## **OBSERVATIONS**

MADE AT THE

# MAGNETICAL AND METEOROLOGICAL OBSERVATORY

ΑT

## TORONTO IN CANADA.

PRINTED BY ORDER OF HER MAJESTY'S GOVERNMENT,

UNDER THE SUPERINTENDENCE OF

MAJOR-GENERAL EDWARD SABINE,

OF THE ROYAL ARTILLERY.

Vol. III.—1846, 1847, 1848.

With Abstracts of Observations to 1855 inclusive.

#### LONDON:

PUBLISHED FOR HER MAJESTY'S STATIONERY OFFICE,

BY

LONGMAN, BROWN, GREEN, AND LONGMANS. 1857.

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### INTRODUCTION.

It has been suggested to me that the time is arrived when a brief review of what the Colonial Magnetic Observatories have accomplished may be desirable, showing—primarily, how far they have successfully carried out the instructions originally drawn up for their guidance by the Committee of Physics of the Royal Society (and approved by the President and Council of that body); and, collaterally, how a similar organization may be made available for the further prosecution of the objects for which the Colonial Observatories were established.

The magnetic investigations designed to be carried into execution by the Colonial Observatories embraced a much wider scope than had been contemplated by any previous institutions, or than had been provided for by the arrangements or instrumental means of any then existing establishment, whether national or private. Not, as previously, limited to observations of a single element (the Declination), or combining at the most one only of the components of the Magnetic Force, the instructions of the Royal Society, and the instrumental means prepared under its direction, provided for the examination, in every branch of detail, of each of the three elements which, taken in combination, represent, not partially but completely, the whole of the magnetic affections experienced at the surface of the globe, classed under the several heads of absolute values, secular changes, and variations either periodical or occasional,—and proceeding from causes either internal or external. meet the requirements of inductive reasoning, it was needful that the results to be obtained should comprehend all particulars under these several heads attainable by an experimental inquiry of limited duration. That no uncertainty might exist as to the objects to which, in so novel an undertaking, attention was to be directed, the Report of the Committee, approved and adopted by the President and Council of the Royal Society, conveyed in a very few sentences, remarkable alike for their comprehensiveness and conciseness, the desiderata of magnetical science. It may be convenient to reproduce these, when desiring to show the degree in which the Observatories have fulfilled their contemplated purposes:-" The observations will naturally refer Vol. III.

"themselves to two chief branches, into which the science of terrestrial magnetism in its present state may be divided. The first comprehends the actual distribution of the magnetic influence over the globe, at the present epoch, in its mean or average state, when the effects of temporary fluctuations are either neglected, or eliminated by extending the observations over a sufficient time to neutralize their effects. The other comprises the history of all that is not permanent in the phenomena, whether it appear in the form of momentary, daily, monthly, or annual change and restoration, or in progressive changes not compensated by counter-changes, but going on continually accumulating in one direction, so as in the course of many years to alter the mean amount of the quantities observed."—(Report of the Committee of Physics, pp. 1 and 2.)

With reference to the first of these two branches, viz. the actual distribution of the magnetic influence over the globe at the present epoch, the Report goes on to state:—"The three elements, viz. the horizontal direction, the dip, and the intensity "of the Magnetic Force, require to be precisely ascertained before the magnetic state "of any given station on the globe can be said to be fully determined . . . . . and "as all these elements are at each point now ascertained to be in a constant state of fluctuation, and affected by transient and irregular changes, the investigation of the laws, extent, and mutual relations of these changes is now become essential to "the successful prosecution of magnetic discovery."

With reference to the second branch, viz. "the secular and periodical variations," it is observed, that "the progressive and periodical being mixed up with the transitory "changes, it is impossible to separate them so as to obtain a correct knowledge and analysis of the former, without taking express account of and eliminating the latter;" and with reference to the secular changes in particular, it is remarked, "These cannot be concluded from comparatively short series of observations, without giving to those observations extreme nicety, so as to determine with perfect precision the mean state of the elements at the two extremes of the period embraced, which, as already observed, presupposes a knowledge of the casual deviations."

It is clear from these extracts, that in the discussion of the observations the first point to be attended to, in the order of time, ought to be an investigation into "the "laws, extent, and mutual relations of the transient and" (as they were called at the time the Report was written) "irregular changes," as a preliminary step to the elimination of their influence on the observations from which a correct knowledge and analysis of the progressive and periodical changes were to be obtained. It will be

proper to show, therefore, in the first place, what the Observatories have accomplished in regard to the so-called casual or transitory variations.

Casual Variations.—All that was known regarding these phenomena at the period when the Report of the Committee of Physics was written, was, that there occurred occasionally, and, as it was supposed, irregularly, disturbances in the horizontal direction of the needle, which were known to prevail, with an accord which it was impossible to ascribe to accident, simultaneously over considerable spaces of the earth's surface, and were believed to be in some unknown manner connected, either as cause or effect, with the appearances of the aurora borealis. The chief feature by which the presence of a disturbance of this class could be recognized at any instant of observation,—or by which its existence might be subsequently inferred independently of concert or comparison with other Observatories,—appeared to be the deflection of the needle from its usual or normal position to an amount much exceeding what might reasonably be attributed to irregularities in the ordinary periodical fluctuations. The observations which had been made on the disturbances anterior to the institution of the Colonial Observatories had been chiefly confined to the Declination. A few of the German Observatories had recently began to note the disturbances of the Horizontal Force, but as yet no conclusions whatsoever as to their laws had been obtained;—in the words of the Committee's Report, the disturbances "apparently observe no law."—(Report, p. 10.) By the instructions cited above, the field of research was enlarged, being made to comprehend the disturbance-phenomena of the three elements; and the importance of their examination was urged, not alone as a means of eliminating their influence on the periodic and progressive changes, but also on the independent ground that "the " theory of the transitory changes might prove itself one of the most interesting and " important points to which the attention of magnetic inquirers can be turned, as " they are no doubt intimately connected with the general causes of terrestrial " magnetism, and will probably lead us to a much more perfect knowledge of those " causes than we now possess."

The feature which has been referred to as furnishing the principal if not the only certain characteristic of a disturbance of this class, namely, the magnitude of the departure from the usual or normal state at the instant of observation, has, in the discussion of the observations, been made available for the object at present under notice; it has afforded the means of recognizing and separating from the entire mass of hourly observations, taken during several years, a sufficient body of observations to furnish the necessary data for investigating at three points of the earth's surface—one in the

temperate zone of the northern hemisphere, a second in the temperate zone of the southern hemisphere, and a third in the tropics-the laws or conditions regulating or determining the occurrence of the magnetic disturbances. The method by which this separation has been effected has been explained on several recent occasions, and will be found fully described in pp. viii, ix, and x of the present volume, when treating of the disturbances of the Horizontal Force at Toronto. By processes of a similar description, the disturbances of principal magnitude in each of the three elements, the Declination, Inclination, and Total Force, have been separated from the other observations at the three Observatories of Toronto, Hobarton, and St. Helena, and submitted to an analysis, of which the full particulars as regards the Toronto observations are contained in the present volume, as those of Hobarton and St. Helena will be in volumes which have yet to appear. By the adoption of a uniform magnitude as constituting a disturbance throughout the whole period comprised by the analysis, the amount of disturbance in the several years, months, and hours is rendered inter-The result of this investigation (which could not be otherwise than a very laborious operation, since the Toronto observations alone, for example, considerably exceeded 100,000 in number, each of which had to be passed through several distinct processes), has made known to us that this class of phenomena, which may with propriety and advantage receive in future the appellation of occasional, are, in their mean or average effects, subject to periodical laws of a very systematic character, placing them, as a first step towards an acquaintance with their physical causes, in immediate connection with the Sun as their primary exciting cause. They have, 1°, a diurnal variation which follows the order of the solar hours, and manifests, therefore, its relation to the sun's position as affected by the earth's rotation on its axis; 2°, an annual variation, connecting itself with the sun's position in regard to the ecliptic; and, 3°, a third variation, which seems to refer still more distinctly to the direct action of the sun, since both in period, and in epochs of maximum and minimum, it coincides with the remarkable solar period of about ten or eleven of our years, the existence of which has been recently made known to us by the phenomena of the solar spots; but which, as far as we yet know, is wholly unconnected with any thermic or physical variation of any description (except magnetic) at the surface of the earth, and equally so with any other cosmical phenomena with which we are acquainted. The discovery of a connection of this remarkable description, giving apparently to magnetism a much higher position in the scale of distinct natural forces than was previously assigned to it, may justly be claimed on the part of the Colonial Observatories, as the result of the system of observation enjoined (and so patiently and carefully maintained), and of the investigation for which it has supplied the data; since it was by means of the disturbance-variations so determined, that the coincidence between the phenomena of the solar spots and the magnitude and frequency of magnetic disturbances was first perceived and announced.—(Phil. Trans. 1852, Art. viii.)

The extent and mutual relation of the disturbance-variations of the three elements, even at a single station (as is shown in the present volume for Toronto), supply a variety of points of approximation and of difference, which are well suited to elucidate the physical causes of these remarkable phenomena; but valuable as such aids may be when obtained for a single station, their value is greatly augmented when we are enabled to compare and combine the analogous phenomena as they present themselves at different points of the earth's surface. To give but a single example: there are certain variations produced by the mean effects of the disturbances which attain their maximum at Toronto during the hours of the night (pp. lix—lxi of this volume); the corresponding variations attain their maximum, at Hobarton, also during the hours of the night, but with a small systematic difference as to the precise hour, and with this distinguishing peculiarity, that the deflection at Hobarton is of the opposite pole of the needle (or of the same pole in the opposite direction) to the Toronto disturbance; whilst at a third station, St. Helena, which is a tropical one, the hours of principal disturbance are those, not of the night, but of the day. A very superficial examination is sufficient to show that for the generalisation of the facts,—a generalisation which is indispensable for their correct apprehension and employment in the formation of a theory,—the stations at which the phenomena are known must be increased. Those which were chosen for a first experiment were well selected to prove the importance of the investigation, and thus to lead to its extension. It is only at the Colonial Observatories that the disturbance-variations have hitherto been made out; and, guided by experience, we may infer that by adopting a similar organization and similar processes of observation at other stations, similar results may be expected, and the inquiry be further prosecuted.\*

<sup>\*</sup>The Colonial Observatories which were under my superintendence were originally four in number; viz. Toronto, St. Helena, Cape of Good Hope, and Hobarton. In July 1846 the detachment of the artillery at the Cape of Good Hope was withdrawn by orders from England, and the charge of the Magnetical and Meteorological Observations transferred to Mr. Maclear, the Government astronomer at that station. The Magnetical Observations made at the Cape, whilst the Magnetic Observatory was one of those which were under my superintendence, were published in 1851 in a volume similar to the present. Since the transfer to Mr. Maclear, Mr. Pierce Morton, a gentleman of considerable mathematical attainments, who has been added as an assistant to take charge, under Mr. Maclear, of that branch of the Cape Observatory, has applied himself to the investigation of the lunar magnetic influence (as derived from the Cape Observations), with a view of presenting the results to the Royal Society. For this and for other investigations into which he may desire to enter, he will have the entire series of observations, viz. those, as above stated, already published, and those which have been made since the transfer of the Observatory up to the present time.

Periodical Variations.—The anticipation expressed in the Report of the Committee of Physics, that, for the purpose of obtaining a correct knowledge of the "regular periodical " variations," it would be found necessary to eliminate the "casual perturbations," has been fully confirmed. Had the latter been strictly "casual," or accidental in a sense contra-distinguished from and opposed to periodical, a sufficiently extended continuance of observation might have occasioned their mutual compensation; but now that we have learned that the mean effects which they produce are governed by periodical laws, and that these laws and those of the regular periodical variations are dissimilar in their epochs, it is manifest that in their joint and undivided effects we have two variations, due to different causes and having distinct laws, superimposed upon each other; to know the one correctly, we must necessarily therefore eliminate the other. A striking illustration of the importance of such elimination is furnished by the solardiurnal variation of the Total Force. It will readily be imagined that the question must be an important one, whether a variation which is supposed to derive its origin from the sun be a single or a double progression; whether it have two maxima and two minima in the 24 hours, or but one maximum and one minimum in that period. When no separation is made of the disturbances, the progression appears to be a double one, having two minima, one occurring in the day and the other in the night. With the removal of the disturbed observations the night-minimum disappears, and we learn that the regular solar-diurnal variation of the Total Force has but one notable inflection in the 24 hours; viz. that which takes place during the hours when the sun is above the horizon. The night-minimum is, in fact, the mean effect of the occasional disturbances (pp. xciii—xcv of this volume). It is probable that the nocturnal inflection of the solar-diurnal variation of the Declination may be ascribed to the same cause, namely, to the superposition of two distinct variations.

A careful analysis of the solar-diurnal variations of the Declination at the Colonial Observatories has brought to light the existence at all these stations of an annual inequality in the direction of the needle, concurrent with changes in the sun's declination, having its maxima (in opposite directions) when the sun is in or near the opposite solstices, and disappearing at or near the epochs of the equinoxes. An intercomparison of the results of the analysis at these stations has shown, that this inequality has the remarkable characteristic of having notably the same direction and amount in the southern as in the northern hemisphere, and in the tropical as in the temperate zones. An ingenious explanation of these phenomena has been suggested by Dr. Langberg of Christiania (Proceedings of the Royal Society, Vol. VII., p. 345); but whether this explanation be or be not the correct one, the

theoretical importance of the facts is considerable, inasmuch as they appear to be wholly irreconcilable with the hypothesis which would attribute the magnetic variations to thermic causation. We may ascribe to the general and almost exclusive prevalence of the thermic hypothesis, and to its influence on magnetic reasonings, that the well-known erroneous opinion was so confidently promulgated by a deservedly high magnetic authority,\* that a line must exist surrounding the globe in which the needle would be found to have no diurnal variation. We have now, on the contrary, reason to be assured by the facts above referred to that there is no such line, but that everywhere in the regions of its supposed existence a diurnal variation subsists, having opposite characteristics in opposite parts of the year, as influenced by the sun's position on either side of the equator, and disappearing only at the epochs when the sun passes from south to north or from north to south declination.

Lunar Variation.—But if thermic relations have failed to supply a connecting link between the sun and those magnetic variations which are, without doubt, referable to the sun as their primary cause, the failure of that hypothesis is made still more obvious by the existence of variations governed by the moon's position relatively to the place of observation. We are indebted to Mr. Kreil, now holding the same position in Austria that I have filled in England, for the first suggestion of the existence of a lunardiurnal variation of one of the elements, viz. the Declination, founded on observations at Milan and Prague; and in the present volume, pp. lxxviii—lxxxvi, will be found a complete exposition of the facts of the moon's diurnal influence on all the three magnetic elements at Toronto, viz. on the Declination, Inclination, and Total Force. In the case of this investigation also, notwithstanding the smallness of the values concerned, the instrumental means supplied to the Colonial Observatories have been found competent to determine with an approximation sufficient for present theoretical purposes, the character and amount for each element of the regular daily effect of the moon on the terrestrial magnetic phenomena, the existence of which does not appear to have been even suspected at the time when the Report of the Committee of Physics was drawn up. The discovery of the moon's influence on any of the magnetic elements is due, as already stated, to Mr. Kreil; but Toronto is the first, and as yet the only, station at which the numerical values at every lunar hour of the lunardiurnal variations of the three elements have been published. Corresponding statements to that which has been given for Toronto will be given for St. Helena and Hobarton in the volumes of those Observatories which are now in preparation. All the results

<sup>\*</sup> Arago, Annuaire, 1836, p. 284.

at the three stations present the same general characters. The lunar influence does not appear to partake in the decennial inequality which is found in all the variations depending upon the sun.—(Phil. Trans. 1857, Art. I.) The lunar-diurnal variation of each of the elements is a double progression in the 24 lunar hours, having epochs of maximum and minimum symmetrically disposed. In character, therefore, it differs from what might be expected to take place if the moon were possessed of inherent magnetism-i.e. if she were a magnet, as it is usually termed, per se-and accords with the phenomena which might be expected to follow if she were magnetic only by induction from the earth. On the other hand, it is believed that the amount of the variation, as observed at each of these stations, very far exceeds what can be imagined to proceed from the earth's inductive action reflected from the moon. In this theoretical difficulty, we are naturally thrown back to seek a more extensive knowledge of the phenomena than we have yet obtained, and to the generalisation which will follow when sufficient materials for it have been procured. In subordinate particulars a difference which is apparently systematic is perceived to exist in regard to the hours which constitute the epochs of maxima and minima at the three stations, as well as in regard to the amounts of the respective variations; these differences are no doubt intimately connected with the causes of the phenomena, and are likely to lead to their elucidation. It is therefore greatly to be desired that the number of stations furnishing complete determinations, such as the Colonial Observatories only have hitherto supplied, should be increased.

The domain of periodical variations has thus been considerably enlarged since the Report of the Committee of Physics was drawn up, and must henceforth be understood to comprise, in addition to the variations "whose amount is a function " of the hour-angle of the sun, and of his longitude," [or of his declination] (Report, p. 10)-1°, those variations of the three elements whose amount is a function of the hour-angle of the moon; 2°, those variations which were classed in the Committee's Report as "irregular," or "apparently observing no law," but which are now known to be governed by laws depending on the sun's declination and hour-angle; and 3°, those variations, both "regular" and "occasional," which have their epochs and amounts dependent apparently on a solar period of not yet perfectly ascertained duration, manifesting itself also by periodical changes in the frequency and amount of the solar spots. With the exception of the last-named class, all these variations require for their generalisation that the phenomena should be investigated at several points of the earth's surface widely distant from each other; and we have now the knowledge, grounded on experience, that a very few years are sufficient for the observations at each station, with the instrumental means and methods recommended by the Royal Society, and when the investigation is made a primary object by those who engage in it.

Absolute Values and Secular Changes .- But interesting and valuable as is the acquisition of a fuller and more precise knowledge of the comparatively small magnetic variations, produced at the surface of the earth by the action or influence of external bodies, even greater importance seems to attach, when terrestrial magnetism is in question, to the purposes of that distinct branch of the duties of a Magnetic Observatory, which consists in the determination of the absolute values and secular changes of the three magnetic elements. By the absolute values we seek to acquire a knowledge of the actual present order and distribution of the terrestrial magnetic influence at the surface of the earth, and to provide the materials by which the constancy, or otherwise, of the earth's magnetic charge may hereafter be examined; and by determinations of the present direction and amount of the secular changes, we seek to become acquainted with the laws, and ultimately with the causes, of that most mysterious change, by which the magnetic condition of the globe at one epoch passes progressively and systematically into that of another. It is specially by determinations of this class, obtained with the necessary precision in different parts of the globe, that (in the words of the Committee's Report) the "patient inductive inquirer " must seek to ascend to the general laws of the earth's magnetism." At the time when the Report of the Committee of Physics was written, doubts were reasonably entertained whether the limited time during which the Colonial Observatories were likely to be maintained in action would be sufficient for the determination of the secular changes; and it was therefore very properly urged, that "these changes " cannot be concluded from comparatively short series of observations without giving " to the observations extreme nicety, so as to determine with perfect precision the " mean state of the elements at the two extremes of the period embraced." It is with much satisfaction, and with a well-deserved recognition of the pains which have been bestowed by the successive Directors of the Toronto Observatory, and their assistants, to this branch of their duties, that I am able to refer to the determinations of the absolute values and secular changes of the three elements contained in this volume, in evidence that the instrumental means which were devised, and the methods which have been adopted, have proved, under all the disadvantages of a first essay, sufficient to determine these data with a precision which is greatly in advance of preceding experience, and, as far as may be judged, equal to the present requirements of theoretical investigation. It should, moreover, be noticed, that Toronto is a station where the casual and periodical variations, which it was apprehended would seriously

interfere with the determination of absolute values, are unusually large. We may derive, therefore, the greatest encouragement from the results thus obtained, to persevere in a line of research which is no longer one of doubtful experiment, and to give it that further extension which the interests of science require.

Amongst the results which have recompensed the labours of the Colonial Observatories in this branch of their inquiries, perhaps there is none of more general theoretical importance than the conclusion which has been established by means of the observations of the Declination at St. Helena, that the current annual amount of secular change takes place by equal aliquot portions in every month, and even in every fortnight, of the year. The magnitude of the annual change of the Declination at St. Helena, 8' (or more precisely 7'.93), in each of the eight years during which the observations were maintained, and the comparative tranquillity of the tropical regions in regard to magnetic disturbances, were circumstances which made St. Helena a particularly eligible The result has been to remove secular change locality for this investigation. conclusively and altogether from the category of atmospheric or thermic relations, with which, in the absence of a correct knowledge of the facts, it has frequently been associated, and to characterize it henceforward as a phenomenon of far more systematic order and regularity than had previously been generally apprehended .-- (Proceedings of the Royal Society, vol. VII. pp. 67—75.)

It has thus been shown that in each and all of the branches of inquiry for which the institution of the Colonial Observatories was recommended they have accomplished the objects which were contemplated, and have in many respects exceeded the expectations on which the recommendation was founded. Nor has the scope of their performance been limited to a mere registry of the observations, or to their publication in a crude and undigested form. It was well remarked by an authority of the greatest weight, when addressing the British Association on the occasion of the assembly of the Magnetical and Meteorological Conference at Cambridge in 1845 (Herschel, Address, p. xxxv), that "a man may as well keep a register of his dreams as of the " weather or any other set of daily phenomena, if the spirit of grouping, combining, and " eliciting results be absent." To advance by the simple and straightforward path of inductive inquiry, in a science such as terrestrial magnetism in which a physical theory has yet to be sought, the endeavour must be made "to grapple with the palpable " phenomena, seeking means to reduce their features to measurement, the measure-" ments to laws, the laws to higher generalisations; and so step by step to advance to " causes and theories." The mere observational part is not, and ought never to be, viewed as the fulfilment of the duties of institutions such as Magnetic Observatories;

those duties ought always to be held to include (either on the part of the Directors of the Observatories themselves, or on that of persons who, as Superintendents or otherwise, have constantly watched the progress of the work) "the systematic deduction from " the registered observations of the mean values, and of the local coefficients of diurnal, " annual, and secular change," because "no other class of persons stands in anything like " so favourable a position for working out the first elementary laws of phenomena, and " referring them to their immediate points of dependence," as those who have directed or superintended the processes by which the data required for the knowledge of the phenomena have been obtained. The introductory discussions prefixed to the several volumes which contain the observations of the Colonial Observatories,—and a succession of papers presented to the Royal Society and published in the Philosophical Transactions,—bear testimony to at least unsparing labour on the part of the Superintendent, to give a completeness to the experiment of Colonial Observatories corresponding to its original conception, though this portion of the duty might well have fallen into abler hands. One great advantage in the task has undoubtedly been enjoyed; viz. the union of the detailed knowledge above alluded to with the opportunity of generalisation, and consequent insight, afforded by results admitting of strict comparison and combination, obtained from well-selected stations at such distant points of the globe, and by a uniform system of observation.

It may be useful on the present occasion, that we should recall to more distinct recollection the views and opinions entertained by those who were the principal instigators of the proceedings by which the Royal Society became the responsible advisers,—and Her Majesty's Government the chief supporters,—of measures which have placed this country in the very conspicuous position of taking that lead in the advancement of certain branches of science which other nations were willing and desirous that she should take. These views cannot be better stated than in the words of one to whom all will be willing to concede pre-eminence, as well in counselling the recommendation to Government, as in conducting the several matters connected with it to a successful issue (Herschel, in Quar. Rev., No. CXXXI.):—" Great physical "theories, with their trains of practical consequences, are pre-eminently national "objects, whether for glory or utility. In effect, such they ought to be considered "by every nation calling itself civilized; and if we look to consequences, we have "only to point to the history of science in all its branches to show, that every great " accession to theoretical knowledge has uniformly been followed by a new practice, " and by the abandonment of ancient methods as comparatively inefficient and This consideration alone we think sufficient to justify, even on " uneconomical.

" utilitarian grounds, a large and liberal devotion of the public means to setting on foot " undertakings and maintaining establishments in which the investigation of physical " laws and the determination of exact data should be the avowed and primary object, " and practical application the secondary, incidental, and collateral one. That the "time is now fully arrived when other great branches of physical knowledge must be " considered as entitled to share in that public support and encouragement which has " hitherto fallen to the lot of astronomy alone, will, we think, be granted without " hesitation by all who duly consider the present state and prospects of science. The " great problems which offer themselves on all hands for solution—problems which " the wants of the age force upon us as practically interesting, and with which its " intellect feels itself competent to deal-are far more complex in their conditions, " and depend on data which to be of use must be accumulated in far greater masses, " collected over an infinitely wider field, and worked upon with a greater and more " systematised power, than has sufficed for the necessities of astronomy. The collect-" ing, arranging, and duly combining these data are operations which, to be carried " out to the extent of the requirements of modern science, lie utterly beyond the " reach of all private industry, means, or enterprise. Our demands are not merely for " a slight and casual sprinkling to refresh and invigorate an ornamental or luxurious " product, but for a copious, steady, and well-directed stream, to call forth from a " soil ready to yield it an ample, healthful, and remunerating harvest. There are " secrets of nature we would fain see revealed; resources hidden in her fertile bosom " for the well-being of man upon earth, we would fain see opened up for the use " of the generation to which we belong. But if we would be enlightened by the " one, or benefited by the other, we must lay on power, both moral and physical, " without grudging and without stint."

If at the period when it was still doubtful what the Colonial Observatories, then just established, might be able to accomplish,—and when in effect the expectations from them were little more than the anticipations of what a voyage of discovery upon an unknown ocean might produce,—the propriety of embarking upon such investigations was thus unhesitatingly affirmed, how much more confidently may the duty of perseverance be insisted upon, when the results of the first experiment have already more than realized the expectations which caused it to be undertaken. They have indeed confirmed the belief that "the gigantic problem proposed to be resolved" is of a nature to yield in its full extent only to "continued and persevering inquiry," but at the same time they may be said to have narrowed the field of inquiry, by showing more distinctly than was previously apprehended, both what is desired to be known,

and how and where it is to be sought. If the history of magnetical science is to be something more than a fragment, the researches must be persevered in.

In considering the means by which the researches thus opened out may be most advantageously prosecuted, it is natural that we should look in the first instance to the adoption, at other selected stations, of arrangements similar to those which were instituted at the stations which were chosen for a first, and, as it has proved, successful, experiment; and with this view, I may be permitted to restate the opinions which I submitted to the Magnetical and Meteorological Conference at Cambridge in 1845, as all that has since taken place has served to confirm those opinions:—

"Before I close this communication, I wish to advert to the expediency of extending the system of observation now in operation at Toronto, St. Helena, and "the Cape of Good Hope, to other of the British colonies, where the same objects can be accomplished in an equally effective and economical manner.

"In cases where the institution of similar establishments is strongly urged by the Governor of a colony,—where competent persons are present and disposed to superintend the observations,—and where soldiers of the artillery are stationed, whose services may be available, and whose employment has been shown to be economical and effective in a high degree in the execution of a laborious and exact routine of observation,—there is wanting only a supply of instruments, the tempoward allotment of a building to contain them, extra pay such as the individuals at the above-named Observatories receive, and an authorised connexion with a head-quarter establishment, whence they may derive instruction and guidance.

"The cost of one of the Ordnance Observatories (including 100*l*. a year for incidentals of all kinds) is 392*l*. a year, exclusive of publication. It may be assumed that five years of hourly observation is a sufficient time of continuance for obtaining in any particular colony the mean values of the magnetical and meteorological elements, and their diurnal, annual, and secular variations, as well as the peculiarities of climate bearing on the health and industrial occupations of man. If the observations were printed *in full detail* for the five years, they would occupy two quarto volumes; but if it were thought sufficient hereafter that duplicate or triplicate manuscript copies should be deposited in different public libraries, and that publication should be confined to abstracts and an analysis, the cost of the publication would form but a small addition.

"The colonies of Ceylon, New Brunswick, Bermuda, and Newfoundland are in the described case; their respective Governors are recommending the establishment of Magnetical and Meteorological Observatories in them; competent Directors are on the spot" (this was written in 1845); "and they are all artillery stations."

To the four stations thus named may now be added Mauritius and Demerara, as from both these colonies strong and repeated applications to the same effect have been sent through their respective Governors to the Sccretary of State for the Colonies. Both these colonies have offered to bear a portion of the expense of the proposed establishments, and have earnestly solicited to be placed in connexion with a head-quarter establishment, from which they might receive properly constructed instruments, with instructions and guidance in their use. Can it be said that we perform our duty as a mother country when we put such applications on the shelf?—whilst, in the interests of science, it would be difficult to estimate too highly the value of such institutions,—in forming good observers, who might subsequently extend their activity over a wider range,—in affording to travelling observers the opportunity of testing and correcting their instruments, as well as keeping up and perfecting their skill in observation,—and in contributing to arouse, to nourish, and to extend to other parts of natural knowledge that desire for the greatest possible accuracy, which was formerly met with only in astronomy and in geodetical operations of the highest class.

When it was first suggested that the officers and soldiers of the scientific corps of the army (Artillery or Engineers) stationed in the colonies might, both beneficially to themselves and advantageously to the public interests, be made available for the performance of such temporary services, the suggestion, from its novelty, might have been open to many objections. None were, indeed, made by the military authorities of the time, who, on the contrary, approved and encouraged the proposition. There may have been doubts entertained in other quarters whether persons, whose ordinary occupations were so dissimilar, would be found to possess the necessary qualifications for carrying out a scheme of exact and varied observation, in which there was no precedent to guide, and of which the performance would be sure to be extensively and closely scrutinized; but such doubts, if they existed, have probably long since subsided as the successive volumes of the Colonial Observatories have appeared; and if any should yet remain, the contents of the present volume, it is hoped, may entirely remove them.

One great and unquestionable advantage which future institutions of this nature will have over those whose duties are accomplished, will be found in the assistance they will derive from the *Physical Observatory of the British Association* at Kew, as a head-quarter Observatory, in which their instruments can be prepared and verified, the constants, &c. carefully determined, new instruments be devised as occasion may require, and be tested by experiment before they are sent out for use; and to which practical difficulties of all kinds which may present themselves to the Directors

may be referred. The omission of a provision of this kind, when the Observatories were first formed, was undoubtedly a great fault, which has been, and could only be, very imperfectly remedied by the Woolwich establishment, designed for a very different purpose, and of insufficient strength even for the duties for which it was designed.

The colonial establishments were first instituted at the instance of the Royal Society and British Association, with a more general concurrence and approval on the part of the cultivators of science in all parts of the globe than, it is believed, were ever before manifested in regard to any purely scientific undertaking; and with such a cordial and effectual co-operation of the public authorities as is well deserving of being held in remembrance. It is for those two great scientific bodies to consider whether any and what steps should now be taken to procure the continuance of the researches.

EDWARD SABINE.

Woolwich, March 1857.

#### ADJUSTMENTS, ABSTRACTS, AND COMMENTS.

#### HORIZONTAL FORCE.

Separation and Analysis of the larger Disturbances.—An important preliminary step in this investigation must be the examination in the most direct and practical manner, i.e., by means of the observations themselves, of the equivalent, in divisions of the scale of the Bifilar Magnetometer, to a change of temperature of 1° Fahrenheit.

From the latter end of 1843 to the termination of the hourly series in June 1848, we have an unbroken series of Bifilar observations particularly suitable for this examination, inasmuch as that interval comprehends the principal part of the observations which it is intended to employ in the purposed investigation. Collecting into one view the mean monthly scale readings and their corresponding temperatures from the general monthly tables of the Horizontal Force in vols. II. and III. of the Toronto Observations, we have as follows:—

TABLE I.

<u></u>	Month and Year.		Monthly Mean in Scale Divisions.			Quarterly Mean Temperature.	Seasons.	
1843. 1844.	December January February	-	514.94 525.33 519.62	43°95 37°95 43°28	}	519.96	4 <b>î ·</b> 73	Winter Quarter (1).
	March April - May -		512.61 498.11 500.67	46°29 56°65 60°85	}	503.79	54°60	Spring Quarter (2).
	June - July - August	-	506.31 507.96 516.58	65°36 70°32 68°72	}	510.28	68.13	Summer Quarter (3).
	September October November	-	529°07 552°37 565°53	65 · 33 53 · 25 46 · 88	}	548 '99	55°15	Autumn Quarter (4).
1845.	December January February		577°33 576°39 580°08	42 · 40 42 · 52 42 · 90	}	577.93	42.61	Winter Quarter (5).
	March April - May -	-	571 · 22 562 · 57 558 · 82	47.97 53.65 59.57	}	564'20	53.73	Spring Quarter (6).
	June - July - August	-	554·14 548·70 552·80	67 · 38 72 · 45 73 · 37	}	551.88	71.07	Summer Quarter (7).
	41ugust	_	002 00	10 91				(Continued on p. ii,)

VOL. III.

Table I.—continued.

Мо	onth and Year.		Monthly Mean in Scale Divisions.	in Temperature in			Quarterly Mean Temperature.	Seasons.
1845. (cont.)	September October November	-	570°93 586°86 602°05	63°24 57°68 49°79	}	586.61	₅°90	Autumn Quarter (8).
1846.	December January February	-	617 16 611 77 613 53	40.61 44.84 42.78	}	614.15	42.74	Winter Quarter (9).
	March - April - May -	-	601*03 593*09 580*05	50°25 54°53 63°18	}	591.39	<b>55</b> *99	Spring Quarter (10).
	June - July - August -	-	575 55 571 16 572 61	69°10 74°19 74°25	}	573.11	72.21	Summer Quarter (11).
	September October November	-	580.78 602.27 614.80	69°97 56°70 52°86	}	599:28	59*84	Autumn Quarter (12).
1847.	December January February	-	635.55 640.48 633.26	43.25 40.17 42.37	}	636*43	41.93	Winter Quarter (13).
	March - April - May - June -	-	627.88 616.15 606.31 606.51	44.70 51.56 60.82 64.46	}	616.78	52*36	Spring Quarter (14).
	July August September	:	590°43 594°77 602°76	73.64 71.07 62.67	}	597.24	69.72	Summer Quarter (15).
	October November December	-	615·17 620·34 636·98	56.05 51.31 45.17	}	612.76	56.68	Autumn Quarter (16).
1848.	January February March	-	636.08 636.62 633.50	43·31 43·98 46·86	}	636.26	44.15	Winter Quarter (17).
	April - May -	-	625:18 617:48	53.36 61.96	}	625*39	54.06	Spring Quarter (18).

It is obvious on the first glance that, independently of variations in the scale readings from the influence of temperature, there was a progressive increase in the scale readings (though by no means regular or even uniformly progressive) from the commencement of the series to its close. According to the mode in which the Bifilar was adjusted, an increase in the scale reading should correspond to a decrease of force either in the earth's magnetism or in the magnetism of the Bifilar Magnet. In the latter case, (that of the decrease of the magnetism of the bar,) we have no reason to expect that the decrease should be regular or uniform; viz., of equal amount in equal times. Nor in respect to secular change in the magnetism of the earth could we venture to assume, in the present state of our knowledge, that the progress of such secular change, whether it were an increase or a decrease of the force, should be uniform. If, however, we except the increase in the scale readings between the spring and summer quarters in 1844, when, from some peculiar cause, it was greater than

ordinary, the departures from a uniformly progressive increase will not appear great, particularly when we take into account the influence of magnetic disturbances, and of the regular periodical variations in the earth's horizontal force in different parts of the year, by which the different quarters may have been influenced. If, therefore, we take the mean between the scale readings, and also between the temperatures in the winter quarters of 1843-1844 and 1844-1845, Nos. (1.) and (5.), and compare these means with those of the intermediate summer quarter in 1844, No. (3.), regarding the difference in the scale divisions  $\left(\frac{519 \cdot 96 + 577 \cdot 93}{2} - 510 \cdot 28 = 38 \cdot 67\right)$ as the value in scale divisions corresponding to the differences of the winter and summer temperatures  $\left(\frac{41^{\circ} \cdot 73 + 42^{\circ} \cdot 61}{2} - 68^{\circ} \cdot 13 = 25^{\circ} \cdot 96\right)$  we shall have  $\frac{38.67}{25.96} = 1.48$  as the scale equivalent to 1° Fahrenheit, a result subject only to inaccuracies which may be due to magnetic disturbances, or to irregularities in the decrease of magnetic force in the bar magnet, or to other causes which we are not able to particularize, which may have influenced the departures from uniformity in the progressive increase in the scale divisions during the period under consideration. In like manner, a combination of the spring and autumn quarters in 1844 with the intermediate summer quarter in the same year (Nos. (2.) and (4.) with No. (3.) will yield a second result, but of comparatively less value than the first, because the differences of temperature between the summer and the mean of the spring and autumn quarters are less than between the summer and winter quarters. The eighteen quarters will thus yield fifteen results, which are as follow:—

		TABLE II.	*	
		Differences of Temperature.	Differences of Scale-readings.	Equivalent of 1° Fahrenheit.
(1) and (5) with (3)	•	- 2 <sup>°</sup> 5.96	38.67	= 1.48
(2) and (4) with (3)	-	- 13.25	16.08	= 1.21
(3) and (7) with (5)	-	- 27.00	46.85	= 1.73
(4) and (6) with (5)	•	<ul><li>11.83</li></ul>	21.33	= 1.80
(5) and (9) with (7)	-	- 28.40	44'16	= 1.57
(6) and (8) with (7)	-	<b>-</b> 15.76	23.52	= 1.49
(7) and (11) with (9)	-	- 29.05	<b>51 6</b> 5	= 1.78
(8) and (10) with (9)	-	- 13.70	25.15	= 1.84
(9) and (13) with (11)	-	- 30'18	<b>52.18</b>	= 1.74
(10) and (12) with (11)	-	w 14°59	22.22	= 1.52
(11) and (15) with (13)	-	- 29.18	51.25	= 1.78
(12) and (14) with (13)	•	- 14.17	28.40	= 2.00
(13) and (17) with (15)	-	- 26.68	<b>39</b> • 2 <b>5</b>	= 1.47
(14) and (16) with (15)	-	<b>-</b> 15.20	17.53	= 1'15
(16) and (18) with (17)	~	- 11.22	17.49	= 1.56
	Sums	- 306.17	495.73	= 1.62
			<u></u>	b 2

Whence  $\frac{495 \cdot 73}{306 \cdot 17} = 1 \cdot 62$  is the equivalent in scale divisions to 1° of temperature.

The quarters into which the year is here divided are those usually called "Meteorological Seasons," December being classed with January and February, and August with June and July. By this division of the year the differences of temperature between the seasons compared are greater than if the more ordinary division had been adopted.

The partial results obtained by the comparison of the summer and winter quarters (which have the largest differences of temperature) exhibit a very satisfactory accord. There are seven such comparisons, and their results are as follow:—

		Diffe	rences.	Equivalent
	Î	Temperature.	Scale-readings.	to I°.
		02.00	00.08	Sc. Div.
(1) and (5) with (3)	-	25.96	38.67	1.48
(3) and (7) with (5)	•	27.00	46.85	1.73
(5) and (9) with (7)	-	28.40	44.16	1.57
(7)  and  (11)  with  (9)	-	29.02	51.65	1.78
(9) and (13) with (11)	-	30.18	52.18	1.74
(11) and (15) with (13)		29.13	51.25	1.78
(13) and (17) with (15)	-	26.63	39.25	1.47
	-	196.35	324.01	1.65

Whence  $\frac{324 \cdot 01}{196 \cdot 35} = 1 \cdot 65$ , the equivalent to 1°. The value which has been adopted in reducing the observations to an uniform temperature during the period under consideration is 1 · 63.

According to the method prescribed in the Instructions of the Royal Society, the equivalent in scale divisions for 1° of temperature should be obtained by dividing the change corresponding to 1° of temperature found by experiment in the magnetic moment of the Bifilar Magnet, by the scale coefficient or the value of one division of the scale, both being expressed in parts of the Horizontal Force. The first of these values (viz., q, = the change in the magnetic moment of the magnet for 1° of Fahrenheit) was found, by the experiments recorded in vol. II. p. liii, to be .000234 parts of the Horizontal Force; and that of the scale coefficient k = .000087, also in parts of the force (pp. li and lii). The change in the scale-readings corresponding to 1° of temperature should have been, therefore,  $\frac{q}{k} = \frac{.000234}{.000087} = 2.69$  scale divisions. This is the value which, in conformity with the instructions under which the colonial observatories have acted, has been employed in the discussion of the Bifilar observations in the preceding Toronto volumes. It is no doubt quite possible that the values of the temperature and

of the scale-coefficients, as determined by the experiments referred to, may have been, either one or both, slightly inaccurate; but it is scarcely possible to imagine inaccuracies, in either or in both, of sufficient importance to account for the difference between  $2 \cdot 69$  and  $1 \cdot 63$ . The existence of a similar discrepancy in the case of the Makerstoun Bifilar has been shown by Mr. Broun in his very valuable discussion of the observations made at that observatory. The experiments by which the change in the magnetic moment of the bar, corresponding to variations of temperature, is determined, are made with the magnet dismounted; and it may be quite possible that the suspension may in some cases (if not in all the Bifilar Magnetometers of the description employed in the colonial observatories) exercise an influence in the changes of direction of the magnet produced by changes of temperature, which was not taken into account in the prescribed Instructions. Whatever may be the cause of the difference, however, there can, I apprehend, be no hesitation in preferring the result which is derived directly from the observations themselves.

The correct amount of this very important element in the reduction of the observations was the subject of earnest and even anxious consideration with Captain Lefroy during the latter part of his stay at Toronto, and led to an endeavour, after the hourly series had terminated, to ascertain the effect of changes of temperature on the readings of the Bifilar scale by a direct experiment with the magnet suspended precisely as when employed in the hourly observations. For this purpose the magnetometer was enclosed by boards extending from the floor to the ceiling, in a space sufficiently large to include also a copper stove. The scale was read by means of an aperture, which could be closed by a slider when not required. The account of this experiment, and its result, cannot be better related than by making the following extract from Captain Lefroy's report:—" The experiments were made by kindling a fire and keeping " up the temperature for three days, then allowing it to go out, and opening the " communication with the external air for the same length of time. There were five " cold and three hot alternations, each of three days. The readings were taken every " half-hour from 6 A.M. to 11 P.M., and at each reading the small Bifilar, which had " been in adjustment since December 1845, was also observed. It was hoped that the " small Bifilar would not show the changes of temperature of the other instrument, but "it was not found practicable to prevent the whole body of air in the room being " affected by these changes to some extent. Instead, therefore, of having a means of " correction independent of the temperature coefficient of the second instrument, we " have to reduce the small Bifilar readings to an uniform temperature by the employ-" ment of its own coefficient: but, in the first place, the value of  $\frac{q}{k}$  obtained for this " instrument in the ordinary way is more likely to be practically correct than that of " the other instrument, the suspension of the one being of silk and the other of metal; " and in the second place, the value of k given by adjustment for this instrument

" ('0003551) agrees very nearly with the value found by deflection ('0003644); " lastly, if the correction  $\frac{q}{k}$  employed be somewhat in error, the result will be affected " only by the difference between the actual and the assumed value, which cannot be " important upon differences not exceeding 5°, as compared with the correction for "differences averaging 61° with the other instrument. To compute the results two " abstracts are formed, one containing the half-hourly observations on the fifteen cold " days, the other those of the twelve hot days: by these we get two diurnal curves with " both instruments, which must be exactly comparable as diurnal curves, the days being " alternate. The differences between the corrected mean scale reading of the small " Bifilar for the same hour of observation by the two diurnal curves is therefore the " change of Horizontal Force which we have to eliminate before comparing the corre-" sponding readings of the large Bifilar. Multiplying this difference by the ratio of the " scale coefficients of the two instruments, and applying it as a correction to the second " curve of the large Bifilar, the two curves of the latter instrument are reduced to the " same values of the Horizontal Force, and the difference of scale reading between them " is the residual effect of the change of temperature. We have then from the successive " half-hourly observations a like number of equations; omitting the three first half-" hours on each day, when it may be probable that the magnet may not have taken " up the temperature indicated by the thermometer (the bulb of which was, however, "close to it), we obtain, as the result of the whole, 1.74 as the equivalent in scale " divisions for 1° of Fahrenheit."

"The inner case of gilt wood was removed, and the outer one was slightly raised by wedges to allow the air in the box to acquire the temperature of the rest of the room. There was no reason to suppose that currents of air affected the scale readings: there was no iron whatsoever about the stove, and it was always in the same position, whether heated or otherwise."

That the result of these experiments should exhibit so close an approximation to the value (1.63) which has been found to represent the actual change produced in the readings of the scale by 1° of temperature in the whole body of the observations themselves, is a strong testimony to the care which must have been taken in conducting the experiments under the very difficult condition of regulating artificial temperatures in air heated by a stove.

The separation and analysis of the larger disturbances of the Horizontal Force has been conducted on the principle already described in discussing the larger disturbances of the Declination (Toronto Observations, vol. II. pp. xxii to xxxv). As the first step, the whole of the observations were reduced individually to an uniform temperature of 55°, employing the coefficient named in the preceding pages (1.63); the mean scale division was then computed for every hour in each of the sixty months, and the correctness of the whole work was examined by the comparison of these hourly means with the hourly

means printed in the monthly tables, the latter being reduced to the standard temperature of 55° by the application in each case of the correction due to the difference between the recorded temperature and 55°.

The hourly means thus corrected in each month presented to the eye at the different hours the diurnal variation of the Horizontal Force, cleared from the influence of temperature on the magnetism of the bar, but retaining whatever effects may have been due to disturbances. For the purpose of eliminating the disturbances of largest amount, the observations which had been individually corrected for temperature were compared each with the monthly mean, at the same hour and in the same month, and every observation which differed 14 0 scale divisions or more from that mean was provisionally marked as a disturbed observation. Fresh means for each hour in each month were then taken, omitting the observations marked as disturbed, and the means thus obtained were then used as standards of comparison for a second examination. This process was repeated until the hourly means were strictly the means of all the remaining observations, after the separation of those which differed from them respectively by 14 0 scale divisions or more.

The value of 14 scale divisions in parts of the Horizontal Force at Toronto was about '0012. When the larger disturbances are thus separated, the diurnal variation at the same period of the year, in different years, exhibits a very satisfactory accordance; and, by the process of elimination which has been explained, it is probable that the diurnal variation has very little, if any, influence on the determination of the observations separated as disturbed.

A much greater practical difficulty has been occasioned by a circumstance already noticed in discussing the temperature-coefficient, namely, the progressive increase in the scale readings, partly from secular change and partly also from instrumental causes. Whenever the amount of increase in the course of a month was seen to be such as to interfere with the proper comparability of the observations in the earlier or later portions of the month with the means taken in the usual manner, fresh means, more suitable for the comparison, have been formed; thus, for example, for comparison with the observations in the last week of one month and the first week of the next, it has in some instances appeared preferable to form the hourly means from the whole of the observations of the two months united, instead of from each month separately, whereby the advantage is gained, that the period which furnishes the standard of comparison for the fortnight in question extends to a nearly equal distance on either side of the observations compared with it. In a few instances in which the increase was more irregular than was commonly the case, fortnightly means, and even, when absolutely required, weekly means, have been substituted for the monthly or two-monthly means. This part of the process requires in the person who conducts it an attentive preliminary consideration and study of the observations, and it is important that it should be carefully executed, because normal values, correctly obtained, form an essential basis for the study of all the terrestrial magnetic variations. To facilitate researches of this nature in which the observations contained in these volumes may hereafter be employed, as well as to show the steps by which the conclusions now submitted have been arrived at, a table of the hourly means of the readings of the Horizontal Force Magnetometer reduced to 55° Fahrenheit, and omitting the observations in which the amount of disturbance equalled or exceeded 14 scale divisions (or '0012 parts of the whole Horizontal Force,) is subjoined at the close of this discussion (pp. xviii to xxi), specifying in each case the interval to which the normal values correspond, as well as the interval comprehended by the observations from which they have been derived.

The period which the hourly observations included in this investigation comprise is one of five complete years, terminating on the 30th June 1848. It is not, however, an absolutely unbroken period, as in October 1843 the magnet of the Vertical Force Magnetometer was displaced from its mounting, and employed in experiments designed to show the change in its magnetic moment occasioned by changes of temperature. It was remounted in February 1844; consequently the five months from October 1843 to February 1844 that would have made a continuous suite during the five years are deficient. These have been replaced (in the similar investigation to the present, in which the observations of the Vertical Force Magnetometer have been employed) by the observations of the same months of the preceding year, viz., October 1842 to February 1843. And as it is desirable that the five years submitted to this investigation should consist of identical months in the Horizontal and in the Vertical Force, the observations of the Horizontal Force during the months from October 1843 to February 1844 have been replaced by those of October 1842 to February 1843. It will be understood, therefore, that whenever in the subjoined pages the year ending June 30th 1844 is spoken of in reference to the Horizontal and Vertical Forces, (and to their theoretical equivalents, the Inclination and Total Force,) the months which constitute that year consist of July to September 1843 inclusive, October 1842 to February 1843 inclusive, and March 1844 to June 1844 inclusive.

The course that has been followed in working out the several parts of the process by which the larger disturbances of the Horizontal Force have been separated from the other observations, and the laws of their periodical variations shown, has been as follows:—The hourly observations of the Bifilar Magnetometer during the five years terminating June 30, 1848, were received at Woolwich from Toronto precisely in the state in which they appear in the 2d and 3d Toronto volumes; namely, the readings, uncorrected for temperature, at every hour of Göttingen time, arranged in monthly tables, accompanied by corresponding tables of the temperature of the Bifilar Magnet, shown by a thermometer of which the ball was enclosed in the same case with the magnet, and which was read contemporaneously with the Bifilar scale. The monthly tables of the scale readings and of the temperature were summed before their transmission to Woolwich, both in Vertical and Horizontal columns, and means

taken of all the days in the month at the different hours, and of all the hours of the day on the different days, forming "hourly means" and "daily means." In this state the Observations were received at Woolwich and printed; they were, in fact, printed from the original manuscripts.

The first step taken at the Woolwich office was to rewrite the whole of the observations of the five years in scale divisions, corresponding to the respective readings, but reduced to an uniform temperature of 55°, taken as a convenient approximate mean temperature; for this purpose each of the observations had to receive a correction proportioned to the difference between the recorded contemporaneous reading of the thermometer and the standard temperature of 55°, and computed by a coefficient representing the change in the scale reading produced by an alteration of 1° of the thermometer. The mode and process of deriving this coefficient from the observations themselves has been stated in pp. i to vi of this volume. The formation of the monthly tables of the "Scale Readings reduced to an uniform temperature of 55°" from the tables "uncorrected for temperature" was performed, under the superintendence of Mr. Magrath, the principal clerk in this office, by two con-commissioned officers, each working independently of the other, and having the correctness of the work proved by the accordance of the two independent computers; the daily and hourly means were then taken in the same manner by two independent computers, and were additionally checked by comparison with the daily and hourly uncorrected means calculated at Toronto, when these means were also reduced to the standard temperature of 55° [excepting in a very few instances in which the observations on days of excessive disturbance had been omitted in the sums and means of the uncorrected readings computed at Toronto, but were restored in the sums and means of the corrected tables. The new tables thus formed, of the scale readings reduced to 55°, then passed into my hands; and having satisfied myself by a careful examination that a difference of 14 scale divisions above or below what might be taken as a normal value, (viz., the mean value at the same hour during the same month, or for several preceding and several succeeding days,) would constitute a convenient minimum limit for the disturbances of largest amount—being on the one hand a greater departure from the normal value than could reasonably be ascribed to any other cause than that of a disturbance in the earth's magnetism, whilst on the other hand the number of disturbances that would be thereby separated would form a sufficient body to permit their periodical laws (if such existed) to be investigated—I proceeded to mark provisionally with a pencil every observation which differed 14 scale divisions or more from its normal. I then recomputed the normals omitting the observations provisionally marked as disturbed, and compared afresh all the observations, including the provisionally marked ones, with the new normals, altering the markings where required, and continuing this process until the normal in every case included every observation which differed less than 14 scale divisions from itself, and excluded every observation which differed 14 scale divisions or more from itself; the latter were then marked finally with a surrounding ring in ink. In this state the tables were returned to the office, and the correctness of the markings, and of the normals excluding the larger disturbances, was examined by a separate computer.

A table was then formed by two computers working separately, and their work compared, of the marked disturbances during the five years, arranged chronologically, showing the day, the hour, and the amount of disturbance (i.e. the difference from the normal) in scale divisions; and on the receipt of this table from the office I proceeded to distribute the disturbances according to the years, months, and hours of their occurrence, separating them into disturbances increasing and disturbances decreasing the force, and forming the tables contained in the following analysis; the correctness of the distribution and of the calculations in each of the tables being in every case examined by a second person.

In the course of the process of marking the disturbances it became evident, as already remarked, that there were times, occasional but by no means frequent, when the change in the mean monthly scale reading, (i.e. the means of all the hours and all the days in the month from one month to the next,) was so considerable as to cause the regular hourly normals of the month to be inapplicable to the earlier or later portions of the month. In such cases the difficulty was met, and more suitable normals obtained for the earlier or later portions of the month, by taking the hourly means of the last fortnight of the one month and the first fortnight of the next, or by a mean of the normals of the two months combined; or in a very few instances, in which the departure from an uniformly progressive change was greatest, by normals derived from periods of less duration than a month.

The number of the Bifilar observations in which the amount of disturbance equalled or exceeded 14 · 0 scale divisions in the five years was 2968, being about 1 in between 12 and 13 of the whole body of the observations.

The aggregate values of the disturbed observations of the Horizontal Force in the different years, each ending June 30, are as follow—

			1	ABL	E IV.				
Year ending	June 30	), 1844	-	-	8618 7 S	c. Div.	_		Ratios.
, ,,	,,	1845	-	-	8032'4	,,	_	-	0.45
<b>39</b>	,,	1846	•	-	9479.2	,,	-		0.23
"	99	1847	-	-	197001	».	-	-	1.11
"	"	1848	•	-	42905.3	, ,,	•	77	2.42
	Total	in the Fi	ve Years	•	88735.7	<b>"</b>			

The sum of the disturbances in the five years (88735.7 sc. div.) gives an annual mean of  $17747 \cdot 1$  sc. div.; and calling this annual mean = 1.00, we obtain the ratios which the aggregate values in the different years bear to the average annual value. We find in this table a progressive increase in the annual value of the disturbed observations from the years ending in June 1844 and June 1845 to the year ending June 1848. The aggregate value in the year ending June 1844 exceeds by a small amount that of the year ending June 1845; but it will be remembered that the former of these two years included five months taken from the preceding year, namely, October 1842 to February 1843 inclusive, in consequence of the Vertical Force Magnetometer having been dismounted from October 1843 to February 1844 inclusive; and as we learn from the observations of the Declination at Toronto, (Vol. II. p. xxiii) that 1843 was a year of minimum disturbance in comparison with the years which preceded and followed it, it was to be expected that the aggregate value of the disturbed observations which stand in the table as corresponding to the year ending June 1844, should be swelled by. the substitution of the disturbances in five months of a preceding year. It will be seen in the sequel, that when the months actually belonging to the year ending June 1844 are employed, the aggregate values, and consequently the ratio in that year, are less than in 1845.

Table V. exhibits the aggregate values in the different years, divided into disturbances increasing the force and disturbances diminishing the force.

TABLE V.

					Increasing.	Decreasing	
Year ending	June	1844	-	-	1963.9	6654'8	sc. div.
, -	,,	1845	-	~	1122.5	6909.9	"
,,	,,	1846	-	-	1566*8	7912.4	,,
**	,,	1847	-	-	2385.8	17314.3	22
11	,,	1848	-	_	5015.5	37889.8	,,

Totals in the five years - - 12054.5 76681.2

It appears from this table that the effect of the larger disturbances was in each year to diminish the Horizontal Force considerably more than to increase it. The ratio of the value of the disturbances decreasing the force to those which increased it was, on the average of the five years, nearly as 6.4 to 1.

The next table exhibits the aggregate values of the disturbed observations, distributed into the different *months* of their occurrence. The final column expresses the

ratio which the values in the preceding column bears to the mean monthly value or average of all the months:—

TABLE VI.

· ·	}		Yea	r ending June	30,		Sums in the	Ratios.
Months.		1844.	1845.	1845. 1846.		1848.	Five Years.	Tutios,
July - August - September October - November - December - January - February - March - April - May - June -		Sc. Div. 1092 6 585 9 300 4 576 4 2004 6 610 2 401 2 139 6 1122 3 1223 9 456 4 105 2	Sc. Div. 190'6 788'7 1266'6 1201'8 1132'9 719'3 702'1 471'0 422'0 611'1 369'8 156'5	Sc. Div. 630'2 740'2 1211'7 575'7 235'3 546'6 598'3 429'9 895'3 1289'5 1241'8 1069'0	sc. Div. 1218'3 1609'6 3092'7 2637'2 642'9 352'6 452'0 936'3 1741'2 3731'2 2515'7 786'1	Sc. Div. 1383 1 1876 5 6739 9 5931 9 3225 0 7174 8 2112 8 4941 7 2721 0 4187 6 2042 6 568 4	sc. Div. 4514 '8 5600 '9 12611 '3 10923 '0 7240 '7 9403 '5 4266 '4 6918 '5 6901 '8 11043 '3 6626 '3 2685 '2	0.61 0.75 1.71 1.48 0.98 1.28 0.58 0.94 0.94 1.50 0.90 0.36
<del></del>	<u> </u>	Total in th	ne five years	<u>-</u>	•	<del>-</del> -	88735*7	
		Mean month	ly value		8	$\frac{88735\cdot7}{12}$ =	7395 = 1	•00

April and September are the months of maximum disturbance, and January and June of minimum disturbance. The progression from the maxima to the minima and from the minima to the maxima are continuous, with the exception of the month of December; an exception obviously caused by the occurrence of excessive disturbance December 1847. If the year ending June 1848 be omitted, the ratios in December and January of the other four years to the average monthly disturbance in those four years are, of December 0.58 to 1, and of January 0.56 to 1. On the whole, therefore, we may conclude that in the larger disturbances of the Horizontal Force, as in those of the Declination (Teronto Observations, Vol. II. p. xxvi), the greatest amount of disturbance takes place at or about the equinoxes, and the least at or about the solstices. The amount of disturbance at the equinoxes (April and September) is to that at the solstices (January and June) in the proportion of between 3 and 4 to 1.

The next table exhibits the aggregate values of the disturbed observations, distributed into the different *hours* of their occurrence.

Table VII.

Aggregate Values of the Disturbances, distributed into the different Hours of their Occurrence, with the Ratios of the Values at each Hour to the Mean Hourly Value or Average of all the Hours.

Toronto Astronomical		In the	Year ending J	une 30,		Sums in the	T) - 41	Toronto
Hours.	1844.	1845.	1846.	1847.	1848.	Five Years.	Ratios.	Civil Hours.
18	335.6	201.8	200*8	879'1	2263.9	3881*2	1.00	6 a.m.
19	286.3	273.2	210.8	860.6	3507.9	5138.8	1.40	7 a.m.
20	178.6	171.5	297.5	716.0	2953.7	4317:3	1.20	8 a.m.
21	334.5	317.5	463.6	728.5	2203.0	4047.1	1.09	9 a.m.
22	563.3	446.2	411.3	770.2	1515.3	3706.3	1:00	10 a.m.
23	478.0	378*8	399.9	624.8	1570.2	3451.7	0.90	11 a.m.
0	475.9	415.9	386.3	606.2	1393.6	3278.2	0.87	Noon.
. 1	394.0	275.7	470.1	413.7	1249.6	2803 1	0.76	1 p.m.
2	395 1	264.7	242.3	540 <b>·5</b>	1019.2	2461.8	0.66	2 p.m.
. 3	288.7	231.3	369.0	548*6	1015.8	2453.4	0.66	3 p.m.
4	<b>345°5</b>	141.5	327.6	522.7	929*4	2266.7	0.61	4 p.m.
5	421.6	322.6	260.4	629.0	902.1	2535.7	0.66	5 p.m.
6	367°9	187.9	326*4	517.5	774.7	2174.4	0.59	6 p.m.
7	353.7	351.0	259.3	480.5	1355*8	2800'3	0.76	7 p.m.
8	344.6	363*2	433.6	515°3	1111.1	2767.8	0.75	8 p.m.
9	459.0	366*3	504.6	1012.5	966.2	3308.9	0.90	9 p.m.
10	496.7	434.0	622.5	933.2	1324.1	3810.2	1.03	10 p.m.
11	322.3	285.1	556.9	1187°7	1851.7	4203.7	1.14	11 p.m.
12	293.8	537.0	625.3	990.5	2247.5	4694.1	1'22	Midnight
13	366.1	544.9	544.8	1613.6	2597.8	5667.2	1.23	1 a.m.
14	399.9	458.1	464.5	1463.2	3155.7	5941.4	1.60	2 a.m.
15	248.5	390.3	532.0	1453.3	2427.5	5051.6	1.37	3 a.m.
16	212.8	311*4	317.1	938.6	2430.0	4209'9	1.14	4 a.m:
17	256*3	362.5	252.6	754.0	2139*2	3764.6	1.02	5 a.m.
<u></u>	· ·	Total in th	e five years	•		88735*7		
		Mean hourl	y value		$\frac{88735.7}{24} =$	3697 = 1°0	0	

When we examine the ratios presented in this table we at once perceive that the occurrence of the larger disturbances of the Horizontal Force at Toronto is regulated by periodical laws. The amount of disturbance is systematically greater at all the

hours from 10 p.m. to 10 a.m. inclusive, than at any hour from 11 a.m. to 9 p.m. inclusive. The ratios are equal to or above unity from 10 p.m. to 10 a.m. inclusive, and below unity from 11 a.m. to 9 p.m. inclusive. The maximum is at 2 a.m., and the minimum intermediately between 2 and 6 p.m., during which latter hours there is but little variation in the amount. There is also a secondary maximum about 7 or 8 a.m., preceded by a secondary minimum at 5 or 6 a.m. In the year ending June 1848 (but for that year only,) the secondary maximum at 7 a.m. was greater than at 2 a.m. (the usual hour of the principal maximum,) or than at any other hour in that year; this circumstance is chiefly due to the great disturbances which occurred in December 1847.

Tables VIII. and IX. exhibit the aggregate hourly values in the different years separated into disturbances increasing the force and disturbances decreasing the force; with the ratios at each hour to the respective mean hourly values.

TABLE VIII.

Disturbances increasing the Force.

Toronto Astrono-		In the	Year ending Ju	Sums in the	Ratios.	Toronto Civil		
mical Time.	1844.	1845.	1846.	1847.	1848.	Five Years.	Ratios.	Time.
н. 18	Sc. Div. 15'5	Sc. Ďiv.	Sc. Div. 55°9	Sc. Div.	Sc. Div. 103 1	Sc. Div.	0.38	н.
19	45.5		00 9	16.5	54·3	116.0 131.8	0.58	6 a.m.
20	18.5	19.1	28.8	37.0	65.4	168.2	0.33	8 a.m.
21	86.6	87.2	118.3	32.6	147.5	472.5	0.94	9 a.m.
22	231.2	151.7	87.4	80.4	181.7		1.46	10 a.m.
23	203.9	138.7	89.8	173.9	351.2	732.7 957.5	1'90	10 a.m.
0	185.7	159.9	104.2	125.0	345.0	920.1	1'83	Noon.
1	158.0	99.1	123.3	74.4	331.4	786 2	1.57	1 -
2	210.6	130.1	171.4	210.0	434.0	1156.1	2.30	l p.m.
2 3 4 5	80.9	52.4	112.5	305.3	448 5	999.3	2.00	2 p.m.
4	189.4	17.6	227.6	292.6	530.4	1257.6	2.20	3 p.m.
ŝ	183.5	53.5	117.8	381.9	374.2	1111.0	$\frac{2}{2} \cdot 20$	4 p.m.
6	72.2		82.7	150.6	131.7	437.5	0.85	5 p.m.
7	17.3	17.1	70.1	62.2	609.8	776.8	1.22	6 p.m.
8	31.4	50.2	66.5	26.2	362.8	537.4	1.07	7 p.m.
9	51.9	18.5	18.7	104.7	123.2	317.0	0.63	8 p.m.
10	92.8	55.7		93.7	101.0	343.2	0.68	9 p.m.
ii	14.6	36.2		46.1	105.1	202.3	0.40	10 p.m.
12	_	49.2	30.6	36.3	100.2	216.3	0.43	11 p.m.
13				66.0	50.5	116.9	0.43	Midnight
14				00 0	17.4	17.4	0.03	1 a.m.
15	28.3			35.0	14.9	78.2	0.16	2 a.m.
16	15.3		15.0		1 3	30.3	0.06	3 a.m.
17	30.1		32.2	<del>17</del> ·8	$\frac{-}{31}.5$	111.8	0.52	4 a.m.
					01.0		0 22	5 a.m.
			Total in the	v value	$\frac{2054}{24} =$	12054°5	1.00	·

Table IX.

Disturbances decreasing the Force.

Toronto Astrono- mical Time.		In the	Year ending J	Sums in the	<b>.</b>	Toronto			
	1844.	1845.	1846.	1847.	1848.	Five Years.	Ratios.	Civil Time.	
н.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		н.	
18	320.1	201.8	144.9	861.8	2160.8	3689.4	1.12	6 a.m.	
19	240.8	273.2	210.8	844 4	3453.6	5022.8	1.57	7 a.m.	
20	160.4	152.4	268.7	679.0	2888.3	4148.8	1.30	8 a.m	
21	247.9	230.0	345.3	695.9	2055.5	3574'6	1.12	9 a.m	
22	331.8	294.5	323.9	689.8	1333.6	2973.6	0.93	10 a.m	
23	274.1	240'1	310.1	450.9	1219.0	2494.2	0.78	· 11 a.m	
0	290.2	270.0	267.8	481.5	1048.6	2358.1	0.74	Noon.	
1	236.0	176.6	346'8	339.3	918.2	2016.9	0.63	1 p.m	
2 3	184.2	134.6	70.9	330.2	585.2	1305.7	0.41	2 p.m	
3	207.8	178'9	256.8	243.3	567.3	1454.1	0.46	3 p.m	
4 5	156.1	123.9	100.0	230.1	399.0	1009.1	0.31	4 p.m	
5	237.4	269.4	141.6	247.1	527.9	1424.7	0.45	5 p.m	
6	295'4	187.9	243.7	366.9	643.0	1736.9	0.54	6 p.m	
7	336.4	333.9	189.2	418.0	746.0	2023.5	0.63	7 p.m	
8	313.2	312.7	367.4	488.8	748.3	2230.4	0.70	8 p.m	
9	407.1	348.1	485.9	907.8	843.0	2991.9	0.94	9 p.m	
10	403.9	378.3	622.5	839.5	1223.1	3467.3	1.09	10 p.m	
11	307.7	248.6	556.9	1141.6	1746.6	4001.4	1.25	11 p.m	
12	293.8	487.8	594.7	$954 \cdot 2$	2147 3	4477.8	1.40	Midnigh	
13	366.1	544.9	<b>544 8</b>	1547.6	2546.9	5550.3	1.73	l a.m	
14	399.9	4581	464.5	1463.2	3138.3	5924.0	1.86	2 a.m	
15	220.2	390.3	532.0	1418.3	2412.6	4973.4	1.26	3 a.m	
16	197.5	311.4	302.1	938.6	2430.0	4179.6	1.31	4 a.m	
17	226.2	362.5	220.1	736.2	2107.7	3652.7	1.14	5 a.m	
			Total in the	five years		76681.2			
Mean hourly value $\frac{76681}{24}$ =						3195°0 = 1°00			

We perceive by these tables that both the disturbances which increase and those which decrease the force are governed in respect to their frequency and amount by periodical laws depending on the solar hours, and that the laws are different in the two cases. The disturbances which increase the force have a maximum at 4 p.m., and a minimum from 2 to 4 a.m. There are also secondary maxima at 11 a.m., at 2 p.m., and at 7 p.m.; and secondary minima at 1, 3, and 6 p.m., unless we may regard these secondary maxima and minima as accidents which would disappear on a longer continuance of the observations.

From 10 a.m. to 8. p.m. inclusive the ratios are with a single exception above unity and from 9 p.m to 9 a.m. inclusive without an exception below unity. It is in the hours

of the day, consequently, that the disturbances which increase the force have their greatest prevalence, whilst the hours of the night are comparatively tranquil. The converse law holds in regard to the disturbances which decrease the force; from 10 p.m. to 9 a.m. the ratios exceed unity at every hour, and from 10 a.m. to 9 p.m. they are uniformly less than unity. The maximum is at 2 a.m. and the minimum at 4 p.m. The continuous progression from the maximum to the minimum, and from the minimum to the maximum, undergoes an interruption of very marked character at 7 and 8 a.m., constituting a very decided secondary maximum in the disturbances which increase the force at those hours, which hours are not distinguished by any peculiarity in the disturbances of opposite character.

The table which follows (Table X., pp. xviii to xxi) shows the normal values finally adopted, the periods for which they have been employed, and the periods from which they have been derived. This table is the result of careful consideration; and is presented, not alone as one of the steps by which the conclusions arrived at in this volume have been obtained, but as a means of rendering the whole body of the Bifilar Observations in the five years more valuable for future enquiries than they would be without a table of this kind. Possessed of a table containing an approximate normal reading for every day and every hour, the inquirer has it in his power, by a simple comparison of the observations in the monthly tables, with the table of normals, to ascertain the state of the Horizontal Force relatively to its mean value on any particular day or hour to which his attention may be directed; he will have in such case only to correct the tabular scale reading in the monthly table to the standard temperature of 55°, by the aid of the coefficient 1.63 as the equivalent of 1° of Fahrenheit.

## TABLE X.

Hourly Means of the Readings of the Bifilar Magnetometer, reduced to an uniform Temperature of 55° Fahrenheit; omitting disturbed Observations in which the Amount of Disturbance equalled or exceeded 14 Scale Divisions or about ·0012 parts of the whole Horizontal Force at Toronto.

Table X.

Hourly Means of the Readings of the Bifilar Magnetometer, reduced to an uniform Temperature of exceeded 14 Scale Divisions, or about '0012 parts

		GÖTTINGEN HOURS.										
Periods to which the	0	1	2	3	4	5	6	7	8	9	10	11
Hourly Means						roront		<u> </u>	1	l	1	<u> </u>
correspond.			,		•	LORONI		······	<del> </del>	<del></del>		
	18	19	20	21	22	23	0	1	2	3	4	5
1842 :	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
Oct. 1 to 31 -	449.3	446.6	442.8	434 2	429.6	429.3	431'0	435.5	441.7	444 6	446.6	447'2
Nov. 1 to 26 -	457.7	457.2	451'4	445.7	438 1	437.7	440.8	444.5	450.4	455.8	456 2	458.4
Nov. 27 to 30 - Dec. 1 to 31 -	462.6	462.1	459.0	454.5	447.6	445'2	447.0	450.4	455.6	460.5	462.6	463.7
Dec. 1 to 31 -	467.6	467.0	466.6	463*4	457.1	452.8	453'1	456.3	460.9	465.3	469.0	469.0
Jan. 1 to 31 -	465.8	466.5	466.2	461.8	456.1	449.2	447.0	451.7	454.6	462.0	466.7	465.2
Feb. 1 to 9 -	469.3	469.9	466'6	464.1	460.1	457.4	457.9	462.1	464.2	470.2	475.5	473.5
July 2 to 15 -	904.6	903.8	902.6	909.0	899.7	899.8	905.6	907.3	912.5	915.5	919.0	916'8
July 16 to 29 -	928.1	927.0	927.8	925.4	922.3	925.4	930.5	934.4	938.2	943.3	940.0	939.3
July 30 to Aug. 12	949.9	948.2	942'1	938'1	940.5	944.6	947.2	953.7	957.1	960.8	960.1	962.5
Aug. 13 to 26 • Aug. 27 to Sept. 16	967·5 987·1	964.5	962 <b>.</b> 8	960.0	957°6 976°5	963.3	966'6	971.2	978 <b>.</b> 7	981.6 999.1	979 <b>.</b> 6	979'4
Sept. 17 to 20 -	998.9	997.6	992.1	986.8	986.4	987.3	990.5	997.5	1002.2	1006.3	1006.2	992.9
Sept. 21 to 30 -	1010.6	1008 6	1003.4	998.3	996.5	995.1	999.4	1004.3	1002 2	1013.2	1016.9	1015.5
Oct. 2 to 31 -	490.6	489.7	487.3	483.7	481.3	480.1	482.8	484.8	488 3	490.4	492.2	492.2
Nov. 1 to 30 -	496.8	495.6	492.9	489.5	488.7	488.9	489'1	490.8	493.8	496.3	497.6	498.4
Dec. 1 to 31 -	500.9	200.9	499.7	499.2	495.7	491.5	490.1	491.1	494.4	497.2	200.0	499'7
1844:	400.0	700.0	40044	40010	40.440	10010						
Jan. 1 to 31 - Feb. 9 to 29 -	499.8 503.2	500°2 502°7	498°6 500°7	496'9 499'5	494.3	492:0	491.5	494.4	496.6	499.3	502.0	501.9
March 1 to 31 -	504.2	501.2	498.0	496.9	$\begin{array}{c} 499.7 \\ 494.2 \end{array}$	499.4 492.1	500°3 491°6	501°7 494°0	504°1 498°8	506°4 504°4	506.7 504.5	505'9 504'1
April 1 to 30 -	503.1	503.2	501.5	497.6	494.8	495.6	494.5	499.3	202.0	508.2	508.0	518.8
May 1 to 11 -	506.7	506.7	504.2	500.0	497.6	498'6	500.3	505.4	210.3	513.6	513.6	514.2
May 12 to 25 -	510.3	509.6	507.1	502.5	500'4	501.6	506.1	511.5	515.6	518.6	519.2	518.1
May 26 to June 8	515.8	515.2	513.0	509.6	508°2	509.9	513.6	518.3	523.7	524.8	525.0	524.5
June 9 to 22 - June 23 to July 6	521.3	520.8	518.8	516'6	515.9	518.2	521.2	525.0	529.7	531.0	530.9	531.0
July 7 to 27 -	527.4 533.5	527°3 533°8	523 9 528 9	520°3 523°9	517.3	520.3	525.2	529.3	534.2	536.6	537.1	536.2
July 28 to Aug. 3	537.2	536.0	531.3	525.4	518'8 521'2	522.4 524.8	529°1 530°9	533.6 536.5	538.7 541.5	542°3 546°4	543.3	541.4
Aug. 4 to 24 -	540.9	538.3	533.6	526.9	523.6	527.2	532.7	539*4	544'3	550.5	546'4 549'6	544.5 547.5
Aug. 25 to Sept. 7	545.1	542.5	537.4	531.4	528.3	531.2	537.0	544.0	549.3	552.8	553.1	551.4
Sept. 8 to 28 -	549.3	546.7	541.2	535.8	532.9	535°7	541'4	548.6	554.3	555'1	556 6	555.3
Sept. 29 to Oct. 5	551.7	549.6	544.6	539 4	536.2	538.4	542.8	548.4	553.6	555'3	556.8	556.7
Oct. 6 to 26 -	554.1	552.4	548.0	543.0	539.5	541.0	544.2	548'1	553.9	555.5	557.1	558*0
Oct. 27 to Nov. 2 Nov. 3 to 30	555°5 556°9	554°3 557°2	551°0 554°0	547°0 551°0	544.0	543.5	546.0	549.0	554.4	556.6	557.6	558.2
Dec. 1 to 31 -	561.4	560.4	560.2	5591	548°5 556°4	545°9 550°7	547°7 552°4	550°0 555°1	554°9 556°7	557·7 559·9	558.2	558.3
1845:						333	202 I	300 1	000 1	003 3	000 0	561.8
Jan. 1 to 31 -	560.3	560.4	556.9	551.3	546.0	546.9	548.4	552.3	555.2	557.0	560.0	#60·1
Feb. 1 to 28 •	564'1	563.9	560.6	558.2	555.8	553.9	554.3	556°4	560.6	557°8 565°1	560°2 564°8	560.1
March 1 to 31 -	564.5	562.1	558*8	554.9	551.4	548.6	550.7	554.7	558.9	563.8	565.9	566.8
April 1 to 26 -	563.6	562.6	559.6	551.5	546.9	547.0	550.0	555.7	562.7	564.0	569.4	568.3
April 27 to May 10	565.1	564.5	561.1	554.6	551.6	$552 \cdot 2$	555'6	<b>5</b> 61.0	567.1	569.3	572.9	572.2
May 11 to 24 -	566.7	566'4	562.6	557.8	556.3	557.5	561.2	566.4	571.5	574.6	576.4	576.1
May 25 to June 7	571.4	570.8	567.4	562.5	559.6	561.0	564.7	569.7	575.4	578.5	580.3	580.0

TABLE X.
55° Fahrenheit; omitting disturbed Observations in which the Amount of Disturbance equalled or of the whole Horizontal Force at Toronto.

				G	ÖTTING	EN HOU	RS.					Periods
12	13	14	15	16	17	18	19	20	21	22	23	from which the
					CORONTO	) HOURS	s.	<u>'</u>	<del>'</del>		·	Hourly Means
6	7	8	9	10	11	12	13	14	15	16	17	are derived.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	1842 :				
446.6	446'6	444 3	443.9	445.2	444.9	445.5	445.4	447.0	446.1	449*4	448.7	Oct. 1 to 31.
459'1	458'1	456.8	455.6	454.8	454.2	454.5	455.8	454.0	455.7	457.0	458.4	Nov. 1 to 26.
463.4	462.5	461.0	459.8	459.4	458.5	458.6	459.0	460.0	460 0	461 7	463.4	Nov. and Dec.
467.7	467.0	465.2	464.1	464.0	462.8	462.7	463.0	465.2	464.2	466.4	468.3	Dec. 1 to 31.
				;								1843:
464.4	463.4	462.9	461.5	461.2	461.1	461.1	461.7	462.3	463.3	464.8	465.9	Jan. 1 to 31.
471.3	465.8	465.7	466.7	466.7	465.4	467.6	467.3	466.6	466.8	469.1	468.2	Feb. 1 to 9.
916.9	914.7	910.2	911.0	909.0	907.5	905.8	906.9	906.7	906.8	904.7	902.2	July 2 to 15.
936.7	936.4	933.5	931.2	929.2	930.2	929.6	928.3	929.2	929.2	928.0	928.0	July 16 to 29.
958.8	957.6	954.6	953.6	952.6	951.4	950.8	949.9	951.8	950.2	949.3	947.0	July 30 to Aug.
976.4	973.9	973.6	971.9	970.7	971.1	969.6	968.2	970.0	969.2	966.7	967.1	Aug. 13 to 26.
991.0	990.8	990.2	989.0	987.7	986.8	986.2	986.9	986.2	984.6	986.5	985.2	Aug. 27 to Sept.
001.6	1000.1	997.6	997.8	997.2	997.0	997.6	998.0	997.5	996.6	998.2	998.7	Sept. 1 to 30.
012.2	1009 4	1004.7	1006.6	1006.6	1007.2	1009.0	1009.2	1008.5	1008.2	1010.2	1011.9	Sept. 21 to 30.
490.3	490 1	489.4	488.7	487.4	486.0	485.6	488.0	487.5	487.9	489.0	489.8	Oct. 2 to 31.
497.5	496.5	494.7	494.9	493.1	492.7	493.5	492.9	494.0	493.3	494.3	495.8	Nov. 1 to 30.
499'8	498.0	497.7	497.5	496.5	496.3	496.6	497.4	497.6	497.8	498.9	499.6	Dec. 1 to 31.
	200										-20	1844:
500.7	500.5	500.5	498.6	497.9	497.8	497.1	497.3	497.4	498.3	499.1	499.6	Jan. 1 to 31.
505.8	505.2	504.1	504.3	502.8	502.8	502.7	500.8	500.6	501.3	502.0	503.0	Feb. 9 to 29.
503.9	503.4	502.4	502.8	501.5	500.7	500.3	500.5	500.3	500.4	501.2	502.9	March 1 to 31.
507.6	505.3	501.9	501.2	.502.0	500.5	501.1	501.0	501.0	501.1	503.7	504.5	April 1 to 30.
211.1	508.3	506.7	505.9	507.1	504.9	504.9	504.8	505.3	505.4	507.0	507.4	April and May
514.2	511.3	511.6	510.3	512.2	509.3	508.7	508.5	509.6	509.6	510.2	510.5	May 1 so 31.
521.3	518.9	518.4	516.8	517.2	515.5	515.3	515.3	515.4	514.9	515.0	515.6	May and June.
528.2	526.5	525.3	523.3	52 <b>2</b> ·1	521.8	522.0	522.1	521.3	520.2	519.8	520.7	June 1 to 30.
533'5	331.2	529.8	528.3	527.1	527.3	527.3	527.3	525.9	525.9	525.4	526.3	June and July.
538.8	536.4	534.4	533.4	532.1	532.9	532.7	532.5	530.2	531.2	531.1	532.0	July 1 to 31.
541.5	538.9	537.2	537.3	537.0	537.8	536.3	536.5	535.6	535.4	535.0	536.0	July and Aug.
544.2	541.4	540.0	541.1	541.8	542.6	539.9	540.6	540.7	539.2	538'9	540.0	Aug. 1 to 31.
549.1	547.4	544.6	545.2	545.7	545.7	544.0	544.5	544.5	543.9	543.6	544.6	Aug. and Sept
554.0	553.4	549.2	549 3	549.6	548.7	548.2	548.3	548.4	548.6	548.4	549.2	Sept. 1 to 30.
554.3	553.8	551.5	551.2	551.2	550.6	550.2	550.7	549.1	550.8	551.3	551.5	Sept. and Oct.
554.6	554.2	553.1	553.7	552.8	552.4	552.2	553.0	549.8	552.9	554.1	553.8	Oct. 1 to 31.
556.0	555.8	554.7	554.2	554.0	552.6	552.3	553.3	551.6	553*2	554.2	555.4	Oct. and Nov.
557.5	555.8	556.2	554.6	555.2	552.9	552.4	553.6	553.4	553'6	554.2	557.0	Nov. 1 to 30.
61.1	561'2	559.4	556.5	555.5	556.7	555°1	555.2	55675	556.7	558.1	559.9	Dec. 1 to 31.
								·	İ			1845:
557.4	558.7	558.7	557.7	558.7	557.8	557°2	556.7	556.8	556.5	558.1	557.4	Jan. 1 to 31.
64.0	563.5	561.6	561.3	561'8	561.0	561'4	561.0	560.8	560.6	562.7	562.8	Feb. 1 to 28
64.0	563.7	564.7	563.7	562.4	561.4	561.9	561.3	561.0	560.9	562.5	563.1	March 1 to 31.
66.9	564.7	563.7	563.4	563.2	562.9	562.4	561.2	562.5	562.6	564.7	563.8	April 1 to 30.
69.3	567.7	565.8	564.2	564.3	564.1	563.8	562.9	563.9	563.8	565.4	564.8	April 1 to May.
71.8	570.8	568.0	565.2	565.2	566.6	565.2	564 7	565.3	565.1	566.1	565.8	May 1 to 31.
76.4	574.4	572'1	570.2	570.0	570'1	568.9	568.4	568.8	568.6	569.5	570.0	May 1 to June
												(Continued on p. x

TABLE X.—continued.

June 29 to July 5	*												
to which the Hourly Means correspond.    18						(	GÖTTING	EN HOU	TRS.				
Hourly Means   18		0	1	2	3	4	5	6	7	8	9	10	11
18	to which the	ļ	l	<u> </u>	<u> </u>	<u> </u>	!	<u> </u>					
18	·						TORONT	o Hour	S.				
June 8 to 28	correspond.	18	19	20	21	22	23	0	1	2	3	4	5
June 29 to July 5	1845:	Sc. Div.											
July 27 to Aug. 2 581-4 587-8 0 575-9 570-4 567-8 567-8 567-8 577-9 577-0 581-2 585-1 585-8 584-8 Aug. 34 to 23 - 584-3 580-7 576-3 571-6 589-3 570-8 575-2 580-7 581-5 589-5 589-5 587-5 589-7 589-8 580-7 589-8 580-7 589-8 580-7 589-8 580-8									573.1	579.3	582.5	584'2	583.7
													584'2
Aug. 24 to Sept. 6													
Aug. 24 to Sept. 6 585° 9 582° 7 578° 3 574′ 6 572° 2 574′ 6 580° 3 584′ 9 590° 6 591′ 8 593° 2 591′ 581′ 581′ 580′ 588′ 9 585′ 588′ 9 585′ 2 582° 2 580° 7 581′ 6 586′ 0 588′ 9 592′ 7 594′ 0 594′ 593′ 2 00° 50° 5 588′ 9 585′ 2 582° 2 580° 7 581′ 6 586′ 0 588′ 9 592′ 7 594′ 0 594′ 593′ 2 00° 50° 5 588′ 9 585′ 2 582° 2 580° 7 581′ 6 586′ 0 588′ 9 592′ 7 594′ 0 594′ 5 593′ 2 00° 50° 5 588′ 9 585′ 2 588′ 9 585′ 2 588′ 2 580° 1 593′ 595′ 595′ 595′ 595′ 595′ 595′ 595′													
Sept. 7 to 27 - 587' 5 584' 7 580' 0 576' 4 573' 7 575' 9 582' 1 586' 6 591' 8 592' 6 591' 591' 8 592' 6 591' 7 592' 0 594' 5 593' 9 593' 0 588' 9 585' 2 588' 0 588' 9 591' 2 593' 6 596' 1 596' 1 596' 4 594' 7 590' 1 596' 1 59													
Sept. 28 to Oct. 4													
Oct. 26 to Nov. 8 Nov. 9 to 30 - 596.0  Sec. 1 to 31 - 596.7  Sec. 1 to 31 - 596.7  Sec. 2 596.7  Sec. 2 596.7  Sec. 2 596.7  Sec. 3 596.7  Se													
Oct. 26 to Nov. 8   596'0   595'4   591'5   588'5   586'9   586'2   588'2   590'6   593'7   595'8   596'5   595'5   596'3   598'3   595'5   596'6   596'3   598'3   598'3   595'5   596'6   596'3   598'3   59	Oct. 5 to 25 -		593.0									1	
Nov. 9 to 30			1										595.5
1846;   597.7   597.9   596.7   594.4   589.1   586.5   586.9   591.7   595.9   601.1   602.5   602.0										593.8			
Jan. 1 to 31	Dec. I to 31 -	596.7	597.2	597.0	293.9	591.4	589.8	587.5	589°2	591.2	596.3	598.3	598 <b>.2</b>
Feb. 1 to 29					1		!						
March 2 to 31 - \$98.71 \$996.0 \$592.6 \$589.0 \$85.2 \$582.0 \$588.9 \$586.2 \$589.2 \$595.1 \$598.1 \$599.3 \$April 1 to 30					594.4		586.2	586.9	591.7	595.9	601.1	602.5	602.0
April 1 to 30 - 595.3 595.2 590.7 584.7 582.4 581.8 584.7 588.0 592.6 603.3 600.9 601.3 May 1 to 31 - 593.4 593.8 588.0 581.7 581.8 584.5 588.1 594.0 602.4 606.1 605.7 605.4 July 1 to 31 - 602.4 602.2 599.4 597.3 591.9 588.3 591.5 595.3 600.5 605.8 609.8 610.8 615.5 614.7 Aug. 1 to 31 - 605.6 604.4 597.7 592.3 593.7 591.4 602.3 610.5 615.0 618.1 618.1 618.1 618.2 59t.1 to 30 - 610.6 606.8 601.5 596.4 592.1 594.2 600.5 608.7 615.6 619.6 614.0 613.4 Nov. 2 to 30 - 610.6 606.8 601.5 596.4 592.1 594.2 600.5 603.3 605.5 609.3 611.6 614.0 613.4 Nov. 2 to 30 - 617.8 616.6 611.9 606.8 605.2 600.9 598.8 597.5 600.2 604.7 608.3 611.6 614.0 613.4 Nov. 2 to 30 - 617.8 616.6 611.9 606.8 605.0 607.0 607.0 609.8 614.8 619.4 621.2 620.6 1847.					1 -					593.7	597.5	596.5	596.7
May 1 to 31											595'1	598.1	599.3
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$							1			1			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	June 1 to 20												
Aug. 1 to 31         -         605 6         604 4         597 7         592 3         593 7         594 4         602 3         610 5         615 0         618 1         618 1         616 2           Sept. 1 to 30         -         610 6         606 8         601 5         596 4         592 1         594 2         600 5         608 7         615 6         619 6         616 4         612 7           Nov. 2 to 30         -         617 8         616 6         611 9         606 8         605 0         607 0         607 0         608 3         613 4         614 7         615 3           Dec. 1 to 31         -         619 2         618 8         615 6         610 7         607 0         607 0         609 8         614 8         614 7         615 3           1 to 31         -         619 2         618 8         615 6         610 8         607 7         607 0         609 8         614 8         612 7         615 8           1 to 31         -         619 2         618 8         615 6         610 8         607 7         607 0         609 8         614 8         612 7         615 6         611 7         616 9         606 9         606 9         614 6         612 7         617 9													
Sept. 1 to 30 - 610·6 606·8 601·5 596·4 592·1 594·2 600·5 608·7 615·6 619·6 616·4 619·7 Oct. 1 to Nov. 1 - 613·7 610·0 605·2 600·9 598·8 597·5 600·2 604·7 608·3 611·6 614·0 613·4 Nov. 2 to 30 - 617·8 616·6 611·9 606·8 605·0 601·5 603·3 605·5 609·3 613·4 614·7 615·3 Dec. 1 to 31 - 620·6 620·1 617·1 614·8 610·7 607·0 607·0 609·8 614·8 619·4 621·2 620·6 1847:  Jan. 1 to 31 - 619·2 619·2 618·8 615·6 610·8 607·3 607·7 611·0 614·9 620·5 621·1 622·1 Feb. 1 to 28 - 615·8 613·0 609·4 608·4 607·2 606·2 606·8 611·1 614·3 615·7 617·9 616·9 March 1 to 31 - 615·6 614·1 610·0 606·7 600·2 598·7 599·9 603·9 608·9 614·6 619·2 620·1 May 1 to 31 - 615·3 613·8 612·6 607·1 602·6 605·6 612·0 619·5 623·2 626·0 625·8 625·4 Aug. 1 to 31 - 623·1 621·9 615·5 610·1 607·0 606·1 611·2 616·4 621·5 627·3 633·6 633·6 633·6 632·4 Aug. 1 to 31 - 623·1 621·9 615·5 610·1 607·0 606·1 611·2 617·8 627·7 632·0 632·6 632·6 632·6 632·8 625·4 Aug. 1 to 31 - 623·1 621·9 615·5 610·1 607·0 606·1 611·2 617·8 627·7 632·0 632·6 632·6 632·6 632·8 625·4 Aug. 1 to 31 - 623·1 621·9 615·5 610·1 607·0 606·1 611·2 617·8 627·7 632·0 632·6		1										l	
Oct. 1 to Nov. 1 - Nov. 2 to 30         613.7 co. 610.0 co. 605.2 co. 600.9 co. 598.8 co. 597.5 co. 600.2 co. 604.7 co. 608.3 co. 611.6 co. 611.9 co. 606.8 co. 611.9 co. 606.8 co. 605.0 co. 601.5 co. 603.3 co. 605.5 co. 609.3 co. 613.4 co. 613.		1 - 1											
Nov. 2 to 30													
Dec. 1 to 31	Nov. 2 to 30 -	617.8	616.6										
1847:  Jan. 1 to 31	Dec. 1 to 31 -	620.6	620.1	617.1	614.8	610.7	607.0						
Feb. 1 to 28 - 615 *8 613 *0 609 *4 608 *4 607 *2 606 *2 606 *8 611 *1 614 *3 615 *7 617 *9 616 *9 March 1 to 31 - 615 *6 614 *1 610 *0 606 *7 600 *2 598 *7 599 *9 603 *9 608 *9 614 *6 619 *2 620 *1 615 *1 615 *2 611 *7 606 *0 602 *1 598 *5 595 *0 599 *1 607 *6 614 *4 619 *6 623 *4 620 *1 May 1 to 31 - 623 *3 622 *7 619 *2 615 *7 610 *5 611 *7 616 *0 624 *5 632 *0 635 *6 636 *6 632 *5 July 1 to 31 - 621 *9 618 *5 615 *2 611 *1 609 *0 610 *2 616 *4 621 *5 627 *3 633 *6 633 *5 630 *4 Aug. 1 to 31 - 623 *1 621 *9 615 *5 610 *1 607 *0 606 *1 611 *2 617 *8 627 *7 632 *0 632 *6 632 *8 632 *8 632 *1 621 *1 620 *6 615 *4 609 *6 604 *7 600 *7 598 *9 605 *1 611 *8 616 *8 620 *4 620 *8 620	1847:				ĺ								
Feb. 1 to 28  March 1 to 31  April 1 to 30  April 1 to 30  Cot. 1 to 31  Dec. 1 to 31  Col. 1 to 31				618.8	615 6	610.8	607:3	607.7	611.0	614.9	620.5	621.1	6221
March 1 to 31 - 615 6 614 1 610 0 606 7 600 2 598 7 599 9 603 9 608 9 614 6 619 2 620 1 615 7 610 1 to 30 - 615 2 611 7 606 0 602 1 598 5 595 0 599 1 607 6 614 4 619 6 623 4 620 1 615 3 613 8 612 6 607 1 602 6 605 6 612 0 619 5 623 2 626 0 625 8 625 4 620 1 621 9 618 5 615 2 611 1 609 0 610 2 615 4 621 5 627 3 633 6 633 5 630 4 622 8 625 1 620 1 618 9 610 9 607 9 603 4 602 5 606 9 611 5 615 612 613 621 9 624 1 620 6 615 4 609 6 604 7 600 7 598 9 605 1 611 8 616 8 620 4 620 5 620 8 624 1 620 6 623 2 617 9 614 5 614 7 616 1 617 2 618 3 622 9 624 8 629 9 626 8 623 6 616 0 612 6 607 1 609 8 617 3 620 7 625 7 629 4 621 1 620 9 623 8 623 7 622 8 617 5 612 6 607 1 609 8 617 3 620 7 625 7 629 4 621 1 620 9 624 8 622 8 617 5 612 6 607 1 609 8 617 3 620 7 625 7 629 4 624 1 620 9 626 8 623 6 616 0 612 6 607 5 605 5 613 5 619 3 624 4 620 8 621 7 622 6 621 8 621 7 622 6 621 7 617 6 611 5 607 1 609 8 617 3 620 7 625 7 629 4 624 1 620 6 622 8 617 5 612 6 607 5 605 5 613 5 613 5 619 3 624 4 625 6 632 6													
April 1 to 30													
June I to 30											619.6	623'4	
July 1 to 31         -         621 '9         618 '5         615 '2         611 '1         609 '0         610 '2         616 '4         621 '5         627 '3         633 '6         633 '5         630 '4         630 '4         621 '8         611 '1         609 '0         660 '1         611 '2         617 '8         627 '7         632 '0         633 '5         630 '4         630 '4         606 '1         611 '2         617 '8         627 '7         632 '0         632 '6         632 '8         630 '4         632 '8         606 '7         612 '6         621 '2         628 '2         631 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         632 '6         632 '8         600 '7         598 '9         605 '1         611 '8         616 '8         620 '8         622 '9         624 '8         622 '0         608 '2													
Aug. 1 to 31       -       623 1       621 9       615 5       610 1       607 0       606 1       611 2       617 8       627 7       632 0       632 6       632 7       632 7       632 7       632 7       632 7       632 7       632 7       632 7       632 7       632 7													
Sept. 3 to 30													
Oct. 1 to 31	0 7 0 1 00												
Nov. 1 to 30	Oct. 1 to 31 -	620.1											
Dec. I to 31			620.6	615.4									
1848:  Jan. 1 to 31 - 624 '4 623 '5 624 '8 622 '0 608 '2 601 '7 602 '7 608 '5 611 '5 620 '3 626 '7 625 '9  March 1 to 31 - 629 '9 626 '8 623 '6 616 '0 612 '6 607 '5 605 '5 613 '5 613 '5 620 '7 625 '7 629 '4  April 1 to 30 - 624 '4 626 '6 622 '8 61 '' 5 612 '1 609 '4 615 '8 618 '9 621 '5 630 '1 634 '4 635 '3  May 1 to 31 - 632 '6 629 '9 626 '8 619 '4 616 '2 617 '2 620 '4 632 '1 636 '1 638 '6 639 '6 639 '3	Dec. 1 to 31 -	629.7	628.8	627.6	623.2	617'9	614.5						
Feb. 1 to 29 - 628 4 626 3 625 5 621 7 617 6 611 5 607 1 609 8 617 3 620 7 625 7 629 4  March 1 to 31 - 629 9 626 8 623 6 616 0 612 6 607 5 605 5 613 5 619 3 624 3 628 6 631 7  April 1 to 30 - 624 4 626 6 622 8 61 5 612 1 609 4 615 8 618 9 621 5 630 1 634 4 635 3  May 1 to 31 - 632 6 629 9 626 8 619 4 616 2 617 2 620 4 632 1 636 1 638 6 639 6 639 3	1848:										. =		
Feb. 1 to 29 -   628 4   626 3   625 5   621 7   617 6   611 5   607 1   609 8   617 3   620 7   625 7   629 4    March 1 to 31 -   629 9   626 8   623 6   616 0   612 6   607 5   605 5   613 5   618 3   624 3   628 6   631 7    April 1 to 30 -   624 4   626 6   622 8   61 5   612 1   609 4   615 8   618 9   621 5   630 1   634 4   635 3    May 1 to 31 -   632 6   629 9   626 8   619 4   616 2   617 2   620 4   632 1   636 1   638 6   639 6   639 3    June 1 to 30 -   635 7   634 7   636 7   635 8   618 9   621 5   630 1   638 6   639 6   639 3			623.5	624.8	622.0	608.2	601.7	602.7	608.5	611.5	620.3	626.7	625.0
March 1 to 31 - 629'9 626'8 623'6 616'0 612'6 607'5 605'5 613'5 619'3 624'3 628'6 631'7  April 1 to 30 - 624'4 626'6 622'8 61"5 612'1 609'4 615'8 618'9 621'5 630'1 634'4 635'3  May 1 to 31 - 632'6 629'9 626'8 619'4 616'2 617'2 620'4 632'1 636'1 638'6 639'6 639'3			626.3										
April 1 to 30 - 624.4   626.6   622.8   61.5   612.1   609.4   615.8   618.9   621.5   630.1   634.4   635.3    May 1 to 31 - 632.6   629.9   626.8   619.4   616.2   617.2   620.4   632.1   636.1   638.6   639.6   639.3    June 1 to 30 - 635.7   634.7   636.7   636.7   635.8   619.8   619.8   619.8   619.8   621.5   636.1   638.6   639.6   639.3	March 1 to 31 -			623.6		612.6							
May 1 to 31 -   632.6   629.9   626.8   619.4   616.2   617.2   620.4   632.1   636.1   638.6   639.6   639.3	April 1 to 30						609.4	615.8					
												,	
	June 1 to 30 -	635.7	634.7	630.7	625.8	619.8	620.6	629.0	636.4				

Table X.—continued.

12 13	3 14	15	1.0		GÖTTINGEN HOURS.											
			16	17	18	19	20	21	22	23	Periods from which the					
	TORONTO HOURS.															
6 7	7 8	9	10	11	12	13	14	15	16	17	are derived.					
581.0 577 582.0 578 582.9 581 586.1 583 589.3 586 589.8 586 590.2 586 591.6 589 594.7 594 596.4 597 596.4 597 596.4 597 600.5 598 600.3 598 600.0 597 600.6 598 600.3 607 609.4 606 609.3 607 609.4 606 612.9 612 612.3 613 614.6 614 619.5 613 617.1 617 617.2 617 617.4 613 624.3 613 631.1 626 629.0 628 629.0 628 629.0 628 621.0 628 625.9 622 628.9 622	Div. Sc. Div. 7'9 576'3 9'5 577'9 1'1 579'5 3'6 582'5 6'1 585'4 6'4 586'0 6'7 586'7 9'4 589'3 2'1 591'9 4'6 594'5 7'1 597'2 5'9 595'7 8'0 596'2 9'7 598'5 7'2 596'5 6'6 600'9 4'3 604'1 2'0 612'7 3'2 611'4 4'3 613'2 9'0 616'8 3'2 609'4 9'8 616'9 6'3 623'1 5'1 625'2 7'4 626'7	5c. Div. 575:3 577:0 578:7 582:3 585:9 586:7 587:5 589:1 590:7 593:2 595:6 595:5 596:8 595:6 597:0 603:2 605:0 614:5 612:3 614:4 619:4 618:3 617:8 615:6 611:4 618:2 621:1 623:2 625:7 623:2 625:7 623:2 625:7 623:4 625:1 628:0 628:4 627:4	Sc. Div. 574.6 575.6 576.7 581.2 585.7 587.0 588.2 590.3 592.4 594.2 596.0 596.9 594.8 598.1 593.9 598.6 602.4 602.1 612.2 610.9 613.8 619.7 617.9 616.4 614.8 610.5 617.0 622.1 621.8 625.2 624.9 621.0 621.7 625.3 622.7 625.9 627.1 631.9 634.1	sc. Div. 573.7 575.0 576.4 580.8 585.1 586.8 588.4 589.6 591.0 592.3 593.7 594.8 596.8 596.0 597.8 596.4 600.5 602.8 611.7 608.8 612.9 618.0 617.3 615.4 614.7 611.6 617.3 621.1 622.6 626.1 623.9 620.7 620.2 625.3 621.0 625.3 621.0 625.3	sc. Div. 572.6 575.8 576.9 580.3 583.7 585.2 586.8 588.7 590.7 592.5 594.3 594.1 594.9 594.6 596.5 593.4 593.2 596.0 608.3 612.3 616.6 617.1 615.6 615.7 613.4	sc. Div. 572·2 574·6 577·1 580·5 583·9 585·0 586·1 589·5 593·2 593·6 594·6 596·5 593·9 601·5 605·9 614·1 617·8 617·9 615·2 612·8 613·1 616·4 619·0 624·2 621·2 619·5 619·9 624·8	sc. Div. 572'4 575'1 577'9 580'8 583'6 585'3 586'9 589'8 593'4 594'6 595'6 595'0 597'2 593'5 594'0 614'6 618'6 618'0 614'9 610'2 611'0 614'6 618'6 618'6 618'6 618'6 618'8 622'6 625'4 619'8 622'6 625'4 619'8 622'6 632'8	sc. Div. 572'1 574'5 577'0 580'5 583'9 585'5 587'1 589'6 592'1 593'8 595'3 597'2 596'4 591'7 596'0 600'1 605'9 606'2 612'2 614'7 618'1 618'7 616'1 613'1 611'8 614'2 620'7 618'1 618'7 616'1 611'8 614'2 620'7 618'1 618'7 616'1 611'8 614'2 620'7 618'1 611'8 622'8 621'4 626'0 621'4 629'1 629'8 631'5	sc. Div. 573.0 575.1 577.3 579.7 582.1 584.8 587.5 590.7 593.9 595.3 596.7 595.1 597.1 597.1 597.1 604.6 612.2 612.8 616.1 613.8 613.2 620.9 625.2 620.9 625.2 626.6 628.6 632.8	\$\( \text{Solution} \)  \$5\( \text{A} \cdot 2 \)  \$6\( \text{A} \cdot 4 \)  \$6\( \text{A} \cdot	1845: June 1 to 30. June 1 to July 31. July 1 to 31. July 1 to Aug. 31. Aug. 1 to 31. Aug. 1 to Sept. 30. Sept. 1 to 30. Sept. 1 to Oct. 31. Oct. 1 to 31. Oct. 1 to 30. Dec. 1 to 31.  1846: Jan. 1 to 31. Feb. 1 to 29. March 1 to 30. May 1 to 31. June 1 to 30. July 1 to 31. Aug. 1 to 31. Sept. 1 to 30. Oct. 1 to 31. Feb. 1 to 29. March 1 to 31. Aug. 1 to 31. Aug. 1 to 31. Aug. 1 to 31. Sept. 1 to 30. Oct. 1 to 31. Nov. 1 to 30. Dec. 1 to 31. Sept. 1 to 30. Dec. 1 to 31. April 1 to 30. May 1 to 31. April 1 to 30. May 1 to 31. Sept. 3 to 30. Oct. 1 to 31. Sept. 3 to 30. Oct. 1 to 31. Nov. 1 to 30. Dec. 1 to 31. Sept. 3 to 30. Oct. 1 to 31. Nov. 1 to 30. Dec. 1 to 31. Nov. 1 to 30. Dec. 1 to 31. Nov. 1 to 30. Dec. 1 to 31. April 1 to 30. May 1 to 31. April 1 to 30.					

#### VERTICAL FORCE.

Separation and Analysis of the larger Disturbances.—In preparing the observations of the Vertical Force Magnetometer for the various deductions that can be made from them, the first step must be to ascertain in the most direct and practical manner, from the observations themselves, the equivalent in divisions of the Magnetometer scale to a variation of 1° of temperature. Commencing with February 1844, in the middle of which month the Magnetometer was adjusted, an unbroken series continued until the end of May in the following year, when a re-adjustment took place. From March 1844 to May 1845 inclusive, we have consequently an unbroken series of fifteen months, in which the mean monthly scale readings, with the corresponding temperatures, were as follows:—

TABLE XI.

	<del>4</del>	Sc. Divisions.	Temperature.	Sc. Divisions.	Temperature.	
844.	March - April - May -	- 121°8 - 99°0 - 88°0	46°5 56°5 60°5	} 102.93	° 54*5	Spring (1).
	June - July - August -	75'1 - 60'2 - 58'5	64.8 69.7 68.3	<b>64.60</b>	67.6	Summer (2).
	September October - November	- 61'4 - 83'6 - 95'1	65°1 53°4 47°1	80.03	55*2	Autumn (3).
18 <b>45.</b>	February -	- 101'1 - 99'5 - 93'3	42.7 42.7 42.9	97.97	42.77	Winter (4).
	March - April - May -	82.9 72.1 58.6	48°0 53°6 59°4	71.20	53.67	Spring (5).

From the difference in the mean scale reading in the spring quarters of 1844 and 1845 ( $102 \cdot 93 - 71 \cdot 20 = 31 \cdot 73$ ) in which quarters the temperatures were nearly the same, we may infer that a considerable change took place in the scale readings during this interval from other causes than changes in the earth's magnetism; variations depending on particular periods of the year can have no place, since the seasons compared are the same, and any secular change which could be reasonably imagined must have been far less considerable. We must, therefore, attribute this decrease of  $31 \cdot 73$  scale divisions occurring in one year principally, if not wholly, to instrumental causes.

On a comparison of the *monthly* scale readings each with the others we further find reason to believe that the decrease thus occasioned was progressive during the whole interval, though not always to an uniform amount. Under these circumstances, perhaps the best mode of combining these five quarterly results with the view of

eliminating periodical and secular variations, and, as far as may be, instrumental error, and of thereby obtaining the effect of temperature, is to mean the results in the spring and autumn of 1844 (Nos. 1 and 3), and compare their mean with the intermediate summer (No. 2); and in like manner to mean the results of the autumn of 1844 and spring of 1845 (Nos. 3 and 5), and compare their mean with the intermediate winter (No. 4); and then to take a mean of the results of these two comparisons: these are stated in the following table:

TABLE XII.

		Difference of Temperature.	Difference of Scale Readings.	Equivalent to a Variation of 1° Fah <sup>t</sup> .
From (1) and (3) compared with (2) we have	-	12°75	26°85	2°10
From (3) and (5) compared with (4) we have		11°65	22°40	1°92

If we could regard these comparisons as sufficient of themselves to give a final result, we should only have to take the mean between them, 2.01, in which we might consider that any subsisting periodical and secular variations were eliminated. But the shortness of the period during which the series was unbroken, together with the magnitude and irregularity of the change from instrumental causes, will not permit us to rest in this as a final result, and we are led to seek for further evidence.

In examining the monthly tables in which the Vertical Force Observations from March 1844 to May 1845 inclusive are contained (Toronto Observations, vol. 2, pp. 224-243, 404-413), we find several instances in which the temperature of days very near to each other differed very considerably, and when consequently the effect of a change of temperature on the indications of the magnetometer can be examined with advantage. In choosing amongst these, it is obvious that the shorter the interval between the observations compared, the less the result is likely to be affected by the instrumental change which has been adverted to; and those instances are to be preferred in which a high temperature may be found between two nearly equidistant low temperatures, or a low temperature between two nearly equidistant high ones; provided that the condition of proximity be tolerably preserved, and that care be taken to avoid times of considerable magnetic disturbance. The following table presents a selection of instances made on these principles, with the results which they give individually and collectively:—

TABLE XIII.

	<b>T</b>			Mean	Mean	Differe	nces.	Equivalent to a
,	Dat	ES.		Temperature.	Scale Readings.	Temperature.	Readings.	Variation of 1° Fah <sup>t</sup> .
1844.	March	12 and 13 18 and 19 25 and 26		50°77 39°46 49°50	Sc. Div. 116°13 133°64 115°72	} 10°67	Sc. Div. 17°72	Sc. Div. 1 '66
1844.	May June	20 to 22 27 to 28 10 and 11	•	56.63 66.55 58.80	94°47 95°58 87°75	8.84	15.23	1.49
1844.	September	16 to 20 23 to 27	-	71·47 55·95	48 · 92 77 · 94	} 15.2	29.02	1.87
1844.	October	21 and 22 24 and 25 28 to 31	-	50.80 57.21 45.05	87:33 76:00 98:16	9.29	16.74	1.80
1844.	October November	28 to 31 4 to 8 25 to 28		45.05 50.69 39.25	98.16 89.48 108.83	8.24	14.02	1.64
1844.	November December		-	39·25 46·30 38·52	108.83 95.74 108.00	} 7.41	12.68	1.40
1845.	January February	23 to 25 1 to 7 21 to 26	-	47.29 34.44 50.37	89.91 109.50 78.92	} 14.39	25.09	1.74
1845.	March	11 to 13 17 to 19 26 to 28	-	48.54 41.38 53.22	80.36 95.03 74.34	9.20	17.68	1.86
1845.	May	7 and 8 12 and 13 15 and 16		53 22 54 10 68 67 56 70	69.53 40.93 63.42	} 13.27	25.55	1.93
				Colle	ectively -	97.43	174.03	1.48

From this table we have 1.78 as the equivalent in scale divisions to a variation of  $1^{\circ}$  temperature: or if we combine this with the result previously obtained from the five quarterly means (page xxiii), we have  $\frac{174.03 + 49.25}{97.43 + 24.38} = \frac{223.28}{121.81} = 1.83$  sc. divisions, as the equivalent of  $1^{\circ}$ . The value adopted for the portion of the observations from March 1844 to May 1845 inclusive has been 1.80.

From June 1845 to August 1845 inclusive, and from September 1845 to March 1846, the Vertical Force Observations form two series, the break between them occurring at the end of August; each series is therefore of only a few months' duration. At the end of March 1846, the magnet was removed from the Magnetometer, remagnetised, and mounted afresh. The time of Horizontal Vibration, which had been previously 11<sup>s</sup>·50, was reduced by the stronger magnetic charge imparted to the needle to 10<sup>s</sup>·29 observed on 1st of April 1846; which was only increased to 10<sup>s</sup>·36 when again observed on February 28th, 1849. The series of observations which was commenced in April 1846 continued without interruption to the close of the hourly observations in

June 1848, forming an unbroken series of twenty-seven months; and for this period it will be necessary to examine afresh the equivalent in scale divisions to a change of 1° of temperature, inasmuch as the equivalent must be expected to be slightly modified by the increased magnetism of the needle.

The mean monthly scale readings, with the corresponding temperatures, are as follow, and are collected in quarterly values:—

TABLE XIV.

	Dates.		C. J. D. P	and the second s	Quarter	ly Means.	
	Dates.		Scale Readings.	Temperature.	Readings.	Temperature.	Seasons.
846.	April -	_	214.0	5 <sup>°</sup> 4·7	,		
	May -	-	198.3	62.8	7 199.3	62.0	Spring (1).
	June -	-	185.7	68.6	∤ <b>j</b>	1	
	July -	•	173.7	73.6	)		
	August	-	170.8	73.7	73.2	72.3	Summer (2).
	$\mathbf{September}$	-	175'9	69.2	J		
	$\mathbf{October}$	-	197.1	56.6	)		- A A
	November	_	200.6	52.8	202.6	50.8	Autumn (3).
	$\underline{ ext{December}}$	-	210.2	43.0	J		
847.	January	-	209.0	40.3	)		<b>!</b>
	February	-	203.4	42.3	204.4	42.4	Winter (4).
	March -	-	200.7	44.6	J		
	April -	-	188.9	51.4	]]		G . (5)
	May -	-	171.8	60.3	774.2	58.2	Spring (5).
	June -	-	161.9	63.9	ן	1	
	July -	-	143.1	73.0	1,010	2010	g (a)
	August	•	145°4 160°8	$70.4 \\ 62.4$	149.8	68.6	Summer (6).
	September October	-	172.5	56°1	7		ł
	November	-	179.8	51.6	180.2	51.0	Autumn (7)
	December	-	188.3	45.2	2 180 م	21.0	Autumn (7).
848.	January	-	187.2	43 2 43 4	K		
0.70.	February	_	182.2	43 9	182.5	44.3	Winter (8).
	March -	_	177.7	46.7	102 0	110	1111101 (0).
	April -	_	165.9	53.3	15		
	May -	٠.	148.9	61.2	149.5	61.0	Spring (9).
	June -	_	133.4	68.5		01 0	~Prime (o).

By comparing with each other similar seasons in different years, and thus eliminating periodical variations, whilst, at the same time, we have the temperatures approximately the same, we find that during this period, independently of changes from other causes, a progressive decrease took place in the scale readings which did not greatly differ from an uniform decrease. Without entering at present into the question of the cause of this decrease, let x = its amount taken from quarter to quarter, assumed to be uniform, and counted from the middle quarter (April, May, and June, 1847), and let y = the equivalent in scale readings for a change of temperature of 1°. Then each quarter will furnish an equation towards the values of x and y; and by least squares we find the most probable value of x to be 6·43, and of y 1·64, the coefficient of x being positive in the quarters antecedent to April, May, and June, 1847, and negative in the

subsequent quarters; and the coefficient of y positive when the temperature is above  $56^{\circ} \cdot 7$  (the arithmetical mean of the temperatures of the nine quarters), and negative when it is less than  $56^{\circ} \cdot 7$ .

Comparing the summer and winter quarters, or the quarters in which the differences of temperature are greatest, we have as follows:—

			Differ	ences.	Torrivalent of 19
			Scale Readings.	Temperature.	Equivalent of 1°.
Summer and Winter	-{ (2) and (6) with (4) (4) and (8) with (6)	-	42.75 43.65	28°05 25°25	$\left. \left. \right\} \frac{86.4}{53.3} = 1.62 \right.$

Comparing also the spring and autumn quarters alternately with summer and with winter, we have as follows:—

				Differ	ences.	F
				Scale Readings.	Temperature.	Equivalent of 1°
Spring and Autumn with	Summer, Winter, Summer, Winter,	(3) and $(5)$	with (4) - with (6) -	16.00 27.40	15.90 12.25 13.85 11.70	$\begin{cases} \frac{88.5}{53.7} = 1.65 \end{cases}$

The equivalent to 1° of temperature appears, therefore, to have been somewhat less in the period from April 1846 to June 1848 than in the period from March 1844 to May 1845; between these periods the needle had been re-magnetized, and its magnetic force increased, the times of Horizontal and Vertical vibration being slightly affected thereby (Toronto, vol. II. p. lxi). The ratio of the times of Horizontal and Vertical vibration being one of the elements upon which the change in the scale readings, corresponding to changes of temperature, depends, we should be prepared to expect that the amount of the equivalent to 1° of temperature would not be exactly the same before and after the re-magnetization, but that the equivalent would be slightly diminished in amount when the magnetic charge of the needle was increased. The two values, 1·80 and 1·64, differ from each other in the direction, and very nearly to the amount which might be expected from the change effected in the times of Horizontal and Vertical vibration. The results may be considered, therefore, as being each approximately corroborative of the other.

The value of the Scale-coefficient, k, computed according to the Instructions of the Royal Society, varied in different months between March 1844 and May 1845 from  $\cdot 000060$  to  $\cdot 000065$  parts of the Vertical Force, the mean being  $\cdot 0000628$ ; and between April 1846

and June 1848 from 000065 to 000067, the mean being 0000658. Thence we should have, theoretically, the change in the magnetic moment of the needle corresponding to 1° of Fahrenheit,  $0000628 \times 1.80 = 000113$  for the first period, and 0000658 $\times$  1.64 = .000108 for the second period. There were two attempts made to obtain the change in the magnetic moment by direct experiment, one at the end of 1843 and beginning of 1844, of which the particulars are related in the Toronto Observations, vol. I. pp. liii-lvii, the result being '000112; and a second in March and April 1846, of which the particulars are given in vol. II, pp. lxii-lxiii, and of which the result was '00007. The result of the experiments in 1843 and 1844 (.000112) is in remarkable accord with the deduction obtained by the present investigation, .0001105 (mean of .000113 and .000108). The partial results in the second series, viz., in March and April 1846, accord better with each other than do those of 1843-1844; but it is possible that there may have been some accidental oversight causing an error which may have pervaded the whole. needle itself has been since transferred, by direction of Her Majesty's Government, to the provincial authorities of Canada, and remains at Toronto in what is now a provincial observatory; it has not been possible, therefore, to repeat the direct experiments on its magnetic moment at Woolwich, which would otherwise have been done. It would have been satisfactory to have *proved* by this means, what is, however, extremely probable, that in the case of the Vertical Force needle the method of determining the temperature equivalent prescribed in the Instructions, and that which has been here adopted, of deriving it from the observations themselves, lead to an identical conclusion.

The separation and analysis of the larger disturbances of the Vertical Force has been conducted on the same principle as in the case of the larger disturbances of the Horizontal Force. As the first step, the whole of the observations were reduced individually to an uniform temperature of 55°, employing the coefficients named in the preceding pages. The mean scale division was then computed for every hour in each of the sixty months; and the correctness of the whole work was examined by the correspondence of two computers, and by the agreement of these hourly means with the hourly means printed in the monthly tables, when the latter were reduced to the standard temperature of 55° by the application in each case of the correction due to the difference between the recorded temperature and 55°. The hourly means thus corrected in each month presented to the eye at the different hours the diurnal variation of the Vertical Force, cleared from the influence of temperature on the magnetism of the bar, but retaining whatever effects may have been due to disturbances. For the purpose of eliminating the disturbances of largest amount, the observations which had been individually corrected for temperature were compared each with the monthly mean, at the same temperature, hour, and month, and every observation which differed 4.0 scale divisions or more from that mean was provisionally marked as a disturbed observation.

Fresh means for each hour in each month were then taken omitting the observations marked as disturbed, and the means thus obtained were then used as standards of comparison for a second examination. This process was repeated until the "hourly means" were strictly the means of all the remaining observations, after the separation of those which differed from them respectively by four scale divisions or more. (The value of four scale divisions in parts of the Vertical Force at Toronto was '00026.)

When the larger disturbances are thus separated, the diurnal variation at the same period of the year, in different years, exhibits a very satisfactory accordance; and, by the process of elimination which has been explained, it is probable that the diurnal variation has very little, if any, influence in the determination of the observations separated as disturbed.

A much greater practical difficulty was occasioned by a circumstance already noticed in discussing the temperature coefficient; namely, the progressive decrease in the scale readings from instrumental causes, and possibly also in part from secular change. Whenever the amount of decrease in the course of a month was seen to be such as to interfere with the proper comparability of the observations in any part of the month with the means taken in the usual manner, fresh means more suitable for the comparison were formed; thus, for example, for the observations in the last week of one month, and the first week of the next, it has in some instances appeared preferable to form the hourly means for comparison from the whole of the observations of the two months united, instead of from each month separately, whereby the advantage is gained that the period which furnishes the standard of comparison for the fortnight in question extends to a nearly equal distance on either side of the observations compared with it. In a few instances in which the decrease was more irregular than was commonly the case, fortnightly means, and even, when absolutely required, weekly means, were substituted for the monthly or two-monthly means. This part of the process requires an attentive preliminary consideration and study of the observations, and it is important that it should be carefully executed, because normal values, however obtained, form an essential basis for the study of all the terrestrial magnetic variations. To facilitate researches of this nature, in which the observations contained in these volumes may hereafter be employed, as well as to show the steps by which the conclusions now submitted have been arrived at, a table of the hourly means of the readings of the Vertical Force Magnetometer reduced to 55° Fahrenheit, and omitting the observations in which the amount of disturbance equalled or exceeded four scale divisions (or 00026 parts of the whole Vertical Force at Toronto), is subjoined, (pp. xxxviii to xli) specifying in each case the interval to which the normal values correspond, as well as the interval comprehended by the observations from which they are derived.

The period which these normal values comprise is one of five complete years, terminating on the 30th June 1848. It is not, however, an absolutely unbroken period, as in October 1843 the magnet of the Vertical Force Magnetometer was displaced from

its mounting, and employed in experiments designed to show the change in its magnetic moment occasioned by changes of temperature. It was remounted in February 1844; consequently the five months from October 1843 to February 1844 that should have formed a continuous suite are deficient. These have been replaced by the observations of the same months of the year preceding, viz., October 1842 to February 1843.

It will be understood, therefore, that, throughout the discussion of the Vertical Force disturbances, whenever the year ending June 30th 1844 is named, the months which constitute it consist of July to September 1843 inclusive, October 1842 to February 1843 inclusive, and March 1844 to June 1844 inclusive.

The number of the Vertical Force observations in which the amount of disturbance equalled or exceeded 4.0 scale divisions in the five years was 5220, being about 1 in 7 of the whole number of observations.

The aggregate values of the disturbed observations of the Vertical Force in the different years, each ending June 30th, are as follow:—

```
TABLE XV.

Year ending June 30, 1844 - - - 7008 5 Scale Divisions.

, , 1845 - - 6201 1 ,,

, , 1846 - - - 7839 1 ,,

, , 1847 - - 13055 7 ,,

, , 1848 - - 19161 5 ,,

Total in the five years - 53265 9
```

Table XV. shows a progressive increase in the annual value of the disturbed observations from the years ending in June 1844 and 1845 to the year ending June 1848. The aggregate value in the year ending in June 1844 exceeds by a small amount that of the year ending June 1845; but it must be remembered that these two years do not admit of strict comparison with each other, because the first included five months taken from a preceding year, in consequence of the magnetometer being dismounted from October 1843 to February 1844 inclusive. If, as there is reason to believe, 1843 was a year of minimum disturbance (as was certainly the case in the Declination and Horizontal Force), it becomes probable that the amount of disturbance in the Vertical Force in the year ending June 1844 may have been swelled by this substitution of five months from the preceding year.

The sum of the disturbances in the five years (53265 · 9 scale divisions) gives an annual mean of 10653 · 2, and hence we obtain the ratios which the aggregate values in the different years bear to the average annual value, as shown in the following table:—

```
TABLE XVI.

Year ending June, 1844 - - 0 0.65 to 1.

,, ,, 1845 - - - 0.58 to 1.

,, ,, 1846 - - 0.73 to 1.

,, ,, 1847 - - - 1.23 to 1.

,, ,, 1848 - - 1.80 to 1.
```

Table XVII. exhibits the aggregate values in the different years, divided into disturbances increasing the force and disturbances diminishing the force.

TABLE	XVII.
-------	-------

					Increasing.		Decreasing	•
Year ending	June.	1844	-	-	3174.2	•	3834.3	Scale Divisions.
		1845	•	-	2061.2	-	4139.9	,,
"	"	1846	-	-	3356.1	-	4483.0	,,
"	"	1847	_	-	4372.9	-	8682.8	,,
» »	"	1848	-	•	9298 <b>·3</b>	-	9863*2	"
,,	"				-			
Su	ms in 1	the five	years	-	22262.7	-	31003.2	**
			•					

It appears from this table that the average operation of the disturbances of larger amount at Toronto is to diminish the Vertical Force more than to increase it. The ratio of the disturbances diminishing the force to those which increased it, on the average of the five years, was nearly as 1 · 4 to 1.

The next table exhibits the aggregate values of the disturbed observations, distributed into the several months of their occurrence, with the ratios which the values in the preceding columns bear to the mean monthly value or average of all the months.

TABLE XVIII.

			In the	Year ending J	Tune 30,		Sums in the	Ratios.	Months.			
Months.		1844.	1845.	1846.	1847.	1848.	Five Years.	nanos.	months.			
July - August - September October November December January February March - April - May - June -		sc. Div. 527'3 281'5 536'9 489'9 589'7 794'7 384'3 72'8 1283'7 1374'4 490'5 182'8	sc. Div. 351'1 760'1 1115'0 1017'1 666'1 198'6 652'2 346'8 345'1 249'5 382'7 116'8	Sc. Div. 562 3 808 1 625 2 463 3 524 8 659 4 301 7 266 7 374 3 1048 3 1347 2 857 8	sc. Div. 1406'8 2075'1 2369'5 1125'7 408'3 149'3 313'0 508'0 1163'2 2034'5 1081'9 420'4	sc. Div. 637.5 880.8 2434.4 2663.6 1138.2 2611.3 841.1 2093.0 1619.6 1901.7 1683.1 657.2	sc. Div. 3485 ° 0 4805 ° 6 7081 ° 0 5759 ° 6 3327 ° 1 4413 ° 3 2492 ° 3 3287 ° 3 4785 ° 9 6608 ° 4 4985 ° 4 2235 ° 0	0.71 1.08 1.60 1.29 0.75 1.00 0.56 0.74 1.08 1.49 1.12 0.50	July. August. September. October. November. December. January. February. March. April. May. June.			
			Tota	l in the five	e years	-	53265.9	1				
Mean monthly value, $\frac{53265.9}{12} = 4438.8 = 1.00$												

April and September are the months of maximum disturbance, and January and June the months of minimum disturbance. The progression from the maxima to the minima, and vice versâ, is continuous with the exception of December, an exception manifestly caused by the occurrence of excessive disturbance in December 1847. If the year ending June 30, 1848, be omitted, the ratios of the disturbances in the months of December and January respectively, to the mean monthly disturbance in the remaining four years are, December 0.63 and January 0.58. On the whole, therefore, we may conclude, that in the disturbances of the Vertical Force, as in the Declination and Horizontal Force, the maxima occur at or about the equinoxes, and the minima at or about the solstices. The values of the disturbances at the equinoxes are to those at the solstices in the ratio of nearly 3 to 1.

Tables XIX. and XX. exhibit the aggregate monthly values in the different years, separated into disturbances increasing the force, and disturbances decreasing the force.

TABLE XIX.

Disturbances increasing the Force.

Mantha			In the	Year ending	Tune 30,		Sums in the		35
Months.		1844.	1845.	1846.	1847.	1848.	Five Years.	Ratios.	Months.
		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		
July -	-	214.0	25.7	153.3	362.3	279.5	1034.8	0.22	July.
August	-	83.2	284.3	236.1	442.0	363.1	1408.7	0.76	August.
September	-	$309^{\circ}2$	149'1	133.1	779.5	1395.5	2766.4	1.49	September.
October	-	256.5	278.5	278.7	344.0	1151.2	2308.9	1.25	October.
November	-	245.8	250*2	63.2	137.7	828*4	1525.3	0.85	November.
$\mathbf{December}$	-	685.3	126.7	454.2	117.2	1356.1	2739.5	1 48	December.
January	-	144.9	460.4	110.3	232.2	368.3	1316.4	0.41	January.
<b>F</b> ebruary	-	58.1	88.0	60.2	268.8	958'1	1433.5	0.77	February.
March -	-	506.8	159.9	208.1	587.9	782.1	2244.8	1.21	March.
April -	-	95.9	109.9	679.2	637.6	790.1	2712.7	1.46	April.
May -	-	128.2	95.1	656'1	227.6	722.4	1829.4	0.88	May.
June -	-	46.3	33.4	323.3	235.8	303.2	942.3	0.21	June.
	'		Total	in the five	years		22262.7	I	
			Mean	monthly v	ralue,	<sup>263</sup> =	1855.2 =	= 1.00	

$\mathbf{T}_{A}$	ABLE XX.	
Disturbances	decreasing	the Force.

			In the	Year ending	June 30,		Sums in the	<b>10</b> - 11 -	Months.
Months.		1844.	1845.	1846.	1847.	1848.	Five Years.	Ratios.	Months.
July - August September October November December January February March - April - May - June -	1111111111	sc. Div. 313 · 3 198 · 3 227 · 7 233 · 4 343 · 9 109 · 4 239 · 4 14 · 7 776 · 9 878 · 5 362 · 3 136 · 5	\$c. Div. 325'4 475'8 965'9 738'6 415'9 71'9 191'8 258'8 185'2 139'6 83'4	sc. Div. 409 °0 572 °0 492 °1 184 °6 461 °6 205 °2 191 °4 206 °2 166 °2 369 °1 691 °1 534 °5	sc. Div. 1044.5 1633.1 1590.0 781.7 270.6 32.1 80.5 239.2 575.3 1396.9 854.3 184.6	sc. Div. 358.0 517.7 1038.9 1512.4 309.8 1255.2 472.8 1134.9 837.5 1111.6 960.7 353.7	Sc. Div. 2450°2 3396°9 4314°6 3450°7 1801°8 1673°8 1175°9 1853°8 2541°1 3895°7 3156°0 1292°7	0.95 1.31 1.65 1.33 0.68 0.63 0.45 0.69 0.98 1.55 1.22 0.50	July. August. September. October. November. December. January. February. March. April. May. June.
			,, <u></u> ,	in the five	2100	33.2	31003°2 2583°6 =		

It is seen by Tables XIX. and XX. that the values of the disturbances which increase the force, and of those which decrease the force, follow, in their ratios to their respective mean monthly values, the same general law as that obtained from their conjoint consideration in the remarks on Table XVIII. The equinoxes are the epochs of maxima, and the solstices of minima.

It has been seen in page xxx. that, on the average of the whole year, the disturbances which decrease the force preponderate in value over those which increase the force in the ratio of 1.4 to 1.0. This preponderance, however, appears to be subject to a periodical variation, and to have a maximum about the time of the northern solstice, and a minimum at the opposite period of the year. This variation is of considerable amount; and though the number of years (five) over which the series of observations extends is insufficient to give its progression with great regularity, it is still quite sufficient to indicate the general fact of the existence of such a variation, and to point it out as worthy of a more extensive examination. Table XXI. exhibits the ratios in the different months of the values of the disturbances decreasing the force to those which increase it, the latter being taken throughout as the units.

Table XXI.

Ratios of the Values of the Disturbances decreasing the Vertical Force in the different Months to the Value of those which increase it.

Months.	Ratios.	Months.	Ratios.
July       -       -         August       -       -         September       -       -         October       -       -         November       -       -         December       -       -	2:33 2:41 1:56 1:49 1:18 0:61	January February March April May June	0.89 1.29 1.13 1.43 1.72

In December and January the preponderance of the decreasing values ceases, and increasing values preponderate. If we combine in one view the north-solstitial months of May, June, and July, the mean ratio is 1.8 to 1.0. In the opposite part of the year (combining November, December, and January in one view,) the preponderance is reversed, the mean ratio being as 0.83 to 1.0. In the comparison of the values of the easterly and westerly disturbances of the Declination at Toronto (Toronto Observations, vol. II. p. xxvii), we have the evidence of an analogous periodical variation existing in that element. In the north-solstitial months, easterly disturbances preponderate, and in the south-solstitial months westerly predominate. In the analogy thus traced the predominance of easterly disturbances of the Declination ranges itself with the predominance of disturbances which decrease the Vertical Force, and the predominance of westerly disturbances of the Declination with that of disturbances which increase the Vertical Force.

On comparing with each other the periodical affections of the Vertical Force in the different months which have been thus brought into notice, we find that in the sums of the values of the whole disturbances (when those which decrease are combined with those which increase the force) the equinoctial months are the epochs of maximum disturbance, and the solstitial months epochs of minimum disturbance; whilst in the periodical variation of the ratios of the disturbances of opposite character to each other (viz., those which decrease and those which increase the force,) the extreme dissimilarity takes place at or near the solstitial epochs, whilst the equinoctial epochs hold a middle place. In both these respects the analogy holds in respect to the disturbances of the Declination.

Table XXII. exhibits the aggregate values of the disturbed observations, distributed into the several *hours* of their occurrence, together with the ratios of the values at the different hours to the mean hourly value or average of all the hours.

TABLE XXII.

Toronto		In the	Year ending J	une 30,		Sums in the	Ratios.	Toronto Civil
Astronomical Time.	1844.	1845.	1846.	1847.	1848.	Five Years.		Time.
н.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	1.51	н.
18	398.3	363.2	306.8	633.0	994.9	2696.5		6 a.m.
19	365.7	241.9	245.3	563.7	1149.8	2566.4	1.15	7 a.m. 8 a.m.
20	273.7	188.6	262.5	455.4	598.4	1778.6	0.80	
21	207.8	109.3	129.7	261.4	483.4	1191.6	0.54	9 a.m.
22	183.6	57.3	111.7	131.2	329.0	813.5	0.36	10 a.m.
23	112.8	65.3	102.0	120.0	355.8	755.9	0.34	11 a.m.
0	145.1	58.2	188.1	191.3	454.6	1037.3	0.46	Noon.
1	207.7	106.6	219.4	305.6	555 1	1400.1	0.63	1 p.m.
2	213.1	159.0	260.6	342.9	720.8	1704.4	0.77	2 p.m.
3	221.1	160.6	$317\cdot 2$	512.1	716.3	1944'1	0.87	3 p.m.
4	290.4	200.7	439.0	510.9	884.4	2325.4	1.04	4 p.m.
5	342.4	260'4	397.5	522.2	864.6	2387.1	1.07	5 p.m.
6	329.0	228.8	369.1	556.5	757°2	2240.6	1.01	6 p.m.
7	319.6	244.6	302.0	517.5	885.3	2339.0	1.02	7 p.m.
8	274.7	223.2	256.6	433.8	789.2	1977.5	0.89	8 p.m.
9	204.2	196.7	291.5	361.6	602'4	1656.4	0.74	9 p.m.
10	245'4	181.0	283.9	645.9	539.6	1895.8	0.82	10 p.m.
11	277.7	227.9	314.9	585.0	660.2	2065.7	0.93	11 p.m.
12	401'0	484'1	467.5	784.0	957.6	3094.2	1.39	Midnight
13	366.2	469.5	486.2	1032.1	1161.9	3516.2	1.28	1 a.m.
14	373.3	520.4	537.5	961.5	1171.4	3564 1	1.61	2 a.m.
15	421.0	566.2	591.1	994.7	1273 1	3846'1	1.73	3 a.m.
16	294.8	458.4	555 <b>°</b> 1	934.9	1099.6	3342.8	1.21	4 a.m.
17	439*4	428.9	403.9	697.9	1156.2	3012.6	1.41	5 a.m.
•		Total	in the five y	years		53265.9		
		Mean	hourly valu	e - <u>58</u>	$\frac{3265.9}{24} =$	2219.4 =	1.00	

When we examine the values presented in this table, we at once perceive that the occurrence of the larger disturbances of the Vertical Force at Toronto is governed by periodical laws depending on the hours of solar time. The aggregate value of the disturbances in the five years is a maximum at 3 p.m. and a minimum at 11 a.m.; there is also a secondary maximum at 5 p.m. and a secondary minimum at 9 p.m. There is, therefore, a double progression, and between the successive maxima and minima the progression is everywhere continuous. During the hours of the day, i.e. from 8 a.m. to 11 p.m., the ratios are less than unity, except from 4 to 7 p.m. inclusive, when the secondary maximum takes place. From midnight to 7 a.m. the ratios at every hour exceed unity.

Tables XXII. and XXIII. exhibit the aggregate values at the different hours, separated into disturbances increasing the force and disturbances decreasing the force, and the ratios of the values at each hour of both kinds of disturbance to their respective mean hourly values.

Table XXIII.

Disturbances increasing the Force.

Toronto		In the	Year ending	June 30,		Sums in the	Ratios.	Toronto Civil
Astronomical Time.	1844.	1845.	1846.	1847.	1848.	Five Years.	Tratios.	Time.
H.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		н.
18	63.3	14.8	48.7	17.9	113.1	257.8	0.58	6 a.m.
19	74.9	4.7	47.4	21.0	148.2	296*2	0.35	7 a.m.
20	72.2	27.5	78.8	31.3	177.9	387.7	0.42	8 a.m.
21	62°6	8.8	29.5	22.6	139.9	263.5	0.58	9 a.m.
22	65.8	14.3	80.4	34.5	178.1	373.1	0.40	10 a.m.
23	67.6	29.9	52.3	77.1	262*2	489°1	0.52	11 a.m.
0	86.6	39.8	127.8	149.9	396.7	800.8	0.86	Noon.
1	162.0	80°2	141'3	265.5	495.7	1144.7	1.23	1 p.m.
2	163.6	144.6	194.5	303.6	684.9	1491.2	1.61	2 p.m.
3	203.6	151'9	275.9	469.7	691°4	1792.5	1.93	3 p.m.
4	249.5	185.7	387.6	451.8	870.6	2145.2	2.31	4 p.m.
5	290'1	260.4	350.9	450'2	841'1	2192.7	2.36	5 p.m.
6	278.0	215.7	324.8	518.6	733.5	2070.6	2.23	6 p.m.
7	333.7	221.9	251.3	471.2	857.2	2135.3	2.30	7 p.m.
8	236'4	208'4	200.2	370.2	766.2	1781.4	1'92	8 p.m.
9	146°3	122.7	238.5	223.7	521.1	1250.3	1.35	9 p.m.
10	127.3	87.5	107.7	131.5	397.1	851.1	0.92	10 p.m.
11	110.9	72.8	68'1	80.8	219.2	551.8	0.29	11 p.m.
12	87.3	<b>55</b> '3	74.5	42.0	216.7	475*8	0.21	Midnight.
13	64.5	31.6	45.8	45.0	139.3	326*2	0.35	1 a.m.
14	60.7	24.6	62'1	47.3	130.1	324°8	0.35	2 a.m.
15	60.3	22.7	63.7	42'1	111.1	303.9	0.33	3 a.m.
16	34.2	21.6	50.4	58*2	91.4	256.1	0.28	4 a.m.
17	72.5	13.7	51.9	47.2	115.6	300.9	0.35	5 a.m.
		Total	in the five y	ears		22262.7		
		Mean	hourly value	e •	$\frac{22263}{24} =$	927.6 =	1.00	

Table XXIV.

Disturbances decreasing the Force.

Toronto Astronomical		In the	Year ending J	une 30,		Sums in the	Ratios.	Toronto Civil
Time.	1844.	1845.	1846.	1847.	1848.	Five Years.	Itatios.	Time.
н.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		H.
18	335.0	348.7	258'1	615.1	881.8	2438.7	1.80	6 a.m.
19	290.8	237.2	197.9	542.7	1001.6	2270.2	1.76	7 a.m.
20	201.5	161.1	183.7	424 1	420.5	1390.9	1.07	8 a.m.
21	145.2	100.4	100.2	238.8	343.5	928.1	0.72	9 a.m.
22	117.8	43.0	31.3	97.0	151.3	440.4	0.34	10 a.m.
23	45.2	35.4	49.7	42.9	93.6	266.8	0.20	11 a.m.
0	58.5	18.4	60.3	41'4	57.9	236.5	0.18	Noon.
1	51'1	26.4	78.1	40.	59*4	255.4	0.19	1 p.m.
2	57.5	14.4	66.1	39.3	35.9	213.2	0.16	2 p.m.
3	34.3	8.7	41.3	42'4	24.9	151.6	0.11	3 p.m.
4	40.9	15.0	51.4	59.1	13.8	180.2	0.14	4 p.m.
5	52.3		46.6	72.0	23.2	194.4	0.12	5 p.m.
6	51.0	13.1	44'3	37.9	23.7	170.0	0.13	6 p.m.
7	<b>5</b> 5 <b>·</b> 9	22.7	50.7	46.3	28'1	203.7	0.12	7 p.m.
8	38.3	14.8	56.4	63.6	23.0	196.1	0.12	8 p.m.
9	57.9	74.0	55.0	137.9	81.3	406.1	0.31	9 p.m.
10	118.1	93.2	176.2	514.4	142.5	1044.7	0.80	10 p.m.
11	166.8	155.1	246.8	504.2	441.0	1513.9	1.17	11 p.m.
12	313.7	428°8	393.0	742.0	740.9	2618.4	2.02	Midnight.
13	302.0	437.9	440.4	987.1	1022.6	3190.0	2.47	1 a.m.
14	312.6	495.8	475.4	914.2	1041.3	3239.3	2.20	2 a.m.
15	360.7	543.5	523.4	952.6	1162.0	3542.2	2.74	3 a.m.
16	260.3	436.8	504.7	876.7	1008.2	3086.7	2.39	4 a.m.
17	366.9	415.2	352.0	650.7	1040°9	2825.7	2.19	5 a.m.
		Total	in the five y	ears		31003.5		
		Mean	hourly value	31	$\frac{003 \cdot 2}{24} =$	1291'8 =	1.00	

When we examine the ratios presented in these tables, it is at once seen that both the disturbances which increase the force and those which decrease it are regulated by periodical laws. In the disturbances increasing the force, the values are highest from noon to 10 p.m. inclusive; they exceed the mean hourly value from 1 to 9 p.m., and exceed twice that value from 4 to 7 p.m. The hours of maximum and minimum are approximately, the maximum about 5 p.m., and the minimum about 5 a.m., though (in the latter case particularly) the precise hour is not very distinctly marked. In the disturbances decreasing the force, the values are least from 10 a.m. to 9 p.m. inclusive; they are less than the mean hourly value from 9 a.m. to 10 p.m. inclusive, and greater from 11 p.m. to 8 a.m. inclusive: from midnight to 5 a.m. the values exceed at each hour twice the mean hourly value. The maximum is well marked at 3 a.m.; the minimum less distinctly marked takes place during the hours of the afternoon. When the ratios are highest in the disturbances increasing the force they are generally lowest in those decreasing the force, and vice versâ; but the periodical laws in the two cases are not strictly the converse of each other.

The account given in pp. viii to x of the operations by which the successive steps were accomplished in the investigation of which the disturbances of the Horizontal Force were the subject, applies equally to the present investigation into the periodical laws of the disturbances of the Vertical Force; and in Table XXV. will be found the successive normal values which have been employed of the Vertical Force at the standard temperature of 55° at the different hours, corresponding to Table X in the case of the Horizontal Force.

TABLE XXV.

Hourly Means of the Readings of the Vertical Force Magnetometer, reduced to an uniform Temperature or exceeded 4.0 Scale Divisions or 00026 parts

200		į.	<u>.</u>		GÖ	TTINGE	n Hour	S.				
Periods to which the	0	1	2	3	4	5	6	7	8	9	10	11
Hourly Means correspond.		<del>`</del>	<u> </u>		T	ORONTO	HOURS.					
correspond.	18	19	20	21	22	23	0	1	2	3	4	5
1842: Oct. 1 to 31 - Nov. 1 to 18 - Nov. 19 to 30 - Dec. 1 to 31 -	Sc. Div. 67.6 64.6 57.3 57.6	Sc. Div. 68'1 64'9 57'0 57'4	Sc. Div. 67.5 65.1 57.7 57.7	Sc. Div. 66°7 64°5 58°0 57°1	Sc. Div. 66.7 63.9 58.1 56.3	Sc. Div. 66°8 64°0 58°4 56°5	Sc. Div. 67 '7 64 '4 58 '9 57 '0	Sc. Div. 68 2 65 6 59 5 57 4	Sc. Div. 69°0 66°6 59°6 58°6	Sc. Div. 69 8 66 0 59 9 58 5	Sc. Div. 69'9 66'5 60'5 58'5	Sc. Div. 70°0 66°9 61°1 58°6
1843: Jan. 1 to 31 Feb. 1 to 8 July 2 to 29 July and August Aug. 1 to 31	57.9 53.1 58.8 57.3 55.8	57.5 53.3 58.9 56.8 54.8	56.9 54.0 58.9 56.7 54.6	57.0 51.7 58.8 56.7 54.7	56.6 51.3 58.8 56.7 54.7	56.5 51.9 58.7 57.0 55.4	57.5 52.4 59.2 57.5 55.8	58.0 53.1 59.9 58.2 56.6	58.0 53.9 60.8 59.1 57.5	58.1 54.3 61.8 60.0 58.2	58.1 54.6 62.7 60.7 58.8	58.3 54.6 63.6 61.0 58.5
Sept. 1 to 9 - Sept. 10 to 30 -	51.2 46.7	50°7 46°6	50.7 46.9	50.7 46.8	50°8 46°9	51.0 46.7	51.5 47.3	52°3 48°1	53°0 48°4	53°7 49°3	54.0 49.2	53.8 49.2
1844: Feb. 9 to 29 March 1 to 23 Mar. 24 to April 6 April 7 to 23 April 24 to May 11 May 12 to 25 May 26 to June 8 June 9 to 22 June 23 to 30 July 1 to 6 July 7 to 13 July 14 to 20 July 21 to 31 Aug. 1 to 31 Sept. 1 to 30 Oct. 1 to 31 Nov. 1 to 30 Dec. 1 to 31	105.4 107.8 105.0 102.2 100.1 98.3 95.5 92.8 90.6 90.8 88.7 86.5 84.4 82.0 80.6 81.0 79.9 78.1	105°6 107°6 104°8 102°0 100°3 98°6 95°5 90°0 91°4 89°1 86°5 84°1 82°4 80°6 77°8	106·2 107·8 105·1 102·5 100·4 98·3 95·2 92·2 89·6 91·0 86·6 83·4 82·4 79·6 80·9 81·0 77·8	104'9 107'3 104'8 102'4 99'9 97'4 94'6 91'9 89'2 90'0 88'8 86'4 83'0 81'8 79'1 80'4 77'8	104.0 106.0 103.8 101.7 99.2 96.7 94.3 91.9 90.0 88.9 87.9 85.7 82.8 81.8 79.4 79.8 77.6	104'3 105'2 103'3 101'3 98'7 96'3 94'1 92'0 90'3 88'4 87'9 84'5 82'9 82'0 80'0 79'9 80'4 77'5	104 8 105 8 103 7 102 1 99 4 96 9 94 6 92 4 90 2 88 6 88 1 84 4 83 2 81 5 80 6 78 5	105.0 106.2 104.3 102.5 99.6 96.7 94.5 92.2 90.7 89.5 85.0 83.0 82.8 81.7 81.4 79.3	105'7 106'9 105'1 103'4 100'1 97'8 95'2 92'9 92'2 90'8 88'9 85'6 83'6 84'3 82'3 82'3 81'9 79'7	105.7 108.0 105.6 103.2 100.9 98.7 96.1 93.6 91.7 91.8 90.1 87.0 85.1 82.8 82.7 82.4 80.0	105.6 108.1 105.7 103.2 101.5 99.8 97.0 94.3 92.6 92.2 91.2 88.9 85.4 85.4 82.8 80.2	105.5 108.5 106.3 103.9 102.0 100.1 97.3 94.5 92.9 93.6 91.1 88.8 86.5 85.1 82.0 82.4 82.7 80.0
1845: Jan. 1 to 15 Jan. 16 to 31 Feb. 1 to 28 March 1 to 31 April 1 to 30 May 1 to 31 June 11 to 21 June 22 to 30 July 1 to 12 July 13 to 31 Aug. 1 to 16 Aug. 17 to 31	78.2 75.1 70.9 70.4 69.9 67.8 108.7 105.5 103.3 98.8 167.2 163.8	77.8 75.1 70.7 70.6 69.8 67.3 109.0 105.8 102.9 98.3 166.8 162.7	78.2 74.7 71.0 70.4 68.9 66.2 108.5 104.2 102.3 97.8 166.6 162.7	77.8 74.6 70.8 69.5 68.7 65.5 107.5 102.1 97.5 165.8 161.8	77.8 74.4 70.5 68.6 68.2 64.5 106.8 101.5 96.6 165.4 161.4	78.2 74.5 70.0 68.0 68.1 64.2 107.1 102.2 101.7 95.9 165.6 162.2	78.2 75.1 70.8 68.6 68.5 65.0 107.0 103.1 101.5 95.5 165.4 162.6	77.6 75.9 71.6 69.2 69.2 107.0 103.4 102.0 96.7 166.0 163.7	78.5 77.4 72.8 70.1 70.1 67.3 108.2 104.9 102.5 97.4 167.5 164.7	78.9 77.9 73.1 70.9 70.8 68.2 109.4 106.2 104.1 98.1 167.8 164.6	78.5 77.5 72.9 71.1 70.9 68.6 110.3 107.5 106.0 98.7 167.9 165.0	78.6 77.5 73.3 71.5 71.2 69.0 110.5 107.2 105.7 99.3 168.3 165.6

Table XXV.

of 55° Fahrenheit, and omitting disturbed Observations in which the Amount of Disturbance equalled of the whole Vertical Force at Toronto.

		GOTTINGEN HOURS.											
	12	13	14	15	16	17	18	. 19	20	21	22	23	Periods from which the
				•	7	TORONT	HOURS	s.					Hourly Means are derived.
	6	7	8	9	10	11	12	13	14	15	16	17	
	Sc. Div. 69'9 66'6 61'7 58'1	Sc. Div. 69 9 66 9 61 1 58 1	Sc. Div. 69°6 66°7 60°8 58°0	sc. Div. 69 5 66 3 60 5 58 3	Sc. Div. 69'1 66'4 61'0 57'9	sc. Div. 68 6 65 4 59 7 57 7	Sc. Div. 67'9 64'8 58'9 57'5	Sc. Div. 67.5 64.7 60.6 57.3	Sc. Div. 67.7 64.2 60.9 57.2	sc. Div. 68°1 64°6 59°3 57°2	Sc. Div. 67 9 64 4 59 1 56 8	sc. Div. 67.5 64.9 58.9 57.5	1842: Oct. 1 to 31. Nov. 1 to 18. Nov. 19 to 30. Dec. 1 to 31.
	58.9 55.0 63.6 60.9 58.2 53.7 49.2	59°1 55°0 62°4 60°1 57°8 53°5 49°2	58.8 54.8 61.6 59.6 57.6 53.3 49.1	59°0 54°8 61°3 59°2 57°1 52°8 48°5	58'9 54'4 60'5 58'4 56'4 52'1 47'9	58.6 53.9 59.7 57.7 55.7 51.7 47.7	57.5 53.2 59.4 57.4 55.4 51.1 46.9	57°5 52°8 59°2 57°1 55°1 50°7 46°3	57.5 53.0 57.9 56.2 54.4 49.9 45.4	57°2 53°0 58°0 56°1 54°2 50°3 46°5	57°1 53°2 58°4 56°2 54°1 50°0 46°0	57 3 53 6 58 4 56 8 55 2 50 8 46 5	1843: Jan. 1 to 31. Feb. 1 to 28. July 2 to 29. July and August. Aug. 1 to 31. { Aug. 1 to 31 and } Sept. 10 to 30. Sept. 10 to 30.
	105.6 108.3 106.0 103.5 101.6 99.8 97.0 .94.1 91.9 92.6 91.3 88.4 85.1 81.7 82.3 82.2 80.0	106.0 108.0 105.9 102.8 101.4 100.1 97.1 94.1 91.5 92.1 90.8 87.7 86.0 84.3 81.4 82.8 82.3 79.8	106'2 107'8 105'4 102'7 101'1 99'6 96'7 93'9 91'6 91'7 90'6 87'8 84'8 83'9 81'6 82'3 82'3 79'7	105.7 108.0 105.1 102.0 100.7 99.5 96.7 93.9 91.5 91.7 90.4 87.0 84.4 81.7 81.8 82.2 79.8	105.7 107.7 104.4 101.1 99.8 98.6 96.0 93.3 91.0 91.1 89.9 86.6 84.0 82.8 81.6 81.4 82.5 79.6	105 · 8 107 · 0 104 · 2 101 · 3 99 · 6 98 · 0 95 · 5 93 · 0 90 · 8 91 · 0 89 · 5 86 · 4 84 · 0 82 · 2 80 · 7 81 · 1 81 · 4 79 · 0	106:0 107:0 104:5 102:1 99:8 97:7 95:2 92:8 91:3 90:7 89:6 84:9 83:7 82:1 80:1 81:2 81:1 78:9	105.6 106.5 104.4 102.3 99.8 97.2 94.7 92.2 90.6 90.2 89.1 86.3 83.3 81.5 80.9 80.7 78.7	105:3 106:8 104:5 102:2 99:5 96:7 94:5 92:2 90:3 90:0 89:0 86:6 84:2 80:7 80:7 80:7 80:7	105:3 106:5 104:2 101:9 99:7 97:5 94:8 92:1 89:9 90:1 89:6 86:7 84:4 81:1 80:1 81:2 80:1 78:6	105.6 107.1 104.2 101.4 99.4 97.5 95.0 92.4 89.8 90.6 89.0 86.3 84.3 82.2 80.0 80.8 80.1 78.2	105.6 106.9 104.4 102.0 100.0 98.1 95.5 93.0 90.6 91.2 88.4 82.4 80.2 80.4 80.3 78.3	1844: Feb. 9 to 29. March 1 to 23. March and April. April 7 to 23. April and May. May 12 to 25. May and June. June 9 to 22. June 23 to 30. July 1 to 6. July 7 to 13. July 14 to 20. July 21 to 31. Aug. 1 to 31. Sept. 1 to 30. Oct. 1 to 31. Nov. 1 to 30. Dec. 1 to 31.
•	78.7 77.5 73.1 71.6 71.1 68.8 110.5 106.9 106.3 99.2 168.4 164.9	78.4 77.7 72.9 71.5 70.8 68.3 109.8 106.9 105.7 98.4 167.4 164.2	78.4 77.4 72.8 71.4 71.0 67.8 109.7 106.1 105.2 97.6 167.3 164.4	78.6 76.7 72.6 71.3 70.7 67.2 109.2 106.4 105.1 97.5 166.3 163.5	78*4 75*6 72*4 71*0 70*0 67*4 109*5 105*8 104*2 97*7 166*5 163*3	77.9 75.9 72.5 71.2 70.0 66.7 109.2 105.6 103.9 97.3 165.3 163.1	78.1 75.7 71.3 70.5 69.5 66.5 108.6 105.9 103.5 97.0 165.3 162.7	77.8 75.7 71.6 70.3 69.2 66.6 108.9 105.5 103.6 96.4 164.4 162.5	77.7 75.6 71.4 69.9 68.8 66.8 109.0 105.1 103.7 95.7 165.4 162.1	77.4 75.1 71.6 70.5 69.1 66.8 109.5 105.1 104.1 96.3 165.9 162.3	78.8 75.1 71.0 70.7 69.3 66.7 109.4 105.6 103.7 96.6 165.4 162.6	76.8 75.1 71.3 70.5 70.0 67.2 109.8 106.4 103.9 98.0 165.9 163.3	1845: Jan. 1 to 15. Jan. 16 to 31. Feb. 1 to 28. March 1 to 31. April 1 to 30. May 1 to 31. June 11 to 21. June 22 to 30. July 1 to 12. July 13 to 31. Aug. 1 to 16. Aug. 17 to 31. (Continued on p. xl.)

Table XXV.—continued.

	GÖTTINGEN HOURS.											
Periods to which the	0	1	2	3	4	5	6	7	8	9	10	11
Hourly Means correspond.			· · · · · · · · · · · · · · · · · · ·			TORONT	O HOUR	s.				
	18	19	20	21	22	23	0	1	2	3	4	5
1845 (cont.): Sept. 1 to 13 Sept. 14 to 30 Oct. 1 to 18 Oct. 19 to 31 Nov. 1 to 15 Nov. 16 to 30 Dec. 1 to 31	Sc. Div. 161 0 164 1 162 9 158 8 159 6 158 1 155 5	Sc. Div. 160'8 163'5 163'0 159'1 159'8 158'1 155'2	Sc. Div. 161'2 163'0 163'0 159'5 159'2 157'5 155'2	sc. Div. 160°2 162°1 161°6 159°9 158°5 157°1 155°4	Sc. Div. 160'9 162'0 161'5 158'9 158'4 156'6 155'5	Sc. Div. 161.4 162.6 161.7 158.3 158.6 157.3 155.6	Sc. Div. 162 2 163 1 162 1 158 3 159 4 158 7 155 7	sc. Div. 163.5 164.2 162.6 159.5 160.2 159.0 156.4	sc. Div. 165.4 165.1 163.4 160.6 161.4 159.7 157.1	Sc. Div. 165'4 164'9 164'0 160'8 161'2 159'0 157'6	sc. Div. 165°1 165°3 163°9 160°0 160°7 158°8 157°5	Sc. Div. 164'9 165'2 164'2 160'6 160'4 158'9 157'1
1846: Jan. 1 to 31 Feb. 1 to 28 March 1 to 24 April 3 to 25 April 26 to May 9 May 10 to 23 May 24 to June 6 June 7 to 24 June 25 to July 4 July 5 to 25 July 26 to Aug. 8 Aug. 9 to 22 Aug. 23 to 31 Sept. 1 to 30 Oct. 1 to Nov. 1 Nov. 2 to 7 Nov. 2 to 7 Nov. 8 to 28 Nov. 29 to Dec. 12 Dec. 13 to 16 Dec. 17 to 31	154'9 155'0 154'5 213'7 212'3 210'9 209'3 207'8 206'7 205'6 204'4 203'3 201'8 200'4 200'3 198'3 196'3 199'4 187'6	154.9 155.1 154.5 213.5 211.9 210.3 208.6 206.9 206.0 205.1 204.4 203.6 200.0 200.2 198.4 196.6 193.6 190.6 187.0	155.2 155.1 154.6 213.2 211.6 210.1 208.7 207.3 206.0 204.6 203.8 202.9 201.4 199.9 200.3 198.5 196.6 193.5 190.2 187.7	154·4 154·1 153·8 212·2 210·6 209·1 208·4 207·8 206·1 204·3 203·3 202·4 200·5 198·6 200·2 198·3 196·4 193·0 189·9 187·1	154'3 153'3 152'7 211'2 210'0 208'7 207'9 207'1 205'7 204'3 202'8 201'4 200'0 198'6 199'6 199'6 199'6 199'6 199'6 189'4 186'8	154·4 153·4 152·2 211·2 211·2 211·9 210·6 206·0 204·3 203·1 201·9 201·1 200·4 199·7 197·8 195·9 193·0 189·5 186·8	154.7 154.3 152.7 211.2 211.0 210.9 209.5 208.0 206.4 204.7 203.5 200.2 200.0 198.3 196.6 193.5 190.3 187.5	155.9 154.4 153.6 211.8 212.0 212.3 210.4 208.5 206.6 204.8 204.1 203.4 202.3 201.2 201.0 199.1 197.2 194.2 190.7 187.7	156.5 155.1 154.4 213.2 213.4 213.6 211.5 209.4 207.8 206.1 205.2 204.4 202.8 202.5 201.9 200.0 198.0 195.0 191.1 188.0	156.7 155.6 155.5 214.0 213.5 213.0 212.0 2011.0 209.0 207.1 206.2 205.3 203.9 202.3 202.1 200.1 194.8 191.1 188.0	156:4 155:8 155:4 213:6 213:5 212:7 211:9 210:3 208:8 207:6 206:4 204:5 202:7 202:1 199:8 197:5 195:0 191:0 187:3	156.4 155.8 155.5 213.4 213.9 214.0 212.5 210.9 210.6 209.8 208.6 207.1 204.8 202.6 202.0 199.8 197.6 195.3 191.2 188.2
1847: Jan. 1 to 15 Jan. 16 to 31 Feb. 1 to 28 March 1 to 31 April 1 to 30 May 1 to 31 June 1 to 15 June 16 to 30 July 1 to 31 Aug. 1 to 31 Sept. 1 to 30 Oct. 1 to 31 Nov. 1 to 30 Dec. 1 to 31  1848: Jan. 1 to 31	185.7 183.1 182.0 182.7 183.5 181.0 178.4 175.4 173.3 171.8 172.7 172.9 172.6 171.1	186.0 183.1 182.9 183.6 183.3 180.4 176.8 175.2 173.3 171.0 172.8 173.7 173.3 170.8	185.5 183.0 183.4 184.2 182.8 179.8 176.5 174.6 173.0 170.3 172.5 173.7 172.3 170.7	184.7 182.9 181.8 183.3 182.1 179.1 176.5 174.4 172.5 169.8 171.3 173.2 172.2 170.9	184.5 183.2 181.6 182.5 181.3 178.3 176.8 174.1 171.7 170.9 170.7 173.0 171.9 170.6	185:3 182:5 181:6 182:2 181:1 178:3 177:1 173:2 171:7 170:9 171:5 172:2 172:6 171:0	186.4 183.1 182.2 183.1 181.5 178.2 177.4 173.2 171.6 170.9 171.9 172.8 173.4 171.0	186·2 183·2 182·7 183·2 182·1 179·0 177·8 173·6 172·0 171·1 173·0 174·2 174·1 171·9	186.5 183.3 183.1 184.0 183.1 179.7 178.2 174.2 172.5 171.5 173.0 174.4 175.4	186.8 183.3 183.0 184.4 184.2 180.8 180.0 175.6 173.9 171.9 173.3 174.7 175.3 173.1	186.7 182.7 183.1 184.6 184.7 181.6 179.5 177.0 174.2 172.6 173.6 174.9 175.5 172.2	186.8 183.8 183.2 184.8 184.9 182.3 180.0 177.1 174.8 173.1 174.1 174.6 175.2 172.0
Feb. 1 to 29 - March 1 to 31 - April 1 to 30 - May 1 to 31 - June 1 to 30 -	164.8 163.5 164.2 160.0 156.1	165.4 164.8 164.0 160.0 155.9	167 6 166 5 164 2 163 7 160 0 154 9	166 9 165 0 162 9 162 7 159 6 153 9	166.8 163.2 162.1 162.1 158.5 154.0	167°1 163°5 162°2 161°5 157°4 153°6	168.6 164.7 163.3 162.1 158.1 153.8	168.9 165.3 164.0 163.2 159.1 153.6	169 1 165 8 164 3 164 0 160 4 154 9	169°4 166°3 164°3 164°5 161°0 156°2	169.8 165.7 165.0 165.4 161.6 156.2	169.5 166.1 165.0 164.0 161.5 157.7

Table XXV.—continued.

-	1												11
					G	ÖTTINGI	EN HOUI	RS.					
	12	13	14	15	16	17	18	19	20	21	22	23	Periods from which the
		` <u> </u>			·	TORONT	O HOUR	5.	<u> </u>		<u> </u>	<u> </u>	Hourly Means
	6	7	8	9	10	11	12	13	14	15	16	17	are derived.
	Sc. Div. 164'9 164'5 164'0 160'6 160'6 158'8 157'1	sc. Div. 164'5 164'3 164'2 160'5 159'8 158'6 157'5	Sc. Div. 163 *8 164 *7 164 *1 161 *0 159 *9 157 *8 157 *3	Sc. Div. 163 ' 4 164 ' 5 164 ' 0 162 ' 3 159 ' 9 158 ' 9 157 ' 0	sc. Div. 163 ' 4 163 ' 2 161 ' 3 159 ' 4 157 ' 4 157 ' 2	Sc. Div. 162 * 8 162 * 7 163 * 4 161 * 2 159 * 0 158 * 1 157 * 2	Sc. Div. 162 1 162 9 162 9 160 6 159 0 157 5 156 4	Sc. Div. 160 9 163 2 162 3 160 0 159 3 156 9 155 8	Sc. Dv. 160°2 163°0 162°4 159°5 158°9 156°8 155°9	Sc. Div. 160 9 161 7 162 4 159 7 159 2 157 6 155 8	Sc. Div. 160°2 162°0 162°3 159°4 159°1 157°6 155°3	Sc. Div. 161°3 162°9 162°5 159°6 159°4 157°5 155°4	1845: Sept. 1 to 13. Sept. 14 to 30. Oct. 1 to 18. Oct. 19 to 31. Nov. 1 to 15. Nov. 16 to 30. Dec. 1 to 31.
	156·1 156·1 155·5 213·1 213·6 214·2 212·4 210·6 209·9 209·2 207·7 206·3 204·2 202·2 202·2 199·9 197·7 194·9 191·1 188·2	156.5 156.4 155.5 215.4 213.8 212.2 211.4 210.6 210.1 209.6 207.6 206.0 204.1 202.3 202.1 200.1 198.2 194.7 191.2 188.7	156.6 155.9 154.8 214.9 213.4 211.9 210.7 209.5 208.5 207.5 206.4 205.3 203.5 201.8 201.8 200.1 198.5 194.8 191.4 189.5	156.2 155.8 154.7 213.5 212.3 211.1 210.2 209.2 207.9 206.6 204.7 202.8 202.0 201.2 201.0 199.5 197.9 195.3 191.5 188.4	156.4 156.1 154.8 213.4 212.4 211.4 209.7 208.0 206.6 205.2 204.4 203.7 202.5 201.4 201.1 199.6 198.1 195.0 190.9 187.8	156.0 155.7 155.4 213.3 211.6 209.9 209.0 208.1 206.7 205.4 200.5 201.5 200.4 200.0 199.0 197.9 194.4 190.7 187.7	155.7 155.4 154.6 212.0 210.9 209.8 208.5 207.3 206.0 204.8 203.8 202.8 200.5 200.2 200.0 198.4 196.7 193.8 190.0 187.6	154.8 154.9 154.2 212.3 210.7 209.1 208.3 207.5 202.8 202.5 202.3 201.5 200.7 199.6 198.2 196.8 193.4 189.6 187.6	155.2 154.8 154.1 212.7 210.9 209.2 208.0 206.7 203.5 200.3 201.0 201.7 201.4 201.1 200.0 198.5 197.1 192.7 190.0 187.2	154.6 154.7 154.1 212.6 210.7 208.8 206.9 205.0 203.6 200.2 200.8 201.5 201.1 200.7 199.9 198.4 196.9 192.3 189.8 187.7	154.9 154.3 154.0 213.2 212.0 210.7 208.6 206.5 203.6 200.9 200.5 201.2 200.6 200.0 199.1 197.9 196.7 192.8 189.4 187.1	154.7 154.5 153.8 213.3 211.7 210.0 208.7 207.5 205.1 202.8 202.1 201.5 200.1 198.8 199.0 197.8 196.6 193.1 189.6 187.4	1846: Jan. 1 to 31. Feb. 1 to 28. March 1 to 30. April 1 to 30. April 1 to May 31. May 1 to 31. May 1 to June 30. June 1 to July 31. July 1 to 31. July 1 to 31. Aug. 1 to 31. Aug. 1 to Sept. 30. Sept. 1 to 30. Oct. 1 to 31. Oct. 1 to Nov. 30. Nov. 29 to Dec. 12. Dec. 1 to 31. Dec. 17 to 31.
	187 0 184 2 183 3 181 2 184 3 182 3 179 6 177 3 174 7 172 4 174 0 175 1 174 8 171 8 169 6 165 6 165 4 164 3 162 1 156 9	186.7 183.8 183.3 183.9 184.5 182.2 179.1 176.8 174.2 172.0 172.2 175.3 175.2 172.4	186.7 184.0 183.3 184.6 184.2 182.1 179.4 176.1 173.3 172.0 172.5 175.2 175.4 172.5	186 2 183 5 183 6 184 5 183 6 181 8 179 3 175 5 173 6 171 2 172 6 174 9 172 5 169 3 166 2 163 7 160 3 156 4	185.7 183.7 182.8 184.4 183.6 181.5 178.7 174.7 172.7 171.1 172.4 175.1 174.3 172.4 168.7 166.1 163.6 160.3 156.0	185'9 183'6 182'7 183'9 183'3	185 · 5 183 · 7 182 · 6 183 · 5 183 · 3 180 · 4 176 · 8 172 · 6 169 · 6 173 · 9 170 · 4 168 · 1 165 · 8 164 · 4 161 · 7 158 · 6 154 · 9	185 · 3 183 · 4 182 · 6 183 · 3 182 · 4 180 · 3 176 · 1 174 · 4 171 · 7 170 · 5 173 · 1 172 · 9 171 · 2 168 · 0 165 · 1 163 · 7 162 · 0 158 · 4 154 · 8	185 '3 183 '3 182 '1 182 '6 182 '4 180 '2 177 '2 174 '2 171 '6 170 '0 173 '1 172 '7 170 '8 167 '2 163 '6 162 '3 159 '2 154 '9	185.7 183.3 182.2 183.4 182.9 180.1 177.2 174.4 171.5 170.3 171.6 173.5 172.6 171.1	185.5 182.9 182.2 183.7 179.8 177.8 175.8 172.1 169.7 170.6 173.1 172.6 170.6	185 · 2 182 · 9 181 · 7 183 · 2 183 · 1 180 · 9 178 · 2 175 · 4 172 · 6 170 · 2 171 · 6 172 · 9 172 · 4 170 · 0 167 · 3 165 · 1 163 · 8 163 · 3 160 · 1 156 · 6	1847: Jan. 1 to 15. Jan. 16 to 31. Feb. 1 to 28. March 1 to 31. April 1 to 30. May 1 to 31. June 1 to 15. June 16 to 30. July 1 to 31. Aug. 1 to 31. Sept. 1 to 30. Oct. 1 to 31. Nov. 1 to 30. Dec. 1 to 31.  1848: Jan. 1 to 31. Feb. 1 to 29. March 1 to 30. May 1 to 31. June 1 to 30. May 1 to 31. June 1 to 30.

Vol. III.

## INCLINATION AND TOTAL FORCE.

Analysis of the larger Disturbances.—The disturbances of the Inclination which equalled or exceeded 1'·0, and of the total force which equalled or exceeded ·0004 of the whole force, both measured from the respective normals at the same hour and in the same month, were obtained from the observed disturbances of the Horizontal and Vertical Forces in the following manner: Tables were formed, in the first column of which were placed in chronological order the larger disturbances of the Vertical Force, separated as already described, and in the second column those of the Horizontal Force, each expressed in terms of the respective forces, by the conversion of the scale divisions in which the disturbances were observed into parts of the respective forces by means of the scale coefficient.

At a large proportion of the hours of contemporaneous observation, when one of the two components of the force exhibited a disturbance which by its amount was brought into the category of the larger disturbances, the other component was also disturbed. In such cases there were contemporaneous entries in both columns; but when one of the components only was so affected, the entry in the corresponding column of the other component was blank. These blanks were all filled up by inserting for the component which did not exhibit a disturbance of sufficiently large amount to have been classed as a large disturbance and separated accordingly, the difference, whatever that might be, between the observation at that hour and its proper normal. These two columns then exhibited all the larger disturbances of both the horizontal and vertical components whenever either component was disturbed, with the contemporaneous difference of the other component from its mean or normal value in the cases when one only of the two components exhibited a large disturbance. The entries in the two columns had each their proper signs prefixed, + if the disturbance or difference from the normal were in augmentation of the force, and - if in diminution of the force. These two columns then expressed the values of  $\frac{\Delta Y}{Y}$  for the Vertical Force, and  $\frac{\Delta X}{X}$  for the Horizontal Force, for every hour at which either  $\frac{\Delta Y}{V}$  equalled or exceeded 00026 parts of the Vertical Force, or  $\frac{\Delta X}{X}$  equalled or exceeded 0012 parts of the Horizontal Force. fourth column were then filled in, the third expressing the values of  $\Delta\theta$ , or the disturbances of the Inclination, and the fourth the values of  $\frac{\Delta \phi}{\phi}$  , or the disturbances of the Total Force (in parts of \$\phi\$, the total force at Toronto), corresponding to the entries in the first and second columns, and computed by the formulæ-

$$\Delta\theta = \sin\theta \cos\theta \left(\frac{\Delta Y}{Y} - \frac{\Delta X}{X}\right);$$

$$\frac{\Delta\phi}{\phi} = \cos^2\theta \frac{\Delta X}{X} + \sin^2\theta \frac{\Delta Y}{Y}$$

From the third and fourth columns all the disturbances of the Inclination  $(\Delta\theta)$  which equalled or exceeded 1'0 in amount, and all the disturbances of the total force  $\left(\frac{\Delta\phi}{\phi}\right)$  equalling or exceeding 0004 in amount, were taken, as forming respectively a sufficient body of the larger disturbances of each element to permit their periodical laws to be investigated and shown. These disturbances were then dealt with, in regard to classification and tabular arrangement, in the same manner that has been already explained in treating of the disturbances of the horizontal and vertical components of the force.

In deriving the disturbances of the Inclination and Total Force from those of the Horizontal and Vertical Forces, all the calculations and arrangement in tables have been prepared, under the superintendence of Mr. Magrath, by the Non-Commissioned Officers of the Royal Artillery employed in the Woolwich Office; every part of the process having had the advantage of two independent computers.

Inclination.—The aggregate values of the disturbed observations of the Inclination in the different years, each ending June 30th, are as follows:—

### TABLE XXVI.

Year ending	June 30	th 1844*	_		-	-	-	684.3
"	,,	1845 -	-		-	-	-	613.9
,,	,,	1846	-		•	-	-	753.7
,,	,,	1847 -		-		•	-	1399.0
**	,,	1848	-		•	-	-	3139.8
Tot	al in the	five years			•	-	•	6590*7
	Mean	annual valı	1e 6	590°	<del></del>	1318'1.	•	<u> </u>

# TABLE XXVII.

The ratios in each year to the mean annual value are as follows:—

Year ending	June 30	th 1844	-		-	•	_	0.52
,,	,,	1845		-		•	-	0.47
,,	,,	1846	-		-	-	-	0.57
,,	12	1847		-		•	•	1.06
••	"	1848	•		œ	-	<b>-</b> .	2.40

Table XXVIII. exhibits the aggregate values in the different years divided into disturbances increasing the Inclination and disturbances decreasing the Inclination.

<sup>\*</sup> Having five months of the preceding year (October 1842 to February 1843) substituted for five of its own months (see page xi).

		TABLE	$\mathbf{X}$	XV	III.		
-						Increasing.	Decreasing.
Year ending	June 30th	1844			-	498.8	185.5
1 car chaing		1845			-	510.5	103.4
,,	"	1846	_		-	612.7	141.0
"	"	1847			_	1165.8	233.2
"	,,	1848	_		_	2809.8	330.1
"	"	1040					
	Total in	he five v	ear	'S	-	5597.5	993.2
	20002 112						

The effect of the larger disturbances is, therefore, to increase the Inclination considerably more than to decrease it. The ratios of the values of the disturbances increasing the Inclination to those which decrease it, on the average of the five years is 5.6 to 1. In the several years the ratios are as follows:—

## TABLE XXIX.

Year ending June 30th 1844: As 2.7 to 1.

" 1845: As 5.0 to 1.

" 1846: As 4.3 to 1.

" 1847: As 5.0 to 1.

" 1848: As 8.5 to 1.

The augmentation of the ratio in the year ending June 30th, 1848, was occasioned by the excessive amount of disturbance in December 1847, which in the case of the Inclination was chiefly in disturbances increasing its value.

Table XXX. exhibits the aggregate values of the disturbances, distributed into the different *months* of their occurrence, and the ratios which the values in the different months bear to the mean monthly value or average of all the months.

TABLE XXX.

Months.	1844.			1		the Five	Ratios.	Months.
		1845.	1846.	1847.	1848.	Years.		
July August September October November January February - March April May June	69 <sup>'</sup> ·7 53·5 30·0 59·5 138·7 53·6 33·8 24·9 98·1 83·8 30·5 8·2	16'1 62'5 73'8 73'4 86'7 61'4 72'5 38'3 35'5 49'8 33'1 10'8	38'4 45'4 83'0 50'4 25'2 73'9 41'4 32'1 63'9 114'2 99'9 85'9	95.2 100.5 200.5 182.6 54.4 32.6 46.1 78.2 149.4 236.6 162.1 60.8	89.5 143.4 531.3 429.7 253.4 527.8 161.3 340.8 184.6 288.2 140.9 48.9	308'9 405'3 918'6 795'6 558'4 749'3 355'1 514'3 531'5 772'6 466'5 214'6	0.56 0.74 1.67 1.45 1.02 1.37 0.64 0.94 0.97 1.41 0.85 0.39	July. August. September. October. November. December, January. February. March. April. May. June.
	<u></u>	Total in t	he five ye	ars	•	6590.7		

December is the only exception to a periodical variation, having its maxima at the epochs of the equinoxes, and its minima at those of the solstices. This apparent anomaly was occasioned by the excessive and unusual disturbances in December 1847. The ratio for the month of December taken from a comparison of the disturbances in that month in the first four years, with the mean monthly value in the same years, is 0.77.

Table XXXI. exhibits the aggregate values of the disturbances of the Inclination distributed into the different *hours* of their occurrence, together with the ratios of the values at each hour to the mean hourly value or average of all the hours.

TABLE XXXI.

Toronto Astronomical		In the Y	ear ending Jun	e 30th,		Sums in the	Ratios.	Toronto Civil
Time.	1844.	1845.	1846.	1847.	1848.	Five Years.	natios.	Time.
Hours.								
18	19.4	12.4	1ą.o	4ó·1	139.0	223.9	0.81	6 a.m.
19	16.2	16.6	17.7	47.0	224.8	322.6	1.17	7 a.m.
20	10.0	15.0	$\overline{17} \cdot \overline{2}$	38.9	211.5	292.3	1.07	8 a.m.
21	20.6	20.1	35.9	51.6	160'4	288.6	1.00	9 a.m.
22	36.8	34.1	31.4	60.4	122.1	284.8	1.00	10 a.m.
23	36.2	29.7	31.9	51.0	130.2	279.6	1.00	11 a.m.
0	38.8	35.2	34.8	55.3	125.0	289.4	1.00	Noon.
i l	34.4	25.2	41.8	42.8	126.8	271.0	0.99	1 p.m.
$\overline{2}$	33.2	23.1	23.7	48.8	101.2	230.6	0.84	2 p.m.
$\bar{3}$	21.9	26.4	32.9	48.4	95*6	225.2	0.85	3 p.m.
4	35.7	18.8	30.0	40.0	77.5	202.0	0.73	4 p.m.
4 5	40.5	32.2	30.2	56.7	77.7	237.6	0.86	5 p.m.
6	43.2	28.0	44.9	61.0	93.8	270.9	0.88	6 p.m.
7	45.1	40.6	33.9	66.8	121.4	307.8	1.13	7 p.m.
8	37.0	40'1	44.2	66.2	94.8	282.6	1.03	8 p.m.
9	42.4	34°6	50.9	88.8	82.1	298.8	1.09	9 p.m.
10	36.2	35.4	48.9	83.0	113.9	317.7	1.16	10 p.m.
11	31.9	21.6	45.1	74.0	141.3	313.9	1.14	11 p.m.
12	19.7	33.3	42.2	<b>52</b> .6	146.3	294.1	1.07	Midnight.
13	20.9	28.4	27.9	100.0	160.7	337.9	1.53	1 a.m.
14	22.1	19.0	22.4	70.4	189.5	323.4	1.18	2 a.m.
15	13.8	15.7	20.8	79.2	133.4	262.9	0.96	3 a.m.
16	9.1	14.3	19.5	41.5	146'4	230.5	0.84	4 a.m.
17	18.0	13.8	12.2	34.5	124.1	202.6	0.74	5 a.m.
<u>*                                    </u>		Total in	the five yea	rs -	~ -	6590.7	<u>!</u>	
		Mean ho	urly value	-	$\frac{6590.7}{24} =$	274.6 =	1.00	

The hourly disturbances of the Inclination arrange themselves in four groups, exhibiting a double progression. From 7 a.m. to noon, and again from 7 p.m. to 2 a.m. inclusive, the values equal or exceed the mean hourly value; and from 1 p.m.

to 6 P.M. inclusive, and again from 3 A.M. to 6 A.M. inclusive, they fall short of the mean hourly value.

Table XXXII. shows, in columns 2 and 3, the values at the different hours separated into disturbances which increase the Inclination and disturbances which decrease it.

The disturbances which increase the Inclination have two epochs of maxima, and two of minima; the principal maximum is at 1 A.M., and the secondary maximum at 7 A.M.; the principal minimum at 4 P.M., and the secondary at 5 A.M. The progression from the afternoon minimum to the maximum twelve hours later, may be regarded as continuous, with slight and possibly accidental interruptions at 8 P.M. and midnight; from the maximum at 1 A.M. to the minimum at 5 A.M., and thence to the secondary maximum at 7 A.M., the progressions are continuous and uninterrupted; and from the maximum at 7 A.M. to the afternoon minimum it is also continuous, with slight and possibly accidental interruptions at noon and 3 P.M.

The disturbances which decrease the Inclination are comparatively small at all the hours; they exhibit, however, a systematic tendency to be greater during the hours of the day than during those of the night; their actual maximum is at 2 p.m., and their minimum at 2 a.m.

The disturbances which increase the Inclination preponderate greatly at all the hours. In the Declination, there are certain hours in which the easterly deflections preponderate, and others in which the westerly deflections preponderate; and in the total force there are certain hours in which the general effect of the disturbances is to increase the force, and other hours in which their general effect is to decrease it. The Inclination differs in this respect from either of the other two magnetic elements; inasmuch as its disturbances have a uniform character in increasing the Inclination The greater or less degree in which this effect is produced is shown at all the hours. in column 4, which contains the differences between the two preceding columns (or their sums when the signs prefixed are regarded). This column therefore exhibits at the different hours the accumulated effect in five years of the disturbances of 1'.0, and upwards. The least amount of disturbance occurs at 2, 3, and 4 in the afternoon; at 6 p.m. it becomes considerable, and continues so till 3 a.m. inclusive, showing a decided maximum at 1 and 2 A.M. There is a second increase in the amount of disturbance at 7, 8, and 9 A.M., with a secondary maximum at 7 A.M., not much inferior in amount to the principal maximum at 2 A.M. In column 5 is shown the average daily effect of the disturbances of 1.0 and upwards, at the different hours of the 24; this is obtained by dividing the accumulated effect at the different hours in five years by 1550, being the number of days in the five years on which the observations were made.

TABLE XXXII.

Toronto Astronomical	Aggregate Values	of the Disturbances	Excess of the Increasing	Mean Diurnal Effect	Toronto
Time.	Increasing the Inclination.	Decreasing the Inclination.	Disturbances in Five Years.	of the larger Disturbances.	Civil Time.
(1.)	(2.)	(3.)	(4.)	(5.)	(6.)
H.	1		1	,	i
18	+189.7	-34.2	+155.5	+0.10	6 a.m.
19	+301.7	-20.9	+280.8	+0.18	7 a.m.
20	+266.8	-25.5	+241.3	+0.16	8 a.m.
21	+245.1	-42.5	+201.6	+0.13	9 a.m.
22	+224.4	-60.4	+164.0	+0.10	10 a.m.
23	+205.8	<b>-</b> 73'8	+132.0	+0.09	11 a.m.
0	+216.6	<b>-72</b> .8	+143.8	+0.09	Noon.
1	+201.4	-69.6	+131.8	+0.09	I p.m.
$rac{2}{3}$	+150.8	<b>-</b> 79'8	± 71°0	+0.02	2 p.m.
3	+168.2	-57.0	+111.2	+0.07	3 p.m.
4	+142.2	-59'8	+ 82.4	+0.02	4 p.m.
5	+183.1	-54.5	+128.4	+0.08	5 p.m.
6 7 8	+241.3	-29'6	+211.7	+0.14	6 p.m.
7	+265.8	-42.0	+223.8	+0.14	7 p.m.
. 8	+260.2	-22.4	+237.8	+0.16	8 p.m.
9	+275'1	-23.7	+251.4	+0.16	9 p.m.
10	+275.2	-42.5	+232.7	+0.12	10 p.m.
11	+279.3	<b>-34</b> 6	+244.7	+0.16	11 p.m.
12	+256.6	-37.5	+219.1	+0.14	Midnight.
13	+309.4	-28.5	+280.9	+0.18	1 a.m. 🤇 🛧
14	+308.2	-15.2	+293.0	+0.19	2 a.m.
15	+243.3	-19.6	+223.7	+0.14	3 a.m.
16	+209.4	<b>-21</b> 1 1	+188.3	+0.12	4 a.m.
17	+177.9	-24.7	+153.2	+0.10	5 a.m.

Total Force.—The aggregate values of the disturbed observations of the Total Force in the different years, each ending June 30th, are as follows:—

TABLE XXXIII.

Year ending		th 1844* 1845	-	-	'4491 pa '2775		e total force.
?? ??	"	1846	-	-	3809	"	"
,,	"	1847	-	-	•7293	,,	**
,,	"	1848	-	-	1.0747	"	"
Tota	l in the fi	ve years	_		2.9112		

<sup>\*</sup> Having five months of the preceding year (October 1842 to February 1843) substituted for five of its own months (see page xxix).

The ratios in each year to the mean annual value are as follows:—

# TABLE XXXIV.

Year ending	June 30th,	1844*		-	-	0.77
,,	**	1845	-	-	-	0.48
,,	"	1846	•	•	-	0.65
<b>/</b> ,,	,,	1847	-	-	-	1.25
• ,,	"	1848	-	-	-	1.84

Table XXXV. exhibits the aggregate values in the different years divided into Disturbances increasing the force, and Disturbances decreasing the force.

## TABLE XXXV.

						Increasing.	Decreasing.		
Year en	ding Ju	ne 30t	h, 1844	-	-	•2011	·2480 parts	s of the	Total Force.
	. ,,	,,	1845		-	<b>.</b> 0616	·2159	,,	,,
	. 22	"	1846	•	-	·1363	<b>2</b> 446	39	"
	. 3)	,,	1847			<b>.</b> 1839	• 5454	,,,	,,
	,,	,,	1848		-	4067	.6680	. 35	- 22
						<del></del>	<del></del>		
	Total in	the fi	ve years	•	-	<b>.</b> 9896	1.9219		
			•						

The general effect of the larger disturbances of the Total Force is to decrease the total magnetic force more than to increase it.

The ratio of the values of the disturbances decreasing the Total Force to those which increase it, on the average of the five years, is 1.94 to 1. The ratios in the several years are as follows:—

### TABLE XXXVI.

Year end	ing Jur	e 30th	, 1844	-	<b>-</b> .	-	-	as 1.23 to 1
	,,	"	1845	-	-	-		as 3.51 to 1
	,,	,,	1846	•	-	•	-	as 1.79 to 1
	37	,,	1847	•	-	-	-	as 2°96 to 1
	"	,,	1848	•	-	-	•	as 1.64 to 1

<sup>\*</sup> Including five months (October to February) substituted from the preceding year (see page xxix).

Table XXXVII. exhibits the aggregate values of the disturbances distributed into the different *months* of their occurrence; with the ratios which the values in the different months bear to the mean monthly value or average of all the months.

TABLE XXXVII.

1844. '0447 '0244 '0457 '0415 '0515 '0677 '0296	1845. '0151 '0349 '0587 '0524 '0317 '0033 '0260	1846. '0294 '0437 '0292 '0205 '0257 '0265	1847. '0668 '1161 '1339 '0688 '0170 '0047	1848.  '0338 '0384 '1302 '1464 '0604 '1538	the Five Years.  1898 2575 3977 3296 1863	0.78 1.06 1.64 1.36 0.77	July. August. September. October. November.
0244 0457 0415 0515 0677	.0349 .0587 .0524 .0317 .0033	· 0437 · 0292 · 0205 · 0257 · 0265	1161 1339 0688 0170	`0384 `1302 `1464 `0604	*2575 *3977 *3296 *1863	1.06 1.64 1.36	August. September. October.
.0457 .0415 .0515 .0677	.0587 .0524 .0317 .0033	· 0292 · 0205 · 0257 · 0265	1339 0688 0170	1302 1464 0604	·3977 ·3296 ·1863	1.64 1.36	September. October.
0415 0515 0677	.0524 .0317 .0033	·0205 ·0257 ·0265	.0688 .0170	·1464 ·0604	*3296 *1863	1.36	October.
.0515 .0677	.0317 .0033	·0257 ·0265	<b>.</b> 0170	.0604	1863		
.0677	.0033	.0265				0.771	
			(0047)	*1590			
'0296	*0960 I				2560	1.02	December.
	- 1	'0128	'0120	.0476	1280	0.52	January.
*0026	'0144	.0135	0256	1237	1795	0.74	February.
.0605	.0136	.0169	.0625	1012	2547	1.02	March.
.0633	*0074	.0551	1332	1163	3753	1.55	April.
'0164	0144	.0675	.0711	*0929	2623	1.08	May.
.0015	*0056	.0404	·0176	.0300	'0948	0.39	June.
	Total	in the five	years		2.9115	parts of	the Total Force
-	.0633 .0164	*0633	*0633	.0633         .0074         .0551         .1332           .0164         .0144         .0675         .0711           .0012         .0056         .0404         .0176    Total in the five years	**O633	.0633         .0074         .0551         .1332         .1163         .3753           .0164         .0144         .0675         .0711         .0929         .2623           .0012         .0056         .0404         .0176         .0300         .0948           Total in the five years         -         2.9115	.0633       .0074       .0551       .1332       .1163       .3753       1.55         .0164       .0144       .0675       .0711       .0929       .2623       1.08         .0012       .0056       .0404       .0176       .0300       .0948       0.39    Total in the five years          2.9115

The anomaly in the month of December, which is the only exception to a periodical variation having its maxima at the epochs of the equinoxes and its minima at those of the solstices, was occasioned by the excessive and unusual disturbances in December 1847. If the ratio for December be taken from the value of the disturbances in that month in the four years ending respectively June 30th, 1844, 1845, 1846, and 1847, compared with the mean monthly value in the same years, it is found to be 0.66, which would place it in its natural order in the progression. We may, therefore, regard the general progression of the annual variation of the Total Force depending on the larger disturbances to be from a maximum at each of the equinoxes to a minimum at each of the solstices, and vice versa; and the month of December 1847 as forming an accidental exception, presenting a decided anomaly in that particular year, but which might possibly disappear if the month were comprehended in observations continued through a longer series of years than are here combined.

Tables XXXVIII. and XXXIX. exhibit the aggregate monthly values in the different years separated into disturbances increasing and disturbances decreasing the force.

Table XXXVIII.

Disturbances increasing the Total Force.

			In the Y	ear ending	June 30,		Sums in the	Dadias	Months.
Months.		1844.	1845.	1846.	1847.	1848.	Five Years.	Ratios.	Months.
July -	_	0154	.0004	.0062	.0115	·0152	0487	0.59	July.
August -	-	.0078	.0107	.0087	.0174	.0091	0537	0.65	August.
September -	-	0258	.0044	'0016	.0329	0554	1201	1.45	September.
October -	-	.0215	*0084	·0105	0142	.0367	.0913	1.10	October.
November -	-	.0201	.0080		.0039	.0414	.0734	0.89	November.
December -	-	.0580	}	'0176	.0041	.0581	1378	1.67	December.
January -	-	.0106	.0188	.0024	.0095	.0181	*0594	0.72	January.
February -	- [	.0016	.0009	*0025	.0100	.0426	0576	0.70	February.
March -	- [	·0175	.0046	.0068	.0262	.0413	*0964	1.17	March.
April -	-	.0186	0025	.0316	*0350	.0370	1247	1.21	April.
May -	- (	*0042	.0020	.0367	.0100	.0363	'0892	1.08	May.
June -	-	-	.0009	.0117	.0092	·0155	.0373	0.45	June.
		· · · · · · · · · · · · · · · · · · ·	Total i	n the five	years		•9896 pa	rts of th	e Total Forc

Table XXXIX.

Disturbances decreasing the Total Force.

Months.			ears ending	Sums in						
		1844.	1845.	1846.	1847.	1848.	the Five Years.	Ratios.	Months.	
July August September October November December January February March April May June -		*0293 *0166 *0199 *0200 *0314 *0097 *0190 *0010 *0430 *0447 *0122 *0012	·0147 ·0242 ·0543 ·0440 ·0237 ·0033 ·0072 ·0135 ·0090 ·0049 ·0124 ·0047	*0232 *0350 *0276 *0100 *0257 *0089 *0104 *0107 *0101 *0235 *0308 *0287	*0553 *0987 *1010 *0546 *0131 *0006 *0025 *0156 *0363 *0982 *0611 *0084	*0186 *0293 *0748 *1097 *0190 *0957 *0295 *0811 *0599 *0793 *0566 *0145	1411 2038 2776 2383 1129 1182 0686 1219 1583 2506 1731	0.88 1.27 1.73 1.49 0.70 0.74 0.43 0.76 0.99 1.56 1.08 0.36	July. August. September. October. November. December. January. February. March. April. May. June.	
Total in the five years  Mean monthly value $\frac{1.9219}{1.9219}$							1'9219 parts of the Total Force.			

Both the disturbances which increase the Total Force and those which decrease it show the same periodical law of monthly variation which has been pointed out in the remarks on Table XXXVII., in which they were exhibited conjointly. In both, the equinoxes are epochs of maxima and the solstices of minima. In the disturbances decreasing the force, the progression from the minima to the maxima and from the maxima to the minima is continuous and uninterrupted. In those increasing the force, December is the only interruption, and ceases to be so if the ratio be taken from the four years ending June 30th, 1844, 1845, 1846, and 1847; omitting the year ending June 30th, 1848. The excessive disturbances in December 1847 are seen by Tables XXXVIII. and XXXIX. to have been chiefly disturbances increasing the Total Force.

Table XL. exhibits the aggregate values of the disturbances distributed into the different hours of their occurrence; together with the ratios of the values at the different hours to the mean hourly value or average of all the hours.

TABLE XL.

Toronto Astrono- mical Time.		In the	Year ending J	Sums in the	Ratios.	Toronto Civil		
	1844.	1845.	1846.	1847.	1848.	Five Years.	manos.	Time.
н.								-
18	.0257	·0185	*0136	•0409	.0655	1642	1.35	н. 6 а.т.
19	0267	.0127	0105	0409	*0759	1629	1.34	7 a.m.
20	0190	0064	0103	0281	.0381	1029	0.86	8 a.m.
$\tilde{2}$ 1	.0139	.0045	.0060	.0157	.0268	.0669	0.22	9 a.m.
$\frac{21}{22}$	.0099	.0015	.0033	.0050	0200	0320	0.26	10 a.m.
23	.0058	.0013	.0024	.0012	.0107	0214	0.17	11 a.m.
ő	.0066	.0005	.0054	.0046	.0130	0301	0.25	Noon.
ì	.0135	0024	:0076	.0120	.0228	0583	0.48	1 p.m.
$\overline{2}$	.0123	.0039	.0108	.0169	.0337	.0776	0.64	2 p.m.
2 3	.0143	.0040	'0141	.0252	.0353	0929	0.76	3 p.m.
4	.0171	.0063	.0225	0229	.0474	1162	0.96	4 p.m.
4 5	0224	.0112	.0191	.0277	.0434	1243	1.03	5 p.m.
6	.0181	.0082	.0148	0251	.0357	1019	0.84	6 p.m.
7	.0235	.0072	.0134	.0205	.0458	1104	0.91	7 p.m.
8	·0165	.0063	.0080	.0176	.0395	*0879	0.72	8 p.m.
9	.0120	.0075	'0104	.0164	.0285	.0748	0.65	9 p.m.
10	.0141	.0078	.0144	.0364	.0268	0995	0.85	10 p.m.
11	.0191	.0094	.0158	.0359	.0370	1172	0.97	11 p.m.
12	<b>.</b> 0261	.0270	.0272	<b>.</b> 0488	'0610	.1901	1.57	Midnigh
13	.0244	0254	.0267	.0661	.0743	2169	1.78	1 a.m.
14	.0257	.0292	.0300	<b>.</b> 0634	.0767	2250	1.85	2 a.m.
15	.0292	.0309	.0339	.0625	.0821	2386	1.97	3 a.m.
16	.0207	.0245	.0321	.0578	.0708	2059	1.70	4 a.m.
17	.0325	.0230	.0240	.0415	.0716	1926	1.59	5 a.m.

Total in the five years

2.9115 parts of the Total Force.

Mean hourly value  $\frac{2.9115}{24} = .1213 = 1.00$ 

The law which regulates the occurrence in the diurnal period of the disturbances of larger amount of the Total Force is here in its principal features sufficiently distinct and obvious. From 8 A.M. to 11 P.M. inclusive the disturbance at every hour is less than at any hour from midnight to 7 A.M. inclusive. It is a minimum at 11 A.M., and a maximum at 3 A.M., the disturbance at the hour of maximum being about eleven times greater than at the minimum hour. From the maximum at 3 A.M. to the minimum at 11 A.M. the progression is continuous and uninterrupted: from the minimum at 11 A.M. to the maximum at 3 A.M. the progression is interrupted in the afternoon by secondary small maxima at 5 and 7 P.M., with corresponding secondary minima at 6 P.M. and 9 P.M., but from the secondary minimum at 9 P.M. to the principal maximum at 3 A.M. the progression is continuous and uninterrupted.

Tables XLI. and XLII. show the aggregate hourly values in the different years, separated into disturbances increasing and disturbances decreasing the force; with the ratio of the values at each hour to the respective mean hourly values.

TABLE XLI.

Disturbances increasing the Force.

Toronto Astrono-		In the Y	Year ending Ju	Sums	Ratios.	Toronto		
mical Time.	1844.	1845.	1846.	1847.	1848.	in the Five Years.	Ratios.	Civil Time.
н.								н.
18	.0045	.0004	.0022	·	.0042	.0113	0.27	6 a.m.
19	.0060	_	.0012	.0004	.0029	.0102	0.25	7 a.m.
20	.0028	.0009	0026	.0011	.0043	.0147	0.36	8 a.m.
21	.0055	_	.0004	.0004	.0025	.0088	0.21	9 a.m.
$\frac{21}{22}$	.0038		.0009	.0004	.0049	.0100	0.24	10 a.m.
23	.0040	.0002	.0016	.0008	.0088	.0157	0.38	11 a.m.
0	.0056	.0002	.0040	.0046	$\cdot 0122$	.0269	0.65	Noon.
1	.0100	.0024	.0044	.0116	.0216	.0500	1.21	1 p.m.
$\stackrel{\cdot}{2}$	0105	.0039	.0085	<b>.</b> 0161	$^{\circ}0325$	.0715	$1^{\circ}73$	2 p.m.
3	0122	.0040	.0137	.0231	.0353	.0883	2.14	3 p.m.
	0149	*0063	.0211	.0210	.0474	1107	2.69	4 p.m.
4 5 6 7	0196	0117	.0177	.0260	0434	1184	2.87	5 p.m.
6	.0120	0078	0126	.0247	.0357	.0958	$2^{\cdot}32$	6 p.m.
7	.0192	.0068	.0119	0192	.0454	1025	2.49	7 p.m.
8	.0139	.0055	.0064	.0152	.0386	0796	1.93	8 p.m.
9	.0079	0037	.0080	.0069	.0228	•0493	1.19	9 p.m.
10	0062	.0028	.0041	.0036	.0159	.0326	0.79	10 p.m.
11	.0069	0022	.0028	.0018	.0074	.0211	0.21	11 p.m.
12	.0061	0012	.0035	.0004	.0080	0192	0.46	Midnight.
13	.0054	.0010	.0012	.0004	.0030	.0113	0.27	l a.m.
14	.0046		.0012	.0016	.0025	.0099	0.24	2 a.m.
15	.0048		.0020	.0021	.0033	.0122	0.30	3 a.m.
16	.0023		.0016	.0021	.0013	.0073	0.18	4 a.m.
17	.0064		.0024	.0004	.0028	0120	0.59	5 a.m.
	0001		0021	0001	0020	0120	20	J & a.m.
	Total in the five years					'9896 pa	arts of the f	orce.
	Mean hourly value $\frac{.9896}{24} =$					·0412 =	1.00	

Table XLII.

Disturbances decreasing the Force.

Toronto Astrono-		In the Y	Year ending Ju	ne 30,		Sums in the	Ratios.	Toronto Civil
mical Time.	1844.	1845.	1846.	1847.	1848.	Five Years.	natios.	Time.
н.								н.
18	.0212	.0181	.0114	<b>.</b> 0409	•0613	1529	1.91	6 a.m.
19	.0207	.0127	.0093	.0367	.0730	1524	1.90	7 a.m.
20	.0132	0055	.0097	.0270	'0338	.0892	1.11	8 a.m.
21	.0084	.0045	*0056	.0153	.0243	.0581	0.73	9 a.m.
22	0061	'0015	.0024	.0046	.0074	•0220	0.27	10 a.m.
23	.0018	.0008	.0008	.0004	.0019	0057	0.07	11 a.m.
o	.0010	_	.0014		.0008	0032	0.04	Noon.
1	.0035		.0032	.0004	.0012	.0083	0.10	1 p.m.
2	.0018	·	.0023	.0008	.0012	.0061	0.08	2 p.m.
$\bar{3}$	.0021		.0004	.0021		.0046	0.06	3 p.m.
4	.0022		'0014	<b>.</b> 0019	-	.0055	0.07	4 p.m.
5	.0028		.0014	.0012		.0059	0.07	5 p.m.
6	.0031		.0026	*0004		.0061	0.08	6 p.m.
7	.0043		.0019	'0013	*0004	0079	0.10	7 p.m.
8	*0026	.0004	.0020	.0024	.0009	.0083	0.10	8 p.m.
9	.0041	.0033	.0029	.0095	.0057	*0255	0.32	9 p.m.
10	.0079	.0046	0107	.0328	.0109	.0669	0.84	10 p.m.
11	.0122	*0067	.0135	<b>.</b> 0341	.0296	*0961	1.20	11 p.m.
12	.0200	.0258	.0237	<b>.</b> 0484	.0530	1709	2.13	Midnight.
13	.0190	.0244	$^{\circ}0252$	<b>.</b> 0657	.0713	2056	2.57	1 a.m.
14	.0211	.0292	.0288	<b>.</b> 0618	.0742	2151	2.69	2 a.m.
15	·0244	.0309	.0319	*0604	*0788	2264	2.83	3 a.m.
16	.0184	.0245	.0302	.0557	*0695	1986	2.48	4 a.m.
17	*0261	*0230	.0216	*0411	•0688	1806	2.25	5 a.m.
		Total in	the five ye	ars -		1.9219 pa	arts of the	Total Force.
		Mean ho	ourly value	. 1.	$\frac{9219}{24} =$	.0801 =	1.00	

When Tables XLI. and XLII. are examined, it is seen that the disturbances increasing the force and those decreasing it, may be generally viewed as parts of one and the same phenomenon, subject to one and the same law, expressed by ratios which in the two cases are approximately the complement of each other, viz., at the hours when the one augments in value, the other diminishes, and vice versa; and that the two classes of disturbances, distinguished from each other by the opposite effects which each produces on the mean or normal state of the magnetic force, do in fact constitute when viewed together a diurnal variation of very striking order and regularity, having a maximum of increased force at a certain hour, and a maximum of diminished force at another hour distant nearly twelve hours from the preceding, and forming a regular progression from the hour of the greatest increased force to that of greatest diminished force, and vice versa. To see this in its just light, and to obtain the true

proportions in which the magnetic force is increased or diminished at the different hours by the effects of the disturbances, it is necessary to combine the values in Tables XLI. and XLII. somewhat differently from what is done in Table XL., by taking the differences instead of the sums of the increasing and decreasing values. When we take the sums we investigate the proportion which the whole amount of disturbance, whether its effect be to increase or to decrease the force, bears at each hour to the mean hourly value or average of all the hours: the ratios in this case are shown in Table XL. When, on the other hand, we take the differences, we exhibit the amount by which the magnetic force of the earth is either increased or decreased at the several hours by the influence of the disturbances of '0004 and upwards during five years. This is shown in column 4 of Table XLIII.; the values are in parts of the Total Force at Toronto.

TABLE XLIII.

Hours.		Distur	bances	General Effect, or accumulated influence at each of	Average Daily Effect at the
		Increasing.	Decreasing.	the 24 hours in 5 Years.	different hours.
(1.) 18; or 6 A.M. 19; or 7 A.M. 20; or 8 A.M. 21; or 9 A.M. 22; or 10 A.M. 23; or 11 A.M. 0; or Noon 1; or 1 P.M. 2; or 2 P.M. 3; or 3 P.M. 4; or 4 P.M. 5; or 5 P.M. 6; or 6 P.M.	-	(2.) + '0113 + '0105 + '0147 + '0088 + '0100 + '0157 + '0269 + '0500 + '0715 + '0883 + '1107 + '1184 + '0958	(3.):1529:1524:0892:0581:0220:0057:0032:0083:0061:0046:0055:0059:0061	(4.):1416:1419:0745:0493:0120 +:0100 +:0237 +:0417 +:0654 +:0837 +:1052 +:1125 +:0897	(5.) '000092 '000092 '000047 '000032 '000008 +- '000015 '000027 +- '000042 +- '000054 +- '000068 +- '000073 +- '000058
7; or 7 P.M. 8; or 8 P.M. 9; or 9 P.M. 10; or 10 P.M. 11; or 11 P.M. 12; or Midnight 13; or 1 A.M. 14; or 2 A.M. 15; or 3 A.M. 16; or 4 A.M.		+ '1025 + '0796 + '0493 + '0326 + '0211 + '0192 + '0113 + '0099 + '0122 + '0073 + '0120	- 0001 - 0079 - 0083 - 0255 - 0669 - 0961 - 1709 - 2056 - 2151 - 2264 - 1986 - 1806	+ '0946 + '0946 + '0713 + '0238 - '0343 - '0750 - '1517 - '1943 - '2052 - '2142 - '1913 - '1686	+ 000038 + 000062 + 000047 + 000016 - 000022 - 000047 - 000098 - 000125 - 000132 - 000138 - 000123 - 000109

We learn from this table that the law of the diurnal variation due to the disturbances of the Total Force at Toronto is as follows:—From 11 a.m. to 9 p.m. inclusive they augment the force; from 10 p.m. to 10 a.m. inclusive they diminish it. The hour of greatest augmentation is 5 p.m.; of greatest diminution 3 a.m. The decreasing effect changes to an increasing effect about midway between 10 and 11 a.m.; the increasing

to a decreasing between 9 and 10 p.m., nearer to 9 than to 10. The greatest diminution is nearly twice as great as the greatest augmentation. The hours of most rapid change are from 7 to 8 a.m., and from 11 p.m. to midnight. From the greatest diminution at 3 a.m. to the greatest increase at 5 p.m. the progression is continuous and uninterrupted, and from the greatest increase at 5 p.m. to the greatest decrease at 3 a.m. it is also continuous, except in a small and apparently accidental interruption at 7 p.m. As the values in column 4 of Table XLIII. are the accumulated values in five years, and as each year comprised about 310 days of observation (or 1,550 days in the five years) we may take an approximate view of the mean diurnal variation due to the disturbances equalling or exceeding '0004 in amount. An increase of force at 5 p.m. of '1125 divided by 1,550 days = '000073; and a decrease of force at 3 a.m. of '2142 divided by 1550 = '000138; making together an average diurnal range of '000211 parts of the force, changing progressively from + '000073 at 5 p.m. to - '000138 at 3 a.m.

As it is not probable, on the one hand, that the disturbances of  $\cdot 0004$  and upwards comprehend all the disturbances of the class to which they belong, we may regard the preceding range as expressing the minimum limit of the true average daily range of variation due to the disturbances of occasional occurrence; whilst, on the other hand, it appears extremely improbable that the minor effects of the causes which produce the larger disturbances should equal in aggregate value those which exceed  $\cdot 0004$ . We have, then, the same degree of improbability that the range of the diurnal variation due to all the disturbances of this class should amount to twice the value which has been obtained by this analysis, or to  $\cdot 000211 \times 2 = \cdot 000422$ . The diurnal range may be regarded as something between  $\cdot 000211$  and  $\cdot 000422$ , but probably nearer to the first than to the last. The final column of Table XLIII. (column 5) shows the average daily effect of the disturbances of  $\cdot 0004$  and upwards at every hour of the day and night.

#### DECLINATION.

Analysis of the larger Disturbances.—To complete the view of the magnetic disturbances at Toronto in the five years ending June 30th 1848, a second and a more perfect analysis has been made of the disturbances of the Declination during that period than that which is contained in the second volume of the Toronto Observations (pp. xxvii—l), which was deemed sufficient for a first approximation when other duties pressed heavily on the time at command.

The disturbances which were then subjected to analysis, were those which differed five scale divisions (3'·6 in arc) or upwards from the mean or normal positions of the magnet in the same month and at the same hour, the normal positions being derived from the whole body of the observations, excluding only some very extreme The more perfect mode of proceeding is that which has been stated in describing the process adopted in the cases of the Horizontal and Vertical Forces; viz. the subsequent correction of the normal positions by a recalculation in which the whole of the disturbances are excluded, and a revision of the disturbances in conformity with the new normals; both processes being repeated until the normals finally adopted are derived from a body of observations including all which differ less, and excluding all which differ more, than a certain fixed value from themselves. the same time this fixed value has itself been altered by raising the standard considered to constitute a disturbed observation from five scale divisions to seven (i.e. from 3'·6 to 5'·0 of arc), the experience gained in the former investigation having led to the belief that the higher value would constitute in some respects a preferable standard. The number of observations thus separated amounted to 2,172 in the five years of hourly observations ending June 30th 1848, averaging about 1 in 17 of the whole body.

The aggregate values of the disturbed observations in the different years are shown in the following table:—

#### TABLE XLIV. Year ending June 30th 1844 2053.2 minutes of arc. 1845 2521.8 1846 3246.6 ,, 18475478.7 ,, 1848 6422.0 Total in the five years 19722.3 Mean annual value

The ratios in each year to the mean annual value are as follow:—

			TABL	E .	XLV	<i>T</i> .					
Year ending	June 30th	1844	-		-		-		-	-	0.52
"	,,	1845		-		-		-		-	0.64
,,	٠,,	1846	-		-		•		-	-	0.85
**	,,	1847		-		-		-		-	1.39
,,	,,	1848	-		-		-			-	1.63

The observations of the Declination were not interrupted in the months from October 1843 to February 1844; consequently the years ending June 30th 1844, 1845, 1846, 1847, and 1848 are here strictly what they profess to be, and the ratios show a continuous progression from a minimum in the first year to a maximum in the last.

Table XLVI. shows the aggregate values in the different years, divided into easterly and westerly disturbances.

• '	•	7	ABLE	XLVI.			
						Easterly.	Westerly.
Year ending	June 30th	1844	-	•	_	1235.8	817.4
"	,,,	1845	-	-	_	$1325 \cdot 4$	1196.4
,,,	,,	1846	-	-	-	1973.3	1273.3
"	,,	1847	•	-	-	2958.9	2519.8
,,	,,	1848	-	-	-	$3573\cdot 5$	$2848 \cdot 5$
	Total in	the fiv	e years	-	-	11066.9	8655*4

The general effect of the larger disturbances is therefore to decrease the westerly Declination at Toronto. The easterly values preponderate in the ratio of 1.28 to 1.

Table XLVII. exhibits the aggregate values of the disturbances distributed into the different months of their occurrence, with the ratios which the values in each of the months bear to the mean monthly value or average of all the months.

TABLE XLVII.

		Year	s ending Juño	Sums in the				
Months.	1844.	1845.	1846.	1847.	1848.	Five Years.	Ratios.	Months.
July - August September October November Jecember January February March - April - June -	 327.9 131.1 164.6 122.7 30.9 50.2 65.5 119.4 403.8 389.5 193.1 54.5	160'8 280'5 450'1 341'4 305'6 197'0 250'9 132'6 106'5 151'0 65'0 80'4	159'3 355'4 371'5 263'9 161'8 181'7 142'1 125'6 308'5 312'3 349'7 514'8	565.1 885.3 828.4 608.5 314.1 124.5 89.6 259.8 481.7 750.2 408.5 163.0	329 5 242 7 848 9 808 2 469 6 691 4 387 9 746 4 524 2 726 0 587 5 59 7	1542.6 1895.0 2663.5 2144.7 1282.0 1244.8 936.0 1383.8 1824.7 2329.0 1603.8 872.4	0.94 1.15 1.62 1.31 0.78 0.76 0.57 0.84 1.11 1.42 0.98 0.53	July. August. September October. November. December. January. February. March. April. May. June.
		Total	in the five	years	-	19722.3		
		Mean	monthly v	alue, $\frac{1972}{1}$	2.3 =	1643.5 =	= 1.00	

September and April are the months of greatest disturbance, and January and June the months of least disturbance. The progression from the maxima to the minima, and from the minima to the maxima, is continuous and uninterrupted.

Table XLVIII. exhibits the aggregate monthly values in the five years separated into easterly and westerly values, with the ratios in each case to the respective mean monthly values, and also the ratios in the different months of the easterly to the westerly values.

TABLE XLVIII.

	Easterly	Values.	Westerly	Values.	Ratios of the	e je
Months.	hs. Sums in the Five Years. Ratios to Value		Sums in the Five Years.	Ratios to the Mean Monthly Values.	Easterly to the Westerly Values.	Months.
July August September October November December January February March April May June	903 2 1255 2 1504 8 1174 0 556 6 527 4 527 0 772 9 1062 9 1187 5 904 3 691 1	0.98 1.36 1.63 1.28 0.60 0.57 0.57 0.84 1.15 1.29 0.98 0.75	639'4 639'8 1158'7 970'7 725'4 717'4 409'0 610'9 761'8 1141'5 699'5 181'3	0.89 0.89 1.61 1.35 1.06 0.99 0.57 0.84 1.06 1.59 0.98 0.25	1.41 1.96 1.29 1.21 0.77 0.74 1.29 1.27 1.40 1.04 1.29 3.82	July. August. September. October. November. December. January. February. March. April. May. June.
Total in the five year	s, 11066°9		8655.3	<del></del>		
Mean monthly values	·	00 -	721.3 =	1.00	· · · · · · · · · · · · · · · · · · ·	<u>, , , , , , , , , , , , , , , , , , , </u>

The same general law is seen to prevail in both easterly and westerly disturbances when separately viewed as when they are viewed conjointly; the equinoxes are the epochs of maximum and the solstices of minimum.

The ratios which indicate the proportion in which the easterly disturbances preponderate over the westerly exhibit, on the other hand, a tendency towards a maximum at the June solstice and a minimum at the December solstice. The mean ratio in the months of November, December, and January is 0.93, and in the months of May, June, and July 2.17.

The next table exhibits the aggregate values of the disturbed observations distributed into the different *hours* of their occurrence, with the ratios which the values at each hour bear to the mean hourly value or average of all the hours.

TABLE XLIX.

Toronto Astrono-		Year	rs ending June	30,	Sums in the	Ratios.	Toronto Civil	
mical Time.	1844.	1845.	1846.	1847.	1848.	Five Years.		Time.
н.	00'14	1440	1001	22015				
18	93.4	145.3	122.7	206.7	295.6	863.7	1'05	6 a.m.
19	70.7	98.8	139.8	269.0	383.6	961.9	1.17	7 a.m
20	67.6	122.2	136.4	297.0	423.5	1046.7	1.27	8 a.m
21	59.1	84.0	129.7	210.2	427.9	910.9	1.11	9 a.m.
22	50.6	89.0	112.5	148.6	311.8	712.2	0.87	10 a.m
23	37.5	100.2	83.8	119.4	197.3	538.2	0.66	11 a.m.
0	26.2	75.4	57.5	56.2	186.1	401.4	0.49	Noon.
1	29.3	28.8	31.2	42.7	112.6	244.6	0.30	1 p.m.
2	26.8	63.4	23.0	67.7	146.1	327.0	0.40	2 p.m
3	28.1	57.9		105.1	134.9	326.0	0.40	3 p.m
4	47.9	52.7	40.2	150.9	140'1	431.8	0.23	4 p.m
5	66.9	54.7	59.3	159.0	114.4	454 3	0.56	5 p.m
6	97.3	38.2	70.8	262.3	217.9	686.5	0.84	6 p.m
7	62.8	101.1	225.9	257.4	156.9	804.1	0.88	7 p.m
8	139.5	186.3	152.5	295.0	228.4	1001.4	1.25	8 p.m
9	176.3	243.3	254.8	387.1	$433^{\circ}2$	1494.7	1.82	9 p.m
10	220.5	178.9	254.9	380.2	$232\cdot 2$	1267.0	1.55	10 p.m
11	109.3	97.0	173.5	329.8	314.5	1024.1	1.25	11 p.m
12	158.2	139.1	193.7	270.5	344.8	1106.3	1.35	Midnigh
13	119.2	118.0	254.1	369.9	389.4	1250.6	1.52	l a.m
14	86.7	127.0	176.3	289.5	308.9	988*4	1.21	2 a.m
15	110.8	74.6	185.0	248.6	307.0	926.0	1.13	3 a.m
16	69.4	163.1	186'1	329.6	348.3	1096.2	1.34	4 a.m
17	99.7	82.3	183.2	225.9	266.6	858.0	1.02	5 a.m
		Te	otal in the fi	ve years		19722:3	<u> </u>	<del>!</del>
<del></del>			ean hourly v	value, $\frac{1972}{24}$		821.8 =	1.00	

From 10 A.M. to 7 P.M. inclusive the ratios are invariably below unity, and from 8 P.M. to 9 A.M. inclusive as invariably above unity. The hour of least disturbance is 1 P.M., and of greatest 9 P.M., both being well-marked features. The progression during the hours of the day from 8 A.M. to 9 P.M. is uninterrupted to and from the minimum at 1 P.M., but is much less regular during the hours of the night.

Table L. exhibits the aggregate values separated into their easterly and westerly constituents, with the ratios at each hour to the mean hourly value or average of all the hours.

TABLE L.

Toronto Astronomical	Disturb	ances.	Ratio	os.	Toronto Civil Time	
Time.	Easterly.	Westerly.	Easterly.	Westerly.	Totolio Otvii Timo	
н.		1		1100	C	
18	207.8	655 9	0.45	1.82	6 a.m.	
19	$160^{\circ}2$	801.7	0.35	2.23	7 a.m.	
20	118.1	928.6	0.56	2.58	8 a.m.	
21	99.2	811.8	0.21	2.25	9 a.m.	
22	128.0	584.2	0.58	1.62	10 a.m.	
23	$179 \cdot 9$	358.3	0.39	1 00	11 a.m.	
0	111.8	289.6	0 24	0.80	Noon.	
	97.7	146'9	0.51	0.41	1 p.m.	
1 2 3	93.2	233.8	0.50	0.65	2 p.m.	
3	102.6	223:4	0.22	0.62	3 p.m.	
4	145'1	286.7	0.35	0.80	4 p.m.	
5	200'1	254.2	0.44	0.71	5 p.m.	
6	481.5	205.0	1.02	0.57	6 p.m.	
7	664.9	139.2	1.44	0.39	7 p.m.	
. 8	899.6	101.8	1.95	0.28	8 p.m.	
9	1417.1	77.6	3.09	0.55	9 p.m.	
10	1104.7	162.2	2*41	0.45	10 p.m.	
- 11	925*4	98.7	2.05	0.27	11 p.m.	
12	80819	297.4	1.76	0.85	Midnight.	
13	824.5	426.1	1.79	1.19	1 a.m.	
14	627.6	360.8	1.37	1.00	2 a.m.	
15	589.5	336.2	1.28	0.94	3 a.m.	
16	662.5	434.0	1.45	1.21	4 a.m.	
17	417.0	441.0	0.91	1.23	5 a.m.	
Fotal in the five years.	11066.9	8655.4				
Mean hourly }	461.1	360.6				

The easterly disturbances are below the average during the hours of the day, or from 5 a.m. to 5 p.m. inclusive, and above the average during the hours of the night, or from 6 p.m. to 4 a.m. inclusive; the westerly disturbances are below the average from noon to midnight inclusive, and above the average, with a single exception at 3 a.m., from 1 a.m. to 11 a.m. inclusive. The easterly have a maximum and the westerly a minimum, both decided features, at 9 p.m.; the westerly have a well-marked maximum at 8 a.m., and the easterly have minima scarcely differing from each other at 9 a.m. and at 1, 2, and 3 p.m. From noon to 5 p.m. both easterly and westerly disturbances are below their respective averages, consequently these are the hours of least general disturbance. From 6 p.m. to 11 p.m. the easterly are so much above their average that they more than compensate for the deficiency of the westerly; from midnight to 5 a.m. both easterly and westerly are above their respective averages (with the slight and apparently accidental exception already noticed at 3 a.m.), and from 6 a.m. to 10 a.m. the high values of the westerly more than compensate for the low values of the easterly disturbances. Excepting at the hours from noon to 5 p.m. inclusive,

when both easterly and westerly disturbances are small, and from 1 A.M. to 5 A.M., when they are both large, there is a systematic tendency to a diminution of easterly disturbance at the hours when large westerly disturbance prevails, and to a diminution of westerly disturbance when large easterly disturbance prevails.

In the following table is shown for each hour (in column 2) the excess of easterly disturbance over westerly, or of westerly over easterly, in the aggregate values of the five years; and in column 3 the mean effect at each hour, or a daily average, obtained by dividing the accumulated excess in five years shown in column 2 by 1,552, the number of days of observation in the five years. Column 3, therefore, exhibits the mean diurnal variation produced on a general average by the disturbances amounting to or exceeding 5'0 of arc, and which, as a general and systematic effect, is superimposed upon the more regularly occurring diurnal variation derivable from the great body of the observations after the disturbed observations have been individually abstracted.

TABLE LI.

Toronto Astro- nomical Time.	Excess of Easterly or Westerly Values at the different Hours.	Mean Diurnal Variation occasioned by the disturbed Observations.	Toronto Civil Time.	Toronto Astro- nomical Time.	Excess of Easterly or Westerly Values at the different Hours.	Mean Diurnal Variation occasioned by the disturbed Observations.	Toronto Civil Time.
	(2.)	(3.)			(2.)	(3.)	-
н.	1 ,						*
18	448°1 W.	0°29 W.	6 a.m.	.6	276.5 E.	0.18 E.	6 p.m.
19	641.5 W.	0.41 W.	7 a.m.	7	े 525 7 E.	0°34 E,	7 p.m.
20	810.5 W.	0.52 W.	8 a.m.	8	797.8 E.	0.52 E.	8 p.m.
21	712.6 W.	0'46 W.	9 a.m.	9	1339°5 E.	0.87 E.	9 p.m.
22	456 2 W.	0°30 W.	10 a.m.	10	942.5 E.	0.61 E.	10 p.m.
23	178°4 W.	0.11 M.	11 a.m.	11	826.7 E.	0.23 E.	11 p.m.
0	177°8 W.	0.11 W.	Noon.	12	511.5 E.	0.33 E	Midnight.
1	49°2 W.	0.03 W.	1 p.m.	13	398 4 E.	0°26 E.	1 a.m.
<b>2</b>	140°6 W.	0.09 W.	2 p.m.	14	266 8 E.	0°17 E.	2 a.m.
3	120°8 W.	0.08 M	3 p.m.	15	253 °O E.	0.16 E	3 a.m.
4 5	141.6 W.	0.09 M	4 p.m.	16	228 5 E.	0.15 E.	4 a.m.
5	54 1 W.	0.04 W.	5 p.m.	17	24.0 W.	0.02 W.	5 a.m.
			1				

It is seen by this table that when a daily average is derived from all the disturbances of larger amount (5'·0 and upwards) occurring in five years at Toronto they are found to produce a maximum easterly deflection of the Declination magnet of 0'·87 at 9 p.m., and a maximum westerly deflection of 0'·52 at 8 a.m., the intermediate progression either way being continuous, and only interrupted by a few slight irregularities occurring in the hours of the afternoon when the disturbances are fewest and of least amount. The range is 0.87 + 0.52 = 1.39, which might possibly be increased to 2.0 if the disturbances of the same class which are less than 5.0 could be separated and included in the analysis.

Table LII. contains the hourly normals of the Declination for each month from July 1843 to June 1848 inclusive, omitting disturbed observations in which the amount of disturbance equalled or exceeded 7.0 scale divisions or 5.0 of arc.

Table LII.

Hourly Means of the Readings of the Declinometer; omitting disturbed Observations in which

			<i>a</i>			GÖTT	INGEN 1	HOURS.				
Periods to which the		0	1	2	3	4	5	6	7	8	9	10
Hourly Means			'	<u> </u>	1	TO D	ONTO HO	) DTTDG			•	<u>'                                      </u>
correspond.			<del></del>			101		JURS.		<del>,</del>		,
		18	19	20	21	22	23	0	1	2	3	4
1843:		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div
July - August -	-	131.8 131.1	133.7	133.0 133.2	131.1	126.8 125.0	122.9	119°3 117°0	117·2 116·2	117.7	118.8	120°7
September October -	-	129.4 126.8	$\begin{vmatrix} 131.7 \\ 128.1 \end{vmatrix}$	130.7 129.4	127.8 129.2	123.4	119.8	116.7 120.8	116.5	118.1	119.9	122.4
November December	-	127.8 127.4	128·3 127·7	129°0 127°6	128.7 128.4	126.5 127.7	123.4 125.8	122°1 123°6	121 3 122 5	122°2 122°0	123°3 123°6	124.5 124.6
1844:		-										
January -	-	127.1	127.5	128.7	129.6	127.7	125.7	123.4	122.2	122.3	123.3	124.3
Tebruary - March -	-	128°2	129.0	131.0	128'8 130'3	126.5	124°0	121.8	121.3	122.3	123.8	125.2
April -	-	129 1	130.1	130.9	129.3	127.8 126.2	124 0	120.2	119.5	119.2	120.2 119.3	$121.7 \\ 120.7$
May -	-	130.4	131'4	131.2	129.6	125.2	121 4	118.5	116.2	116.5	117.3	119.8
une -	-	130.3	131.5	131'3	129.0	124.4	119.6	116.1	114.6	115.3	116.7	118.8
[uly -	-	129°1	132.3 131.5	132 <b>.</b> 2	129.8	125.3	120.5	118.0	115.7	115.0	116.8	119.0
August - September	-	123.9	125.0	123.9	127°9	122.8 116.3	117°2 111°5	115.0 108.4	112.8 109.9	114.9 110.8	115'6 114'1	119.5
October -	-	120.8	122.1	122.4	121.4	118.4	114.6	112.3	112.1	110.3	112.1	117.5 116.2
November	-	118.5	119.3	120.5	120.5	118.2	115.1	113.5	112.0	113.6	114.7	115.6
December	-	118.7	118.6	119.0	119.8	119.2	116.9	114.6	113.6	113.2	115.2	116.0
1845:												
anuary -	-	117.7	119.8	120.8	119.9	117.8	115.2	113.5	113.1	113.2	115.3	116.5
ebruary -	-	119.6	120.2	120.2	120.4	118.7	116.0	113.3	112.3	113.0	114.7	116.5
Iarch - pril -	-	119.7	121.6	122'8 123'3	122.2 122.6	120.1	116.1	112.7	110'4	110.2	111.3	112.5
Iay -	- 1	122.9	124.3	124.0	121.5	118.2 112.8	115'0 110'4	110°2 107°6	107.6 107.4	107.6 108.1	108.7 110.4	111.7 113.1
une -	-	123.3	124.3	124.4	122.1	118.1	112.2	108.2	107.1	103 1	108.4	110.8
uly -	-	121.4	123.7	124.3	123.0	118.7	113.1	108.6	106.1	105.9	107.0	109.1
ugust -	-	121.2	123.8	123.6	120.7	114.8	109'1	105.1	103.8	105.2	107.8	111.5
eptember October -	-	118°2 115°5	119.5 119.5	116.8	115.7 115.6	111.1	107.2	104.7	105.0	106.7	108.8	111.5
lovember	-	114.8	116.4	117.2	116.4	113.4	110.6 110.5	108.4 107.6	108.2 108.0	108.8	110.1	110.8
December	-	114.9	115.3	116.3	116.4	116.3	114.3	111.9	110.2	110.4	111.2	111.8

Table LII. the Amount of Disturbance equalled or exceeded  $7\cdot 0$  Scale Divisions or  $5\cdot 0$  Minutes of Arc.

					GÖTT	INGEN E	OURS.	· · · · · · · · · · · · · · · · · · ·				
11	12	13	14	15	16	17	18	19	20	21	22	23
					TOR	он отис	OURS.					
5	6	7	8	9	10	11	12	13	14	15	16	17
sc. Div. 123 4 124 3 123 6 123 9 125 2 126 0	Sc. Div. 125.0 124.8 124.2 124.7 126.6 126.9	sc. Div. 124'9 125'0 124'2 125'4 127'5 127'1	sc. Div. 124.5 124.6 125.4 125.5 127.3 127.6	sc. Div. 125 ' 4 125 ' 2 127 ' 2 126 ' 1 127 ' 1 127 ' 9	sc. Div. 125 2 124 9 125 4 125 9 127 2 127 7	sc. Div. 125 2 125 0 124 5 126 5 127 3 127 1	sc. Div. 127 1 124 8 126 0 125 2 126 1 126 7	sc. Div. 126 '7 124 '7 126 '0 126 '0 125 '8 126 '1	sc. Div. 126.0 126.4 126.0 125.8 125.5 125.5	sc. Div. 126.0 125.8 126.1 125.6 126.0 126.0	sc. Div. 127 1 126 2 125 6 126 5 126 9 126 4	Sc. D 128 128 126 126 126 127
125.5 125.5 123.8 122.5 121.8 121.0 120.9 121.9 118.4 116.5 116.9	126.2 125.7 124.6 123.8 122.9 122.1 122.6 123.3 118.7 117.4 117.9	127'3 126'3 126'0 123'5 124'0 122'6 123'3 123'5 118'3 117'9 118'9 118'3	127.4 127.4 126.2 125.7 123.5 122.7 122.7 123.3 119.0 119.0 118.3 118.8	127.9 127.6 125.9 125.2 124.7 122.6 123.1 123.0 118.7 118.2 119.0 119.6	128 2 127 7 127 1 126 4 124 7 123 4 124 1 123 7 119 7 119 3 119 4 118 8	127.2 127.0 127.4 127.6 125.2 124.4 123.9 118.2 118.3 118.9 119.8	126.6 126.3 127.5 126.0 124.0 123.4 124.6 124.2 120.2 118.7 118.5	126.5 126.5 127.0 126.0 125.4 124.1 125.1 123.9 119.0 118.1 117.4 117.9	126.5 126.3 127.2 126.4 125.4 124.7 124.0 123.5 120.0 118.7 117.0 116.9	126.9 127.2 126.6 126.3 125.3 124.3 124.2 123.0 119.8 118.1 118.1	127.4 127.4 127.7 126.7 125.7 126.0 125.0 124.5 121.9 119.2 117.7	126° 128° 128° 127° 128° 127° 126° 122° 119° 118°
117·2 116·5 114·7 114·7 115·6 113·7 111·6 113·2 113·4 111·7 112·4 114·3	118'4 117'8 116'4 116'3 115'3 114'0 115'0 114'0 112'1 113'4 115'1	118.5 117.6 117.7 117.1 116.1 115.5 114.9 114.4 114.3 112.9 114.7 116.0	119.0 118.3 117.5 117.0 116.3 115.1 114.4 114.0 114.1 112.8 114.6 116.6	119'4 120'0 117'7 117'0 115'7 115'2 114'8 114'9 114'2 113'7 114'6 116'8	119.0 118.6 118.6 117.2 115.9 115.1 116.1 115.2 114.2 113.7 114.6 116.3	118'3 118'1 118'7 118'0 116'3 115'9 116'3 115'7 113'1 113'8 114'1 116'3	117 · 3 118 · 9 118 · 3 117 · 4 116 · 1 115 · 6 115 · 3 114 · 8 113 · 7 114 · 2 113 · 6 116 · 5	117.6 117.3 118.4 117.8 116.8 116.3 115.9 115.0 114.0 114.0 113.4 115.3	117'9 117'5 118'7 117'2 116'8 116'4 115'7 114'5 114'0 115'0 113'2 114'5	117'9 118'1 118'5 118'2 117'6 115'8 115'1 115'1 115'8 115'7 113'9 115'8	119'3 118'6 118'7 118'5 118'4 117'8 116'2 115'0 116'8 115'6 113'1 115'4	118: 118: 118: 119: 120: 120: 118: 117: 116: 114: 115:

Table LII.—continued.

					GÖTI	INGEN I	HOURS.		***************************************				
Periods to which the	0	1	2	3	4	5	6	7	8	9	10		
Hourly Means	TORONTO HOURS.												
correspond.	18	19	20	21	22	23	0	1	2	3	4		
1846: January - February - March April	Sc. Div. 115°5 115°6 116°4 117°5	Sc. Div. 116'4 116'4 117'6 119'4	Sc. Div. 118°3 117°8 120°1 119°4	Sc. Div. 118.6 117.1 119.5 117.7	Sc. Div. 116.6 115.2 116.8	Sc. Div. 114'2 112'9 112'1 109'5	Sc. Div. 111 2 110 6 108 7 106 7	Sc. Div. 109.6 109.3 106.4	Sc. Div. 110°3 109°3 106°1 104°7	sc. Div. 111'1 110'4 106'4 105'0	Sc. Div. 112'9 111'9 109'2 107'4		
May June July August September - October November -	118.6 119.5 117.9 118.5 117.2 115.7 114.6 114.9	120.0 121.2 122.4 122.0 119.4 116.2 114.7 115.5	120'1 120'7 121'4 121'8 118'2 118'0 117'0 116'5	117.7 119.0 119.9 119.8 116.4 117.0 118.4 117.7	113.5 115.8 116.9 113.9 111.4 114.8 115.8 116.5	107.9 111.4 111.8 109.3 107.0 110.7 113.1 113.9	104.5 107.8 109.0 105.0 103.8 107.6 109.8 110.7	102.3 104.9 106.3 103.7 103.4 106.4 108.2 109.4	103.5 104.1 105.9 103.0 104.4 106.4 108.1 109.0	105 0 105 3 105 2 105 7 104 4 108 2 108 6 108 9 109 7	107 4 107 7 106 3 106 9 107 2 111 7 110 3 109 9 110 7		
January February March April June - July August - September - October November - December	115:5 114:4 113:6 115:4 118:2 117:7 119:3 119:8 116:9 113:9 113:5 112:1	115.7 115.2 115.2 117.9 118.7 119.0 121.1 122.2 119.3 116.4 113.9 113.3	117.6 115.9 117.5 117.6 118.4 118.9 120.6 122.7 120.2 118.8 116.9 114.7	117.8 114.0 117.3 115.7 116.1 116.6 118.0 119.3 118.4 117.9 115.5 116.0	115.7 112.4 114.5 112.2 111.2 112.4 112.7 112.4 112.4 114.5 114.3 115.1	113·2 109·6 109·5 106·1 106·0 107·8 107·6 106·8 107·3 109·5 110·8 111·4	110.6 107.1 105.0 102.3 104.2 104.1 103.8 101.4 101.5 105.1 106.7 109.8	109'2 106'9 102'3 101'0 102'8 101'6 102'0 98'4 99'5 104'1 104'5	109.7 107.4 102.9 101.7 102.5 102.1 102.3 99.4 100.9 104.5 104.7	111.0 108.4 103.6 103.9 104.3 103.4 104.2 102.7 104.1 106.2 105.8 107.2	112·3 109·2 105·2 106·6 106·4 105·6 106·7 105·7 107·2 107·6 106·2 107·7		
1848: January February March April May June	112'9 119'6 120'4 121'1 124'3 123'8	112.9 119.1 123.6 123.1 125.9 125.7	116.5 122.8 124.9 123.6 125.1 125.6	117.7 124.9 125.4 122.7 122.8 123.8	116·1 123·1 121·8 118·3 116·8 118·9	112.7 119.9 116.6 114.1 111.3 112.6	108'3 116'2 110'6 110'7 107'5 108'5	106.2 113.1 108.6 108.0 105.8 106.6	105.9 111.2 107.2 107.9 105.8 105.7	105.9 110.9 108.4 109.0 107.5 107.7	106.2 111.5 110.9 111.1 109.7 110.4		

Table LII.—continued.

	GÖTTINGEN HOURS.											
11	12	13	14	15	16	17	18	19	20	21	22	23
					TOR	ONTO HO	ours.					
5	6	7	8	9	10	11	12	13	14	15	16	17
8c. Div. 114'1 112'1 111'0 109'2 109'9 109'5 109'9 110'1 110'2 111'2 111'4 112'4	sc. Div. 114'3 112'2 112'1 111'2 111'2 111'3 111'1 110'3 112'4 112'6 111'4 113'2	sc. Div. 114'9 113'1 112'7 112'0 111'5 111'2 112'4 111'3 111'6 112'9 113'4 114'1	sc. Div. 115'9 114'5 112'8 112'7 112'2 112'3 112'8 112'4 111'9 113'9 114'2 115'4	Sc. Div. 116 2 115 4 113 7 113 9 113 6 112 7 113 6 114 4 111 4 115 2 114 3 115 7	sc. Div. 116 '4 114 '5 114 '5 114 '6 114 '1 114 '2 113 '8 113 '7 113 '7 114 '2 115 '4	sc. Div. 115 '4 114 '4 114 '8 114 '7 114 '9 114 '6 115 '4 112 '7 112 '1 114 '8 113 '9 115 '2	Sc. Div. 115 '2 113 '8 114 '7 114 '8 113 '8 115 '0 114 '3 112 '1 114 '2 114 '0 114 '8	Sc. Div. 114'2 113'7 114'1 115'5 114'1 112'6 114'4 115'2 112'7 113'5 111'9 113'7	Sc. Div. 114'4 114'1 114'8 113'0 111'6 114'3 112'4 114'2 113'9 112'6 114'1	sc. Div. 114'4 114'4 114'8 115'3 113'0 111'6 112'1 113'8 114'5 113'6 113'8 114'3	sc. Div. 115.6 114.9 115.5 112.8 113.7 114.1 112.1 115.3 114.2 113.9 115.1	sc. D 115 115 116 116 117 119 113 116 114 114
113.0 110.4 106.7 109.3 108.1 109.4 109.8 109.8 107.8 109.0	113'6 111'6 108'6 109'7 110'4 109'4 110'5 110'2 110'4 108'4 110'1 111'0	114'0 112'1 109'6 110'4 110'6 109'8 110'0 109'9 109'6 109'3 110'3 111'1	115'2 111'7 110'4 111'4 110'2 109'1 109'8 109'7 110'4 111'9 111'6	115'6 112'8 111'1 111'6 110'1 109'8 110'1 111'5 110'7 112'0 112'8	115'1 112'4 112'0 111'8 109'9 110'0 111'0 110'7 111'0 110'6 113'1 113'3	115'0 112'4 112'0 111'6 110'0 111'4 111'0 111'2 111'0 110'9 114'2 112'7	114.2 111.7 111.8 111.7 111.2 111.3 111.5 110.8 111.9 111.7 111.8 112.4	114'1 112'1 112'0 111'4 111'0 111'0 111'8 112'0 112'5 111'0 112'1	115.0 111.9 111.5 111.3 110.5 109.7 111.4 111.8 111.7 113.1 112.0 112.7	114'8 112'8 112'7 112'6 110'8 110'3 111'4 112'5 112'2 113'4 112'8 112'6	115'0 113'1 112'4 112'8 113'4 112'5 112'5 112'4 113'0 112'4 112'8	115 114 113 114 115 114 116 114 114 112 113
107'4 111'9 112'0 112'9 113'1 113'9	108'9 112'8 114'1 113'8 114'6 115'5	109°3 114°0 113°4 115°2 114°6 116°7	111°3 116°1 114°5 116°9 115°0 116°5	111.6 116.5 116.4 115.8 115.5 116.0	112°2 118°7 117°5 116°7 115°9 115°6	112.2 118.1 117.6 116.4 115.5 116.1	113°3 118°2 119°0 116°8 116°3 116°7	111'9 118'6 118'4 117'8 116'7 116'2	111.8 117.0 119.7 118.4 117.1 115.4	112.4 117.8 119.7 118.3 116.5 115.9	112.2 117.0 119.6 118.0 117.8 117.5	112 118 118 119 121 119

### GENERAL CONCLUSIONS.

In a communication made to the Royal Society on the 18th of March 1852, it was shown that the larger disturbances of the Declination, both at Toronto and at Hobarton, indicated, by the variation in their numbers and aggregate values in different years, the existence of a periodical inequality, of which the extreme and opposite phases were five years distant from each other, and the years 1843 and 1848 were respectively the epochs of minimum and maximum. The examination which had led to this conclusion comprehended the years from 1841 to 1848 inclusive, and was definite in respect to 1843 as the year of minimum; inasmuch as 1841, 1842, and 1843 showed a progressive decrease in the number and aggregate value of the larger disturbances in each year, whilst from 1843 to 1848 there was a progressive increase of both in successive years.

It was noticed in the same communication that the regular diurnal variations of each of the three magnetic observation-elements at Toronto and Hobarton, the Declination, the Horizontal Force, and the Vertical Force, and of each of the two derived elements, the Inclination and the Total Force, exhibited evidences of a corresponding periodical inequality in the amplitude or extent of the diurnal variation, the years 1843 and 1848 being also epochs respectively of minimum and maximum. The observation of one of the elements, the Declination, extending uninterruptedly at both stations over eleven entire years, or from 1841 to 1851 inclusive, distinctly marked 1848 as the year of maximum, as well as 1843 as the year of minimum.

This discovery of the existence of a periodical inequality, common to the magnetic disturbances of larger amount and to those more regular diurnal magnetic variations of which the sun has been long recognised as the primary cause, (inasmuch as they conform systematically to laws depending on solar time,) was regarded as affording presumptive evidence of the subsistence of a causal connection common to those two classes of phenomena; which presumption was corroborated by facts adduced in the same communication, proving that the disturbances are themselves subject, on the average, to a well-marked diurnal period regulated also by solar time.

The periodical inequality thus manifested, having its opposite phases of maximum and minimum separated by an interval of five years, and of which the cycle might therefore be conceived to include about ten of our solar years, did not appear to connect itself with any of those divisions of time with which we are conversant, as depending upon the relative circumstances of the sun, and the earth and her satellite. The cycle might or might not be one of regular and unfailing recurrence. The observational evidence to which we are indebted for a knowledge of its existence, though sufficiently decisive as far as the period of observation extended, could only be viewed, in reference to a permanently cyclical character of the phenomenon, as fragmentary, and as the commencement of an investigation which would require to be pursued in one or more of the permanent magnetic observatories established in our own and other countries.

Had no other circumstance presented itself to give additional interest to an investigation which held out at least a fair promise of making known laws of definite order and sequence in phenomena which have excited so much attention of late years, but of which so little has hitherto been ascertained,—had, for example, the decennial period, which appeared to prevail with precisely corresponding features in two distinct classes of the magnetic variations, connected itself with no other periodical variation either of a terrestrial or cosmical nature with which we are acquainted,—there might have been, indeed, little reason to apprehend, in these days of physical curiosity and inductive application, that the investigation would have been suffered to drop; but the interest and importance of the inquiry have doubtless been greatly enhanced by the remarkable coincidence, which it was the object of the paper communicated to the Royal Society in March 1852 to announce, between the above-described periodical inequality by which the magnetic variations referable to solar influence are affected, and the periodical inequality which has been discovered by M. Schwabe to exist in the frequency and magnitude of the solar spots. The coincidence, as far as we are yet able to discover, is absolute; the duration of the period is the same, and the epochs of maximum and minimum fall in both cases on the same years. The regularity with which the alternations of increase and decrease have been traced by M. Schwabe in his observations of the solar spots (which have been now continued for about thirty years), must be regarded as conferring a very high degree of probability on the systematic character of causes which as yet are known to us only by the visible appearances which they produce on the sun's disk, and by the disturbances which they occasion in the magnetic direction and force at the surface of our globe. As a discovery which promises to raise terrestrial magnetism to the dignity of a cosmical science, we may feel confident that, although the colonial observatories have been brought to a close, the investigations, which they have thus successfully commenced, will be pursued to their proper accomplishment in those national establishments which have a permanency suitable for such undertakings.

The conclusions which have been hitherto drawn, both in the Philosophical Transactions and in the introductory discussions in the Toronto and Hobarton volumes, regarding the periodical laws of the disturbances at those stations, have been confined exclusively to the disturbances of a single element, viz. the Declination. It was fully recognised that each of the other two observational elements, viz. the Horizontal and the Vertical Force, might be expected to furnish concurrent, but strictly independent, evidence of the periodical affections to which the magnetic disturbances are subject; but the work to be accomplished for the elaboration of that evidence was considerably greater than in the case of the Declination, from the necessity of eliminating the influence of changes of temperature on the magnets employed in measuring the variations of the Horizontal and Vertical Forces, before these disturbances could be separated for analysis. The labour required in the different processes of reduction has now been gone through, and statements of the results in full detail are contained in the

preceding pages of this volume: it now remains to bring together in one view the evidence which the three observational and the two derived elements furnish of the periodical laws—decennial, annual, and diurnal—which regulate the occurrence of the larger disturbances.

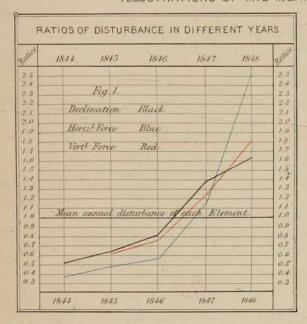
Decennial Period.—In respect to the decennial period, it must be regarded as a fortunate circumstance that the five years of hourly observation, which were commenced before the existence of any inequality of longer duration than a year was suspected, began with 1843, the year of minimum, and closed with 1848, the year of maximum disturbance, so that the variation has been followed through a complete phase. has been strictly the case in the Declination and Horizontal Forces, and with a single exception in the Vertical Force also, the exception being caused by the interruption of the observations of that element, (for purposes explained elsewhere,) during the months of October, November, and December 1843, January and February 1844. These months have been supplied, in the year ending June 1844, from hourly observations made with the same apparatus in the preceding year, viz. in the months of October, November, and December 1842, January and February 1843, thus rendering the five years of the Vertical Force complete for the investigation of the annual and diurnal variations; but, of course, in regard to the decennial period the months taken from a different year, even though it be the adjacent one, are an imperfect substitute. The effect of this substitution has been in fact, as shown in p. xxix, to swell the aggregate value of the disturbances of the Vertical Force in the year nominally ending June 30, 1844, but really comprising five months taken from a preceding year, so as to make them slightly exceed the aggregate value in the year ending June 30, 1845. A similar slight excess in the aggregate value of the disturbances of the Horizontal Force in the year ending June 1844, over the aggregate value in the year ending June 1845, is shown (p. ix) when the same five months of the preceding year are substituted for its own months; but when, in the case of the Horizontal Force (the observations of which were not suspended, as were those of the Vertical Force), the actual observations throughout the year ending June 1844 are taken, the true progression is restored, and the apparent anomaly disappears.\*

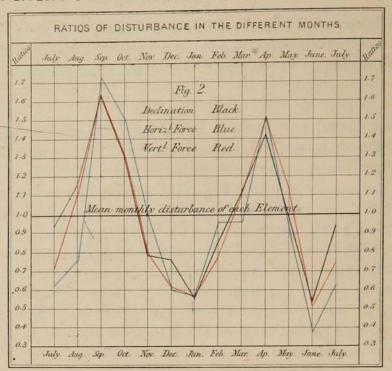
<sup>\*</sup> When the disturbances are taken from the observations of the months actually belonging to the year ending June 1844, the aggregate values of the disturbed observations of the Horizontal Force in the different years are as follow:—

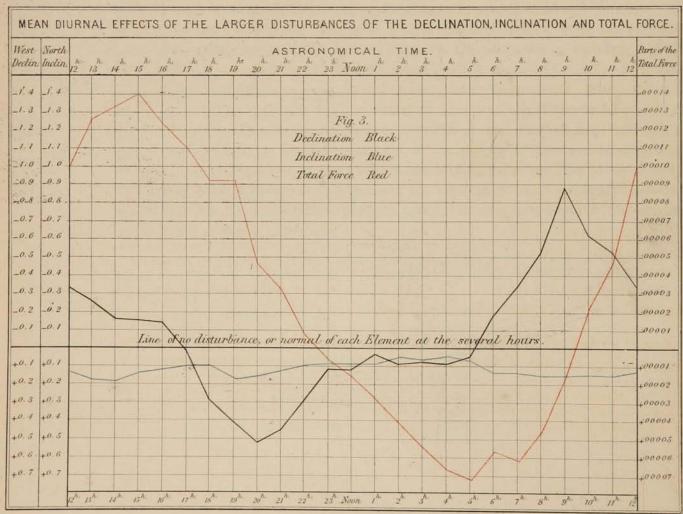
Ratios.

Year ending	June 3	0, 1844	-	-	6016.5	-	-	0.32
,,	,,	1845	-	-	8032.4	-	-	0.47
,,	,,	1846	-	-	$9479 \cdot 2$	•	•	0.55
99	,,	1847	-	-	197001	•	-	1.14
"	,,	1848	-	-	42905.3	-	-	2.49
	Total	in the five	years	-	86133.5			
	Mean	annual va	lue	-	17226.7 =	1.00		

# ILLUSTRATIONS OF THE MEAN EFFECTS OF THE LARGER DISTURBANCES.







The variations of the three magnetic elements being measured by instruments wholly distinct and unconnected with each other, each element affords an independent evidence of the progressive increase in the aggregate values of the larger disturbances during the period under examination. The sum of the aggregate values of each element in the five years, divided by 5, gives the mean annual value of that element, which we may take in each case as equal to 1.00, for the purpose of comparison with the actual aggregate values in the different years. We have then the ratios of the disturbances of the different elements in the different years as follows:—

							TABLE LII	[ <b>.</b>		
							Declination.	Horizontal Force.	Vertical Force.	Mean.
										***
Year en	ding J	une 30	), 1844	•		-	0.25	0.32	0.65*	0'44
	,,	,,	1845		■.	-	0.64	0.47	0.28	0.57
	,,	,,	1846	•		-	0.85	0.55	0.73	0.70
	"	,,	1847		-	-	1.39	1.14	1.23	1.25
	"	"	1848	•		-	1.63	2.49	1.80	1.97

The final column has been added to show the mean ratio of disturbance in each year as derived from the three elements, measured by the aggregate value in each year of all the disturbances which exceeded a certain definite magnitude in each element, the same magnitude being taken throughout the five years.

It is seen by this table that in the year ending June 1847 the ratio of disturbance is above twice as great, and in the year ending June 1848 nearly four times as great, as in either of the years ending June 1844 or June 1845. In the year ending June 1848, which is the year of maximum, the proportion is nearly five times as great as in the year ending June 1844, which is the year of minimum. The evidence of the existence of a decennial period borne by the disturbances of the Declination receives the fullest confirmation from the variations in different years of the disturbances of the Horizontal and Vertical Forces.

Fig. 1. pl. 1. has been drawn in illustration of the progressive increase of disturbance in each of the three elements between the year ending June 1844 and the year ending June 1848. The dotted horizontal line represents the mean or average annual disturbance in each element, and is the zero line, or unit, with which the actual aggregate values of the disturbance of each element in each year are compared: the Declination is represented by a black line, the Horizontal Force by a blue line, and the Vertical Force by a red line. The rate of increase of disturbance is seen to be much slower in the first half than in the second half of the five years.

Annual Period.—The sum of the aggregate values of the disturbances of each element in the five years, divided by 12, gives the average monthly disturbance-value

<sup>\*</sup> In the deduction of this number, five months of the preceding year have been substituted for five months of the year ending June 1844; it has not been included, therefore, in the final column which shows the mean ratios in each year.

for that element, which being taken as = 1.00, and compared with the actual monthly disturbance-values, gives the ratios in the following table:—

TABLE LIV.

	-			
Months.	Declination.	Horizontal Force.	Vertical Force.	Mean.
, <del></del>		0.4.6.1	0.71	0.75
July -	<ul> <li>0.94</li> </ul>	0.61		
August -	- 1.16	0.75	1.08	0.59
September	<b>-</b> 1.62	1.71	1.61	1'64
October -	<b>- 1</b> .31	1.48	1.29	1.36
November -	- 0.78	0.88	0.75	0.84
December -	- 0.76	0.28	0.61	0.65
January -	- 0.57	0.26	0.57	0.57
February -	<ul> <li>0.84</li> </ul>	0.94	0.74	0.84
March -	- 1.11	0.94	1.08	1.04
April	- 1.42	1.20	1.49	1.47
May -	- 0.98	0.80	1.12	1.00
June	- 0.53	0.36	0.20	0.46

The evidence afforded by each of the three observational elements in regard to annual variation is to one and the same effect. January and June are the months of minimum disturbance, September and April the months of maximum disturbance. The aggregate value of the disturbances in the equinoctial months is about three times as great as in the solstitial months. Of the two equinoctial months the value is somewhat higher in each element in September than in April; and of the two solstitial months December is higher than June, also in each of the three elements.

Fig. 2. pl. 1. has been drawn in illustration of the annual variation which has been thus described. The dotted horizontal line is the *mean* monthly disturbance of each element (*i.e.* the sum of the disturbance in the twelve months, divided by 12). The black line for the Declination, the blue line for the Horizontal Force, and the red line for the Vertical Force, show in each case the variation in the proportion which the actual disturbances in each month bear to the *mean* monthly disturbance in the same element. The correspondence of the three elements could scarcely be more perfect.

The annual variation which has been thus deduced has reference exclusively to the variable amount in the different months of the sums of the aggregate values of the disturbances of each element, without distinguishing apart or separating the disturbances which cause easterly deflections and those which cause westerly deflections; or those which increase and those which decrease the Horizontal and Vertical Forces. When this separation is made, we continue to find that each of the two portions into which the disturbances of each element are divided, exhibits distinctly and notably the same general features which have been derived from their conjoint consideration. The equinoxes are in all cases the epochs of maxima and the solstices of minima. But when we study more carefully the relative prevalence of disturbances of particular

character at different periods of the year,—which we may do by forming tables of the relative proportion which the aggregate values in the different months of the easterly disturbances bear to the aggregate values in the same months of the westerly disturbances, and the disturbances which decrease the force bear to those which increase it,—we find that indications present themselves of an annual variation of a different kind from that which has been hitherto described, namely, an annual variation in the *character* of the disturbances of two at least of the elements which have been observed; and although a greater length of time and a greater amount or continuance of observation may be required for the satisfactory establishment of such a periodical variation, its present indications ought not to be overlooked, since the range of the variation is of considerable magnitude, and its systematic character as distinctly marked as could well be expected in an annual variation derived from not more than five years of repetition. The elements in which these phenomena are most distinctly noticeable are the Declination and the Vertical Force, and the correspondence between the indications of these two elements is in many respects very remarkable. In both elements, when the relative proportions are taken,—in the Declination, of the aggregate values in the different months of easterly and of westerly disturbances; and in the Vertical Force, of disturbances which decrease and disturbances which increase the force,—we find that in both cases the proportions vary from a minimum at the southern solstice to a maximum at the northern solstice, the equinoxes being intermediate. At the northern solstice easterly disturbances are in considerable excess, as are disturbances which decrease the Vertical Force; at the southern solstice, the excess is on the other side; westerly disturbances then predominate, as do the disturbances which increase the Vertical Force. The relative proportion of the aggregate values of easterly to westerly disturbances of the Declination, and of disturbances which decrease the Vertical Force to those which increase it, varies from the one solstice to the other, approximately, as three to one, and in both elements nearly alike.

In the Horizontal Force the disproportion between the values of the disturbances which increase the force and those which decrease it is so great (decreasing disturbances greatly preponderating at all periods of the year) that a variation corresponding to that of the two other elements is not so simply arrived at; but it may be stated generally that the proportion of decreasing disturbances is greater at the epoch of the southern solstice than at that of the northern solstice.

Diurnal Variation.—Before we proceed to examine the diurnal variation of the Declination, Inclination, and Total Force which it is the average effect of the larger disturbances to produce, it may be desirable to show the proportions in which the disturbances of the three observed elements occur at the different hours. This is expressed in the following table by the ratio which the aggregate values in the five years of the disturbances at each particular hour bear to the mean or average disturbance at all the hours in the same five years taken as the unit.

TABLE LV.

Toronto		Toronto		
Astronomical Hours.	Declination.	Horizontal Force.	Vertical Force.	Civil Hours
18	1.05	1.00	1.51	6 a.m.
19	1.17	1.40	1.12	7 a.m.
20	1.27	1.20	0.80	8 a.m.
$\frac{20}{21}$	1.11	1.00	0.54	9 a.m.
$\overline{22}$	0.87	1.00	0.36	10 a.m.
23	0.66	0.90	0.34	11 a.m.
0	0.49	0.87	0.46	Noon.
ī	0.30	0.76	0.63	1 p.m.
	0.40	0.66	0.77	2 p.m.
2 3 4 5 6 7 8 9	0.40	0.66	0.87	3 p.m.
4	0.23	0.61	1.04	4 p.m.
5	0.26	0.66	1.07	5 p.m.
6	0.84	0.29	1.01	6 p.m.
7	0.98	0.76	1.02	7 p.m.
8	1.22	0.75	0.89	8 p.m.
9	1.85	0.90	0.74	9 p.m.
10	1.55	1.03	0.82	10 p.m.
11	1.25	1.14	0.93	11 p.m.
12	1.35	1.22	1.39	Midnight
13	1.52	1.28	1.28	l a.m.
14	1.51	1.60	1.61	2 a.m.
15	1.13	1.37	1.73	3 a.m.
16 17	1 · 34 1 · 05	1.14	1.51 1.41	4 a.m. 5 a.m.

From the systematic increase and decrease of the ratios at the different hours, it is obvious that the disturbances of each element, when viewed on the average of a sufficient body of observations, are regulated by laws which have a diurnal period. The diurnal variation thus presented is far, however, from being identical in each of the three elements. The maximum disturbance takes place, indeed, in all the elements during the hours of the night, and the minimum disturbance during the hours of the day; but the particular hours of maximum and minimum are different in the three The hour of maximum in the Declination, for example, is 9 P.M., when the disturbances of the Horizontal and Vertical Forces are both even less than the hourly average: and the Horizontal and Vertical Forces do not reach their hours of maximum until, respectively, 2 and 3 A.M., when the disturbances of the Declination have notably declined. So in respect to the hour of minimum: that of the Declination, 1 p.m., is nearly midway between that of the Vertical Force at 11 A.M. and that of the Horizontal Force at 4 P.M., the disturbance of the Horizontal Force being still high when that of the Vertical is a minimum, and the disturbance of the Vertical Force being still high when that of the Horizontal Force is a minimum. Speaking generally, the disturbances of the three elements are above the average in the hours of the night and early morning, and below the average during the hours of the day; to the latter, however, there is an exception in the Vertical Force, which is above the average from 4 to 7 P.M. In the Declination the aggregate value of the disturbances at the hour of maximum is about six times as great as at the hour of minimum; in the Horizontal Force, about 2.7 as great; and in the Vertical Force, about five times as great.

In the ratios of the Declination-disturbances at the different hours shown in the preceding table we have the joint effects of two classes of disturbances, those which produce easterly and those which produce westerly deflections; and in the ratios of the disturbances of the Horizontal and Vertical Forces at the different hours, we have the further complication that the variations of the Horizontal and Vertical Forces do not bear a simple relation to those of the theoretical equivalents to which they are due,—viz. the Inclination and the Total Force,—but involve quantities dependent on the resolution of forces, which, when the Inclination is great, as it is at Toronto, have a tendency to mask the simplicity of the variations of the Inclination and of the Total Force, as they would appear if they were the subjects of direct observation. In the following table, therefore, are placed the proportions at the different hours in which the six classes of phenomena respectively vary, viz. the disturbances which produce easterly and those which produce westerly deflections, those which increase and those which decrease the Inclination, and those which increase and those which decrease the Total Force.

TABLE LVI.

		······	LADILE	17 / 1.							
Toronto	RATIOS OF DISTURBANCE.										
Astrono-		eclination ucing	Of the In	nclination acing	Of the To	Toronto Civil Hours.					
Hours.	Easterly Deflection.	Westerly Deflection.	Increase of Inclination.	Decrease of Inclination.	Increase of Force.	Decrease of Force.	Hours.				
18	0.45	1'82	0.85	0.83	0.27	1.91	6 a.m.				
19	0.32	2.23	1.59	0.21	0.26	1.91	7 a.m.				
20	0.26	2.58	1.14	0.65	0.37	1.12	8 a.m.				
$\frac{21}{22}$	0.21	2.25	1.02	1 37	0.22	0.62	9 a.m.				
22	0.58	1.62	0.96	1.47	0.25	0.58	10 a.m.				
23	0.39	1.01	0.89	1.80	0.39	0.07	11 a.m.				
0	0.24	0.80	0.93	1.75	0.67	0.04	Noon.				
1	0.51	0.41	0.87	1.70	1.25	0.10	1 p.m.				
2	0.50	0.65	0.65	1.92	1.79	0.08	2 p.m.				
3	0.55	0.62	0.41	1'36	2.21	0.06	3 p.m.				
4	0.32	0.80	0.61	1:46	2.77	0.07	4 p.m.				
5 6	0.44	0.71	0.79	$\frac{1.35}{0.72}$	2.96	0.07	5 p.m.				
7	1.02	1 001	1.04	1.02	2.39 $2.56$	0.07	6 p.m.				
8	1'44 1'95	0.39	1.12	0.55	1.99	0.09	7 p.m.				
9	3.09	0.28	1.17	0.28	1.23	0.31	8 p.m.				
10	$\frac{3.09}{2.41}$	0.45	1.18	1.39	0.81	0.83	9 p.m.				
11	$\frac{2.41}{2.02}$	0.43	1.19	0.84	0.23	1.19	10 p.m. 11 p.m.				
12	$\frac{2.02}{1.76}$	0.82	1.10	0.85	0.46	2.14					
13	1.79	1.19	1.32	0.70	0.56	2.57	Midnight.				
13	1.37	1.00	1.33	0.37	$0.20 \\ 0.22$	2.70	1 a.m. 2 a.m.				
15	1.54	0.94	1.05	0.48	0.28	2.81	3 a.m.				
16	1.48	1.51	0.90	0.48	0.18	2.48	4 a.m.				
17	0.81	$1.\overline{23}$	0.76	0.22	0.18	$\frac{2.40}{2.24}$	5 a.m.				

We learn from this table that the laws which regulate the occurrence of easterly and westerly disturbances of the Declination are not on the one hand similar, nor on the other hand are they always complementary to each other. Thus from 1 P.M. to 5 P.M. both classes are considerably below the average, and from 1 A.M. to 5 A.M. both classes, with a slight exception, are above the average; whilst from 6 P.M. to 11 P.M. easterly disturbances greatly exceed, and westerly fall greatly short, of the average; and from 6 a.m. to 11 a.m. westerly exceed and easterly fall short of the average. In the Inclination and Total Force the complementary character of the opposite affections of each element is somewhat more extensively manifested: thus, the disturbances which increase the Inclination are below the average from about noon and the early hours after noon, when those which decrease it are above the average; and are below the average from about midnight and the early hours after midnight, when those which increase the same element are above the average. In the Total Force, from 1 A.M. to 8 A.M. the disturbances which increase the force are greatly above, as those which decrease the force are greatly below, the average,—a contrast which is reversed from 1 A.M. to 8 A.M., the disturbances which decrease the force being then greatly above, whilst those which increase it are greatly below, the average. In neither of the two elements, however, does the complementary character exclusively prevail. It may be remarked, that in all the instances which have been thus brought into view, treating successively the diurnal variations of the disturbances of each of the three elements, the parallel cases which have been cited, whether of identity or of contrast, fall, without exception, on homonymous hours—a circumstance which affords additional evidence of the systematic character of the affections of which we are treating.

There does not appear to be any uniform cotemporaneous connection between the prevalence of either easterly or westerly Declination-disturbance, and that of disturbances which either increase or decrease the Inclination or the Total Force. Thus, for example, the hours at which the disturbances which increase the Total Force are most notably above the average occur from 1 p.m. to 9 p.m.; whilst we find that for half that period, or from 1 p.m. to 5 p.m., the Declination-disturbances are characterised by a very low proportion of easterly disturbances, and for the other half of the period, or from 6 p.m. to 9 p.m., by a very high proportion of easterly disturbances; and, without multiplying instances of dissimilarity, it may be remarked generally, that the more the six classes of disturbance are examined and compared with each other, the less reason does there appear to conclude that there is any uniform interaccompaniment of the variations of different elements.

As the instrument by which the variations of the Declination are observed is more simple in construction than those required for the variations of the Inclination and Total Force, and the disturbances of the Declination are therefore more easily observed and more generally known, a somewhat disproportionate consideration has been frequently given to them in the discussion of these phenomena, which it may be

desirable briefly to remark upon. Thus the knowledge of the magnetic disturbances having been chiefly drawn hitherto from those of the Declination, it has been very generally and very naturally imagined that the early hours of the night, or from 8 p.m. to 11 P.M., are those at which magnetic disturbances principally take place; that about 11 P.M., or a little after, they begin to subside, disappearing almost wholly in the daytime, and reappearing again possibly the following evening, at the same hour as on the preceding evening, in supposed analogy with certain peculiar atmospheric disturbances, which manifest a tendency to recur at the same hours on successive days. It is in this supposed analogy that the term of magnetic storms appears to have originated. An examination of the observations of the three elements at but a single station, as Toronto for example, teaches us that this view requires to be considerably The disturbances of the Declination, which reach a maximum at 9 P.M., have indeed already subsided considerably at 11 P.M., but those of the Inclination show no abatement until about 2 A.M., whilst those of the Total Force, which are much below their average at 9 p.m., increase progressively to their maximum, which is only reached at 3 A.M., or nearly six hours after the maximum of the Declination disturbances has taken place. In like manner the hours of the afternoon, in which the Declination is but little disturbed, and which have been supposed in consequence to be hours in which an intermission of disturbance takes place, are seen by the table to be precisely those hours at which the disturbances which increase the Total Force have their principal development, being then in the proportion of nearly ten to one when compared with the homonymous hours after midnight. When these remarkable phenomena are more fully studied, the aspect they present is that of a disturbance continued frequently through several successive days, changing from one element to another, and affecting each at different hours and in different modes, in conformity with laws the average operation of which it has been the object of this investigation to ascertain; and wearing the appearance consequently, when only a single element is regarded, of a limitation to those hours when that element in particular is affected, but which appearance ceases when the phenomena are more generally apprehended.

It was the supposed analogy between magnetical and atmospherical disturbances which led, in the commencement of the British colonial observatories, to the *simultaneous* observation and record of these two great and, as we have now reason to believe, distinct branches of natural phenomena; and as the inquiry advances we are continually becoming acquainted with additional circumstances to strengthen the persuasion, that the causes of these occasional and previously supposed "irregular" manifestations of disturbing magnetical influence are to be sought in more distant sources than in variations of the meteorological phenomena.

There is another misapprehension in regard to the nature of the occasional disturbances, which has followed very naturally from the limitation of the view to the disturbances of a single element. An inference has sometimes been drawn in favour of a local origin of a particular disturbance (in contradistinction to the general fact of

their simultaneous occurrence at extremely distant parts of the globe), from the circumstance that though the disturbance was manifested by the Declination at one station, no indication of it was shown by the cotemporaneous observations of the Declination at another and a distant station. Now, simultaneity at stations separated by considerable intervals of longitude implies a difference in the solar time; and the observations at Toronto show that a difference in the solar time may determine the question whether a disturbance, which may nevertheless be common to both stations, may or may not be traceable by simultaneous observations of a single element only. Towards the attainment of a just conclusion, therefore, in regard to a possible local origin, it is indispensable that a more extensive generalization should be made, and that cotemporaneous affections of the three elements should be brought into the comparison. Nor can this condition of the inquiry be dispensed with even in comparing the phenomena at stations under the same meridian, but separated by large intervals of latitude, unless it be first shown that the same law of solar hours prevails at both stations in regard to the occurrence of the disturbances of each particular element. It need scarcely be said that the general simultaneity of the disturbances has a very important bearing upon their theory, inasmuch as it militates decidedly against the supposition of their originating in atmospherical peculiarities, and tends to assign them, with far greater probability, to a cosmical source. That some disturbances may have a local origin is undoubtedly possible, but no such case has yet, I believe, been established on adequate evidence.

For the purpose of viewing in its simplest form, and expressed in numerical value, the influence which, on a daily average, the larger disturbances exercise on the Declination, Inclination, and Total Force, we must revert to the aggregate values in the five years which supplied the ratios of disturbance at the different hours in each of the six classes of phenomena contained in Table LVI. From these values we obtain readily and immediately for each hour the excess in the aggregate amount of easterly over westerly, or of westerly over easterly, deflection, and of disturbances which increase or decrease the Inclination or the Total Force over those which respectively decrease or increase those elements. Hence we can easily form a table containing, for each of the elements at every hour, the numerical excess in the aggregate values of whichever kind of disturbance predominates at that hour; and dividing the excess by 1550, which is the number of days of observation in the five years, we have the mean effect corresponding to the larger disturbances of each of the elements at the different hours, or the average diurnal variation of each element due to the larger disturbances. This is shown in the following table, illustrated by Fig. 3. pl. 1., in which the diurnal variations of Declination and Inclination are expressed in decimals of a minute of arc, and that of the Total Force in parts of the Total Force at Toronto, which in absolute value and employing British units may be taken with sufficient approximation at 13.9.

TABLE LVII.

Toronto Astronomical	Mean Diurnal Va	riation occasioned by th	e larger Disturbances.	Toronto	
Time.	Declination.	Inclination.	Total Force.	Civil Time.	
H.	,	,	Parts of the Total Force.		
18	0.29 W.	+0.10	- 000092	6 a.m.	
19	0.41 W.	+0.18	- 000092	7 a.m.	
20	0.52 W.	+0.16	- 000047	8 a.m.	
21	0.46 W.	+0.13	- 000032	9 a.m.	
22	0.30 M.	+0.10	- 0000008	10 a.m.	
23	0.11 W.	+0.09	+ 000007	11 a.m.	
0	0.11 M.	+0.09	+.000012	Noon.	
$egin{array}{c} 1 \ 2 \ 3 \end{array}$	0.03 M.	+0.09	+ 000027	1 p.m.	
<b>2</b>	0.09 M.	+0.02	+ 000042	2 p.m.	
3	0.08 W.	+0.07	+ 000054	3 p.m.	
4	0.09 M.	+0.02	+.000068	4 p.m.	
4 5 6 7 8	0.04 W.	+0.08	+ 000073	5 p.m.	
6	0°18 E.	+0.14	+ 000058	6 p.m.	
7	0°34 E.	+0.14	+ 000062	7 p.m.	
8	0.52 E.	+0.16	+ 000047	8 p.m.	
9	0.84 E.	+0.16	+.000016	9 p.m.	
10	0.61 E.	+0.12	- 000022	10 p.m.	
11	0.53 E.	+0.19	- 000047	11 p.m.	
12	0.33 E.	+0.14	- 000098	${f Midnight}$	
13	0.26 E.	+0.18	- 000125	1 a.m.	
14	0.14 E.	+0.19	- 000132	2 a.m.	
15	0.16 E.	+0.14	000138	3 a.m.	
16 17	0.15 E. 0.02 W.	+0.15 +0.10	- 000123	4 a.m.	

From this table we find that the range of the diurnal variation of the Declination representing the influence of the larger disturbances is from 0'.52 W. at 8 A.M. to 0'.87 E. at 9 P.M. (or the whole range has an extent of 1'.39); that of the Inclination, from a minimum increase of 0'.05 at 2 P.M. to a maximum increase of 0'.19 at 2 A.M. (or a total extent of 0'.14); and that of the Total Force, from a maximum decrease of .000138 at 3 A.M. to a maximum increase of .000073 at 5 P.M. (or a total extent of range of .000211 parts of the Total Force at Toronto).

As the larger disturbances of each element which have been separated by the processes and subjected to the analysis described in this communication, can by no means be supposed to include the whole of the disturbances of the class to which they belong, we can only regard the extent of the diurnal variation as stated above to be in each case a minimum limit, which would be certainly somewhat exceeded if by any mode of proceeding we could succeed in separating the minor effects of the same causes; but we have no reason to suppose that the epochs of maxima and minima or the laws of intermediate progression would sustain any material alteration thereby.

As the aggregate values of the disturbances are taken from the five years which include a complete quinquennial or semi-decennial period, the mean diurnal variation

deduced from them must be considered as also subject to a small decennial variation, analogous to that which has been found to exist in the ordinary solar-diurnal variation. And as the sums of the variation-values at the different hours, taken with their proper signs, in no case equal zero, but have a sensible magnitude in each element, the absolute values of the three elements must also be affected with a very small cyclical variation due to the disturbances, of which the period will also be decennial.

## LUNAR-DIURNAL VARIATION.

The observations employed in the investigation on which we now enter are the six years of hourly observations of the Declination from July 1st, 1842, to June 30th, 1848, and the five years of hourly observations of the Horizontal and Vertical Forces commencing July 1st, 1843, and ending June 30th, 1848, but having in the first year of the Horizontal and Vertical Forces the months of October, November, December 1842, January and February 1843, substituted for the same months in the subsequent year, during which the observations of the Vertical Force were suspended.

The larger disturbances of each element having been marked for omission, and the hourly normals (excluding the observations so marked) computed as already described, the retained observations were then characterised in reference to their lunar relation by small figures signifying the lunar hour to which each observation most nearly corresponded. For this purpose the time of the moon's meridian passage at Greenwich was taken from the Nautical Almanac, and corrected for the difference of longitude, so as to give the time of the moon's passage of the astronomical meridian at Toronto in the mean solar time of the station. The difference of time corresponding to the difference between the meridians of Toronto and Göttingen was then applied, so as to give the mean Göttingen time of the moon's passage of the astronomical meridian at Toronto. The observation at the Göttingen hour nearest to the time thus computed was then marked with 0<sup>th</sup>, signifying that it was the nearest observation to the moon's upper culmination, and from which its distance could not exceed half an hour. The time of the moon's inferior passage was then computed in a similar manner, and the observation at the Göttingen hour nearest to it was marked 12<sup>n</sup>. The intermediate hours received corresponding markings, except that when thirteen solar hours, and consequently thirteen observations, were comprised within twelve lunar hours, that observation was omitted which fell most nearly equidistant between the epochs of two exact lunar hours. The monthly tables were thus marked for the lunar hours before they were returned from myself to the office, and were considered to be prepared for re-arrangement in tables conforming to lunar time; but instead of the observations themselves, the differences at each hour between the scale readings observed and the normals at the same hour (Tables X., XXV., and LII.) were entered in the lunar tables, by which process the diurnal and other variations depending on the period of the year and the hour of the solar day were, in great part at least, eliminated. The differences were marked with a + or - sign according as the scale reading at the time of observation was greater or less than the normal, the entries having a + sign implying in the case of the Declination are westerly deflection of the north end of the magnet, and those having a - sign implying the converse.

The means were then taken in every month, at every lunar hour, the signs being regarded; the monthly means were then collected into yearly means; and finally, the means at each lunar hour in the six years of observation were collected as shown in the subjoined table, in which the entries are expressed in scale divisions, one scale division equalling 0'.721 of arc.

TABLE LVIII.

Lunar			<b>Y</b> ear endin	g June 30,			7.5	Lunar
Hours.	1843.	1844.	1845.	1846.	1847.	1848.	Means.	Hours
н.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	н.
ö	-0.50	-0'42	-0.45	-0.40	-0.46	-0.37	-0.38	0
1	-0.11	-0.31	-0.18	-0.37	-0.64	-0.29	-0.32	1
2	-0.08	-0.28	+0.04	-0.28	-0.39	-0.31	-0.22	$\frac{2}{3}$
3	-0.09	-0.08	-0.07	0.00	-0.36	-0.13	-0.15	3
4	+0.26	+0.09	+0.31	+0.08	+0.13	+0.28	+0.19	4 5
4 5	+0.39	+0.09	+0.42	+0.52	+0.20	+0.45	+0.32	5
6	+0.66	+0.40	+0.23	+0.77	+0.12	+0.48	+0.45	6
7	+0.21	+0.29	+0.47	+0.26	+0.31	+0.29	+0.40	7
8	+0.17	+0.26	+0.08	+0.20	+0.09	+0.10	+0.20	8
9	-0.14	+0.21	-0.31	+0.31	-0.23	+0.35	+0.03	9
10	-0.36	-0.24	-0.57	-0.22	-0.40	+0.04	-0.29	10
11	-0.21	-0.33	-0.66	-0.54	-0.24	-0.49	-0.46	11
12	-0.59	-0'48	-0.21	-0.21	-0.52	-0.22	-0.47	12
13	-0.37	-0.27	-0.45	-0.34	-0.29	-0.44	-0.36	13
14	-0.17	-0.31	-0.24	-0.32	+0.07	-0.12	<b>-0.</b> 19	14
15	+0.07	-0.14	+0.04	-0.12	+0.52	-0.10	+0.04	15
16	+0.12	+0.22	+0.31	+0.14	+0.43	+0.20	+0.24	16
17	+0.37	+0.45	+0.21	+0.16	+0.55	+0.49	+0.42	17
18	+0.43	+0.74	+0.65	+0.39	+0.47	+0.28	+0.54	18
19	+0.26	+0.25	+0.52	+0.21	+0.55	+0.39	+0.36	19
20	+0.29	+0.12	+0.35	+0.20	+0.22	+0.02	+0.21	20
21	+0.08	+0.12	+0.10	-0.12	-0.21	-0.30	-0.06	21
22	-0.26	-0.02	-0.04	-0.23	-0.42	-0.42	-0.24	22
23	-0.29	-0.37	-0.33	-0.25	-0.31	-0.34	-0.32	23

Representing the mean of the six years by the usual formula of sines and cosines, we have the coefficients of the several terms as follows, expressed in seconds of arc, a being counted in hours (multiplied by 15°) from the time of the moon's upper culmination.

TABLE LIX.

Arguments.								$\cos 4 a$ .				
Coefficients	$A_0 =$	$A_1 =$	$B_1 =$	$A_2 =$	$B_2 =$	$A_3 =$	$B_3 = .$	$A_4 =$	$B_4 =$	$A_5 =$	$B_5 =$	$A_6 =$
Coemcients								+1.51				
Arguments.	1											
Coofficients	$B_6 =$	$A_7 =$	$B_7 =$	$A_8 =$	$B_8 =$	$A_9 =$	$B_9 =$	$A_{10} =$	$B_{10} =$	$\mathbf{A}_{\mathrm{n}} =$	$B_{11} =$	$\mathbf{A}_{12} =$
Coefficients	+0.57		+0.08	+0.16			-0.39			" +0*49	+0.28	" -0°29

The coefficient of principal magnitude is  $A_2 = -19'' \cdot 18$ , whose argument is  $\cos 2 a$ . The same coefficient calculated for the different years is as follows:—

TABLE LX.

•							"
Year ending June	30th,	1843	-		.,	•	-19.35
"	,,	1844	-	-	-	-	-17.61
,,	,,	1845	-		-	-	-21.05
,,	,,	1846	-		-	-	-20.22
<b>))</b>	,,	1847	-		_	-	-19.04
,,	,,	1848	-		-	-	<b>-18</b> *53
And from the mean of the s	ix yea	ars	-	-		-	-19.18

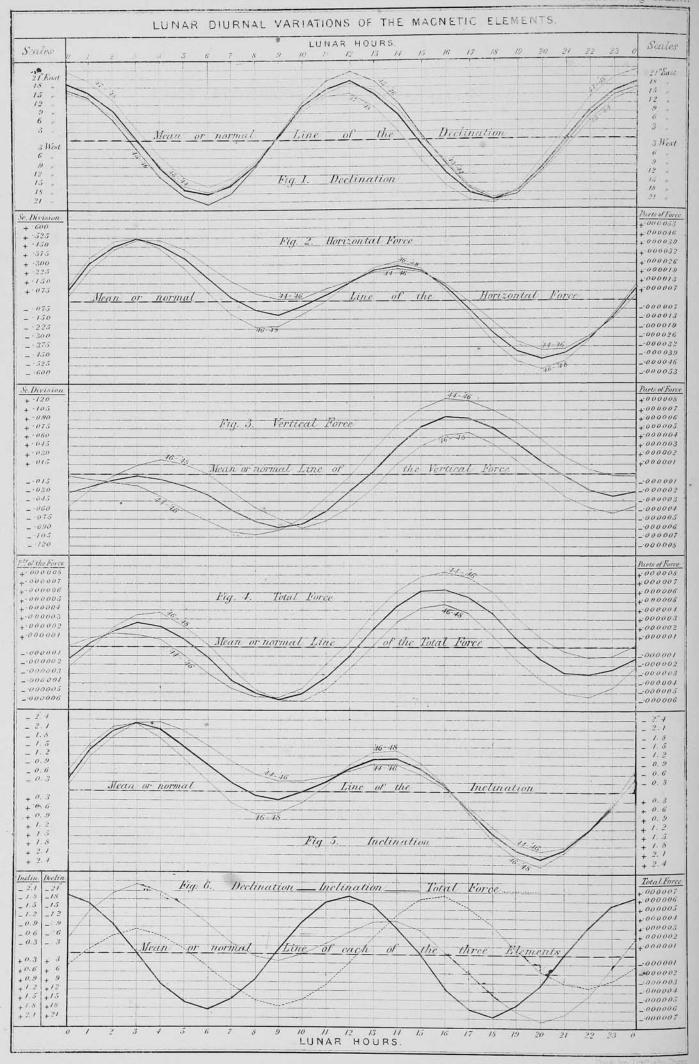
Whence we obtain the probable error of -19.18 (the value of  $A_2$  from the mean of the six years) =  $\pm 0$ ".34.

With the two first terms of this formula, viz.—

 $\Delta_x = 0^{\prime\prime} \cdot 0 + 0^{\prime\prime} \cdot 20 \cos a - 1^{\prime\prime} \cdot 03 \sin a - 19^{\prime\prime} \cdot 18 \cos 2a + 0^{\prime\prime} \cdot 45 \sin 2a$  or its more convenient equivalent,

$$\Delta_x = 0^{"\cdot}0 - 1^{"\cdot}05 \sin(a + 348^{\circ}52') + 19^{"\cdot}186 \sin(2a + 271^{\circ}21')$$

we obtain the deflections of the north end of the magnet at the several lunar hours as follows:—



Lunar Hours,	Deflections.	Lunar Hours.	Deflections.	Lunar Hours. Deflections.		Lunar Hours.	Deflections.	
22 23 0 1 2	9.29 to the Dast. 15.92 ,, 18.95 ,, 16.46 ,, 9.54 ,, 0.14 ,,	4 5 6 7 8 9	9.19 to the West. 15.89 " 18.14 " 15.34 " 8.20 " 0.42 to the West.	10 11 12 13 14 15	" 10.67 to the Wast. 17.30 " 19.38 " 16.31 " 8.86 " 1.04 to the West.	19 20	" 10.77 to the West. 17.78 " 20.21 " 17.43 " 10.19 " 0.42 "	

TABLE LXI.

Comparing these values with the actual deflections, we find the probable error at each observation hour  $\pm 1^{\prime\prime}\cdot37$ .

In Plate II., Fig. 1., the darker line represents the deflections in Table LXI. constituting the lunar-diurnal variation, the dotted line showing the mean or normal position of the magnet. The variation thus represented is that derived from the mean of the six years; and for the purpose of showing the accordance of the results when the whole period of six years is divided into three portions, each consisting of two years,—viz., July 1842 to June 1844, July 1844 to June 1846, and July 1846 to June 1848,—the corresponding curves have been computed by the subjoined formulæ, obtained as already described, and are represented by the fainter lines. The formulæ are—

```
July 1842 to June 1844, \Delta_x = +0^{"\cdot}41 - 2^{"\cdot}09 \sin(a + 291^{\circ}) - 18^{"\cdot}1 \sin(2a + 87^{\circ}\cdot7)
July 1844 to June 1846, \Delta_x = +0^{"\cdot}30 + 3^{"\cdot}04 \sin(a + 78^{\circ}7') + 20^{"\cdot}6 \sin(2a + 270^{\circ}\cdot1)
July 1846 to June 1848, \Delta_x = -0^{"\cdot}58 - 5^{"\cdot}23 \sin(a + 53^{\circ}5') + 18^{"\cdot}9 \sin(2a + 276^{\circ}\cdot1)
```

The number of hourly observations of the Declination made in the six years amounted to 42,888; of these, 2,345 were disturbed to an amount which equalled or exceeded 5'0 of arc from the normal at the same hour, and were consequently excluded; leaving 40,543 as the number of observations from which the results of the lunar-diurnal variation have been derived.

Horizontal Force.—Table LXII. exhibits, in columns 2 to 6, the mean hourly variation of the Horizontal Force at the different lunar hours in each of the five years ending June 30, and in column 7 the mean of the five years. The lunar influence at the several lunar hours is shown in decimals of a scale division, one such division being approximately 000087 parts of the whole Horizontal Force at Toronto. The sign + implies that the force is increased, and — that it is decreased, by the lunar influence.

Lunar		In the	Mean of the	Lunar						
Hours.	1844.	1845.	1846.	1847.	1848.	Five Years.	Hours.			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)			
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	•			
0	+0.44	-0.05	+0.10	+0.70	-0.07	+0.22	0			
. 1	+0.48	+0.01	+0.09	+0.70	+0.68	+0.39	1 .			
. 2	+0.68	+0.29	+0.11	+0.29	+0.42	+0.42	2 3			
3	+0.42	+0.48	+0.71	+0.20	+0.08	+0.44				
4 5	+0.28	+0.58	+0.22	+0.09	+0.19	+0.27	4 5			
5	+0.16	+0.68	+0.21	+0.43	+0.74	+0.44	5			
6	-0.23	+1.11	-0.03	+0.09	+0.43	+0.27	6 7			
7	-0.13	+0.72	-0.20	-0.25	+0.21	+0.07	7			
8	-0.16	+0.59	-0.31	-0.24	-0.19	-0.06	- 8			
9	-0.15	+0.58	-0.53	-0.79	+0.24	-0.15	9			
10	-0.43	+0.50	-0.10	-0.62	+0.53	-0.14	10			
11	-0.05	+0.32	+0.36	+0.39	-0.55	+0.17	11			
12	-0.28	+0.37	+0.12	-0.02	-0.31	-0.02	12			
13	+0.11	+0.64	+0.11	+0.23	+0.47	+0.31	13			
. 14	+0.06	+0'84	+0.18	-0.09	+0.40	+0.28	14			
15	+0.08	+0.04	.+0.23	-0.06	+0.73	+0.20	15			
16	0.00	-0.01	+0.13	+0.35	+0.28	+0'14	16			
17	-0.17	+0.48	-0.47	0.00	+0.33	+0.03	17			
18	-0.08	-0.19	-0.13	-0.24	-0.47	-0.22	18			
19	-0.21	-0.13	-0.33	-0.24	-0.80	-0.40	19			
20	-0.19	-0.70	-0.11	-0.55	-1.33	-0.28	. 20			
21	-0.19	-0.82	-0.31	-0.09	-1.07	-0.20	21			
22	-0.28	-0.44	-0.52	+0.09	-0.65	-0.30	22			
23	-0.08	-0.46	-0.12	+0.34	-0.18	-0.11	23			
$\begin{array}{c} 22 \\ 23 \end{array}$							22 23			

TABLE LXII.

We may represent the values in column 7 of Table LXII. (or the variation of the Horizontal Force at the several lunar hours on the average of the five years of observation) by the first terms of the usual formulæ for periodical functions; viz.,

$$\Delta_x = A_0 + A_1 \cos a + B_1 \sin a + A_2 \cos 2a + B_2 \sin 2a$$
;

and by substituting in this formula the numerical values of the coefficients obtained from the numbers in column 7, it becomes

 $\Delta_x = + .05 - .024 \cos a + .214 \sin a + .0775 \cos 2a + .323 \sin 2a$ , or its more convenient equivalent,

$$\Delta_x = +.05 + .215 \sin(a + 353^{\circ}.6) + .3324 \sin(2a + 13^{\circ}.5),$$

the coefficients being decimals of a scale division, and a reckoned in hours (multiplied by 15°) from the time of the moon's superior culmination. By this formula we obtain the curve which is shown by the stronger line in Plate II., Fig. 2.; and for the purpose of showing the degree of confidence to which this curve is entitled as an approximate representation of the variation produced in the Horizontal Force by the moon in the course of a lunar day, the variation in the different years in columns 2 to 6 of Table LXII. have been so combined as to form two separate means, one representing the columns headed 1844, 1845, and 1846, and a second representing

the columns headed 1846, 1847, and 1848,—the years 1844 and 1845 having double weight assigned to them in the first mean, and those in the columns headed 1847 and 1848 double weight in the second mean. The formulæ representing these separate means are—

For 1844 to 1846,  $\Delta_x = + .088 + .243 \sin (a + 347^{\circ} \cdot 6) + .277 \sin (2a + 4^{\circ} \cdot 6)$ For 1846 to 1848,  $\Delta_x = + .013 + .192 \sin (a + 355^{\circ} \cdot 0) + .395 \sin (2a + 19^{\circ} \cdot 2)$ 

The curves respectively computed by these formulæ are shown by the fainter lines in Fig. 2., in which the stronger line has been already noticed as being derived from the mean of the five years.

The number of hourly observations of the Bifilar Magnetometer employed in this investigation is 34,303.

Vertical Force.—Table LXIII. exhibits, in columns 2 to 6, the mean hourly variation of the Vertical Force at the different lunar hours in each of the five years ending June 30, and in column 7 the mean variation in the five years. The lunar influence at the several lunar hours is expressed in decimals of a scale division, one scale division being approximately '000065 parts of the whole Vertical Force at Toronto. The sign + implies an increase, and — a decrease, of the force from the lunar influence.

TABLE LXIII.

Lunar		In the	Mean of the	Lunar			
Hours.	1844.	1845.	1846.	1847.	1848.	Five Years.	Hours.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
0	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0 1	+0.09	+0.02 -0.03	-0.02 + 0.06	-0.00	+0.03 +0.03	+0.03	0
9	+0.03	-0.03	-0.16	-0.09	-0.18	-0.10	2
$egin{matrix} 2 \\ 3 \end{matrix}$	-0.11	0.00	-0.07	+0.18	-0.06	-0.01	3
4	-0.09	-0.01	-0.01	+0.13	+0.08	+0.02	4
$\frac{4}{5}$	+0.01	-0.02	-0.09	+0.07	+0.02	0.00	5
$\check{6}$	-0.15	-0.15	+0.09	+0.01	-0.02	-0.04	6
7	-0.06	-0.24	+0.08	-0.18	-0.02	-0.08	7
8	+0.03	-0.52	+0.03	-0.12	-0.17	-0.10	8
9	-0.04	-0.10	-0.10	+0.05	-0.07	-0.06	9
10	-0.13	-0.10	-0.10	+0.08	-0.11	-0.07	. 10
11	-0.14	+0.03	-0.03	+0.05	-0.14	-0.05	11
12	-0.08	+0.15	-0.10	+0.01	-0.50	-0.02	12
13	+0.14	+0.03	+0.08	+0.10	-0.16	+0.04	13
14	+0.03	+0.10	+0.04	+0.03	-0.09	+0.05	14
15	+0.08	+0.12	+0.06	+0.02	+0.04	+0.07	15
16	+0.11	+0.18	+0.08	+0.15	+0.06	+0.11	16
17	+0.17	+0.09	+0.04	+0.04	+0.15	+0.09	17
18	+0.19	+0.09	+0.18	-0.03	+0.05	+0.09	18
19	+0.11	+0.02	0.00	0.00	+0.15	+0.06	19
20	+0.14	+0.01	+0.01	-0.14	+0.08	+0.03	20
21	+0.11	-0.07	-0.17	-0.13	+0.05	-0.04	21
22	+0.08	+0.04	-0.51	-0.07	+0.07	-0.03	22
23	+0.11	+0.04	-0.18	-0.13	-0.03	-0.06	23

The curves obtained from the values comprised in this table are represented to the eye in Plate II., Fig. 3., the fainter lines corresponding to the variations in the separate periods, 1844 to 1846, and 1846 to 1848, and the stronger line to the mean of the whole period of five years. The formulæ by which these curves have been computed are as follow:—

1844 to 1846, 
$$\Delta_x = +.006 - .092 \sin (a + 0^{\circ}.5) + .036 \sin (2a + 345^{\circ}.1)$$
  
1846 to 1848,  $\Delta_x = -.014 - .028 \sin (a + 355^{\circ}.5) + .058 \sin (2a + 316^{\circ}.7)$   
1844 to 1848,  $\Delta_x = +.005 - .058 \sin (a + 2^{\circ}.0) + .048 \sin (2a + 330^{\circ}.0)$ 

The coefficients are decimals of a scale division, and a is reckoned in hours (multiplied by 15°) from the time of the moon's superior culmination. The number of hourly observations of the Vertical Force Magnetometer employed in this investigation is 31,773.

Inclination and Total Force.—The variations of the Inclination and Total Force in a lunar day are derived from those of the horizontal and vertical components of the force by the formulæ—

$$\Delta heta = \sin heta \cos heta \left( rac{\Delta Y}{Y} - rac{\Delta X}{X} 
ight);$$
  $rac{\Delta \phi}{\phi} = \cos^2 heta rac{\Delta X}{X} + \sin^2 heta rac{\Delta Y}{Y};$ 

in which  $\theta$  is the inclination,  $\phi$  the total force, X its horizontal, and Y its vertical component. They are shown for the whole period of the five years in Table LXIV., computed from the values of the Horizontal and Vertical Forces in columns 7 of Tables LXII. and LXIII. The variation of the Inclination is expressed in seconds of arc, the sign + signifying an increase of the dip of the north end of the magnet; and that of the Total Force in parts of the Total Force at Toronto, of which the approximate absolute value is 13.9 in British units.

TABLE LXIV.

Lunar Hours.	Lunar-diurnal Variation		Lunar	Lunar-div	ırnal Variation	Lunar	Lunar-diurnal Variation	
	of the Inclination.	of the Total Force.	Hours.	of the Inclination.	of the Total Force.	Hours.	of the Inclination.	of the Total Force.
0 1 2 3 4 5 6 7	" -0.56 -1.44 -2.07 -2.26 -2.05 -1.61 -0.97 -0.33	Parts of the Force '0000013 + '0006004 + '0000019 + '0000026 + '0000021 + '0000008 - '0000012 - '0000034	8 9 10 11 12 13 14 15	" +0.05 +0.17 0.00 -0.32 -0.75 -1.07 -1.08 -0.76	Parts of the Force '0000051 - '0000058 - '0000034 - '0000010 + '0000021 + '0000044 + '0000060	16 17 18 19 20 21 22 23	" -0.22 +0.57 +1.31 +1.92 +2.14 +1.93 +1.33 +0.42	Parts of the Force. + '0000063 + '0000053 + '0000033 + '0000006 - '0000020 - '0000031 - '0000035 - '0000026

These variations are represented to the eye by the stronger lines in Figs. 4. and 5. of Plate II.; in which also the fainter lines show the variations derived respectively from the half periods constituted as previously described. In Fig. 6., of Plate II. are collected in one view the lunar-diurnal variations of the Declination, Inclination, and Total Force, as they are separately represented in other figures of the same plate.

General Conclusions.—The three magnetic elements concur in showing that the moon exercises a sensible magnetic influence at the surface of the earth, producing in every lunar day a variation in each of the three elements, which is distinctly appreciable by the instruments employed in the observatories established to carry out the system of observation recommended by the Royal Society, when due care has been taken in conducting the observations, and suitable methods are adopted for elaborating the results.

The lunar-diurnal variation consists in a double progression in each lunar day in each of the three elements: the Declination has two easterly and two westerly maxima, and the Inclination and Total Force each two maxima and two minima in each interval between two successive passages of the moon over the astronomical meridian; the variation passing in every case four times through zero in the course of the lunar day. The easterly maxima of the horizontal deflection of the north end of the magnet synchronise with the moon's superior and inferior passages of the meridian, the westerly maxima with the lunar hours of 6 and 18. The maxima of the increased magnetic force due to the moon's action occur about the lunar hours of 3 and 16, and the minima about the hours of 9 and 20. The maxima of the Inclination, i.e. of the dip of the north end of the magnet, occur about the lunar hours of 3 and 14, and the minima about 9 and 20. The extent of the variation in the lunar day, or the range between the extremes that are widest apart, is in the Declination 38".33, in the Inclination 4"·4, and in the Total Force '000012 parts of the whole terrestrial magnetic force at Toronto. These are the values derived from the whole period of observation, i. e. from six years of the Declination, and from five years of the Inclination and Total Force. When the whole period is subdivided into two half-periods, the hours of maxima and minima and the extent of the range accord with the results of the whole period in each of the three elements, with slight and wholly insignificant exceptions. The reality of the variations is thus attested no less by the accordance of the results when the whole period during which the phenomena were observed is subdivided into separate and independent portions, than by the systematic character which the variation is seen to possess, when the strictly independent results at the several lunar hours are brought together and exhibited continuously.

As it happens that in the Declination the variation resulting from the moon's action is greater, relatively to the instrumental means for measuring it, than either in the Inclination or in the Total Force, it is reasonable to conclude that we have a better

opportunity of judging of the particular nature and character of the moon's magnetic influence by studying the effects produced on the Declination than by studying those produced on either of the other elements.

Referring to Table LIX., p. lxxx, which exhibits the coefficients of all the twelve terms in the formula of sines and cosines by which the results of observation are strictly represented, we perceive that the coefficient of the cosine of twice the hour angle is not only the one of greatest amount, but is, in fact, the only one which we can with confidence regard as possessing a substantial value. All the other coefficients are, without exception, not only extremely small in comparison with the one above noticed, but are so small that they may well be supposed to represent the small deviations from a natural law ascribable to errors which cannot wholly be extinguished in averages derived from not more than six years of observation. On the other hand, the coefficient in the second term has a value far beyond any explanation resting on the supposition of errors of observation. The probable error of any single hour is 1".37, whilst the range of the variation is not less than 38". Whilst, therefore, the general result of this investigation is to establish conclusively the existence of a lunar-magnetic influence sensible at the surface of the earth, the lunardiurnal variation which is thus manifested appears to be consistent with the hypothesis that the moon's magnetism may be, in great part at least, if not wholly, derived by induction from the magnetism of the earth.

It is further observable, that in the lunar-diurnal variation there is no appearance of the *decennial* period which constitutes so marked a feature in the solar-diurnal variations.

# SOLAR-DIURNAL VARIATION.

Declination.—In the first volume of the Toronto Observations, published in 1845, an inference was drawn from the examination of the observations in 1841 and 1842 printed in that volume, that the double progression which showed itself in the diurnal variation, (produced by a small westerly retrogression of the north end of the magnet occurring between the hours of 10 and 14), might be an effect of the superposition of two distinct diurnal variations, each proceeding from a distinct class of phenomena; one class being the regular solar-diurnal variation corresponding to the sun's daily (apparent) revolution round the earth; and the other class produced by causes, not indeed of daily, but of occasional occurrence, the diurnal variation being in the latter case the representative of the mean effect of the occasional causes: and it was suggested, that if by any process the whole effect of the occasional disturbances could be eliminated, it might be very possible that the residual variation, or that portion which might be regarded as more strictly deserving the name of "diurnal variation," might prove to be "a single progression with but one maximum and one minimum in the 24 hours." It was at the same time further suggested, that though it might be

difficult, and perhaps impossible, to eliminate from the observations the whole effect of the disturbances referred to, it might be very possible, by a partial separation of those of largest amount, to examine whether their influence on the diurnal variation was or was not of a systematic character, and such as might produce the supposed effects.

The Toronto observations from 1843 to 1848 have since been received and printed, and have been treated according to the suggestion above noticed. The result has been to establish the fact, that the occasional and previously called "irregular" disturbances are phenomena subject to periodical laws; and that amongst these there is one which regulates their occurrence in the diurnal period, causing them to constitute in their mean effect a diurnal variation wholly distinct from the regular daily solar-diurnal variation, and having different hours of maxima and minima. (Phil. Trans. 1851, Art. V.; 1852, Art. VIII.; 1856, Art. XV.; and pp. lxxvi and lxxvii of this volume.)

The disturbed observations which have been separated from the great body of the observations for the purpose of this investigation are all those which differ from the normal position of the magnet, at the same hour and in the same month, by a quantity equalling or exceeding  $5' \cdot 0$  of arc. These have sufficed to establish the systematic characters and distinctive features of the diurnal variation which the disturbances occasion, but we are sure that they do not give its full numerical amount; for it cannot be doubted that there must be minor disturbances of the same class,—minor effects proceeding from the same causes,—which remain in the body of the observations when those of 5'·0 and upwards have been removed; and which must still continue to exercise an influence similar in kind, and possibly (as being more numerous) not less in degree, on the residual diurnal curve, modifying the pure result which would be obtained if the whole influence of the disturbances could by any process be separated. The question, then, which now remains to be considered is, whether, and with what degree of probability, we may infer, by means of a comparison of the diurnal variation with and without the disturbances of 5'·0 and upwards, that if their whole influence were eliminated the residual diurnal variation would show itself as a single instead of a double progression.

This question is of some theoretical importance; for since the publication of the first volume of this work, in 1845, the physical explanation of the diurnal variation has occupied the attention of eminent physicists, two of whom in particular, Faraday and Secchi, have propounded physical therories, which, however dissimilar they may be in other respects, concur in regarding the diurnal variation derived from the whole of the observations including the disturbances, as phenomena of one and the same class, and the double progression as an integral part of the same, and a necessary consequence of the physical theory adopted for their explanation. An additional importance is therefore given to the inquiry whether, after the deduction of that portion of the diurnal variation which has now been ascertained to proceed from a distinct class of

phenomena, not of daily but of occasional occurrence, the residual variation, or that due to the regular daily course of the sun round the earth, may not be regarded with greater probability as a "single progression with but one maximum and one minimum," rather than as a "double progression with two maxima and two minima."

In column 2 of the subjoined table (Table LXV.) is shown the mean diurnal variation derived from the whole of the observations, including the disturbances; in column 3 the mean diurnal variation derived from the disturbances which equal or exceed 5'·0 (from Table LI., p. lxi); in column 4 we have the residual diurnal variation when the values in column 3 are deducted from those in column 2; and in column 5 we have the diurnal variation such as it would be found if we permitted ourselves to suppose that by abstracting the disturbances equalling or exceeding 5'·0 we had eliminated half the influence of the disturbances of the class to which they belong.

TABLE LXV.

Toronto		Diurnal Variati	on, as derived from		Toronto	
Astronomical Time.	the whole of the Observations.	the larger Disturbances.	the Values in Column 2 — the Values in Column 3.	the Values in Column 2 — twice the Values in Column 3.	Astronomical Time.	
(1.)	(2.)	(3.)	(4.)	(5.)	(6.)	
H. 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2	0'96 E. 0'80 E. 0'69 E. 0'87 E. 1'27 E. 1'91 E. 2'69 E. 3'58 E. 3'92 E. 3'17 E. 0'94 E. 1'80 W. 4'13 W. 5'10 W. 4'96 W.	0°33 E. 0°26 E. 0°17 E. 0°16 E. 0°15 E. 0°02 W. 0°29 W. 0°41 W. 0°52 W. 0°46 W. 0°30 W. 0°11 W. 0°11 W. 0°03 W. 0°09 W.	0.63 E. 0.54 E. 0.52 E. 0.71 E. 1.12 E. 1.93 E. 2.98 E. 3.99 E. 4.44 E. 3.63 E. 1.24 E. 1.69 W. 4.02 W. 5.07 W. 4.87 W. 3.83 W.	0.30 E. 0.28 E. 0.35 E. 0.55 E. 0.97 E. 1.95 E. 3.27 E. 4.40 E. 4.99 E. 1.54 E. 1.58 W. 3.91 W. 5.04 W. 4.78 W. 3.75 W.	H. 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3	
4 5 6 7 8 9 10	2 · 57 W. 1 · 33 W. 0 · 30 W. 0 · 22 E. 0 · 70 E. 1 · 39 E. 1 · 31 E. 1 · 24 E.	0.09 W. 0.04 W. 0.18 E. 0.34 E. 0.52 E. 0.87 E. 0.61 E. 0.53 E.	2.48 W. 1.29 W. 0.48 W. 0.12 W. 0.18 E. 0.52 E. 0.70 E. 0.71 E.	2 · 39 W. 1 · 25 W. 0 · 66 W. 0 · 46 W. 0 · 34 W. 0 · 35 W. 0 · 09 E. 0 · 18 E.	4 5 6 7 8 9 10	

From this table we perceive, 1st, that when the diurnal variation is derived from the whole body of the observations including the disturbances as in column 2, the march of the north end of the magnet towards the east, which is otherwise continuous from

the extreme westerly direction between 1 and 2 p.m. to the extreme easterly direction between 7 and 8 the following morning, is interrupted by a small westerly retrogression between 9 p.m. and 4 a.m.; 2d, that when the larger disturbances, or those which equal or exceed 5' 0 in amount, and produce as their mean effect the diurnal variation in column 3, are eliminated, the westerly retrogression previously noticed is reduced very considerably both in amount and continuance, as is seen in column 4; and 3d, that if we assume that, by abstracting the disturbances equalling or exceeding 5' 0, we may have eliminated half of the whole influence of the causes to which the larger disturbances are due (which is certainly no unreasonable supposition), we have the residual diurnal variation as in column 5, in which the westerly retrogression is almost wholly obliterated, and the variation has become virtually a single progression, with but one maximum and one minimum.

Viewing, then, the residual variation after the elimination of the influence of the disturbances as the best approximation we can obtain towards a representation of the phenomena of the regular solar-diurnal variation, and regarding this representation as corresponding to a mean state of the phenomena, or to that which would belong to all the days in the year if the sun's path were always in the plane of the equator, we find the mean solar-diurnal variation at Toronto to be approximately as follows:—The chief variation takes place during the hours when the sun is above the horizon; the motion of the north end of the magnet towards the east, which during the hours of the night is extremely slow, quickens between 4 and 5 a.m., and continues at a nearly uniform rate, exceeding 1' an hour, from 5 a.m. to a few minutes before 8 a.m., when the easterly extreme is reached. The north end then returns rapidly towards the west, attaining the westerly extreme of its daily progress about 20 minutes past 1 p.m. This interval is the time of most rapid motion, the whole amplitude or extent of the diurnal variation, amounting to about 10' of arc, being passed through in about  $5\frac{1}{2}$  hours. The motion is most rapid between 10 and 11 A.M., when the change of direction in one hour is very nearly 4'.0. After reaching the westerly extreme, at or about 1h. 20m., the north end returns again towards the east, at a nearly uniform rate a little exceeding 1'·0 per hour, until near 6 P.M., at which time the night phase of the variation may be This, apart from the disturbances, is a continuation of the easterly motion, but at a comparatively very slow rate, which, on the average of the 10 hours from 6 p.m. to 4 a.m., scarcely exceeds 0'.16 per hour.

Table LXVI. exhibits the solar-diurnal variation of the Declination in the different months of the year after the separation and omission of the larger disturbances. This table is similar in form to Table VII. in vol. II. (p. xv), but differs from it inasmuch as the latter is derived from all the observations, including the disturbances, and in this the disturbances are excluded. The sign + implies that the north end of the magnet is to the east, and — to the west, of the mean position in the month.

Vol. III.

TABLE LXVI.

					CORONT	O ASTRO	NOMICA	L HOUR	S.			
Months.	O <sup>b</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10h.	11 <sup>h</sup> .
January	-2·50 -2·42 -3·72 -4·54 -5·24 -4·72 -4·24 -6·00 -6·26 -3·72 -3·00 -1·94	-3·34 -3·30 -5·22 -5·98 -6·28 -6·20 -5·86 -7·22 -6·38 -4·20 -3·80 -3·02	-3·14 -3·26 -5·36 -5·84 -6·10 -6·26 -5·96 -6·52 -5·40 -3·94 -3·30 -3·36	-2·44 -2·54 -4·78 -4·98 -4·84 -5·26 -5·12 -5·04 -3·36 -2·66 -2·52 -2·38	-1.64 -1.66 -3.42 -3.30 -3.12 -3.76 -3.68 -2.74 -1.16 -1.80 -1.78 -1.70	-0'92 -1'36 -2'18 -1'66 -1'26 -1'68 -1'86 -1'02 -0'42 -1'24 -1'10 -0'80	-0'32 -0'84 -1'12 -0'80 -0'44 -0'62 -0'70 -0'18 +0'12 -0'70 -0'12	+0'06 -0'38 -0'56 -0'32 -0'22 -0'28 -0'12 -0'06 -0'22 +0'64 +0'36	+0'76 +0'32 -0'30 +0'44 -0'18 -0'32 -0'66 -0'10 +0'24 +0'24 +0'84 +0'88	+1'02 +0'92 +0'22 +0'14 +0'16 -0'22 -0'16 +0'48 +0'64 +0'58 +0'96 +1'24	+1'08 +0'88 +0'90 +0'82 +0'38 +0'04 +0'36 +0'46 +0'48 +1'16 +1'10	+0.66 +0.60 +1.02 +1.12 +0.50 +0.66 +0.58 +0.52 +0.06 +0.62 +1.16 +1.02
Semi- annual Means April to Sept Oct. to March -	$\begin{bmatrix} -5.17 \\ -2.88 \end{bmatrix}$	$ \begin{array}{r} -6.32 \\ -3.81 \end{array} $	$\begin{bmatrix} -6.01 \\ -3.73 \end{bmatrix}$	$\begin{bmatrix} -4.77 \\ -2.89 \end{bmatrix}$	$\begin{bmatrix} -2.96 \\ -2.00 \end{bmatrix}$	$\begin{bmatrix} -1 & 32 \\ -1 & 27 \end{bmatrix}$	$\begin{bmatrix} -0.44 \\ -0.52 \\ \end{bmatrix}$	-0.53 -0.05	$\begin{vmatrix} -0.10 \\ +0.46 \end{vmatrix}$	+0.55 +0.85	+0.47 +0.93	$+0.57 \\ +0.85$
Annual Means	4.02	-5.07	-4.87	-3.83	-2.48	-1:29	-0.48	-0.13	+0.18	+0.25	+0.40	+0.41
(continued)	.1		1		1		·					
Months	12h.	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .
January	+0.26	+0.58 +0.12 +0.16 +0.74	+0.92 0.00 -0.04	+0.42 +0.62 +1.28 +1.48 +0.68 +0.02 +0.12 +0.72 +1.40 +0.92 +0.62 +0.30	+0.86 +0.76 +1.50 +1.58 +1.40 +1.40 +0.92 +0.94 +1.96 +1.20 +0.52 +0.46	+1.70 +0.92 +0.58	+0.74 +1.64 +2.26 +3.40 +5.16 +5.28 +4.52 +3.90 +1.84 +1.28 +0.58	+1.28 +2.00 +3.52 +4.64 +6.04 +6.36 +6.50 +6.94 +5.22 +2.74 +1.78 +0.92	+2.66 +2.92 +4.72 +4.96 +5.82 +6.20 +6.26 +6.90 +4.80 +3.66 +2.90 +1.46	+2.90 +2.78 +4.54 +3.96 +4.18 +4.72 +4.86 +4.76 +3.00 +3.04 +2.76 +2.04	+1.48 +1.46 +2.52 +1.30 +0.64 +1.73 +1.78 +0.54 +0.56 +1.10 +1.26 +1.62	-0°38 -0°50 -0°74 -2°02 -3°06 -2°00 -1°76 -3°12 -3°70 -1°66 -1°12 -0°26
Annual Means	+0.63	+0.24	+0.2	+0.41	+1.12	+1.93	+2.98	+3.99	+4.44	+3.63	1	-1.69

Table LXVII. exhibits the solar-diurnal variation of the Horizontal Force in the different months of the year, after the separation and omission of the larger disturbances. This table is similar in form to Table XXXIII. in vol. II., p. lix.

TABLE LXVII.

				Ţ	ORONTO	ASTRO	NOMICA	L HOURS	S.			
Months.	O <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .
	•00	.00	.00	.00	.00	.00	.00	.00	00	.00	.00	.00
January February	-099 -065 -108 -086 -052 -042 -032 -052 -067 -071 -091 -073	-060 -043 -070 -042 +010 +004 +007 +003 -009 -038 -060 -052	-030 -010 -030 +005 +054 +054 +049 +057 +045 -001 -017 -027	+021 +017 +017 +056 +081 +085 +081 +090 +072 +024 +016 +005	+048 +028 +041 +074 +085 +095 +092 +091 +076 +040 +028 +031	+045 +033 +051 +074 +081 +089 +078 +080 +061 +043 +033 +031	+033 +027 +040 +056 +059 +067 +055 +048 +053 +034 +032 +027	+020 +028 +035 +030 +030 +039 +037 +023 +036 +031 +031 +021	+018 +019 +030 +012 +013 +015 +013 +015 +021 +017 +025 +013	+012 +020 +021 +011 +005 000 +009 +015 +023 +015 +019 +010	+014 +012 +017 +008 +004 -004 +008 +022 +016 +020 +007	+008 +008 +014 +005 +001 -015 +005 +011 +018 +008 +007 +002
Semi- annual Means April to Sept Oct. to March -	$\begin{vmatrix} -056 \\ -085 \end{vmatrix}$	-004 -054	+045 -019	+078 +016	+085 +037	+077 +039	+056 +032	$+032 \\ +028$	+015 +020	+010 +016	+006 +013	+004 +008
Annual Means	-070	-029	+013	+047	+061	+058	+044	+030	+017	+013	+010	+006
(continued)												
Months.	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22h.	23 <sup>h</sup> .
HOMAIS.	.00	.00	.00	•00	•00	.00	.00	.00	.00	.00	.00	.00
January February March April May June	000 +006 +014 +007 -005 -018	+006 -001 +007 +008 -012 -019	+005 +003 +011 +003 -006 -014	+012 -007 +011 +013 -012 -023	+022 +012 +019 +021 -009 -019 -018	+020 $+017$ $+023$ $+024$ $-005$ $-012$ $-017$	+031 +021 +035 +014 +001	+031 +010 +013 +011 -007 -007 -011	+024 -011 -016 -023 -036 -033 -035	-008 -030 -050 -070 -085 -064 -067	-051 -046 -085 -102 -105 -098	-101 -063 -111 -112 -089 -082 -081
July September	-013 +007 +018 +006 +006 -007	-008 +003 +008 +013 +011 -002 -003 +005	-013 +009 +011 +015 +016 +007	$ \begin{array}{r} -014 \\ +001 \\ +003 \\ +020 \\ +019 \\ +005 \end{array} $ $ \begin{array}{r} -006 \\ +010 \end{array} $	$ \begin{array}{r} -013 \\ -007 \\ +021 \\ +032 \\ +028 \\ +015 \end{array} $ $ -002 \\ +022$	-003 +024 +033 +039 +022 +026	$ \begin{array}{r} -003 \\ +001 \\ +015 \\ +032 \\ +043 \\ +034 \end{array} $	$ \begin{array}{r} -017 \\ -017 \\ -009 \\ +014 \\ +034 \\ +030 \end{array} $ $ -006 \\ +022$	$ \begin{array}{r} -062 \\ -064 \\ -027 \\ -008 \\ +021 \end{array} $ $ -041 \\ -003$	-067 -105 -103 -068 -048 -004	-098 -118 -130 -094 -083 -040 -109 -065	-081 -099 -115 -096 -103 -072 -097 -092

Table LXVIII. exhibits a corresponding table of the Vertical Force, similar in form to Table XXXIX. in vol. II., p. lxix, but with omission of the larger disturbances.

TABLE LXVIII.

	·					TORONT	O ASTRO	ONOMICA	L HOUR	S.		· · · · · · · · · · · · · · · · · · ·	
Months.		Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10 <sup>h</sup> .	11h.
		•00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
January		-0013 -0068 -0081 -0077 -0095 -0075 -0077 -0047 -0023 -0055 -0024 -0028	+0014 -0024 -0046 -0033 -0041 -0067 -0047 +0005 +0046 +0005 +0020 +0013	+0042 +0042 -0001 +0031 +0029 -0005 +0004 +0070 +0090 +0046 +0074 +0054	+0058 +0087 +0042 +0068 +0067 +0077 +0081 +0007 +0109 +0077 +0070 +0072	+0047 +0084 +0056 +0082 +0110 +0116 +0141 +0143 +0110 +0074 +0073 +0060 +0117 +0066	+0056 +0086 +0070 +0077 +0133 +0131 +0159 +0110 +0073 +0072 +0054	+0070 +0081 +0067 +0063 +0137 +0106 +0174 +0133 +0095 +0075 +0065 +0043	+0070 +0074 +0061 +0090 +0093 +0111 +0145 +0097 +0065 +0068 +0055	+0064 +0055 +0055 +0068 +0069 +0074 +0081 +0061 +0073 +0065 +0054	+0050 +0055 +0050 +0027 +0043 +0055 +0064 +0014 +0045 +0061 +0056 +0056	+0033 +0041 +0041 +0035 +0017 +0010 +0008 +0029 +0041 +0042 +0042	+0022 +0027 +0036 -0013 -0018 +0000 -0003 -0033 -0011 +0013 +0022 +0022
Annual Means -	-	-0055	-0013	+0040	+0076	+0091	+0100	+0092	+0084	+0067	+0048	+0028	+0005
· (continued)				·	<u> </u>		2,60	•		·	<u>'</u>	4	<del>'</del>
Marakis		12 <sup>h</sup> .	13h.	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> •	18h.	19 <sup>h</sup> .	20h.	21h.	22 <sup>h</sup> .	23 <sup>h</sup> .
Months.		.00	.00	.00	.00	.00	.00	.00	.00	.00	•00	.00	.00
January February		-0004 +0003 +0003 +0036 -0045 -0029 -0056 -0050 -0017 -0009 -0019	-0022 -0033 -0023 -0041 -0063 -0043 -0074 -0069 -0050 -0051 -0033 -0027	-0028 -0045 -0036 -0036 -0050 -0119 -0100 -0059 -0041 -0046 -0027	-0041 -0036 -0020 -0029 -0043 -0065 -0116 -0091 -0054 -0026 -0050 -0028	-0047 -0038 -0003 -0031 -0026 -0009 -0093 -0091 -0086 -0051 -0056 -0041	-0045 -0026 -0020 +0004 -0003 +0020 -0052 -0067 -0063 -0049 -0050	-0027 -0022 -0011 +0027 +0019 +0004 +0001 -0019 -0040 -0061 -0022 +0006 -0030	-0027 -0010 +0017 +0015 +0001 -0022 -0005 -0023 -0028 -0019 -0033 -0037	-0036 -0011 +0018 -0004 -0027 -0054 -0028 -0045 -0043 -0027 -0046 -0040	-0068 -0082 -0038 -0042 -0074 -0079 -0050 -0074 -0095 -0056 -0077 -0046	-0072 -0119 -0101 -0088 -0125 -0099 -0078 -0095 -0081 -0090 -0068	-0064 -0124 -0128 -0105 -0124 -0095 -0087 -0054 -0049 -0091 -0070 -0059
Annual Means	-	-0019	-0044	-0054	-0050	-0048	-0030	-0012	-0014	-0029	0065	-0091	-0087

From the diurnal variations of the Horizontal and Vertical Forces we obtain those of the Inclination and Total Force, as follows:—

TABLE LXIX.

Diurnal Variation of the Inclination and Total Force, omitting the larger Disturbances.—(The sign + signifies an Augmentation of the North Dip and of the Total Force; the sign - the converse.)

Toronto	IN	CLINATION.	,		TOTAL FORCE.		Toronto
Astrono- mical	Semi-annı	ıal Means.	Annual	Semi-ann	ıal Means.	Annual	Civil
Hours.	April to September.	October to March.	Means.	April to September.	October to March.	Means.	Hours.
H. 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 2 3 4 5 6	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c}                                     $	$ \begin{array}{c}                                     $	Parts of Force.  - '000029  - '000055  - '000067  - '000066  - '000015  + '000009  - '00013  - '000160  - '000144  - '000097  - '000024  + '000064  + '000165  + '000173  + '000146	Parts of Force.  - '000003  - '000025  - '000026  - '000024  - '000022  - '000024  - '000024  - '000078  - '000127  - '000143  - '000098  - '000039  + '000028  + '000086  + '000086  + '000085	Parts of Force '000017 '000040 '000048 '000039 '000019 +- '000008 '000041 '000098 '000142 '000143 '000097 '000031 +- '000046 +- '000102 +- '000125 +- '000131 +- '000115	H. Midnight. 1 a.m. 2 a.m. 3 a.m. 4 a.m. 5 a.m. 6 a.m. 7 a.m. 8 a.m. 10 a.m. 11 a.m. Noon. 1 p.m. 2 p.m. 3 p.m. 4 p.m. 5 p.m. 6 p.m.
7 8 9 10 11	-11·2 - 3·9 - 3·1 - 2·2 - 2·8	-12.7 -6.9 -5.6 -4.6 -2.8	-10.9 - 5.4 - 4.3 - 3.5 - 2.8	+ '000113 + '000078 + '000044 + '000020 - '000009	+ '000083 + '000071 + '000062 + '000045 + '000028	+ '000098 + '000074 + '000053 + '000032 + '000009	7 p.m. 8 p.m. 9 p.m. 10 p.m. 11 p.m.

In the case of the Total Force, the diurnal variation due to the mean effect of the larger disturbances bears so large a proportion to the regular solar-diurnal variation, that when one is superimposed upon the other, and they are viewed in combination,—as is the case when the diurnal variation is obtained from the whole of the observations including the disturbances,—the true character of the regular ordinary solar-variation is altogether masked, and we are in danger of drawing erroneous conclusions in regard to it. Thus, in Vol. I. of the Toronto-Observations, pp. lxx, lxxi, the

diurnal variation being there derived from the whole of the observations, the principal features appeared to be, and were stated as follows:—

A principal maximum at 5 hours.

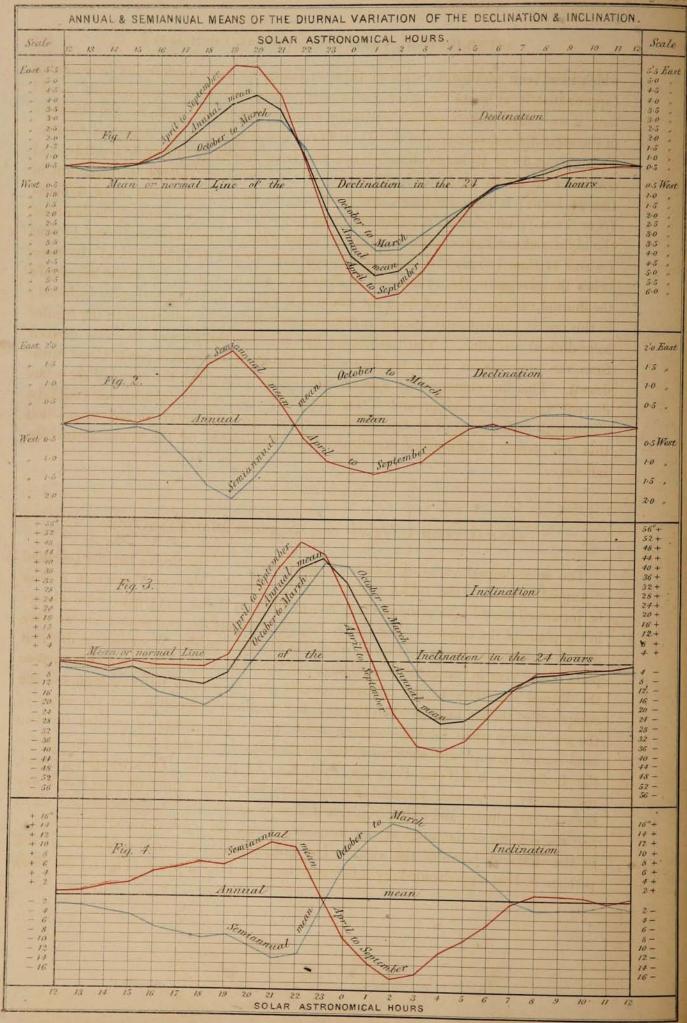
A principal minimum at 15 hours.

A secondary maximum at 18 to 20 hours.

A secondary minimum at 22 or 23 hours.

The first thing we learn by the separation of the disturbances is, that the "principal minimum" so stated as occurring "at 15 hours" is either wholly or in very great part an effect of the disturbances which have their maximum influence in diminution of the force at that hour; and that the true curve of the solar-diurnal variation of the Total Force (like that of the Declination, p. lxxxix) has but one notable inflection in the 24 hours, viz. that which takes place during the hours when the sun is above the horizon. Referring to Table LVII., p. lxxii of the present volume, it will be seen that the diminution of the Total Force at 15 hours occasioned by the larger disturbances averages 000138 parts of the Total Force in every day of the year; whilst from Table LXX., p. xcii, we learn that the diminution of the force at the same hour from the solar-diurnal variation obtained from the observations remaining after the separation and omission of the larger disturbances amounts to not more than '000045 parts of the force. The combination of these two effects, referable as they are to different causes, produced therefore at 15 hours the apparent minimum of the force, amounting to (.000138 + .000045 =) .000183 parts of the force. Now of the two components which form the combined amount, it is obvious that the one depending on the disturbances would be increased, and the other component diminished, in amount, if the values assumed to constitute large disturbances of the Horizontal and Vertical Forces had been taken somewhat smaller than they have been assumed in the preceding pages: and as the remark in p. lxxvii regarding the declination-disturbances is equally true in reference to those of the Total Force, viz. that inasmuch as the larger disturbances separated by the processes described can by no means be supposed to include the whole of the disturbances of the class to which they belong, we must regard the mean diurnal variation obtained from them simply as a "minimum limit," which would certainly be exceeded if we could succeed in separating the minor effects of the same causes;—we may likewise reasonably infer in the case of the Total Force, that were the process of separation of the disturbances carried a little further than it has been in these pages, the small portion of the diminution of the force at 15 hours (.000045) which remains referable to the solar-variation would be progressively reduced, whilst that of the other component would be increased.

The general conclusion, therefore, to which we may be justified in arriving, is, that although we are unable to separate the effects of the two causes so completely as to assign the exact values of each of the components, we are enabled, by the processes



which have been adopted, to separate them so far, as to have no difficulty in assigning (approximately at least) the general character which each of the components would have if we could make a perfect separation between them. In such case the character of the solar-diurnal variation of the Total Force would appear to be nearly as follows: From about 18 or 19 hours (6 or 7 A.M.) the force begins to diminish sensibly, and continues to do so until nearly 23 hours (11 A.M.), when it reaches its minimum in the 24 hours; it then increases, and continues to do so until about 5 or 6 hours (5 or 6 P.M.); after which it remains without any notable inflection during the hours of the night and until after sunrise. The minimum which occurs between 10 and 11 A.M. (nearer 11 than 10) may be taken at between .000140 and .000150 parts of the force below the average in the 24 hours. In Plate IV., Fig. 3., p. xcvi, the dotted line shows the diurnal variation derived from the whole of the observations, disturbances included; in this curve, consequently, the mean disturbance-variation is combined with the regular solar-diurnal variation. The continuous line presents the diurnal variation derived from the observations when the larger disturbances have been separated and withdrawn. This line consequently approximates to the form which the curve of the solardiurnal variation would present if the whole influence of the disturbances could be eliminated. The third or broken line further represents this curve on the supposition that the *larger* disturbances constitute about two-thirds of the whole disturbing influence.

## ANNUAL INEQUALITY OF THE SOLAR-DIURNAL VARIATION.

The solar-diurnal variation obtained from the mean of the twelve months (entitled "Annual Means," in the tables pp. xc to xciii) represents the variation which it may be presumed would take place in every day of the year if the sun's path were always in the plane of the equator. But this is only the case at the equinoxes; and we have now to inquire into the inequality to which the diurnal variation is subject in different parts of the year in consequence of changes in the sun's declination. For this purpose the diurnal variations in the different months may be divided into two groups,—one composed of the six months when the sun has northern declination, and the other of the six months when he has southern declination. The means of each of the two semi-annual groups are shown, for the Declination in Table LXVI., p. xc, and for the Inclination and Total Force in Table LXIX., p. xciii. These means represent, respectively, the diurnal variation at the particular epochs when the sun is half way between the equator and either tropic, and show consequently the character and about half the amount of the range of the inequality which the diurnal variation undergoes in the different parts of the year. The phenomena now under consideration will perhaps be best apprehended by a reference to Plate III., in which (Fig. 1.) the black

curve exhibits (in arc-value) the mean diurnal variation of the Declination in the twelve months, or that which corresponds strictly with the equinoctial epochs; the red curve shows the mean of the six months (April to September) when the sun is between the equator and the northern tropic; and the blue curve the mean of the six months (October to March) when the sun is between the equator and the southern tropic. In Fig. 2. the same phenomena are represented in a different form: the "annual mean," or the diurnal variation at the equinoxes, which is the black curve in Fig. 1., is here drawn as a straight horizontal line, and the red and blue curves are projected at their respective distances from it at the several hours, and for greater distinctness on a scale of twice the magnitude of that in Fig. 1. The annual and semiannual curves of the diurnal variation of the Inclination are represented in a similar manner in Figs. 3. and 4. of the same plate; and those of the Total Force in Figs. 1. and 2. of Plate IV. The red and blue curves have a like signification in regard to season in all the six figures; viz. the red curves correspond to the variation when the sun is north of the equator, and the blue curves to the variation when he is south of the equator.

The annual inequality which is thus manifested has been made, in the case of one of the elements, viz. the Declination, the subject of a particular discussion in papers presented respectively to the British Association and to the Royal Society.—("Reports of the British Association," 1854, pp. 355—368; and "Proceedings of the Royal Society," May 18th, 1854, pp. 67—82.) The object of these communications was to call the early notice of magneticians to the fact that the annual inequality of the diurnal variation of the Declination, as severally derived from the observations at Toronto, St. Helena, and Hobarton, presented so remarkable an accord in character and amount as to give reason to believe that they are general phenomena. The discussion was confined to the one element because the corresponding phenomena of the Inclination and of the Total Force had not then been made out. These are now given for Toronto, and will be so for St. Helena and Hobarton in the volumes now preparing, which will contain the suite of the observations at those Observatories, when the discussion will be resumed.

## SECULAR CHANGE OF THE VERTICAL FORCE.

For this investigation we have the hourly observations of the Vertical Force Magnetometer from February 1844 to June 1848 inclusive. In the following table the monthly means of those observations are collected, having been reduced to a uniform temperature by employing the equivalents for 1° of Fahrenheit obtained in pp. xxii—xxvi.

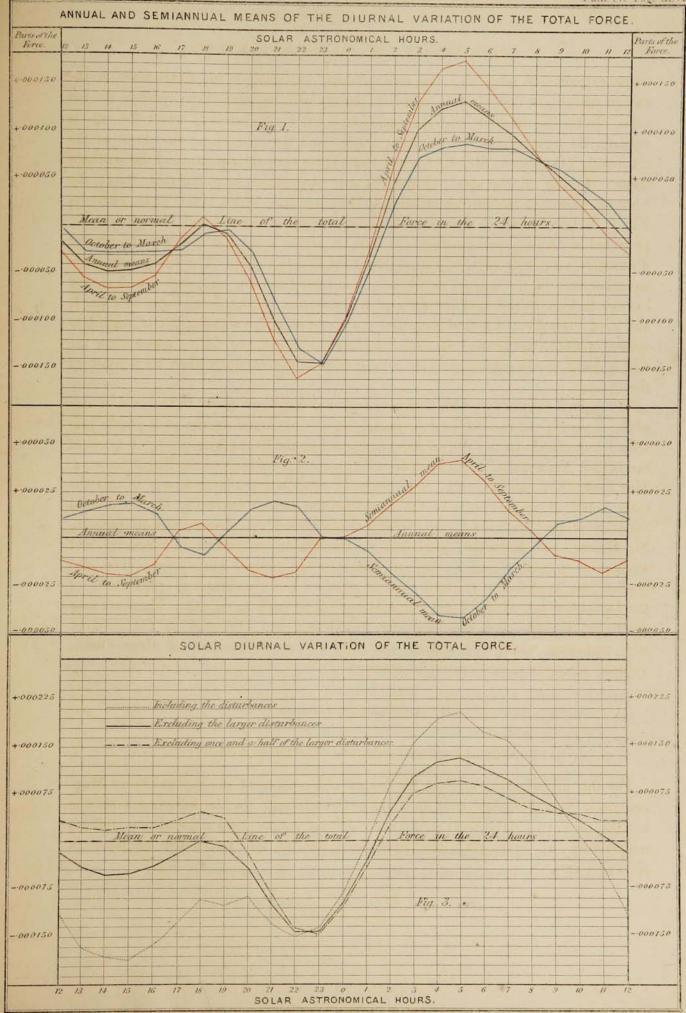


TABLE LXX.

Months.	Monthly	Means.	Equivalent to 1° Tempe- rature.	Reduced to 55°.	Months.	Monthly Means.		Equivalent to 1° Tempe- rature.	Reduced to 55°.
1844: February - March - April - May - June - July - August - September - October - November - December -  1845: January - February - March - April - May -  June - July -  - August - September - October - November - July -  - August -  September - October - November - December - Tebruary - March - August -  September - October - November - December - Tebruary - February - March -  - March -	Sc. Div. 124.9 121.8 99.0 88.0 75.1 60.2 58.5 61.4 83.6 95.1 101.1 99.5 93.3 82.9 72.1 58.6 90.8 68.9 197.9 148.0 157.1 167.1 182.3 174.0 177.0 163.4	44·3 46·5 56·5 60·5 64·8 69·7 68·3 65·1 53·4 47·1 42·7 42·9 48·0 53·6 59·4 67·1 72·0 72·9 63·1 57·6 50·0 40·8	Sc. Div. 1 '80  "" "" "" "" "" "" "" "" "" "" "" "" "	Sc. Div. 105 6 106 5 101 7 97 9 92 7 82 4 79 6 80 7 80 9 79 0 77 4 71 5 70 3 69 6 66 5 112 6 99 5 230 1 162 6 161 8 158 1 156 7	1846: April - May June - July August September October November December 1847: January February March April - May June - July August September October November December 1848: January February March April - May June - July August September October November December 1848: January February March April - May June -	Sc. Div. 214.0 198.3 185.7 173.7 170.8 175.9 197.1 200.6 210.2 209.0 203.4 200.7 188.9 171.8 161.9 143.1 145.4 160.8 172.5 179.8 188.3 187.2 182.5 177.7 165.9 148.9 133.7	\$\frac{4}{54}\$\cdot 7\$ 62.8 68.6 73.6 73.7 69.5 56.5 56.5 52.8 43.0 40.3 42.3 44.6 51.4 60.3 63.9 73.0 70.4 56.1 51.6 45.2 43.4 43.9 46.7 53.3 61.5 68.2	Sc. Div. 1 64  "" "" "" "" "" "" "" "" "" "" "" "" "	Sc. Div. 213 · 5 211 · 1 208 · 0 204 · 2 201 · 5 199 · 7 197 · 0 190 · 5 184 · 9 182 · 6 183 · 6 183 · 6 170 · 7 172 · 9 174 · 3 174 · 2 172 · 2 168 · 2 164 · 3 164 · 1 159 · 6 155 · 3

Omitting June, July, and August 1845, on account of breaks in the continuity, we have in this table three continuous series, each comprising several months, during which the Magnetometer was undisturbed; viz. February 1844 to May 1845 inclusive, 16 months; September 1845 to March 1846 inclusive, 7 months; and April 1846 to June 1848 inclusive, 27 months. In each of these periods the mean monthly scale readings, when reduced to a uniform temperature, decreased, indicating (on the supposition of the magnetism of the needle having been constant) a diminution in the amount of the terrestrial Vertical Force. The mean value of a scale division in the two first series was 000063 parts of the Vertical Force, and in the third series 000066 parts of the force. The first series will then furnish 16 equations for the value of x, the mean monthly decrease in scale divisions; the second series 7 equations, and the third series 27 equations for the same. From these we have the values of x respectively as follows:—

For the first period of 16 months, x = 2.64 scale divisions. For the second period of 7 months, x = 1.47 , , , For the third period of 27 months, x = 2.06 , , ,

The mean of the 23 months composing the first and second periods, allowing weight proportioned to the number of months in each, is 2.28 scale divisions per month, = .000143 parts of the force. The mean of the 27 months composing the third period is 2.06 scale divisions, = .0001365 parts of the force. Hence, on the aforesaid supposition that the magnetism of the needle was constant, we may take the mean between two results which differ so little from each other, viz. .00014, as the approximate monthly diminution of the Vertical Force from February 1844 to June 1848 inclusive, corresponding to an annual decrease of .0017 parts of the force.

The degree of regularity with which the Vertical Force Magnetometer indicated this decrease may be estimated by the probable error of the monthly decrease in the mean scale readings during the third and longest period, which was of 27 months' duration. The monthly decrease was 2.06 scale divisions; the probable error of 2.06 is  $\pm$  0.44, which includes the irregularities occasioned by the disturbances. Judging from the very satisfactory performance of the Toronto instrument which is here indicated, it would appear that the capabilities of the Vertical Force Magnetometer, when used with due precaution and care, have been generally very much underrated.

It may be desirable to show how little the question, so important in many other investigations, of the omission or retention of the larger disturbances of the Vertical Force, affects the indication of the amount of the secular change of that element, derived from an unbroken series of observations of the Vertical Force of many months' continuance. The monthly means reduced to 55° Fahrenheit, from April 1846 to June 1848, in page xcvii, were taken from the whole of the observations of that period, and consequently included the disturbances; but when the larger disturbances, or all those which exceed 4.0 scale divisions from the respective normals, are withdrawn, the monthly means for the same period, also at 55° Fahrenheit, become as follows:—

TABLE LXXI.

		Scale Months.		Scale Divisions.	Months.	Scale Divisions.	
April - May June July August - September - October - November - December -	-	213.0 211.1 208.4 205.2 203.4 200.8 200.6 197.2 190.4	1847:  January - February - March - April May - June July - August - September -		184.6 182.6 183.6 183.1 180.5 176.5 172.8 171.1 172.2	1847: October November December 1848:  January February March April May June	173.9 173.8 171.5 168.3 165.4 164.2 163.3 159.9 155.6

From these we obtain by least squares, as the most probable value of the monthly decrease, 2.08 scale divisions, with a probable error of  $\pm 0.44$ , both being almost identical with the results stated in p. xcviii as obtained from the monthly means of the observations when the disturbances were retained.

We are naturally led by the satisfactory performance of the Vertical Force Magnetometer between the years 1844 and 1848 to examine the observations made with it at an earlier period, which did not receive perhaps their due consideration at the time, from the belief, which appears to have been pretty general, that this instrument was " unavailable for the determination of changes of long period;" and from the circumstance that the Bifilar Magnetometer, from which so much more was expected, did not yield at Toronto results from which any satisfactory conclusion whatever could be arrived at in regard to the secular change of the other component of the Total Force, viz. the Horizontal Force; for which a distinct instrument, the Unifilar, was in consequence supplied. Reverting to Vol. I. of the Toronto Observations, pp. liii to lvii, we find the following to be the history of the early observations of the Vertical Force Magnetometer:—During the first year, viz. September 1840 to September 1841, the magnet was occasionally (six times in the twelve months) dismounted, for the purpose of having its time of vibration in the horizontal plane ascertained. On each of these occasions, consequently, the readings were disconnected, and the continuity of the series interrupted. From October 1841 to October 1843, (at which latter date the magnet was again dismounted to examine the effect of changes of temperature on its magnetic moment,) the magnet was undisturbed, except by its being made to vibrate from time to time in small arcs, in order to ascertain its time of vibration in the vertical plane. For this purpose it was not necessary to touch the magnet, as it was put in vibration by another magnet, and was brought back by the Y's to its proper position on the supports. The frequency with which this examination was made and the times of vibration severally deduced therefrom, are shown in Vol. I., Table XXXVIII., pp. liv and lv, and in Vol. II., Table XXXV., p. lxi. We have here, therefore, another period of 25 months (October 1841 to October 1843 inclusive) in which, assuming, as before, the constancy of the magnetism of the Vertical Force needle, we know of no cause (excepting variations of temperature) to interfere with the indications of the instrument as a true measure of the variations of the Vertical force. The monthly means of the observations, and of the corresponding temperatures, are contained in the following table. They were taken two-hourly from October 1841 to June 1842, and hourly from July 1842 to October 1843.

TABLE LXXII.

Months.	Scale Divisions.	Tempe- rature.	Months.	Scale Divisions.	Tempe- rature.	Months.	Scale Divisions.	Tempe- rature.
1841: October - November - December -  1842: January - February - March - April - May - June -	96.7 102.7 109.5 107.1 106.1 97.0 86.6 81.8 72.2	54.3 48.6 42.3 41.1 41.7 47.9 54.4 57.0 61.9	1842: July August - September - October - November - December -  1843: January - February - March -	57.8 53.9 58.0 65.4 76.3 81.9 75.6 81.5 78.6	69'3 69'3 63'0 56'7 47'8 42'0 45'1 39'4 41'5	1843: April - May June - July August - September - October -	63°2 55°4 43°9 32°8 26°5 29°9 39°5	53.0 57.3 63.7 70.1 71.3 65.6 57.1

Putting Y' for the most probable monthly mean-reading in October 1842, x for the monthly change, y the equivalent in scale divisions for 1° of temperature, and a and b coefficients respectively of x and y, a being reckoned in months from the mean epoch, — if earlier and + if later, and b reckoned in degrees of Fahrenheit from a standard temperature of 55°, — if lower and + if higher, we have 25 equations, from which by least squares we obtain Y' = 70.6 scale divisions, x = -2.19 scale divisions, and y = -1.32 scale divisions.

From the contents of Table XXXVIII., Vol. I. pp. liv and lv, we find the scale coefficient (k) during this period to have averaged, with slight and apparently accidental variations, '0000935; the magnetic force of the needle having been stronger than in the subsequent period from February 1844 to May 1845, the experiments between October and February 1844 to ascertain the temperature correction having had the effect, as is frequently the case, of sensibly weakening the magnet. The value just found for y (-1.32), multiplied by k, gives .000123 as the variation, in parts of the force, of the magnetic moment of the needle by a change of 1° of Fahrenheit. This is a somewhat higher value than '000110, found by subjecting the later observations to a similar process (see ante, p. xxvii), but the difference is small, and quite unimportant in the present investigation. The mean monthly decrease of the Vertical Force is  $2.19 \times .0000935 = .00020$ ; or the annual decrease = .0024. This is also a somewhat larger annual decrease than was found by the later observations, but for this there may be an assignable reason. A secular change of the Vertical Force may proceed from either of two sources (or from both conjointly); viz. a secular change in the Earth's Total Force, or a secular change of the Inclination. Whilst whatever secular change may exist in either or both these elements preserves

a uniform rate, the secular change of the Vertical Force will be uniform also; but if the secular change of either varies, that of the Vertical Force will vary also. Now we have reason to know from the monthly observations of the Inclination between January 1841 and December 1855, discussed in the sequel of this volume, that about the beginning of 1844 the secular change of the Inclination altered from a previously existing annual decrease, to an annual increase. Assuming, therefore, the secular change of the Earth's Total Force, whatever it may have been, to have had the same value in 1841—1843 as in 1844—1848, then, in consequence of the alteration in the secular change of the Inclination, the Vertical Force if losing must have lost more (or if gaining must have gained less) in 1841—1843 than in 1844—1848. The observations of the Inclination would therefore lead us to expect what we have found, viz. that the apparent loss of the Vertical Force, as it may be inferred from the Magnetometer observations in 1841—1843 (assuming the constancy of the magnetism of the needle), should be greater than in 1844—1848.

Thus far in the discussion it has been assumed that the magnetism of the Vertical Force needle was constant; we have now to examine, as far as the materials which have been furnished for the purpose will permit, how far this was the case. The data which we possess are the times of vibration in the horizontal or in the vertical planes observed at particular epochs in the course of the Magnetometer observations. will commence with the times of horizontal vibration, as being those best suited at Toronto to give a satisfactory result. Now, to ascertain whether a change may have taken place in the magnetic moment of a needle during a certain period from the times of horizontal vibration at its commencement and close, and what that change may have been, it is necessary to know by some independent mode the alteration which may have taken place in the interval in the terrestrial Horizontal Force itself. When the Observatories were first instituted, it was hoped that the secular changes of the Horizontal Force might have been derived from the observations made with the Bifilar magnet; but the experience of the two or three first years led to the substitution for that purpose of a distinct apparatus and a special course of observation. It was not until January 1845 that the series of determinations of the absolute Horizontal Force were commenced with the Unifilar Magnetometer, which had been sent from Woolwich to Toronto for the purpose of supplying this failure in The observations with the Unifilar, discussed in the sequel of this the Bifilar. volume, show that from January 1845 to December 1852 inclusive the mean annual decrease of the terrestrial Horizontal Force was '00371 in absolute measure; or  $\frac{\Delta X}{X} = -\frac{.00371}{3.53} = -.00105$ ; and as it further appears by the monthly determinations of the Inclination, also discussed in the sequel of this volume, that we may assume the annual increase of the Inclination from the commencement of 1844 to the end of 1855 to have been approximately uniform, and to have averaged 0'·8, we may perhaps venture to extend the estimate of the annual decrease of the Horizontal Force  $\left(\frac{\Delta X}{X} = -0.0105\right)$  from January 1845 to December 1852 to one year beyond those limits—namely, 1844; whereby we may obtain a standard of comparison for the times of horizontal vibration of the Vertical Force needle observed between February 1844 and June 1848, applicable to the whole of the Magnetometer observations in Table LXX.

(It will be seen by the observations of the Inclination that we should not be justified in extending the same annual increase of the Inclination to the years preceding 1844; and since the annual change of the Horizontal Force is in part dependent on that of the Inclination, we are not possessed of sufficient data to permit a satisfactory deduction of the rate of change of the magnetism of the needle to be derived from its horizontal vibrations from an earlier date than February 1844.)

In November 1843, and to the beginning of February 1844, the Vertical Force needle was dismounted for the purpose of having experiments made on its temperature correction. By these experiments the magnetism of the needle was considerably weakened: its time of vertical vibration, which had been 10s. 31 in October 1843, was found in February 1844, 12s · 79 (Vol. II., Table XXXV., p. lxi). It happened accidentally that at the time when the second Toronto volume was published, it was not known at Woolwich that any observations had been made on the time of horizontal vibration between September 30, 1841, and March 26, 1846 (as stated in Vol. II., p. lxi). It was obvious, however, from the difference in the times of vertical vibration referred to above, that the needle had sustained a considerable loss of force during the temperature experiments (October 1843 to February 1844), and that this must have been known to Captain Younghusband, who was then Director of the Observatory. Believing, from the usual careful habits of that officer, that it was very unlikely that he should have remounted the needle for a fresh series of Magnetometer observations without previously observing its time of horizontal vibration, I had the "Miscellaneous Register Book" examined, in which a record of the observations, if made, would probably be found, and which book had been sent home to Woolwich when the Observatory was transferred to the provincial authorities. I have thus ascertained that the time of horizontal vibration was observed, as I had expected, on the 5th and 6th of February 1844, before the needle was remounted, and again in the beginning of June 1845, when the first of the continuous series in Table LXX. was completed. The time of horizontal vibration was again observed on the 26th of March 1846, when the second continuous series terminated. The needle was then remagnetized; its time of horizontal vibration observed before it was remounted, in the beginning of April 1846, for the third series; and again observed on the 28th of February 1849. The times of vibration at these several dates were as follow:—

```
      1844, February 5th and 6th
      - Three observations
      - 11 · 460.

      1845, June
      - - - , , - 11 · 490.

      1846, March 26th
      - - , , - 11 · 4965.

      1846, April 1st
      - - , , - 10 · 2879.

      1849, February 28th
      - Two observations
      - 10 · 3649.
```

For the change in the magnetic moment of the needle in the first of the three continuous series in Table LXX. (viz. of 16 months, from February 1844 to May 1845 inclusive) we have consequently an increase in the time of the needle's horizontal vibration of  $(11^s \cdot 490 - 11^s \cdot 460 =) 0^s \cdot 030$  in 16 months, or  $\cdot 0223$  in a year, corresponding to a proportionate decrease of  $\cdot 00389$  in parts of the force. But the Horizontal Force itself decreased during the same period at the average rate of  $\cdot 00105$  in a year (p. ci). We find, therefore, the proportionate loss of force of the needle between February 1844 and June 1845 to have been at the mean annual rate of  $(\cdot 00389 - \cdot 00105 =) \cdot 00284$ . Now it has been shown (p. xcviii) that in the same period the monthly scale-readings of the Vertical Force Magnetometer diminished at the average rate of  $2 \cdot 64$  scale divisions in a month, or  $31 \cdot 68$  in a year, corresponding to  $(31 \cdot 68 \times \cdot 0000628 =) \cdot 00199$  parts of the force; therefore the true secular change of the Vertical Force in those 16 months, allowing for the change in the magnetism of the needle, was an *increase* at the mean rate of  $(\cdot 00284 - \cdot 00199 =) \cdot 00085$  in a year.

For a similar deduction during the second continuous series in Table LXX. (seven months, from September 1845 to March 1846) we have an increase in the time of horizontal vibration of  $(11^s \cdot 4695 - 11^s \cdot 460 =) 0^s \cdot 0095$  in seven months, or  $\cdot 0163$  in a year, corresponding to a proportionate decrease of  $\cdot 00284$  in parts of the force; we have, therefore, a proportionate loss of force of the needle between September 1845 and March 1846 of  $(\cdot 00284 - \cdot 00105 =) \cdot 00179$ . The mean monthly decrease in the scale-readings of the Magnetometer (p. xcviii) was  $1\cdot 47$  scale divisions, or  $17\cdot 64$  in a year, corresponding to  $(17\cdot 64 \times \cdot 0000628 =) \cdot 00111$  parts of the force. Therefore the secular change of the Vertical Force in these seven months was an increase at the mean rate of  $(\cdot 00179 - \cdot 00111 =) \cdot 00068$  in a year.

For the third and longest series in Table LXX. (27 months, April 1846 to June 1848 inclusive) we have a mean rate of increase in the time of the needle's horizontal vibration, derived from the observations of the 1st of April 1846 and the 28th of February 1849, of  $(10^{s} \cdot 3649 - 10^{s} \cdot 2879 =) 0^{s} \cdot 077$  in 35 months, or  $\cdot 0264$  in a year, corresponding to a proportionate decrease of  $\cdot 00513$  in parts of the force; and therefore an annual diminution of the magnetic moment of the needle of  $(\cdot 00513 - \cdot 00105 =)$   $\cdot 00408$  in a year. The mean monthly decrease in the scale-readings of the Mag.

netometer between April 1, 1846, and June 30, 1848, was 2.08, or 24.96 in a year; and the corresponding decrease in parts of the force  $(24.96 \times .0000662 =) .00165$ ; therefore the secular change of the Vertical Force in this period, allowing for the change in the magnetism of the needle, was an increase at the mean annual rate of (.00408 - .00165 =) .00243 parts of the force.

Between February 1844 and June 1848 we have, therefore, three continuous series with the Vertical Force Magnetometer, by each of which we find the secular change of the Vertical Force at Toronto to have been an increase. The results collected are as follow:—

February 1844 to May 1845 inclusive, 16 months; rate of annual increase '00085 September 1845 to March 1846 ,, 7 ,, '00068 April 1846 to June 1848 inclusive 27 ,, '00243

Giving each of these results weight proportioned to the time it represents, we have a mean annual increase of the Vertical Force derived from 50 months of Magnetometer observations of .00168 parts of the force.

Secular Change of the Total Force.—We have thus the mean annual secular change of the Vertical Force between February 1844 and June 1848,  $\frac{\Delta Y}{Y} = + \cdot 00168$ ; and from the monthly determinations of the absolute Horizontal Force, discussed in the sequel of this volume,  $\frac{\Delta X}{X}$  at the same period =  $-\cdot 00105$ ; and as  $\frac{\Delta \phi}{\phi} = \cos^2 \theta \cdot \frac{\Delta X}{X} + \sin^2 \theta \cdot \frac{\Delta Y}{Y}$ , and  $\theta$  at the mean epoch = 75° 16′, we have—

$$- \cdot 00105 \cdot \cos^2 75^{\circ} \cdot 16' + \cdot 00168 \cdot \sin^2 75^{\circ} \cdot 16' = + \cdot 0015 = \frac{\Delta \phi}{\phi}$$

or  $\Delta \phi = + .0015 \times 13.9 = + .0208$ , the annual increase of the Total Force in absolute measure.

The conclusions to be drawn from the times of vertical vibration, in regard to the loss of magnetic force which the needle sustained during the Magnetometer observations (and, correlatively, to the increase of the Earth's Vertical Force during the same period), must necessarily be less satisfactory than those derived from the times of horizontal vibration, because we have no independent measure, by a distinct apparatus (as we have in the case of the Horizontal Force), of the change which the Vertical Force underwent in the interval during which the vertical vibrations measured the constant or varying product of the Earth's Vertical Force into the force of the needle. In referring to Vol. II., Table XXXV., p. lxi, it will be seen that the monthly series of observations of

the times of vertical vibration between February 1844 and June 1848 may be divided into two distinct portions; the first comprising from February 1844 to March 1846 (the needle having been remagnetized on the 28th of March 1846), and the second portion comprising from April 1846 to June 1848. In the first interval the small decrease which will be seen to have taken place in the times of vibration indicates an increase,—and on the other hand the small increase in the times of vibration in the second interval indicates a decrease,—in the product of the magnetic force of the needle into the Earth's Vertical Force. The increase in the one interval and the decrease in the other are both extremely small, and, when the two intervals are taken together, in great measure counterbalance each other. We may therefore regard the times of vertical vibration as indicating a very near approach to constancy in the conjoint forces of the earth and of the needle. But the combined evidence of the Magnetometer observations and of the times of horizontal vibration has shown, that throughout this whole period the needle was losing force, and therefore the earth must have gained the force which the needle lost,—or the times of vertical vibration would not have approached so nearly to constancy. The times of vertical vibration are therefore in accordance with those of horizontal vibration, in manifesting that the Vertical Force of the earth was increasing from 1844 to 1848; though, for many reasons, they are less suited than the times of horizontal vibration to give, by their combination with the Magnetometer observations, a satisfactory result in regard to the rate of increase.

It is much to be desired that the subject which has been here considered should receive a further elucidation by the continuance of observations of the same kind at the Toronto Observatory, which has now passed into the hands of a provincial administration, and retains the instruments with which the valuable observations which have now been discussed were made. To these the method since devised by Dr. Lloyd for the absolute determination of the Vertical Force and of its variations from time to time,—and of the Total Force and its variations,—by direct observation, would be an important auxiliary. It is a research which might also well repay the Directors of the Harvard College Observatory in Cambridge, in the United States, should they think fit to resume their magnetical observations, which commenced with such good promise, but were too soon abandoned.

It has been conceived that the progressive approach of the minor maximum of the force, now in the eastern part of Siberia and moving towards America, should augment the force at the American maximum, and that consequently the force at the American maximum ought at the present epoch to be increasing. If this supposition be correct, the observed increase of the total force at Toronto may be a consequence of the general increase of the total force in the vicinity of the American maximum, from the nearer approach of the two points of maxima to each other; or it may be a consequence of a systematic movement of translation of the isodynamic lines in the same vicinity;

or it may be due in part to each of these causes. The solution of such questions, which are of the first importance in relation to the secular change which the general magnetic condition of the earth is undergoing, seems imperatively to require the employment of cotemporaneous or nearly cotemporaneous observations at more than one locality in the region surrounding the maximum. In this respect Toronto is at present unaided: there is, indeed, a Magnetic Observatory at Sitka, on the north-west side of the American continent; but, unfortunately, we are not supplied by it with corresponding observations to those which have been here discussed, as the central Observatory at St. Petersburg did not succeed in constructing a Vertical Force Magnetometer. Amongst the British possessions in that quarter of the globe, perhaps Newfoundland presents practically the most eligible site for a Magnetic Observatory to be maintained in action for at least five or six years.

#### HORIZONTAL FORCE IN ABSOLUTE MEASURE.

The second volume of the Toronto Observations contains, in pp. 595—633, a detailed statement of the monthly observations made with the Unifilar Magnetometer to determine the value of the Horizontal Force in absolute measure, and its annual and secular variations. In the reference made to those observations in the early part of the same volume, pp. lxxxix and xc, it is stated that "as absolute determinations the "results can only yet be considered as provisional, as the exact values of the distances between the centres of the suspended and deflecting magnets, and of the constants of inertia and of induction, will have to be finally determined with the new standard "scale and weights on the return of the Unifilar to England."

Since the publication of that volume, the Unifilar has been brought back to Woolwich, and the graduation of its scale has been compared by Mr. Welsh, of the Kew Observatory of the British Association, with a certified copy of the British standard scale belonging to that observatory. The weight and dimensions of the two rings, employed at Toronto to determine the moment of inertia of the deflecting magnet and the stirrup in which it was suspended during the vibration-observations, have also been examined by Mr. Welsh, and their values assigned in terms of authenticated copies of the British standards of weight and measure.

Mr. Welsh's memorandum of the result of his measurements is as follows:---

Measurement of the Distance-arms of the Unifilar of the Toronto Observatory, and of the Half-length of the Magnet.

Distance of the point, 1 foot, on the one arm, to the point, 1 foot, on the other arm, = 23.960 inches at  $62^{\circ}$ .

The two arms are not in this instrument of one continuous piece of metal; it is therefore necessary in this case to consider the error of the distance as a constant error at all distances. It appears, therefore, that all the observed distances should be corrected by -0.001666 foot.

The half-length of the magnet I. 18 = 0.1526 of a foot, with a probable error arising from irregularity of figure of  $\pm .0001$  foot.

Dimensions of the Inertia Rings employed at the Toronto Observatory.

Ring No. 1.

Weight, 288.900 grains; external diameter, 2.9886 inches at 62°; internal diameter, 2.6097 inches at 62°.

Ring No. 3.

Weight, 358·462 grains; external diameter, 3·6472 inches at 62°; internal diameter, 3·2626 inches at 62°.

Kew Observatory, May 1856.

J. Welsh.

1. In respect to the deflection distances. In different experiments the near end of the deflecting magnet was placed at  $1\cdot 0$  ft.,  $1\cdot 1$  ft.,  $1\cdot 2$  ft., and occasionally at  $1\cdot 3$  ft. from the centre of the suspended magnet, as measured on the graduated arms of the Unifilar; corresponding by Mr. Welsh's memorandum to  $0\cdot 9983$  ft.,  $1\cdot 0983$ ft.,  $1\cdot 1983$  ft., and  $1\cdot 2983$  ft. of British measure at  $62^\circ$  Fahrenheit. To these must be added in each case half the length of the deflecting magnet, making the deflection distances in the different experiments respectively  $1\cdot 1509$  ft.,  $1\cdot 2509$  ft.,  $1\cdot 3509$  ft., and  $1\cdot 4509$  ft. On reference to Vol. II. p. 634, it will be seen that these differ only  $\cdot 0001$  in each case from the distances as measured by Captain Lefroy at Toronto in 1851, and employed by Captain Younghusband in computing the values of  $\frac{m}{X}$  in pp. 593–633, except that the temperature of the scale on which the measurements were made by Captain Lefroy at Toronto was  $50^\circ$  Fahrenheit, and in Mr. Welsh's measurements  $62^\circ$  Fahrenheit. These differences are so minute, that it has not been considered expedient to make any alterations in the values of  $\frac{m}{X}$  as computed by Captain Younghusband.

2. The weight and dimensions of the inertia rings as determined by Mr. Welsh, do not harmonize quite so well with the memorandum which accompanied the rings when sent to Toronto by their maker, Mr. William Jones, of Rupert Street; and it has therefore been necessary to recompute the moment of inertia of the deflecting magnet with the stirrup in which it was placed for the experiments of vibration. Employing Mr. Welsh's measurements, K', the moment of inertia of the ring, = 3.94785 for ring 1, and 7.45135 for ring 3. Substituting these values for 3.93024 and 7.43213, derived from previous measures, and employed by Captain Younghusband in calculating the log. value of  $\pi^2 = 1.6558266$  as given in the memorandum in Vol. II. p. 634, we obtain the corrected log. values, viz. 1.65724 by ring 1, and 1.65748 by ring 3; and The values of  $T^2$  and  $T^1$  (the times of by the mean of the two rings, 1.65736. vibration of the magnet with and without the rings) employed by Captain Younghusband were obtained by three experiments of vibration with the large ring, three with the small ring, and three with the magnet alone, made in the autumn of 1845.

The results of the whole series, thus finally computed, are given in the following table:—

#### TABLE LXXIII.

Abstract of the Monthly Determinations of the Horizontal Force in absolute Measure.—The "Times of Vibration" are corrected for the Torsion of the Suspension Thread and the Rate of the Chronometer, and are reduced to an uniform Temperature of 50°, and to the Mean Biftlar Reading on the Day of Observation. The Values of  $\frac{m}{X}$  are obtained from the Distances and from the Angles of Deflection stated in detail in Vol. II. pp. 596—632. The Angles of Deflection are reduced to the same uniform Temperature as the Times of Vibration, and to the Mean Biftlar Reading on the Day of Observation.

Date,			Time	No. of	Logarithm	Horizontal Force	
			of Vibration.	Experiments of Vibration.	m X.	$\frac{m}{X}$	in absolute Measure (British Units).
1845:			s.				
January	15	-	4.8132	1	0.29249	9'19304	3.2460
,,	16	-	4.8126	1 1	0'29260	9'19230	3.5494 >3.5472
,,	17	-	4.8176	1	<b>0°</b> 29170	9.19216	3.5463
February	14	- 1	4.8182	1	0.29154	9.19245	3.5444
,,	15	-	4.8138	1	0.29239	9'19295	3.5459 > 3.5471
,,	17	-	4.8115	1	0.29286	9.19217	3.2210
March	14	-	4.8163	1	0.29194	9.19243	3.5462 $3.5471$
,,	15	- 1	4.8176	1	0.29171	9.19174	3.5480 $3.5481$
$\mathbf{A}_{\mathbf{pril}}$	14	-	4.8461	1 1	0.28658	9.18782	3.5431
,,	15	-	4.8467	1	0.28646	9.18755	3.5437 > 3.5446
"	16	-	4.8449	1 1	0.28680	9.18705	3.2471

TABLE LXXIII.—continued.

			Time	No. of	Logarithm	ie Values.	Horizontal Force
Date	·.		11116	Experiments of			in absolute Measure
			of Vibration.	Vibration.	m X.	<u>m</u>	(British Units.)
					<i>"</i> "	$\overline{\mathbf{x}}$	
1045							
1845: May	13	-	s. 4 <b>'</b> 8485	1	0.28615	9.18692	3'5450)
•	14	-	4.8469	1	0.28644	9.18578	3.5509 > 3.2481
"	15	•	4.8501	i	0.28587	9.18578	3.2482
June	14	_	4.8489	î	0.28608	9.18619	3.2477)
	16	-	4.8501	î	0.28587	9.18504	3.5515 > 3.5514
" "	17	-	4.8486	i	0.28613	9.18444	3.5550
July	14	-	4.8553	l i	0.28493	9:18431	3.5507
"	15	-	4.8631	1 1	0.28354	9.18283	3.5511 >3.5508
,,	16	-	4.8654	1 1	0.28313	9.18255	3.5505
August	15	-	4.8671	1 1	0.28283	9.18287	3.5480
"	16	-	4.8722	1	0.28192	9.18213	3.5473 > 3.5473
"	18	-	4.8750	1	0'28142	9.18182	3.2462
September	16	-	4.9164	2	0.27407	9.17412	3.2479
,,,	17	•	4'9194	2	0.27354	917408	3.5460 > 3.5466
. ,,	18	-	4.9199	1 1	0.27345	9.17422	3.5452)
$\mathbf{October}$	14	-	4.9027	1 1	0.27650	9 17740	3.5445)
,,	15	-	4 9042	1 1	0.27623	9.17657	3.5467 > 3.5466
<b>,,</b>	16.	-	4.9020	1	0.27662	9.17653	3.5485)
November		-	4.9053	1 1	0.27604	9.17598	3:5484)
"	14	-	4 9118	1 1	0.27489	9.17490	3.5481 3.5471
_ "	15	-	4.9141	1	0.27448	9.17530	3.5448)
December		-	4.9427	1	0.26943	9.16995	3.2461
"	16	-	4.9488	1	0.26836	9.16974	$3.5425 \ 3.5479$
**	17	-	5.0321	1	0.25386	9.15418	3 3468
"	18	-	5.0171	1	0.25645	9.15450	3.5562)
1846:							_
January	14	-	5.0083	2	0.25798	9.15778	3.2490
"	15	-	5.0145	2	0.25690	9.15656	3.2495
"	16	-	5.0227	1	0.25548	9.15614	3.5454 >3.5475
"	17	-	5.0204	1	0.25588	9'15692	3.2439
· · · · · · · · · · · · · · · · · · ·	22	-	5.0215	1	0.25569	9.15623	3.5460
February	14	-	5.0145	2	0.25691	9.15898	3.5399
"	16	•	5.0123	2	0°2567 <b>5</b> 0°25644	9.15842 9.15780	$\begin{pmatrix} 3.5414 \\ 3.5426 \end{pmatrix}$
7\T 1-	17	-	5.0172	$egin{bmatrix} 2 \\ 2 \\ 2 \end{bmatrix}$	0.25031	9·1527 <b>5</b>	3.5403
March	14 16	-	5°0498 5°0454	9	0.25158	9.15273	0.5404
"	17	-	5 0530	$\frac{2}{2}$	0.25026	9.14999	3.5424 3.5441
"	18	-	5.0602	$\frac{2}{2}$	0.24902	9.14994	3.5444
A muil	15	-	5.0795		0.24572	9.14702	3.2428)
${f A}{ m pril}$	17 17	_	5.0802	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0.24560	9.14706	3.2422 >3.2414
1)	18	-	5.0824		0.24525	9.14742	3.5392
May	13	<u>-</u>	5.0822		0.24520	9.14668	3.2527
	14	-	5.0840		0.24495	9.14687	3.2403 >3.2414
"	16	-	5.0827	$ $ $\bar{2}$	0.24517	9 14670	3.2419
$\mathbf{June}$	16	-	5.0854	$\frac{1}{2}$	0.24471	9.14536	3.5455)
	17	_	5.0856	$\overline{2}$	0.24467	9.14540	3.5452 > 3.5458
,,	18	-	5.0859	$\overline{2}$	0.24462	914498	3.5467
July	14	_	5.0910	2	0.24375	9.14448	3 5452
-	$\overline{15}$	-	5.0922	$\overline{2}$	0.24355	9.14483	3.5429 > 3.5446
"	16	-	5.0918	2	0.24362	9114420	3.5458
"							_

TABLE LXXIII.—continued.

		Time	No. of	Logarithn	nic Values.	Horizontal Force
Date,	. [	Time	Experiments of		}	in absolute Measure
24101	1	of Vibration.	Vibration.	m X	$\frac{m}{X}$	(British Units).
	1			m A	X	
1040		-				
1846: <b>A</b> ugust 13	l	s. 5·1016	2	0.24194	9.14382	3.5405
•	•	5.1030	2	0.24194 $0.24171$	9 14366	3.5401 >3.5397
" 14 " 1 <b>5</b>	-	5 1030	9	0.24171		3.5384
	-	5 1040 5 1144	9	0.23977	9.14392	
September 14	-	5.1112	9	0.24026	9.14246	$\left\{\begin{array}{c} 3.5372 \\ 3.5397 \end{array}\right\} 3.5390$
" 16	-	<b>5.1110</b>	9	0.24035	9'14234	$\begin{bmatrix} 3.5402 \\ 3.5402 \end{bmatrix}$
October 12		5.1170	9	0.23933	9'14228	3.5387
19		5'1169	9	0.23934	9'14165	
″ 1 <i>4</i>		5.1163	2 2 2 2 2 2 2 2	0.23945	9°14197 9°14149	3:5374 3:5386 3:5398
November 16	-	5.1177	1 1	0.23921	9.14028	3 5438
17		5.1180	2	0.23916	9'14229	3.5354 > 3.5360
″ 19	- [	<b>5</b> 1209	2 2	0.53866	9.14245	3.5327
December 15		5.1196	2	0.53888	9.14058	3.5412)
16	_	5.1185	$\begin{vmatrix} 2\\2 \end{vmatrix}$	0.23914	9*14006	3.2444 >3.2433
" 17		5.1174	$\frac{1}{2}$	0.23926	9'14021	3.2443
. "		0 11,1		0 20020	3 14021	0 0110)
1847: January 18		5*1261	9	0.23778	913899	3.2432
10		<b>5</b> .1240	2 2	0.23814	9 13881	9.5454
	- 1	5.1266	$\frac{1}{2}$	0.23770	9.13916	3.5422 3.5435
" 20 " 21	-	5.1234	2	0.23824	9.13943	3.2432
February 15	-	5.1283	1 1	0.23741	9.13888	3.5422
" 16	-	5'1293	1 î	0.23724	9.13892	3.2413
" 17	-	5'1280	ī	0.23746	9.13920	3.2410 >3.2426
" 18	-	5.1237	i	0.53819	9.13865	3.2463
<b>"</b> 19	- ]	5.1281	1	0.23744	9.13884	3.5424
March 15	-	5.1323	1	0.23673	9.13993	3.2352
" 16	-	5*1286	1 1	0.23736	9.13903	9.5/19
" 17	- [	5.1312	1	0.23692	9.13919	3.5389 3.5386
,, 18	-	<b>5</b> *1305	1 1	0 23704	9.13926	3.2391
April 14	-	5.1331	2	0.23660	9.13927	3 · 5373 \
., 15	-	5.1338	2	0.23648	9.13935	2 5265
" 16	-	5.1344	2	0.23638	9.14041	3.5318 3.5348
,, 19	-	5.1345	1	0.23636	9.13995	3.2332
May 15	-	5.1312	2	0.23692	9.13870	3.2409
,, 17	-	5.1358	2	0.23614	9.13939	3.5349
,, 19	-	5.1315	2	0.23687	9.13906	3.5392
,, 20	-	5°1329	2	0.23663	9.13879	3.5394)
June 15	-	5°1306	1 1	0.23702	9.13911	3.5396 \
,, 16	-	5'1341 5'1399	2	0.23643	9.13857	3.5395 (3.5399)
, 17	-	5'1328	2	0.23665	9'13894	9 9900 [
,, 18 July 14	-	5'1298	2	0.23716	9.13875	3・5417ノ
1.5	-	5°1388	3	0.23563	9.13886	3.2350
″ 1C	-	5°1387	3	0.23565	9.13816	3.2379 >3.2366
	-	5.1412	2	0.23523	9.13803	3.2368
10	-	5°1413	$\frac{2}{2}$	0.33521	9.13646	3°5431 <sub>]</sub>
10	-	5.1413	2	0.23521	9'13675	3.2419 > 3.2424
September 15	-	5°1438	2	0.23480	9.13624	3.2423
1.0		5°1516	2	0.23347	9,13607	3.2332)
17		5 <b>`1</b> 550 5 <b>`1</b> 529	2 2	0.23290	9'13644	3.5337 3.5338
,, 11	- 1	U 10ZM	1 2 1	0.23325	913653	3`5348 <b>J</b>

TABLE LXXIII.—continued.

n	1				
	Time	No. of	Logarithm	ic Values.	Horizontal Force
Date.	į	Experiments of	:		in absolute Measure
	of Vibration.	Vibration.	m X.	$\frac{m}{X}$ .	(British Units).
*** *** **** ***** *******************					<u></u>
1847: October 16 •	s. 5·1544		0.00000	0.19579	3.5370
10		$\begin{array}{ c c c }\hline 2\\ 2\\ \end{array}$	0°23300 0°23255	9·13573 9·13591	0.5044
", 18 <b>-</b>		2	0.23243	9.13622	3.5327 3.5345
,, 20 •	1	2	0.23249	9:13587	3.5340
November 16 -	5.1576	2	0.23246	9.13550	3·5357)
,, 17	0 2010	2	0.23246	9.13540	3.5365 > 3.2366
, 18	5.1566	2	0.23263	9.13518	3:5378)
December 16 - 18 -		2 2	$0.23228 \ 0.23123$	9·13469 9·13539	3.5384 3.5313
" 91	1	2	0.23123	9.13573	$\frac{3.5258}{3.5258}$ 3.5347
" 24		2 2	0.23142	9.13263	3.5434
1848:					
January 17 -	1	2	0.23060	9.13488	3.5307)
,, 18	0 -00-	2	0.23103	9.13505	3:5320 > 3:5329
" 19 • February 16 •	0 1000	2 1	0°2314 <b>2</b> 0°23117	9°13443 9°13438	3*5359 <i>)</i> 3*53507
17 -			0.23117	9 13438	9.5955
", 18		2 2 2 2	0.53113	9.13405	3.5363 3.5352
,, 19 ·	5'1662	2	0.23102	9.13453	<b>3</b> · 5339
March 13 -	1 0 -0-0	2	0.23167	9.13387	3.5392
,, 14	0 101	2	0.23177	9:13433	3.5378 3.5372
,, 15 April 17		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0.23115 0.23108	9°13450 9°13424	3·5345 J 3·5352 \
10		2	0.23103	9.13392	3.2363 > 3.2361
", 18 ·		$\frac{1}{2}$	0.53140	9'13418	3.2368 }
May 15 ·		2	0.23142	9'13361	3.2392
" 16		2	0.23162	9'13383	3.5391 3.5386
,, 17 ·	0 2010	2	0.23184	9'13448	3.5374)
June 15	7.1070	$\frac{2}{2}$	0.23091 0.23117	9°13379 9°1341 <b>5</b>	$3.5365 \ 3.5360 \ 3.5366$
″ 17 .		2	0.23122	9.13394	3.5372
July 18	# • 1 00F	$\frac{1}{2}$	0.53060	9.13302	3.5382
" 19 ·		2	0.23117	9.13318	3.5399 > 3.5376
" 20 -	, , , , , ,	2	0.23020	9.13348	3.5348)
August 15	, 0 200	$egin{array}{c} 2 \ 2 \ 2 \end{array}$	0.22716	9.13062	3.5340
, 16 , 17	5.1839 5.1877	$\begin{vmatrix} 2\\2 \end{vmatrix}$	$0.22804 \\ 0.22741$	$9.13056 \\ 9.13026$	$3.5379 \ 3.5366 \ 3.5360$
, 19 .	# • 3 O O F	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$0.22741 \\ 0.22761$	9 13073	3.5355
September 15	1 ****	1 1	0.22615	9.12982	3·5332γ
" 16 ·	F . 1000		0.22654	9.12989	3.5345 > 3.5332
,, 19	5 1958	$egin{bmatrix} 2 \\ 2 \\ 2 \end{bmatrix}$	0.22602	9.13004	3.2319)
October 17 -	5.2011		0.22517	9.12909	3.2321
" 19	V	2 2 2 2	$0.22387 \ 0.22322$	9.13024	3.5222 3.5263
" 20 " 21	7.0010		0.2222	9·12982 9·12972	$\begin{bmatrix} 3.5213 \\ 3.5296 \end{bmatrix}$
November 21	==0000		0.22388	9.12932	3.5260
ററ	F.0110	2	0.22348	9.12912	3.5251 3.5249
,, 22 ,, 23	F: 0100	2	0.22313	9.12921	3.235
December 19 ·	5.2019	2	0.22503	9.12896	3.2322
" 20 ·		2	0.22498	9'12904	3.5316 > 3.5318
" 21	5.2044	2	0.22462	9:12869	3.2316)
	1 .	1		1	1

TABLE LXXIII.—continued

Date.	m.	No. of	Logarithmic Values.		Horizontal Force
	Time of Vibration.	Experiments of Vibration.	m X	$\frac{m}{X}$	in absolute Measure (British Units).
1849:					
January 15	s. 5·2095	2	0.22377	9.12877	3.278
,, 16	- 5.2058	$\begin{vmatrix} 2 \\ 2 \end{vmatrix}$	0.22438	9.12784	3.5340 3.5319
" 17	- 5.2054	2	0.22445	9.12798	3.2338
February 17	- 5.2071	2	0.22417	9.12778	3.5334)
,, 19	5 2106	2	0.22358	9.12761	3.2317 3.2312
,, 20	5:2127	2	0.22323	9 12805	3 5286
March 19 20	- 5.2065	$\begin{vmatrix} 2\\2 \end{vmatrix}$	0.22427	9.12747	3.5351
″ 91	5 · 2089 5 · 2067	$\begin{array}{ c c c }\hline & z \\ & 2 \\ \hline \end{array}$	$0.22387 \\ 0.22423$	9.12764	3.5328 3.5339
April 19	5.1998	$\frac{2}{2}$	0 22423	9.12769 $9.12721$	3.5341
,, 20	5.2013	$\frac{2}{2}$	0.22513	9.12691	$\begin{pmatrix} 3.5407 \\ 3.5410 \\ 3.5378 \end{pmatrix}$
,, 21	- 5.2153	$\frac{1}{2}$	0.22280	9.12678	3.2319
May 16	- 5.2052	2	0.22448	9.12587	3.5425)
" 17	- 5.2036	2	0.22475	9.12690	3.5394 >3.5413
,, 18	- 5.2036	2	0.22475	9.12622	3.2422
June 18	5 2105	2	0.22360	9.12541	3 5407
, 19 , 20	- 5.2058 - 5.2187	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	0.22438	9.12551	3.5436 3.5389
July 17	5.2040	$\frac{2}{2}$	0.22223	9.12608	3.5325)
" 18	5.2116	$\frac{2}{2}$	$0.22468 \\ 0.22342$	9°12470 9°12486	3.5480
,, 19	- 5.2147	$\frac{2}{2}$	0.22290	9.12538	3.5423 > 3.5428 3.5380 > 3.5428
	- 5.2218	$\frac{1}{2}$	0.22172	9.12378	3.5397
,, -,	- 5.2193	2	0.22213	9.12386	3.2411 >3.2394
,,	- 5.2224	2	0.22165	9.12424	3.5375
·	5.2285	2	0.22060	9.12375	3'5353)
" 20	- 5.2282 - 5.2242	2	0.22065	9.12319	3.2378 > 3.2382
0 "1 1"	5 · 2242 5 · 2349	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	0.22132	9.12293	3.5416
	- 5.2329	$\frac{2}{2}$	0°21954 0°21987	9.12332	3.5328
"	- 5.2315	2	0.52010	9°12341 9°12294	3.5338 3.5343
NT. 1 10	- 5.2343	$\overline{2}$	0.51964	9.12270	3.5366) 3.5357)
,,	- 5.2319	2	0.22004	9.12267	3.5374 >3.5366
"	5.2316	2	0.22009	9.12295	3.5365
	5 2396	2	0.21876	9.12223	3.2340)
90	5.2370	2	0.21919	9.12203	3.2366 > 3.2351
" 20	- 5.2388	$\begin{vmatrix} 2 \end{vmatrix}$	0.21890	9.12212	3.5349
1850:					
January 16	5:0900		0.40.4.5.		
17	5 2390 5 2388	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	0.21886	9.12222	3.5344
	5.2423	2 9	0.51830	9'12159	3.5372 > 3.5344
T3 1"	- 5.2430	$\begin{array}{c c} 2 \\ 2 \end{array}$	$0.21831 \\ 0.21820$	9.12236	3.5317)
,, 18	- 5.2383	2	0.51858	9.12197 9.12200	3.5328
,, 19	5 2405	$\bar{2}$	0.51861	9.12119	$\left(\begin{array}{c} 3.5358 \\ 3.5377 \end{array}\right) 3.5354$
	5 2379	$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	0.21904	9.12119	3 5369 j
,,	5.2337	2	0.21974	9:12112	3.5425 > 3.5387
//	5.2407	2	0.21858	9.12136	3.2368
10	5 · 2400 5 · 2407	2	0.21870	9.12121	3.2379
	5 · 2397	$\begin{array}{c c} 2 \\ 2 \end{array}$	0°21858 0°21875	9.12141	3.5366 > 3.5373
,,	1 0 2001	1 4	U 21875	9'12122	3.2380

TABLE LXXIII.—continued.

		No. of	Logarithmic Values.		Horizontal Force
Date.	Time	Experiments -			in absolute Measure
Date.	of Vibration.	of		m	(British Units).
	or vibration.	Vibration.	m X	$\frac{m}{X}$	(3,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1850:	s.				
May 18 -	5.2396	2	0.21876	9.12159	3.5366)
90	5.2416	$\frac{2}{2}$	0.51843	9.12122	3.2368 > 3.2366
, 91 -	5.2410	2	0.51823	9.12140	3.5365
June 17 -	5.2454	$\frac{1}{2}$	0.21780	9.12093	3 5354
" 18 -	5.2425	$\frac{2}{2}$	0.51858	9.11992	3.2414 > 3.2380
,, 19 <b>-</b>	5 2491	$\overline{2}$	0.21720	9.11981	3.5375)
July 16 -	5.4446	2	0.18542	9.09060	3.5270)
,, 17 -	5.4443	$\begin{array}{c c} 2 \\ 2 \end{array}$	0.18547	9.09043	3.5280 3.5284
" 18 -	5.4479	2	0.18490	9.08928	3 5303
August 16 -	5.4543	2 2	0.18388	9.09097	3.2193
,, 17 -	5.4531	2	0.18407	9.09101	3.5200 >3.5199
, 19 -	5.4492	2	0.18470	9.09149	3.5205
September 16 -	5.4540	2	0.18393	9.09037	3.5220
" 17 -	5.4522	2	0.18421	9.09051	3.5226 3.5217
,, 18 -	5.4534	2	0.18402	9.09077	3.5207)
October 15 -	5:4554	2	0.18370	9.08771	3.5317
,, 16 -	5.4553	2	0.18372	9.08790	3.5311 3.5320
" 17 - November 19 -	5.4508	$\begin{array}{ c c c }\hline 1\\ 2 \end{array}$	0.18444	9.08782	3.5343)
20 -	5°4569 5°4529		0.18347	9.08654	1 - 1
" 91 -	5.4530	$egin{bmatrix} 2 \\ 2 \\ 2 \end{bmatrix}$	0°18410 0°18409	9.08664	$\left\{\begin{array}{c} 3.5378 \\ 3.5348 \end{array}\right\}$
December 16	5.4606	2 2	0.18288	$9.08734 \\ 9.08722$	3.2302)
17	5.4630	2 2	0.18250	9.08740	3.5282 >3.5283
" 18 -	5.4667	$\begin{array}{c c} 2 \\ 2 \end{array}$	0.18181	9.08733	3.5262
1851:					
January 15	5.4622	2	0.18262	9.08684	3.2310)
16	5.4772	2	0.18024	9.08748	3.5187 3.5249
17	5.4693	$\frac{1}{2}$	0.18120	9.08721	3.5249
February 17 -	5.4639	$\begin{array}{c c} 2 \\ 2 \end{array}$	0.18232	9.08608	3.2330
,, 18 -	5.4768	2	0.18030	9 08751	3.5188 3.5243
,, 19 <b>-</b>	5.4760	$\begin{array}{c c} 2 \\ 2 \end{array}$	0.18043	9.08711	3.5210
March 17 -	5'4643	2	0.18229	9.08620	3.2322
" 18 -	5.4626	2	0.18256	9.08697	3.5302 3.5321
,, 19 -	5.4622	2	0.18262	9.08609	3.5340)
April 15 -	5.4650	2	0.18518	9.08606	3.5323
" 16 -	5.4652	2	0.18512	9.08593	3.2327 3.2311
" 17 -	5.4691	2	0.18123	9.08636	3.5284
May 15 -	5 4638	$\left \begin{array}{c}2\\2\\2\\2\\2\end{array}\right $	0.18237	9.08570	3 5345
,, 16 -	5:4627	2	0.18254	9.08596	3.5342 > 3.5328
,, 17 -	5.4692		0.18121	9.08605	3:5297)
June 17 -	5.4444		0.18546	9.08915	3.2331
,, 18 -	5.4501		0.18455	9.08868	3.2313 3.2311
,, 19 -	5.4506	$egin{bmatrix} 2 \ 2 \ 2 \end{bmatrix}$	0.18447	9.08922	3.5288 )
July 15 -	5.4515		0.18433	9.08897	3:5292
" 16 - " 17 -	5.4490	2 0	0.18472	9.08838	3.5332 3.5317
	5.4518	$\begin{array}{ c c c }\hline 2\\ 2\\ \end{array}$	0.18428	9.08802	3.5329
August 15 - 16 -	5.4561	$\begin{array}{c c} z \\ 2 \end{array}$	0.18359	9'08786	3.2308
″ 18 -	5.4547	2 2	0°18382 0°18401	9°08851 9°08706	$\left\{\begin{array}{c} 3.5291 \\ 3.5357 \end{array}\right\}$ 3.5318
,, 15 -	5.4535	1 4 1	O 19401	9 00/00	∂ ∂∂∂∫ /

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TABLE LXXIII.—continued.

Date		No. of	Logarithmic Values.	Horizontal Force
1851:	Data		nts	in absolute Measure
September 16	Date.		m	(British Units).
September 16 - 5'4631 2 0'18280 9'08730 3'5298 3'5274 3'  " 18 - 5'4638 2 0'18237 9'08749 3'5228 3'5287 3'5	· · ·	Vibration	$mX$ $\overline{X}$	
September 16 - 5'4631 2 0'18280 9'08730 3'5298 3'5274 3'  " 18 - 5'4638 2 0'18237 9'08749 3'5228 3'5287 3'5				
17			0.000	
October 16 - 5 '4682 2 0'18246 9'08725 3'5288'  " 17 - 5 '4632 2 0'18246 9'08636 3'5303'  " 18 - 5 '4644 2 0'1827 9'08650 3'5329'  " 18 - 5 '4644 2 0'1827 9'08650 3'5309'  November 17 - 5 '4844 2 0'17878 9'08556 3'5309'  " 18 - 5 '4843 2 0'17912 9'08331 3'5311		5 4611 2		
October 16 - 5'4660 2 0'18202 9'08640 3'5303 3'5303 ", 18 - 5'4644 2 0'18227 9'08650 3'5303 9' November 17 - 5'4864 2 0'18227 9'08650 3'5303 9' November 17 - 5'4864 2 0'17878 9'08352 3'5288 3'5288 3', 19 - 5'4843 2 0'17912 9'08331 3'5311 3 0'17912 9'08331 3'5311 3 0'17912 9'08331 3'5311 3 0'17912 9'08331 3'5311 3 0'17912 9'08331 3'5311 3 0'17912 9'08331 3'5313 3'5296 3', 16 - 5'4863 2 0'17885 9'08346 3'5292 3', 18 - 5'4893 2 0'17882 9'08351 3'5296 3', 18 - 5'4893 2 0'17882 9'08351 3'5270 3'5292 3', 18 - 5'4812 2 0'17960 9'08329 3'5332 3', 19 - 5'4911 2 0'17864 9'08293 3'5246 3'5246 3', 19 - 5'4911 2 0'17864 9'08293 3'5246 3'5246 3', 19 - 5'5062 2 0'17496 9'08127 3'5226 3', 19 - 5'5105 2 0'17496 9'08127 3'5226 3', 19 - 5'5105 2 0'17496 9'08127 3'5226 3', 19 - 5'5105 2 0'17496 9'08127 3'5226 3', 19 - 5'5105 2 0'17496 9'08127 3'5226 3', 19 - 5'5105 2 0'17496 9'08127 3'5226 3', 19 - 5'5105 2 0'17496 9'08127 3'5226 3', 19 - 5'5105 2 0'17496 9'08127 3'5226 3', 19 - 5'5105 2 0'17498 9'08127 3'5226 3', 19 - 5'5105 2 0'17498 9'08127 3'5226 3', 19 - 5'5105 2 0'17498 9'08127 3'5226 3', 19 - 5'5105 2 0'17498 9'08127 3'5226 3', 19 - 5'5105 2 0'17498 9'08127 3'5226 3', 19 - 5'5105 2 0'17498 9'08127 3'5226 3', 19 - 5'5105 2 0'17498 9'08127 3'5226 3', 19 - 5'5105 2 0'17498 9'08127 3'5226 3', 19 - 5'5105 2 0'17498 9'0816 3'5217 3'5226 3', 19 - 5'5097 2 0'17510 9'08065 3'5240 3', 19 - 5'5092 2 0'17658 9'08676 3'5047 3', 19 - 5'5003 2 0'17658 9'08676 3'5047 3', 19 - 5'5003 2 0'17658 9'08676 3'5047 3', 19 - 5'5003 2 0'17658 9'0866 3'5112 3', 19 - 5'5003 2 0'17658 9'08688 3'5132 3', 19 - 5'5008 2 0'17658 9'08688 3'5132 3', 19 - 5'5008 2 0'17658 9'08688 3'5132 3', 19 - 5'5008 2 0'17658 9'08688 3'5132 3', 19 - 5'5008 2 0'17658 9'08688 3'5133 3', 19 - 5'5008 2 0'17658 9'08688 3'5133 3', 19 - 5'5008 2 0'17658 9'08688 3'5133 3', 19 - 5'5008 2 0'17658 9'08688 3'5133 3', 19 - 5'5008 2 0'17658 9'08463 3'5107 3', 19 - 5'5008 2 0'17658 9'08463 3'5107 3', 19 - 5'5008 2 0'17658 9'08463 3'5107 3', 19 - 5'5008 2 0'17658 9'08463 3'5107 3', 19 - 5				
17	,	5 4660		
November 17	17	5.4639		
November 17 - 5 4864 2 0 17878 9 908352 3 5288 3 5311 3	" 10	5.4644		
## 188	1	5.4864		
December 15 - 5'4820 2 0'17948 9'08362 3'5313 3'5296 3' 18 - 5'4863 2 0'17880 9'08346 3'5292 3' 3'5296 3' 18 - 5'4863 2 0'17880 9'08346 3'5292 3' 3'5296 3' 18 - 5'4893 2 0'17832 9'08351 3'5296 3' 5290 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 3' 5276 3' 3' 5290 3' 5290 3' 3' 5290 3' 5290 3' 5290 3' 5290 3' 5290 3' 5290 3' 5290 3' 5290 3' 5290 3' 5290 3' 5290 3' 5290 3' 5290 3' 5290 3' 529	10			
December 15	" 10		1	
18	December 15 -	- 5.4860 2		
1852	"	- <b>5</b> *4863 2		
1852	10	-   5.4893   2		
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There is still another correction to be applied to these results, which could not be determined until the return of the Unifilar, at the close of the series, to Woolwich, where in the meantime an apparatus had been prepared for the purpose of ascertaining its amount. The necessity for this correction was first pointed out by Dr. Lamont in Dove's Repertorium, Band 7 (1846). In the experiments for measuring the absolute values of the Horizontal Force two operations are required; viz., experiments of vibration, and experiments of deflection: in the experiments of vibration the magnet is in the magnetic meridian; in those of deflection it forms with that meridian an angle which is in all cases considerable. But as it has been found that the earth elicits a sensible degree of magnetism by induction in hardened and magnetized iron or steel, it follows that when placed in the magnetic meridian a magnet is stronger than when it is perpendicular to or forms an angle with the meridian. In the usual mode of computing the results deducible from the combination of the vibration and deflection experiments, the strength of the magnet which is vibrated in the one case and used as a deflector in the other, is assumed to be the same, which, however, is not strictly true, for the reason which has been assigned; hence the necessity of the correction to which has been given, not inappropriately, the name of the inductioncorrection. As its value depends on the capacity of the individual magnet to receive a greater or less inductive charge, it requires, like the temperature-correction, to be determined for the particular magnet which has been employed, which in this case was I. 18 throughout the whole series. The apparatus made for this purpose at Woolwich was similar in principle to Dr. Lamont's, described in Dove's Repertorium, Band 7, and was adapted to one of the ordinary portable Unifilars: it has now been transferred to the Kew Observatory, where it will in future be employed to determine this amongst the other constants of the magnetic instruments supplied through that observatory. I am indebted to Mr. Welsh for the following memorandum of the correction to be applied to the Toronto results, which he has determined by using I. 18 in this apparatus.

Determination of the Induction Coefficient for the Deflecting Magnet I. 18 employed at the Toronto Observatory, 1845—1852.

The experiments have been made with the Woolwich induction apparatus by the method of Dr. Lamont.

Let  $\mu$  = the magnetic moment induced in the bar by the action of a magnetic force equal to unity of the English measure.

 $M_e$  = moment of permanent magnetism of the bar at the time of making the experiments for the induction coefficient.

 $X_e$  = horizontal component of the earth's magnetic force at the time and place of the experiments.

i = magnetic dip at the same time and place.

 $\varphi$  = angle of deflection produced upon the freely suspended needle, the deflecting bar being placed vertical with the north end *downwards*.

 $\varphi'$  = angle of deflection, north end *upwards*.

Then-

$$\frac{\mu}{\mathrm{M}_e} = \frac{\tan\frac{1}{2}(\varphi - \varphi')}{\mathrm{X}_e \tan i \, \tan\frac{1}{2}(\varphi + \varphi')}; \ or, \ \mu = \frac{\mathrm{M}_e}{\mathrm{X}_e} \cdot \frac{\tan\frac{1}{2}(\varphi - \varphi')}{\tan i \, \tan\frac{1}{2}(\varphi + \varphi')}$$

The effect (in parts of the whole magnetic moment of the bar) of the inducing action of the Horizontal Force at any time and place is obtained from the equation,

$$\frac{\Delta m}{m} = \mu \cdot \frac{X}{m}$$

The following are the results of experiments made at the Kew Observatory, January 17 and 19, 1857:—

Hence we have for the different values of  $\frac{m}{X}$  in Table LXXIII., values of  $\frac{\Delta m}{m}$  ranging from 0.00173 to 0.00223; and taking the mean angle of deflection in the Table of the Toronto Observations, Vol. II. pp. 596—633, at 7°.5, the induction-correction applicable to X varies from -.0035 in the experiments of 1845 to -.0044 in those of 1852.

Kew Observatory, January 20, 1857.

J. Welsh.

We obtain, therefore, from Table LXXIII. the following finally corrected values of the absolute Horizontal Force in the several years from 1845 to 1852:—

TABLE LXXIV.

Years.	Annual Means from Table LXXIII.	Annual Means corrected for Induction.	corrected Years.		Annual Means corrected for Induction.
1845	3.5478	3.5443	1849	3.5368	3.5328
1846	3.5419	3.2381	1850	3.5322	3.5280
1847	3.2381	3.5342	1851	3*5299	3.5255
1848	3.2339	3 5299	1852	3.5154	3.2110

From the annual means corrected for induction we obtain 3.5305 as the absolute Horizontal Force corresponding to the mean epoch of the table, January 1st 1849; and  $-.00371 \pm .00091$  as the mean annual secular change between 1845 and 1852 inclusive. The probable error of a single annual mean is  $\pm .0026$ ; a large proportion of which is due to the observations of 1852, which I have not felt at liberty wholly to omit, as no accidental cause has been stated to be known for their apparent irregularity.

## MAGNETIC INCLINATION.

The first volume of the Toronto Observations contained, in pp. 328—332, a detailed statement of the observations of the Inclination made monthly from January 1841 to December 1842 inclusive; the second volume contained, in pp. 559—594, a similar record of the continuation of the series from January 1843 to December 1852 inclusive. The second volume contained also, in pp. lxxxv—lxxxix, a discussion of the results obtained during those years. I have since been favoured by Mr. Kingston, Director of the Toronto Observatory since it has become a provincial establishment, with a continuation of the series during the years 1853, 1854, and 1855, conducted upon the previous model, of which the following is an abstract:—

Table LXXV.

Observations of Inclination continued from Vol. II., page 594. Needle employed, Gambey, No. 1.

•	-	M47.1		P	ole <b>s.</b>	Monthly		Po	oles.	35 .11
1853.	75°+	Monthly Means.	1854.	Direct,	Reversed, 75°+	Moone	1855.	Direct, 75°+	Reversed,	Monthly Means.
Jan. 17	22.1	)	Jan. 16	25.5	17.1	) ° ′	Jan. 15	30.8	16.4	) ° ′
"	22.0		17	25.0	18.7 16.6		16	32.5 29.0	15.8 18.6	
,,	20.3		,,	25.2	16.6	75 21.4	,,	28.4	20.4	>75 24.0
18	22.4		18	$\begin{array}{c c} 25.7 \\ 26.1 \end{array}$	17.1		17	29.0 29.1	19.1 19.2	
"	22.9	75 22.06	Feb. 15	30.1	15.5	) )	Feb. 15	29.1	17.6	۲
" 19	22.4		,,	30.5	17.6		,,	29.7	19.2	
,,	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$		16	29.8 29.3	16.6 17.5	<b>&gt;75</b> 23.4	16	$\begin{bmatrix} 27.6 \\ 27.2 \end{bmatrix}$	20.1	75 23.8
,,	22.4		17	27.8	18.7		17	28.4	20.0	
Feb. 16	22.5	J .	Mar. 15	28.5 $27.3$	19°1	J	Mar. 19	27.0 30.9	18*9 18*8	Į
"	22.1		,,	25.9	20.3	ľ	,,	29.6	18.1	1
"	$\begin{vmatrix} 22.6 \\ 22.8 \end{vmatrix}$		16	$\begin{bmatrix} 27.8 \\ 27.2 \end{bmatrix}$	17:4	75 23.1	20	29'4	17.7	75 23.8
<b>"</b> 7	23 4		17	$\frac{27.2}{27.9}$	19.6 18.8	j	21	28.8	$\frac{18.2}{17.4}$	( )
" "	23.1	75 22.6	April 17	27.6	18.2	}	,,	29.7	17.4	)
"	22.0 22.6		1 1	27.8 28.0	19°2   18°6	]	April 16	$\frac{28.4}{28.7}$	18°2   17°8	)
18	21.8	.]	18	28.3	16.4	75 23.0	17	28.2	18.2	
"	$egin{array}{c c} 22.4 \ 22.8 \ \end{array}$		" 19	24.8 28.2	20.3	70 23 0	,,	27.6	18.5	>75 23.0
"	22.6	]	,,	27.9	18.8 17.2	·	18	27.2 28.1	17·9 17·7	
March -		servations.	May 16	27.5	18.2	۱ ا	May 15	28.2	20.4	{
April 8	$\begin{bmatrix} 23.0 \\ 23.0 \end{bmatrix}$	75 22.6	17	27·3 27·8	18.8 18.7	j	16	26.6	20.9 17.0	
,,	22.6	]	,,	28.3	18.1	75 23.0	,,	28.8	19.4	<b>&gt;75</b> 23.5
May -   June 15	No obs $23.2$	servations.	18	27.0 26.6	17.7 19.5		17	28.7	16.8	
16	22.1		June 15	26.1	18.6	) 1	June 18	29.5	16.6 17.3	{
" 17	$\begin{array}{c} 22.7 \\ 22.0 \end{array}$	75 22.5	,,	27.6	19.2	€ '	,,	29.4	16.7	
11	22.5	]	16	26.7 26.8	19.1	>75 22.9	19	$\frac{27.1}{26.7}$	17.9	75 22.9
July 18	21.6	i	17	25.3	20.3		20	28 1	17.7 19.7	
" 19	$\frac{21.6}{21.5}$		July 17	28.3	18.3	اِ	,,,	27.7	19.3	J
<b>"</b>	21.0	75 21.5	ouly 17	23.9	$egin{array}{c c} 17.5 \ 23.1 \end{array}$	}	July 16	28.4	$\begin{bmatrix} 17.9 \\ 20.4 \end{bmatrix}^{2}$	)
20	21.7		18	29.1	19.9	75 24.3	17	27.5	18.1	F.F. 0011
Aug. 16	21.5	ا ر	, 19	29.3	19.8 20.6	(	"	27.5	19.1	75 23.1
- ,,	20.1		,,	27.6	23.4	j	1	27.6 27.3	18.9	
17	20.0	75 20 25	Aug. 16	26.2	21.4	j		27.4	19.6	, , }
18	19.9		17	26.7 26.8	22.4 18.6	1	,, 16	26.6	19.8	
,, Sant 10	20.4	]	,,	26.8	20.1	75 23.2	1	27.5 26.7	$\begin{bmatrix} 20.8 \\ 20.7 \end{bmatrix}$	75 23.8
Sept. 16	$\frac{21.4}{20.8}$	]	18	26.3 25.8	17.6		17	28.6	19.0	
"	0	1 []	<b>)</b> ,, (	20 0	19.9	,	,, ,	28.6	21.1	J

 ${\bf TABLE\ LXXV.-} continued.$ 

				Р	oles.	Manual		Po	oles.	Monthly
1853.	75°+	Monthly Means.	1854.	Direct, 75°+	Reversed, 75°+	Monthl <del>y</del> Means.	1855.	Direct, 75°+	Reversed, 75°+	Means.
Sept. 17  18  Oct. 17  18  19  *Nov. 16  17  18  Dec. 15  16  17  17	22·1 21·7 21·7 22·5 22·9 22·5 21·6 22·9 22·1 22·7 22·2 23·2 23·2 23·2 23·2 21·7 22·6 21·8 22·5 23·0	\\ 75 \ 21.7 \\ \\ 75 \ 22.4 \\ \\ 75 \ 23.0 \\ \\ 75 \ 22.3 \\	Sept. 18  "9  "20  Oct. 16  "7  18  Nov. 16  "7  "8  Dec. 18  "9  "0  "0  "0  "17  "18  "19  "19  "20  "19  "20  "19	28·3 28·2 27·8 27·2 25·9 27·0 26·1 25·4 26·0 26·3 24·1 28·0 28·4 26·9 27·1 31·0 30·8 28·3 33·1 28·7 30·0	18 9 19 0 20 9 20 3 18 9 18 4 19 2 18 7 17 7 20 0 16 0 16 9 17 9 16 1 17 6 17 4 17 3 18 2 15 4 16 1 19 4 17 7 18 3 17 9	75 23.4 75 22.0 75 22.2 75 23.9	Sept. 17  18  19  Oct. 15  16  17  Nov. 13  16  17  Dec. 18  19  20  "	28.4 29.4 27.6 26.9 26.1 27.5 26.9 30.0 27.6 26.7 27.2 28.7 26.3 26.5 26.2 26.8 27.4 27.5 26.9 27.5 27.5 27.5 27.5 27.5 27.5 27.5 27.5	19.8 19.6 21.3 23.9 22.2 21.0 19.2 15.4 19.5 22.0 19.7 19.8 18.9 19.8 20.7 19.3 19.9 19.9 20.9 17.3 18.9 20.0 19.5	75 24·5 75 23·5 75 23·3

The annual means are 75° 22'·17, 75° 23'·0, and 75° 23'·55. Collecting the several annual means into one view, we have the following table:—

TABLE LXXVI.

Years.	Observed Inclination.	Years.	Observed Inclination,	Years.	Observed Inclination.
1841	75° 16° 6	1846	75° 15° 1	1851	75 20.4
1842	75 16.4	1847	75 15.3	1852	75 20.5
1843	75 14.7	1848	75 18'3	1853	75 22.2
1844	75 14'8	1849	75 18 8	1854	75 23.0
1845	75 15 5	1850	75 20.0	1855	75 23.6

<sup>\*</sup> Previous to the observations of November 1853 a new stone pillar was substituted for the original wooden one.

From these observations the Inclination appears to have reached an epoch of minimum between the years 1843 and 1844, or about the commencement of 1844; and from 1844 to 1855 to have increased at an average rate of  $\frac{75^{\circ} \ 23' \cdot 6 - 75^{\circ} \ 14' \cdot 8}{11} = 0' \cdot 8$ . On this supposition we have the computed Inclination in each of the twelve years,

On this supposition we have the computed inclination in each of the twelve years, with the deviations from the observed values, as follows:—

Years.	Computed Inclination.	Computed— observed.	Years.	Computed Inclination.	Computed—observed.
1844 1845	75 14.8 75 15.6	0.0 +0.1 +1.3	1850 1851	75 19.6 75 20.4	-0.4 -0.0
1846 1847 1848	75 16.4 75 17.2 75 18.0	+1.3 +1.9 -0.3	1852 $1853$ $1854$	75 21°2 75 22°0 75 22°8	$   \begin{array}{r}     +0.7 \\     -0.2 \\     -0.2   \end{array} $
1849	75 18 8	-0.0	1855	$75 \ 23.6$	-0.0

TABLE LXXVII.

The probable error of a single annual determination computed from these twelve years is  $\pm 0' \cdot 5$ .

If we further suppose the epoch of minimum to have synchronized with the commencement of 1844, and that the same rate of secular change, but with an opposite sign, existed previously, we shall have the annual means for the three preceding years, with their deviations from the observed values, as follows:—

This last supposition must of course be viewed as merely approximate in regard to the rate of the secular change before 1843; but on any other supposition than that of an epoch of minimum having occurred somewhere about the years 1843 and 1844, the probable error would greatly exceed that which is stated above. The value of the Inclination at the epoch of its supposed minimum is about 75° 14'·4. In the years immediately following the minimum, the annual increase was probably less, and in the latter portion of the twelve years greater, than the average rate of 0'·8 derived as above.

The Gambey's Inclinometer which has been used at Toronto since 1853 is rather a remarkable instrument, on account of the services it has rendered. It

is the property of Admiral Robert FitzRoy, who, when about to be employed on a voyage of survey and circumnavigation in H.M.S. "Beagle," purchased it from the maker. During that voyage, i.e. from 1831 to 1836 inclusive, it served for the determination of the Inclination at above 30 stations in different parts of the globe, the results of which were published in Vol. I. of the "Voyage of the 'Adventure' and 'Beagle,'" pp. 495—499. In 1837 it was lent by Captain FitzRoy to the writer of these pages, to be employed in determining the position and direction of the isoclinal lines in the magnetic survey of Great Britain, the report of which survey is published in the Transactions of the British Association for 1839. In 1842 it was again lent by Captain FitzRoy to Lieutenant (since Lieutenant-Colonel) Lefroy of the Royal Artillery, to be used in the magnetic survey of the British Possessions in North America, and served to determine the Inclination at above 100 stations between Canada and the Polar Sea. Since the completion of the North American Survey the Inclinometer has remained, with Captain FitzRoy's permission, at the Toronto Observatory, and was occasionally used, in conjunction with Robinson's Inclinometer belonging to the Observatory, in the observations previous to 1853; since 1853 it has been used uninterruptedly. It had originally two needles made by Gambey, and has since had two others, made by the late Mr. Robinson, whose dipping needles were scarcely, if at all, inferior to Gambey's. It has thus been, with few intermissions, in constant work for above a quarter of a century, during which time it has been exposed to travelling of all descriptions, and to climates of the most opposite character; and of its four needles one only is known to have suffered a slight deterioration. This speaks well both for the original instrument and for the care with which it has been treated. The observations in 1853, 1854, and 1855, of which the results only are given in Table LXXV., were all made on the same systematic plan as those of the preceding years, detailed in Vol. II., pp. 560—594, and may be referred to as a fair example of the precision which is attainable in such observations.

Solar-diurnal Variation.—In the early stage of the observations, and before experience had been obtained of the reliance to be placed on the conclusions from the combined Horizontal and Vertical Force observations, it was thought that some light might be thrown upon the solar-diurnal variation of the Inclination by dividing the direct observations of this element into two portions, one to be made in the forenoon and the other in the afternoon. We have since become aware that the solar-diurnal variation of the Inclination is deducible by the Horizontal Force and Vertical Force Magnetometer with much greater precision than it can be by direct observation with the Inclinometer, and that the variation is thereby obtained not merely for two epochs in the 24 hours, such as the forenoon and afternoon, but for every hour of the 24. (See ante, p. xciii.) Still, as direct observations were made in the forenoons and Vol. III.

afternoons, agreeably to the directions issued, and were continued from the commencement of 1841 to the end of 1852, it may be proper to show the comparative results which were thus obtained in each year. They are as follow:—

TABLE LXXVIII.

Years.	A.M.	Р.М.	Years.	A.M.	P.M.
<b>1</b> 841	。 , 75 16 <b>·</b> 68	% / 75 17·20	1847	。 , 75 15 43	° ', 75 15:27
1842 1843	75 16.94 75 15.15	75 15.69 75 14.35	1848	75 18·23 75 19·14	75 18·44 75 18·70
1844 1845	75 15·33 75 15·31	75 14·31 75 15·76	1850 1851	75 19·90 75 20·27	75 20 09 75 20 44
1846	75 15 21	75 15:09	1852	75 20.56	75 20 47

The mean of the A.M. results is 75° 17′·35, and of the P.M. results 75° 17′·15. On the average of the 12 years the A.M. results exceed the P.M. by 0′·2. This is in the same direction as, but somewhat less in amount than, the difference more satisfactorily shown by the combination of the Horizontal and Vertical Force observations. If we suppose 9 A.M. and 3 P.M. to be about the mean times corresponding to the A.M. and P.M. direct observations, the difference between them should have been nearer 0′·5 than 0′·2; but a discrepancy of this small amount is within the limits of the errors of observation by the direct method.

Annual Variation.—Table L. in Vol. II., p. lxxxvii, contains the several monthly values of the Inclination from 1841 to 1852 inclusive, arranged according to the respective months. The following Table (LXXIX.) contains the continuation of the aforesaid Table in Vol. II., for the subsequent years 1853, 1854, and 1855: the final column exhibits for each month a value which is the arithmetical mean of the results in that month in the 15 years.

Monthly Means of the Observations of the Inclination from January 1841 to December 1855 inclusive, continued from Table L., Vol. II., p. lxxxvii.

Months.		1853.	1854.	1855.	Means for each Month, 1841 to 1855 inclusive.
		75° +	75° +	75° +	
January	_	22'1	21'-4	24.0	75 18.78
February -		$\overline{22} \cdot \overline{6}$	23.4	23.8	75 18 43
March	-	22.6*	23.1	23.8	75 18:17
April	-	22.6	23.0	23 0	75 18 33
May	-	22.5*	23.0	23.2	75 18:08
June	-	22.5	22.9	22.9	75 17:38
July	-	21.5	24.3	23.1	75 17:13
August	-	20.3	23.2	23.8	75 17 33
September -	-	21.7	23.4	24.5	75 19:09
October -	-	22.5	22.0	23.5	75 19.09
November -	-	$23 \cdot 0$	22.2	23.3	75 19.53
December -	-	22.3	23.9	23.3	75 19:15
Means for each year	_	75 22.2	75 23.0	75 23 6	75 18 38

<sup>\*</sup> The months of March and May of 1853 are interpolated values, as no observations were made in those months. For March, a mean has been taken between the results in February and April of the same year; and for May, a mean between the results in April and June.

On examining the final column, the existence of annual variation is very perceptible: the Inclination is considerably less in the middle months of the year than at its beginning or ending. But these results involve the effects of the secular change which takes place during the year, as well as those of annual variation. To eliminate the influence of secular change, perhaps the least exceptionable process is to take the arithmetical means, respectively, of January and December, February and November, March and October, April and September, May and August, June and July, of all which couples, or bi-monthly means, the 1st of July is the common mean epoch; if, therefore, there were no annual variation, these six means should be all alike. They are as follow:—

January and December		-	-	-	$7\mathring{5}$	18'.96
February and November		-	-	- '	75	18.98
March and October	-		· -	. '	75	18.63
April and September	-		-	- '	75	18.71
May and August -		-	-	- '	75	17.70
June and July -	-	-	-	. '	75	17.25

It appears therefore, as the result of fifteen years of careful observations, made throughout at the same spot, and according to the same systematic method, and comprising no less than 1,920 distinct absolute determinations, nearly equally distributed, and averaging, therefore, 128 for each of the twelve months,—and after the elimination of secular change,—that the Inclination is lower at Toronto in June and July than in the previous January and the succeeding December, by an amount which may be taken approximately at 1'·71.

Annual Variation, Absolute Value, and Secular Change of the Total Force.—The mean values of the absolute Horizontal Force in the different months obtained in the eight years (1845 to 1852 inclusive, pp. cvi—cxv) are as follow:—

```
January 3.5326; December 3.5291; Mean, January and December 3.5309. February 3.5310; November 3.5287; Mean, February and November 3.5299. March - 3.5329; October - 3.5278; Mean, March and October - 3.5303. April - 3.5296; September 3.5276; Mean, April and September - 3.5286. May - 3.5324; August - 3.5298; Mean, May and August - 3.5311. June - 3.5323; July - 3.5318; Mean, June and July - 3.5321.
```

Combining these with the mean values of the Inclination in the different months in the preceding page, we have the values of the Total Force as follow:—

```
January and December 3.5309 \times \sec 75^{\circ} 18.96 = 13.9133 February and November 3.5299 \times \sec 75 18.98 = 13.9254 March and October -3.5303 \times \sec 75 18.63 = 13.9218 April and September -3.5286 \times \sec 75 18.71 = 13.9164 May and August -3.5311 \times \sec 75 17.70 = 13.9106 June and July -3.5321 \times \sec 75 17.25 = 13.9076 13.9091
```

It appears therefore, as the result of 96 monthly determinations of the absolute Horizontal Force, and 180 monthly determinations of the Inclination, that the Total Magnetic Force is less at Toronto on the average of the months of June, July, August, and September, than on the average of the months of November, December, January, and February, by 0.01 in absolute measure, or about  $\frac{1}{1400}$  of its whole amount.

The mean of the eight years of observation of the absolute Horizontal Force (p. cxvii) is 3.53045, corresponding to the mean epoch of January 1, 1849; the contemporaneous value of the Inclination is 75° 18'.4; whence we have 13.9188 as the absolute value of the Total Force at the same mean epoch. Or if, as some may deem preferable, we omit the observations of the Horizontal Force in 1852, which, from some unexplained cause, differ from the results of the preceding seven years by an amount which greatly exceeds the probable error of a single year as derived from those results, we have, at the mean epoch July 1, 1848,—for the absolute Horizontal Force 3.5332; for the Inclination (the mean of the same seven years) 75° 17'.63; and for the Total Force 13.9178. With the data furnished by the observations of those seven years, we have

the annual secular decrease of the Horizontal Force  $0026 \pm 0006$ ; and the secular increase of the Inclination  $1' \cdot 0 \pm 0' \cdot 19$ ; the probable error of a single annual determination of the absolute Horizontal Force  $\pm 0015$ , and of the Inclination  $0' \cdot 51$ ; and with the same data we obtain the absolute values of the Total Force, corresponding to July 1, 1845, 13 \cdot 9023, and corresponding to July 1, 1851, 13 \cdot 9334; showing intermediately an increase of 0.0311 in six years, or 0052 in one year. Both combinations, therefore, *i.e.* the Horizontal and Vertical Forces examined in pp. ciii—civ, and the Horizontal Force and Inclination examined here, concur in showing an annual increase as the secular change of the Total Force; and we may view the two combinations as being in effect very nearly equivalent to two independent determinations; because, although it is true that the secular change of the Horizontal Force enters into both, yet in its combination with that of the Vertical Force, no variation in its amount which can be regarded as in any degree probable would be otherwise than insignificant in the deduction of the resulting secular change of the Total Force.

## SECULAR CHANGE OF THE MAGNETIC DECLINATION.

Volume II. of the Toronto Observations contains, in pp. 635—639, the particulars of the monthly observations, made from 1845 to 1851 inclusive, to determine the absolute values of the Declination by means of a Declinometer placed in a detached building appropriated to that object only. An abstract of these observations, with a statement of their results, is given in Table I. at the commencement of the same volume (pp. iii, iv); and the conclusion from the results in p. vi. The value of the Declination at the mean epoch July 1, 1848, is stated to have been 1° 34′·91 West; and the mean annual increase of West Declination between 1845 and 1851, 1′·952.

I have since received, through the kindness of Mr. Kingston, the present Director of the Toronto Observatory, a continuation of the series made at intervals in the years 1853 and 1854, with the same instrument in the same locality; and the commencement of a new series in 1855, with the Declinometer placed in a new building. The results are contained in the following table.

TABLE LXXX.

Dates.	Mean Observed Declination.	Mean Reading of the Observatory	Mean Monthly Reading of the Observatory	i	rences. -β.	Observed Declination reduced to the Mean Monthly Reading of the Observatory
•	Decimation.	Declinometer.		Sc. Div.	Arc.	Declinometer.
March 24 to 30 -	0	α Sc. Div. 349°1 350°0 350°4 348°9 345°9 342°8 344°6	β sc. Div. 355 '7 355 '3 351 '9 351 '1 350 '2 350 '1 350 '2	-6.6 -5.3 -1.5 -2.1 -4.3 -7.2 -5.6	-4.7 -3.8 -1.1 -1.5 -3.1 -5.2 -4.0	1 43.8 W. 1 47.3 1 50.9 1 45.0 1 48.6 1 47.3 1 47.5

New Series commenced after rebuilding the Observatory.

1855: August 24 - September 20 - October 16 and 17 November 16 - December 17 and 18	- 1 56.7	369·2	376°7	-7.6	-5.4	1 51'3
	- 1 54.2	373·5	377°5	-4.0	-2.9	1 51'3
	- 1 55.5	372·8	375°8	-3.0	-2.1	1 53'4
	- 1 58.8	370·6	375°6	-5.0	-3.6	1 55'2
	- 1 56.6	373·6	375°4	-1.8	-1.3	1 55'3

The annual secular change from 1845 to 1851 inclusive was an increase of 1'.95 West Declination; from July 1851 to April 1854 (two years and nine months), an increase of 2'.54; and, assuming the circumstances of the new series to be strictly comparable with those of the old series, the increase from April 1854 to October 1855 is at the mean annual rate of 3'.4. It seems probable, therefore, that the rate of the secular increase of West Declination at Toronto is augmenting.

Captain Younghusband, R.A., who had been Director of the Toronto Observatory from 1841 to 1844 inclusive, and who had subsequently held the appointment of my Assistant at Woolwich, was recalled in January 1854 to regimental duty, from which he had been detached for more than twelve years. Since that date I have had no other assistance than that which I have received from Mr. Magrath, Principal Clerk, and

four non-commissioned officers of the Royal Artillery, acting as Assistant Clerks, who are changed occasionally as military convenience requires.

The long experience which Mr. Magrath has had in the office in which he has served since its commencement in 1840, and his unwearied assiduity and devotion, together with the uniform good conduct of the non-commissioned officers, have enabled me to carry on the duties since December 1853 without requiring the assistance of an officer.

EDWARD SABINE,
Major-General.

Woolwich, March 1857.

TORONTO, 1846 to 1848.

MAGNETICAL OBSERVATIONS.

	Angu	lar Value of	one Scale I	Division of t	he Declinom	DECLIN	NATION. 21. Increa	sing Numbe	rs denote de	creasing W	esterly Decl	ination.	
Mean Gö Tim	ttingen ]	Oh.	Ih.	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5h.	6h.	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10h.	11h.
	1 2 3	Sc. Div. 115 7 114 5 114 8	Sc. Div. 114'6 114'8 114'0	Sc. Div. 118'8 114'8 115'8	Sc. Div. 119'0 118'0 116'0	Sc. Div. 119'0 116'1 116'6	Sc, Div. 116 2 113 2 114 9	Sc. Div. 112.4 111.0 113.6	Sc. Div. 109 '0 110 '8 111 '0	Sc. Div. 109 '4 112 '0 110 '8	Sc. Div. 111'0 112'4 108'5	Sc. Div. 112°7 112°6 112°5	Sc. Div. 113'4 114'1 114'2
	4 5 6 7 8 9	114.0 115.6 111.8 117.8 115.7 116.0	114.1 115.8 116.7 114.0 116.2 116.1	117'8 117'0 117'0 114'8 118'0 117'3	118.7 119.2 117.3 117.0 117.4 118.4	117.0 117.7 113.2 116.2 116.5 115.6	114.8 110.3 113.8 115.0 113.8 113.0	111.6 111.0 104.8 111.4 111.4 111.8	110.0 109.0 105.2 109.8 110.4 112.0	111.1 110.0 111.2 111.4 111.6 112.1	111'0 111'2 109'7 112'2 112'2 113'0	111.4 112.4 114.0 113.5 113.2 112.9	110°2 114°0 113°9 115°0 114°0 118°2
JANUARY.	11 12 13 14 15 16 17	112.2 114.3 110.4 113.8 111.0 119.0	114·1 116·3 102·9 114·5 115·4 117·7	110°0 118°0 115°1 114°4 120°8 120°4	109'4 117'4 119'1 118'8 120'7 119'4	116.0 116.6 118.0 115.9 116.9 115.4	115.0 114.9 115.0 113.2 115.8 115.2	113'0 114'4 114'2 112'1 114'0 110'4	111.2 113.5 114.0 113.2 112.2 108.4	109.7 113.6 111.3 113.0 110.0 107.5	110.0 110.4 111.2 112.1 109.0 107.6	111.9 110.5 118.3 112.4 112.0 112.7	117.8 111.8 114.0 112.8 111.3 117.1
JA	18 19 20 21 22 23 24	115.7 116.8 116.0 118.3 116.2 116.8	116.2 117.8 116.4 119.6 117.2 121.7	118:0 118:2 119:2 120:2 119:8 121:2	119.0 119.0 119.8 120.8 120.0 119.0	118'8 116'4 118'8 119'1 118'7 118'4	115°1 113°2 116°2 116°2 116°0 114°1	112.0 110.2 110.1 112.7 111.7 110.0	109'2 110'5 107'0 108'8 107'9 104'5	112.0 111.4 105.9 108.0 109.4 109.5	112.2 114.7 109.5 110.4 112.1 112.0	113.0 114.1 113.0 113.2 112.3 111.2	114.4 114.1 114.4 118.5 112.4 115.5
Februar	25 26 27 28 29 30 31	117.0 115.2 119.8 117.0 116.3 116.0	116.8 115.4 117.0 117.3 117.7 118.8	119.0 119.0 120.4 119.5 120.0 120.8	120°0 116°8 113°8 119°0 118°7 120°2	117.2 112.9 110.6 117.6 117.0 116.8	113.4 108.8 106.2 113.8 113.0 114.1	111.0 108.9 109.0 111.8 108.7 110.0	108'3 107'2 109'4 110'2 107'2 108'0	109'4 109'0 110'2 111'1 107'2 109'2	111.0 112.4 111.6 111.8 109.0 110.8	112 3 114 2 114 0 112 8 110 7 113 2	112·2 114·3 114·2 113·0 112·8 114·0
Hourly		115.46	115.89	117.97	118.55	116.63	113.86	111.53	109.55	110.56	111.07	112.85	114.13
ARY.	2 3 4 5 6 7 8 9 10 11 12 13 14	117.2 113.2 115.2 114.9 115.0 116.4 ————————————————————————————————————	111'2 117'4 117'8 114'4 115'6 115'0 	117.0 120.4 117.8 116.8 117.0 116.0 ————————————————————————————————————	115.4 120.8 118.2 115.8 117.0 117.2 	117.0 117.3 113.9 116.2 117.0 114.8 	115.1 117.6 113.5 113.0 115.0 110.0 	112·2 113·8 112·0 111·8 113·0 108·0	109'9 109'2 109'8 110'2 111'8 108'2 110'0 107'8 110'2 108'8 108'5 107'0	109'4 109'6 107'8 110'0 111'2 109'5 	109'0 110'0 108'0 111'4 112'0 110'4 112'2 112'6 110'2 109'8 108'2	111'0 111'7 110'3 112'0 112'2 112'7 ————————————————————————————————————	116.2 112.2 112.2 112.2 112.4 112.1 
FEBRUARY.	15 16 17 18 19 20 21 22	109'8 115'0 114'3 115'0 115'3 115'2	115.0 116.0 116.2 115.8 116.2 116.2	113.2 116.0 118.0 117.0 117.0 117.0	114.8 115.7 114.7 117.0 117.0 116.0	113.8 116.1 117.2 115.6 115.1 114.1	112.6 114.0 116.2 114.9 112.2 110.3	111.4 109.0 114.4 114.2 110.0 110.0	108.6 109.2 111.4 112.4 110.0 111.0	110.8 108.0 108.8 112.0 110.2 111.0	114'2 111'0 109'0 113'0 112'0 110'0	110.0 112.4 113.8 113.2 112.0 110.0	115.0 110.0 109.3 111.9 110.6 109.6
March	22 23 24 25 26 27 28	116.0 116.7 116.2 117.8 117.5 116.6	116.0 117.0 116.8 119.8 118.8 119.0	115.8 118.7 118.2 120.0 119.4 121.0	115.0 118.0 117.1 117.2 118.8 120.6	114.0 114.8 116.2 110.3 118.1 117.2	112.9 111.0 113.4 111.2 115.0 111.2	111'8 110'2 107'0 108'8 111'4 108'0	111.2 110.2 103.7 107.2 110.0 107.0	111.2 109.8 104.8 106.0 108.1 107.5	111.0 110.8 103.8 109.2 110.0 109.3	110.8 112.0 104.0 112.4 110.8 112.0	111.0 111.5 102.2 113.0 112.8 112.2
Hourly	Means	115.60	116.32	117.77	115.22	114.85	112.82	110.22	109.30	109.31	110.38	111.24	111.70

12 <sup>h</sup> .	13h.	14h.	15h.	1.Ch	1.7h	10h	19 <sup>b</sup> •	20h.	21h.	22h.	23h.	74
12".	15"•	14"•	15"•	16h.	17h.	18h.	19"•	20".	21"•	22"•		Means.
Sc. Div. 115°1 115°0 113°2	Sc. Div. 115°4 115°0 116°1	Sc. Div. 117 2 116 0 117 0	Sc. Div. 116 2 115 7 116 2	sc. Div. 118 8 117 0 116 2	sc. Div. 114°3 116°3 116°8	8c. Div. 114.4 114.2	Sc. Div. 114.0 113.4	Sc. Div. 113°2 114°2	Sc. Div. 112°8 114°2	Sc. Div. 114°4 114°0	Sc. Div. 114.8 110.0	Sc. Div. 114.66 114.14
113.2 115.2 113.6 115.0 115.9 114.2	111.9 112.7 116.2 114.8 115.2 115.2	116'3 115'0 116'0 115'3 116'0	115·2 116·8 114·0 115·4 115·3 115·8	117.2 116.2 115.0 115.2 115.3 115.4	117.0 115.3 117.0 115.2 115.3 115.0	115.0 115.0 117.0 116.5 116.1 115.3	114.2 115.0 104.2 110.2 115.5 115.0	117.0 114.4 115.5 108.3 115.2 115.4	114.2 113.9 114.6 109.0 115.6 116.0	114.7 115.0 121.0 118.6 115.8 113.8	114.4 114.8 115.8 111.0 115.4 115.4	114.49 114.19 114.27 113.08 114.68 114.73
114'2 114'1 113'4 114'1 113'0	115.0 115.4 124.4 115.2 114.2	115'8 140'4 118'1 116'0 117'0	116.2 114.5 116.0 117.4 115.9	115.8 119.0 116.1 116.1 117.5	115.0 122.9 111.0 115.0 118.2	116.2 114.1 119.0 114.5 115.8 121.6	130°2 114°2 114°3 113°8 117°0 119°0	116.5 114.0 113.0 111.6 118.9 116.2	121 · 1 114 · 0 113 · 0 120 · 2 114 · 7 123 · 5	117.0 114.2 113.4 116.4 116.4 113.5	120.0 } 113.5 118.8 114.0 115.5 113.5	116.21 113.60 116.23 114.70 114.94 115.51
115.6 	115°3 	115.8 	121.0  117.8 115.4 115.8 115.0 115.4 115.7	113.0 120.8 117.0 117.8 115.2 113.9 114.2	118.0 	115·2 115·2 115·1 115·0 115·0 114·4	115.9 115.0 115.0 115.7 115.4 120.0	117.7 115.2 120.0 116.2 115.0 149.4	116.5 116.8 116.0 116.0 115.0 129.5	118.2 115.9 116.0 116.6 114.6 134.6	117:3 116:3 116:2 117:0 115:8 125:8	115.43 115.39 115.33 114.85 115.32 118.60
112.0 114.4 114.8 113.3 113.8	112.8 114.7 111.4 113.6 114.6 115.0	112.9 114.2 124.2 115.0 116.4 115.0	113.0 114.0 122.2 114.4 114.8 121.0	113.0 120.2 123.0 114.8 114.8 114.0	112.4 113.8 123.8 120.5 117.6 113.5	113.2 112.0 112.8 116.0 112.0 112.0	113.8 112.0 113.0 110.6 109.8 110.0	114.0 112.8 113.2 110.6 111.7 114.8	114.0 112.4 115.2 111.1 113.1 109.2	114.8 114.0 118.0 117.0 110.2 117.2	116.0} 115.2 114.2 118.0 115.4 115.0	114.66 113.42 113.82 114.95 114.11 113.69 114.49
— 114·31	115.29	117:15	116.12	116.39	115.99	117.2	114.0	111.0	111.4	114.7	115.0}	114.80
113.9 113.2 113.0 113.2 111.6 113.3	115.7 113.9 114.0 113.8 112.0 114.0	117.0 114.1 114.2 114.0 115.2 115.0	116.9 115.8 118.4 114.2 115.6 115.0	116.9 115.2 115.0 114.0 116.3 113.8	116.0 115.0 114.2 114.0 116.1 113.3	115°3 113°2 113°8 113°8 115°4	113.0 113.4 113.6 113.7 116.2	116.0 113.2 113.2 113.6 116.8	110.4 106.4 113.4 113.0 113.0	109°2 114°4 113°7 113°8 113°1	116·2 113·0 114·0 113·6 119·0 ————————————————————————————————————	114.05 113.92 113.62 113.48 114.56 115.47
112.7 114.2 113.8 112.0 111.0 107.0	113 · 2 114 · 2 114 · 2 113 · 0 110 · 3 108 · 0	114°1 114°0 115°4 115°0 113°4 115°0	115.8 114.0 114.3 118.5 113.8	115 · 4 114 · 2 113 · 5 114 · 2 113 · 9 115 · 0	115.0 112.8 113.2 114.4 115.8 116.2	122.7 114.8 112.8 113.6 114.0 111.8 — 117.0	123.0 114.2 113.4 113.6 113.8 113.2  97.2	123.6 114.8 113.0 113.8 114.0 114.2 ————————————————————————————————————	123.0 114.2 114.8 115.0 114.8 114.0	123·2 115·0 115·0 115·0 115·2 111·2	114.8 114.2 115.8 115.8 121.0 — }	112·17 113·42 113·68 113·52 113·34 113·80
113.4 111.8 109.7 112.2 111.1 110.4	113.8 116.4 111.8 112.4 110.6 112.0	120°0 113°6 113°0 114°0 113°2 112°4	116.2 114.6 114.8 114.0 114.8 113.2	113.8 114.8 113.0 114.0 114.5 114.0	115.0 115.0 113.7 114.0 114.0 113.8	111.8 112.1 114.2 113.3 113.6	111.0 112.7 114.8 114.7 116.2	113.8 112.5 111.0 113.8 118.2	116.0 115.0 115.0 114.2 115.4	117·5 114·0 115·0 114·8 115·8	116.0 114.0 115.2 114.6 113.8	113.65 113.29 113.53 114.08 113.70 113.20
111'2 111'3 103'7 114'2 113'0 112'8	112.8 112.4 104.0 116.0 113.4 112.6	113 · 2 113 · 0 114 · 3 124 · 2 117 · 4 113 · 2	113 · 4 118 · 7 112 · 8 122 · 0 113 · 8 116 · 0	114.0 114.0 112.6 119.0 114.0 113.9	113 · 2 114 · 0 112 · 0 117 · 0 114 · 4 114 · 2	115.0 114.1 112.0 112.8 113.7	114.0 114.8 112.7 113.2 112.4	114.2 115.0 113.0 116.4 112.0	115.5 115.4 114.2 122.4 115.4	115.0 115.6 118.2 117.0 114.2	116.1 117.0 118.6 115.0 116.0	113.51 114.00 111.31 115.09 114.18 113.43
				-		114.5	111.2	112.0	111.0	114.7	114.75	110 10

	Angu	lar Value of	one Scale I	oivision of th	ne Declinom		NATION. 21. Increas	sing Number	rs denote de	creasing W	esterly Decli	ination.	
Mean Go Time.	öttingen ]	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> •	5h.	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
	2 3 4 5 6 7 8	Sc. Div. 115°0 116°0 115°4 116°2 116°1 116°0	Sc. Div. 117 '6 118 '2 116 '2 116 '0 118 '7 119 '2	Sc. Div. 121 ° 0 120 ° 0 118 ° 4 118 ° 8 119 ° 0 121 ° 2	Sc. Div. 118 ° 0 117 ° 8 117 ° 5 113 ° 9 119 ° 0 121 ° 4	Sc. Div. 114'0 116'2 116'4 116'4 118'0 119'0	Sc. Div. 112.6 109.4 109.5 116.3 114.8 115.8	Sc. Div. 110°2 108°5 108°6 114°0 111°8 111°8	Sc. Div. 107'8 109'6 107'2 112'0 110'0 109'2	Sc. Div. 107°8 109°0 107°1 111°6 109°4 107°8	Sc. Div. 108 '4 108 '8 108 '2 111 '2 110 '8 108 '0	Sc. Div. 109 '2 111 '0 110 '1 111 '5 112 '2 108 '8	Sc. Div. 111.7 112.5 110.5 112.0 113.0 110.8
. •	9 10 11 12 13 14	115.0 116.0 116.2 118.2 118.0 124.2	118.2 117.2 118.8 121.4 112.2 120.8	118.6 119.7 118.7 122.4 101.2 111.0	120.0 119.7 119.7 118.4 106.2 111.4	118°1 117°4 115°6 116°1 99°0 112°9	114.4 111.3 111.9 110.2 97.4 105.5	109.8 106.4 109.1 107.0 101.2 103.9	108.8 104.0 108.3 106.0 104.4 100.6	108.6 105.1 106.3 105.8 105.4 106.8	109.0 106.8 101.9 108.4 105.0 106.0	110°9 109°0 107°8 111°6 105°1 113°2	112.0 110.6 115.6 98.8 119.0
MARCH.	15 16 17 18 19 20 21 22	116.8 116.2 102.2 115.0 116.0 116.4	118·2 100·4 114·0 117·6 117·0 118·8	119°2 105°2 118°8 120°2 121°2 118°8	120°2 115°6 121°3 118°2 123°8 120°2	116.8 119.4 117.0 118.1 120.9 114.2	110.8 112.3 113.5 114.0 115.1 110.7	105.2 106.9 110.9 110.4 110.7	103.8 105.0 107.4 108.2 106.0 105.0	103.0 105.0 107.4 107.0 104.7 103.0	100°0 106°2 108°2 107°3 104°3 102°2	112.4 120.0 108.9 109.6 105.8 105.2	102·1 111·2 111·2 113·0 108·0 108·9
	22 23 24 25 26 27 28 29	116.5 118.5 115.2 97.4 119.2 116.3	119.0 119.2 116.8 116.2 119.2 115.2	120°2 120°8 119°1 123°4 120°6 120°6	119.8 122.6 118.8 116.4 121.0 122.3	115.5 116.9 119.0 116.3 113.6 116.2	110°8 108°4 114°0 110°4 111°2 114°4	108.0 103.2 108.8 108.2 109.8 110.2	104.0 101.0 106.2 104.9 106.0 107.6	106°0 102°2 104°4 105°1 106°2 105°3	107.2 104.4 106.2 105.9 107.5 105.7	109.8 108.8 109.6 110.0 108.9 107.3	111'0 110'4 110'7 110'4 111'4 109'2
	30 31	114.8 117.4	115.2 119.4	122·4 119·6	124·1 119·0	118.4 116.8	113.6 110.4	109.6 107.4	105.0 102.0	103.8 102.5	104°4 105°4	107°0 106°8	110'4 110'2
Hourly	Means	115.39	116.95	118.47	118.70	116.08	111.49	108.43	106.35	106.12	106.44	109.63	110.2
	$\left(egin{array}{c}1\\2\\3\\4\\5\end{array} ight)$	112.6 117.4 118.7 118.0	115.8 117.6 121.2 121.0	119.4 114.4 122.8 122.8	120°4 114°2 122°0 121°3	117.6 117.3 117.2 118.8	111.8 113.6 112.8 114.5	107.2 110.4 108.0 102.0	105.6 107.0 105.0 100.0	106.6 107.2 102.8 103.0	106°1 107°0 105°7 104°0	106.6 107.5 107.3 105.2	107.6 109.0 110.4 109.2
	6 7 8 9 10 <sup>2</sup>	111.0 113.0 114.0 114.0	97.0 117.4 117.2 119.0	81.0 117.2 114.1 119.8	92.7 119.2 116.2 117.8	115.0 113.0 112.5 113.7	115°0 108°8 107°1 107°8	108.4 107.2 105.0 104.5	107.9 105.0 104.1 102.5	105 · 2 106 · 9 106 · 4 103 · 0	102.0 105.2 106.9 105.3	110°5 106°2 109°8 107°2	95.0 108.0 111.0 —
APRIL.	11 12 13 14 15 16 17 18 19	119°8 108°2 117°4 122°2 112°6 118°0 117°0	118.0 	117.2 115.0 108.0 124.7 117.8 121.0 118.2	118.8 	114.1 112.0 116.2 113.1 106.4 114.3 114.7	108.0 	110.6 104.7 106.9 108.0 98.4 108.6 106.6	105.4 100.0 103.2 106.8 104.0 105.1 105.0	105'6 	106.8 	109'9	114.9 105.2 103.0 103.0 108.0 107.0 107.5
	20 21 22 23 24 25 26	114.0 119.0 119.6 118.8 116.4 118.2	117.0 121.0 121.0 119.4 118.6 123.0	117.0 122.2 122.7 120.8 118.4 122.2	116.9 120.0 119.0 116.8 117.0 118.3	114.0 116.0 115.2 111.7 115.7 113.2	110.0 109.2 108.0 105.8 107.4 109.0	107.8 106.9 b 111.2 102.3 106.2 107.0	107.0 103.2 c 102.4 101.2 105.2 103.0	105.7 103.7 100.8 103.2 104.0 104.0	106.5 105.0 103.8 104.9 106.2 102.0	106.1 107.7 108.9 106.8 109.5 108.0	10.0 113.0 110.0 111.0 109.0
	27 28 29 30	117.8 119.0 118.7 121.4	119.0 120.0 121.6 120.8	118·2 119·2 120·8 119·7	117.2 114.2 121.4 114.4	106.7 110.2 115.6 110.9	107°0 106°4 111°4 107°4	105°2 106°0 106°0 103°0	106.4 106.4 106.0 102.8	106.2 106.2 106.2 105.0	108.0 107.0 106.4 108.0	109.8 107.9 107.2 109.7	112.0 110.0 109.8 109.8
Hourly	Means	117.15	118.02	117:38	116.35	113.80	109.53	106.32	104.41	104.67	104.98	107.76	108.58

<sup>&</sup>lt;sup>2</sup> Good Friday.

<sup>&</sup>lt;sup>b</sup> Two minutes late.

c Three minutes late.

12 <sup>h</sup> •	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
Sc. Div. 111 ' 4 112 ' 2 112 ' 1 112 ' 0 112 ' 8 111 ' 0	Sc. Div. 111'9 112'8 112'2 112'2 112'8 114'5	Sc. Div. 113 1 113 0 112 9 113 0 113 1	sc. Div. 113 1 113 0 113 3 113 4 113 3 113 7	Sc. Div. 113 '8 113 '9 114 '0 a 113 '0 113 '8 113 '9	sc. Div. 113 '7 114 '0 119 '8 115 '2 114 '0 114 '0	Sc. Div. 114 '2 118 '2 116 '0 114 '8 114 '0	sc. Div. 113 '8 114 '2 115 '2 115 '2 113 '9	sc. Div. 113 '8 112 '6 113 '2 115 '0 114 '1	Sc. Div. 114'0 116'2 112'8 110'0 114'1	Sc. Div. 114'8 116'4 112'0 117'0 115'4	sc. Div. 114 2 116 8 116 4 116 0 116 0	Sc. Div. 113 13 113 76 113 12 114 03 >113 114 17
112·2 112·8 112·2 110·6 104·0 118·2	113·1 113·0 113·8 111·4 111·1 113·9	113 · 9 114 · 3 113 · 6 113 · 8 111 · 5 120 · 8	113.9 113.2 115.0 115.0 117.1 139.0	114.0 114.0 114.8 117.2 117.5 117.0	114.4 112.7 116.8 115.0 116.2 115.8	113.2 114.0 113.0 119.8 114.8 116.4	113'3 116'0 114'0 117'2 114'9 124'7	113'3 116'2 114'2 115'3 114'9 126'0	114.1 115.7 114.6 115.8 112.2 118.1	114.2 115.0 115.0 116.2 118.2 116.0	114.4 } 115.8 116.8 119.3 115.5 115.4 }	113.82 113.99 112.97 113.84 113.98 110.33 114.22
108'0 112'0 112'2 112'0 110'8 111'2	123.7 120.2 126.6 113.0 111.8 111.5	108.0 130.0 110.1 112.8 112.0 112.5	112'8 126'8 112'8 114'9 113'0 112'4	119'8 120'2 113'0 113'4 113'0 112'8	129'8 118'8 113'2 114'0 113'9 113'0	111.4 122.2 123.5 113.9 114.0 113.4	113.7 113.2 116.4 114.0 114.0 115.2	113.0 121.8 117.0 114.6 114.6 	113.2 115.2 118.0 114.8 114.3 118.2 ————————————————————————————————————	114.7 113.0 118.2 115.0 114.0 117.3	116.8 109.5 114.2 115.6 116.0	113.87 114.75 113.11 113.55 113.45 112.20
111'0 111'0 111'4 113'0 114'4 113'2	111.7 112.1 110.6 113.6 112.8 116.8	112.6 112.1 112.0 113.7 118.3 127.6	112.6 112.0 111.9 114.4 116.0 112.0	113.0 112.3 112.8 114.2 113.6 115.6	113.0 112.8 113.0 123.3 112.6 110.6	113·4 113·1 117·6 112·4 113·4 ————————————————————————————————————	115.7 113.7 108.3 112.2 114.2 ————————————————————————————————————	114.8 114.0 124.5 110.4 113.8 —	115.3 114.4 119.4 115.2 115.4	116.6 115.1 115.5 115.6 114.0	118·7 114·4 115·2 116·2 108·2 — }	113°26 112°22 113°38 112°45 113°39 113°27
111.8 113.0 111.79	112.6 112.5 113.93	112.4 112.8 114.34	113.2 116.8	113·2 112·4 114·47	114.6 113.1 115.28	114.6 114.1 115.28	113.9 b 123.6	113.9 114.8	114.0 112.3 114.75	113.2 114.6 115.23	114.4 114.0 114.86	112.96 113.19 
110.0 110.3 112.0 111.6 	111.6 111.3 112.2 113.2 	112·3 111·8 113·0 113·6 — 113·4 114·0	114·1 112·2 112·1  114·0 113·2	112.8 113.2 112.8 113.2 	121.6 113.4 113.4 116.8 	118.4 114.2 114.0 	118.4 114.6 114.6 	115.6 111.4 115.3 - 117.8 115.8 112.2	115.8 120.8 116.0  116.3 106.0 109.0	115.4 121.2 114.2 	117.2 112.0 115.0 	113.35 112.88 113.57
112.0 113.4 — 113.3 — 106.4 107.2 103.8 107.4 109.8	112.3 113.0 — 112.2 — 108.0 110.8 133.0 136.8 111.2	114.0 113.0 	123.5 114.2 ————————————————————————————————————	114·4 113·2 ————————————————————————————————————	114.0 113.2 	107·4 	115·4	114.8 	114.6 	114·2	114.0 	112·45 113·37 113·43 111·44 111·15 113·42 114·51 112·20
10.0 	110.9 107.2 113.4 113.0 110.4 113.0 113.0	110.0 110.0 112.8 110.7 112.9 112.5 118.0	111.6 112.4 112.8 112.6 110.5 113.2 117.4	113.2 	113·4 	119.8 114.0 114.7 113.0 113.0 120.0	115·2 114·5 117·2 113·6 115·0 115·0	116.4 115.2 117.2 114.0 114.4 110.2	115.0 114.7 115.0 115.0 115.5 112.4	112·2 115·0 115·8 115·2 115·4 126·4	113·0} 115·0 117·7 116·2 115·4 114·4 116·0}	112 · 11 111 · 78 113 · 42 112 · 68 111 · 67 114 · 46 113 · 17
13.6 11.9 13.2 10.6	113.8 112.0 113.0 113.0	113.0 114.8 111.0	115'9 120'3 118'0 112'0	115.0 118.0 118.0	114.5 115.8 114.5 114.8	110.2 114.2 111.8 112.5 114.0	112.9 115.5 111.0 116.2 113.8	118.6 110.5 114.4 116.2 109.2	117.0 113.0 115.1 117.0 110.0	116.2 116.0 115.3 115.0 115.2	116.03 115.9 116.2 116.2 117.7	112.68 113.83 115.03 115.03

<sup>&</sup>lt;sup>a</sup> Three minutes late.

<sup>&</sup>lt;sup>b</sup> Seven minutes late.

	Angr	ular Value o	f one Scale	Division of	the Declinor		NATION. 721. Incres	asing Numb	ers denote d	ecreasing W	esterly Dec	clination.	
Mean G Tir	öttingen }	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> •	3h.	4h.	5 <sup>h</sup> •	6h.	7h.	8h.	9h.	10h.	11h.
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	Sc. Div. 118'4 117'0	Sc. Div. 120'7 119'4	Sc. Div. 118'2 118'0	Sc. Div. 116'4 116'0	Sc. Div. 110'9 112'0	Sc. Div. 107.8 106.2	sc. Div. 103°1 102°6	Sc. Div. 103 ° 0 103 ° 0	Sc. Div. 105 2 103 0	Sc. Div. 108 3 107 2	Sc. Div. 111 0 109 4	Sc. Div. 113°0 110°0
	3 4 5 6 7 8 9	124.0 118.6 117.4 119.8 118.0	126.7 119.0 122.5 119.4 120.5 121.8	125°1 117°0 121°2 119°5 119°0 121°3	123.8 113.8 118.0 117.4 116.6 117.0	120.0 111.0 113.9 114.1 114.1 109.0	98·2 106·4 108·7 109·0 110·0 104·2	101.2 101.5 105.4 102.0 104.0 101.8	102.8 101.4 104.0 100.0 102.0 105.0	101.2 102.0 105.0 100.5 104.2 105.0	102 · 4 103 · 2 110 · 2 102 · 4 102 · 7 104 · 2	105.7 103.4 109.7 104.0 103.2 102.3	101.0 103.9 111.0 106.0 107.0
MAY.	11 12 13 14 15 16 17	116·2 118·2 114·8 117·0 119·0 118·6	116.0 120.2 116.4 116.2 121.0 119.8	116'4 126'4 116'5 116'4 118'8 121'0	118.5 121.0 116.2 115.6 118.2 119.2	114.6 107.0 118.5 109.5 118.2 115.0	112·2 107·2 115·5 111·3 111·2 110·8	108.8 106.1 111.2 108.0 107.8 109.8	105.0 109.2 112.0 104.0 106.8 106.4	104.8 111.1 106.2 103.2 105.4 104.8	103.6 105.0 109.0 107.0 106.4 106.0	103'3 113'2 108'3 107'0 108'6 107'4	105.8 107.7 108.0 109.2 110.2 107.7
A	18 19 20 21 22 23 24	121·4 120·4 105·0 113·2 118·0 124·6	120.0 122.8 121.4 121.2 117.4 127.2	124·2 113·4 117·8 120·7 124·0 126·8	120.0 117.1 107.3 112.8 116.4 115.0	114·3 112·1 102·2 106·2 111·5 116·2	107.4 106.2 98.2 102.2 108.2 103.2	106.0 106.5 103.2 100.0 100.0 103.2	99°2 103°0 104°0 100°0 98°5 101°0	100°0 100°0 108°8 104°6 103°0 102°0	101.7 104.0 107.0 106.0 107.5 104.7	106'1 108'4 112'8 110'3 111'6 109'2	108.3 109.5 116.2 113.8 113.9 112.8
	25 26 27 28 29 30 31	108'8 115'0 115'0 120'0 119'2 125'0	109.6 118.8 116.0 120.0 121.8 130.0	113.4 120.0 117.0 122.2 121.4 126.0	107.0 120.0 114.2 121.2 121.0 120.2	109.5 114.2 111.2 115.0 115.3 117.0	108.0 107.8 104.8 109.6 109.0 109.2	105.0 104.4 102.0 104.2 102.0 106.2	104.2 104.4 100.0 102.6 100.3 97.6	103.8 104.6 101.8 103.0 104.0 100.6	104.8 105.0 104.8 105.2 104.8 104.2	106.8 109.8 106.5 109.0 106.8 105.8	107'2 110'4 111'0 112'0 109'2 115'4
Hourly	Means	117.72	120.52	120.07	116.92	112.49	107.40	104.46	103.02	103.76	105.28	107.68	109.21
	1 2 3 4 5 6	120°0 125°8 120°1 118°2 117°0 119°0	115.5 127.7 122.2 120.4 118.4 120.0	113.9 126.2 121.0 117.8 121.5 119.2	115.8 118.4 120.2 115.8 121.2 115.0	112·3 114·2 119·3 111·2 119·9 113·2	114.0 112.0 112.8 106.6 114.3 109.7	106.2 109.6 113.8 101.0 111.0 106.7	107.4 100.0 110.0 100.0 105.3 103.0	108.0 103.8 111.4 107.0 105.0 102.2	106.2 105.0 108.7 108.0 104.0 100.0	107.8 105.9 108.1 108.8 107.0 106.2	109'2 108'0 115'1 111'0 113'2 108'4
	8 9 10 11 12 13	120.0 124.6 120.0 120.2 117.8 131.6	121 · 4 125 · 0 122 · 6 122 · 4 118 · 2 131 · 8	121 ° 0 126 ° 0 123 ° 0 123 ° 0 118 ° 0 118 ° 0	120°2 118°2 125°4 121°8 120°0 119°0	117.0 115.0 124.6 117.3 117.8 116.2	112.0 109.2 116.2 112.3 111.5 109.6	110°2 107°0 111°8 108°8 113°0 106°0	105.6 102.3 110.0 105.0 107.8 105.6	103.0 102.5 106.6 101.8 106.0 103.2	102.8 101.8 105.0 100.9 105.8 104.6	103.2 105.6 105.0 101.7 106.4 105.7	106.8 107.0 109.0 105.6 108.8 110.1
JUNE.	15 16 17 18 19 20 21	118.0 115.2 119.8 115.8 117.8 119.0	113.7 109.4 124.2 120.0 118.2 120.2	117'2 122'6 123'7 121'3 120'0 119'2	118.6 118.2 123.0 116.8 114.0 119.8	117.0 121.0 116.8 111.8 109.6 113.8	114.8 109.2 111.3 111.0 107.3 109.8	115.6 107.0 106.3 106.6 107.7 107.0	101.3 109.2 104.8 105.0 103.8 107.0	100.0 105.0 107.8 104.2 103.8 105.6	106.0 110.0 108.0 110.8 106.2 107.0	103.5 110.9 112.0 110.4 108.5 108.4	109.7 111.0 113.7 112.0 110.2 111.0
	22 23 24 25 26 27 28	129.6 119.2 117.0 121.0 118.0 120.6	128'4 120'4 122'3 121'3 119'2 121'0	126.2 119.2 114.8 120.0 119.8 119.4	121.8 117.0 113.0 118.4 120.4 117.7	114.3 115.2 111.3 116.0 119.2 115.2	108.8 108.8 109.3 114.2 113.8 112.8	105.6 108.0 103.8 107.4 108.0 106.8	105.1 102.8 105.0 105.0 105.8 100.0	102·3 105·2 106·3 102·2 105·0 100·0	105 · 1 109 · 2 109 · 2 103 · 0 105 · 2 99 · 0	107.2 106.3 110.2 105.3 105.2 99.8	110.0 111.0 113.2 109.4 106.9 103.1
	29 30	119.8 123.6	121.9 124.2	123°0 123°1	119.6 125.2	117·9 121·3	110.9	108.4 108.4	102.8 106.4	100°3 105°3	100°0 104°8	100°0 105°2	104.8 107.9
Hourly	Means	120.33	121.12	120.70	119.02	116.09	111'40	108.14	104.85	104.37	105.24	106.32	109.47

1	,	Angulai	Value of o	ne Scale Di	vision of the		CLINATIO		no Numbers	denote deci	reasing Wes	sterly Declin	ation.	
-			41					A				1		
	.12 <sup>h</sup> .	13h.	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17h.	18h.	19h.	20h.	21h.	22h.	23h.	M	eans.
s	Sc. Div.	Sc. Div. 112 ° 0	Sc. Div. 112°2	Sc. Div. 113'4	Sc. Div.	Sc. Div.	Sc. Div. 113 2	Sc. Div.	Sc. Div. 112 9	Sc. Div.	Sc. Div. 114.2	Sc. Div.	Sc. Div.	
	10.0	112.4	115.5	119.7	117.4	117.8	_	<b>—</b>			_	124.0	114.13	1
1	08.2	106.3	118.8	108.4	98.0	119.2	123°2 115°4	119.4 111.3	117.8 115.9	117.0 109.0	121.2 112.0	116.2	111.41	]
10	06'0	102.2	113'7	113.5	115.0	112.8	110.0	117.0	117.4	117.0	115.6	116.4	110.73	.,
1/1/	11:2 07:2	117 <b>.</b> 6	111 <b>'</b> 3 112 <b>'</b> 4	111'8 117'0	111.8 119.2	121.0 111.0	112°2	111'8 118'2	110°2 108°4	114'0 114'2	117.8 114.8	118 <b>.</b> 6	112°76 111°92	
1	11.2	111.8	110.6	111.5	112.9	118.2	116.3	114.0	112.0	112.4	113.3	115.6	111.40	i
1	11.0	110.6	110'7	111.5	112.2	112.8	112.8	113.3	114·1	115.0	116.0	$\frac{-}{116\cdot 4}$	111.37	
	13.3	109.0	107.0	110.2	138.5	112.0	114.2	120.0	114.4	107.0	105.2	107.5	111.81	
	05°0 17°0	106°2	104°2 114°0	119'8 113'4	116.0 123.0	115°2 116°4	106.4 117.2	110°2 107°8	113'4 113'0	115 <b>'</b> 5	114.8 112.2	102'8 115'9	111.74 114.24	Ì
1	10'4	119.4	115.6	117.8	119*2	115.2	115.0	114.0	113.8	111.8	109.0	117.0	112.61	<b>\}112.3</b> 6
	09.8	110'8 110'2	111'1 110'2	110°2	111.0 111.0	111.0 111.0	111.0	113.3	112.0	112.1	113.2	116.2	112.33	
1						_	112.4	112.6	112.0	110.4	114.4	115.0}	111.98	ĺ
	07°3 11°5	111.0	115.5 112.2	115'0 114'5	118.0 117.8	118°2 125°2	125.0	126°2	111.2	116.0	115.8 106.0	118.8 118.8	113.20 113.68	
10	14.8	113.2	111.0	110.0	118.0	117.7	138 <b>.</b> 4 116 <b>.</b> 0	114.0	115.6 112.0	113 <b>.</b> 8	113.5	116.3	111.41	}
1	14°3 15°4	113.5 113.6	111'8 112'5	115.8	114.0	113.8	111.5	114.0	105.0	103.8	106.3	114'0	110.32 115.30	)
	13.8	112.0	111.8	111 <b>.</b> 0	115.8 130.2	114.0 118.3	114.0	115.0	114.2	113.0	— 110.8	129.2	112 90	
١,	_ 14.6	113.7	111.2	 111`2	113.8	100:0	126.0	106.0	109.2	112.4	113.2	110.2	110.36	
1	12.4	114.5	113.8	117.6	110.8	120.8 111.0	111.0	113.0 112.2	112 <b>·</b> 1 112 <b>·</b> 4	113'0 112'4	110'8 113'7	113.0 112.0	112.00	ļ
	13.2	111'4	112.2	111.0	112.8	111.3	112.2	1111.7	110.7	109.3	112'0	117.8	110.41	
	13'8 08'2	114'0 110'0	112.4 109.8	111 <b>·</b> 9 110·4	112°0 125°6	111°3 126°0	111'3 117'0	111'8 115'2	112 <b>'</b> 4 115 <b>'</b> 4	113 <b>·</b> 2 110 <b>·</b> 2	$114.0 \\ 109.2$	116 <b>.</b> 6	112.45 112.52	$\begin{array}{c} 112.75 \end{array}$
	08.0	108.2	107.8	119.8	101.4	126.6		· —				116.9}	113.76	112 10
-	11:00	111:00	111100	110170	115:00	110100	128.0	121.0	112.8	111.8	110.8			
1	11.55	111.98	111.90	113.29	115.69	116.50	115.88	114.28	112.71	112.23	112.81	115.66	112.53	<b>i</b> 
	10.4	109.2	140.4	124.3	121.4	123.2	129.2	125.8	124.3	123.6	122.8	116.0	116.95	
	26'0 13'2	109 <b>.</b> 4 114.0	109°0	116 <b>.</b> 0	106'0 117'2	115.3	115°8 112°5	111.9	120 <b>°</b> 0 107 <b>°</b> 8	110.8 109.5	116 <b>'1</b> 107 <b>'</b> 4	118.0 115.2	113.82 113.72	J
11	12.0	111.8	111.0	112.0	110.5	110.8	107.8	110.0	119.4	117.6	117.0	118.0	111.81.	
	13.0 07.6	111.2 108.4	110.6 108.2	$\begin{array}{c} 110.2 \\ 121.2 \end{array}$	118'0 115'2	120°8	120.2	104.6	113'2	114'8	114.4	117.8	113.61	
							115.4	115.4	113.0	113.8	114.4	119.0}	112.00	
	11 <b>'</b> 0 10 <b>'</b> 4	108'0 114'0	107°8 117°0	111.2 111.2	124°0 121°2	119 <b>·2</b>	123.7 119.3	137 <b>.</b> 0	123°0	129 <b>.</b> 0	122 <b>.</b> 8	122.8 116.2	115.96 113.57	
1.3	12.8	112.5	115.0	111.5	116.0	117.2	117.0	112.8	112.0	112.2	113.6	116.8	114.21	] } 113·30
	09.8	110.0	110°4 110°4	110'4 111'1	111'2 112'0	111.4 113.7	112.2	113 <b>°</b> 0 112 <b>°</b> 1	115 <b>.</b> 8	115.0 116.1	116 <b>.</b> 0	113°0 123°2	112.05 113.15	1
	11.8	113.0	113.6	122.2	114.2	113.8	— 113.0					— 1	112.95	ĺ
10	08.8	119.2	 114.7	124.0	121.2	122.2	113 <b>'</b> 3	110 <b>·</b> 3 104 <b>·</b> 2	110.8 104.1	106 <b>·</b> 9 107 <b>·</b> 4	110°0 112°3	109.6 } 117.0	112.68	
12	23.0	130.2	117.3	114.0	126.5	114.0	114.2	110.5	109.0	108.0	100'2	118.4	113.90	l
	12.6 15.4	114.0	112.0	111.0	114.6	113.2	112.2	111.8	112.0	107.0	116.4	113.0 113.2	113.40 114.69	
11	11.2	111.0	115.0 111.8	136°2 111°0	114'0 110'5	112 <b>'</b> 1 110 <b>'</b> 4	117'0 111'0	$125.0 \\ 110.3$	119 <b>.</b> 2 108 <b>.</b> 8	113.8 109.1	114 <b>'</b> 9	117.0	110.93	İ
11	13.0	113.0	112.8	112.6	111.0	112.4	<b>→</b>		_			$\frac{-}{126\cdot 2}$	112.12	
	17.3	143.7	118.8	126.0	120.2	113.8	113°2 110°7	108.2 112.0	108 <b>.</b> 0	107°4 105°4	105°0 111°2	106.8	114.97	
	13'2 14'4	114.0	115.2	111.0	113.8	116.2	110.2	112.0	112.8	113.0	103'0	109.0	111.90 111.77	
11	11.8	114.4 118.7	112.7 116.2	113°1 117°4	112 <b>.</b> 2	112 <b>·</b> 5	111 <b>.</b> 9	112 <b>'</b> 6 111'0	111.2 108.7	111.6 111.0	101'6	118'8 114'2	112.84	112.89
10	07.0	110.5	111.9	117.0	114'6	112.7	110.3	116.0	116.5	115.8	116.5	120.0	113.10	
10	07.2	109.6	106.3	111.5	109.0	112.5	112.0	116.4	113.4	112.8	108.6	116.8	110.45	
	08.0	108.3	110.4	129.4	116.2	117.4	118.2	118.0	115.0	115.8	115.2	113.4	113.12	
10	98.8	110.0	110.5	109.8	126.4	125.0	116.0	115.8	111.0	113.9	114.8	117.6	114.54	l
j.	2.29	113.82	113.41	116:30	115.88	115.63	114.75	113.87	113.14	112.75	112.67	116.42	113.25	

	A non	ılar Value o	f ana Saala i	Division of	ha Dadia		INATION.		J	V	Zantanlar Da	12	
Mean G Ti	öttingen }	H	1 <sup>h</sup> .	2h.	3h.	$4^{h}.$	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	$ \begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \end{bmatrix} $	Sc. Div. 119 ° 0 112 ° 0 118 ° 2 130 ° 4	Sc. Div. 121 ° 0 128 ° 2 117 ° 4 115 ° 2	sc. Div.   121 1   123 0   119 4   115 0	sc. Div. 123 ° 0 123 ° 8 116 ° 4 117 ° 4	Sc. Div. 120'0 118'0 113'8 115'5	Sc. Div.   111.6   114.8   115.7   112.8	sc. Div. 111 2 114 6 114 5 108 8	sc. Div. 108 2 109 2 111 4 108 5	sc. Div. 105 '8 106 '7 109 '9 106 '2	Sc. Div. 103 '8 104 '5 107 '1 105 '0	Sc. Div. 104 4 104 8 107 7 107 0	Sc. Div. 108'7 105'9 109'7 110'0
	5 6 7 8 9 10	114.0 121.0 117.0 116.0 122.0 132.8	123.0 126.0 118.4 121.8 123.1 123.6	123.5 130.0 122.4 125.0 123.0 117.0	125.0 119.8 118.0 124.2 119.8 108.0	116.0 120.0 118.0 121.2 119.8 110.6	109'9 115'0 114'2 112'2 114'2 117'0	99°2 107°2 108°0 111°3 111°4 114°2	104.0 106.8 106.2 108.8 104.8 108.6	103°2 113°2 104°2 110°0 102°0 98°0	104.0 106.8 104.6 102.2 106.2 103.8	107.0 105.0 105.5 104.4 106.0 108.8	116.4 108.4 110.8 107.0 107.0 112.2
JULY.	12 13 14 15 16 17 18 19	114.0 117.4 115.0 115.5 121.0 115.7	120°0 119°0 124°2 112°5 124°0 123°0	124'4 118'2 124'4 120'0 123'4 117'3	122 · 2 118 · 4 124 · 8 117 · 4 120 · 4 116 · 4	119.0 116.0 118.6 116.5 115.0 114.0	110.8 118.5 110.0 110.0 100.6	106'8 107'0 109'2 105'0 109'0 103'8	104.0 104.8 109.4 106.7 105.4 101.2	109°2 107°4 106°9 109°0 107°0 104°6	109'8 106'9 109'6 107'0 107'8 108'0	108'0 105'8 108'8 110'0 108'0 114'9	113.8 105.0 109.0 111.0 112.2 115.0
	20 21 22 23 24 25 26	117'0 119'2 120'8 120'2 121'0 119'2	121'0 121'0 120'0 124'4 124'2 124'4	120°2 122°8 119°0 123°5 124°8 122°2	118.6 123.8 118.8 116.4 121.8 118.8	114'9 118'5 114'8 114'1 120'5 122'5	110.5 117.0 109.5 106.9 109.8 117.8	109.2 114.0 106.2 107.0 110.9 111.8	109'4 109'0 100'9 105'2 106'2 111'8	108.8 107.0 105.3 104.0 95.4 105.3	107.0 107.5 107.5 105.5 97.0 105.5	108.0 107.1 108.2 109.0 99.4 112.0	110'4 109'8 109'2 111'0 101'0 108'0
<u>.</u>	27 28 29 30 31	123°3 119°8 127°0 111°2 119°8	124.4 123.2 128.0 111.0 122.4	125.6 124.1 119.2 119.8 117.8	121.3 120.7 118.0 120.4 113.0	118.5 113.1 108.8 117.0 114.5	111.4 106.4 103.6 108.2 107.8	107 · 2 103 · 7 95 · 2 107 · 4 105 · 2	102.0 102.0 105.0 110.0 101.8	103.0 103.9 102.2 103.8 105.4	100°0 104°5 108°6 99°6 106°0	103.0 105.0 106.6 97.8 105.0	109.0 110.0 110.4 97.2 107.8
Hourly		119.24	121.64	121.70	119.20	116.64	111.21	108.11	106.34	105.46	105.40	106.26	109.10
	1 2 3 4 5 6 7 8 9	119.2 120.8 121.3 119.0 121.0 110.8	124.0 122.8 125.5 122.0 125.0 120.2 111.5	115.8 	111.0 	111.0  117.2 116.0 108.8 110.2 117.2 122.5	109.2 109.2 111.0 111.0 111.0 114.2 118.0	107.4 	103.0 105.0 105.0 100.0 102.6 109.4 109.0	102.2 106.2 104.2 103.0 102.8 105.2 110.8	105.9 107.0 104.8 106.2 104.2 115.8 113.8	104.1 	107.2 
AUGUST.	10 11 12 13 14 15 ( 16	109.6 118.0 118.0 114.2 118.2 104.8	112.0 121.9 119.2 100.2 129.0 115.8	120.4 123.0 119.0 103.8 119.0 116.9	122.7 126.0 112.2 106.0 106.7 113.0	118.3 120.8 107.0 107.6 100.6 113.0	114.8 b 116.6 101.4 105.5 98.2 c 109.8	106.0 111.0 102.4 107.2 106.0 105.3	103.8 104.2 107.0 104.8 105.5 104.8	102.2 104.8 108.2 105.4 102.0 104.0	103.0 106.0 112.0 109.8 102.0 108.0	106.0 104.2 107.6 110.0 102.9 110.0	109.2 109.5 114.8 112.0 108.3 109.0
AU	17 18 19 20 21 22 23	122.8 117.0 111.4 118.6 121.0 125.5	125·3 122·4 121·8 118·2 120·6 126·0	124.8 121.8 121.2 118.8 120.0 d 127.2	122.0 122.0 120.4 114.0 120.6 122.4	116.0 116.0 111.0 108.2 110.3 114.2	114.0 113.4 106.0 106.2 106.8 103.0	106.0 103.0 100.4 101.8 104.3 103.0	102.5 102.0 101.2 99.0 107.0 98.8	104.2 103.5 100.0 100.9 103.8 98.6	104.2 104.6 104.8 106.0 102.0 101.4	106.0 110.2 107.3 108.0 105.0 101.8	109.5 112.8 110.2 112.8 109.2 110.8
	24 25 26 27 28 29 30	120°2 119°2 119°5 113°0 121°8 117°2	125.0 116.5 123.0 119.4 124.5 124.2	128.0 119.8 127.2 122.0 125.5 121.4	130°2 123°3 124°8 118°2 123°4 116°0	118'1 113'6 115'8 112'8 117'0 116'0	119.2 107.8 109.4 106.8 103.0 113.5	108.8 104.6 104.0 103.0 100.0 113.3	105 · 2 101 · 8 103 · 0 104 · 0 98 · 8 107 · 0	100.0 105.4 102.2 100.4 99.2 102.8	99°3 105°0 104°3 100°0 102°2 104°0	104'0 106'2 107'2 109'6 119'0 107'4	101.0 108.0 112.2 109.0 118.3 106.9
TT1 · ·	Maana	118.4	120.0	118.4	116.2	115.6	109.7	104.2	102.8	104.2	106.0	110.0	109.5
Hourly .	weans	117:36	120.62	121.07	118.93	113.65	109.57	106.00	103.74	103.32	105.47	107.62	110.07

<sup>&</sup>lt;sup>a</sup> Four minutes late.

<sup>&</sup>lt;sup>b</sup> Fourteen minutes late.

c Ten minutes late.

<sup>&</sup>lt;sup>4</sup> Five minutes late.

	Angular	Value of o	ne Scale Di	vision of th	e Declinome	DECLIN		ing Number	s denote dec	ereasing We	sterly Decli	nation.
12h.	13h.	14 <sup>h</sup> .	15h.	16 <sup>h</sup> •	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Means.
Sc. Div. 111'8 114'8 110'9 109'0	Sc. Div. 109'4 112'0 113'0 111'2	Sc. Div. 121.7 111.2 114.9 107.8	Sc. Div. 114°0 118°8 126°0 107°2	Sc. Div. 111'2 121'9 128'6 117'4	Sc. Div. 111 '9 122 '0 132 '6 117 '6	Sc. Div. 109 5 120 2 117 0	Sc. Div. 118°2 123°3 115°8	Sc. Div. 119°0 123°0 117°0	Sc. Div. 113°2 124°4 121°8	Sc. Div. 125'3 131'2 123'0	Sc. Div. 118.6 119.2 123.8	sc. Div. 114 23 J 116 98 7 116 90
112.2 111.0 112.0 111.0 108.4 114.8	112.6 119.8 111.0 112.2 109.8 109.8	123°8 115°0 110°7 110°4 118°8 114°2	105.7 111.2 117.0 112.2 114.0 126.6	113.9 112.0 116.8 111.6 112.2 126.5	122.0 107.0 115.2 112.2 111.5 127.0	111.0 121.9 121.8 116.2 115.0 112.0	109°1 117°0 114°0 116°6 117°4 110°6	101.8 116.8 113.7 112.2 115.3 114.4	109.0 115.4 113.9 110.0 116.2 120.2	112.8 113.1 113.2 114.6 110.5 131.0	119.6 119.0 110.4 117.0 120.8 141.8	111'89 114'11 114'26 113'19 113'70 115'17
114.2 112.8 112.4 113.7 113.0 112.6	119°1 107°4 112°5 116°0 113°0 116°8	119.0 115.8 113.4 114.8 111.6 123.6	112.5 118.2 112.4 116.4 111.7 119.0	114·1 115·2 119·0 112·1 114·8	113.0 118.7 117.2 112.8 119.2 111.2	112.2 116.0 138.0 115.2 112.0 113.0	113.0 115.8 137.0 112.0 114.8 112.0	110.8 113.0 120.2 114.4 116.8 110.8	104.2 105.0 114.0 114.0 106.0 110.0	113.8 92.3 111.4 114.0 104.0 110.0	119.8 100.0 107.4 116.0 119.8 115.0	114.47 112.33 114.70 114.61 112.40 113.11
111.0 110.2 113.8 104.8 105.0	112.0 111.0 110.4 114.2 104.0 118.5	123 0 111 8 111 4 113 0 111 2 112 0	117.0 112.0 111.7 112.8 108.2 116.2	115.0 114.0 112.4 115.2a 111.5 114.2	112.0 121.0 112.0 112.7 118.0 114.0	112.5 121.6 130.2 113.2 112.0 117.2	116.0 107.0 125.4 116.0 112.0 111.4	106.0 107.4 114.4 118.0 113.0 111.0	117.6 108.2 113.2 115.0 113.6 109.8	115.7 109.0 111.4 107.6 115.0 105.0	118.7 } 108.4 114.0 115.4 118.0 116.4	113·54 112·77 115·25 112·23 113·02 110·85
110°0 107°2 110°2 103°0 110°0	112.2 109.2 122.2 110.6 112.8	119.0 111.2 109.4 108.0 109.8	114.7 112.0 110.5 132.7 104.2	117 · 4 113 · 2 112 · 2 117 · 3 115 · 2	110.0 111.6 121.6 118.0	113.2 120.2 111.2 114.8 110.2 104.6	115.4 117.4 112.5 117.0 107.0 113.0	116.0 112.5 115.0 112.5 114.3 105.8	112.7 108.4 116.6 108.8 115.5 100.0	112.0 114.2 118.8 112.0 113.5 109.8	119·2 } 116·4 118·0 115·0 116·2 118·0	114'49 113'38 112'30 112'03 111'39 110'32
110.77	112.69	114.31	114.62	115.44	116.12	115.99	115.43	113.2	112.47	113.49	117.11	113.47
114.8 — 112.2 112.8 111.0 111.0 111.0	122·2	115.5 129.0 110.8 112.3 132.0 110.6 120.0	116.2 112.0 110.8 170.0 113.0 114.8	111.0 	107.2 110.8 111.8 111.1 131.4 114.2 124.2	105.2 111.0 111.8 109.2 122.2 122.0	112.0 111.0 112.5 112.3 110.2 79.4	110'4 112'2 114'0 117'2 104'2 121'8	112.8 113.2 117.2 122.8 94.3 117.8	113.4 114.5 114.0 122.0 106.7 113.0		116·17 113·52
109·2 117·2 112·0 113·6 109·8 142·8	110.0 116.4 108.0 111.8 109.2 122.8	114.6 b 118.2 110.7 113.2 113.6 117.0	119.2 123.6 124.1 118.0 150.4 117.6	117 ° 2 121 ° 2 115 ° 7 114 ° 2 124 ° 5 119 ° 4	111.2 110.0 121.9 130.4 128.4 110.5	115.8 116.2 113.7 120.6 129.0 88.6	125.5 113.8 109.8 120.0 123.0 105.5	122.5 120.4 111.4 120.2 127.2 92.0	100.6 114.0 111.9 118.8 119.3	112.0 112.0 112.8 114.0 107.0 109.6		115.59 112.56 114.34 113.64 112.66 110.42
111.2 113.8 111.8 113.2 111.8 108.2	113.2 115.9 110.0 111.2 110.0 110.9	122.2 126.9 112.8 111.0 108.8 112.2	128.0 120.8 120.2 110.0 109.0 108.2	117.9 116.0 112.6 111.2 117.0 110.0	111.0 119.0 111.3 109.8 113.3 115.8	125.0 112.3 112.8 111.0 110.6 112.6	122.0 112.0 111.6 101.2 111.2 115.2	116.5 112.2 111.4 113.8 110.2 112.8	110.2 111.0 111.0 113.4 114.0 114.8	110.0 109.0 114.0 115.0 109.8 116.8		114.25 113.69 113.83 111.01 110.53 112.21 111.81
120°0 122°8 113°0 116°0 105°2 109°1	107.0 111.3 111.2 108.1 107.0 107.5	114.1 116.0 111.2 109.2 109.9 106.4	130.0 115.2 112.0 112.0 120.0 109.7	123°3 113°2 113°5 111°0 135°4 109°8	118.0 114.6 127.3 118.5 112.2 113.0	111.2 134.5 116.0 121.8 108.8 111.0	114.0 114.3 111.2 116.8 102.0 108.9	112.0 111.7 111.0 112.1 112.0 106.6	114.0 113.0 108.0 113.1 120.0 110.2	116.0 113.4 103.2 114.3 109.0 104.2	118.2 111.5 115.0 114.0 119.0 110.0 	115 '41 112 '03 113 '87 110 '99 112 '22 112 '43
109.0	111.3	123.4	120.2	114.8	111.0	123.4 110.0	120°0 111°2	116 <b>.</b> 4 111 <b>.2</b>	112.2	113.0	113.8	112.27
112.44	113.24	115.45	119.78	117.34	116.07	115.91	113.09	113.22	112:91	111.83	113.14	112.94

	A	ngular Value	e of one Sca	le Division (	of the Declin		LINATION		ibers denote	decreasing	Westerly D	eclination.	
Mear	Göttingen Time.	) Oh.	1h.	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
	$   \begin{pmatrix}     1 \\     2 \\     3 \\     4 \\     5 \\     6   \end{pmatrix} $	Sc. Div. 116'9 119'0 120'0 98'0 129'0	121 · 2 120 · 5 123 · 0	120°3 120°3 122°7 111°0	Sc. Div. 114 '8 116 '2 118 '0 121 '2 113 '1	sc. Div 111.6 109.8 111.0 108.9 105.8	105.0	sc. Div. 101 '9 102 '2 100 '2 99 '0 104 '6	sc. Div. 101 ° 0 102 ° 2 100 ° 2 99 ° 8 102 ° 0		Sc. Div. 104.8 107.2 106.4 104.8 110.7	Sc. Div. 108 5 109 2 110 0 108 1 114 9	Sc. Div. 110°4 111°4 111°1 120°6 105°0
R.	7 8 9 10 11 12 13	116.6 116.8 119.0 116.0 83.4 112.7	121.0 115.0 124.0 118.6 111.5 115.4	110.8 120.0 111.6	116.8 111.3 114.7 118.2 108.8 111.9	113.2 113.0 110.2 110.2 101.0 104.0	108'1 109'0 107'0 100'8 104'3 100'0	104 1 105 3 102 8 98 6 100 0 102 8	109°2 105°0 102°0 103°4 100°7 105°0	107·2 111·0 104·0 98·8 103·4 112·8	111'1 114'8 109'6 98'8 108'9 110'0	114'1 111'8 113'5 101'8 117'5 117'0	115'1 111'0 116'2 108'0 121'0 118'0
SEPTEMBER	14 15 16 17 18 19 20	122.8 112.0 118.2 125.2 116.4 118.0	119.9 109.6 120.2 124.8 119.6 116.0	112.2 119.0 115.5 122.0 119.1 118.8	113.0 115.4 113.8 116.5 118.0 116.0	106.0 106.9 113.1 113.1 115.0	101 · 2 b 103 · 2 108 · 7 108 · 3 108 · 0 108 · 9	101.0 102.8 107.8 104.2 103.2 104.0	100.0 103.0 107.6 102.3 102.8 102.2	104.8 107.2 109.2 104.8 104.1 101.0	109.0 113.0 111.2 108.8 107.8 100.2	114.0 115.2 112.4 114.8 111.3 102.0	111.8 119.1 112.1 112.8 113.0 108.2
	21 22 23 24 25 26 27	123°0 87°2 115°4 116°8 117°0 118°2	126.0 90.2 113.5 121.0 120.5 121.0	123.0 73.0 119.0 119.0 118.9 119.6	121.4 82.4 116.7 116.3 123.0 118.0	117.0 99.2 112.2 111.0 111.8 115.2	112·2 96·7 109·9 106·2 109·0 111·0	107.4 109.5 104.0 103.8 106.0 107.0	103.0 117.1 103.0 101.5 102.2 105.0	104.2 106.6 102.9 101.2 102.0 104.4	99.6 110.8. 103.5 106.5 105.0 106.4	95.5 99.3 103.5 104.6 107.2 109.2	105.8 116.0 104.6 106.0 110.0 110.5
	28 29 30	118°5 115°4 114°6	117.8 117.2 115.0	116.6 116.8 116.2	117.6 114.1 119.0	113.4 111.8 113.4	108.4 110.1 111.2	104.0 106.8 104.2	109.8 106.7 105.0	107.2 106.0 106.0	107°2 105°8 105°4	109°1 107°8 103°0	110.0 108.2 106.4
Hour	ly Means	114.85	117:34	115.97	114.85	110.30	106.03	103.75	103.91	104.69	107:20	109.05	111.64
	$\begin{bmatrix} & 1 \\ 2 \\ 3 \\ 4 \end{bmatrix}$	116.2 104.8 121.0	120.0 113.1 120.0	117.8 110.3 120.2	110°8 105°4 118°6	109.7 109.2 118.0	104.3 108.0 113.8	107 · 2 105 · 2 109 · 2	107.0 106.4 104.9	106.3 104.6 105.8	110.4 101.7 108.6	111.8 107.1 109.8	113°0 102°7 110°8
	5 6 7 8 9 10	116.2 114.4 116.0 116.3 113.4 104.3	117·2 111·3 121·8 73·5 114·2 98·8	118.4 116.0 122.2 95.5 117.0 100.4	111.0 114.2 120.0 111.0 117.4 103.3	107.2 110.3 108.3 104.0 114.2 105.6	106·1 105·0 106·2 102·0 110·4 108·0	104.0 101.2 100.7 102.8 106.4 105.0	103.5 102.0 99.3 100.8 104.0 103.8	105.5 103.8 104.2 102.4 100.8 101.7	109°2 108°0 107°2 109°2 104°2 105°7	111.8 110.0 104.2 111.2 108.8 111.0	112.2 110.8 99.2 114.2 108.9 111.8
OCTOBER.	12 13 14 15 16 17 18	119.0 113.0 115.6 115.0 118.8 117.9	113·1 115·5 116·0 115·6 117·0 117·9	102·2 116·2 117·1 118·0 116·6 117·0	106.4 116.5 117.4 117.2 117.0 117.0	109.6 114.0 113.0 115.3 111.5 113.0	111.0 d 108.8 107.8 111.0 108.3 109.2	109.5 106.9 107.0 106.8 107.8	111.0 108.0 107.5 107.0 109.4 106.0	108.0 108.0 110.8 110.8 110.8	109.7 109.6 111.8 111.1 111.8 109.0	111.8 116.6 112.9 111.6 111.7 111.1	113.0 111.0 112.2 112.5 111.0 111.0
	19 20 21 22 23 24 25	115.7 118.2 114.0 116.3 118.8 115.2	115.5 121.2 114.8 119.1 118.1 116.9	117.8 123.0 120.0 114.0 117.2 119.0	120.0 121.2 119.8 108.7 119.7 120.0	119.0 e 119.8 119.1 114.0 118.5 117.8	114.0 109.4 112.5 110.2 114.0 112.5	105.8 107.6 109.8 108.8 109.9 110.0	103.0 106.0 107.4 103.0 107.2 110.7	106.4 106.8 108.0 103.5 107.0 106.4	106.0 107.8 110.5 107.6 109.0 107.2	106.0 109.2 108.9 112.5 110.0 108.2	105°2 110°1 114°0 110°3 112°0 110°4
Novem)	26 27 28 29 30 31	110·2 115·0 115·4 114·2 108·2 109·7	115.0 117.2 115.6 113.5 111.0 112.0	119.0 118.7 116.6 117.5 100.0 116.2	119.2 121.8 118.8 117.1 111.0 114.4	119.8 118.2 116.8 118.6 115.0 112.0	115°0 116°0 115°6 114°8 114°0 112°0	109'4 111'0 110'8 112'0 113'0 110'2	107.0 109.0 108.7 108.6 111.4 109.0	105°2 106°1 107°8 106°4 110°4 111°2	107'4 108'1 108'3 108'0 112'0 111'7	108:9 108:6 111:2 108:7 112:0 111:8	110.9 108.2 111.0 110.6 112.8 112.2
Hourly	Means	114.57	114.00	114.96	115.37	113.76	110.37	107.55	106.37	106.44	108.55	110.27	104.44

<sup>&</sup>lt;sup>a</sup> Forty minutes late.

b Eighteen minutes late.

 $<sup>^{\</sup>circ}\, Four$  minutes late.

	Angula	r Value of o	one Scale Di	ivision of th	e Declinome	$\begin{array}{c} \text{DECLIN}A \\ \text{ter} = 0' \cdot 72 \end{array}$		ng Numbers	s denote deci	reasing Wes	terly Declin	ation.
12 <sup>b</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Means.
Sc. Div. 113 2 111 0 110 2 110 8	Sc. Div. 111 2 109 8 108 0 111 8	Sc. Div. 110'7 110'4 106'5 125'9	Sc. Div. 110 ' 5 109 ' 5 108 ' 7 110 ' 0	Sc. Div. 116°0 111°1 108°2 118°0	Sc. Div. 111 '4 111 '1 108 '8 109 '8	Sc. Div. 118°2 113°1 120°2 113°3	Sc. Div. 114.7 117.2 112.7 112.8	Sc. Div. 114°2 115°0 125°0 110°0	Sc. Div. 112*8 119*8 109*0 104*0	Sc. Div. 112 ° 0 115 ° 8 124 ° 0 100 ° 0	Sc. Div. 116'5 118'0 114'2 110'0	Sc. Div.  111.73   112.03   111.86   112.97
153°2  115°3 113°4	120.0 — 112.5 111.8	133.8  111.2 112.5	125.0 111.0	115.4  110.6	117.2  110.5 108.1	109.8 112.2 110.4	103°0 115°0 110°4	112·2 112·7 113·3	111.0 111.3 112.2	107.8 120.0 112.5		113.93 113.02 111.54
115.8 115.8 112.2 114.0	113.0 112.0 152.2 110.2	112.2 110.8 118.7 122.0	110.9 116.2 112.4	108.9 113.9 118.8 112.0	107.0 112.4 120.8 110.4	107.8 109.0 102.0 ———————————————————————————————————	108.9 121.2 108.8 — 112.4	112.3 123.2 108.6 — 111.8	115.7 123.0 102.2 — 126.8	117.7 128.4 113.4 	116.0 123.8 119.3 ————————————————————————————————————	112.06 J 112.47 111.05 112.84
115.0 113.8 111.2 112.9 111.2	121.8 113.0 112.8 116.3 113.0	111.4 112.3 125.0 115.0 112.8	113·3 111·0 115·2 112·2 112·4	123.5 111.3 113.3 112.0 c 118.2	121·2 112·2 112·0 112·4 115·0	109.4 113.0 114.0 115.0 113.2	120.8 114.0 115.0 113.2 113.2	118.0 114.0 117.0 115.0 114.3	121·2 115·7 113·6 104·4 113·1	111.0 115.5 108.8 117.0 115.0	120°2 115°0 122°7 121°8 118°0	113'44 111'97 113'72 >112'41 113'47 112'74
111.4 	113.0 120.1 113.2 107.0 109.2 111.2	112.8 	113.8 101.1 121.5 107.8 111.0 125.0	113.0 	114.5 — 121.4 124.0 112.7 112.4 113.2	112.1 117.7 126.0 109.0 113.0 105.0	101'4 136'2 114'0 112'0 112'8 109'7	120.7 131.6 110.0 117.1 114.2 118.0	116'8 137'0 112'6 117'8 114'4 109'0	124.0 155.2 113.4 116.8 116.5 119.0	125·2 } 101·2 114·8 117·7 116·3 116·4	112*04 116*32 108*39 110*53 111*01 112*60
115 · 4 	113.3 113.1 105.8	109.3 114.0 106.0	111.2.0 110.3 106.0	112.8 111.5 108.8	113.0 112.6 112.2	112.0 113.0 115.0	110.0 113.2 113.5 123.5	118'3 113'6 112'8 122'0	118.0 113.0 115.0 117.2	113 °9 114 °0 115 °0 107 °2	114.8 113.1 116.1	112.93 112.67 111.62 111.19
114.34	114.12	113.72	112.41	114.17	113.21	112:52	113.83	115.91	114.87	116.74	116.24	
124.6 100.2 110.0	122.2 112.1 111.2	111.0 128.2 112.0	113°3 139°7 112°1	112.0 112.0	111.5 123.2 111.9	111.5 115.0	112.0 119.4 —	105°0 123°6 —	110.9 122.4 —	115.1 126.5 —	107.5 126.0	112.12 113.91 113.21
113.0 120.8 111.2 119.0	113.5 113.8 111.8 121.6	113·1 115·0 116·0 114·1	112·2 116·8 152·0 115·0	112.3 115.4 126.6 113.1	111'8 119'2 118'2 120'0	112.2 113.0 120.0 138.8 116.2	113.2 113.0 119.2 112.0 118.0	113.7 114.2 117.0 110.0 105.2	114.8 113.3 110.0 119.0 113.2	115.2 116.5 114.0 122.0 115.3 128.8	115.0 } 115.4 113.1 117.0 115.0 118.6	111 82 112 55 115 12 109 52 117 17
123.8 111.2 — 119.2 113.0 112.1	119.0 112.0  116.0 121.4 117.5	122.8 112.0  113.2 112.2 113.0	124.1 110.4 — 112.2 127.5 111.7	123.0 110.8 — 108.8 116.6 -112.0	133.4 111.0  111.8 113.1 113.0	128.6 — 114.0 112.8 113.2 113.3	144.8 — 113.5 113.9 112.8 113.3	117.0 	108.4 	111.0 115.0 115.7 113.8	113 0 117 8 113 0 114 0 114 0	108.78 111.94 114.03 112.88
112.1 110.3 111.8 —	112.0 110.7 111.2 	112.7 118.2 113.2 — 122.4	110.0 111.2 117.0 — 115.0	130.0 112.0 114.0 — 144.0	125.6 112.4 114.0 — 121.2	115°3 112°0 — 113°1 113°8	122.0 114.2 — 114.0 110.0	115.2 114.0 — 114.2 112.8	110.0 117.5 — 114.4 112.8	103.4 116.5 — 114.8 114.7	120.4 117.8 — 113.2 117.0	114 11 113 27 112 82 113 88
113·2 113·9 126·8 112·4 108·2	113'3 112'0 110'2 113'0 113'4	111.7 113.9 114.5 113.8 117.0	113·2 113·3 115·8 112·2 126·6	113.2 133.6 111.0 113.8 115.2	113.0 124.2 112.2 122.8 116.2	112.5 111.0 116.6	114.0 111.2 111.4 113.2	114.0 113.2 108.2 111.0	113.4 115.2 105.4 113.3	114.2 106.2 111.2 114.7	114.4 110.2 112.0 115.0	113°34   114°03   111°79   113°88   113°50
112.0 111.2 111.8 112.2 113.8	112.6 112.0 112.0 113.4 111.8	113.2 113.0 119.0 113.0 116.4	113.7 114.2 113.0 118.6 119.4	114.9 116.0 115.0 114.2 120.6	116.3 115.2 115.4 115.8 118.9	113.8 112.8 112.2 117.2 115.6 115.6	111.1 113.8 111.2 112.0 117.6 107.8	112.2 114.1 112.6 113.2 113.0 115.5	113.0 112.0 113.2 117.8 115.5 115.0	113.8 112.3 113.7 115.0 115.2 111.1	109·2 112·0 115·2 118·1 116·4 115·0	112.78 113.23 114.00 113.77 112.99
112.5	112.4		113·7 —	113 2	113.3	120.0	115.0	114.8	114.2	114.0	114.5	113.02
113.67	113.63	115.06	117.55	117.24	116.84	115.66	114.95	113.59	113.28	114.80	115.06	113.09

	Angu	lar Value o	f one Scale l	Division of t	he Declinor		NATION. 721. Incres	asing Numb	ers denote d	lecreasing W	Vesterly Dec	clination.	
Mean (	Göttingen }	Oh.	1h.	2h.	3h.	4 <sup>h</sup> .	5h.	6 <sup>h</sup> .	7h.	8h.	9h.	10h.	11h.
	2 3 4 5 6 7 8	Sc. Div. 114'0 114'2 114'0 114'3 116'0 116'2	Sc. Div. 112'8 113'4 114'2 116'0 114'8 117'2	Sc. Div. 100'0 105'8 115'1 117'0 118'2 121'0	Sc. Div. 100'0 110'6 115'2 118'0 120'4 120'8	sc. Div. 111 '4 114 '4 113 '8 116 '8 118 '0 120 '2	sc. Div. 104 2 113 1 110 8 111 0 112 0 117 4	Sc. Div. 103 2 110 6 108 8 106 8 109 2 112 8	sc. Div. 107 '7 110 '2 107 '8 104 '2 106 '2 108 '8	Sc. Div. 106 2 110 2 109 0 106 7 106 2 106 8	Sc. Div. 106 2 111 0 111 0 109 0 108 4 103 0	Sc. Div. 112 2 110 9 111 6 111 0 108 8 102 3	Sc. Div. 107'1 109'9 111'2 111'5 110'8 109'2
IBER.	9 10 11 12 13 14 15	112.8 111.3 114.2 115.0 114.8 114.2	114'8 114'6 114'2 115'7 115'0 115'2	114.0 116.2 116.8 117.8 118.2 117.4	113.6 120.0 118.8 119.8 120.0 118.1	115°1 118°5 116°9 120°8 117°4 116°5	113°1 115°2 112°3 118°2 113°6 113°1	109.0 110.8 108.2 113.4 110.0 110.6	107.9 108.8 107.0 110.0 108.0	107.5 108.0 109.2 109.2 107.0 108.3	107.4 108.2 107.0 109.2 108.4 110.0	110.0 109.2 104.8 109.8 109.2 109.0	110°2 110°0 109°2 110°6 108°0 110°8
NOVEMBER	16 17 18 19 20 21 22	114.2 115.3 120.0 114.0 116.0 115.4	115.3 115.7 117.0 115.0 117.4 116.2	115.6 115.4 117.4 115.7 118.4 115.4	115.8 113.0 116.0 115.0 119.2 121.0	113.9 110.0 105.0 116.0 116.0	112.0 109.6 105.0 110.0 109.8 115.8	110'8 110'1 109'2 105'2 107'9 111'9	110.4 90.0 108.0 105.8 107.8	110'3 84'0 108'8 108'0 108'0	108.6 94.0 108.8 108.8	109.0 98.0 109.5 111.2 106.8 111.0	109'4 108'2 109'2 112'0 127'0 111'7
	23 24 25 26 27 28 29	114.0 115.5 114.0 118.8 117.1 111.0	114.2 114.2 114.2 122.0 111.4 113.1	118.1 118.0 118.0 121.8 107.6 114.4	120.6 118.0 120.2 124.5 104.9 118.8	118.4 116.2 118.0 99.9 114.0 117.1	114.8 111.0 115.4 105.6 113.0 115.5	111.3 110.0 111.2 109.5 111.7 109.1	109:2 108:2 108:0 105:0 108:8 111:9	109°2 108°4 107°6 107°8 109°0 105°2	110.0 109.2 110.1 110.8 108.4 108.0	109.8 109.4 111.3 110.7 112.0 108.8	111'4 111'9 113'1 109'2 110'0 118'0
Hourly	30 Means	109.8	109.9	112.6	108.2	112.0	112.12	113°0 109°77	110.2	109.0	111.0	112.1	113.6
	( 1	114.7	118.5	116.0	116.0	116.9		<u> </u> 				109.14	111.33
	2 3 4 5	118.4 115.5 116.0 118.5	117.5 115.6 112.0 119.3	110 0 109 2 113 6 114 2 117 2	116.8 116.4 118.3	116 9 114 2 115 9 112 1 115 0	112.4 109.5 113.8 105.1 112.2	109.2 108.1 111.2 104.0 106.3	108.0 107.0 110.0 105.2 106.0	108.5 109.0 110.8 104.4 105.4	111.0 111.2 110.2 106.6	111.1 111.5 111.5 111.3	111.2 113.3 110.7 116.2 112.9
	6 7 8 9 10 11 12 13	117.0 115.0 115.4 113.2 113.4 116.7	116·2 117·4 116·3 111·8 108·9 117·0	118.0 118.7 118.6 116.0 118.8 119.2	118.0 119.0 120.7 119.0 115.3 118.6	116°2 118°6 120°5 117°8 117°2 117°1	114.6 115.8 116.0 116.1 115.2 117.2	111.2 112.5 112.0 112.2 111.2 113.6	108.8 109.4 108.5 111.0 109.8 110.8	107.6 108.4 107.9 109.4 109.2 110.1	108.0 109.8 108.0 108.0 109.2 109.0	110.0 110.7 106.2 109.2 109.7 109.2	112.0 112.3 108.2 115.5 110.9 113.0
DECEMBER.	14 15 16 17 18 19 20	114.0 113.3 115.9 115.0 117.6 115.5	115.2 116.6 115.9 115.4 117.8 115.8	115.4 118.1 116.4 116.3 117.0 117.4	115.8 118.5 118.3 117.0 120.0 118.5	115.8 117.3 119.0 117.0 117.5 117.1	115.0 114.3 117.0 115.4 113.8 114.8	112.9 112.7 113.1 111.1 111.4 111.1	112.0 111.8 110.8 110.0 108.1 109.0	109.6 111.1 109.6 109.6 108.6	109.9 110.6 110.0 111.0 109.9 109.4	110°3 111°9 111°4 110°8 110°0 111°5	113.7 111.2 113.8 111.9 111.5 111.2
	21 22 23 24 25 a	113.9 115.0 114.0 111.2	113.1 116.2 116.8 116.5	114'3 116'0 117'5 118'1	118.7 120.0 120.0 117.4	117.4 117.0 114.8 120.0	113.0 113.8 109.0 112.0	111.0 110.0 107.4 112.0	109°9 109°7 110°0 110°0	110.0 110.0 105.4 109.2	111.0 110.2 107.0 110.4	111.8 111.0 107.0 112.1	114.7 111.6 107.2 114.0
	26 27 28	114.2 — 112.8	115'4 — 113'3	114.2 — 114.8	115.2	112.6	110.7	110.0	109.0	109.2	110.0	111.5	113.0
	29 30 31	113.0 113.4 114.0	114.2 116.0 114.8	115.0 116.5 116.5	115.0 116.8 117.4 116.5	116.2 117.0 115.2 114.0	115.2 113.8 111.2 111.9	113.2 111.2 108.8 110.8	112.4 109.2 108.0 110.6	110.6 109.2 109.0 111.7	112.0 110.8 110.0 112.0	111.3 112.7 111.2 112.2	112.0 113.2 113.8
Hourly	Means	114.87	115.21	116.50	117.65	116.2	113.53	110.41	109.42	108.97	109.67	110.40	112:37

<sup>&</sup>lt;sup>a</sup> Christmas Day.

			nde Scare Di	vision of the	e Declinome	$ter = 0' \cdot 72$	1. Increasi	ng Numbers	denote deci	reasing Wes	sterly Declin	ation.	
12h.	13 <sup>h</sup> •	14 <sup>h</sup> .	15h.	16h.	17 <sup>h</sup> .	18h.	19h.	20h.	21h.	22h.	23h.	Me	ans.
sc. Div. 112 °0 112 °1 110 °2 112 °5 112 °6 110 °0	Sc. Div. 114'0 111'7 112'0 113'9 112'0 119'7	Sc. Div. 116.6 113.2 115.5 113.8 120.6 117.0	Sc. Div. 112 *8 113 *6 117 *2 114 *1 117 *9 115 *0	Sc. Div. 113 * 5 113 * 4 116 * 8 113 * 5 113 * 0 113 * 0	Sc. Div. 113 ° 0 111 ° 0 117 ° 0 113 ° 7 116 ° 8 113 ° 0	Sc. Div. 116'0 113'0 115'0 118'8 115'8	Sc. Div. 111 0 113 4 114 2 109 0 115 0	Sc. Div. 112 ° 0 114 ° 2 110 ° 0 112 ° 2 115 ° 2	Sc.Div. 112'4 114'0 117'9 115'2 118'0	Sc. Div. 106 '2 114 '2 115 '1 114 '2 116 '1	Sc. Div. 113 2 114 4 116 1 113 0 116 0	Sc. Div. 109 90 112 19 113 31 112 72 114 12	
111.3 110.2 111.8 111.5 108.4 111.3	112.0 116.0 111.4 112.1 112.1 112.0	112.8 112.9 112.3 113.1 111.7 112.2	112.6 112.5 112.4 113.0 111.3 112.8	115.0 113.2 113.2 112.8 115.8 112.0	113·2 113·5 113·1 113·3 115·1 112·7	112.3 113.8 113.4 112.8 112.0 115.6	113.2 112.2 113.1 112.1 112.2 114.0	113.7 112.5 112.4 112.0 113.0 115.0	113'2 113'0 113'1 113'8 113'6 113'2	113.8 113.1 114.0 114.0 115.2	$ \begin{bmatrix}                                    $	113:41 112:11 112:83 112:15 113:52 112:27 112:43	) }112·56
112.8 112.8 110.5 110.9 105.0 111.8	112.0 113.0 111.9 111.0 116.5 113.4	112.8 111.8 114.6 114.2 110.0 113.8	113.0 116.1 112.2 115.5 113.8 127.2	113.0 116.3 113.0 114.2 114.2 113.4	112.8 115.8 113.0 113.9 113.0 113.2	113·2 115·0 122·0 111·0 112·6 114·4	112.4 113.0 122.0 113.0 112.2 109.2	112.0 113.2 111.9 113.0 112.0 109.5	112.1 113.7 116.0 113.0 114.0 113.0 	110.5 114.5 124.9 113.5 115.2 115.2	113.9 } 115.0 103.4 114.3 113.8 115.4 	112.75 110.39 112.00 112.27 113.01	
112.0 113.2 113.0 115.9 109.2 110.0	113.4 113.8 114.2 117.1 140.0 132.2	114.0 114.1 114.0 111.1 118.2 114.4	113.9 113.4 114.9 119.0 117.2 127.2	114.0 113.7 115.1 123.0 120.0 113.5	113.4 113.9 114.5 123.0 116.5 112.8	112 2 113 0 112 9 114 6 117 6 116 2 110 8	113.0 112.9 114.0 116.0 110.1	113·1 112·4 113·0 113·6 95·4 109·2 ————————————————————————————————————	112.8 113.5 113.2 113.0 112.2 110.5	113 · 7 114 · 0 113 · 4 123 · 6 107 · 8	115.0 114.4 118.8 118.1 106.1	113.43 113.02 113.93 114.07 112.87	\ \
114.2	114.1	120.1	114.3	115.0	114.8	113.8	102.31	111.80	113.76	114.1	114.0	112.55	
110.0 114.7 112.3 117.0 114.1 	115.7 114.0 113.2 118.4 115.1	114·2 114·0 114·2 119·0 115·9	117.0 113.8 114.2 119.8 116.0 — 114.0 116.0 120.2 119.3 119.2 115.2 — 115.3 115.0 114.3 114.0 114.7 114.4 — 115.0 114.4 123.8 117.0 — 115.9 — 114.8 114.2 115.0 115.0	117.8 114.0 113.4 126.4 115.4	112·3 115·7 114·6 118·2 115·4	117.0 113.0 113.0 116.7	115.6 113.0 121.9 116.0 112.0 113.2 114.8 109.7 117.0 115.2 114.4 112.8 115.1 114.2 114.8 115.0 113.0 113.6 114.5 113.2 111.2 114.0 112.2 112.0 112.5 113.1	115.0 115.2 113.1 116.0	112:3 112:2 116:4 114:2	115.0 113.4 115.2 117.0	105.8 114.9 115.0 118.0	113·37 113·05 113·84 114·16 113·54 113·47 114·29 114·37 114·95 115·25 114·21 114·32 114·33 113·42 113·78 114·16 114·51 114·22 113·55 113·47 113·55 113·47 113·59	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

	Α	ngular Valu	a of ana Saa	la Division	of the Deali		NATION.	ressing Nu	mhers denot	e decressing	Westerly I	Declination	
Mean (	Göttingen ime.		1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	$\begin{pmatrix} 1\\2\\3\\4 \end{pmatrix}$	Sc. Div. 114.8 114.0	sc. Div. 115*8 116*2	sc. Div. 116.0 119.2	Sc. Div. 116.7 116.2	Sc. Div. 115.6 114.5	Sc. Div. 112.2 111.8	Sc. Div. 109.8 108.6	Sc. Div. 109°2 108°4 ————————————————————————————————————	Sc. Div. 110 ° 0 110 ° 0 106 ° 2	sc. Div. 110*4 109*2 110*0	Sc. Div. 113 * 2 111 * 8 111 * 1	sc. Div. 114'2 112'5
	4 5 6 7 8 9	117.0 116.0 113.1 114.9 115.0 115.4	116.4 116.5 117.5 116.0 115.9 115.4	118.2 118.4 120.8 119.3 117.5 117.7	119.0 120.1 122.8 120.1 121.2 119.0	118.6 117.1 120.7 117.0 116.4 117.1	112 2 114 5 117 1 113 0 111 3 113 2	110.5 110.5 100.6 100.8	100 0 110 2 107 8 108 0 109 2 108 5	106 2 110 0 107 0 109 0 108 8 107 2	110.6 110.8 110.8 105.9	112.8 113.0 115.6 108.0	110.0 112.1 114.7 115.0 113.5 112.2
JANUARY.	10 11 12 13 14 15 16 17	115.4 115.7 112.0 113.8 112.0	114.2 117.7 112.2 114.0 114.0 116.0	120°0 109°1 119°2 116°9 115°4 117°2	121.0 120.2 116.8 117.2 116.2 117.8	112°1 119°1 116°8 115°7 113°7 115°4	108.5 114.3 115.0 111.4 112.0 114.1	106.8 111.2 110.7 109.0 109.2 111.2	106.9 107.8 107.0 109.2 108.0 108.4	106'4 107'1 108'2 108'8 108'4 110'1	110.0 108.0 110.2 111.8 110.2 110.2	112.6 110.8 111.0 112.8 111.4 112.1	112.0 112.0 112.2 116.5 112.3 112.1
JAN	17 18 19 20 21 22 23 24	114.9 115.8 116.0 117.0 119.2 117.0	115.0 115.7 113.0 118.8 119.5 117.9	116.5 117.0 118.2 118.1 116.0 118.9	116.0 117.0 120.0 115.6 115.0 118.0	115.0 114.0 111.2 113.8 114.7 117.0	112.3 c 111.3 111.5 110.0 115.1	110.7 109.2 108.7 107.0 110.8 112.0	109'1 109'7 110'0 109'0 111'1	111.1 113.0 113.4 115.1 115.1	111.9 115.0 113.0 113.6 113.6	111.9 115.0 113.7 116.6 113.0 113.2	112:2 115:2 113:0 115:3 113:3 114:0
	25 26 27 28 29 30 31	116.0 114.8 117.3 115.0 120.4 114.4	116.4 115.3 116.8 115.8 111.1 115.0	118.0 118.0 116.3 117.2 112.7 117.0	120.0 117.0 115.0 117.4 111.5 115.3	117·1 118·8 114·1 117·5 111·7 113·8	116.0 116.4 114.4 116.2 109.9 115.5	109.8 115.0 112.6 115.5 111.5	109.0 112.2 111.8 114.0 108.6 111.3	109·2 111·2 110·8 113·8 107·2 108·0	112.0 1112.0 111.8 113.5 105.8 102.2	113.0 112.8 112.3 112.0 105.8 114.2	114.0 112.6 113.1 112.8 105.0 107.2
Hourly	y Means	115.46	115.70	117:26	117.77	115.41	113.16	110.28	109.51	109.66	110.66	112.26	112.65
	$     \begin{bmatrix}       1 \\       2 \\       3 \\       4 \\       5 \\       6 \\       7     \end{bmatrix} $	113.0 113.8 115.2 116.0 113.8 119.3	112.9 117.0 119.4 116.6 114.4 114.7	115.7 116.2 119.0 118.0 116.6 123.5	110.0 113.0 117.0 114.7 115.1 111.0	105·2 110·2 111·7 112·6 112·6 110·4	107.8 106.8 106.1 108.8 110.2 93.6	108.2 105.2 103.9 106.9 108.0 104.2	109.3 105.5 104.8 108.0 108.0 103.8	112.2 108.2 107.5 108.3 109.3 103.6	112.6 110.2 102.9 112.0 111.6 106.4	112.3 112.2 110.6 112.9 d 112.3 105.1	111'3 111'7 111'2 112'4 112'0 109'1
ARY.	8 9 10 11 12 13 14	112.8 115.0 113.8 116.0 113.0 113.0	114.4 115.8 114.6 115.4 115.0 113.4	115.0 117.0 116.8 116.7 115.2 113.0	112.0 115.0 115.0 115.0 117.2 112.0	115.0 113.1 115.0 112.0 115.5 111.1	114.0 111.1 112.3 110.0 111.0 109.8	108.8 108.0 111.0 109.0 111.0	107.2 108.4 108.2 108.2 108.9 109.9	107.7 106.1 109.4 108.4 107.4 110.0	110°1 105°9 108°2 108°2 108°8 110°1	108.0 105.9 109.0 109.7 107.4 111.0	111'0 107'7 109'2 110'2 107'1 110'0
FEBRUARY.	15 16 17 18 19 20 21	114.0 118.6 114.3 118.0 110.2 113.5	114.8 115.6 115.0 119.1 117.0 115.8	112.5 109.7 116.3 122.0 118.7 113.0	111.0 109.1 113.5 120.0 117.2 115.0	109:2 108:1 112:0 117:2 115:9 112:1	107.6 108.2 107.2 111.0 111.4 108.7	107'1 106'1 104'7 107'0 109'0 106'6	107'9 107'0 105'2 107'0 106'0 104'2	109.5 108.9 108.0 107.4 106.0 104.0	109.5 110.2 ° 111.0 107.8 107.6 106.4	110'8 112'0 110'3 109'7 109'5 106'9	111.0 112.0 110.0 110.8 110.0 107.9
	22 23 24 25 26 27 28	116'8 115'2 109'7 113'0 115'0 112'9	114'1 115'2 117'1 110'0 114'0 113'1	106.3 114.1 114.0 116.0 117.4 116.0	100.5 114.0 108.0 115.0 116.7 116.0	103.0 114.0 110.4 110.2 111.0 115.4	110°2 112°0 112°2 104°2 111°2 108°4	107.9 107.2 d 108.2 103.0 107.7 102.8	104.7 106.6 108.2 108.3 106.7 102.5	105.3 108.0 102.2 106.1 110.2 104.1	106.0 108.2 106.0 105.1 108.0 106.7	103°1 109°0 104°2 107°6 110°0 110°2	106.2 108.8 111.2 110.0 116.0 110.2
Hourly	Means	114.41	115.18	115.78	113.46	111.79	108.91	107.14	106.85	107.41	108.40	109.15	110'42

<sup>&</sup>lt;sup>a</sup> Twenty minutes late.

<sup>&</sup>lt;sup>b</sup> Twelve minutes late.

<sup>&</sup>lt;sup>c</sup> Ten minutes late.

	Angt	ılar Value o	f one Scale	Division of	the Delinom		NATION. 21. Increas	sing Number	rs denote de	creasing We	esterly Declin	nation.	
12h.	13 <sup>h</sup> .	14h.	15 <sup>h</sup> .	16h.	17 <sup>h</sup> .	18h.	19h•	20h.	21h.	22h.	23h.	Me	ans.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
115'0 114'7	115°2 114°6	118.8	114 <b>.</b> 9 115.0	115.1	115.3	115.0	114.7	114.9	114.9	123.0	119.9	114.78	)
111.1	114.1	120.0	120.0	117.0	116.0	118.0	112.3	114.8	108·2 115·2	112.0	115.0	113.42	j
112.9	113.2	122.2	119.4	118.0	116.6	114.0	98°2 115°4	118.0	114'8	114.2	115.0	115.08	}
115°0 115°0	115.6 115.6	119.0	117°4 116°1	116.2	115°2 114°3	114·2 114·3	114.0	113.2	113.2	113.4 115.0	114.0 115.0	114.79 114.29	 
114.4 113.0	115.2 112.2	116.0 117.4	115.9 116.5	116.0 116.7	116.5 115.7	116.0	114.0	114.8	115.2	116.0	115.4	114.47	}114 (
	114.3	116.3		i —		114.8	115.0	114.7	114.8	114.2	117.2	113.80	
114°0 112°0	114'8	116'2	116.3 119.2	116.0 113.2	116'4 115'0	116.2	115.5 a 112.0 p	115'4 114'9	116°2 114°5	114.0	108.4	113.56	(
111'4	114.2	115.0 113.5	115.0	114.9	114.7	114.2 109.2	115.0	111.0	114.9	114.8	115.3 113.5	113.40 113.56	
113 <b>.</b> 4 113.0	110.5	113.3	113.3	117°2 113°3	113.0	113.0	114.7 113.2	113°2 113°2	113.0 113.0	113.0	110.4	112.37	
112.0	113.8	114.0	114.3	113.5	113'4	113.6	112.5	113.4	112.8	116.4	$ \frac{115.5}{115.5}$	113.42	
112.0	113'4 115'2	115.0 112.4	114.8 115.4	114°2 115°1	113.6 115.5	114.0	114.1 114.3	114.0 112.0	115°0 118°2	115.0 121.2	114.8 118.2	113.63 115.06	
115°2 117°1	116.0	126.3	114.1	114.0	115.6	106.8	115.1	118.0	118.4	117.6	110.8	114.72	
114°2 114°0	116°2 115°8	115.1	115.8 116.2	115°2 116°3	115.0 112.0	115.2	115.4	115.3	115'8 117'0	117°0 115°8	114.7 115.8	114'63 ( 114'76 (	.114'3
114.0	115.4	113.4	119.2	113.8	113.0	114.0	115.4	_	<b>—</b>		116.0}	114.97	
114.5	115.8	114.6	115.0	114.8	114.8	112.4 115.0	114.0 114.2	115°8 114°4	116.4 115.0	116°2 115°5	116.03 112.2	114.24	
113.1	111.5	112.5	115'0	114.5	114.1	114.5	110.2	115.2	116.3	116.2	117.0	114.41	
114.1 113.0	114.3	114°2 109°8	111.0	114.0 112.8	114.0 113.8	114.2 114.4	114.0 112.8	114.7 114.6	115°2 132°0	115°0 125°8	116.8	114·12   115·35	
101.5	112.0	112.5	114.0	116.5	114.2	115.6	114.0	112.1	116.6	114.2	115.0	111.76	
111.5	111.4	124.4	110.5	116.2	116.1	114.4	114.4	115.0	112.0	113.0	118.0}	113.63	
113.09	113.97	116.24	115.22	115.14	115.00	113.94	113.48	114.97	115.44	115.72	115.13	114.07	
110.9	111.4	110.2	111.5	111.0	111.0	112.0	110.2	111.6	112.3	113.8	115.2	111.33	
111.2	111.6	111.9	112.0	111.1	111.0	110.8	111.5	110.6	112.0	110.2	112.0	111.08 (	112.14
111.8 111.8	112.0	112.7 112.2	112.2	112.4 112.4	111.8 112.0	111'5 112'0	112.2 111.2	111.0 111.0	113.4 112.4	112.2 112.0	111.4 113.0	$\frac{111.60}{112.23}$	
112.0	111.8	112.2	112.0 112.8	113.3	114.3	112.9	110.2	111.1	114.4	114.0	126.2	112.50	
120.0	111.1	110.4	127.1	124.2	118.0	111.1	113.5	110.2	111.0	112.0	$\frac{-}{112\cdot 3}$	111.89	
110.0	111.8	120.0	114.9	113.0	120.3	116.8	113.0	113.5	114.0	114.8	117.0	113.12	
114.8 110.3	111.0	112.0 111.4	114 <b>·3</b> 113 <b>·</b> 6	112.0 111.0	111.4 114.0	112.6 112.8	112.0 111.4	111.8 $112.1$	112 <b>.</b> 4 113.0	115°0 114°0	115°5 114°2	111'92 112'14	
111'2	113.0	114.2	112.3	111.7	111.6	111.8	112.0	112.0	113.5	114.0	114'8 113'0	112.11 J	
108°1 110°7	111.0 110.8	111'2 111'9	111.8 115.0	113°2 112°0	$\substack{112.2\\112.2}$	111.6	112.0	112.0	112.3	112·2 —	$\frac{113.0}{112.6}$	111.75	
 111 <b>·</b> 2					110:0	110.5	113.2	114.0 114.0	114'6 114'6	114'7 104'2	112.6 §	111.33	
111 2	110°0 112°4	111.0 110.0	119.0 111.4	110.4 111.5	110°2 111°0	110.0 107.8	113.2 108.6	111.0	111.7	114.1	114.0	111.09	
114.0	111.8	112.0	112.2	112.6	112.1	111.8	112.6	114.0	114'0 111'0	114 <b>.</b> 7 109.3	116.2 115.2	111.92	.111.65
110'8 110'4	111.0	112 <b>.</b> 4 111.2	111.8 113.0	113.5 111.8	112.3 111.3	111.3	113°5 111'8	111 <b>.</b> 2	111.7	113.7	113.0	111.43	111 0
110.0	112.0	112.3	112.3	111.4	112.2	112.4	111.2	104.2	 123*8	 121`2	127.6}	111.87	
100.0	103.7	107.0	98.8	122.4	119.2	90'4	124.8	121.0	118.0	115.2	116.3	109:20	
110'0 120'8	111.2 119.2	110.6	110°2 124°0	110°4 125°2	110°9 122°0	111.6 108.4	112.1 118.3	112 <b>.</b> 2	$\begin{array}{c} 113.0 \\ 120.2 \end{array}$	115°0	113.2 112.0	111°34 113°03	
112.0	112.0	116'8	113.2	118.6	125.5	121.3	120.8	115.0	110.5	107.0	113'4	112.26	
117'0 111'0	110.8	112°2 121°0	113.2 113.0	114.0 112.7	110°2 111°2	110.2	109.8	107.0	112.0	112.4	113.0	111.92	
		-	<del>-</del>	—	—	111.5	111.3	111.5	112.2	112.6	113.0}	111.35	
111.82	111.41	112.39	113.30	113.81	113.66	111.19	112.98	111.92	113.64	113.07	115.18	111'82	

<sup>&</sup>lt;sup>d</sup> Five minutes late.

<sup>&</sup>lt;sup>e</sup> Two minutes late.

f Three minutes late.

	Anon	lar Value of	ona Scala T	division of t	ha Daolinon		NATION.	sing Numbe	ers denote de	ecreasing W	esterly Dec	ination.	
Mean Gö Time	ttingen \	Oh.	1h.	2h.	3h.	4h.	5h.	6 <sup>h</sup> •	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
	1 2 3 4 5 6 7	Sc. Div. 116'8 113'0 112'9 113'7 112'2 114'1	Sc. Div. 120'7 114'5 114'9 115'3 116'1 116'9	Sc. Div. 124 '9 117 '9 117 '4 116 '7 116 '8 114 '4	Sc. Div. 121 ° 0 118 ° 5 117 ° 3 117 ° 3 ° 118 ° 0 120 ° 8	Sc. Div. 110 7 116 2 116 2 115 2 114 7 117 7	Sc. Div. 107.5 111.0 113.7 107.8 111.0 113.4	sc. Div. 102 · 5 106 · 7 108 · 9 104 · 9 106 · 7 108 · 9	Sc. Div. 95°9 104°5 105°8 101°1 103°7 105°1	Sc. Div. 95°7 104°9 104°8 102°7 104°7 103°1	Sc. Div. 94*9 106*9 105*9 99*7 105*0 103*3	Sc. Div. 96.7 108.6 108.3 100.9 106.5 105.4	Sc. Div. 97°1 109°5 109°7 99°7 106°7 107°8
	8 9 10 11 12 13 14	108.7 114.8 110.0 116.5 113.6 118.0	112.8 109.0 110.0 117.7 115.0 119.2	117.0 101.5 117.2 116.9 117.3 120.0	115.8 115.0 117.0 116.9 117.8 118.7	112.0 117.2 114.0 114.0 117.0 116.0	109.5 113.8 106.7 108.0 112.8 111.8	104.5 109.2 104.5 105.0 107.3 107.0	102.0 107.6 101.0 102.8 103.8 103.6	102:2 105:2 108:8 103:1 103:0 103:2	99'4 106'7 102'0 103'8 102'8 103'0	102.4 107.6 102.7 103.8 104.0 103.0	104.7 108.0 106.0 106.3 104.2 101.3
MARCH.	15 16 17 18 19 d 20 21	115.2 114.4 113.5 111.2 119.0 109.2	118.0 116.5 117.5 116.0 64.0 115.2	121.8 116.2 119.1 120.0 74.2 122.0	118.8 115.9 121.0 120.7 102.8 117.2	117·1 111·9 118·7 117·8 107·7 114·0	109.2 105.8 112.6 107.9 102.0 111.2	103.2 101.9 105.0 99.8 c 106.3 107.8	102.2 101.0 100.3 97.2 104.6 105.9	101.5 101.9 100.0 99.8 103.8 105.1	104.0 105.0 101.7 100.8 124.1 105.4	106.9 107.8 105.0 105.2 116.8 107.8	109.0 109.8 108.4 108.0 104.4 110.0
	22 23 24 25 26 27 28	114.8 114.0 111.0 110.4 114.0 110.2	116.4 115.0 110.0 111.2 112.2 112.8	119.0 113.8 108.0 113.0 114.2 113.8	118 · 2 114 · 2 111 · 2 115 · 1 115 · 4 115 · 2	115.2 111.2 109.7 113.9 113.1 111.5	112.8 106.0 109.2 109.2 108.8 105.9	108.1 102.9 104.8 105.4 105.0 102.6	104.0 100.2 102.7 101.9 102.7 103.0	103.0 99.5 103.0 101.0 101.9 105.3	102.5 100.1 108.4 102.4 104.0 106.2	103°3 102°1 104°2 104°0 103°1 106°8	105.0 104.0 103.0 108.7 105.0 107.7
	29 30 31	112.4 118.6 115.0	115°1 117°8 118°8	117·2 122·0 119·9	117°2 117°7 118°6	112°8 115°0 114°8	106.4 107.6 107.6	101.3 103.5 101.4	100°3 100°0 100°2	101.4 101.4 101.8	103.0 104.0 102.4	105'0 107'2 108'9	111.8 108.8 108.0
Hourly	Means	113.39	115.18	116.85	117:33	114.2	109.21	104.94	102.25	102.62	103.58	104.89	106.21
(	1 2 f	116.0	116.4	113.0	118.6	116'4	109.8	105.0	102.8	103*2	104.0	107.5	109*1
	3 4	107.6	115.2	115.7	110.0	104.0	107.9	96.9	94.6	96.0 g	94.8	97.8	107.2
	5 6 7 <sup>h</sup> 8 9 10	115.0 116.2 111.2 126.6 118.2 114.8	119°0 118°0 120°0 122°2 121°0 117°1	119'8 121'4 121'8 121'4 120'0 116'4	118'8 120'0 119'9 119'4 117'5 115'4	116.0 114.8 116.1 112.8 113.4 110.6	109'4 105'4 108'1 108'2' 106'2 105'0	103.0 102.0 101.6 105.6 103.4 102.6	100.8 100.2 100.6 103.4 103.0 103.2	100'9 101'6 95'0 106'0 107'2 103'2	105.0 104.0 101.1 107.6 109.0 105.4	108.8 105.7 98.3 109.4 109.4 109.6	111'9 108'8 101'4 109'8 109'6 110'1
APRIL.	12 13 14 15 16 17	115.8 116.0 117.0 114.4 121.6 109.6	118.0 117.0 118.4 117.0 123.6 109.7	117.2 115.0k 117.4 116.3 121.4 116.6	118 2 114 4 115 2 116 2 116 0 121 4	111.8 110.0 110.7 109.1 110.4 117.1	107.8 104.2 103.2 101.0 101.0° 108.6	102.6 105.6 98.4. 96.6 101.4 102.2	101.4 100.4 97.2 97.4 95.8 99.5	99.8 101.4 97.2 99.4 97.4 100.4	101.5 103.7 99.4 102.2 99.2 103.6	97.6 108.0 101.6 105.4 105.9 106.5	109.7 107.3 102.0 108.2 108.8 109.4
	18 19 <sup>h</sup> 20 <sup>h</sup> 21 <sup>h</sup> 22 23 24 25	115.4 105.9 111.0 112.7 112.8 113.4	118 · 2 92 · 1 72 · 6 113 · 2 112 · 8 113 · 2	119.4 89.1 75.9 113.9 112.0 113.4	118.4 94.6 91.4 110.5 112.2 111.2	113.6 95.8 92.6 110.2 110.2 108.3	109.5 95.8 99.2 107.0 105.4 104.3	105.0 94.8 101.0 103.7 102.8 101.4	101 '4 101 '3 102 '6 100 '6 103 '0 101 '6	101'4 90'2 103'2 106'5 102'5 103'4	102.7 93.0 100.0 102.4 103.6 105.6	104.7 88.0 101.6 104.4 104.6 107.6	106.5 98.6 128.4 111.7 107.0 109.4
	26 27 28 29 30	119.3 117.9 118.2 120.0 111.6	119.5 120.4 118.0 123.4 112.7	116'3 119'6 115'0 123'0 118'6	113.9 117.5 110.6 117.8 113.4	110.8 107.4 110.4 113.6 115.5	107°1 106°4 103°5 104°4 106°5	104.6 103.9 99.2 104.9 101.3	102.7 102.4 103.0 104.0 101.6	105.4 102.0 103.4 103.8 99.5	108'9 103'0 105'7 106'8 104'3	109.5 107.4 107.4 115.0 107.1	110.0 108.8 108.4 119.3 113.2
Hourly	Means	115.94	117.42	117:30	115.63	111.60	105.82	102*24	100.89	101.91	103.80	106.49	109.21

<sup>5</sup> Six minutes late.
<sup>5</sup> Four minutes late.

b Twelve minutes late.

b Omitted in the Means, on account of the great influence of disturbance on those days.

f Good Friday.

	Angula	ar Value of	one Scale I	oivision of the	ne Declinom		NATION.	ing Number	rs denote de	reasing We	esterly Decli	nation.
12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16h.	17h.	18h.	19 <sup>h</sup> •	20h.	21h.	22h.	23h.	Means.
sc. Div. 98 9 109 7	sc. Div. 99°1 108°8	Sc. Div. 113 '2 109 '8	Sc. Div. 109 1 110 5	Sc. Div. 108.5 110.5	Sc. Div. 120'8 109'8	Sc. Div. 111'8 109'6	Sc. Div. 109°7 110°7	sc. Div. 109'9 110'5	Sc. Div. 111'8 111'9	Sc. Div. 113 '7 110 '2	Sc. Div.;   113 '4   111 '0	Sc. Div. 108.51 110.65
109.4 97.4 107.0 108.2	109'7 99'9 118'9	110.7 99.2 110.0	110.7 124.5 111.7 111.8	110.9 111.9 111.4	110.7 116.1 111.5 121.1	110.6 114.1 111.7	110.8 110.8	111.8 113.9 110.9	111.0 111.9 112.7	111.9 113.2 111.7	112.2 113.8 113.1	111.07 109.22 111.03 110.67
110°4 111°0 108°3	113.5 111.0 108.6	113.4 113.4 109.0	122.0 117.1 110.7	115.0 111.0 112.0	118.0 112.0 110.7	118.0 112.0 110.8	115.0 118.3 110.0 112.4	109.0 115.7 110.3 106.4	118.2 113.7 110.8 114.2	120.0 87.0 111.2 115.0	117.3 115.6 113.0 114.9	112.56 110.64 110.65 109.70
110°8 106°6 105°4	111.5 107.0 104.3	109.8 113.4 107.5	110.4 110.5 111.0	110.0 115.2p	111.8 111.8	111.4 115.2	111'9 117'2	112.1 112.1	116.0 115.2	113°2 117°3	112.0 112.0 113.0	110.2 111.26 110.05
110°2 110°0 110°2 109°2 130°5	110.3 110.6 111.6 97.0	110.8 110.2 111.8 112.4 105.0	111.0 111.0 111.2 118.5 129.4	111.8 111.8 111.8	112.0 111.0 112.0	111.8 112.6 110.8 111.0 120.6 132.7	110.0 111.5 111.0 110.2 123.4 117.0	111.8 111.2 111.4 110.0 123.9 120.0	113.0 112.0 111.8 110.6 115.5 116.0	104.2 113.3 111.8 113.9 110.0 114.1	113 ° 2 112 ° 4 114 ° 0 117 ° 5 113 ° 0	111.07 110.00 110.79 112.53 112.45
108.0 106.2 102.2 117.0	114.4 107.4 106.2 108.0	110.0 108.1 127.0 109.3	111.0 108.2 115.6 109.0	111.1 108.8 117.0 109.2	142.2 109.0 116.5 107.5	111.8 109.2 116.0 94.4	108.5 110.8 109.3 104.2	109.8 107.0 120.9 113.8	112.0 110.8 120.0 112.2	111.6 113.0 110.0 112.6		112·22 110·01 110·69 108·07
108.0 108.0 108.0	108.3 108.1 109.2 ————————————————————————————————————	109.0 109.2 110.0	109°2 110°0 112°8 — 111°0	108.9 112.0 114.2 — 115.2	108.2 115.3 110.8	109.7 111.8 	111.4 e 112.8 — 110.2	115.3 111.2 — 111.0	114.2 111.4 — 110.4	110.0	112.0 110.2 110.1 114.1	109·33 J 109·31 J 109·47 J
110.0	111.0	111.0	112.2 110.2	111.1 111.1	111.0 111.4 114.5	111.2 111.8 111.2	111.4 112.0 111.8	112.3 112.4 112.5	106°1 111°2 111°9	114.1 111.5 113.1	113.8 112.2	111.11
108.11	109.16	110.82	112.35	111.88	113.90	111.47	111.96	112:34	112.61	111.71	113.38	110.46
101.0	123.8	110.7	114.0 — 128.0	136.0	121.8	113.4	116.3	110.8	116.6	114.3	112.9}	111.71 } 110.27
115.0 107.8	110.0	120°1 116°0	112.4 119.4	111.7 106.8	103·2 111·0	108.4 112.2 111.7	107.7 110.7 115.0	113.0 104.6 113.0	108.3 109.3 113.0	107°0 112°1 114°3	110.0 } 114.4	109.09 111.11 111.23
105.4 112.8 112.8 118.0	98.4 108.4 113.0 109.0	96.4 110.4 108.8 109.7	132.4 117.6 109.1 109.3	0.5 110.2 110.0	120'1 112'4 109'3 110'0	117.0 115.2 110.8	153°1 109°0 113°2	114.0 114.0 102.1	83°1 104°7 112°2 —	132°3 113°0 111°8	124.0 112.8 112.8 — }	106.77 111.76 111.45 110.32
110.4 108.6 106.6 107.8 110.8	110°2 109°2 106°4 109°0 111°4	110.0 115.0 109.2 108.8 116.0	110°8 109°4 109°4 115°8 117°0	113·2 109·2 109·5 114·3 116·4	111.2 110.0 111.4 112.3 119.0	112.2 112.4 110.4 109.6 112.5 117.0	111.4 113.2 105.8 111.2 112.0 111.9	112.0 113.0 112.2 112.5 112.0 98.6	112.8 113.6 114.8 111.4 121.3 114.0	113.7 114.6 114.2 112.4 120.0 114.6	114.2 } 113.4 115.8 112.0 120.2 118.2	110 32 110 31 109 90 108 30 110 38 111 14
112.4 108.0 101.8	112·3 109·9 103·9	112.4 	112.8 — 111.8 109.2	111.7  110.4 110.2	112.4  111.2 111.0	111.0 113.6 111.2	111.0 120.0 117.5	111.2 92.3 118.4	111.7 120.5 115.6	112.0 114.6 118.4	113·4 112·1 116·0	110.37 110.45 103.33
126.4 108.3 111.0 110.4	107.4 109.3 110.0	113.4 112.2 110.7	111.3 111.9 110.4 113.0	110 2 109 6 109 4 115 4 114 4	107.0 110.0 113.2 114.0	106.9 110.0 107.4	108.4 112.0 110.6	109.8 111.0	109.3 112.4 111.4	109.6 109.4 111.6	110.0 112.0 112.2	104.52 109.40 109.33
110·2 110·4 108·6 109·0 108·4	116.0 110.6 116.6 122.4 115.6	112.4 111.4 116.6 129.4 114.2	109 · 2 111 · 0 111 · 2 104 · 4 106 · 4	109.8 112.7 111.5 116.5 112.7	113.8 111.4 111.8 115.4 119.6	110.8 112.0 112.5 112.4 107.6 119.0	113.5 111.5 f 111.9 119.2 110.0 108.2	112.2 110.6 112.0 124.6 95.0 113.3	113'4 112'5 111'6 117'6 120'0 109'6	114.5 115.3 109.4 100.2 124.0 111.5	115.4 116.0 114.5 116.0 120.4 114.2	110.23 111.55 110.67 111.21 113.75 110.75
109.63	112.13	112.87	112.20	113.18	112.68	111.83	111.68	110.62	112.96	112.82	114.47	110.67

d Omitted in the Means, on account of the great influence of a disturbance on that day.

Beven minutes late.

Eight minutes late.

	Angu	lar Value of	one Scale I	Division of th	ne Declinom	$\begin{array}{c} \text{DECLII} \\ \text{eter} = 0^{\prime \cdot 7} \end{array}$	NATION. 21. Increa	sing Numbe	rs denote de	ecreasing W	esterly Decl	ination.	
Mean Gö Tim	ttingen ]	0h.	1h.	2 <sup>h</sup> •	3h.	4h.	5 <sup>h</sup> .	6 <sup>h</sup> •	7h.	8h.	9ħ.	10 <sup>h</sup> .	11h.
	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	Sc. Div. 115°8	Sc. Div. 119'4	Sc. Div. 121'8	Sc. Div. 120.0	Sc. Div. 117 4	Sc. Div. 110.8	Sc. Div. 107 3	Sc. Div. 107 0	Sc. Div. 105°4	Sc. Div. 109 * 5	Sc. Div. 106°4	Sc. Div. 109'4
	3 4 5 6 7 <sup>a</sup> 8	114.9 115.4 116.6 116.6 120.0 94.4	115.5 118.4 118.2 116.8 117.4 95.6	115.2 119.4 119.6 119.2 119.2 101.5	113.4 117.0 117.8 119.2 118.0 98.8	112.8 111.6 112.4 115.5 114.4 106.2	107'2 105'0 105'6 110'0 110'4 103'0	104'3 101'8 101'2 107'4 107'4 109'2	102.0 99.2 99.4 105.2 106.5 112.6	103.0 99.4 99.2 103.9 104.4 111.8	104.4 101.7 100.8 105.3 105.6 114.0	106.6 104.2 103.4 107.7 106.4 114.4	109.4 107.9 106.6 111.0 108.3 114.4
<b>.</b>	9 10 11 12 13 14 15	118.7 115.0 116.8 118.0 118.0 131.4	118'4 116'6 116'4 120'0 120'2 128'5	118.6 115.0 114.2 118.1 119.9 128.4	112·2 110·4 110·7 114·2 116·4 117·5	108.8 106.5 105.2 106.4 111.2 108.6	106.0 105.4 100.0 100.4 104.2 94.7	104.2 104.2 97.8 96.4 100.4 97.3	104.4 104.6 97.4 96.6 101.2 92.3	104.6 104.7 100.0 b 99.3 103.4 96.9	105.4 107.5 102.6 102.6 104.0 99.3	106.6 107.8 106.4 106.6 106.6	108.9 108.4 109.4 110.3 107.8 108.3
MAY.	16 17 18 19 20 21 22 23	116.8 120.5 121.3 119.4 117.6 116.8	118.8 122.9 117.6 120.4 118.8 118.6	118.8 121.2 118.0 116.0 118.6 118.4	118.4 119.4 117.4 112.4 116.0 117.4	113.6 118.5 112.4 103.6 112.4 112.0	105'4 112'3 110'0 100'0 103'8 106'4	104.3 107.0 108.0 105.4 102.4 104.8	105.4 106.1 105.6 101.0 100.0 103.3	101'4 104'4 104'1 101'4 <sup>d</sup> 100'8 104'4	100'4 105'0 104'0 107'6 104'4 106'3	104.0 106.4 106.4 104.4 105.8 107.5	106.4 109.4 108.0 116.0 113.4 110.4
	23 24 25 26 27 28 a 29 30	115.0 117.6 122.9 124.0 118.7 124.7	116.8 118.4 122.4 122.4 115.4 121.9	115.2 117.5 120.8 121.4 116.2 122.5	112.8 114.5 118.4 118.8 115.5 119.4	109.6 109.8 114.4 112.2 107.4 105.6	106°1 106°0 105°6 105°0 105°5 104°2	103.8 105.4 103.2 103.4 104.4 102.8	102.0 102.4 101.6 101.4 105.4 103.0	102.4 102.4 104.7 101.2 100.4 104.8	104.4 104.4 108.0 102.4 101.9 106.0	105.8 106.4 111.4 106.8 105.9 106.6	107'3 108'3 112'5 104'5 108'0 109'0
TY	\ 31	116.6	117.4	117'3	116.3	114.4	111.4	107.4	105'4	105.0	104.6	107.4	108.5
Hourly	Means	117.70	118.35	118.19	115.37	110.88	105.35	103.72	102.05	102.86	104.77	106.80	109*38
	1 2 3 4 5 5	120°0 111°5 118°2 114°4 117°4	122.0 116.0 117.6 116.8 119.8	118.8 117.4 117.0 117.4 117.6	115.4 116.4 116.4 114.8 116.4	112.5 112.2 114.4 110.2 111.4	104'8 107'4 110'1 106'4 105'4	102.4 103.8 105.6 109.4 102.7	94.8 105.6 102.5 103.2 101.8	98.8 102.2 103.7 104.1 102.4	101.0 102.8 105.4 104.6 104.4	102.4 102.8 105.7 105.4 107.6	105.8 106.4 108.4 106.6 109.0
	6 7 8 9 10 11 12 13	120°4 122°2 120°5 117°2 118°8 121°4	119.0 124.2 119.9 113.0 119.4 123.2	121.5 121.6 118.7 116.0 119.2 122.4	119.2 115.0 115.8 112.5 118.6 117.0	114.0 111.4 106.8 111.1 109.6 113.4	105°2 107°0 104°2 103°4 112°2 109°2	102.0 103.9 103.0 91.7 103.9 103.4	101.6 104.0 102.0 98.2 102.6 102.6	103.0 104.2 101.3 102.6 102.6 98.6	107.4 105.6 102.2 105.4 99.8 97.4	108.4 108.7 102.8 106.1 102.2 104.6	110.5 112.0 105.6 108.3 108.4 100.5
JUNE.	14 15 16 17 18 19 20	116.2 120.4 115.5 122.6 113.6 116.8	109.4 120.4 115.6 119.5 118.4 119.0	114.9 122.8 118.5 119.6 118.4 119.8	112.4 121.8 115.8 116.4 117.4 117.8	110.8 121.4 112.9 115.8 114.4 112.2	110.4 112.1 c 105.4 109.2 111.0 106.6	108·2 106·7 102·9 104·6 106·0 103·0	99.5 103.4 100.6 101.4 100.8 101.9	102·2 102·5 103·6 102·4 101·6 101·2	106.4 104.0 104.6 102.6 102.4 102.5	107.2 103.0 106.6 102.6 110.8 105.3	111'0 104'4 105'2 107'4 110'9 109'0
	21 22 23 24 25 26 27	119.9 115.4 115.5 114.9 118.8	121 · 2 122 · 3 119 · 0 117 · 4 116 · 2 117 · 4	121.2 122.0 119.6 117.8 115.9 117.4	120.4 119.7 119.4 115.5 113.5	117.4 117.4 115.8 111.4 109.6 109.0	110 · 2 107 · 3 b 109 · 4 106 · 4 106 · 8 102 · 6	103.7 103.5 104.6 102.5 103.6 100.4	100°4 101°3 99°0 102°4 101°4 103°4	98.3 101.4 98.8 103.4 102.0 104.4	98.4 102.4 101.8 105.4 105.4 105.4	105 · 2 105 · 0 105 · 5 107 · 0 107 · 4 106 · 4	102'4 109'6 106'9 110'1 107'4 110'0
	28 29 30	119 <b>.</b> 9 114 <b>.</b> 4 112.6	119.6 119.4 119.8	118 <b>·9</b> 118 <b>·4</b> 118 <b>·9</b>	115'4 114'2 116'6	112.6 112.4 113.4	111.3 111.6 108.2	105.4 102.2 105.4	100.7 101.2 106.3	104.4 102.0 104.0	104.2 102.4 104.9	107'4 105'4 104'9	112.2 106.7 107.3
Hourly	Means	117.65	118.67	118.91	116.60	112.83	107:84	103.63	101.64	102.14	103.42	105.63	107.77

a Omitted in the Means, in consequence of the influence of disturbance on those days.

<sup>&</sup>lt;sup>b</sup> Seven minutes late.

12h.	13h.	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> •	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Ме	ans.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. I	 Div.
118.0	113'4	109.6	112.4	108.2	110.8		<u> </u>			l —	113.4	112.12	
	11504	112.5	112:0	11010	11010	112.3	110.4	111.5	110.2	110.5		i	[
109*2	115 <b>.</b> 4	111.2	109'8	112°2 110°2	110.8	110.5	110.0	110.4	110.4	111.3	111'4	110.22	ł
112.0	111.6	110.2	110.4	110.8	109°2	109.6 110.4	109.6	107.6	111.5 112.4	112.9 112.7	115 <b>°</b> 0 116 <b>°</b> 4	109.63	
l 10°6 l 12°4	111.7	111.4	110.5	110.3	110.2	111.0	113.0	112°4 113°6	102.8	112.6	114.8	110.01 111.35	1
111.5	109.0	129.2	112.8	121.2	131.5	125.2	12.7	130.3	118.5	98.4	102.4	110.00	,
114.8	111.4	110.2	109.3	109.4	109.3						1 !		i
				_		112.0	111.8	105.1	110.2	115.8	114.4	108.75	1
109 <b>.5</b>	108'6	108.4	109.4	110.0	109.6	109.6	116.4	111'9	111.4	112.4	113.8	110.31	ĺ
107°8	108.9	109.0	109.4	109.2	109.4	109.6	109.4	112.0	113.4	114.4	115'8	109.77	İ
111.0	111'4	114'6	109*4	109'0	109.2	110.5	111.0 c	110.4	109 6	111.0	115.2	108.70	
110'4	111.0	108.2	108.4	109.2	113.2	109.8	110'4	111.0	112'0	113.2	115.4	109.24	111.
107.8	107.4	107 <b>'</b> 9	108 <b>.</b> 5	109 <b>·3</b>	109 <b>°</b> 6	110.2	110.0	113.2	115.0	123.0	141.4	111.22	
108*4	115*8	100 0	103 4	119 4	111 2	110.4	109.4	109.6	111.0	113.4	$114 \cdot 2$	109.95	
109.8	112.0	114.0	109.6	113.4	110.4	114.4	110.2	112.4	104.8	112.0	119.3	110.68	
110.8	111.4	112.5	111.6	114.5	113.5	115.5	111.4	102.8	109.2	116.5	116.6	112.42	
110.3	110'4	106.5	115.8	110.2	118'4	112.6	113.6	106.3	116.3	117.4	115.8	111.93	
108.8	109*4	112.8	112.7	108.4	110.2	113'5	113.2	111.4	111'4	109.0	110.0	109.95	
113.6	112.3	112.7	111.8	111.8	114'4	114.0	108.6	108.2	108.2	111.6	114.0	110.65	l
111.0	109.6	108'6	110.2	109.5	109'2						113.2}	110.44	
					10014	110.4	109'0	111.2	111'0	111'4			!
107.5	107.6	106.7	106.4	106.0	108.4	108.6	112'4	112.2	112.4	115.0	115.6	109'18	
109.3	108.2	107.0	106'4	109.2	110.0 109.4	115 <b>'</b> 4 109 <b>'</b> 6	110.8	110.6	116'0 110'2	116.6 114.0	119 <b>·2</b> 117 <b>·</b> 0	110.49	
112 <b>·2</b> 108·4	110°2 104°5	110 <b>.</b> 5	108 <b>.8</b>	109 <b>·</b> 3	123.0	110.0	110'0 112'4	110 <b>.0</b>	116.0	113.5	116.5	111°55 110°85	
111.9	112.5	113.4	115.4	111.5	111.4	111.4	124.0	81.8	110.6	115.4	125.2	110 33	
110.4	108.7	108.2	109.5	109°4°	109.3		124 0	——	110 0	110	_		
	_			_		106.8	107.0	107.8	110.4	112.8	114.6	110.52	110
110.4	110.6	110.0	108*4	109.6	109.6	112.4	112.2	111.2	111.5	115.6	116.0	111.55	
111.00	110.28	109.61	109'72	110.53	<b>111.5</b> 0	111.19	110.92	110.50	111.08	113.67	116*20	110.46	
114'0	114.8	108*4	109.0	107*2	107.4	107.5	106.4	107.4	108*2 .	108.0	104.4	108*39	
108.2	108.2	108'3	110.6	110.0	112.8	112.8	113.4	110'4	109.2	115'6	113.6	109.90	
108.0	110.6	110'4	119'4	112.4	110.0	108.6	103.2	111'2	111.0	111'4	113.5	ر60 110	
108'4	109.1	109.2	109'4	109.2	109.2	113'0	111.5	110.4	110.4	111.2	112.0	ר85'109	
109*2	109.2	109.0	108.2	109.2	109.3						1,}	110.28	
	11010	11017	11014	110:0	117:0	117.0	111.5	110.0	110.4	111.5	116.4		
110.5	110'0	112.5	116 <b>.</b> 4 108.6	116.6	117'9 113'7	117.0 110.6	116.4 110.2	114°2 104°6	121'9 110'0	119'4 113'8	121.6 121.4	113.61 111.30	
									110 0			111 001	
110.8	109.6	109.2	100.0	108.6					112.2	112'6	114.0	100.75	
110 <b>·</b> 8 110 <b>·</b> 7	107.4	108.4	108.2	109.6	113.4	112.2	109.6	111.7	112.2 107.0	113'6 115'4	114'0 115'8	109.75	I
110 <b>·</b> 8 110 <b>·</b> 7 1 <b>07·0</b>	107°4 107°4	108 <b>.</b> 4	108 <b>.</b> 2	109 <b>.</b> 6	113 <b>.</b> 4 116.4	112 <b>.</b> 2	110.0 109.6	111.7 105.8	107.0	115'4	115'8	109.75 109.02	110
110°8 110°7 107°0 110°8	107°4 107°4 109°4	108.4 108.4 133.8	108 <b>·2</b> 108 <b>·3</b> 112·3	109.6 117.7 107.6	113.4	112.5 111.8 108.1	109.6 110.0 108.4	111.4 102.8 110.0	110°9	115'4 109'6 —	115'8 117'8	109.75 109.02 111.02	110
110·5 110·8 110·7 107·0 110:8 99·0	107.4 107.4 109.4 115.6	108.4 108.4 133.8 121.4	108.2 108.3 112.3 111.4	109.6 117.7 107.6 119.2	113.4 116.4 108.4 119.0	112.2 111.8 108.1 — 132.4	109.6 110.0 108.4 ————————————————————————————————————	111.7 105.8 110.0 — 117.4	107.0 110.9 — 113.2	113.0  112.4	115.8 117.8 	109.75 109.02 111.02 112.45	110
110.8 110.7 107.0 110.8 99.0	107.4 107.4 109.4 115.6	108.4 108.4 133.8 121.4 — 108.9	108·2 108·3 112·3 111·4 	109.6 117.7 107.6 119.2 —	113.4 116.4 108.4 119.0	112.2 111.8 108.1  132.4 109.4	109.6 110.0 108.4  111.4 111.4	111.7 105.8 110.0 — 117.4 111.0	107.0 110.9 — 113.2 111.4	115.4 109.6 — 113.0 111.8	115'8 117'8 	109.75 109.02 111.02 112.45 109.47	110
110.8 110.7 107.0 110.8 99.0 — 105.4 106.4	107.4 107.4 109.4 115.6 	108.4 108.4 133.8 121.4  108.9 110.4	108.2 108.3 112.3 111.4 	109.6 117.7 107.6 119.2 ————————————————————————————————————	113.4 116.4 108.4 119.0  109.4 113.6	112·2 111·8 108·1 	109.6 110.0 108.4 	111.7 105.8 110.0 	107.0 110.9 — 113.2 111.4 111.0	115.4 109.6 — 113.0 111.8 112.5	115'8 117'8 — 112'2 116'4 113'4	109.75 109.02 111.02 112.45 109.47 111.54	110
110.8 110.7 107.0 110.8 99.0 	107.4 107.4 109.4 115.6 	108.4 108.4 133.8 121.4 	108.2 108.3 112.3 111.4 	109.6 117.7 107.6 119.2 	113.4 116.4 108.4 119.0 	112.2 111.8 108.1 	109.6 110.0 108.4 	111.7 105.8 110.0 	110.9  113.2 111.4 111.0 104.9	115.4 109.6  113.0 111.8 112.5 111.7	115.8 117.8 	109.75 109.02 111.02 112.45 109.47 111.54 109.06	<b>110</b> °
110.8 110.7 107.0 110.8 99.0 	107.4 107.4 109.4 115.6 	108.4 108.4 133.8 121.4  108.9 110.4 108.0 108.4	108.2 108.3 112.3 111.4 	109.6 117.7 107.6 119.2 	113.4 116.4 108.4 119.0 	112.2 111.8 108.1 	109.6 110.0 108.4 	111.7 105.8 110.0 	110.0 110.9  113.2 111.4 111.0 104.9 110.0	115.4 109.6  113.0 111.8 112.5 111.7 111.4	115.8 117.8 	109.75 109.02 111.02 112.45 109.47 111.54 109.06 110.48	>110°
110.8 110.7 107.0 110.8 99.0 	107.4 107.4 109.4 115.6 	108.4 108.4 133.8 121.4 	108.2 108.3 112.3 111.4 	109.6 117.7 107.6 119.2 — 112.2 117.4 110.4 110.0 115.0	113.4 116.4 108.4 119.0  109.4 113.6 108.8 117.5 116.0	112.2 111.8 108.1 	109.6 110.0 108.4 	111.7 105.8 110.0 — 117.4 111.0 109.4 110.7 f 105.0 109.5	107.0 110.9 — 113.2 111.4 111.0 104.9 110.0 108.4	115.4 109.6  113.0 111.8 112.5 111.7	115'8 117'8 	109 '75 109 '02 111 '02 112 '45 109 '47 111 '54 109 '06 110 '43 111 '52	}110°
110.8 110.7 107.0 110.8 99.0 	107.4 107.4 109.4 115.6 	108.4 108.4 133.8 121.4 	108.2 108.3 112.3 111.4 	109.6 117.7 107.6 119.2 	113.4 116.4 108.4 119.0  109.4 113.6 108.8 117.5 116.0 109.4	112.2 111.8 108.1 — 132.4 109.4 111.2 108.2 112.4 115.2	109.6 110.0 108.4  111.4 111.4 108.4 108.7 104.8 110.2	111.7 105.8 110.0 — 117.4 111.0 109.4 110.7 f 105.0 109.5	107.0 110.9 — 113.2 111.4 111.0 104.9 110.0 108.4	115.4 109.6 — 113.0 111.8 112.5 111.7 111.4 110.6	115'8 117'8 	109.75 109.02 111.02 112.45 109.47 111.54 109.06 110.48	>110°
110.8 110.7 107.0 110.8 99.0 	107.4 107.4 109.4 115.6 	108.4 108.4 133.8 121.4 	108:2 108:3 112:3 111:4 	109.6 117.7 107.6 119.2 — 112.2 117.4 110.4 110.0 115.0 109.2	113.4 116.4 108.4 119.0 	112.2 111.8 108.1 — 132.4 109.4 111.2 108.2 112.4 115.2 — 109.6	109.6 110.0 108.4 	111.7 105.8 110.0 — 117.4 111.0 109.4 110.7 f 105.0 109.5	107.0 110.9 — 113.2 111.4 111.0 104.9 110.0 108.4 — 111.2	115.4 109.6 — 113.0 111.8 112.5 111.7 111.4 110.6 —	115'8 117'8 	109 '75 109 '02 111 '02 112 '45 109 '47 111 '54 109 '06 110 '43 111 '52 109 '88	110*
110.8 110.7 107.0 110.8 99.0 105.4 106.4 108.4 108.2 112.8 109.2 112.8	107.4 107.4 109.4 115.6 	108.4 108.4 133.8 121.4 	108 · 2 108 · 3 112 · 3 111 · 4 	109'6 117'7 107'6 119'2 — 112'2 117'4 110'4 110'0 115'0 109'2 — 109'3	113.4 116.4 108.4 119.0 	112.2 111.8 108.1 	109.6 110.0 108.4  111.4 111.4 108.4 108.7 104.8 110.2	111.7 105.8 110.0 — 117.4 111.0 109.4 110.7 f 105.0 109.5	107.0 110.9 — 113.2 111.4 111.0 104.9 110.0 108.4 — 111.2 111.2	115.4 109.6 — 113.0 111.8 112.5 111.7 111.4 110.6	115'8 117'8 	109 '75 109 '02 111 '02 112 '45 109 '47 111 '54 109 '06 110 '43 111 '52 109 '88 109 '17	110°
110.8 110.7 107.0 110.8 99.0 105.4 106.4 108.0 109.2 112.8 109.2 104.4 111.0 109.4	107.4 107.4 109.4 115.6 	108.4 108.4 133.8 121.4 — 108.9 110.4 108.0 108.4 113.0 108.8 — 106.0 109.2 109.4	108 · 2 108 · 3 112 · 3 111 · 4 	109.6 117.7 107.6 119.2 	113.4 116.4 108.4 119.0 	112.2 111.8 108.1 	109.6 110.0 108.4	111.7 105.8 110.0 — 117.4 111.0 109.4 110.7 f 105.0 109.5 109.5 109.9 109.2 110.0	107.0 110.9 	115.4 109.6 — 113.0 111.8 112.5 111.7 111.4 110.6 — 110.6 111.2 110.6 110.4	115'8 117'8 	109.75 109.02 111.02 112.45 109.47 111.54 109.06 110.43 111.52 109.88 109.17 110.53 109.57	
110.8 110.7 107.0 110.8 99.0 105.4 106.4 108.0 109.2 112.8 109.2 104.4 111.0 109.4 111.0	107.4 107.4 109.4 115.6 	108.4 108.4 133.8 121.4 	108.2 108.3 112.3 111.4 	109.6 117.7 107.6 119.2 	113.4 116.4 108.4 119.0 	112.2 111.8 108.1 	109.6 110.0 108.4	111.7 105.8 110.0 — 117.4 111.0 109.4 110.7 f 105.0 109.5 109.5 109.5 109.2 110.0 110.4	107.0 110.9	115.4 109.6 — 113.0 111.8 112.5 111.7 111.4 110.6 — 110.6 111.2 110.6 110.4 114.5	115'8 117'8 	109.75 109.02 111.02 112.45 109.47 111.54 109.06 110.43 111.52 109.88 109.17 110.53 109.57 110.12	
110.8 110.7 107.0 110.8 99.0 105.4 106.4 108.0 109.2 112.8 109.2 104.4 111.0 109.4 110.4 110.4	107.4 107.4 109.4 115.6 	108.4 108.4 133.8 121.4 — 108.9 110.4 108.0 108.4 113.0 108.8 — 106.0 109.2 109.4 110.2 108.6	108.2 108.3 112.3 111.4 	109.6 117.7 107.6 119.2 	113.4 116.4 108.4 119.0 	112.2 111.8 108.1 	109.6 110.0 108.4	111.7 105.8 110.0 — 117.4 111.0 109.4 110.7 f 105.0 109.5 109.5 109.9 109.2 110.0	107.0 110.9 	115.4 109.6 — 113.0 111.8 112.5 111.7 111.4 110.6 — 110.6 111.2 110.6 110.4	115'8 117'8 	109.75 109.02 111.02 112.45 109.47 111.54 109.06 110.43 111.52 109.88 109.17 110.53 109.57	
110.8 110.7 107.0 110.8 99.0 105.4 106.4 108.0 109.2 112.8 109.2 104.4 111.0 109.4 110.4 110.4	107.4 107.4 109.4 115.6 	108.4 108.4 133.8 121.4 — 108.9 110.4 108.0 108.4 113.0 108.8 — 106.0 109.2 109.4 110.2	108.2 108.3 112.3 111.4 	109.6 117.7 107.6 119.2 	113.4 116.4 108.4 119.0 	112·2 111·8 108·1	109.6 110.0 108.4	111.7 105.8 110.0	107.0 110.9  113.2 111.4 111.0 104.9 110.0 108.4  111.2 111.2 109.7 110.0 112.0 d 111.0	115.4 109.6 — 113.0 111.8 112.5 111.7 111.4 110.6 111.2 110.6 111.2 110.4 114.5 112.4	115'8 117'8 	109 '75 109 '02 111 '02 112 '45 109 '47 111 '54 109 '06 110 '43 111 '52 109 '88 109 '17 110 '53 109 '57 110 '12 109 '32	
110.8 110.7 107.0 110.8 99.0 105.4 106.4 108.0 109.2 112.8 109.2 104.4 111.0 109.4 110.4	107.4 107.4 109.4 115.6 	108.4 108.4 133.8 121.4 	108·2 108·3 112·3 111·4 105·2 110·0 106·4 108·1 115·5 109·2 106·4 108·6 109·0 110·3 108·2 106·4	109.6 117.7 107.6 119.2 	113.4 116.4 118.4 119.0 109.4 113.6 108.8 117.5 116.0 109.4 110.0 109.8 108.6 108.5 109.6	112·2 111·8 108·1	109.6 110.0 108.4	111.7 105.8 110.0	107.0 110.9	115.4 109.6 — 113.0 111.8 112.5 111.7 111.4 110.6 111.2 110.6 110.4 114.5 112.4 — 113.3	115'8 117'8 	109.75 109.02 111.02 112.45 109.47 111.54 109.06 110.43 111.52 109.88 109.17 110.53 109.57 110.12 109.32 109.57	
110.8 110.7 107.0 110.8 99.0 105.4 106.4 108.0 109.2 112.8 109.2 104.4 111.0 109.4 111.0	107.4 107.4 109.4 115.6 	108.4 108.4 108.4 133.8 121.4 	108·2 108·3 112·3 111·4 105·2 110·0 106·4 108·1 115·5 109·2 106·4 108·6 109·0 110·3 108·2 106·4 111·4	109.6 117.7 107.6 119.2	113.4 116.4 118.4 119.0 109.4 113.6 108.8 117.5 116.0 109.4 110.0 109.8 108.6 108.5 109.6 109.4	112·2 111·8 108·1	109.6 110.0 108.4	111.7 105.8 110.0	107.0 110.9	115.4 109.6 — 113.0 111.8 112.5 111.7 111.4 110.6 111.2 110.6 110.4 114.5 112.4 — 113.3 112.9	115'8 117'8 	109 '75 109 '02 111 '02 112 '45 109 '47 111 '54 109 '06 110 '43 111 '52 109 '88 109 '17 110 '53 109 '57 110 '12 109 '32 109 '57 111 '17	
110.8 110.7 107.0 110.8 99.0 105.4 106.4 108.0 109.2 112.8 109.2 104.4 111.0 109.4 111.0 109.6	107.4 107.4 109.4 115.6 	108.4 108.4 108.4 133.8 121.4 	108·2 108·3 112·3 111·4 105·2 110·0 106·4 108·1 115·5 109·2 106·4 108·6 109·0 110·3 108·2 106·4 111·4 108·5	109.6 117.7 107.6 119.2	113.4 116.4 108.4 119.0 	112.2 111.8 108.1	109.6 110.0 108.4	111.7 105.8 110.0	107.0 110.9	115.4 109.6 — 113.0 111.8 112.5 111.7 111.4 110.6 111.2 110.6 110.4 114.5 112.4 — 113.3 112.9 116.4	115'8 117'8	109 '75 109 '02 111 '02 112 '45 109 '47 111 '54 109 '06 110 '43 111 '52 109 '88 109 '17 110 '53 109 '57 110 '12 109 '32 109 '57 111 '17 110 '26	110
110.8 110.7 107.0 110.8 99.0 105.4 106.4 108.0 109.2 112.8 109.2 104.4 111.0 109.4 111.0	107.4 107.4 109.4 115.6 	108.4 108.4 108.4 133.8 121.4 	108·2 108·3 112·3 111·4 105·2 110·0 106·4 108·1 115·5 109·2 106·4 108·6 109·0 110·3 108·2 106·4 111·4	109.6 117.7 107.6 119.2	113.4 116.4 118.4 119.0 109.4 113.6 108.8 117.5 116.0 109.4 110.0 109.8 108.6 108.5 109.6 109.4	112·2 111·8 108·1	109.6 110.0 108.4	111.7 105.8 110.0	107.0 110.9	115.4 109.6 — 113.0 111.8 112.5 111.7 111.4 110.6 111.2 110.6 110.4 114.5 112.4 — 113.3 112.9	115'8 117'8 	109 '75 109 '02 111 '02 112 '45 109 '47 111 '54 109 '06 110 '43 111 '52 109 '88 109 '17 110 '53 109 '57 110 '12 109 '32 109 '57 111 '17	

<sup>°</sup> Nine minutes late.

<sup>&</sup>lt;sup>d</sup> Five minutes late.

e Four minutes late.

	Angu	lar <b>V</b> alue of	one Scale I	Division of t	he Declinon		NATION.	using Numbe	ers denote de	ecreasing W	esterly Dec	lination.	
Mean Go Tin	öttingen l	Oh.	1 <sup>h</sup> .	2h.	3h.	4h.	5 <sup>h</sup> .	6h.	7 <sup>h</sup> -	8h.	9h.	10h.	11h,
	$ \begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix} $	Sc. Div. 121 2 117 4 117 8	sc. Div. 123 5 119 3 119 6	Sc. Div. 122 ° 0 121 ° 0 120 ° 4	Sc. Div. 120'9 117'4 121'2	Sc. Div. 111 0 113 9 110 6	Sc. Div. 111'0 109'4 106'8	Sc. Div. 108 4 104 2 104 4	Sc. Div. 105 6 102 2 103 8	sc. Div. 106 '7 104 '4 104 '6	Sc. Div. 104°9 105°6 104°4	Sc. Div. 106 '4 107 '0 105 '4	Sc. Div. 108'4 107'4 109'5
	4 5 6 7 8 9	119.0 122.2 119.8 116.4 119.2 121.8	121'4 123'4 120'4 116'0 119'6 123'6	118'4 118'8 121'5 114'0 116'2 123'9	114'2 115'5 117'4 109'0 114'6 123'2	112 · 4 112 · 2 114 · 3 109 · 4 111 · 4 119 · 3	105.6 109.7 97.3 106.0 107.5 111.5	103 · 2 106 · 1 94 · 4 104 · 3 102 · 4 108 · 9	103.4 103.9 101.6 104.4 105.4 102.2	103.6 106.8 101.7 105.4 99.4 109.9	107.6 106.0 101.5 105.4 101.4 104.4	108'8 107'4 104'0 106'4 96'2 106'5	109:2 108:3 106:4 112:8 102:6 110:4
JULY.	11 12 13 14 15 / 16 17	122.8 119.4 117.4 120.0 119.2 114.5	123.4 122.5 123.4 122.4 120.0 113.4	122.0 125.3 123.4 123.0 120.5 113.4	118·2 121·0 120·6 120·8 117·6 116·8	114.6 113.2 110.4 115.4 112.4 112.2	111.5 106.2 103.4 108.4 107.2 108.9	105.4 101.2 100.4 104.4 101.6 101.9	98.6 99.4 100.7 100.5 100.0	101.0 99.2 101.5 99.4 101.3 96.4	102.2 99.4 101.2 101.4 103.0	103 '4 103 '4 105 '4 103 '8 101 '4 105 '9	110'4 106'4 110'2 108'1 104'1 107'3
	18 19 20 21 22 23 24 25	118.4 117.4 118.3 124.2 121.4 118.2	120°5 116°0 121°2 124°4 121°6 121°4	120.8 118.4 120.4 122.5 118.4 121.2	118.4 116.4 115.8 117.8 117.3 119.1	113.4 114.3 110.2 113.7 113.4 113.6	110.4 108.4 106.4 107.8 106.6 107.2	105°2 103°4 102°4 101°2 106°3 103°2	105.4 101.4 94.2 97.2 101.0 102.9	104.4 101.2 98.2 101.2 103.1 106.2	105.2 103.9 103.0 104.2 105.0 110.0	107.4 107.6 106.8 107.4 109.1 110.4	110°2 109°8 110°3 110°8 112°4 110°8
Augu	26 27 28 29 30 31	118.0 120.9 118.5 119.4 120.0 118.8	119.4 120.9 122.2 118.6 123.3 121.0	120.4 120.1 119.2 118.4 123.4 123.6	113 '4 117 '4 115 '2 116 '4 120 '4 123 '0	104.0 109.9 105.9 112.7 111.6 117.2	104.5 105.9 103.4 109.4 105.0 108.6	95.5 104.4 100.6 104.2 102.9 104.6	98.4 104.6 101.4 102.5 101.9 102.6	98.5 106.6 105.2 103.4 99.6 101.4	103.0 108.4 106.5 106.0 105.4 104.3	109.4 110.8 110.2 107.4 106.4 107.4	110'4 115'3 111'2 109'4 109'9 110'4
Hourly		119.32	120.83	120.39	117.74	112.32	107.18	103.12	101.69	102.60	104.24	106.36	109.35
	2 3 4 5 6 7	118 · 2 121 · 0 115 · 4 121 · 3 123 · 4 116 · 6	121.8 124.6 129.8 124.4 127.4 121.5	124.2 119.4 125.4 121.1 125.0 122.2	123.0 118.6 114.8 124.2 124.6 117.4	119.5 115.9 114.6 111.9 112.6 112.0	113.4 111.4 110.2 110.9 107.6 105.4	105.2 107.8 104.7 104.5 103.9 101.5	100.4 103.8 103.3 100.6 95.0 99.2	98.8 101.3 104.7 103.9 100.4 102.8	98.4 104.5 106.0 105.6 104.6 107.2	103.4 105.5 106.6 105.6 107.4 116.2	108'3 106'4 109'0 109'2 106'2 110'4
ដ	8 9 10 11 12 13 14	117.3 119.4 117.4 117.4 118.2 125.4	120°2 120°0 121°3 122°0 120°0 124°2	120.6 122.4 121.6 123.3 120.8 122.8	118.4 121.6 120.4 119.2 120.4 118.0	111.2 114.0 110.4 113.5 114.4 104.8	105.4 108.8 105.4 106.6 105.2 107.8	101.7 100.4 98.9 98.6 97.9 83.4	98°3 95°4 96°6 94°6 96°4 96°4	98.0 96.6 97.9 96.4 98.4 96.6	100°3 99°6 102°8 98°8 101°4 99°3	103.9 103.8 104.6 103.2 104.6 103.6	107.5 107.9 108.4 108.4 107.5 107.6
AUGUST.	15 16 17 18 19 20 21 22	116.2 124.7 121.9 119.9 117.8 118.6	120°4 130°3 126°3 122°9 121°4 121°8	125.5 127.2 126.9 121.6 121.4 122.6	123.6 120.5 121.8 116.6 114.0 118.0	115.6 117.9 115.4 109.0 110.2 108.4	106'3 110'0 109'7 103'6 107'5 102'9	100°3 110°2 101°9 99°4 105°4 100°4	93.8 98.0 96.0 99.0 104.0 98.5	94.8 97.6 96.8 102.2 107.6 97.0	109.6 98.5 98.8 106.0 107.4 98.5	102.6 103.7 98.4 110.4 108.3 105.9	105'4 106'4 102'4 108'9 108'9 107'6
İ	22 23 24 25 26 27 28 29 30 a	121:4 122:0 112:5 124:0 119:5 118:5	123.8 120.5 116.6 121.0 121.8 125.0	122·3 124·3 114·2 118·0 120·7 124·6	116.0 119.8 120.0 116.2 118.0 118.8	109.5 111.9 106.2 111.8 114.5 111.4	103 '9 103 '2 101 '6 105 '2 106 '7 104 '6	99.0 98.9 100.4 100.4 99.4 95.4	98.8 100.7 100.7 98.4 96.1 97.4	102.5 101.6 101.6 99.8 97.8 98.2	104.2 105.4 102.8 102.3 102.2 101.4	108 · 2 106 · 6 106 · 6 105 · 7 107 · 5 107 · 0	111.6 111.4 111.3 108.5 108.9 111.4
	31 a						-				<u>-</u>	<u> </u>	
Hourly :	Means	119.20	122.87	122.42	119.33	112:36	106.80	100.82	98:39	99.72	102.73	105.80	108.31

<sup>\*</sup> The Observations omitted, the Magnet having been affected considerably by the vertical iron shafts of Robinson's Anemometer.

	Angula	ar Value of	one Scale D	ivision of th	e Declinome	$\begin{array}{c} \text{DECLIN.} \\ \text{eter} = 0' \cdot 72 \end{array}$		ing Number	s denote dec	reasing Wes	sterly Declin	ation.
12 <sup>h</sup> .	13h.	14h.	15h.	16h.	17 <sup>h</sup> .	18h.	19 <sup>h</sup> •	20h.	21h.	22h.	23h.	Means.
Sc. Div. 111'4 108'8 109'0	Sc. Div. 111°6 110°4 109°5	Sc. Div. 110.6 119.4 110.0	Sc. Div. 110°0 108°9 109°4	sc. Div. 115 '8 108 '7 109 '4	Sc. Div. 109 2 109 3 107 5	Sc. Div. 109'8 109'7	Sc. Div. 109°3 109°7	Sc. Div. 109.5 111.4	Sc. Div. 110.5 111.0	Se. Div. 111.6 111.0	Sc. Div. 113 4 111 0	Sc. Div. 111 '78 J 110 '35 J
108'9 109'6 107'4 113'2	109'1 110'0 107'4 115'0	109.7 109.8 108.0 108.2	109'4 110'9 107'2 108'5	109'3 119'4 127'4 109'6	110.0 110.6 125.8 110.1	111.6 110.4 111.4 117.4 111.2	112.0 114.3 110.2 108.4 111.0	111.1 116.7 113.0 111.1 111.6	111.5 123.4 114.6 112.2 112.3	111.5 118.4 110.8 112.4 112.9	116.4 119.0 96.3 110.0 116.4	110.72 111.89 111.12 110.50 110.40
99'6 108'4	95.0	104.0	78.5 114.6 —	124.8	126.4	122.6	127.4	97.4	109.6	115.4	$\left  \begin{array}{c} 119.8 \\ \\ 112.4 \end{array} \right\}$	111.97
111.7 110.4 111.6 109.4 104.0 110.2	112.0 110.4 109.4 110.9 108.4 106.4	121.2 122.4 110.2 109.8 108.4 105.4	109.5 108.8 108.4 109.2 108.4 106.6	111'4 109'4 108'3 109'0 110'2 108'4	108.0 106.4 109.9 109.5 110.2 109.4	110.4 108.4 112.5 110.4 111.4	98.4 109.4 109.5 109.0 108.4	106.4 110.5 109.0 109.3 109.8	111.8 110.7 108.3 109.5 110.2	112.2 113.4 111.6 111.5 101.8	116.8 112.0 115.4 115.4 110.4	110°97 110°37 110°09 110°43 108°68
110'4 110'8 111'8 110'0 110'9	108.2 109.6 110.0 108.4 109.4	108.0 109.4 108.4 106.9 110.4	108.5 109.4 108.0 110.4 112.8	109.4 110.2 108.9 134.4 110.5	111.6 110.8 110.7 128.4 111.8	109.5 111.7 112.2 127.6 118.4 111.6	109.5 109.8 110.2 117.6 110.4 112.4	109.4 109.0 112.0 116.4 103.6 111.4	110.4 111.4 108.0 112.8 111.5 112.2	111'8 108'2 111'4 110'2 112'8 112'4	111.4 110.0 114.6 119.0 115.5 115.0	108.44 110.66 110.28 111.19 112.63 111.52 110.8
114'4 111'5 115'5 112'0 110'6 110'7 111'6	112.5 109.4 111.8 110.8 110.9 109.5 109.0	110°6 112°3 107°6 110°6 110°7 110°4	115.5 111.5 108.6 112.8 115.4 111.2	115.5 	125.0 109.7 111.0 109.6 114.4 123.2 113.1	109°3 112°4 112°3 110°0 111°2 114°6	109°5 113°8 120°5 113°8 111°0 110°0	110·2 114·0 120·1 109·9 114·5 111·1	109.4 112.5 115.2 109.3 117.4 112.4	112·2 108·6 113·4 113·1 110·8 112·6 — 111·0	112.0 } 114.9 116.4 116.4 112.5 112.1	112.21 109.82 113.22 110.28 111.67 112.11 111.52
110.14	109.37	109.67	108.96	113.58	112.99	110.4	111.20	110.93	111.70	111.20	113.12	110.81
113.4	110.7 109.5 109.6 .122.4 112.2	108.6 110.4 108.4 114.4 111.2	110.0 106.9 117.5 127.6 113.9	109 2 107 5 128 4 120 4 109 4	109.8 109.0 117.1 117.6 113.4	110°0 110°2 116°1 110°4 118°2	113.8 117.4 119.4 108.6 115.0	111.9 114.2 122.2 106.8 114.2	113.6 113.4 108.8 101.5 110.0	116°2 118°6 128°4 111°5 108°4	117.4 120.0 123.9 119.4 107.4	111.51 111.90 114.78 113.01 111.87
126.6 	111.8 109.0 109.9 108.7 110.6 109.4	118.9 108.4 109.8 110.0 108.8 110.8	125.5 	116.4 110.6 111.3 109.8 109.4 111.4	116.0 114.6 110.4 110.2 109.3 111.6	106.6 115.6 110.4 119.4 109.4 112.2	117.6 112.6 109.6 110.6 109.5 110.4	109.6 111.6 110.2 109.6 110.4 111.6	113.6 112.2 112.0 110.8 110.2 112.4	112.4 109.6 112.2 111.8 111.6 117.6	114.6 115.4 114.1 114.4 113.9 121.4	113.42 110.12 109.99 110.02 109.34 110.51
109.5 107.2 107.2 111.6 108.7 109.7	110.0 106.4 107.2 109.4 108.6 110.9	108.2 108.4 106.5 107.8 108.9 109.2	112.6 107.8 128.4 111.0 110.2	110.0 110.6 115.4 111.6 109.7	112.6 109.6 108.9 110.0 110.4	110.4 114.6 112.8 108.6 110.4 110.7	110.6 116.8 112.1 110.4 112.6 111.2	110.6 113.2 110.5 110.0 115.4 111.5	111.6 105.8 111.9 111.5 107.4 113.3	109.4 114.2 109.4 112.0 112.4 113.4	$\begin{bmatrix}$	108.70 110.63 110.94 111.10 110.42 111.23
107.5 110.6 112.4 115.4 109.0 110.4	109.8 	110°7 113°6 113°6 108°4 109°5	111.9 110.4 113.6 108.4 117.4	110.0 109.4 116.3 108.6 111.6	110.4 108.8 110.4 120.2 108.4 109.4	107.8 109.6 114.7 119.4 109.4 108.4	107.6 111.4 120.0 120.8 109.3 110.4	114.2 107.9 114.4 117.1 111.2 111.5	115.4 117.6 114.0 118.9 112.0 118.4	114.8 115.8 118.9 119.9 113.8 115.2	117.4 115.4 116.9 120.7 116.4 119.3	109.64 110.94 112.24 112.64 109.82 110.94
111.4	110.2	122.2	115.4	110.0	109.2	109.3	110.4	112.3	113.5	115.0	$\frac{-}{113\cdot 3}$	111.10
_											_	-

	Angu	lar Value of	one Scale T	Division of t	he Declinon		NATION.	sing Numbe	rs denote de	creasing W	esterly Decl	nation.	
Mean Gö Tin	ittingen ]	O <sup>h</sup> •	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4h.	5 <sup>h</sup> .	6h.	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
	1 a 2 a 3	Sc. Div.	Sc. Div. ————————————————————————————————————	Sc. Div. ————————————————————————————————————	Sc. Div.	Sc. Div.	Sc. Div. 	Sc. Div. 106°4 104°2	Sc. Div. 101.7 101.9	Sc. Div.	Sc. Div. 102'6 104'9	Sc. Div. 104°4 106°2	Sc. Div.
	4 5 6 7 8 9 10	114.2 	115·3  119·2 121·4 117·0 122·0 121·4	122.5 	114.9 	111.9 114.4 113.9 111.9 102.4 110.2 112.4	103.6 105.2 106.4 113.6 108.6 104.6 103.4	102.9 101.2 100.4 98.2 92.6 98.8 101.5	96.8 100.0 96.9 91.5 100.4 98.4	99.6 102.0 98.3 93.0 101.8 99.6	108.4 104.4 105.3 101.1 96.2 105.9 103.4	113.6 107.4 108.5 105.4 101.6 110.2 107.4	110.0 110.4 107.6 111.4 110.4 110.4
SEPTEMBER.	12 13 14 15 16 17 18 19	121·2 118·8 118·4 120·0 115·6 118·8	114.8 120.0 122.7 124.9 123.4 123.2	98.4 119.4 122.7 127.2 120.0 122.0	98°2 119°2 120°1 124°4 118°4 122°8	100'6 108'6 114'4 120'4 116'4 111'4	91.6 106.6 108.3 113.2 104.4 107.4	96.0 100.2 101.4 104.6 98.2 104.8	94.5 97.5 96.4 98.4 93.4 102.4	100°4 98°0 96°5 99°2 99°5	106.5 102.0 101.0 102.4 103.4 103.4	112.4 106.8 105.3 105.6 108.8 106.4	111.2 108.9 109.4 107.8 110.6 115.4
	20 21 22 23 24 <sup>d</sup> 25 26	118.8 116.5 115.2 110.4 117.9 113.4	120.4 118.4 116.8 114.4 182.0 116.4	120°2 119°4 115°0 104°8 80°5 117°4	116.8 114.2 112.4 96.9 83.0 114.4	113.2 112.0 105.3 97.6 110.1 110.8	108·2 105·4 106·6 96·9 153·4 103·3	103.4 100.5 105.0 94.4 78.8 98.2	101'5 97'9 101'5 98'9 124'8 95'4	103.4 101.4 102.4 103.6 86.3 95.9	106.2 105.4 108.4 109.3 97.1 99.4	108.4 108.9 112.4 112.5 104.8 104.5	107.5 110.4 113.4 114.0 124.0 107.5
	27 d 28 29 30	25'8 115'0 113'4 112'4	74.0 118.2 117.4 114.5	83 8 119 4 120 3 117 4	97.6 118:4 123:5 118:8	109'9 112'5 116'6 122'4	103'0 106'9 112'9 116'4	94.0 102.2 109.3 111.4	99°2 100°4 118°0 105°2	105'3 100'4 100'4 101'0	108.8 102.3 94.4 102.6	110.0 103.2 101.6 103.7	107'4 109'4 116'1 107'2
Hourly	Means	116.88	109:30	118.18	116.06	111'44	106.24	101.34	99.62	100.19	103.47	107:31	110.36
	$\begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$	113°2 112°5	117 <b>·</b> 4 114 <b>·</b> 4	116 <b>·</b> 5 117 <b>·</b> 4	118.7 115.1	118.7 107.0	113°5 110°6	111.6 108.9	108 <b>·</b> 2 106 <b>·</b> 4	106 <b>.</b> 4 105 <b>.</b> 3	106 <b>.</b> 1	105°2 106°0	110.3 109.3
	4 5 6 7 8 9	113.8 114.4 114.0 114.4 120.6 116.2	116.4 117.9 116.7 117.4 118.4 120.4	115'9 118'4 117'0 118'8 121'4 121'9	114.8 118.8 118.6 117.0 119.5 117.4	112.6 112.4 114.4 113.4 116.4 124.2	110°3 108°0 107°4 107°4 107°5 115°4	107'4 103'4 103'2 102'0 100'9 109'2	106.5 100.4 101.4 102.4 99.6 105.5	107.5 99.0 104.2 102.8 97.9 103.9	108.4 102.8 106.8 105.9 98.0 105.4	107'9 104'2 · 108'8 107'9 98'3 105'7	106.4 102.4 108.8 107.9 99.3 106.7
OCTOBER.	11 12 13 <sup>4</sup> 14 15 16 17	115.0 117.4 112.5 115.2 111.5 112.4	118'4 118'6 119'4 118'2 112'9 112'0	119.8 122.4 64.4 118.2 108.8 118.2	118'4 121'4 101'0 111'9 114'1 114'4	114.5 114.6 104.4 112.4 114.2 110.0	108.4 108.4 87.9 108.9 106.6 104.6	102.2 102.8 100.6 100.4 101.9 104.3	100.7 103.4 104.6 100.5 103.9 103.4	100'4 103'4 99'4 102'6 106'4 104'8	105.2 103.3 103.8 106.9 107.7 107.4	106'4 106'7 104'4 109'3 110'4 108'2	107.6 106.4 105.4 108.8 112.4 108.3
)0	18 19 20 21 22 <sup>d</sup> 23 <sup>d</sup> 24	122.5 113.8 113.6 114.6 110.4 137.5	117.6 109.8 116.3 116.4 112.6 57.2	111'4 111'6 119'4 118'0 114'3 142'6	107.0 115.5 119.4 119.4 113.5 118.3	101.6 106.6 115.4 117.6 115.6 128.3	105.8 111.2 110.4 113.4 109.3 125.3	108.4 103.4 106.4 108.2 106.4 119.4	104.5 102.6 107.1 106.2 106.6 105.9	105.4 105.8 107.6 107.4 108.2 103.6	107'9 106'5 108'2 107'9 103'8 109'7	110.5 109.3 109.4 109.4 98.4 107.4	118.0 108.5 113.5 109.4 108.1 120.0
	25 <sup>d</sup> 26 27 28 29 30 31	110·1 113·5 113·6 102·2 112·4	110°3 117°2 116°8 116°4 120°4 117°4	95°2 118°6 121°4 120°4 122°9 119°3	107'3 119'2 121'6 119'7 124'8 120'3	114.9 115.4 119.5 116.5 122.2 116.3	98.4 106.0 114.3 110.8 125.6 111.7	104'4 103'4 109'6 105'4 106'4 106'9	119'4 104'2 106'4 101'8 106'4 104'4	111.0 105.4 106.4 103.6 102.2 105.0	108.0 108.4 105.4 104.6 102.4 106.6	109'4 110'0 106'4 107'2 105'1 108'2	108.4 108.4 106.8 109.2 108.2 108.4
Hourly	Means	114*12	116.40	118.08	117.59	114.36	110.58	105.59	103.80	104.25	105.79	107.30	108.27

Observations omitted, having been affected to an uncertain amount by the induced magnetism of the vertical iron shafts of Robinson's Anemometer.

	Angul	ar Value of	one Scale D	livision of th	ne Declinom	$ DECLIN \\ eter = 0' \cdot 75 $		ing Number	rs denote dec	creasing We	sterly Decli	nation.
12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21 <sup>h</sup> .	22 <sup>h</sup> .	23h.	Means.
Sc. Div.	Sc. Div.	Se. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
108'9 115'4 110'2	109.0 118.5 110.4	106'9 123'4 128'5	106.5 115.8 117.3	109.4 115.4 109.7	109.4 110.4 104.9	110.7 111.0	111.6 112.2 —	112.4 112.4 —	116.4 112.6	116.8 113.8	$116.4 \\ 113.8 \\ \hline -114.5$	112.71 111.89 >110.89
111'4 112'0 108'4 107'6 112'0	110'8 110'2 108'9 109'2 110'5	112.0 111.8 110.6 110.9 109.2	120'4 111'8 110'4 108'8 117'1	118'8 110'6 110'6 114'4 111'2	114'3 112'3 110'4 108'6 109'9	111.4 118.0 111.9 110.4 106.6 110.4	112.0 112.4 111.5 110.8 111.3 110.0	111'0 111'4 112'4 111'4 111'2 111'2	111.0 112.4 109.3 111.8 113.3 109.1	113.6 112.0 113.2 112.0 113.5 110.4	114.5 5 113.6 115.2 114.4 113.7 111.5	111.77 111.25 110.11 107.32 110.54
111.5 	110.6 	116.5 120.4 108.9 109.5 107.4 111.0 109.4	117.2 111.0 <sub>b</sub> 109.6 112.6 110.5 111.2 109.8	112.6 	113.0 120.0 110.7 110.4 111.6 111.2 110.4	110°2 118°6 111°5 111°2 116°9 114°2	115'9 113'7 112'4 111'0 113'8 120'4	119.0 112.6 112.4 c 111.5 109.0 117.4	123 · 4 114 · 4 113 · 8 113 · 4 111 · 8 120 · 4	108.2 115.2 113.0 114.3 111.9 113.0	127.8 116.4 115.0 115.0 117.9 115.2	112.63 109.23 110.06 110.91 112.43 111.55 111.02
108.0 110.6 112.8 111.6 119.0 110.4	107.6 109.4 112.4 113.3 110.0 108.3	108'9 109'0 111'4 110'4 118'0 107'9	109.5 108.4 110.6 108.4 115.6 109.4	112'4 108'4 109'4 108'9 110'9 109'0	120'4 106'2 110'1 109'0 105'6 107'5	108.5 107.5 105.0 114.6 122.0 100.4	117'2 120'6 109'4 120'0 115'4 107'4	113'4 118'4 112'4 112'0 120'3 101'4	116.2 116.5 112.0 117.0 124.6 109.5	112.6 116.6 112.6 114.0 140.0 112.4	116.6 115.4 112.2 116.4 104.0 112.0	111.87 112.07 109.42 111.46 110.07 95.87
109.7 134.0 121.5 108.4	110'4 124'4 107'5 108'2	109°0 105°4 131°9 108°5	107.8 112.9 114.2 108.6	107.4 111.3 120.0 110.0	109.5 109.4 118.9 110.4	118.8 111.4 103.3 114.0 110.4	130.4 111.2 109.2 120.4 110.5	109.4 110.8 110.0 105.4 110.3	107.5 110.6 106.5 110.6 113.4	107.2 111.8 107.0 109.9 112.3	98.6 112.0 109.8 110.0 115.4	108*37 99*53 110*48 113*67 110*81
112.10	110.65	112.86	112.07	112.74	111.36	112.11	114.57	112'48	113.68	113.47	113.75	110.94 \ 108.26
107°0 107°4	107.7 109.2	109'3 109'4	109.8	110°5 110°4	113.0 110.2	110.9	112.2	111.8 —	114.6	112.8	112·2	111°57 110°31
108.2 101.2 109.2 108.6 93.2	109.4 107.0 109.5 108.9 103.0	109.6 108.4 110.0 109.4 109.6	110°0 108°3 109°2 109°4 109°2	110'2 109'4 109'6 109'6 110'4	111.2 109.7 109.7 110.4 109.8	111 5 111 2 109 6 110 4 112 4 95 5	112.4 112.0 110.3 110.5 113.4 114.8	112.5 112.0 111.4 110.4 119.5 117.2	113.5 114.9 111.4 110.4 125.2 113.8	112.6 113.8 112.0 113.7 125.2 113.6	113.0 } 113.4 112.4 112.4 117.5 113.6	110°99 108°88 110°26 111°95 108°40
109.2 107.5 104.9 108.9 122.6 108.6	106.7 108.4 108.8 110.6 109.6 112.2 112.4	113.5 109.0 109.9 109.0 110.8 114.4	115.5 	111.7  110.0 113.4 110.2 110.2 111.6 114.8	110.4 110.0 110.6 110.6 110.6 113.2 114.8	111.0 112.2 114.4 110.4 114.6 111.0	115°2 111°9 116°2 110°4 119°5 115°4	113.0 107.4 110.2 111.8 115.7 112.8	113.8 115.0 116.4 111.4 117.4 120.4	114.0 115.6 129.0 112.5 112.2 114.6	113.9 117.3 119.4 113.4 112.4 112.0 	112.05 110.75 112.15 105.60 111.12 111.58 113.10
116'4 107'4 112'0 110'4 109'2 120'4	109.0 109.6 107.4 110.4 109.6 112.4	110·2 110·4 110·4 110·4 113·7 115·9	111.4 113.7 108.4 110.4 113.8 106.4	111'4 120'9 108'4 109'7 114'0 105'9	110'9 111'4 109'7 110'6 113'7 79'0	119.4 111.4 114.4 112.5 111.5 115.4	123.8 114.2 112.5 107.3 111.6 113.4	121.2 112.4 111.0 111.9 112.6 135.5	117 · 4 112 · 2 115 · 2 111 · 8 112 · 8 87 · 0	126.0 113.3 112.2 114.6 112.8 133.7	113.5 112.3 115.0 112.6 142.3	111.12 110.65 111.50 111.82 112.85 111.43
199'4 110'6 108'2 107'7 108'8 109'0	110°4 112°4 107°4 108°6 108°8 110°3	119.4 109.8 109.6 108.8 111.0 110.3	111'4 110'2 110'4 109'4 111'6 111'4	107.4 110.4 110.5 109.4 110.5 115.6	107.6 113.5 108.8 107.5 110.3 113.2	33.7 109.5 111.2 110.9 108.0 109.7	112.4 102.5 110.8 111.2 109.3 110.2	176·2 109·4 110·0 113·2 109·3 110·4	132.6 112.2 111.6 110.2 110.0 110.2	78:3 113:5 112:4 110:8 111:0 111:2	125.8 } 112.6 112.8 118.2 115.8 112.6 — }	109.25 111.06 111.58 110.17 111.42 112.20
108.52	<u> </u>					115.4	113.10	111.6	110.5	112.4	$\frac{122.8}{114.72}$	111.12
100 92	108*94	110.00	110.70	111.30	110.89	111 22	110 10	112 01	117 00	111 01	14.14	*** **

<sup>&</sup>lt;sup>b</sup> Fifteen minutes late.

<sup>&</sup>lt;sup>c</sup> Three minutes late.

d Omitted in the Means, on account of disturbance.

	Ang	ular Value o	of one Scale	Division of	the Declino	DECLI	NATION. 721. Incre	asing Numb	oers denote d	lecreasing V	Vesterly Dec	clination.	
Mean G Ti	öttingen }	Oh.	1h.	2h.	3h.	4 <sup>h</sup> .	5h.	6h.	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
	1 2 3 4 5 6 7	Sc. Div. 115 '6 118 '2 109 '3 111 '5 117 '8 117 '5	Sc. Div. 118'9 118'2 109'0 116'3 108'8 117'4	Sc. Div. 115'8 117'4 108'4 117'5 112'4 118'4	Sc. Div. 90'4 116'9 113'6 116'4 116'4 119'3	Sc. Div. 97 '4 113 '2 114 '4 112 '8 114 '1 114 '0	Sc, Div. 109 '3 111 '5 108 '2 109 '2 110 '4 108 '5	Sc. Div. 106 '4 108 '3 106 '2 104 '8 105 '5 105 '0	sc. Div. 104 '9 107 '0 104 '4 103 '5 104 '4 104 '1	sc. Div. 106 °6 106 °4 103 °8 104 °6 106 °4 103 °0	sc. Div. 106 '7 107 '2 104 '6 105 '4 108 '4 104 '6	Sc. Div. 102 '8 107 '6 106 '4 107 '0 108 '4 106 '5	Sc. Div. 93 6 108 4 108 2 108 8 108 4 108 2
ER.	8 9 10 11 12 13 14	118.0 115.2 111.6 113.7 111.7 114.4	109.0 114.2 112.2 115.4 117.4 112.2	110'4 113'6 122'4 119'6 121'4 121'8	111.6 113.0 118.5 121.1 122.8 121.9	103.4 114.9 111.2 118.6 121.8 116.1	108.6 110.4 105.6 113.3 115.4 111.9	104'2 106'5 99'4 108'0 110'0 105'2	101.5 103.8 98.9 105.6 107.2 104.4	102.2 103.4 100.1 105.0 104.2 104.8	103.4 103.8 103.3 106.4 106.8 105.0	104'4 104'4 103'4 107'5 108'4 106'2	108.2 107.6 104.2 108.7 110.2 107.8
NOVEMBER.	15 16 17 18 19 20° 21	112.5 108.6 112.8 114.3 114.8 117.4	114'2 116'2 115'2 115'5 115'4 84'8	116.6 116.4 116.4 115.2 117.6 105.0	116'4 120'0 113'3 111'4 113'2 122'8	115:4 110:8 112:2 113:8 114:8 118:0	110.4 111.4 109.6 109.4 109.0 111.4	107.5 106.2 107.4 106.5 105.8 104.4	105.4 97.8 103.0 106.6 105.2 103.6	104'4 100'0 106'6 107'4 106'4 103'4	105.4 104.3 107.4 108.4 104.4 105.4	107.7 102.4 107.4 107.2 120.4 106.4	110.3 100.9 109.2 107.4 98.4 107.4
	22° 23 24 25° 26 27 28	114'2 111'6 111'6 110'2 107'5 113'2	115.4 113.4 111.6 110.4 108.6 113.4	118°2 116°4 112°4 122°4 102°5 114°8	116.4 116.0 112.8 117.3 110.6 108.5	116.6 111.6 110.8 116.4 113.4 113.0	115.4 110.5 107.4 118.5 111.6 113.1	117.4 104.1 102.5 105.9 110.9 109.6	101.2 104.8 102.4 106.4 109.4 105.2	94.0 107.0 104.0 100.6 106.8 107.4	118.4 107.4 104.4 96.2 105.8 107.4	94.0 107.4 107.4 100.4 106.9 105.4	98.2 107.6 110.4 100.8 103.8 112.5
	29 30	113.4 113.2	114.3 114.3	115 <b>·4</b> 115 <b>·</b> 5	116'1 115'4	116.5 115.4	113.0	108.8 110.2	114.3 107.4	105.0	106.4 107.4	108.4 107.8	109.9
Hourl	y Means	113.40	113.96	115.28	114.59	113.03	110.23	106.49	104.83	104.89	105.84	107.02	107.07
	$ \begin{bmatrix} 1\\2\\3\\4\\5 \end{bmatrix} $	115.0 114.6 108.4 114.8	115.5 113.0 108.2 112.5	115.4 114.4 114.9 109.7	115.6 113.6 117.4 102.5	116.6 114.2 107.0 109.8	115.6 111.3 106.6 107.4	112.5 111.9 107.6 107.3	116.2 107.4 105.4 105.4	116.9 107.0 105.8 106.4	108.6 105.2 106.3 107.0	110.4 105.2 106.7 107.4	109'8 111'4 107'8 109'0
	6 7 8 9 10 11 12	113°3 113°7 110°4 107°4 116°4 98°3	113°3 114°0 112°0 117°4 112°6 98°9	114.2 114.4 107.2 112.4 114.6 100.9	115.4 113.9 116.6 105.4 111.4 109.6	114.4 114.3 103.5 107.4 108.6 113.1	112.5 110.3 106.0 104.8 106.5 113.4	110.3 107.5 102.4 103.4 102.2 109.3	110.4 106.4 105.8 105.5 102.4 108.4	110.6 106.2 106.0 100.7 101.4 108.0	109.4 105.9 107.8 108.3 102.4 107.9	109.0 105.9 109.2 107.6 116.4 105.4	110.0 107.4 110.4 109.4 110.1 109.3
DECEMBER.	13 14 15 16 17 18° 19	112.5 106.6 112.5 112.8 115.4 104.5	113.5 110.2 114.3 113.4 114.4 112.4	114.6 103.4 115.4 113.8 118.3 98.4	113.6 117.4 118.2 117.2 130.4 116.9	112.6 119.4 116.4 118.7 139.4 104.5	110.8 116.5 d 117.0 104.6 108.4	109.0 110.4 110.2 112.6 119.6 109.6	105.0 106.2 107.6 109.4 106.0 108.2	105.2 106.0 106.6 108.9 89.5 101.6	106.6 106.2 107.4 107.4 97.8 111.4	109.2 108.8 108.0 106.5 109.4 108.4	109 8 109 8 110 0 110 2 102 5 111 0
	20 ° 21 22 23 24 25 ° 26	7.8 112.4 110.4 110.9 108.4	10·0 116·4 111·6 111·0 113·4	117.8 116.7 112.8 111.0 116.5	45.7 118.8 102.9 115.6 116.5	84.0 119.4 108.6 111.5 116.2	116.4 113.4 110.7 111.6 111.5	115.5 110.6 107.6 109.4 109.2	100°3 107°0 106°4 107°5 106°5	107.3 106.6 107.4 107.2 104.4	124.5 106.5 107.9 104.6 107.0	109'4 106'4 106'9 106'5 109'4	103'9 107'7 106'6 108'4 110'6
	27 28 29 30 31	113.4 112.4 111.8 112.5 113.3	115.4 113.5 115.4 113.0 113.3	118.6 114.8 115.5 113.8 114.6	118·2 116·2 119·5 116·2 117·2	117.2 117.6 118.5 116.9 117.6	111.6 113.4 109.9 114.5 114.5	108'4 110'4 107'3 111'4 113'0	106'4 106'4 109'3 110'4 111'2	107.5 108.0 99.9 107.3 110.4	109°2 108°0 105°8 106°9 110°2	109'6 107'5 105'9 106'3 108'2	110°5 108°8 107°6 107°2 108°8
Hourly	Means	111.24	112.76	113.25	114.97	114.95	111.59	109.31	107.44	106.00	106.68	107.99	108.88

<sup>&</sup>lt;sup>a</sup> Thirteen minutes late.

<sup>&</sup>lt;sup>b</sup> Two minutes late.

<sup>&</sup>lt;sup>c</sup> Omitted in the Means, on account of disturbance.

 	Angul	ar Value of	one Scale 1	Division of t	he Declinon	DECLIN	NATION. 21. Increas	sing Numbe	rs denote de	creasing We	esterly Decli	nation.
12h.	13b.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
Sc. Div. 107 6 109 6 108 3 110 0 110 4 109 2	sc. Div. 103 '4 109 '4 108 '5 110 '4 111 '2 110 '4	Sc. Div. 117'1 109'8 110'8 110'2 111'3 110'6	Sc. Div. 115 '4 109 '5 114 '5 109 '9 110 '7 110 '2	Sc. Div. 108 '4 108 '4 114 '4 110 '4 111 '5 111 '2	Sc. Div. 120 6 115 1 111 5 119 5 111 3 114 4	Sc. Div. 114'4 108'5 112'0 114'0 116'9	Sc. Div. 118'2 102'4 98'4 111'4 112'4	Sc. Div. 118'0 116'6 114'8 110'6 118'2	Sc. Div. 115 '8 112 '4 117 '2 111 '3 120 '8	Sc. Div. 114'6 117'8 112'4 113'4 118'4	Sc. Div. 112 8 109 6 112 4 114 0 121 4	Sc. Div. 109.78 111.23 109.65 110.95 112.33
109°3 107°6 112°4 109°4 109°6 110°6	109.6 110.2 113.0 109.8 111.0 111.2	109'2 112'4 112'8 114'6 116'4 112'8	112.4 112.8 119.4 113.4 111.6 113.3	111.4 117.6 115.9 113.4 117.4	111.5 113.4 120.6 118.8 113.4 112.4	115·2 102·5 113·8 107·4 112·4 112·2	114'3 112'4a 111'4 109'7 109'2 110'6	111'4 112'0 112'6 111'0 109'4 112'3	110'3 110'4 113'4 114'3 109'4 114'4	115.6 111.0 115.4 112.4 111.2 107.8	117.8 111.3 112.6 111.8 110.0 108.7	111.55 108.66 111.42 110.48 111.83 112.61
109.6 105.4 110.4 113.0 102.2 108.4	110.5 106.0 110.3 110.4 110.8 106.4	109.6 111.6 111.3 111.4 112.4 112.6	119.5 111.4 113.4 110.0 111.7 111.8	115.4 115.4 112.4 110.4 116.8 112.0	110.4 117.2 113.4 110.4 117.2 111.8	111.9 111.0 111.2 111.5 110.4 114.0	112.0 118.0 112.4 111.0 110.2	114.7 111.0 112.4 111.6 111.6 110.3	114.9 112.6 115.4 112.0 111.6 109.4	115.0 112.6 114.6 105.8 106.4 109.9	115.4 104.4 113.4 112.3 109.6 113.4	112.03 111.30 110.06 110.66 110.35 110.99
104.4 109.2 114.2 112.6 116.0 114.4	124.0 110.2 112.4 113.3 116.6 112.0	109.0 110.4 113.4 99.4 111.6 112.2	123 · 2 109 · 2 113 · 4 182 · 6 106 · 0 111 · 6	123.0 108.4 144.2 119.3 115.2 112.6	115.0 108.4 118.4 125.0 111.6 113.4	107'4 119'4 108'6 109'2 121'3 111'4	106'4 103'0 108'0 100'2 122'6 110'4	106.4 102.6 107.4 107.7 121.4 109.2	110.9 104.0 109.4 112.4 118.0 104.3	111.6 109.8 111.4 110.7 113.2 104.4	114.4 109.8 111.1 110.8 110.2 111.4	108.75 111.11 109.56 111.03 115.18 109.41
110°4 110°7	110.6	111.6	112.9	111.6 112.8	112.6 111.6	114'2 112'6 111'8	112.6 112.4 112.3	111.4 112.8 112.6	113°3 113°4 112°9	112°5 113°4 120°8	112.4 114.3 120.4	111.20 112.08 112.20
109:98	110.37	112.03	[ [	114.25	114.55	111.61	110.44	112:17	112.67	112.20	112.67	110.95
 109.2 102.4 108.0 111.2	110.6 104.5 113.8 112.2	112.8 111.4 112.0 115.4	111.4 115.8 110.6 114.4	111.7 114.0 114.9 115.9	115°2 121°2 111°3 113°4	111.6 118.4 113.0	112.7 118.3 115.4	113.5 103.0 111.5	111°0 115°2 113°2	121°4 112°4 112°8	116.4 114.5 113.0	113.45 111.67 110.43
110.6 109.4 111.9 110.0 109.4 112.4	110.6 108.5 109.4 111.4 114.2 113.4	111.4 106.2 108.5 111.6 108.4 112.5	111.6 107.4 114.9 112.0 112.4 113.8	112.8 109.6 115.1 111.4 122.2 113.2	113.0 111.4 112.2 111.3 124.6 112.4	109.4 113.0 107.4 113.0 111.4 128.0	115.4 112.3 112.0 114.5 112.4 119.4	116.2 112.0 115.0 113.9 96.6 111.8	113.8 112.5 114.8 114.6 113.5 112.4	113.4 113.0 119.5 111.0 114.8 107.5	113.5 } 112.8 121.4 112.6 116.4 101.6	110°97 112°02 110°94 110°37 109°27 111°54 111°04
109.6 110.6 111.3 110.4 109.2 111.4	109.8 111.6 112.0 110.4 109.6 111.2	111.0 112.4 112.4 110.8 112.4 123.2	115.8 116.0 113.4 110.3 106.4 114.2	111.7 114.8 112.6 114.4 111.8 117.0	111.4 112.9 112.6 114.4 111.4 121.9	110.4 111.6 112.2 111.6 118.4 112.4	109°3 112°0 109°4 107°6 115°8 113°8	111.6 109.4 111.3 111.4 115.6 111.4	111'4 108'4 108'9 111'7 119'0 111'4	112.0 109.0 108.4 112.6 124.2 112.9	111.8 5 112.2 111.5 112.6 117.5 113.4	109'45 110'60 111'29 111'88 113'71 111'39
120°2 109°8 134°2 109°5 109°8	133.5 111.4 107.6 109.9 112.4	115.4 111.2 110.5 112.5 114.5	118.7 111.6 113.5 113.4 114.4	120°0 111°6 114°0 112°2 113°4	112.4 111.3 114.4 113.4 112.5	106.0 114.8 114.6 121.6 112.6	143.0 122.4 108.6 105.6 114.7	123°0 113°4 109°6 116°4 116°4	120.0 114.0 110.8 111.0 113.4	81.8 114.4 113.5 115.4 116.2	155.8 113.4 107.8 110.4 115.4	100.51 102.30 111.40 111.43 111.45 111.80
111.0 109.4 108.4 108.0 109.7	110'9 110'9 111'5 112'4 110'7	111'0 112'2 122'4 110'2 111'3	113.4 112.8 111.0 112.4 111.8	112.6 112.4 112.4 112.5 109.3	114.2 111.5 113.6 114.4 110.4	113.4 110.6 112.4 112.2 110.4 110.4	112.3 111.5 112.4 110.5 111.8 112.3	112'4 112'0 112'4 112'2 113'4 112'4	112.5 112.6 111.6 113.3 113.6 111.5	112.5 112.9 112.8 111.6 114.0 112.4	113.6 5 112.4 113.3 112.0 112.3 112.4	112.13 111.71 111.56 111.74 111.95
110.64	110.85	111.87	112.52	113.19	113.52	113.33	112.35	111.40	112.29	113.29	112.94	111.42

	Angt	ılar Value o	f one Scale 1	Division of t	he Declinon		NATION. 21. Incres	sing Numbe	ers denote d	ecreasing W	esterly Decl	ination.	
Mean G Tir	föttingen }	Oh.	1h.	2".	3h.	4h.	5h.	6 <sup>h</sup> .	7h.	8h.	9h.	10h.	11h.
	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 114°2	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	2 3 4 5 6 7 8	112.8 108.3 113.9 114.1 113.4 113.4	112.6 106.8 114.5 115.0 110.4 115.8	116.2 111.6 116.9 116.4 106.6 119.2	119.4 114.5 118.6 120.0 114.4 120.0	119.4 107.4 118.6 120.2 112.0 117.2	116.5 107.5 114.9 116.4 110.2 113.3	113.2 112.4 110.9 110.3 109.0 107.4	111.3 110.6 109.2 109.0 107.8 105.9	106.9 107.7 108.6 108.8 107.4 104.4	99'4 106'4 108'4 109'2 106'7 114'0	97.4 109.7 107.6 109.2 108.4 106.4	105.6 109.8 110.4 111.0 108.6
ARY.	9 10 11 12 13 14 15 16	113.6 112.9 116.4 111.7 113.4 113.4	110'9 116'0 108'4 109'8 112'5 114'2	116.5 118.8 124.4 101.9 117.4 111.2	128'8 121'6 125'0 105'4 120'4 112'0	116.4 116.6 113.2 113.2 116.4 112.2	112·1 112·4 113·4 115·4 118·7 111·8	109 · 9 107 · 5 89 · 4 111 · 6 105 · 1 106 · 7	107.4 104.2 106.5 105.4 100.9 106.6	104.9 100.6 112.4 99.6 97.0 106.0	105.4 104.1 96.6 107.7 95.0 107.6	107 9 107 0 109 2 100 2 102 0 108 8	110'4 108'2 100'7 107'4 108'7 108'4
JANUARY.	16 17 18 19 20 21 22 23	113.0 111.6 113.4 112.5 112.3 113.5	114.4 114.4 112.4 112.4 113.9 113.4	114·4 116·6 113·6 118·2 114·5 118·4	114·4 117·4 131·6 118·3 118·2 116·8	111.6 117.6 121.0 117.6 116.1 117.4	110.4 114.9 111.8 110.6 112.7 111.9	107.8 110.6 106.2 111.0 109.5 108.6	106:4 106:2 104:9 107:6 105:9 105:3	106.5 106.4 103.0 103.8 101.8 105.5	107.5 105.8 105.4 103.2 105.9 108.4	107.3 105.6 106.8 106.4 107.6 107.1	108.4 108.5 107.5 108.5 103.4 106.4
	23 24 25 26 27 28 29 30	106.9 114.5 112.0 115.8 112.8 116.6	120.4 110.0 118.4 112.5 115.4 115.0	115.3 118.4 123.2 122.4 115.9 119.0	103.7 115.4 122.7 120.3 119.0 115.9	104.4 112.2 108.8 119.2 118.6 118.4	101.6 107.4 108.8 114.0 126.0 113.8	105 4 101 9 103 4 104 6 105 0 108 5	99.8 97.4 101.4 104.2 104.5 106.2	95.0 95.4 105.3 103.8 104.2 107.4	101.2 99.4 109.4 105.6 106.5 107.4	101.8 103.8 102.8 106.2 105.2 107.8	100°0 104°6 105°4 106°7 104°2 109°0
	31	110.2	111.2	115.7	117.2	117.2	114.8	110.8	108.2	107.9	107.0	105.6	105.9
Houri	y Means	112.93	113.25	116.13	117.97	115.27	112.75	107.61	105'91	104.63	105.46	105.98	107'17
	$     \begin{bmatrix}       1 \\       2 \\       3 \\       4 \\       5 \\       6 \\       7     \end{bmatrix} $	117:5 122:6 115:9 118:4 117:6	118·1 111·6 120·6 117·2 118·6	120°1 119°5 121°4 120°3 123°2	124.2 122.6 123.4 124.4 126.0	121.7 122.5 122.8 122.6 120.8	122.3 120.9 119.6 118.4 a 118.6	118.4 118.2 116.4 115.4 116.4	115.5 113.4 114.5 113.8 115.1	113.7 111.6 113.3 111.2 114.3	112.2 112.3 112.6 110.6 114.1	111.5 113.3 112.4 110.4 114.2	114.4 114.4 113.4 112.2 115.4
.Y.	7 8 9 10 11 12 13	120°8 118°6 124°2 117°6 118°5 118°8	121.4 118.7 121.0 120.0 115.7 119.0	123.0 123.8 124.2 124.7 122.8 116.2	126.6 122.0 133.0 126.2 128.2 117.2	122·2 122·3 123·8 127·4 127·2 120·2	118°2 118°0 116°6 122°4 122°0 121°4	114·4 106·4 115·4 117·6 116·4 119·7	113 · 9 107 · 2 108 · 8 115 · 8 111 · 4 117 · 4	109.5 109.3 107.4 111.4 109.3 114.4	106.4 110.0 108.5 110.2 109.4 112.4	109.6 112.9 104.4 111.8 109.3 113.1	105.6 110.4 110.4 110.4 110.4 110.4
FEBRUARY.	14 15 16 17 18 19 20	118.4 121.4 119.4 119.3 120.2 124.4	119.0 119.2 120.4 121.5 122.4 124.0	121.5 110.4 123.0 127.0 125.6 124.6	123.7 118.4 124.8 125.4 126.4 127.4	124.6 120.0 122.6 123.6 124.7 117.4	124.3 118.0 117.4 118.6 118.6 111.5	119·2 110·0 113·3 114·6 113·4 106·0	116.6 107.5 112.4 112.5 109.8 101.6	115.0 107.7 112.4 111.7 108.5 107.4	111.6 110.6 113.2 112.4 110.3 110.4	106.0 113.5 112.4 113.3 112.6 112.2	93.4 110.4 112.4 113.9 114.4 112.6
	21 b 22 b 23 24 25 26 27	110°4 121°4 122°4 104°2 119°6 118°5	98.0 128.3 119.4 109.5 104.3 119.0	131.8 125.4 123.6 105.8 106.4 122.3	131.0 126.4 124.2 119.5 116.7 125.4	125.4 123.6 121.6 110.7 125.6 126.4	120°0 120°6 118°8 114°3 124°4 121°8	119.8 116.2 122.5 113.0 115.7 120.0	116.6 108.8 121.4 114.7 115.2 115.4	109.8 101.6 112.0 109.5 114.0 114.0	100°0 89°0 108°3 111°4 114°2 111°2	127.5 103.8 107.2 125.4 112.4 112.3	141.8 c 105.9 109.8 113.4 117.3 112.4
	28 29	115.6 119.2	113.4 121.4	124·4 122·6	129·3 123·4	120.6 125.8	122.5 121.4	115.5 117.2	110.4 113.4	103.6 111.4	106·4 111·1	110.8 111.4	111.7 112.6
Hourly	Means	118.83	118.06	120.71	124.58	122.48	119.57	115.44	112.94	110.98	110.86	111.86	111.43

<sup>&</sup>lt;sup>a</sup> Three minutes late.

b Omitted in the Means, on account of disturbance.

e Five minutes late.

-		Angula	r Value of	one Scale D	ivision of th	e Declinom	DECLIN		ng Number	s denote dec	reasing Wes	sterly Declin	ation.	
	12h.	13 <sup>h</sup> .	14h.	15h.	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19h.	20h.	21h.	22h.	23h.	Means.	
	Sc. Div. 108°4	Sc. Div. 109 4	Sc. Div.	Sc. Div. 112.6	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
1	]	-		_	<u> </u>		112.6	112.3	112.4	111.4	111.4	112.8	111.63	
	107.8	107°0 111°5	115'4 112'3	118.7 112.4	118.4	119.4	122.6	113'4	113.5	128.4	124.5 112.3	112.5 113.0	113.85	
	110.8	111.4	111.8	112.4 $113.2$	112.0	111.8	111.2	112.4 112.9	111.8 111.8	109.4	109.2	113.4	110 37	
1	111'6	111.7	111.7	112.4	112.0	113.2	112.8	113.7	114.0	116.7	111'4	113.4	113.10	
	111.5	111.2	112.0	115.4	117.0	112.2	110.6	113.2	112.8	113.2	112.2	111.8	111.59	54
-	108.8	111.2	111.4	111'4	110.8	110.4	112.2	112.4	111.2	114.6	110.5	$ \frac{111.4}{111.4}$	111.33	-
-	110.6	109.6	114.4	111.2	112.4	112.6	112.8	112 4	111 2	113.4	114.5	114.0	112.35	
	109.6	120.0	126'4	120.4	118.5	108.4	113.2	112.0	114.2	117.5	124.0	118.4	113.87	1
	113.2	110.0	110'4	108.0	108.8	110.8	111.0	111.6	111.6	113.4	104.9	108'8	109.92	
1	108.2 109.3	106°8 117°6	109'0 111'4	114 <b>'</b> 3 111 <b>'</b> 4	112.4 109.9	109°9	108.6 108.9	109·7 109·2	108.5 109.5	110°2 110°4	108·2	109°2 112°5	108.51	ŀ
	108.4	108.4	109.3	109.4	109.4	110.5	100 9	109 2	109 3				110.24	
	108.6					<del></del>	110.6	113.5	113.0	110.2	110.4	111.0}	1	
	108.6 107.5	107°4 109°2	110 <b>.</b> 6	110.6	110.8	115.4	111.6	112.2	111.2	111.2	112°2 113°6	111'4 112'3	110.66 111.40	
	107.6	109 2	114.0	112 <b>.</b> 4 116.1	113.3	110 <b>·</b> 9	111.3	111.9 112.6	112 3 104 4	112.4 107.6	117.4	112.3	111.22	
	109.2	110.9	111.6	110'4	111.7	112 4	113.5	112.4	110.0	112.2	112.5	113.4	111.26	1
-	109.4	108.7	109.9	110.8	110.8	110.6	110.4	111.5	110.9	111'5	111.6	111'4	$ _{110.38}$ $ _{111}$ .	17
ł	110.5	107.6	111.4	109.6	115.2	111.7	112.7	112.8	111.4	116.8	115.0	$ {123.6}\}$	112.11	ı
- 1	103.0	108.7	110.3	110.8	111.0	112.8	109.4	110.4	111.4	111'4	112.8	112.6	107.50	
- 1	105.0	110.2	111.5	111.0	112.6	111.6	111.0	111'4	114.2	114.4	113.4	111.8	109.10	1
	106.6	106.6	112.4	107.5	111.5	115.4	108.6	109.4	108.4	114.4	114.2	113.9	110.44 113.31	ļ
	108'3 110'4	108.5 119.4	110°3	110'4 121'4	111'4 120'3	115.4 118.8	124.0 129.6	119.5 108.9	117.4 110.2	123°4 106°2	125.5 130.0	110°1 128°4	115 31	
1	108.8	108.7	109.2	109.5	110.0	110.5	123 0					7	111.39	1
	107.0	108.0	108.8	109.2	109.6	110.4	115.4 110.5	113°1 110°7	109°2 110°5	111'6 110'2	113.6 111.3	109.4 } 112.4	110.47	
	108.86	110.40	112.87	112.33	112.21	110 4	112.95	112.17	111.23	113.27	114.07	113.527	111.35	ĺ
					112 01	***	114 00	1				1		
į	114.6	115.3	116.2	116.4	122.6	116.0	120.5	116.4	116.6	118.8	110.8	116.2	117.08	
-	115.4	115.6	116.4	116.4	117.6	118'8	116.4	116'1	116.8	117.8	117.4	117.6	$\left \begin{array}{c} 116.86 \\ 118.13 \\ \end{array}\right> 116.$	12
	115.2 113.3	115.6 115.3	116.8 116.2	120.6 116.0	124.4 118.3	120°2 117°8	120°3	120°4 116°6	119°0 117°4	116.6 116.0	119.4 117.1	117.6 117.6	116.43	
1	117.0	117.4	116.8	119.8	116.6	116.2	-	_		<del></del>		122.6}	120.08	
						<u> </u>	140.0	134.4	119.6	130.6	116.4	122.6	l Ì	
- {	108.9 111.2	107.6 112.4	111'4 108'4	$\frac{117.2}{123.8}$	$122.3 \\ 124.4$	121.4 130.2	117.5 129.4	118°8 124°7	115'6 112'5	116'4 115'7	117.0 109.3	117.4 112.2	115.96 116.42	
	110.5	111.4	122.4	113.3	124 4	118.4	117.9	117.8	116.4	116.6	116.5	116.0	116.28	
	111.4	114'4	116.6	116.4	117.9	118.6	118.0	116.3	116.6	116.4	116.9	117.4	117.14	į
	112.0 113.3	112.8 114.4	115.6	116.5	117.4	117.8	118.4	119.4	117.7	119.2	118.4	118.6	116'85	
		114 4	115.4	116.2	120.6	116°3	120.6	118.3	117.8	118.4	117.6	117.6}	117.05	
	107.4	112.2	115.8	115.2	115.0	121.6	121.6	122.1	120.7	121.2	113.4	116.0	116.48	
	112.4	113.0	114.4	115.2	116.3	118.0	117.5	117.2	120.0	118.8	122.4	121.4 121.4	115.57 117.29	ŀ
	114.7 114.4	116'3 115'0	115.7 116.2	117 <b>.</b> 0 116 <b>.</b> 4	117 <b>·</b> 2 116 <b>·</b> 6	119'8 116'7	117.8 115.4	113 <b>.</b> 4 116.3	120°0 117°0	118°4 117°6	119 <b>'</b> 6	119.0	117 29	
	115.0	115.4	115.6	116 4	116.5	116.2	117.3	123.6	119.6	119.0	120.6	118.8	117.52 > 117.52	25
	114.3	114.4	114.4	112.1	112.4	120.5	-					$\frac{-}{118\cdot 2}$	115.50	- 1
	117.8	106.8	 116 <b>·</b> 4	293.5	100:0	100.5	118.4	124.2 120.0	$\begin{array}{c} 91.2 \\ 118.0 \end{array}$	121 2 118 8	123 <b>·</b> 9 116 <b>·</b> 4	118 2 )	126.56	ı
- [	107.3	123.4	116.4	118 <b>.</b> 4	128 <b>·</b> 9 117 <b>·</b> 8	128 <b>.</b> 5	119°2 120°4	83.4	97.6	104.6	102.6	107.4	112.46	1
	110.5	114'8	116.2	126.6	127.4	141.8	128.4	142.0	126.0	114'4	124.0	104'2	120.31	Ī
	112.4 121.0	110.6	116.4	117.7	110.4	116'1	143.0	121.2	112.4	122.8	98.4	130°5 117°4	115.14 116.27	ļ
	113.8	112 <b>.</b> 4 114 <b>.</b> 8	115°4 116°2	120°8 136°2	119.8 118.4	116°5 118°4	115.6	116.4	115.8	116.8	116.8	1	117.94	
-						_	116.8	117.0	113.4	113.0	113.8	$\frac{-}{120.0}$		
	113'4 112'2	115.7	116.3	116.8	117.0	116.6	118.3	116.6	113.6	118.3	111.4 119.0	120.0	115.74 118.07	
-		115.4	114.8	111.5	134.5	130.4	117.6	117.1	117.4	113'6			<u>·</u>	
1	113.53	113.99	115.66	118.02	119.43	120.20	121.03	120.27	116.55	118.29	116.44	118.10	117.01	

	A =1 cm	lar Value of	one Seele T	livision of t	ha Daolinon	DECLIN	NATION.	sing Numbe	ers denote de	ecreasing W	esterly Dec	ination.	
Mean Ge Tim	öttingen [	Oh.	1h.	2h.	3h.	4h.	5 <sup>h</sup> .	6h•	7h.	8h.	9 <sup>h</sup> .	10 <sup>h</sup> .	11h.
	$ \begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \end{pmatrix} $	Sc. Div. 119.6 119.7 118.4 118.3	Sc. Div. 121 * 4 121 * 8 121 * 6 120 * 8	Sc. Div. 124 '4 124 '3 124 '4 126 '2	Sc. Div. 125 8 126 5 125 0 126 5	Sc. Div. 120 '7 125 '4 121 '3 122 '4	Sc. Div. 119 7 123 4 118 6 115 4	sc. Div. 114.5 118.5 111.4 109.6	Sc. Div. 115 4 113 4 108 6 107 4	Sc. Div. 112 4 112 2 108 4 107 6	Sc. Div. 112°4 111°8 110°2 109°6	sc. Div. 114 * 3 112 * 4 112 * 6 110 * 8	Sc. Div. 113°0 113°5 114°2 113°1
	5 6 7 8 9 10	122.5 122.4 125.9 120.4 121.6 121.3	124.6 126.2 125.9 124.4 125.0 124.4	126.6 128.4 129.6 127.4 128.3 127.0	123 · 8 128 · 2 132 · 4 126 · 6 129 · 2 128 · 4	119.6 121.4 122.6 121.7 127.4 125.8	112.4 116.3 116.3 114.6 122.4 120.6	110.4 108.4 102.2 107.6 116.6 114.4	106.4 109.4 103.6 104.4 115.2 112.1	104'4 108'9 102'6 104'3 109'0 109'4	105.4 110.9 103.4 104.6 108.4 108.4	107.5 114.0 103.5 108.6 110.2 110.2	109.6 113.2 109.7 115.5 112.4 111.6
MARCH.	12 13 14 15 16 17 18	122.4 122.0 123.2 131.6 112.0 120.4	125.4 119.5 121.4 130.8 107.6 120.4	126'8 122'4 113'5 132'6 119'2 121'8	127.4 124.9 107.4 127.4 116.4 122.7	122.6 117.8 99.4 121.6 118.2 118.4	118.4 115.4 112.6 115.2 108.6 113.6	112.4 109.6 105.7 113.4 110.2 110.9	109.4 106.6 107.2 111.8 114.5 111.0	107.9 106.2 110.2 108.2 125.2 108.4	107.9 106.4 114.5 112.2 117.4 109.5	109.4 109.1 114.5 112.6 114.7 108.4	111.7 110.5 115.2 114.4 118.0 110.4
	19 20 21 22 23 24 25	109.7 126.4 120.6 119.4 118.4 114.5	106'4 126'2 122'4 122'4 114'4 129'3	114.5 123.0 123.4 125.5 120.0 123.3	101'3 129'0 125'6 123'6 123'4 123'4	105.4 126.6 122.2 121.5 122.5 99.6	105°3 115°6 115°4 117°0 115°5 108°4	104.4 111.6 110.2 112.4 111.0 117.6	107.8 109.5 104.6 106.4 105.5 112.4	136.6 107.6 103.8 103.6 101.8 112.4	120°0 108°4 104°2 104°6 102°5 113°6	117.6 110.0 107.8 108.6 107.8 112.6	114'8 112'4 109'0 110'4 109'4 107'2
	26 27 28 29 30 31	121.0 120.4 120.4 116.4 113.6	126.4 122.4 122.4 125.2 114.9	126.4 123.6 126.4 126.0 122.5	122°3 123°4 126°4 125°3 119°4	118.6 120.6 121.4 122.5 121.4	114.6 118.4 112.4 117.6 117.6	109°3 108°5 106°4 111°7 106°0	105.6 107.2 104.3 109.0 103.4	107.5 108.0 104.2 106.5 105.6	108.4 108.4 107.8 106.2 110.4	111.5 110.8 110.2 107.4 110.7	111'2 112'4 113'5 106'6 110'4
Hourly	Means	120.09	121.99	124.35	123.77	119.28	115.60	110.22	108.60	109.00	109:17	110.66	111.97
	1 2 3 4 5 6 7	122.4 	121'3  108'6 127'2 118'0 128'7 118'0 122'4	124°2 107°6 128°0 110°4 132°1 110°4 124°6	127°2 	121.6 	115.8 115.8 112.8 117.6 119.0 117.6 116.6	111.6 	108.6 	107.8 	109.4 108.6 106.6 113.4 107.6 113.4 110.4	113°3  123°3 108°3 122°2 110°6 122°2 112°6	112'8 115'9 114'0 116'4 115'4 116'4 113'9
APRIL.	8 9 10 11 12 13 14 15	119.6 120.5 119.4 120.0 123.4 124.2	124.2 120.4 120.3 122.4 125.0 125.9	124.4 120.6 123.5 123.0 125.0 124.4	122.4 120.5 121.3 122.6 123.4 119.4	118.6 116.6 117.8 118.1 119.4 115.8	113.4 111.8 114.0 113.6 113.2 112.4	110 · 4 109 · 4 112 · 6 108 · 6 109 · 6 110 · 2	107.0 106.4 111.6 105.6 107.4 105.4	106.4 108.4 111.3 106.0 107.2 105.3	108.4 109.7 112.6 108.9 109.2 103.6	111.4 113.0 113.0 111.6 112.4 102.6	113.4 115.0 113.6 113.2 114.0 107.8
AI	17 18 19 20 21 a	122'4 120'3 119'2 121'4	123°4 121°4 122°5 122°6	124'4 122'4 122'7 122'4	124.8 119.2 120.4 122.7	121'2 115'4 117'4 120'4	112.4 110.4 113.6 117.2	108.3 108.8 110.7 113.9	108.2 106.8 107.7 109.6	108.4 104.4 107.6 107.2	104.3 105.4 108.4 108.3	106.0 108.7 111.5 109.4	104°3 113°7 113°2 112°3
,	22 23 24 25 26 27 28 29 30	120.6 120.5 121.0 122.4 120.4 124.7 130.0	127.4 121.0 124.0 125.2 123.2 124.3 123.5	117.5 121.6 126.8 125.9 124.4 123.2 130.0	119'4 	113.4 	115'4 112'2 114'4 110'8 112'5 111'3 101'9	108.5 109.2 111.5 109.2 110.3 108.0 98.2	105.7 108.6 107.4 110.4 110.4 107.8 107.4	106.6 	107.4 110.4 108.5 111.3 111.7 109.0 108.4	110.8 111.6 110.4 112.7 113.8 110.6 110.4	114.3 114.4 113.4 114.4 115.0 113.2 106.4
Hourly	Means	121.40	122.54	122.48	120.66	118.45	113.57	110.12	108.01	107.91	108.92	112.18	113.18

		A 10-	Walna of	GI. D			DECLIN	ATION.					
		Angulai	value of (	one Scale D	vision of th	e Declinom	$eter = 0' \cdot 75$	21. Increas	ing Number	rs denote de	creasing We	ste <b>rly Decli</b>	nation.
	12h.	13h.	14 <sup>h</sup> .	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Means.
-	Sc. Div. 119'4 114'6	Sc. Div. 115°4 115°4	Sc. Div. 115'6 115'9	Sc. Div. 134'4 116'2	Sc. Div. 120'4 116'2	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 118'6 118'0	Sc. Div.	Sc. Div. 119'4 116'0	Sc. Div. 118 47   117 60
	115·2 115·4	116.3 112.6	116.4 117.2	118.2	117.4 118.0	117.6 117.3 117.4	116.6	117.4	117.8	116.5	117.0	118.6	116.23 \ 114.15
	110.0 114.5	111'4 114'8 114'2	111.6 112.8 113.5	117'4 115'8 115'2	115'8	117·4 117·4	117.4 120.4 117.4	116'6 121'5 121'4	116.4 121.2 120.8	119 <b>.4</b> 120.4	121.4 122.2	119'8 121'2	115.85 117.77
	113·2 112·8 113·4 112·0	114.4 114.4 114.5	115 2 115 4 115 5 115 4	116.7 116.4 115.8	121.8 118.5 116.9 117.2	127.6 117.4 120.0 117.4	120'4 117'5 119'4	122·4 117·7 117·6	120'4 118'3 118'4	118.6 118.4 119.4	118.7 119.0 118.4	117'8 119'4 119'3	116·72 115·98 118·12
	112.8 113.2	115.6 114.5	116'3 116'2	118'4 118'4	118.2	119·4 120·4	117.4 120.4 124.6	119°3 120°4 130°8	119 '4 120 '0 122 '6	120°4 120°2 124°7	122 <b>.</b> 2 120 <b>.</b> 6 122 <b>.</b> 4	121·8 119·4 125·4	117.77 117.65 117.65
	115°2 114°9 117°4	116°2 115°4 111°4	117.2 115.9 112.6	117.4 114.0 114.4	116.7 114.1 115.6	118.0 133.6 115.0	130°3 115°8 115°4	128°2 116°6 115°4	127.0 144.9 117.2	128'0 135'6 118'4	121'8 137'3 118'6	118'4 124'4 119'4	116.63 121.43 115.23 116.84
	110.4 	111.4  114.4 113.5	111.6 107.2 114.2	114.5  111.8 115.2	113.9  109.4 115.5	115°2 124°4 115°7	118.0 126.2 115.4	105.4 113.2 115.0	125'4 118'6 116'8	134.4 116.7 117.0	118 <b>·2</b> 124·4 118·4	115·4 121·5 118·0	115.40 114.65 116.54
	110 <b>.4</b> 113.4 111.2	113.0 113.0	114.8 114.3	115.5 124.4 119.4	116.4 117.2 121.7	114.4 118.0 145.4	116'9 118'5 128'0	117.6 120.0 124.4	116.6 118.4 126.4	115.8 128.2 124.6	117°2 127°8 120°5	117'4 112'8 117'5	114.64 116.75 117.42
	105'6  117'4 113'4	111.2 110.4 114:4	113.0  115.0	113.8 112.9 122.8	115.2 	119°2 131°9 117°8	125°3 117°6 117°0	121.6 115.4 117.3	123.6 -115.0 115.6	107.7 126.2 119.4	114.4 122.0 117.0	112.0 118.6 118.6	114.88 116.56 116.39
	114.0 111.6 113.7	114.4 108.2 111.6	114.4 109.6 110.7	117.6 117.9 143.2	115·2 121·2 126·6	115.6 116.6 117.4	117.6 124.4 123.5	117 · 4 123 · 5 130 · 5	116.4 124.8 119.8	119.4 122.0 109.7	119.4 119.3 122.6	112.2 116.2 112.0	115.40 116.50 116.67
	113.74	113.39	114.16	118:37	117:50	120.14	119.87	119.22	120.59	120.63	120.63	118.38	116.4
	113.4	124.2	118.8	132.7	116.2	124.7	128.0	120.2	112.3	112.0	123.2	113.6}	118.16
	109°3 112°8 112°8	107.0 113.0 117.4	117.0 113.4 119.6	129.0 113.3 115.4	126.0 119.4 115.8	110.0 115.4 137.4	126.2 * 118.4 135.0		116.6 116.5 115.4	119.2	115.2 119.0 110.0	117.8 119.2 105.6	114 <b>·</b> 96 116 <b>·</b> 20 116 <b>·</b> 80
	117·3 112·8 114·6	116.5 117.4 113.8	122.8 119.6 114.1	134.6 115.4 114.5	141 · 4 115 · 8 114 · 5	108.2 137.4 113.8	118.4	102.8 132.4	110.4	165.0	156.0 110.0	133.0 105.6	122.48 116.80 116.06
	113.0 115.4	114.0 112.4	114°2 115°4	114.6 115.2	114.7 115.5	116°2 116°4	118'4 106'0 116'7	118 <b>·</b> 9 117 <b>·</b> 6 117 <b>·</b> 8	113°2 118°4 119°4	120.6 119.4 120.1	119.4 120.0 119.0	119·2 118·8 119·5	115·27 115·75
	113.7 114.4 114.4	114'3 114'4 114'5	115°0 114°5 114°7	115.4 114.6 114.3	115'6 117'7 115'5	116.4 116.3 116.6	117.2 116.7 116.0	117.6 116.9 118.4	118.4 112.0 118.0	119.4 118.6	119.1 118.0 118.1	118.8 121.4 121.5	116'34 115'68 116'28
	110.0  105.4 114.6	125.6 — 112.4 114.5	116.0  142.5 112.8	113.6 119.4	108.0  116.6 117.2	115.6	115°2 116°4	112.4 122.2 116.5	116'8 118' <b>2</b> 119'4	117.4 118.4 120.3	120°9 118°5 120°2	119.8 119.8	114.34 >116.31 116.23 115.12
	113.8	114·4 114·5	115.6 129.7	116.3	117 2 116 6 122 4	115.4 117.4 121.8	115°8 119°0 — 129°2	119.9	118 4 118 2 175 4	118.4	119.0	118.3	115 · 91 124 · 03
	112.4	114.4	118.6	116.0  119.4	116.8	117.0	108.4	 116 <b>·</b> 4	117.3	117·4 117·2	115.4 117.4	116.0	114.71 116.28 ]
	115·4 114·0 115·2	116.9 113.8 115.4	121 2 119 2 115 1 118 4	119 4 116 4 115 4 120 4	120.4 116.0 116.2 116.4	116.8 116.4 116.6 116.4	116.7 117.0 117.2 117.8	116.5 116.2 118.0 119.4	117 5 118 0 118 4 120 2	118.0 118.0 114.5	118.0 117.6 117.4	119.4 119.5 123.4	116 · 37 116 · 33 117 · 47
	115.3	114.2 127.2	114·5 121·4	114.8 118.3	115.8	128·2 118·4	115.4	131.5	139.5	137.7	138.3	124.4	119·53 116·33
	113'83	116.18	118:50	117.87	117.73	118.66	118.88	119:22	120.61	122.14	121.19	119*43	116.82

	Ang	ılar Value o	f one Scale	Division of	the Declinor	DECLI	NATION. 721. Incres	asing Numb	ers denote d	ecreasing W	esterly Dec	lination.	
	Göttingen }	Oh.	1 <sup>h</sup> .	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7h.	8h.	9h.	10 <sup>h</sup> .	11h.
	1 2 3 4 5 6 7	sc. Div. 122 °6 121 °0 126 °8 130 °5 125 °0 124 °4	sc. Div. 124 0 121 4 128 4 132 6 127 7 120 4	Sc. Div. 124 8 122 7 128 8 132 2 125 4 124 4	Sc. Div. 124 6 122 2 122 5 130 8 122 6 127 4	sc. Div. 118 3 117 4 116 4 119 4 116 6 125 2	Sc. Div. 112 '4 110 '2 113 '8 118 '0 109 '6 119 '2	Sc. Div. 109 6 107 4 105 3 104 2 104 4 113 5	Sc. Div. 107 2 103 8 101 5 102 6 99 4 108 6	Sc. Div. 106'8 104'4 103'4 101'6 96'6 106'4	Sc. Div. 106 6 105 5 106 4 105 0 102 4 108 4	Sc. Div. 112 4 108 8 109 6 109 4 108 6 110 8	Sc. Div. 113 '5 111 '8 119 '0 113 '6 112 '8 112 '7
	8 9 10 11 12 13 14	114'4 123'4 109'3 123'4 126'5 123'8	116.4 125.0 115.9 126.5 125.4 127.7	111 3 122 4 111 6 122 0 126 0 128 0	108 · 2 116 · 9 110 · 4 124 · 6 121 · 5 123 · 8	106 6 112 0 115 6 117 2 112 4 116 0	108 · 2 113 · 4 123 · 4 113 · 8 107 · 0 107 · 4	108'8 113'4 102'4 110'3 105'4 104'0	107.7 110.4 104.6 109.2 103.4 104.3	108.4 108.8 102.4 109.0 104.8 104.0	116.0 105.2 107.6 109.4 107.4 108.9	112'4 105'3 107'8 111'5 110'4 113'1	109'6 108'8 114'5 113'4 112'7 115'9
MAY.	15 16 17 18 19 20 21	124.4 124.4 125.4 121.0 123.2 112.8	128'4 126'2 133'4 135'0 123'4 115'6	127 2 126 9 130 6 137 0 126 4 121 4	123:3 123:4 130:8 132:9 124:5 120:2	117.4 117.4 116.4 119.4 119.7	112·3 106·4 112·6 120·6 119·2 114·4	109'3 103'4 104'6 125'4 110'0 110'0	107.2 101.8 93.4 84.4 101.7 110.4	105.4 105.4 95.2 94.2 103.0 110.4	108.6 107.0 99.4 114.4 105.6 109.5	112'9 110'0 105'6 114'4 107'4 110'2	115.4 115.6 109.4 117.4 111.0 111.6
	22 23 24 25 26 27 28	123.4 122.4 125.0 120.4 125.2 129.2	125°1 124°8 128°2 122°7 125°4 129°0	122.2 125.6 124.4 121.2 125.4 111.6	120.8 126.2 113.6 122.4 121.2 115.2	115.4 119.8 114.4 119.4 114.2 109.9	107.4 115.0 110.4 113.6 109.2 109.2	106.2 112.0 104.2 111.2 105.3 107.3	107.3 110.0 105.4 109.5 106.0 105.3	106.8 109.4 105.5 106.4 107.4 103.2	108.1 108.8 100.4 105.3 108.8 106.8	108.8 110.6 105.4 107.0 111.4 109.4	113.6 113.4 111.3 112.0 113.4 122.4
	29 30 31	123 · 4 124 · 0 125 · 4	123 · 9 124 · 4 129 · 3	124.0 124.4 127.5	121 8 124 4 132 4	117.6 119.4 120.8	113.5 113.6 108.8	108.4 107.2 108.4	108.3 103.8 105.4	110.4 104.8 101.6	111.7 107.6 104.4	113.7 109.0 106.4	114.5 115.4 110.4
Hourly	Means	122.99	125 41	124 27	122.24	117:10	112.68	108.21	104.24	104.66	107:23	109.71	113.40
	$\left(\begin{array}{c}1\\2\\3\\4\end{array}\right)$	124.4 124.3 126.2	126.6 125.4 129.0	123·2 125·5 129·6	121 · 4 122 · 5 126 · 0	116.5 118.4 121.0	109.7 112.4 •114.4	107.6 106.6 106.2	110°0 104°4 102°9	107:5 103:6 101:5	107.8 106.6 103.5	110°4 109°2 108°8	113.0 112.4 111.2
	4 5 6 7 8 9	120 · 2 117 · 2 124 · 4 124 · 5 123 · 7 126 · 0	126.6 122.6 124.4 125.7 124.2 125.6	122.0 126.6 125.2 125.7 124.8 124.4	123°3 124°4 124°4 123°4 122°4	121 '4 121 '4 119 '2 116 '2 118 '6 116 '4	112·5 114·4 115·3 109·4 112·6 113·6	105.6 107.8 110.4 104.3 109.4 109.2	102.7 105.5 109.0 105.0 109.4 106.4	100°2 104°7 106°4 103°4 110°7 109°2	105.5 107.2 106.6 104.4 110.7 108.6	110°2 110°2 110°3 107°8 112°4 108°4	119°2 114°2 113°6 110°6 112°4 112°4
JUNE.	11 12 13 14 15 16 17	123 ° 0 126 ° 4 129 ° 4 123 ° 6 124 ° 8 121 ° 8	125 · 4 127 · 2 126 · 8 124 · 0 127 · 3 125 · 4	125 · 4 127 · 4 128 · 4 122 · 6 125 · 3 125 · 4	122°2 126°5 128°4 121°8 122°2 121°6	118.6 122.2 120.0 112.5 115.8 117.8	112.4 115.1 113.4 107.4 110.5 111.7	106.0 113.2 106.0 107.0 110.4 108.4	107.2 107.4 104.8 108.2 107.2 107.4	107.6 108.2 103.4 111.4 106.4 106.4	110.5 109.6 109.0 111.5 109.2 108.3	114.6 111.8 112.0 112.5 112.4 111.7	116.7 114.0 117.9 116.4 115.3 114.4
	18 19 20 21 22 23 24 25	124 · 4 115 · 5 124 · 8 117 · 4 121 · 2 122 · 4	127 · 4 120 · 2 127 · 5 126 · 1 123 · 4 121 · 9	126.5 126.9 120.2 126.4 124.4 123.4	121 '4 124 '0 121 '3 125 '0 123 '6 123 '6	119.4 121.4 118.5 123.0 118.8 120.4	113 · 4 118 · 4 108 · 4 112 · 6 112 · 0 115 · 6	109.4 110.8 107.8 114.9 107.1 111.3	106.4 108.0 107.4 106.2 107.2 112.0	105 '4 108 '4 106 '5 106 '4 109 '7 102 '4	103.4 106.0 109.7 111.5 113.4 107.3	103.8 109.6 110.2 118.9 113.0 111.4	109'4 112'8 109'2 117'4 114'8 115'0
	26 27 28 29 30	124·5 125·4 124·6 125·2 127·4	125.6 127.4 126.6 126.2 130.8	124.4 129.4 126.6 126.8 129.0	121 · 4 127 · 6 124 · 8 126 · 2 125 · 4	118.7 118.1 117.0 123.0 117.7	114.6 111.3 109.2 115.4 112.6	110.8 108.4 104.2 107.8 110.3	105.6 104.6 104.4 105.4 107.4	103°8 103°4 103°4 100°8 107°4	105.6 104.6 105.8 101.4 109.4	110·9 109·0 110·2 106·4 111·5	115.5 113.2 114.2 111.7 113.5
Hourly	Means	123.57	125.74	125.60	123*81	118.92	112.63	108.20	106.62	105.70	107.68	110.68	113.86

142h	13h.	14 <sup>h</sup> .	15h.	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	10h	OOh	01h	ooh	och	3.5
12h.	10.	11.	10.	10,4	17	10".	19h.	20h.	21h.	22h.	23h.	Means.
Sc. Div.	Sc. Div. 114° I	Sc. Div. 112°1	Sc. Div. 121 0	Sc. Div. 118'8	Sc. Div. 115 9	Sc. Div. 116°0	Sc. Div. 119°4	Sc. Div.	Sc.D v.	Sc. Div. 112.0	Sc. Div. 119°2	Sc. Div. 115°34 } 116°
12.0	115.2	119.4	123.6	123.6	123.6	117.2	117.6	117.6	102.0	116.2	125.4	115.45
17.0	115.6	118'4	140.0	116.4	117.2	115.8	116.6	117.4	118.5	106.5	129.3	117.08
14.2	113.2	114.2	114'6	115.2	115.4	117.5	117.0	117.0	115.4	116.4	121.0	116.30
17.2	120.8	114'4	115.2	114.9	113.2	115.7	116 0	116.4	116.0	117.4	121.3	114.57
15'1	116.4	115.9	117.2	117.2	117.4						— 1	118.79
_	_	<b>—</b>	-		<u> </u>	112.4	130.4	119.6	134.5	126.6	126.6}	l J
10'4	110.8	111.4	119.6	118.3	123.0	125.6	123.6	123.4	124'4	116'4	120'2	ר 114՝80
10.4	111.4	112.6	113.2	115.8	115.2	115.4	116.4	120.4	121.4	119'4	123.3	115.01
15.2	115.4	128.4	120.8	117.4	124.2	118.6	125.9	103.6	115.2	121'1	120.0	114.65
14.6	114.4	114.5	114.4	114.7	113.7	116.3	116.0	118.5	118.0	120.8	123.6	116:23
14'4	115'4	115'4	118.2	119.0	118.0	118.0	117'0	117.2	116.8	116.3	120.6	115.40
16'0	116'4	118.4	115.4	115.3	115.6	110.0	17011	. —		100.4	$\frac{-}{122\cdot 6}\}$	116.13
16.4	115.2	115.2	115.4	116.4	115.4	116.2	116.4	118.2	119.4	120'4 120'2	122 6 7	116.20 >112.
17.3	115.2	113.4	114.4	113.6	114.4	115 <b>.</b> 4 115 <b>.</b> 6	116'6 116'4	117°4 117°6	117.4 117.5	118.7	123.4	115.22
11.0	110.8	107.4	116.2	114.9	127.5	123.4	95.8	117 6	116.2	127.0	137.6	115.19
18.3	96.4	134.0	107.4	114.4	116.6	116.4	118,6	118.6	119.4	119.4	121.4	117.71
12.4	122.4	117.3	115'4	115.6	116.5	116.0	100.4	114'4	115.4	113.4	115.2 a	114.55
13.0	112.6	113.6	114'3	113.5	115.0	_	_				~ 1	l i
	_	_			l <u>—</u> [	118.2	108.4	119.4	119.5	119.3	$\frac{-}{119\cdot 4}$	114.68
15.4	114.4	114.4	114'6	114.8	114.8	114.4	115.0	115.2	114'5	115.2	115.0	114°305
15'2	115.4	115.0	115.0	115.4	116'4	115.2	114.8	115.8	116.0	111.2	120.0	116.00
13.7	126.1	114'4	111'4	117.7	118.0	118.2	115.4	110.8	113.6	115.0	119.4	114.25
12.4	112.0	113.4	113.6	116.0	114.0	113.4	119'6	116.4	11615	121.2	124.4	115.17
14'4	114.0	112.4	112.7	118'4	114.2	115.2	117.8	122.3	128'4	121.9	125.8	116.27
15.4	113.4	111.8	113.4	111.7	115.4						] [ }	113.70
	11514	110.4	110:0	114:4	115.4	113.6	112.5	110.3	112.2	121'4	118.8	! !
15.4	115.4	119.4	112.0	114.4	115.4	115.2	115.4	113.8	115'4	116.0	120.0	115.89
114 <b>'</b> 9	115°3	115°5 117°9	117 <b>°</b> 6 130°0	117.0 123.4	116.8 108.2	118.4 121.4	$\begin{array}{c} 115.8 \\ 120.7 \end{array}$	117.0	109.0	116 <b>·</b> 6	120°2 123°4	$\left \begin{array}{c} 115.38 \\ 117.34 \end{array}\right> 115.$
		117 9	116.94					120.4	117.4		122.23	115.63
114.62	114.64	115 94	116 94	116.44	116.40	116.86	116.13	116.61	117:11	118.04	122 25	113 03
117.0	117.6	116.4	115.2	115.2	115.5	115.2	116.8	115.8	114.8	116.4	120.7	115.65
11444			11014	118'4	117.5							
14.4	115.4	115.2	118.4			116°4	115.4	118.3	117.9	119.7	118.4	115.71
	115.4	115.5 118.2	123.6	116.4	110.3			l —			118.4	115.71
11.8	117.4	118.2	123.6	116.4	110.3	 114`4	115.0	113.4	113.2	111.0	118.4 $117.5$	115.10
11.8	117.4	118·2 	114.0	116.4	115.6	114.4 114.3	115.0 113.4	113.4 113.0	113·2 114·4	111:0 115:8	118·4  117·5 117·8	115°71 115°10 114°80
11'8  119'4 114'4	117.4 — 118.2 117.4	118°2 	123.6 	116.4  115.2 114.5	110°3 	114.4 114.3 114.5	115.0 113.4 115.2	113.4 113.0 115.8	113 · 2 114 · 4 117 · 4	111.0 115.8 118.4	118.4 	115.71 115.10 114.80 115.38
11.8  19.4 14.4 15.6	117.4  118.2 117.4 115.6	118.2 114.7 115.0 115.4	123.6 114.0 114.6 115.3	116.4 115.2 114.5 114.6	110.3 115.6 115.4 114.5	114'4 114'3 114'5 117'3	115.0 113.4 115.2 116.4	113'4 113'0 115'8 116'4	113·2 114·4 117·4 117·2	111.0 115.8 118.4 119.2	$ \begin{array}{c} 118.4 \\  \hline  117.5 \\ 117.8 \\ 120.2 \\ 122.2 \end{array} $	115.71 115.10 114.80 115.38 116.20
11.8  19.4 14.4 15.6 13.3	117.4  118.2 117.4 115.6 115.4	118·2 114·7 115·0 115·4 114·5	123.6 	116.4 	110.3 	114.4 114.3 114.5 117.3 117.2	115.0 113.4 115.2 116.4 118.6	113.4 113.0 115.8 116.4 115.4	113·2 114·4 117·4 117·2 116·5	111.0 115.8 118.4 119.2 118.4	$ \begin{array}{c} 118.4 \\$	115.71 115.10 114.80 115.38 116.20 114.87
11.8 19.4 14.4 15.6 13.3 12.8	117.4 	118·2  114·7 115·0 115·4 114·5 114·4	123.6 	116.4 	110°3 	114'4 114'3 114'5 117'3	115.0 113.4 115.2 116.4	113.4 113.0 115.8 116.4 115.4 119.9	113·2 114·4 117·4 117·2	111.0 115.8 118.4 119.2	118.4 117.5 117.8 120.2 122.2 117.0 123.4	115.71 115.10 114.80 115.38 116.20 114.87 117.22
11.8	117.4  118.2 117.4 115.6 115.4	118·2 114·7 115·0 115·4 114·5	123.6 	116.4 	110°3 115°6 115°4 114°5 120°4 121°3 114°8	114·4 114·3 114·5 117·3 117·2 121·7	115.0 113.4 115.2 116.4 118.6 121.0	113.4 113.0 115.8 116.4 115.4 119.9	113·2 114·4 117·4 117·2 116·5 120·8	111.0 115.8 118.4 119.2 118.4 123.4	118.4 117.5 117.8 120.2 122.2 117.0 123.4	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15
11.8 	117.4 	118·2 	123.6 114.0 114.6 115.3 113.7 114.0 113.4	116.4 	110°3	114.4 114.3 114.5 117.3 117.2 121.7	115.0 113.4 115.2 116.4 118.6 121.0	113.4 113.0 115.8 116.4 115.4 119.9	113 · 2 114 · 4 117 · 4 117 · 2 116 · 5 120 · 8 — 115 · 6	111.0 115.8 118.4 119.2 118.4 123.4	$ \begin{array}{c} 118.4 \\  \hline  117.5 \\ 117.8 \\ 120.2 \\ 122.2 \\ 117.0 \\ 123.4 \\  \hline  117.2 \end{array} $	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15
11.8 	117.4 	118·2	123.6 — . 114.0 114.6 115.3 113.7 114.0 113.4	116.4 	110.3 	114'4 114'3 114'5 117'3 117'2 121'7 115'6 116'0	115.0 113.4 115.2 116.4 118.6 121.0 — 117.5 115.3	113.4 113.0 115.8 116.4 115.4 119.9	113°2 114°4 117°4 117°2 116°5 120°8 — 115°6 113°2	111.0 115.8 118.4 119.2 118.4 123.4 — 114.4 117.3	$ \begin{array}{c} 118.4 \\  \hline  117.5 \\ 117.8 \\ 120.2 \\ 122.2 \\ 117.0 \\ 123.4 \\  \hline  117.2 \\ 120.0 \end{array} $	115.71 115.10 114.80 115.38 116.20 114.87 117.22
11.8 	117.4 	118·2	123.6 — . 114.0 114.6 115.3 113.7 114.0 113.4 — .	116.4 	110°3	114'4 114'3 114'5 117'3 117'2 121'7 115'6 116'0 120'4	115.0 113.4 115.2 116.4 118.6 121.0 	113.4 113.0 115.8 116.4 115.4 119.9 	113°2 114°4 117°4 117°2 116°5 120°8 — 115°6 113°2 118°8	111.0 115.8 118.4 119.2 118.4 123.4 — 114.4 117.3 120.4	118'4	115·71 115·10 114·80 115·38 116·20 114·87 117·22 115·15 115·90
11.8 — 19.4 14.4 15.6 13.3 12.8 15.3 — 16.8 17.4 15.4	117.4 	118·2	123.6 — . 114.0 114.6 115.3 113.7 114.0 113.4 — . 115.4 116.5 122.2	116.4 	110.3 	114'4 114'3 114'5 117'3 117'2 121'7 115'6 116'0 120'4 119'6	115.0 113.4 115.2 116.4 118.6 121.0 	113.4 113.0 115.8 116.4 115.4 119.9  115.4 114.5 123.4 116.4	113°2 114°4 117°4 117°2 116°5 120°8	111.0 115.8 118.4 119.2 118.4 123.4 14.4 117.3 120.4 115.8	$ \begin{array}{c} 118.4 \\  \hline  117.5 \\ 117.8 \\ 120.2 \\ 122.2 \\ 117.0 \\ 123.4 \\  \hline  117.2 \\ 120.0 \end{array} $	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 118.32
11.8 	117.4 	118·2	123.6 —	116.4 	110.3 	114'4 114'3 114'5 117'3 117'2 121'7	115.0 113.4 115.2 116.4 118.6 121.0 	113.4 113.0 115.8 116.4 115.4 119.9 	113°2 114°4 117°4 117°2 116°5 120°8	111.0 115.8 118.4 119.2 118.4 123.4 14.4 117.3 120.4 115.8 117.4	118'4	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 118.32 117.50
11.8 	117.4 	118·2	123.6 	116.4 ————————————————————————————————————	110°3	114'4 114'3 114'5 117'3 117'2 121'7 115'6 116'0 120'4 119'6	115.0 113.4 115.2 116.4 118.6 121.0 	113.4 113.0 115.8 116.4 115.4 119.9 	113°2 114°4 117°4 117°2 116°5 120°8	111.0 115.8 118.4 119.2 118.4 123.4 	118'4	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 118.32 117.50 116.44 115.94
11.8 	117.4 	118.2 	123.6 —	116.4 	110·3	114'4 114'3 114'5 117'3 117'2 121'7	115.0 113.4 115.2 116.4 118.6 121.0 	113.4 113.0 115.8 116.4 115.4 119.9 	113°2 114°4 117°4 117°2 116°5 120°8	111.0 115.8 118.4 119.2 118.4 123.4 ————————————————————————————————————	$ \begin{array}{c} 118.4 \\  \hline                                  $	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 118.32 117.50 116.44 115.94 115.54
11.8 	117.4 	118·2	123.6 —	116·4  115·2 114·5 114·6 115·2 114·8 114·0  115·4 116·4 118·4 117·0 116·4 114·8  113·6	110·3	114'4 114'3 114'5 117'3 117'2 121'7	115.0 113.4 115.2 116.4 118.6 121.0 	113.4 113.0 115.8 116.4 115.4 119.9 	113·2 114·4 117·4 117·2 116·5 120·8	111.0 115.8 118.4 119.2 118.4 123.4 	$ \begin{array}{c} 118.4 \\  \hline                                  $	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 118.32 117.50 116.44 115.94 115.54 113.96
11.8	117.4 	118·2	123.6 —	116·4  115·2 114·5 114·6 115·2 114·8 114·0  115·4 116·4 117·0 116·4 114·8  113·6 114·4	110·3	114'4 114'3 114'5 117'3 117'2 121'7	115.0 113.4 115.2 116.4 118.6 121.0 	113.4 113.0 115.8 116.4 115.4 115.4 114.5 123.4 116.4 113.4 115.5 109.8 116.2	113·2 114·4 117·4 117·2 116·5 120·8	111.0 115.8 118.4 119.2 118.4 123.4 	$ \begin{array}{c} 118.4 \\  \hline                                  $	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 118.32 117.50 116.44 115.94 115.54 113.96 115.70
11.8	117.4	118.2 	123.6 —	116·4	110·3	114'4 114'3 114'5 117'3 117'2 121'7 115'6 116'0 120'4 119'6 121'0 114'4 115'2 113'4 114'0 121'4	115.0 113.4 115.2 116.4 118.6 121.0 — 117.5 115.3 126.0 119.2 113.8 115.4 — 116.2 114.4 114.4 122.4	113.4 113.0 115.8 116.4 115.4 119.9 	113·2 114·4 117·4 117·2 116·5 120·8	111.0 115.8 118.4 119.2 118.4 123.4 	$ \begin{array}{c} 118.4 \\  \hline                                  $	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 118.32 117.50 116.44 115.94 115.54 113.96 115.70 116.11
11.8	117.4	118·2	123.6 114.0 114.6 115.3 113.7 114.0 113.4 115.4 116.5 122.2 117.4 115.0 113.4 113.4 117.2 116.0 122.4	116.4	110·3	114'4 114'3 114'5 117'3 117'2 121'7	115.0 113.4 115.2 116.4 118.6 121.0 — 117.5 115.3 126.0 119.2 113.8 115.4 — 116.2 114.4 114.4 122.4 121.3	113.4 113.0 115.8 116.4 115.4 119.9 	113·2 114·4 117·4 117·2 116·5 120·8 — 115·6 113·2 118·8 116·0 112·6 116·0 112·0 116·0 121·3 112·4	111.0 115.8 118.4 119.2 118.4 123.4 	118'4	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 118.32 117.50 116.44 115.94 115.54 113.96 115.70 116.11 117.73
11.8	117.4	118.2 	123.6 —	116.4	110·3	114'4 114'3 114'5 117'3 117'2 121'7 115'6 116'0 120'4 119'6 121'0 114'4 115'2 113'4 114'0 121'4	115.0 113.4 115.2 116.4 118.6 121.0 — 117.5 115.3 126.0 119.2 113.8 115.4 — 116.2 114.4 114.4 122.4	113.4 113.0 115.8 116.4 115.4 119.9 	113·2 114·4 117·4 117·2 116·5 120·8	111.0 115.8 118.4 119.2 118.4 123.4 	$ \begin{array}{c} 118.4 \\ \hline \\ -17.5 \\ 117.8 \\ 120.2 \\ 122.2 \\ 117.0 \\ 123.4 \\ \hline \\ -17.2 \\ 120.0 \\ 120.0 \\ 119.2 \\ 121.4 \\ 118.4 \\ \hline \\ -121.2 \\ 117.2 \\ 120.4 \\ 127.4 \\ 121.4 \\ 1$	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 116.44 115.54 113.96 115.70 116.11 117.73 115.72
11.8	117.4	118·2	123.6 114.0 114.6 115.3 113.7 114.0 113.4 115.4 116.5 122.2 117.4 115.0 113.4 113.4 117.2 116.0 122.4	116.4	110·3	114'4 114'3 114'5 117'3 117'2 121'7	115.0 113.4 115.2 116.4 118.6 121.0 — 117.5 115.3 126.0 119.2 113.8 115.4 — 116.2 114.4 114.4 122.4 121.3 113.2	113.4 113.0 115.8 116.4 115.4 115.4 114.5 123.4 116.4 115.5 109.8 116.2 126.5 113.3 116.4	113·2 114·4 117·4 117·2 116·5 120·8	111.0 115.8 118.4 119.2 118.4 123.4 	$ \begin{array}{c} 118.4 \\ \hline \\ -17.5 \\ 117.8 \\ 120.2 \\ 122.2 \\ 117.0 \\ 123.4 \\ \hline \\ -17.2 \\ 120.0 \\ 120.0 \\ 119.2 \\ 121.4 \\ 118.4 \\ \hline \\ -121.2 \\ 117.2 \\ 120.4 \\ 127.4 \\ 121.4 \\ 1$	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 118.32 117.50 116.44 115.94 115.54 113.96 115.70 116.11 117.73
11.8	117.4	118·2	123.6 —	116·4	110·3	114'4 114'3 114'5 117'3 117'2 121'7 115'6 116'0 120'4 119'6 121'0 114'4 115'2 113'4 114'0 121'4 119'7 116'4 115'8	115.0 113.4 115.2 116.4 118.6 121.0 — 117.5 115.3 126.0 119.2 113.8 115.4 — 116.2 114.4 114.4 122.4 121.3 113.2 — 115.4	113.4 113.0 115.8 116.4 115.4 119.9  115.4 114.5 123.4 116.4 115.5 109.8 116.2 126.5 113.3 116.4	113·2 114·4 117·4 117·2 116·5 120·8	111.0 115.8 118.4 119.2 118.4 123.4 	118'4	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 118.32 117.50 116.44 115.94 115.54 113.96 115.70 116.11 117.73 115.72 116.12
11.8	117.4	118·2	123.6	116·4	110·3	114'4 114'3 114'5 117'3 117'2 121'7 115'6 116'0 120'4 119'6 121'0 114'4 115'2 113'4 114'0 121'4 119'7 116'4 115'8 114'4	115.0 113.4 115.2 116.4 118.6 121.0 — 117.5 115.3 126.0 119.2 113.8 115.4 — 116.2 114.4 114.4 122.4 121.3 113.2 — 115.4 115.4	113.4 113.0 115.8 116.4 115.4 119.9 115.4 114.5 123.4 116.4 115.5 109.8 116.2 126.5 113.3 116.4 111.0 113.4	113·2 114·4 117·4 117·2 116·5 120·8  — 115·6 113·2 118·8 116·0 112·6 116·5 — 116·0 112·3 112·4 115·8 — 116·6 113·4	111.0 115.8 118.4 119.2 118.4 123.4 	118'4	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 118.32 117.50 116.44 115.94 115.54 113.96 115.70 116.11 117.73 115.72 116.12 115.78
11.8	117.4	118·2	123.6 114.0 114.6 115.3 113.7 114.0 113.4 115.4 115.0 113.4 113.4 117.2 116.0 122.4 114.3 119.4 114.0 114.9	116·4	110·3	114'4 114'3 114'5 117'3 117'2 121'7 115'6 116'0 120'4 119'6 121'0 114'4 114'0 115'2 113'4 114'0 121'4 119'7 116'4 - 115'8 114'4 114'4	115.0 113.4 115.2 116.4 118.6 121.0 — 117.5 115.3 126.0 119.2 113.8 115.4 — 116.2 114.4 114.4 122.4 121.3 113.2 — 115.4 114.4 114.4 121.3 113.8	113.4 113.0 115.8 116.4 115.4 119.9 	113 · 2 114 · 4 117 · 4 117 · 2 116 · 5 120 · 8 	111.0 115.8 118.4 119.2 118.4 123.4 	118'4	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 118.32 117.50 116.44 115.54 113.96 115.70 116.11 117.73 115.72 116.12 115.78 115.78 115.36
11.8	117.4  118.2 117.4 115.6 115.4 113.4 114.4 117.8 114.6 123.4 118.0 115.6  114.4 113.5 113.2 121.0 116.6 116.2 123.4 116.0 115.0	118·2	123.6 114.0 114.6 115.3 113.7 114.0 113.4 115.4 116.5 122.2 117.4 115.0 113.4 113.4 113.4 113.4 114.0 114.9 119.4	116·4	110·3	114'4 114'3 114'5 117'3 117'2 121'7 115'6 116'0 120'4 119'6 121'0 114'4	115.0 113.4 115.2 116.4 118.6 121.0 — 117.5 115.3 126.0 119.2 113.8 115.4 — 116.2 114.4 114.4 122.4 121.3 113.2 — 115.4 114.4	113.4 113.0 115.8 116.4 119.9 	113 · 2 114 · 4 117 · 4 117 · 2 116 · 5 120 · 8 ————————————————————————————————————	111.0 115.8 118.4 119.2 118.4 123.4 114.4 117.3 120.4 115.8 117.4 119.4 118.4 118.4 118.4 118.7 118.0 118.4 117.4	118'4	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 116.44 115.54 113.96 115.70 116.11 117.73 115.72 116.12 115.78 115.78 115.36 115.50
11.8	117.4  118.2 117.4 115.6 115.4 113.4 114.4 117.8 114.6 123.4 118.0 115.6  114.4 113.5 113.2 121.0 116.6 116.6 116.2 123.4 116.0 115.0 118.5	118·2	123.6 114.0 114.6 115.3 113.7 114.0 113.4 115.4 116.5 122.2 117.4 115.0 113.4 113.4 113.4 113.4 114.0 114.9 119.4 115.6	116·4	110·3	114'4 114'3 114'5 117'3 117'2 121'7 115'6 116'0 120'4 119'6 121'0 114'4	115.0 113.4 115.2 116.4 118.6 121.0 	113.4 113.6 115.8 116.4 119.9 	113 · 2 114 · 4 117 · 4 117 · 2 116 · 5 120 · 8 ————————————————————————————————————	111.0 115.8 118.4 119.2 118.4 123.4 114.4 117.3 120.4 115.8 117.4 119.4 118.4 119.4 118.8 117.7 112.8 118.0 118.4 117.4 119.7 120.2	118'4	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 116.44 115.54 113.96 115.70 116.11 117.73 115.72 116.12 115.78 115.78 115.36 115.50 116.56
11.8	117.4  118.2 117.4 115.6 115.4 113.4 114.4 117.8 114.6 123.4 118.0 115.6  114.4 113.5 113.2 121.0 116.6 116.2 123.4 116.0 115.0	118·2	123.6 114.0 114.6 115.3 113.7 114.0 113.4 115.4 116.5 122.2 117.4 115.0 113.4 113.4 113.4 113.4 114.0 114.9 119.4	116·4	110·3	114'4 114'3 114'5 117'3 117'2 121'7 115'6 116'0 120'4 119'6 121'0 114'4	115.0 113.4 115.2 116.4 118.6 121.0 — 117.5 115.3 126.0 119.2 113.8 115.4 — 116.2 114.4 114.4 122.4 121.3 113.2 — 115.4 114.4	113.4 113.0 115.8 116.4 119.9 	113 · 2 114 · 4 117 · 4 117 · 2 116 · 5 120 · 8 ————————————————————————————————————	111.0 115.8 118.4 119.2 118.4 123.4 114.4 117.3 120.4 115.8 117.4 119.4 118.4 118.4 118.4 118.7 118.0 118.4 117.4	118'4	115.71 115.10 114.80 115.38 116.20 114.87 117.22 115.15 115.90 116.44 115.54 113.96 115.70 116.11 117.73 115.72 116.12 115.78 115.78 115.36 115.50

<sup>&</sup>lt;sup>a</sup> Eight minutes late.

	(	One Scale D	ivision = '(	000087 parts	s of the H. I	HORIZO	ONTAL FO	ORCE. vision, corre	sponding to	1° decrease	of Tempera	ature, 1.63.	
Mean ( gen T	Göttin- }	Oh.	1 <sup>h</sup> •	2h.	3h.	4 <sup>h</sup> .	5h.	6 <sup>h</sup> .	7h.	8h.	9h.	10h.	11h.
	$\left( \begin{array}{c} 1\\2\\3 \end{array} \right)$	Sc. Div. 629 2 617 0 614 8	Sc. Div. 624 ° 0 618 ° 0 616 ° 0	Sc. Div. 622 5 614 0 614 2	Sc. Div. 620 0 613 2 608 8	Sc. Div. 619 0 609 3 611 4	Sc. Div. 612'4 602'6 606'2	8c. Div. 614'6 604'6 603'2	Sc. Div. 612 '7 608 '7 604 '0	Sc. Div. 614*4 612*6 607*3	Sc. Div. 620°2 615°0 613°2	Sc. Div. 619 4 613 4 625 4	Sc. Div 621 6 612 3 614 0
	4 5 6 7 8 9	620°0 614°1 616°0 603°0 609°4 614°4	619.8 615.9 615.1 594.5 610.7 614.0	620°2 615°7 610°0 602°0 607°4 614°2	617.0 615.0 610.0 612.6 600.0 612.0	599.6 604.5 606.5 602.2 600.0 608.0	605.6 597.9 603.5 592.4 596.8 602.0	605 · 1 603 · 0 578 · 0 594 · 0 598 · 7 608 · 2	607.2 608.0 592.4 596.8 602.7 610.0	614.8 611.0 606.0 600.4 604.0 612.0	620.0 617.7 611.3 607.5 608.0 608.0	622.5 617.5 614.0 605.2 608.0 610.7	611.5 618.2 611.0 610.8 611.2 612.0
JANUARY.	11 12 13 14 15 16	624·2 621·0 609·2 621·8 602·0 614·5	623.8 623.5 611.6 616.6 609.0 612.5	611.2 626.0 622.6 618.5 605.8 615.0	622.0 625.4 618.7 623.9 609.5 612.5	615.0 622.2 608.1 615.6 603.0 605.2	606.0 615.0 605.3 611.2 601.5 610.9	602 0 613 9 604 6 612 8 600 0 607 7	603°0 614°9 607°8 615°0 605°0 601°5	603.0 617.3 599.3 611.8 602.5 603.9	610.5 620.0 601.5 609.0 592.0 608.2	618.5 620.9 608.5 613.9 608.5 611.9	618 2 619 2 609 2 611 0 606 8 606 2
JA	18 19 20 21 22 23 24	630.0 627.5 621.4 624.9 631.5 607.0	630.0 629.0 621.7 624.3 631.1 618.0	627.8 627.0 623.4 624.0 628.1 619.0	626.0 624.5 618.1 618.5 619.2 620.0	626.0 616.1 613.1 613.1 610.8 606.0	627.5 614.6 611.4 608.2 607.0 599.5	623°0 616°2 608°0 608°4 610°0 603°5	620 · 4 619 · 9 612 · 0 616 · 0 616 · 0 589 · 8	624.5 624.7 621.0 624.8 626.0 594.7	627 ° 0 625 ° 0 625 ° 0 634 ° 5 632 ° 0 600 ° 9	628 · 2 628 · 8 625 · 0 639 · 0 640 · 0 608 · 9	629 ° 0 628 ° 9 621 ° 3 637 ° 0 632 ° 2 607 ° 6
	25 26 27 28 29 30 31	611.0 610.0 610.3 605.0 606.0 604.0	610.0 610.8 612.8 605.6 605.0 605.0	608.0 608.0 613.4 604.2 601.0 606.5	603·2 602·1 597·3 600·8 596·0 605·1	593.7 596.2 605.0 596.6 589.5 600.0	\$90.7 595.0 597.0 594.1 590.0 597.0	594.8 597.4 597.0 597.1 593.2 594.0	600 · 8 606 · 2 601 · 3 603 · 5 593 · 0 605 · 4	606.5 609.2 606.2 609.0 593.6 611.0	612.0 615.3 613.0 612.0 597.6 615.8	610.0 611.0 614.8 616.0 596.0 619.6	606.0 613.0 617.0 612.4 603.8 618.0
	y Means	615.23	615.86	615.17	613.01	607.25	603.75	603.44	606.44	610.06	613.79	616.87	615.5
		i	1 0	1 0	TEMP	ERATURE C							
	$\left[ egin{array}{c} 1 \ 2 \ 3 \end{array}  ight]$	41°4 46°7 46°6	41°5 46°7 46°5	41°5 46°4 46°5	41.5 46.6 46.2	41°5 46°8 46°3	41°7 47°0 47°0	41°5 47°0 47°2	41°5 47°0 48°0	41°7 47°0 48°0	42°0 47°0 48°3	42°6 46°8 48°6	42.8 47.3 49.0
	4 5 6 7 8 9	43.0 45.0 47.5 51.5 48.7 47.6	42°8 45°5 47°8 51°0 48°6 47°4	42.6 45.6 47.4 50.4 48.0 46.8	42.6 45.4 47.5 49.7 47.8 46.4	43.0 46.2 47.8 49.5 47.8 46.2	43.8 47.2 48.5 50.0 48.0 46.9	44.8 47.4 49.0 50.0 48.2 47.0	45.2 48.0 48.8 49.8 48.5 47.0	46.2 48.0 49.0 49.4 48.7 47.5	46.5 48.0 49.4 49.2 49.2 47.5	46.4 48.0 49.2 49.0 49.2 47.0	47.0 47.7 49.5 48.4 49.0 46.6
	11 12 13	41.5 39.6	41.8	41.8	41.2	41.0	41.8	- 1		40.0	43.5	43.6	43.2
ANUARY.	14 15 16 17	41.6 44.7 51.2 41.5	39.9 41.7 44.8 50.5 41.0	39.5 41.6 44.7 49.7 40.0	39°2 42°2 45°0 49°0 39°4	39.4 42.5 46.6 49.0 39.3	40°2 43°3 47°6 49°0 39°2	42.5 40.8 44.2 48.4 49.0 39.0	43.0 41.8 45.1 48.9 48.7 38.8	43.2 42.6 46.7 49.4 48.4 38.2	43°2 48°0 50°5 48°5 38°0	43.0 48.6 51.0 47.9 38.0	48°5 51°2 47°5
JANUARY.	14 15 16 17 18 19 20 21 22 23 24	44.7 51.2	41.7 44.8 50.5 41.0 	41.6 44.7 49.7	42.2 45.0 49.0	42.5 46.6 49.0	40°2 43°3 47°6 49°0	40.8 44.2 48.4 49.0 39.0 	41.8 45.1 48.9 48.7	42.6 46.7 49.4 48.4	43°2 48°0 50°5 48°5	48.6 51.0 47.9	48.5 51.2 47.5 37.2 40.0 40.7 43.9 40.3 43.4
	14 15 16 17 18 19 20 21 22 23	44.7 51.2 41.5 — 32.2 35.5 42.2 37.0 36.1	41.7 44.8 50.5 41.0 	41.6 44.7 49.7 40.0 — 32.9 35.0 41.0 36.6 36.1	42.2 45.0 49.0 39.4 - 33.0 36.0 41.0 37.5 36.2	42.5 46.6 49.0 39.3 — 34.1 36.4 40.7 38.0 37.5	40.2 43.3 47.6 49.0 39.2 — 35.0 37.0 41.0 37.5 39.4	40.8 44.2 48.4 49.0 39.0 - 35.6 37.4 41.4 37.0 40.5	41.8 45.1 48.9 48.7 38.8 	42.6 46.7 49.4 48.4 38.2 	43.2 48.0 50.5 48.5 38.0  37.6 39.8 43.6 38.7 42.1	48.6 51.0 47.9 38.0 	42.6 48.5 51.2 47.5 37.2 40.0 40.7 43.9 40.3 43.4 44.0 50.0 53.4 45.2

	One Scale	Division =	•000087 par	ts of the H.		ZONTAL I		responding t	o 1º decreas	e of Tempe	rature, 1°63.	
12 <sup>h</sup> .	13h.	14h.	15 <sup>h</sup> .	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
623°3 611°7	619'0 610'4	617.6	619.0	613.8	610.0	616.2	617.0	617'0	620.0	618.0	618.0 614.2	618 62 610 95
507.7	599.0	607.0	601.0	608.2	611.0			_			1	611.34
					-	614.0	615.2	617.0	616.2	617.4	619.6	
319.0	614.0	605.0	614.8	612.0	611.2	612.4	611.0	611.8	613.0 612.6	615.4	614.7	613.23
615 <b>'</b> 8 611 <b>'5</b>	607.7	606.0	606:8 592:0	611.0	610.0	608.0	621.4	614.3 595.2	595.4	610.9	608'0 602'5	611:29 603:78
310.0	609.2	607.7	606.7	606.2	607.6	607.0	607.0	609.0	609.5	610.0	609.0	605.01
313.8	611.8	610.0	610.0	610.0	611.0	610.2	610'4	611.0	611.6	613.0	604.4	607.68
312.4	614.2	612.4	611.5	611.2	612.0						}	612.96
	614.8	613.2	615.0	616.0	617.4	618.8	614.5	623'4 618'0	612.0	617.1	626.0 }	614.93
617°0 612°4	607.7	567.6	599.2	595.5	609.0	608.0	616.0 614.0	615.0	615.0	617.0	617.7	613.22
909.0	595.0	612.4	610.0	611.0	611.0	611.0	613.0	610.4	608.2	610.0	616.6	609.33
612.0	614.0	613.0	614.9	611.5	607'0	601.8	600'1	605.0	607.6	606.3	606.0	611.67
8.016	606*9	608.0	605.6	609 0	615.0	608.8	596.2	597.7	598.0	605.0	613.2	605.00
620.5	623.1	623.0	612.0	615.1	615.0	628.0	630.0	630.0	632.0	637.0	626.0}	616.74
- 628 <b>·2</b>	628.2	626.8	626.7	628.5	628.9	628 0	628.0	628.0	628.0	630.0	626.7	627:28
624'3	625.2	627.2	625.0	628.9	627.0	621.2	617.7	620.0	622.0	622.0	622.6	623.57
622.0	621.0	620.0	618.0	621.2	621.2	620.7	620.4	620.8	622.6	622.8	624.1	619.84
632.9	628.0	628 0	624.0	623.4	625.0	625.0	625.4	626.5	629.0	630.0	630.5	625.02
590.0	616.3	618.0	613.2	611.8	$\begin{array}{c} 611.2 \\ 612.2 \end{array}$	610.0	598:0	571.0	577.7	595.2	610.0	612.76
607.2	611.6	613.8	611.9	613.0	012 2	610.0	610.0	610.8	610.0	610.8	612.0	608.68
605.9	606.0	606.8	607:0	608.0	607.0	607.0	606.0	607.0	608.2	608.2	610.2	605.61
614.0	614'9	614.4	611.1	605.1	609.0	609.0	610.0	610'4	613.8	616.0	612.6	608.94
614.0	597.0	605.0	589.5	589.4	596.4	602.0	598.0	596.8	599.3	600.0	604.6	603.21
610.5	611.2	607.8	606.8	598.5	607 <b>.</b> 4	602.8 579.0	598.8	600°5 594°2	601.9	600.0	604.0 601.2	604.60 579.12
606'8	602.8	598.8	602.8 612.8	603.9	613.0	3/9 0		094 4	002 0	-		
-	— — — — — — — — — — — — — — — — — — —	— ·	-		-	627.0	625.0	626.0	629.0	629'0	629.4	613.20
613'94	612.01	610.79	610.19	610.76	612.33	612:32	611.63	610.99	611.93	613.97	615.00	611.77
			1 0				BIFILAR MA		í o		t o II	
43.2	43.0	42.8	43.0	43.0	42.8	43.3	44.0	44.2	44.6	45.7	46.4	42.80
47.7	48.0	48.0	48.4	49.0	49.0	48.7	47.4	47.0	46.2	46.2	46.2	47.28
49.0	49.0	49.0	48.3	48.4	48.5	41.5	41.2	41.7	42.0	42.2	43.0}	46.3
47.5	47.5	47.2	47.0	46.8	46.8	46.2	46.5	45.4	45.0	45.0	45.0	45.4
47.5	47.0	46.2	46.5	46.5	46.2	46.2	46.2	46.6	47.2	47.2	47.4	46.7
49.4	49.8	50.5	50.5	50.7	50.7	51.0	50.8	51.0	51.5	52.0	51.5	49.6
48°5 49°2	48.8	48.8	49.0	49.0	48.9 48.4	49.0 48.5	49.0	49.5	49.5 48.4	49.5 48.3	49.0 47.9	49°4 48°4
46.0	48.8 45.8	48.5	48.1 45.6	48°1 45°4	48 4	40 0	- <del>1</del> 0 4	48 4	48 4	40 0		
_	<b> </b> —			<del>-</del>	<del> </del>	40.2	40.2	40.4	40.5	41.0	41.0}	45.0
43.2	43.2	42.6	42.0	42.0	41 6	41.5	41.2	41.4	41.4	40.8	40.0	42.0
43.0	42.7	42.8	42.0	41.6	41.9	42.0 47.0	42.0 46.6	$\begin{array}{c c} 42.2 \\ 46.2 \end{array}$	42.0	42.0 46.0	42.0 45.0	41°5 45°6
48'0 51'2	47.4 51.2	47.4 51.2	47.6 51.2	47.7 51.2	47.5 51.0	51.0	50.8	51.2	51.5	51.2	51.5	49.4
47.2	46.8	46.4	45.2	45.2	$\frac{31}{44}.7$	44.6	44.5	43.8	43.6	42.6	41.9	46.8
37.2	37.0	36.4	36.5	36.0	36.0		<del>-</del>		l —		31.2}	36.4
		<b>—</b>	l	_		30.4	30.6	31.2	31.6	31.7	31.25	
39.2 41.0	38.0	37.4	36.9	36.1	36·2 43·0	36.0 43.0	$35.2$ $42.\tilde{2}$	35°4 42°5	35.4 42.5	35.7 42.5	35.6 42.5	35°9
44.5	41.7	42°2 45°0	42'8 44'5	42.5	43 0	41.6	41.3	39.6	38.4	38.0	37.0	41.8
39.2	39.3	38.6	38.2	38.0	37:6	37.2	36.3	35.8	35.2	35.3	35.2	37.5
43.5	43.0	42.7	41.8	41.4	41.0	40.8	40.4	40.7	41'0	41.2	41.5	40.5
44.0	44.0	44.8	45.3	45.5	45.7	15:5	45:0	16:2	46:0	47:0	46.7}	44.3
20.0	49.8	49.5	49.2	40:4	50:0	45°5 50°0	45.9 49.0	46°3 48°8	46.3	47.0 48.0	46.73	48.7
47.0	49 8	49.5	49 2	49'4 46'0	50 0 46 2	45.8	45.4	45.4	45.4	45.0	45.0	46'0
49.3	49.5	49.5	49.3	49.3	49.2	49.0	48.8	48.8	48.2	49'0	49.0	48.0
50.5	50.0	50.0	50.4	50.8	50.8	51.2	51.5	51.9	51.8	52.1	52.0	50.5
53.6 45.0	53.6	53.6	53.8	53.9	53.2	52.7	52.0	51.2	51.0	50.0	48.0	52.4
	44.7	44.4	44.2	44.4	44.0	32.0	32.2	33.2	34.0	34.2	$\overline{35\cdot 2}$	41.6
-	45.97	45.83	45.67	45.61	45.49	44.30	44.05	44.08	44.06	44.07	43.87	44.8

	(	ne Scale D	ivision = '0	00087 parts	of the H. F		ZONTAL I		esponding to	1º decrease	of Tempera	ature, 1 • 63.	
Mean G gen T	iottin- }	Oh.	1h.	2h.	3h.	4 <sup>h</sup> .	5h.	6h.	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
FEBRUARY.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 1	Sc. Div. 630 · 2 617 · 4 612 · 7 611 · 5 608 · 0 610 · 0 627 · 4 628 · 0 620 · 4 624 · 0 619 · 8 604 · 6 612 · 0 617 · 0 614 · 0 615 · 0 619 · 2	Sc. Div. 627 0 618 8 615 0 611 0 607 0 604 6 623 0 621 0 621 4 606 616 0 616 0 614 2 620 4 620 4	Sc. Div. 628 *8 615 *0 611 *7 608 *7 607 *0 607 *2 611 *6 631 *4 619 *0 619 *0 607 *3 609 *0 607 *0 614 *0 620 *0	Sc. Div. 618*4 610*0 603*0 605*2 605*4 604*0 555*0 612*0 616*2 608*2 607*2 613*5 605*0 604*0 616*8 618*4	Sc. Div. 610 6 595 4 595 0 600 5 601 0 593 6 628 0 631 5 610 0 612 4 608 0 608 0 611 0 607 0 617 7 616 0	Sc. Div. 607 '2 595 '0 593 '0 594 '0 597 '0 591 '8 621 '6 627 '4 614 '0 609 '2 606 '0 603 '2 604 '4 608 '2 605 '0 616 '8 616 '0	sc. Div. 608 '8 596 '0 590 '9 594 '5 600 '0 594 '2 618 '8 624 '2 613 '0 609 '2 606 '5 606 '6 608 '4 606 '5 596 '0 618 '8 614 '0	Sc. Div. 608 '2 596 '2 586 '0 596 '0 600 '6 599 '6 621 '0 630 '0 617 '0 614 '6 610 '8 610 '6 597 '2 605 '2 599 '8 617 '4 614 '2	sc. Div. 614'2 600'0 594'0 600'0 603'4 604'4 623'0 635'5 614'2 608'2 614'8 609'0 605'4 610'0 596'2 616'0 617'0	Sc. Div. 619 '0 605 '0 604 '0 601 '4 603 '4 602 '6 622 '0 630 '5 623 '0 622 '2 615 '6 627 '0 612 '2 594 '0 602 '2 610 '2 618 '8	Sc. Div. 620 '2 610 '0 606 '5 602 '0 604 '4 607 '2 621 '0 627 '0 623 '0 613 '2 616 '0 604 '8 601 '5 611 '6 615 '4	sc. Div 618 '8 610 '0 610 '0 604 '8 603 '6 605 '6 
Marcl	21 22 23 24 25 26 27 28 h 1	612.0 626.0 622.5 623.0 622.8 627.6 622.1	610'8 626'0 621'0 619'4 621'4 627'8 620'0	608'0 	606.0 621.0 619.4 619.2 614.0 621.4 613.2	609.2 618.0 622.0 618.0 610.4 618.5 608.1	612.2 	612.5 615.2 621.2 618.6 603.4 615.0 606.3	610.0 615.0 620.4 619.0 620.0 616.0 610.0	609.5 	605.0 	610.0 620.8 620.8 609.0 617.0 622.0 617.0	610'4 619'4 618'4 614'0 605'0 623'2 620'4
Hourly	Means	618.63	618.01	615.26	610.40	610.75	608.80	608*28	609.78	611.28	614.75	613*26	612.97
					TEM	PERATURE	OF THE BI	FILAR MAG	NET.	<del></del>		· · · · · · · · · · · · · · · · · · ·	<del></del>
	2 3 4 5 6 7 8 9 10 11 12 13 14	35.6 43.5 46.0 49.0 49.2 49.2 	35:4 43:6 46:2 48:8 48:9 48:6 33:0 42:5 38:7 44:0 44:6	34.8 43.8 46.8 49.0 48.5 47.4 	35:0 44:0 47:2 50:1 48:5 43:2 	36.0 44.3 48.6 51.0 49.0 49.2 	36.2 45.0 49.1 51.4 50.0 50.2  34.6 34.3 43.2 40.7 44.6 44.2	37.2 45.6 49.0 51.0 50.0 50.4 	38.7 46.0 48.5 50.8 50.6 50.5 - 34.6 36.0 43.8 41.8 46.2 45.8	39°2 46°8 48°5 51°4 51°2 50°1 35°0 37°3 44°0 42°2 47°1 46°8	39.7 47.8 49.0 52.0 51.6 50.0 	40.4 48.7 49.0 52.0 52.0 50.0 	40.5 48.5 48.2 51.4 51.7 49.7  36.4 38.3 44.2 43.0 48.6 47.0
FEBR	15 16 17 18 19 20 21 22 23 24 25 26 27 28	43°0 44°0 44°5 42°0 46°7 	43°2 44°0 44°0 41°8 42°0 46°5 	43.0 43.5 43.9 41.0 41.6 46.4 	43.2 44.0 44.5 40.6 41.7 46.4 — 38.8 38.8 38.0 35.1 30.5 37.8	44.0 44.5 45.5 41.2 42.0 46.6 — 39.5 38.8 38.6 35.8 31.2 38.0	44·5 46·0 46·6 42·0 43·0 48·0 ————————————————————————————————————	44.6 47.0 46.8 43.0 43.5 48.6 	44.7 47.0 47.4 43.5 44.0 49.2 	44.6 47.4 47.8 43.7 44.8 48.4 	44.8 47.7 48.4 43.7 45.5 48.0 41.0 42.8 41.4 38.4 38.7	45.0 48.0 48.5 43.4 46.4 47.8 41.6 42.8 42.0 37.8 38.8	44.6 47.4 48.2 43.0 46.5 47.5 41.5 41.5 37.0 38.2 42.0
March ——— ourly N		41.40	41.12	40.89	41.12	41.74	42.59	43.12	43.61	44.04	41.0	41.4	44.48

12h.	13h.	14 <sup>h</sup> .	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily an Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
322.0	622.0	618.0	615.0	620.0			1	1			1 1	
314°5	614.0	614.0	607.6	607.2	620.0	618.2	619.2	618'4	618.0	616'2	621'4	618'34
	608.7	609.4	607.8		609.0	611.2	611.2	611.0	614.2	613.2	613.7	608.73
09.2		606.2		609.2	609.2	609.2	610.8	610.7	611.0	612.2	612.2	605.89
06.2	607.0	599.2	607.3	607.2	607.4	607.0	608.0	607.5	608.0	607.0	608.0	604.86
04'0 07'0	606.0	606.0	606.0	608.0	605.0	604.0	599.0	601.0	598.0	602.0	606.0	602*83
						608.0	607 • 4	605.0	602.0	604.4	623.6}	604.86
22.0	624.0	626.0	613'4	614.2	614.0	620.2	623.0	623.2	624.8	624.4	625'8	619.04
22.5	621.0	617.2	620.0	618.6	619.6	622.0	621.6	617.2	618'2	619'4	620.0	624*43
17.4	617.8	616.4	620.0	620.4	619.6	618.2	620.0	620.0	618'4	621.5	618.0	617.92
14.0	613.7	610.0	617.0	619.0	619.0	617.0	617.0	617.0	617.0	617.0	617.0	615.79
07·5 02·0	603.0	598°0 617°0	612.0	603.0	610.0	607.0	606.5	606.0	606.8	605.0	602.2	609.06
_	-		l —	-	_	606.6	607.4	611.8	615.4	613.2	607.2}	609.71
91 <b>.</b> 2	610.2	606.2	610.0	611.2	613.4	615.0	615.0	618.0	613.2	608.8	611.0	608'96
09.2	613.8	611.9	609.0	612.2	612.0	611.0	614'0	612.2	613.0	613.0	611.0	609.85
07.0	609.0	608.0	609.0	609.0	610.0	608.5	610.0	612.0	612.0	610.5	613.0	607:20
16.0	614.0	615.0	618.0	618.0	618.2	617.5	617.8	619.4	618.0	619.2	618.6	616.23
13.0	609.0	616.0	608.0	608.0	610.0	609.2	606'4	606.6	608.8	610.0	607.2	613.07
10.0	610.0	612.0	610.2	611.4	610.0	600:0	C0010	000:0	C10:0	00710	[ <del></del> } ] [	613.03
51.0	623.2	622.8	622.0	621.8	600.7	622.0	623.0	620.0	618.6	625.0	625.0}	
18 <b>·2</b>	618.0	618.1	618.0	620.0	622.7	622.8	623'0	623.0	623.0	622.4	622.0	621'11
08.0					621.0	621.0	621.0	621.0	621.0	621.0	621.4	620.58
	604.0	602.0	611.0	612.0	616.0	615.0	612.0	612.7	618.0	618.7	619.6	615.71
17.0	617.0	608.0	604.7	614.0	620.0	622.0	620.8	624.0	624.2	622.0	626.5	617.18
23.0	623'4	624.2	625.4	619.8	619.6	618'4	622.4	622.1	621.0	621.3	622.0	621.02
— 19.8	620.6	620.0	622.0	621.0	622.7	625.7	627.0	628.0	631.2	627.0	628·0}	619*30
12.26	613.26	612.58	612.67	613.07	614.34	614.88	615.15	615.32	615.57	615.29	616'68	613.23
				TEM	PERATÚRE	OF THE B	FILAR MA	GNET.				
0		o	o	0	0	0	۰	0	0	0		0
40.5	41.0	41.2	41.4	41.5	42.0	42.4	42.5	42.8	43.0	43.2	43.5	39.74
8.4	48.5	48.2	48.0	47.8	47.8	47.4	47.4	47.2	47.0	46.6	45.7	46.28
7.8	47.8	47.8	47.6	47.8	47.8	47.4	47.0	47.0	47.2	47.2	47.7	47.76
0.6	50.4	50.4	50.3	50.7	51.0	51.0	51.5	51.0	51.0	50.2	49.6	50.65
1.0	51.1	51.0	50.2	50.2	50.2	50.4	50.2	20.0	49.6	49.5	49.0	50.19
9.8	49.2	49.0	47.8	46.2	45.2		_	_	-		32.8}	45.31
	35.5	35.5	35.4	35.1	35.0	33.7 34.5	34.0 34.0	34.8 34.2	35.0 33.8	35 <b>.</b> 6	32.8 S	34.26
8.2	38.6	38.8	38.2	38.2	38.6	39.4	39.9	41.0	41.7	42.0	42.2	37.54
3.6	42.8	41.8	$\frac{36.2}{41.2}$	41.2	41.5	41.7	41.5	41.2	41.2	41.4	40.0	42.35
2.6	42.6	42.0	41.8	$\frac{41}{42} \cdot 0$	42.0	42.4	42.9	43.0	43.4	43.8	43.9	41.80
8.2	48.6	48.4	47.5	42 0 47°4	47.8	48.4	47.6	47.7	47.2	46.7	45.6	46.57
0 4 1	46.9	46.1	45.8	45.2	45.0	I		. —			42.7}	44.54
7.0	•		_			40.2	40.6	40.8	41.8	42.2		
7.0	44.5	44.0	43.8	43.6	43.6	43.4	43.2	43.6	43.9	44.0	44.0	43.97
7.0 4.4		4040	45.6	45.5	45.5	45.5	45.2	45.0	45.2	45.6	45.0	45.76
7'0  4'4 7'0	46'4	46.2			47.0	46 6	45.0	44.2	43.5	42.5	42.0	46.03
7.0 4.4 7.0 7.9	46'4 48'0	47.8	47.0	47.0			42.0	42.4	42.5	42.4	41.8	42'16
7'0  4'4 7'0 7'9 1'8	46 4 48 0 42 0	47.8 41.6	47.0 41.5	41.5	41.5	42.0		47.6	47'6	47.4	47.0	45.20
7'0  4'4 7'0 7'9 1'8	46'4 48'0 42'0 48'0	47.8 41.6 48.0	47.0 41.5 47.2	41.5 47.0	41.5 47.3	42.0	47.4	71 0			11	
7.0 4.4 7.0 7.9 1.8 7.0 7.0	46.4 48.0 42.0 48.0 47.3	47.8 41.6	47.0 41.5	41.5	41.5 47.3 46.0	47.5		_	20:4		37.0}	45.00
7.0 4.4 7.0 7.9 1.8 7.0 7.0	46'4 48'0 42'0 48'0 47'3	47.8 41.6 48.0 47.0	47.0 41.5 47.2 46.6	41.5 47.0 46.4	41.5 47.3 46.0	47.5 38.0	37.6	38.9	39.4	38.0	37.8	
7.0 4.4 7.0 7.9 1.8 7.0 7.0 7.0	46'4 48'0 42'0 48'0 47'3 40'8	47.8 41.6 48.0 47.0 	47.0 41.5 47.2 46.6 — 41.0	41.5 47.0 46.4 	41.5 47.3 46.0  40.6	47.5  38.0 40.4	37.6 40.0	39.9 	39.4 39.5	38.0 39.4	39.0	39.99
7.0 4.4 7.0 7.9 1.8 7.0 7.0 1.0 1.7	46'4 48'0 42'0 48'0 47'3 	47.8 41.6 48.0 47.0 — 40.8 41.6	47.0 41.5 47.2 46.6 — 41.0 41.4	41.5 47.0 46.4 	41.5 47.3 46.0 	47.5 38.0 40.4 40.6	37.6 40.0 40.4	38.9 39.9 40.0	39.4 39.5 39.5	38.0 39.4 39.5	39.3 39.0	39 <b>·</b> 99 40 <b>·</b> 59
7.0 4.4 7.0 7.9 1.8 7.0 7.0 1.0 1.7 0.4	46'4 48'0 42'0 48'0 47'3  40'8 41'4 40'8	47.8 41.6 48.0 47.0 40.8 41.6 39.8	47.0 41.5 47.2 46.6 — 41.0 41.4 39.4	41.5 47.0 46.4 	41.5 47.3 46.0 40.6 40.6 40.0	47.5 38.0 40.4 40.6 39.8	37.6 40.0 40.4 39.6	38.9 39.9 40.0 39.4	39.4 39.5 39.5 38.4	38.0 39.4 39.5 38.0	39.0 39.3 37.0	39.99 40.59 39.72
7.0 4.4 7.0 7.9 1.8 7.0 7.0 1.7 0.4 6.0	46.4 48.0 42.0 48.0 47.3 	47.8 41.6 48.0 47.0 40.8 41.6 39.8 35.5	47.0 41.5 47.2 46.6 — 41.0 41.4 39.4 35.0	41.5 47.0 46.4 	41.5 47.3 46.0 40.6 40.6 40.0 33.5	47.5 38.0 40.4 40.6 39.8 33.0	37.6 40.0 40.4 39.6 32.4	38'9 39'9 40'0 39'4 31'8	39.4 39.5 39.5 38.4 31.2	38.0 39.4 39.5 38.0 31.2	39.0 39.3 37.0 30.5	39°99 40°59 39°72 34°97
7.0 4.4 7.0 7.9 1.8 7.0 7.0 1.7 0.4 3.0 7.8	46.4 48.0 42.0 48.0 47.3 	47.8 41.6 48.0 47.0  40.8 41.6 39.8 35.5 40.0	47.0 41.5 47.2 46.6 — 41.0 41.4 39.4 35.0 40.2	41.5 47.0 46.4 	41.5 47.3 46.0 40.6 40.6 40.0 33.5 40.1	47.5 38.0 40.4 40.6 39.8 33.0 40.1	37.6 40.0 40.4 39.6	38.9 39.9 40.0 39.4	39.4 39.5 39.5 38.4	38.0 39.4 39.5 38.0	39.0 39.3 37.0 30.5 39.5	39°99 40°59 39°72 34°97
7.0 4.4 7.0 7.9 1.8 7.0 1.0 1.7 0.4 6.0 7.8 1.2	46.4 48.0 42.0 48.0 47.3 	47.8 41.6 48.0 47.0 40.8 41.6 39.8 35.5	47.0 41.5 47.2 46.6 — 41.0 41.4 39.4 35.0	41.5 47.0 46.4 	41.5 47.3 46.0 	47.5 38.0 40.4 40.6 39.8 33.0 40.1	37.6 40.0 40.4 39.6 32.4 39.8	38'9 39'9 40'0 39'4 31'8	39.4 39.5 39.5 38.4 31.2	38.0 39.4 39.5 38.0 31.2	39.0 39.3 37.0 30.5 39.5	45.00 39.99 40.59 39.72 34.97 36.81 38.60
1.0 1.7 1.0 1.7 0.4 1.0 1.7 0.4 6.0 7.8 1.2	46.4 48.0 42.0 48.0 47.3 	47.8 41.6 48.0 47.0  40.8 41.6 39.8 35.5 40.0	47.0 41.5 47.2 46.6 — 41.0 41.4 39.4 35.0 40.2	41.5 47.0 46.4 	41.5 47.3 46.0 40.6 40.6 40.0 33.5 40.1	47.5 38.0 40.4 40.6 39.8 33.0 40.1	37.6 40.0 40.4 39.6 32.4	38.9 39.9 40.0 39.4 31.8 38.9	39.4 39.5 39.5 38.4 31.2 39.2	38.0 39.4 39.5 38.0 31.2 39.5	39.0 39.3 37.0 30.5	39.99 40.59 39.72 34.97 36.81

	Oı	ne Scale Div	ision = '00	0087 parts o	f the H. F.	HORIZOI Increase in	NTAL FOI a Scale Divi	RCE. sion, corresp	ponding to 1	o decrease o	f Temperatu	re, 1.63.	
Iean G gen Ti	ottin- )	O <sup>h</sup> .	1 <sup>h</sup> .	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6h.	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10 <sup>h</sup> .	11h.
	2 3 4 5 6 7 8	Sc. Div. 629 0 621 6 617 8 609 0 609 5 615 0	Sc. Div. 626 5 620 4 616 2 606 4 607 4 614 5	Sc. Div. 624 0 615 8 613 4 606 0 605 4 611 0	sc. Div. 617.6 612.0 613.3 605.0 603.0 607.4	Sc. Div. 613 0 607 6 606 1 608 5 597 0 601 4	sc. Div. 605 ' 4 602 ' 2 597 ' 0 606 ' 0 594 ' 0 601 ' 4	Sc. Div. 611 2 602 8 604 8 600 2 594 5 601 4	Sc. Div. 613 6 604 8 601 4 598 8 595 0 599 2	sc. Div. 615.6 606.6 608.5 599.2 600.2 601.6	sc. Div. 619'2 609'0 600'2 604'0 601'2 606'4	sc. Div. 624 '8 614 '2 605 '0 604 '0 607 '5 607 '9	Sc. Div. 619'0 612'0 610'0 605'0 607'0 609'8
	9 10 11 12 13 14	614.0 610.0 610.0 607.0 607.5 594.0	618.4 608.2 610.2 607.0 589.0 584.8	607.0 604.8 608.2 597.9 593.0 584.6	605.4 600.0 608.5 595.0 589.8 565.5	603 · 2 594 · 3 602 · 5 591 · 5 575 · 5 569 · 2	595.8 590.4 595.6 587.5 577.7 564.7	592.2 587.3 594.4 584.5 564.6 562.5	594.8 588.0 598.9 588.8 586.2 571.2	599.0 595.1 605.0 591.2 582.8 582.5	602.8 599.7 595.5 594.6 591.0 592.2	606.0 605.0 600.0 603.7 585.4 599.5	607.5 606.0 606.2 596.4 587.5 599.0
MARCH	15 16 17 18 19 20 21	607 · 2 591 · 4 590 · 0 600 · 0 598 · 0 598 · 6	603.5 574.6 607.9 598.0 600.6 595.8	596'4 592'0 604'0 592'8 598'0 593'7	596.2 589.4 595.5 585.0 593.2 590.2	595'4 593'9 594'7 583'4 582'0 585'0	590.0 580.0 588.5 581.8 573.4 581.1	584.4 583.5 587.6 578.0 570.6 583.4	581.4 587.5 591.0 578.5 574.0 591.0	594.4 590.2 598.6 583.4 581.0 592.0	603.0 614.0 605.0 589.8 590.0 592.2	601'8 605'6 600'9 590'3 589'8 597'9	602.0 612.0 607.0 595.2 585.0 604.0
	22 23 24 25 26 27 28	610.0 607.4 610.5 599.9 602.4 603.7	607 2 608 0 611 0 606 1 600 5 599 9	602°2 599°0 607°0 607°9 595°9 592°9	595 6 589 0 601 2 596 9 586 4 591 2	589°5 584°0 594°8 595°9 576°4 589°4	584°8 586°5 589°9 596°9 580°9 583°7	585 ° 0 588 ° 0 591 ° 2 593 ° 1 584 ° 9 585 ° 9	590°8 587°8 593°1 595°2 574°7 583°9	593.0 602.0 598.1 594.7 591.3 586.7	598.0 607.7 608.9 602.5 596.5 592.4	602.0 606.0 608.7 590.1 602.1 601.9	603 · 2 608 · 6 607 · 1 598 · 7 598 · 4 605 · 9
	29 30 31	616.7 610.9	611.4 608.9	607.4 607.0	595 · 9 599 · 2	577.9 594.0	584 <b>.</b> 9 588.1	578.9 589.0	582°1 594°5	588.9 600.7	596.2 604.1	607.9 614.2	614:3 604:9
Hourl	y Means	607:35	605.48	602.59	597.21	592.24	588.78	587.84	590.24	595.47	600.62	603.16	604.30
		l:	1	1		ERATURE (	F THE BIF	ILAR MAGN	ET.			1	
	$ \begin{pmatrix} 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \end{pmatrix} $	34.0 40.4 44.4 48.4 49.4 44.0	34·4 39·6 43·6 47·8 49·2 43·9	35.4 40.0 44.6 48.2 49.0 44.0	37.5 41.0 45.9 48.9 49.2 45.2	39.0 42.6 47.4 49.8 49.0 46.2	40.6 44.0 48.4 51.0 49.0 47.0	41.5 44.8 48.4 51.4 49.4 46.8	42.2 45.4 48.5 51.9 .50.0 46.8	42.4 46.0 48.5 51.9 50.4 46.6	43.0 46.4 49.2 52.9 51.2 46.8	43.4 47.0 49.5 54.0 51.0 47.0	43°1 46°5 49°5 54°5 51°0 46°3
	9 10 11 12 13 14 15	47.7 50.4 48.2 52.2 55.0 54.7	47.6 49.2 48.2 52.0 55.0 54.5	47.3 49.6 49.2 52.0 54.6 53.8	47.6 50.9 50.5 52.0 54.3 54.0	49.2 52.5 52.5 52.9 54.0 53.8	50°3 53°0 53°8 53°1 54°4 54°0	50.8 53.3 54.0 53.5 54.8 54.0	51.4 53.3 54.4 53.6 55.2 54.2	52.0 53.1 54.4 53.7 55.2 54.2	52.6 53.5 54.9 54.0 55.0 54.5	53.0 54.0 55.4 54.0 54.8 54.3	53.0 54.0 55.6 53.6 55.5 54.0
MARCH.	16 17 18 19 20 21 22	46.8 44.6 44.5 53.5 52.2 52.4	46.4 44.0 44.0 53.0 51.8 51.8	46.8 43.7 44.0 52.6 52.4 51.0	46.5 44.0 44.5 53.4 53.6 50.5	46.2 43.4 45.8 54.0 54.2 50.0	46.7 43.4 47.5 55.0 55.0 50.0	47.0 44.0 48.1 55.2 55.3 49.9	47.2 44.8 49.1 56.0 55.8 50.0	47.5 46.2 50.0 56.4 56.3 50.0	47.6 48.0 51.6 56.5 57.0 50.8	• 47.5 49.7 52.4 56.3 57.0 51.8	48 °0 50 °5 52 °2 56 °0 57 °2 52 °5
	22 23 24 25 26 27 28 29	47·2 52·5 52·0 51·4 50·8 50·5	47.6 52.5 51.5 51.2 51.3 50.4	48.4 52.5 51.4 51.0 51.0 50.1	50.0 52.1 51.2 51.0 51.0 50.3	51.9 52.2 51.4 51.7 51.8 50.8	52°2 52°0 51°8 52°2 51°7 51°5	52.8 52.4 52.0 52.6 52.0 52.0	53.0 52.6 52.4 53.0 52.2 52.5	53.0 52.4 52.4 53.2 52.2 52.5	53 3 52 5 52 8 53 6 52 2 52 5	53·2 52·7 53·4 53·6 52·5 52·0	52.8 52.0 54.0 53.2 52.5 52.5
	$\begin{bmatrix} 29\\30\\31 \end{bmatrix}$	46.0 47.6	46°4 47°6	48°2 49°0	48.6 49.4	48.8 50.4	49.0	49.4 50.6	49.6 50.6	49°4 50°4	49.7 50.2	49.6 50.2	49'6
Hourl	y Means	48.49	48.25	48.45	48.97	49.67	50.58	50.62	50.99	51.17	51.63	51.90	51

	One Scale	Division =	•000087 pa	rts of the H		IZONTAL ase in Scale		rresponding	to 1° decrea	ase of Temp	erature, 1·6	3.
12h.	13h.	14h.	15h.	16h.	17 <sup>դ</sup> .	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means,
sc. Div. 619 2 617 0 611 0 605 2 607 8	Sc. Div. 622 ° 0 617 ° 0 612 ° 5 604 ° 0 610 ° 0	sc. Div. 621.6 616.0 611.5 604.0 608.2	Sc. Div. 620°0 613°0 610°0 603°4 609°2	Sc. Div. 619 4 613 0 607 8 a 598 2 609 3	Sc. Div. 619 0 612 0 600 0 604 8 607 8	sc. Div. 620 ° 0 616 ° 0 602 ° 0 601 ° 0 607 ° 2	8c. Div. 620°0 612°4 601°8 605°2 607°7	sc. Div. 620 ° 0 612 ° 0 605 ° 4 604 ° 0 612 ° 5	Sc. Div. 621 0 618 0 603 2 602 2 612 4	sc. Div. 621 * 5 616 * 0 603 * 0 608 * 0 613 * 5	sc. Div. 621 ° 0 615 ° 6 610 ° 0 608 ° 0 614 ° 3	sc. Div. 619 32 612 79 607 16 604 17 605 90
616.0 608.0 606.5 607.2 594.0 582.0 584.0 	615.0 	615.0 	615.2 609.0 605.0 596.4 597.0 580.0 587.0 	614.0 609.0 604.7 596.2 597.6 580.5 587.0 — 595.2	614.2 607.0 605.0 597.4 600.1 583.0 586.0 	613.0 607.0 604.2 609.0 604.0 580.0 	613.0 606.2 606.8 603.0 600.9 569.0 ————————————————————————————————————	614.8 607.4 608.4 602.2 604.2 571.5 	613.0 609.2 608.0 600.2 600.0 586.0 	613.8 610.0 608.8 604.2 606.0 577.0 607.4 604.0	614·3 } 609·2 603·8 610·0 594·8	610°35 605°87 602°73 602°23 598°05 583°93 588°23 597°77
607 2 600 8 600 1 595 8 599 0	604.0 595.0 600.6 597.6 598.0	608.0 602.8 598.6 594.5 600.0	600°0 603°4 597°3 594°5 600°4	595.6 603.5 598.5 598.8 601.6	601.4 601.8 598.2 599.0 602.0	597.8 602.0 598.0 600.0	598.7 602.0 597.5 599.4 	594.2 600.0 599.0 601.0 — 608.8	564.4 600.0 599.0 599.4 — 610.2	576.4 600.0 601.0 599.6 — 611.5	601.0 601.0 599.2 599.8 — 611.0	594.28 599.29 593.47 592.29 598.29
605.0 605.1 606.1 603.5 592.9 607.1	607.2 605.8 607.9 601.7 598.1 587.9	607.0 606.0 608.4 600.9 601.9 583.9	606.4 606.2 604.9 599.9 601.9 598.3	605.8 605.6 604.1 598.9 601.3 597.3	604.2 605.6 604.1 608.9 602.2 603.3	603.4 607.0 602.3 598.4 602.1	603.2 607.0 603.6 601.9 603.9	604.0 607.4 601.9 603.7 603.7 	605.5 609.0 604.9 601.9 604.3	607 · 4 612 · 0 609 · 1 605 · 5 605 · 5  613 · 7	605.0 610.0 611.5 600.7 607.9 	601.06 602.53 603.76 600.16 596.50 598.85
614.3	610.2	609°9 604°9	608.5 602.4	608.9	608.3	608'8 608'4	609.0 <sub>р</sub>	609.9 609.9	611.2	613:9 611:9	613.0	603.68 604.39
603.32	603.23	602.78	602.55	602:30	604'03 EMPERATU	603.80	604°32	604.85	604.31	606.18	607.81	601.03
42.9	43.5	44.0	44.0	43.5	43.2	43.0	42°0	42°0	4Î'4	41.0	40°5	41°·15
47.0 49.3 54.2 50.4	47.0 49.0 53.8 50.4	46.2 49.0 53.0 50.0	46.0 49.3 52.6 49.5	45'9 49'3 52'2 48'8	45.7 49.7 51.6 48.1	45.6 49.8 50.8 47.2	42 0 45 6 49 8 50 1 47 0	45.7 49.6 50.3 45.6	45.4 49.2 49.8 45.2	45 ° 2 49 ° 0 49 ° 5 44 ° 5	45.0 48.9 49.5 44.1	41 13 44 75 48 33 51 17 48 69
46'3 52'6 53'8 55'3 53'5 55'6	46.7 52.5 53.4 54.8 53.6 55.8	46.9 52.0 53.0 54.2 53.5 56.2	47.2 51.5 53.1 54.0 53.2 56.4	47.8 51.5 52.7 53.4 56.4	48.4 51.5 51.8 52.6 53.2 56.2	46.0 51.1 51.3 52.2 53.3 55.8	46.0 50.9 51.2 52.0 53.5 55.6	46.5 50.7 49.8 51.7 53.5 55.6	46.6 50.4 49.6 51.2 54.2 55.4	46.9 50.2 49.2 51.2 55.0 55.0	47.0}	46.37 50.76 51.83 52.70 53.40 55.27
53.5 47.9 50.6 52.0 56.0 55.6 52.5	53.0 47.5 49.8 52.7 56.0 55.7	52.4 	52.4 47.3 48.5 53.3 55.4 55.1	51.7 47.0 47.8 53.9 55.0 54.5	51.4 46.8 47.4 54.0 54.5 54.5	45.4 46.5 47.0 54.0 54.2 53.7	45.8 46.2 47.0 53.6 53.5 53.2	46.1 45.8 46.2 53.5 53.1 52.8	46.0 45.4 46.4 53.2 52.6 52.7	46°4 45°0 47°0 53°0 52°5 53°0		51.70 46.75 46.59 50.56 54.53 54.45
52.6 52.0 54.2 53.0 52.1 51.8	51.5 52.0 51.6 54.2 52.5 51.8 51.7	51.1 51.6 51.6 54.0 52.2 52.1 52.0	50.6  51.4 51.6 53.1 52.4 52.0 51.8	50.0 51.4 51.8 52.5 52.0 52.2 51.2	49.7  51.6 51.9 52.5 52.4 51.8	46.4 51.6 51.5 52.2 52.4 51.6	46.6 51.3 51.0 51.6 52.0 51.6	46.6 51.6 50.7 51.5 51.7 51.2	46.6 52.0 51.4 51.5 51.5	46.8 52.5 51.8 51.5 51.5	47.3 } 52.2 51.7 51.4 50.5	49.85 51.55 51.96 52.35 52.20 51.69
49.8	47.4 50.4	52.0  49.4 50.5	51.8 48.8 49.9	51.2  48.7 49.7	51.0  48.4 49.7	44.9 48.2 49.4	44.8 48.0 48.5	44.8 48.0 48.0	45.0 47.8 47.5	45°4 48°1 46°5	45.5 48.4 46.2	49°87 48°64 49°40
51.81	51.55	51.40	51:17	50.93	50.75	49.81	49.55	49:33	49 20	49.19	48.93	50.52

<sup>&</sup>lt;sup>a</sup> Three minutes late.

	0:	ne Scale Di	vision = •00	00087 parts	of the H. F.	HORIZO	NTAL FO	RCE.	sponding to	1º decrease	of Temperat	ure, 1°63.	
lean G gen T	öttin- }	Oh.	1h.	2 <sup>h</sup> .	3 <sup>h</sup> •	4 <sup>h</sup> .	5h.	6 <sup>h</sup> •	7 <sup>h</sup> •	8h.	9h.	10 <sup>h</sup> .	11h.
	1 2 3 4	Sc. Div. 612.8 609.9 615.0 606.0	Sc. Div. 610 '9 608 '1 612 '2 611 '6	Sc. Div. 610.7 607.5 610.0 612.5	Sc. Div. 607 7 612 8 606 0 607 0	sc. Div. 600°3 607°7 600°4 591°0	sc. Div. 596 3 601 7 593 5 586 0	sc. Div. 594 1 602 4 591 0 581 0	sc. Div. 595°5 602°0 590°0 581°6	Sc. Div. 600°1 601°0 597°5 592°0	Sc. Div. 611'9 608'0 602'5 610'4	Sc. Div. 600'9 611'0 604'0 598'6	Sc. Div. 607.0 613.5 603.8 601.2
	5 6 7 8 9	591.0 584.6 590.0 600.8	571.2 580.0 586.0 599.0	570.0 575.0 585.4 595.0	600°5 575°6 583°8 588°5	572.5 572.9 578.5 582.5	574.0 574.2 582.0 578.9	567.2 573.6 585.6 581.4	577.0 570.0 587.0 587.0	591.6 578.8 592.0 591.0	608.5 583.5 585.0 601.0	630°2 587°8 594°4 602°0	577.0 585.2 599.0 602.8
	10 a	602.0	595.2	595.3	595.4	598.2	591.0	597.2	589.5	597.2	598.2	595.0	599.8
APRIL.	12 13 14 15 16 17 18	605.8 612.5 608.0 610.0 595.2 597.2	612.8 603.0 603.7 600.0 593.4 594.2	602.4 610.0 594.0 568.0 589.0 590.6	599°4 604°9 593°2 563°2 582°4 577°2	599.0 593.7 584.2 566.4 585.0 570.5	583.8 586.0 586.0 560.0 583.2 569.2	576.2 587.6 588.8 581.8 575.0 571.0	578'9 590'0 595'7 588'8 579'4 579'6	596.0 602.0 598.6 604.2 592.0 587.0	616.0 584.0 604.4 609.0 608.2 586.5	594.5 611.0 612.4 621.8 604.5 585.2	609.0 601.0 605.2 611.6 604.0 589.0
	19 20 21 22 23 24 25	602.2 597.6 591.5 593.8 598.8 586.0	600.6 599.0 594.5 592.6 597.8 586.1	597.0 594.0 586.5 588.0 591.2 583.5	587.0 585.0 580.6 574.2 579.0 577.9	582.0 577.5 574.2 570.5 579.2 576.0	577 ° 0 574 ° 0 579 ° 7 571 ° 4 581 ° 0 582 ° 0	582.5 575.0b 589.8 576.1 583.8 578.9	587.0 580.3° 587.8 580.8 592.0 582.0	587.0 585.2 584.8 585.0 600.0 585.0	592.0 589.4 586.8 597.8 603.0 577.0	603.0 589.6 588.5 594.2 599.8 596.0	598°0 589°2 593°2 598°0 598°0 584°2
	26 27 28 29 30	599.0 595.0 596.6 596.8	601.0 590.0 594.2 592.0	589°5 583°0 588°0 583°8	576.0 578.2 583.2 575.2	585:0 580:0 579:8 582:0	597.0 584.6 575.0 583.8	595.6 586.3 585.2 588.6	600°0 590°2 591°0 591°0	603°3 591°4 594°8 588°0	597.0 593.8 597.2 596.0	590°0 587°9 599°2 593°4	591.8 593.0 607.0 589.0
Hourl	y Means	599.92	597.16	592.00	587.76	583.56	582.05	583.83	586.96	593.02	597.88	599.80	598.0
		1				ERATURE O	F THE BIFI	LAR MAGN	ET.	ı		'	
	$\left[\begin{array}{c}1\\2\\3\\4\end{array}\right]$	45.7 46.4 46.9 50.6	45.4 47.0 47.5 50.3	45.8 47.8 49.0 50.5	46.8 49.0 50.0 51.9	48.4 50.1 51.8 52.7	49°2 50°5 52°5 53°5	49°4 51°4 52°7 54°0	49.9 52.0 53.0 54.5	50°5 52°0 53°0 54°8	51.6 52.2 53.9 56.0	52.0 52.2 54.5 56.5	51°9 52°5 54°8 56°8
	5 6 7 8 9 10°	53.7 54.5 51.8 48.6	53°5 54°0 51°4 49°5	53°2 54°0 51°7 50°1	53.6 54.4 51.7 51.0	54.5 54.9 51.8 52.4	55°5 55°0 52°0 52°5	56.0 55.2 52.4 52.4	56.4 56.5 52.5 53.0	56.6 56.5 52.6 53.0	57.0 57.0 52.6 54.0	57°2 56°8 53°2 54°5	57°2 56°9 53°6 54°3
	11 11 12	49.6	49.4	49.0	49.2	50.1	51.0	52.0	53.4	53.2	53.2	53.0	52.9
APRIL.	13 14 15 16 17 18	44.2 44.3 48.5 47.0 50.0 53.4	44.3 45.5 48.5 48.0 50.3 54.0	44.4 46.3 48.5 49.0 51.0 54.2	45.2 46.9 49.0 49.0 52.2 54.6	46.2 47.4 49.6 49.6 53.9 55.4	45.7 48.0 49.5 50.0 55.2 55.9	45.5 47.9 49.5 50.8 55.8 56.3	45.4 48.2 49.6 51.0 56.5 56.6	45.4 48.5 49.8 51.6 56.7 57.0	46'4 49'4 50'4 51'6 57'0 58'0	47.4 50.0 51.0 52.2 57.5 58.5	47.7 50.0 51.5 52.6 57.4 59.0
!	19 20 21 22 23 24 25	50.7 57.0 59.4 59.6 59.8 60.4	51°3 57°2 59°0 59°5 59°8 60°0	52.8 57.5 58.5 59.7 59.6 59.5	53.4 58.7 58.5 60.0 59.6 58.8	55°0 59°6 58°3 60°8 60°0 58°4	55.6 60.7 58.5 60.7 60.8 58.4	56°0 61°4 58°5 61°0 61°2 58°6	56.9 62.2 59.3 61.2 61.6 59.0	57.4 63.0 59.6 61.2 61.9 58.6	58.0 64.0 60.0 61.3 61.8 58.5	58.6 64.3 60.2 61.3 61.9 58.5	59.0 64.2 60.3 60.6 62.0 58.2
	26 27 28 29 30	51.4 56.5 57.5 57.2	52.7 57.4 57.4 56.7	54.0 58.0 57.0 57.8	55.0 58.2 56.4 57.8	57.0 58.6 57.2 58.7	57.4 59.4 57.4 59.2	57°5 59°6 57°6 59°8	57°9 59°8 57°8 60°5	57°9 59°8 57°7 61°2	58.6 60.0 57.8 61.8	59°4 60°2 57°5 62°0	60°0 60°3 57°5 62°0
ourly	Means	52.19	52.38	52.76	53.24	54.10	54.26	54.90	55.39	55.29	56°10	56.42	56.2

<sup>&</sup>lt;sup>a</sup> Good Friday.

b Two minutes late.

<sup>&</sup>lt;sup>c</sup> Three minutes late.

		D' ' '	******			RIZONTAI						
	One Scal	e Division =	= '000087	parts of the	H. F. Incr	ease in Scal	e Division,	correspondir	ng to 1° deci	rease of Ten	nperature, 1°	63.
12h.	13h.	14h.	15h.	16 <sup>h</sup> .	17h.	18h.	19 <sup>h</sup> .	20h.	21h.	22h,	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
608.9	607.4	606.9	605.4	614.2	597.4	593.0	601.9	602.8	606.0	608.3	609.9	604.60
612.0	612.0	612.0	611.8	612.2	610.0	611.8	613.2	615.4	609.0	609.2	611.6	609.41
606.2	604.6	604.0	604.2	604.0	604.2	606.8	607.0	608.1	607.8	611.7	611.2	604.40
597.4	597.0	601.0	598.6	598.2	598.3						1 - 3	597.65
		570:0	500:0	-		585.0	584.8	596.0	601.0	604.0	603.0}	li .
567.1	571.2	570.0	568.6	566.0	567.0	572.0	579.0	581.0	576.0	572.0	587.0	579.48
589.0	584.2	577.0	576.0	579.5	579.0	575.0	585.0	586.8	581.0	584.6	593.7	580'50
595.0	596.5	594.0	596'0	598.0	596.6	601.6	596.0	597.4	598.8	599.8	599.8	592.42
601.4	601.0	601.6	598.8	594.2	596.0	505:0	500:0	004:0	C00:0	C00:0	598.8	595.60
601.0	594.4	599.2	596.5	601.2	600.0	595.0	589.0	604.0	602.8	602.0	1	100 00
001 0	051 1	033 2	030 0	001 0	1 000 0	602.5	608.4	608.0	610.0	613.0	611.8	600.01
608.0	599.0	598.5	604.0	599.0	603.0	607.2	608.8	610.0	612.4	618.8	612.0	602.27
596.0	603.0	605.0	601.8	604.2	605.0	602.2	606.5	592.6	605.8	606.0	609.2	600.96
602.2	601.0	596.8	595.8	599.2	590.2	591.2	000 0	584.0	577.5	595.0	574.0	594.83
585.0	594.4	574.6	569.0	595.0	578.6	602.4	588.0	0010	580.0	594.0	594.0	588.69
607.0	591.0	591.4	592.0	590.0	591.2	591.0	592.0	593.6	594.0	596.0	596.2	592.36
596.0	588.2	585.0	586.2	590.0	593.2		002		0010	0350	1 _ 1	
						587.2	591.2	593.6	595.8	599.4	600.0}	587.63
593.0	584.0	591.2	594.4	595.8	593.6	594.2	596.4	595.8	596.4	597.6	597.0	592.70
<b>5</b> 87.4	585.0	584.8	584.0	580.0	568.5	582.0	584.2	584.0	587.7	585.0	586.2	584.80
592.0	566.8	587.0	585.8	585.9	586.9	585.2	586.0	587.0	588.2	589.4	592.2	586.26
607.0	600.8	601.1	590.0	590.0	589.0	593.0	590.8	590.0	592.4	594.2	599.4	590.00
590.0	590.0	590.0	585.0	571.2	570.6	566.0	576.2	575.0	590°0	579.8	578.5	586.08
590.0	587.2	585.8	582.4	593.2	596.6		· —				l II	
_		· —		l –		602.0	602.8	598.8	597.8	604.0	600.0}	588.97
592.0	592.5	590.2	591.8	594.4	595.0	595.6	592.0	589.0	595.5	596.2	592.0	593:39
591.2	595.0	591.5	589.0	591.0	590.0	593.6	597.5	595.0	595.0	595.0	597.0	590.59
598.0	598.0	591.1	592.0	590.2	595.0	597.0	600.0	600.8	598.0	597.3	600.0	593.70
591.0	593 <b>.0</b>	591.5	589.0	590.0	589.2	592.0	595.4	592.2	590.0	591.8	591.8	589.85
596.15	593.49	592.85	591.52	593.10	591.36	592.98	594.68	595.04	595.26	597.76	597.86	593.09
	<u> </u>	<u></u>		(T) E	MPERATUR	T OF THE	DIEIL VE M	CNET	TINGS (CANADAS SANCES)	40 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -		
. 0	0	0	0		1						0 1	<u> </u>
52°4	52.2	51°8	5 <u>1</u> °0	50°4	49.9	49°7	48°3	47°6	47°4	47°3	47°0	49.23
52.5	52.0	51.2	51.2	50.7	50.3	49.7	49.2	48*4	48.2	47'8	47.2	50.08
56.3	54'5	54.0	53.4	52.6	52.2	51.6	51.1	51.2	51.1	51.2	51.4	52 <b>°</b> 09
56.8	56.3	55.8	<b>55</b> °1	<b>54.</b> 8	54.6	-					$\frac{-}{54.0}$	54.11
						<b>53.5</b>	53.4	54.0	54.2	54.1	54.0 }	
57.0	56.6	56.8	56.2	55.6	55.6	55.5	55.0	54.8	54.8	54.5	54.5	55.47
56.6	56.6	56.8	56.6	56.5	56.0	55°5 »	55.0	54.8	<b>5</b> 3*8	53.2	52.7	55.41
53.9	53.4	53.0	51.7	51.4	51'4	50.7	50.4	50.0	49'6	49.2	49.0	51.71
53.8	53.2	53.0	52.8	<b>51.8</b>	51.6	<u> </u>			40.7	400 5		51'19
52.0	51.6	51.3	<b>50.</b> 6	50.0	20.0	46 <b>°</b> 6	47 <b>.</b> 0	47°5	48.1	48.5	$\frac{49.0}{44.2}$	49.42
47.5						44'0	43.8	44.0	44.0	44.0	44.2	
47°5 49°7	47.0	46.5	46'0	45.6	45'3	44.6	44.4	44.0	44'0	43.7	44.0	45.43
	49.2	49.4	49'4	49.4	49.6	49.4	48'7	48'6	49.0	49.0	49.0	48.45
51.6	51.7	51'6	51.1	50.6	50.0	49.8		48.9	48.4	48.0	47.0	49.74
52.4	52.2	52.6	52.0	51.7	51.4	51.3	51.0		50.0	50.2	50.0	50.75
57.5	57.2	56.8	56 <b>.2</b>	56'0	56.0	54.8	54.3	54.0	54'3	53.8	53.4	54.92
59.2	59.0	58.2	57.8	57.5	57.5		<del>-</del>				<del></del>	55.52
59.0	50.0					52.6	52.2	52.0	51.4	51.2	50.6}	
64.0	58.6	58.2	58.2	58.0	57.4	57.5	57.2	57.2	57.2	57.4	57.2	56.57
60.0	63.6	63.2	62.9	62.5	62.3	62.0	61.8	61.4	61.0	60.6	60.0	61:46
60.6	60°6	60.3	60.4	59.0	59.5	59.4	59.1	59'4	59.6	59.7	59.8	59.43
62.0	61.8	60.8	60.7	60.2	60.1	60.1	60.0	60.0	59.7	59.7	59.8	60.40
57.8	57.2	61.6	61.2	61.0	61.0	60.8	60.8	60.6	60.8	60.8	60.6	60.96
_	01 4	57.2	57.3	57.0	56.8	<u> </u>	<u> </u>	<u> </u>	<u></u>	<u> </u>	50.7	<b>56.</b> 66
60.4	60.2	60.2	50:0	50:0		52.6	52.3	51.7	51°3	51.0		i
60.5	59.9	59.4	59.2	59.0	58.4	58.1	57.6	57·2	57.0	57.0	56.5	57·50
57.5	57.4	59 4 57 4	59.0	58.8	58.5	58.4	58.4	58°4	53.0	58.0	57.8	58.86
62.0	61.4	61.2	58.0 60.8	57.9	57.5	57.5	57 <b>.</b> 4 60.6	57°4 60°4	$57.5 \\ 60.2$	57.5 60.0	57°3 59°9	57.46
	J. 1	01 2	00 0	60.8	60.6	60.6	00 0	00 4				60.13
56.2	56.16	55.94	55.56	55.16			53.71	53.48	<b>5</b> 3 <b>°</b> 22	53.10	52.90	

	Oı	ne Scale Div	ision = '00	0087 parts o	of the H. F.		NTAL FO		ponding to 1	° decrease o	f Temperati	ıre, 1°63.	
Mean G gen Ti	Göttin-}	O <sub>p</sub> .	1 <sup>h</sup> .	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> •	6h.	7 <sup>h</sup> .	8 <sup>h</sup> •	9h.	10h.	11h.
·	1 2	Sc. Div. 593 ° 0 593 ° 5	sc. Div. 591°2 592°1	Sc. Div. 584.6 583.8	Sc. Div. 575 0 573 0	Sc. Div. 577 ° 0 571 ° 0	Sc. Div. 575 2 578 5	sc. Div. 578 8 587 0	sc. Div. 586°4 594°0	sc. Div. 591 0 592 2	sc. Div. 591°2 592°0	Sc. Div. 594 ° 0 589 ° 4	Sc. Div. 593 4 584 2
	3 4 5 6 7 8 9	586.0 570.0 577.0 580.5 582.0 581.0	585 ° 2 566 ° 0 579 ° 2 580 ° 6 581 ° 0 579 ° 0	576.5 563.0 574.2 576.0 580.0 561.0	562.2 564.8 570.2 573.0 575.3 561.4	545°0 564°6 562°8 571°1 563°8 571°0	572°2 565°2 566°4 561°5 562°0 580°0	576.3 561.8 571.0 567.5 567.0 589.4	595.6 573.0 575.8 576.5 574.0 592.2	575.8 584.8 587.0 579.0 591.4 603.2	588'4 581'2 590'0 593'5 590'8 606'4	621'9 587'8 579'8 575'0 591'0 588'2	597.5 593.0 582.0 593.0 587.8 573.6
MAY.	10 11 12 13 14 15 16	591.0 600.9 578.0 572.0 570.0 589.0	590°2 578°6 579°4 563°2 567°0 584°8	590.6 579.8 573.0 567.0 561.0 583.2	589 · 2 547 · 4 568 · 2 553 · 0 556 · 2 568 · 8	588°0 561°4 569°0 560°0 561°0 570°0	590.0 580.2 568.5 558.0 566.0 573.5	587.6 578.8 574.5 559.5 569.2 577.2	592.0 580.0 591.0 570.0 577.2 581.4	610.0 616.5 585.0 581.4 578.8 586.2	608.0 603.5 597.0 582.6 579.8 590.6	603.0 660.0 582.0 582.4 579.9 587.8	601.5 657.5 583.2 582.4 582.8 575.0
W	17 18 19 20 21 22 23	588.2 602.0 581.5 587.0 586.6 606.0	590.0 598.0 595.5 588.2 584.0 600.5	581.8 590.2 587.0 584.0 573.2 581.8	574.6 587.7 586.0 566.7 575.8 573.4	568 · 2 586 · 7 580 · 0 575 · 8 578 · 5 554 · 6	570.0 592.0 596.0 581.0 583.2 548.2	571'0 594'4 602'0 587'4 579'2 582'5	584.2 600.0 610.8 592.8 578.8 590.0	600.0 587.0 620.0 609.6 589.2 591.9	602.0 600.0 598.0 601.8 591.0 588.4	598.5 608.0 601.8 600.5 594.0 590.8	602.5 598.2 595.4 592.4 597.0 592.0
	24 25 26 27 28 29 30 31	566.5 583.5 578.0 577.2 583.5 578.0	572.8 583.0 576.0 573.4 577.0 567.2	564.0 576.0 568.0 574.5 571.8 566.0	547.5 567.0 564.8 562.0 566.4 554.2	562.8 563.0 561.4 550.5 562.0 560.2	571.0 566.6 566.4 546.8 563.9 555.2	569°5 572°0 575°2 555°6 567°0 551°2	569.6 572.8 571.8 566.8 572.8 551.2	585.0 581.2 580.6 572.4 577.5 562.2	583.6 581.4 576.2 575.8 580.0 575.0	583.0 584.0 572.8 577.6 582.5 584.0	582°2 585°2 576°2 578°0 588°0 594°2
Hourly	Means	583'92	581.66	575.85	567.84	566.90	570.67	575.10	581.57	589.19	590.32	592.30	591.08
	<u>.</u>		0	, l a i			) 0	AR MAGNE					
(	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	59°9 61°2	60°2 61°2	61.9 60.6	61°0 62°1	61°0 63°4	61.0 64.0	61°4 64°0	62°0 64°2	62°0 64°2	62°0 64°6	62°0 65°2	$\frac{62.0}{65.4}$
	3 4 5 6 7 8 9	59.0 60.0 61.0 57.2 58.6 62.0	59.5 60.0 61.0 57.8 59.5 62.0	60°5 60°4 61°5 58°0 60°4 62°0	61:3 60:8 62:5 58:8 62:4 61:8	62.7 61.3 63.0 59.5 63.4 61.6	63.5 61.8 63.3 60.2 63.5 61.8	63.8 62.2 63.2 60.5 64.0 61.8	64.2 62.2 63.5 61.0 64.5 62.0	64.8 62.3 63.2 61.0 64.4 61.6	65.4 63.0 63.0 61.4 64.6 61.8	66°0 63°4 63°0 61°5 64°6 62°0	66.7 63.8 63.0 61.5 64.0 62.0
MAY.	10 11 12 13 14 15 16	53.0 53.8 56.5 62.0 63.2 59.6	53.0 54.4 56.5 62.2 63.0 59.2	53.5 55.4 56.6 62.5 62.5 59.4	51.4 56.3 57.0 63.4 62.3 60.4	51'4 57'3 58'5 64'3 62'7 61'9	52.0 58.2 59.5 65.3 63.2 63.0	52.4 58.2 60.0 65.8 63.6 63.6	53.0 58.5 61.0 66.0 64.4 64.2	53°0 59°0 62°0 66°4 64°3 64°7	53.8 60.0 63.0 66.8 64.8 65.2	55.0 60.5 63.5 67.0 65.2 65.7	55.4 61.5 64.0 67.2 65.5 66.0
	17 18 19 20 21 22 23 24	62.8 54.5 55.7 57.5 54.3 58.2	62.2 55.5 56.7 58.3 55.0 58.5	61.8 56.3 57.6 59.0 56.0 58.5	61.4 57.0 58.8 59.2 57.4 59.4	62.0 58.5 60.0 59.4 58.5 60.4	62.5 59.0 60.5 59.8 59.6 61.0	62·2 58·6 61·0 59·4 60·2 62·0	61.5 58.5 61.3 59.0 60.4 63.0	61.4 58.6 62.0 59.0 60.7 63.8	60°3 59°2 62°6 59°2 61°0 64°6	61.4 60.2 62.8 59.8 60.8 65.1	61.5 60.4 63.2 60.2 60.6 65.1
	24 25 26 27 28 29 30 31	61.2 66.0 69.0 69.2 68.2 69.0	61.5 66.5 70.4 69.6 68.9 69.0	62.4 67.4 71.0 70.8 69.8 69.0	63.5 68.4 72.0 71.5 70.7 68.7	64.8 69.7 72.8 71.9 71.7 69.4	66.2 70.4 73.6 71.9 72.0 70.2	66.6 71.2 73.8 72.0 72.0 70.8	67:3 71:8 74:0 72:3 72:0 71:7	67.7 72.5 74.4 73.1 73.0 72.4	68.0 73.2 75.0 72.9 73.0 73.0	68.2 73.4 75.4 72.8 73.2 73.5	68:3 73:6 75:6 73:0 73:5 73:8
				61'34					<u> </u>				

	One Scale	Division =	= '000087 pa	arts of the H		RIZONTAL ase in Scale		orresponding	to 1° decre	ase of Tem	perature, 1°6	3.
12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> •	17h.	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 590 0	Sc. Div. 590 2	5c. Div. 588 6	Sc. Div. 587.8	Sc. Div. 589 2	Sc. Div. 579 8	Sc. Div. 589 0	Sc. Div. 590.7	Sc. Div. 590 2	Sc. Div. 590.0	Sc. Div. 592 8	Sc. Div. 590.0	Sc. Div. 587 46
579.2	578.2	577.2	577.4	576.7	580.0	577.0	572.0	575.0	573.2	583.0	586.0}	581.90
572.4	588.0	569.4	563.0	572.5	555.0	571.0	565.0	566.0	574.0	574.0	573.0	576.08
589.8	572.0	571.0	566.0	558.0	565.0	545.5	565.2	565.0	570.2	577.0	574.8	570.61
574'0	582.0	581.0	583.0	577.0	581.2	579.6	580.8	585:6	580.4	576.2	578.5	578.12
<b>588 2</b>	584.7	579.6	582.2	583.4	570.2	587.2	578'6	593.2	589.2	590.0	591.2	581.04
573'8	569.8 584.2	573.8 576.4	575°4 575°5	574.0 575.4	566'0 576'2	575.4	583.9	584.0	584.0	583.2	587.0	578.20
582.4	004 2	370 4		0/0 4	370 2	588.2	590.0	591.5	591.5	590.4	588.2	583'19
604.8	604.0	602.0	595.7	572.0	590.0	599.0	581.0	590.2	581.4	574.3	523.3	589.95
585.7	581.0	575:0	580.2	575.0	581.2	568.0	586.4	581.2	585.0	573.8	565.5	586.78
597.0	585'6	567.8	576.8	574.2	570.0	575'0	573.0	575.7	573.5	574.6	578.5	577.94
597.8	577.6	571.2	568.0	562.0	567.6	566.0	568.7	568 2	571.4	573.0	573.0	570.67
581.0	578°0 576°0	578°0 577°1	577.0 581.0	578.0 583.0	580°2 583°0	580.0	581.0	583.0	583.0	583.0	588.2	575.80
576.0	370 0	0111	561 0		303 0	585.0	585.0	583.2	588.0	587·2	587.4}	581.64
599.0	576.0	600.0	584'3	584.0	587.2	565.0	582.4	600.8	599.6	595.4	601.4	587.75
594.0	596.0	596 <b>·2</b>	590.4	583.8	580.4	559*2	584'6	593.0	584.8	587.0	595.2	591.20
590.4	589.2	588 2	584.2	584.0	586.8	590.2	586.2	592.0	591.4	583.0	586.0	591.91
589.0	588.6	587.4	590.0	592.0	590.0	592.5	591.0	587.0	590.0	587.0	578.2	588.75
590.0 591.0	590.7 586.0	591.8 586.0	593°0 583°2	596.0 582.0	594.0 583.2	595.0	593.2	590.0	586.2	600.0	597.4	588.66
				-	-	562.0	583.4	578.4	585°4	587.0	-572·0}	$582 \cdot 49$
585.0	583.7	578.0	578.4	576.8	573.2	579.4	578.0	578.8	576.8	574.5	577.0	574.88
586.4	586.0	571.8	566.2	574.5	570.8	570.0	570.0	576.0	572.2	578.0	576.0	<b>575.5</b> 8
576.0	571.8	570.0	568.0	569 <b>°0</b>	567.0	565 3	569.0	570.0	569.0	573.0	578.4	571.41
574.0	574.0	571.0	571.0	571.0	571.0	571.8	570.8	572.4	575.6	577.4	579.0	570.40
576°5 570°2	575.2	578.0 568.0	578 <b>.2</b> 551.4	580°0 557°8	569°2 573°2	569*4	570.4	571.0	572.6	567.0	573.0	573.87
-			-	-	-	556.0	553.8	568.0	558.7	566.2	567.5 }	565.00
585°14	582.27	579.79	578.00	576.97	576.59	575.46	578.25	581.13	580.66	581.10	579.45	580.02
					MPERATUR		BIFILAR M.					
62.3	61.8	61.7	6Î 5	6Î 4	61.3	6j.6	62°0	61.8	6j.8	6η7	6ľ·4	61°47
65.6	65.4	65.4	65.1	65.3	65.0	62.5	62.0	61.6	61.4	60.8	59.5	63.37
67:0	67.0	66.2	65.8	65.2	64.8	64.2	63.5	62.5	$61.\overline{5}$	61.0	60.6	63.64
64'0	64'0	63.6	63.2	63.0	62.5	62.3	61.8	61.8	61.8	61.2	61.3	62'18
63.0	62.7	62.5	62.0	61.6	60.8	60.4	60.0	59.2	58.6	58.0	57.6	61.57
61.2	60.8	60.8	60.6	60.0	59.6	59.2	59.0	58.5	58.5	58.5	58.4	59.74
63'8 61'8	63.6 62.0	63°4 62°2	63 <b>°</b> 0 62 <b>°</b> 4	63 <b>°</b> 0 62 <b>°5</b>	62.5 62.7	62.7	62.5	62.5	62.4	62.5	62.0	62.82
				—-		56.5	56.0	55.4	54.5	54'1	54.7	60°30
56.4	56.5	56.0	55.0	54.5	54.2	54.0	54.0	53.8	53.8	53.4	53.4	53.82
62.0	62.0	61.5	61.2	60.6	60.0	59.2	58.6	58.2	57.6	57.4	57.0	58.68
64'4	64.0	63.6	63.4	62.8	62.4	62.4	62.7	62.7	62.7	62.5	62.2	61'41
67°0 65°5	66'6 65'0	66'2 64'6	66°0 63°5	65.7 63.4	65°4 62°9	$65^{\circ}2$ $62^{\circ}5$	65.0 62.0	65°0 61°4	61.0	64.9 60.5	64.0 59.7	$65.20 \\ 63.20$
65'9	65.9	65.4	64.8	64.5	63.2		- V	-	— —	_		
				—		64.2	64.5	63.8	63.6	63'4	$\begin{bmatrix} -63.5 \end{bmatrix}$	63.58
61.5	60.2	59.2	59:2	58.8	58.8	58.2	57.2	56'3	55.6	55.2	54.6	59.85
60.2	60.0	59'5	58.8	58.4	58.0	<b>57.</b> 8	57.2	56.9	56.5	56.2	55 4	57.97
63.6 60.2	63.2	62.8	62.5	62.0	61.4	60.7	59.8	59.4	58.7	58°4 55°0	57.4 54.3	60.50
60.2	59°7 59°8	59 <b>°</b> 2 59 <b>°</b> 4	58 <b>.</b> 9	58°4 58°7	58°5	57°4 58°0	56.5 57.7	56.0 57.5	55°4 57°2	57 · 2	57.2	58°28 58°54
65.0	65.0	64.2	64.2	64.2	64.2				_		$\frac{1}{61.3}$	62.47
68.0	68.0	68.5	<del></del> 68'4	68.2	68.0	62.8 67.6	$\begin{array}{c} 62.4 \\ 67.0 \end{array}$	62.0 65.0	61.6 66.5	61.2 66.3	66.0	66.46
73.8	73.6	72.6	72.1	71.7	71.3	70.8	70.3	70.0	69.7	69.1	69.0	70.75
75.7	75.7	75.4	74.6	74.0	73.4	73.1	71.5	71.0	70.2	70.0	70.0	73.00
73.0	73.5	72.7	72°4	72.0	71.5	70.6	70.4	70.0	69.6	69.2	68.0	71.41
72°1 73°8	72°0 73°8	71.4 72.5	$\begin{array}{c} 71.4 \\ 72.3 \end{array}$	71.0 72.1	70°8 71°6	70°6	70.4	70.2	70°0	70.0	69.5	71.14
						71.5	71.2	.7017	70.2	69.7	69.5}	71.21
65 28	65.07	64.67	64.30	63.97	63:59	62.95	62.50	62.12	61.76	61.46	61.05	63.18

		)n <b>e</b> Scale Di	vision = '0	00087 parts	of the H. F		NTAL FO		sponding to	1º decrease	of Tempera	ature, 1'63.	-
Mean ( gen T	Söttin- )	O <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>հ</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> •	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10h.	11h.
	1 2 3 4 5 6 7	Sc. Div. 572 · 3 570 · 0 573 · 8 571 · 4 572 · 4 588 · 9	Sc. Div. 563 5 567 0 569 0 571 2 575 4 588 0	sc. Div. 567°3 563°0 564°2 559°8 576°5 580°8	Sc. Div. 566°0 565°6 563°8 560°8 574°5 576°5	Sc. Div. 555 '4 560 '8 561 '0 557 '8 570 '0 578 '0	Sc. Div. 565 ° 0 561 ° 6 565 ° 6 553 ° 5 568 ° 7 581 ° 0	Sc. Div. 558 2 560 1 566 2 560 0 570 0 581 0	sc. Div. 572 * 2 556 * 8 566 * 5 566 * 0 563 * 0 592 * 2	sc. Div. 575 2 576 2 571 8 580 4 577 0 598 0	Sc. Div. 576.2 581.8 574.2 578.0 576.5 594.6	Sc. Div. 577 ° 2 589 ° 8 575 ° 4 576 ° 0 587 ° 0 604 ° 0	Sc. Div. 584 2 606 5 588 0 578 0 589 0 599 8
	8 9 10 11 12 13	597.0 586.6 581.2 578.8 582.5 604.0	592.0 581.2 582.2 576.8 583.0 589.0	587.0 572.8 584.2 575.8 579.2 592.5	578 · 8 566 · 2 575 · 2 575 · 8 574 · 0 590 · 7	573°4 559°6 565°2 574°7 574°0 587°0	571.6 561.8 568.0 573.5 580.0 581.7	577.0 563.8 568.2 570.8 578.2 591.4	580.6 583.5 573.2 573.0 580.0 591.4	580.0 586.0 575.0 578.0 576.2 591.2	586.4 586.0 573.0 586.0 580.2 593.4	588.5 587.2 582.2 588.5 590.0 597.0	598.6 593.0 582.8 590.0 591.8 591.6
JUNE	14 15 16 17 18 19 20 21	574'8 567'8 577'2 574'0 568'5 576'4	572.2 556.6 579.5 577.0 569.0 575.0	576.0 577.8 574.8 568.5 562.5 571.2	580.0 552.0 571.5 565.2 555.0 569.4	564.5 568.0 563.0 567.0 553.4 565.5	544.5 570.6 560.0 572.2 561.6 563.8	574.8 570.0 572.0 574.0 572.6 561.2	573°5 576°6 571°0 579°4 579°8 564°0	572.4 572.2 592.0 581.0 586.7 569.2	591.0 576.0 589.0 579.0 586.8 576.8	590°8 587°0 589°0 586°6 583°1 578°2	595.0 570.9 576.4 586.0 574.0 583.3
	21 22 23 24 25 26 27 28	599°8 597°2 584°0 578°6 576°0 576°4	597.4 594.2 583.7 576.0 573.2 571.2	587.6 585.5 573.6 566.6 572.2 571.8	596.2 576.0 574.5 569.0 568.2 566.8	567.8 573.6 572.5 575.0 566.6 562.0	580°8 570°2 576°0 569°8 567°5 560°4	590°0 588°0 583°0 578°0 569°0 558°0	591 °0 575 ° 5 589 ° 2 583 ° 2 569 ° 2 559 ° 8	591.0 590.5 601.2 580.2 579.0 569.5	596.6 593.5 597.0 579.2 588.4 575.0	586.5 578.0 587.2 576.0 570.8 569.5	596.0 590.0 584.6 574.6 571.3 577.0
	29 30	575.8 569.2	572.0 571.0	565°2 568°4	566°2 559°0	562.7 554.8	567°4 547°2	573°2 557°8	563°5 554°3	580°0 571°0	589°2 571°2	568.0 574.0	571·2 574·0
Hourl	y Means	579.79	577:17	574.03	<b>5</b> 70 <b>.</b> 65	566.67	567.08	571.79	574.17	580.80	583.65	583.37	585.29
		1 .				ERATURE C	ı	LAR MAGN	ET.				
	1 2 3 4 5 6 7	68.5 69.4 65.5 66.4 65.4 61.1	69.5 69.2 66.3 67.0 65.2 61.2	70°0 69°0 66°7 67°4 65°0 62°0	70.5 69.5 67.2 67.5 64.9 62.9	69.8 69.8 67.3 67.8 64.5 63.6	70.6 69.8 67.5 68.1 64.4 63.5	70.8 70.0 67.6 68.7 64.4 63.7	71.0 69.8 67.5 69.4 64.9 63.7	71.5 70.0 67.6 69.4 65.0 64.0	72.0 70.0 68.2 69.5 65.0 64.5	72.6 70.2 68.9 69.4 65.7 64.5	73·2 70·0 69·4 69·0 65·7 65·0
	8 9 10 11 12 13 14	58.5 60.0 62.6 65.5 63.6 63.2	59°0 60°5 63°2 65°7 64°2 64°0	60°1 61°2 64°3 66°0 65°0 64°5	61.3 62.2 65.2 66.4 65.9 65.2	62.7 64.0 66.4 68.0 66.0 66.4	63.7 65.4 66.7 68.6 66.7 67.2	64.2 65.7 67.2 68.7 67.0 67.5	64.6 66.1 67.8 69.0 67.0 67.9	65.2 66.5 68.9 68.5 67.2 68.1	65.8 67.2 70.0 68.5 67.2 68.3	66.4 67.7 70.5 69.2 67.0 68.4	66.7 68.3 71.0 69.2 67.4 68.2
JUNE.	15 16 17 18 19 20 21	66:2 69:4 67:1 69:5 71:5 70:6	66:5 69:4 67:4 69:4 71:6 70:4	67.0 69.8 68.2 69.5 71.6 70.2	68.4 70.2 68.8 70.0 71.7 69.8	69.9 71.0 69.7 71.2 72.0 69.6	70°8 71°4 70°3 71°8 72°6 70°0	71.2 71.2 71.0 72.6 73.5 70.2	71.7 71.2 71.5 73.4 74.5 70.2	72·2 71·4 72·4 73·8 75·4 70·0	73.0 71.5 73.5 74.0 76.5 69.8	73.8 71.8 74.0 74.5 76.7 69.5	74.2 72.0 74.4 74.6 77.2 69.0
İ	22 23 24 25 26 27 28	59.2 61.5 65.0 68.7 70.8 72.0	59.0 61.2 65.3 69.0 70.5 71.8	59.4 61.9 66.0 69.8 70.7 72.0	60.5 62.7 67.0 70.8 70.6 72.0	61.7 64.8 67.9 71.7 71.4 72.2	62.8 66.0 68.7 73.2 72.5 73.0	63.5 66.9 70.0 73.8 73.2 73.6	64.0 68.0 70.7 75.0 74.0 73.8	64.4 68.4 71.7 75.7 74.5 74.0	64.8 69.5 72.0 76.4 75.5 74.0	65.2 70.3 73.3 76.5 76.0 74.0	65°0 70°5 73°8 77°0 76°2 74°0
	29 30	71·5 73·3	71.5 74.0	71°5 74°7	71·5 75·7	71·4 76·9	73·4 77·5	74·4 77·8	75°0 78°2	75°5 78°3	76°0 78°7	76°4 79°0	76°8 79°5
ourly	Means	66.38	66.62	67.06	67.63	68:37	69.08	69.55	70.00	70:37	70.82	71.21	71'43

	Onė Scale	Division =	*000087 på	rts of the H		ZONTAL I use in Scale		rresponding	to 1° decre	ase of Temp	erature, 1°6	3.
12h.	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17h.	18 <sup>h</sup> •	19 <sup>h</sup> .	20h.	21h.	22h•	23h.	Daily and Monthly Means.
Sc. Div. 575 8	Sc. Div. 574 8	Sc. Div. 570 2	Sc. Div. 544.5	Sc. Div. 532 4	Sc. Div.	Sc. Div.	Sc. Div. 545°2	Sc. Div.	Sc. Div. 555 ° O	Sc. Div. 550 0	Sc. Div. 565 0	Sc. Div. 561 58
603.2	569.2	561.0	555.2	546.0	549.0	550.0	565.0	558.0	570.0	575.6	576.0	568.24
585.0	587.2	571.0	572.0	574.0	571.2	573.0	572.2	574.6	573.2	572.0	578.4	572.64
576.0	574.0	574.0	579.0	576.8	573.2	571.8	570.0	565.7	563.8	575.2	575.6	570.33
590.2	584.3	581.6	586*2	588.5	569.8	568.0	581.0	587.1	584.2	589.0	589.2	579.13
598.2	594.8	581.2	572.8	574.0	574.7		_			_	— <u>]</u>	587.18
					. —	587.0	585.8	588.0	588*2	590.8	594.0	
606'8	606.2	595.0	580.0	576.0	572.5	571.0	558.0	581.0	559.0	586.0	590.8	583.06
592.0	573.5	575.0	558.5 579.0	560.0	553.0	569.0	572.0	574.3	575.2	574.3	577.5	574.25
588.0	580°5 584°3	577°0 580°2	573.4	576°2 576°5	573°0 577°4	572.4	574.2	576.8	578'4 577'2	579°0 575°5	576°4 577°0	576.72 578.76
588 2 585 8	581.8	582.4	582.8	585.4	587.0	579 <b>·</b> 8	579°8 590°0	579°2 590°2	594.0	594.0	601.0	<b>584.9</b> 8
288.0	588.2	578.2	574.8	575.6	575.2	090 0	090 0	090 2	094 0	0910		
		•.• <u> </u>		-	_	574.5	577.0	584.0	574.5	575.0	583·2}	<b>5</b> 85 <b>.3</b> 9
579.0	582.2	<b>5</b> 66.3	561.5	560.0	561.8	570.0	566.0	574.6	570.0	568.0	577.0	572.75
586.0	589.0	570.0	566.0	582.6	575.0	572.2	571.0	578.8	572.0	557.8	580.6	572.77
568.0	573.2	570.0	570.0	571.8	572.8	575.0	577.0	573.5	576.5	574.0	574.0	574.63
584.2	569.2	574.0	560.5	559.4	565.8	564'0	544.2	560.0	569'2	569.0	566.0	570.65
571'4	566.0	568.0	568.0	566.0	567.0	567.2	568.0	567.0	567.0	571.0	573'2	569.70
582.0	582.0	581.0	579.0	581.0	576.0				*00·F		598.8	578.41
	00410		FC0:0	701:4	F05:0	596.0	599.8	590'4	583.7	578.2		
603.0	604°0 591°0	575°0 581°2	569°2 577°2	581.4 582.2	585°0 578°6	587.4	589.4	591.0	586°8 583°5	592 <b>.</b> 4 581 <b>.</b> 2	582.4 582.0	588 <b>·</b> 65 583·75
590°2 571°0	575.6	575.8	575.2	577.6	578.5	580°4 577°8	585'4 579'0	584.8 581.0	579.0	584.0	585.6	581.11
576°0	561.6	567.5	564.7	566.8	567.4	572.0	574.0	572.0	571.0	572.2	576.0	572.81
574.0	579.0	581.8	571.0	570.2	576.0	579.0	571.2	570.2	569.0	575.3	573.8	573.42
581.0	581.0	578.0	570.0	574.6	574.0			0,02			)	
_	_	_	_			556.8	573.8	569.2	565.4	576.2	575.0}	570.52
577.0	577.2	571.0	554.8	559.2	556'4	557.2	560.8	565.6	568.2	560.0	565.2	567.80
563.0	569.8	565.2	<b>5</b> 65.0	<b>5</b> 67 <b>.</b> 6	560.7	558.0	560.0	568.0	567.2	566.4	578.5	<b>5</b> 65.05
583.97	580.77	575.06	569.63	570.84	569.98	571.43	572.71	575.28	573.90	575.47	579.70	575.55
	<u> </u>	<u> </u>		TE	 MPERATUR	E OF THE 1	BIFILAR MA	GNET.				
78.0	72.8	72°·4	72.2	72°1	71°·6	71.3	70°9	70°·5	70°·3	69°9	69°·4	71.10
70·2	69.6	69.2	69.0	68.5	68.0	67.8	67.3	66.8	66.2	66.0	65.2	68.80
69.6	69 4	69.0	69.0	68.6	68.4	68.0	67.8	67.6	67.2	67.0	66.6	67.83
68.2	68.4	68.0	67.8	67.6	67.4	67.0	67.0	66.6	66*4	66.0	65.8	67.75
65.2	65.2	65.2	64.8	64.5	64.2	63.2	62.6	62.2	62.0	61.2	61.3	64.29
64.2	64.2	64.0	63.2	62.7	62.2				_		<del>58</del> ·6}	62.40
-			_			60.3	60.0	59.8	<b>59</b> *5	59.0		
66.5	66.2	66.0	65.5	64.8	64.2	63.7	62.5	62.0	61.2	60.6	59.8	63.40
68.4	68.6	68.5	67.6	67:0	66.0	65.6	64.6	64.0	63.4	63.2	62°4 65°6	65°17 67°74
71.0 69.4	71.0	70.4	69.6	69°4 68°0	68.7	68.5 67.0	67.6 66.0	67°2 65°5	66 <b>°</b> 5	66.5 64.2	63.2	67.32
67.6	69 <b>·2</b> 67·4	68.7 66.6	68.6 66.2	65.7	67.6 65.1	64.7	64.1	64.0	63.2	63'4	63.0	65.65
68.0	67.5	67.1	66.6	66.4	66.0	- J			3			
<del>-</del>		5, 1	50 0			68.0	67.6	67.0	66.6	66'6	$\frac{-}{66\cdot 3}$	66.77
74.6	74.4	73.6	73.0	72.5	72.0	71.2	71.0	70.8	70.0	69.0	69.0	71.10
72.2	72.0	71.2	71.3	70.7	70.2	70.0	69.2	68.6	68.2	67.6	67.2	70.37
74.6	74.6	74.0	73.4	73.0	72.4	72.0	71.4	71.0	70.8	70.3	70.0	71.49
74.8	75.2	74.8	74.5	74.5	73.8	73.2	73.0	72.6	72.3	72.0	71.5	72.77
77.0	76.5	75.8	75.2	75.0	74.5	74.1	73.0	72.5	72.0	71.5	71'0	73.87
69.0	68.5	67.6	67.0	66.5	66.0						$\frac{-}{59 \cdot 2} \}$	66'81
64.7	-					60.3	60.4	60'2	60.0	59.7	61.7	62.95
70.5	64.5	64.4	64.0	64.0	63.8	63.5	63.1	63.0 66.2	62.5 66.0	62.0 65.6	65.0	66°90
73.9	70.5 73.8	69.8 73.0	69.4 72.5	68.6 72.1	68.0	67°4 71°4	66.7 70.6	70.4	69.6	69.3	68.7	70.36
77.0	76.5	76.0	75.5	75.0	71 <b>·</b> 9 74·7	73.9	73.0	72.2	71.9	71.2	71.0	73.59
76.6	76.8	75.8	75.4	75 °0	74.7	74.5	74.0	73.6	73.2	73.2	72.5	73.81
74.0	73.2	73.0	73.0	72.7	72.5							
		_	_			73.3	73.0	72.7	72*4	72.0	71.7}	72.93
77.0	77.0	77.0	76.4	76.0	75.4	75.0	74.4	74.0	73.7	73.2	73.0	74 46
79.5	79.5	78.7	78.2	78.0	77.6	77.2	77.0	76.2	75.4	74.8	74.6	77.10
			·									69.10

	C	One Scale Di	ivision = '0	00087 parts	of the H. F	HORIZO . Increase	NTAL FO	RCE. vision, corre	sponding to	1° decrease	of Tempera	ture, 1.63.	
Mean ( Tin	öttin-)	O <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> •	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10 <sup>h</sup> .	11h.
	1 2 3 4	sc. Div. 568 ' 5 561 ' 0 557 ' 5 554 ' 6	Sc. Div. 568 ° 0 571 ° 4 570 ° 2 542 ° 6	Sc. Div. 570°0 563°2 567°8 560°9	Sc. Div. 571 6 554 8 559 4 568 9	Sc. Div. 565°0 552°8 561°0 569°0	Sc. Div. 554 8 550 0 571 0 570 0	Sc. Div. 557 4 567 2 577 8 574 2	sc. Div. 561 ' 5 563 ' 0 572 ' 0 582 ' 0	sc. Div. 562 5 564 4 574 2 584 0	sc. Div. 563 2 571 0 564 1 580 0	Sc.Div. 565°1 576°5 578°8 583°0	Sc. Div. 579 5 576 0 579 0 586 0
	5 6 7 8 9 10	561.5 569.0 571.4 568.0 574.6 582.2	570.8 570.0 576.2 569.0 570.2 575.4	556.0 558.0 568.8 568.0 571.0 558.6	561 0 550 0 567 5 564 4 568 3 558 8	555°2 560°8 566°0 554°0 564°0 565°5	554.0 562.0 561.8 557.3 564.2 573.5	537°5 560°6 560°5 561°2 559°0 551°0	568 2 581 0 579 2 563 6 566 4 547 2	567.0 580.4 572.0 565.0 565.3 536.5	573 · 2 571 · 8 578 · 4 562 · 4 569 · 4 562 · 0	584.0 569.2 586.0 569.8 570.8 579.5	593°2 573°2 581°0 582°6 559°4 576°0
JULY.	12 13 14 15 16 17 18	571.4 575.2 586.2 585.6 587.4 582.2	570°8 566°8 587°8 586°0 585°0 582°0	577 · 2 569 · 2 584 · 6 588 · 0 583 · 5 572 · 0	579°2 568°4 578°0 577°0 573°0 572°8	573 · 5 565 · 0 569 · 2 563 · 5 579 · 0 562 · 0	558 8 568 2 575 0 576 0 0 566 2	558*4 571*8 580*4 580*6 580*0 567*0	563.8 577.4 589.0 583.0 593.2 591.8	578 ' 4 589 ' 0 583 ' 0 593 ' 0 593 ' 0 592 ' 2	587.0 592.6 589.0 586.5 599.4 600.8	590°0 575°0 594°0 591°0 598°2 614°2	580°2 590°0 596°0 590°8 593°2 578°0
	19 20 21 22 23 24 25	580.6 579.2 572.0 585.4 581.2 582.4	583.0 567.8 569.8 587.2 580.0 566.0	582.0 572.8 567.6 580.4 576.2 573.8	570.0 573.9 566.0 559.5 569.8 562.7	557 0 571.7 561.5 564.5 553.0 557.0	570.6 571.5 564.2 565.5 563.5 565.4	576°2 572°2 568°0 574°0 571°8 576°5	579°4 568°8 571°5 572°0 575°6 581°0	580.6 572.0 580.5 571.5 565.7 596.5	576.0 579.0 588.0 572.0 568.8 577.2	580.0 574.8 584.8 577.5 595.2 580.4	580.4 577.0 581.2 591.0 586.0 586.0
	26 27 28 29 30 31	578.4 578.6 573.4 549.5 574.0	580.0 578.5 573.0 557.0 571.8	568.6 574.0 575.5 570.0 554.8	562.0 575.7 565.0 564.0 568.5	552°0 568°6 549°8 548°2 545°8	554.0 568.2 562.5 552.0 540.4	562.0 578.7 542.5 561.8 544.6	564.0 578.5 572.0 556.2 568.2	573 4 592 0 582 0 571 4 587 0	573°0 584°0 590°0 584°8 583°6	569.0 585.0 575.8 556.4 591.0	575.0 583.2 563.6 592.0 594.0
Iourl	y Means	573.74	573.20	570.83	567.04	561.28	563.58	565.66	572.94	576.76	578.79	581.30	581.9
		7Å·5	75.5	76.1				LAR MAGNI	т. 79°2	79.4	79.6	79°·5	79°3
	$\begin{bmatrix} 1\\2\\3\\4\\5 \end{bmatrix}$	74·5 73·8 71·8 69·8	75.5 74.3 72.4 70.5	76.1 74.8 73.2 71.2	77.2 75.4 74.2 72.0	78·2 75·8 75·0 73·0	78.7 76.5 75.5 74.0	78.8 76.6 75.5 75.0	79.2 76.6 75.6 75.5	79.4 77.0 75.8 76.0	76.8 76.8 76.8	79°5 77°0 75°9 77°5	79°3 77°0 76°0 77°5
	6 7 8 9 10	74.0 72.8 70.4 72.0 75.3 78.0	74.5 72.4 70.0 72.5 76.4 78.4	75.0 72.8 70.0 73.2 77.5 78.6	75.9 73.3 70.0 73.8 78.6 79.0	76.2 74.0 70.2 74.8 80.2 80.0	76°2 74°7 71°0 75°3 82°0 81°4	76.4 74.8 71.2 75.3 83.2 81.7	76.8 75.0 71.8 75.0 83.2 82.5	77.3 75.4 72.6 74.8 83.2 82.3	78°3 75°4 74°2 75°2 83°8 81°5	79.4 76.0 75.1 75.6 84.5 81.2	79.5 76.3 75.6 76.4 85.0 81.4
JULY.	12 13 14 15 16 17 18	72.7 69.5 65.1 64.0 63.7 65.6	73.0 69.6 64.8 64.8 64.4 66.5	73.7 70.3 65.4 65.4 65.8 67.4	74.4 70.4 66.0 65.8 67.0 68.2	74·4 70·8 66·4 66·2 68·0 69·0	74.6 70.8 66.7 66.5 68.5 70.0	74.6 70.8 66.8 66.7 69.0 70.2	74.6 70.7 67.0 66.9 69.2 71.0	75.0 70.7 67.0 67.2 69.2 71.5	75°4 71°0 67°2 67°5 70°6 72°1	75.8 70.9 67.4 67.7 71.0 72.4	76.2 70.5 68.0 68.0 71.1 72.6
	18 20 21 22 23 24 25	72.0 72.2 72.9 71.5 73.7 70.6	71·7 72·3 72·5 72·2 73·7 71·4	72.0 73.4 72.5 73.0 73.5 71.8	72.4 74.5 72.7 73.8 73.2 72.0	73.0 75.0 73.0 74.6 73.0 73.7	74.2 76.0 73.4 75.0 73.6 74.5	74.6 76.8 73.9 75.5 73.0 74.9	75.2 77.0 74.2 76.0 72.9 75.5	75.6 77.4 74.5 76.5 72.7 76.4	76.0 77.6 75.0 77.0 73.2 76.7	76.6 77.6 75.5 77.3 73.3 77.3	77.0 77.6 75.6 77.4 73.5 77.4
	26 27 28 29 30 31	71.6 70.5 73.0 77.0 76.3	72:2 71:2 74:0 77:5 76:0	72.6 71.5 74.5 77.7 75.6	73.0 72.5 75.4 78.5 76.0	74.8 73.0 76.1 79.0 76.4	75.0 73.7 77.4 79.6 77.2	75.0 74.7 78.4 79.8 77.8	74.9 75.0 78.7 80.5 77.6	75.5 75.5 78.7 81.2 77.8	75.7 76.0 79.2 81.8 78.5	75.9 76.5 80.3 82.2 79.0	76.0 76.2 80.4 82.0 79.0
	Means .	71.64	72.03	72.54	73.15	73.84	74.52	74.85	75.11	75.41	75.86	76.24	76.3

<sup>&</sup>lt;sup>a</sup> Four minutes late.

	One Scale	e Division =	= *000087 p	arts of the I	HOR I. F. Incre	IZONTAL ease in Scale	FORCE. Division, e	orresponding	g to 1° decre	ease of Tem	perature, 1 · 6	33.
12h.	13h.	14 <sup>h</sup> .	15h.	16h.	17 <sup>h</sup> .	18h.	19h.	20h.	21h.	22h.	23h.	Daily an Monthly Means.
Sc. Div.	Sc. Div. 568'8	Sc. Div. 556 2	Sc. Div. 560'5	Sc. Div. 563.0	Sc. Div. 565.5	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 545.0	Sc. Div. 558'0	Sc. Div. 557 2	Sc. Div. 564 27
64.2	566.0	554.0	562.2	549.0	555.5	568.8	565.0	565°0 552°2	554.3	555.0	563.0	560.76
584.5	571.0	563.0	552.2	547.0	530.2	534.3	582.8	568.2	549.8	550.5	554.0	563.33
596.2	594°4	574'2	574.4	587.6	584.4	-		-	-		1 [	572.50
		FC5:0		-		564.2	568.0	559.0	561.8	566.4	554.0}	
571°4 572°0	563°5 572°4	565°2 561°8	556'8 560'1	556.6 560.0	554.2	561.0	557.0	560.2	561.4	561.0	564.2	563.10
568.0	570.0	569.0	573.2	566.3	558.5 570.0	558.0 567.0	565.0	564.8	566.4 562.3	567 2 567 5	564.4 566.5	565.69 569.77
579'2	575'4	570.8	568.8	568.5	563.8	563.4	561.0 568.4	565.0 566.0	570.2	566.6	571.4	567.40
61.8	565.0	554.0	561.4	559.0	563.0	564.8	590.8	564.7	566.0	570.2	580.0	5 <b>6</b> 6.80
664.0	559.0	554.4	551.2	556.2	537.0		_		_		— 1 l	562.06
						558.0	560.4	567.6	562.0	579.0	574.4}	
574.5	576.0	560.8	562.8	563.6	567.0	567.2	568.0	563.0	557.0	548.0	550.2	568.62
585°0	582.0	580.6 585.0	579°0 583°2	581.0 582.0	581.0	560.0	593.7	592.0	588.4	587°2 586°4	575°4 588°0	578.91
587 <b>'</b> 3	580.0	579.3	578.8	585.8	580°4 583°6	579°3 585°8	586.4 587.0	585.0 592.0	585.8 562.5	586 4 577 4	584.0	584.57 582.69
584.0	579.0	579.2	582.6	583.6	581.7	583.4	583°4	587.0	580.2	581.8	581.0	584·50
73.2	571.4	578.0	584.2	584.0	580.8			- Join	<del></del>		— า	
				<u> </u>		574.0	577.0	552.0	581.5	574.8	577.0}	578.74
79.0	575.5	562.5	572.0	568.0	565.0	570.0	572*4	570.6	571.0	568.2	570.4	573.35
72.5	572.0	572.5	574.0	573.2	568.4	556.2	550.0	562.2	563.7	575 0	570.0	570.43
579'8 582'0	577.8 584.4	579°6 575°4	578.8	581.8	580.9	582.0	581.0	582.0	578.0	559.7	577'0	575.56
596 <b>.</b> 0	589.0	560.0	574°0 576°0	575°0 b	575.0	573.2	573.5	574.5	576.0	577.5	579.0 577.4	575°42 572°91
69.0	570.5	573.2	571 °O	572.0	571°0 572°4	568.0	558.0	561.4	565.0	566.2	3// 4	
	<u> </u>					577.0	576.3	579.4	575'2	576.3	577.2}	574.77
74.0	582.0	563.2	561.2	563.6	566.4	564.0	573.2	578.6	582.2	578.0	579.0	569.87
572.4	575.0	575.2	577.4	578.2	580.0	576.0	588.0	581.4	577.0	576.0	576.0	578.23
69'0	564.4	555.8	562.0	563.5	565.0	567.2	568.5	568.0	562.9	570.0	566.0	566.98
555 <b>.</b> 8	556°0 569°0	561.0 552.8	569°0 571°8	563.9	548.0	550.0	560.0	566.0	567.0	561.5	568.2	562.07 568.00
700 0	309 0	002 6	9/1 8	563.5	567.0	560.8	574.2	570.0	566.2	576.0	574.0	308 00
575.91	573.94	567:29	569.60	569.28	567*25	566.55	571.74	570.29	568.11	569.68	571.08	571.16
. 0	1 0	1 0					BIFILAR MA				0 11	0
79°0	78.3	77.7	77.4	77.0	76°6	76°2	75°5	75°0	74.5	74.2	73.7	7 <sup>7</sup> .13
77:3 76:0	77:2 75:8	77.2 75.0	76.5	76.0	75.2	74.7	74.0	74.0	73.4	72.6	72:0	75°49 73°86
77.5	77.5	76.5	74.0 76.4	73.8	73.2	73.0	72.2	71.6	70.8	70.4	70.0	
		10 0	70 4	76.2	75.8	76.0	75.7	75·3	74.5	74.3	$\left\{ \overline{73\cdot9}\right\}$	<b>74</b> 93
79.2	78.5	77.8	77.2	76.9	76.3	75.7	75.0	74.5	$74 \cdot 2$	73.9	73.0	76.32
76.3	76.0	75.0	74.8	74.6	73.8	73.1	72.3	72.0	71.8	71.6	71.2	73.97
75.8	76.2	75.9	75.3	74.8	74.2	73.8	73.6	73.2	72.8	72.6	73.0	73.05
77:0	77.4	77.2	76.8	76.6	76.2	76.0	75.8	75.8	75.5	75.2	75.0	75.35
84.0 81.4	83.4 81.2	82.5	81.6	81.0	80.7	80.5	79.7	79.0	79.0	78.6	78.2	80.87
- ·	01 4	80.4	80.2	80.2	80.0	 76:8	76·5	75.8	74.6	73.9	73.0}	79°18
76.2	76.0	75.5	75.0	74.7	$\frac{-}{74 \cdot 2}$	76 8 73 8	$\frac{76.5}{72.7}$	75 8 72 1	71.5	71.0	71.0	74.09
70.0	69.6	69.0	68.6	68.2	67.6	67.0	66.7	66.2	66.0	65.2	65.2	69.00
68.0	68.0	67.5	67.0	66.6	66.4	66.0	65.4	65.0	64.6	64.4	63.6	66.26
68.5	68.5	68.2	67.3	67.1	66.8	66.2	65.5	65'0	64.6	64.1	63.8	66.35
71.0	70.8	70.2	69.6	69.1	68.2	68.0	67.4	67.0	66.6	66.5	65.6	68.23
72.7	72.6	72.0	71.5	71.1	70.9	<u> </u>	_				70.6}	70.65
77.4	77.0	76.5	76.0	75.5		72.0	72.0	71.5	71°3 73°0	70.9 $72.2$	70.6 )	74.46
77.5	76.7	76.3	75.7	75 <b>.5</b> 75.6	75°0 75°2	74·5 75·0	74.0 74.6	73.6 $74.2$	73·8	73.4	73.2	75.35
75.2	75.2	74.8	74.5	73.6	73.0	73.0	73.0	72.5	72.3	72.0	71.2	73.61
77'4	77:3	77.0	76.5	76.0	75.7	75.4	75.1	75.0	74.6	74.5	74.0	75.35
73.4	73.4	73.2	73.0	73.0	72.9	72.5	71.8	71.4	71.0	71.0	70.6	72.77
77.5	77.5	77.2	76.6	76.4	76.4		74.0	79.6	$\frac{-}{73\cdot 2}$	73.2	$\left\{\begin{array}{c} -0.00000000000000000000000000000000000$	74.81
76.0	75·7	75.0	74.3	74.0	73.5	74.7	74.0 72.6	73.6 72.0	73.2	73.2	70.6	73.80
76.3	76.2	76.0	75.8	75.4	73 5 75 0	73.0 74.6	72.6	74.5	73.6	73.4	73.3	74.37
80.0	79.8	79.6	79.0	79.1	78·5	78.5	78.5	78.1	78.0	77.7	77.2	77.92
82.0	81.5	80.8	80.8	80.4	80.0	79.2	78.5	78.0	77.5	77.3	77.0	79.57
79.2	78.5	77.4	76.8	76.5	75.6	75.0	74.3	73.8	73.2	73.2	72.4	76.38
				·		I	·	l		I		

<sup>&</sup>lt;sup>b</sup> Fifteen minutes late.

	One Scale Div	vision = *00	00087 parts	of the H. F.	HORIZO Increase i	NTAL FO	RCE.	ponding to	l° decreasé (	of Temperat	ure, 1 63.	
Mean Göttin gen Time.		1 <sup>h</sup> .	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6h.	7 <sup>h</sup> .	8հ.	9 <sup>h</sup> .	10h.	11h,
( 1	Sc. Div. 576*2	Sc. Div. 573'4	Sc. Div. 562°4	Sc. Div. 557°2	Sc. Div. 560°2	Sc. Div. 547 0	Sc. Div. 563°0	Sc. Div. 572°0	Sc. Div. 575 5	Sc. Div. 591 °0	sc. Div. 586°5	Sc. Div. 587 0
2 3 4 5 6 7	570.0 573.0 531.6 561.8	580°8 569°0 568°0 576°4 558°0 554°0	592.0 564.0 558.2 564.0 557.6 553.5	565.0 561.0 552.2 545.0 549.0 547.0	556.0 553.5 554.2 564.0 556.0 542.5	555°0 556°0 559°2 569°8 556°5 549°8	565.6 562.0 566.4 567.2 560.5 564.0	576.0 571.4 575.8 566.0 577.0 575.5	583.0 576.3 580.0 570.4 562.5 582.5	678.0 571.8 574.2 568.5 572.1 588.5	579.0 576.8 593.6 564.2 577.0 583.3	576.2 575.8 564.0 590.0 579.5 571.0
11 12 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15	557°0 582°5 584°0 575°8 576°2 558°8	556.0 578.0 582.2 537.8 576.5 561.0	568.2 572.0 573.6 560.5 552.0 564.5	571 2 571 2 552 0 562 5 545 0 564 6	566.0 566.0 545.2 549.0 537.5 551.0	556.0 a 568.8 566.2 561.8 557.5 c 551.0	553.0 576.4 572.0 572.0 571.2 556.5	562.2 575.8 583.5 581.0 580.0 570.0	566.4 592.8 601.5 589.0 568.0 569.2	573.0 591.2 587.0 593.2 566.5 578.2	574.2 568.6 591.2 585.2 560.0 579.2	571.8 584.0 567.5 583.0 582.0 581.0
LSDDAA 16 17 18 19 20 21 22 22 22 22 22 22 22 22 22 22 22 22	579°5 583°4 582°4 589°0 571°4 585°0	581.0 584.2 592.5 582.0 580.0 574.0	575.0 577.0 585.0 577.8 586.0 b 577.0	572.4 570.0 574.8 568.5 568.0 565.4	566.6 568.0 579.0 574.0 571.0 566.0	554.4 566.2 579.4 586.5 572.5 569.4	555.4 558.5 576.2 583.2 576.5 578.0	568.0 577.2 587.0 588.5 579.2 580.8	578.5 587.5 592.6 596.5 577.3 583.8	586.0 587.2 600.0 596.5 576.2 604.4	591.6 590.5 581.4 591.6 578.8 582.5	591.2 583.0 586.0 589.0 595.6 581.0
23 24 25 26 27 28	589°0 582°0 583°8 577°0 576°3 576°2	589°2 582°4 586°5 580°5 578°5 573°2	588.8 578.2 584.5 576.0 576.0 561.0	578.5 571.0 570.8 573.0 572.0 554.5	570.7 562.0 565.8 568.0 567.8 568.5	568.8 563.4 566.5 568.0 566.6 574.0	570°0 573°0 575°0 572°5 569°2 570°0	582.0 573.0 583.8 585.0 587.5 568.2	572.0 580.0 586.5 601.4 592.2 578.1	583.0 589.0 587.5 581.0 590.8 589.6	591 ° 0 594 ° 2 588 ° 0 589 ° 8 614 ° 8 583 ° 5	602.2 605.5 584.2 631.6 577.8 593.0
30		575.6	571.2	566.8	567.0	563.0	561.0	571.0	579.0	579.2	580.4	576.7
Hourly Mea	ins 575:15	574.26	571.38	563.41	561.37	563.59	568.01	576.82	581.63	583.98	583.73	584.9
/ 1	72°0	73.0	74.0	темрі 74°4	75.4	76.0	LAR MAGN	ет. 76°5	77.0	77.2	77.2	77.4
HSD 12 13 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	71.0 73.0 76.5 78.7 76.8 75.5 73.0 69.3 70.0 75.0 76.7 73.0	71.5 73.4 77.0 78.3 77.6 75.5 72.3 70.0 70.4 75.0 77.5 73.5	74.0	74.4 73.0 75.2 78.5 79.2 77.0 75.0 ————————————————————————————————————	75 4 73 7 76 0 79 5 80 6 77 4 75 0 — 73 4 72 3 73 0 76 2 76 9 76 0	75.0 77.4 80.7 81.4 78.3 75.0 74.1 73.0 74.2 77.0 77.3 77.2	75.8 78.5 81.5 81.7 79.4 75.5 73.6 75.3 78.0 77.4 77.5	76 5 77 0 79 2 82 2 81 8 80 0 76 2 75 0 74 0 75 8 78 7 77 5 78 2	77.7 79.7 82.6 82.2 81.0 76.5 	77.2 78.7 81.0 83.3 82.4 81.5 77.0 — 76.5 74.8 77.3 78.5 78.5 79.6	79.0 81.4 83.8 82.7 81.5 77.0 77.2 75.3 77.8 78.8 78.5 80.0	79.0 81.8 83.8 82.7 82.0 77.0 
AUGUST. 15	71.5 68.2 65.8 67.5 67.0 70.6	72.0 68.2 66.2 67.4 67.4 70.6	72.5 68.5 66.4 67.2 68.0 70.6	72.8 69.4 66.6 67.0 68.6 70.4	73.6 69.5 66.5 67.2 69.7 70.5	74.4 69.9 67.4 67.4 71.0 71.0	74.6 69.8 67.8 67.5 71.7 71.5	74.6 69.8 68.5 68.0 72.0 71.8	74.8 70.0 69.0 68.4 72.5 72.3	75.0 70.4 69.5 68.4 73.2 72.6	75°3 70°7 69°5 68°6 73°5 72°6	75:4 71:0 69:5 68:7 74:2 72:8
24 25 26 27 28 29 30	68.5 66.6 69.4 69.6 71.0 71.9	69.0 67.0 69.5 70.0 70.8 72.0	69.5 68.0 70.7 70.5 70.8 72.5	70.4 69.4 71.4 72.0 71.0 73.2	71.2 70.7 72.0 72.8 71.5 74.0	72.0 71.4 72.6 74.2 72.4 75.0	72°3 71°8 73°0 75°0 73°0 76°2	72.4 72.4 73.5 75.0 73.6 76.2	72.5 72.7 74.0 75.6 74.6 75.7	72.6 73.8 74.8 75.8 75.6 75.8	72.7 74.0 75.0 75.8 76.0 75.3	73.1 74.5 74.7 75.0 75.8 75.0
/ 31	73.2	72.5	73.8	74.2	75.4	76.0	76.6	77.5	78.4	78.9	79.2	79.2
Hourly Me	ns 71.59	71.83	72.08	72.69	73.46	74.28	74.83	75.28	75.74	76.26	76.48	76.6

<sup>&</sup>lt;sup>a</sup> Fourteen minutes late.

<sup>&</sup>lt;sup>b</sup> Five minutes late.

c Ten minutes late.

12h.  Sc. Div. 577 0  572 0  565 8 572 0	13h.	14h.	15h.		1		· ·		T	1	perature, 1.6	
577.0 572.0 565.8 572.0			10	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily an Monthl Means.
572°0 565°8 572°0	Sc. Div. 573 0	Sc. Div. 564 0	Sc. Div. 568 4	sc. Div. 568 6	Sc. Div. 568 0	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
65°8 72°0		-	"	0000	000 0	567.5	577.4	576.5	580.2	578.8	$ 577\cdot 2 $	572.00
65°8 72°0	566.2	564.8	570.2	569.0	500:0							571.94
72.0					569.2	570.2	572.0	575.0	574.0	568.4	569.0	
	564.0	567.8	571.0	577.5	571.0	567.0	570.0	568.2	568.0	571.0	572.0	568.43
	574.0	556.5	560.0	563.9	564.2	563.0	567.0	573.0	578.0	577.5	577.2	568:42
65.0	552.7	564.0	567.5	570.0	519.5	567.7	561.4	557.2	489'1	538.4	536.0	558.6
61.2	551.7	562.5	562.0	568.2	566.2	548.0	479'0	547.8	559.5	535.8	522.5	554.2
77.6	562.2	565.0	562.8	562.4	571.0	010	1100	01.0			1	ł
111 0	002 2	0000	-	002 1	0,10	561.2	569.0	550:0	566.0	579.2	575.5	566.03
~~~	EC4:4	566.8 р	573.0	571.0	r71.0			559.0				500 6
60.2	564'4				571.8	571.5	572.0	577.0	580.0	584.0	581.0	568 6
72.2	578.6	569.5	571.0	564.8	577.2	579.0	589.0	583.5	583.0	583.2	583 2	577.5
70.0	564.0	564.0	549.0	555.5	556.0	567.0	561.2	552.0	560*2	566.0	579.0	568.74
71.0	569.5	568.0	551.2	560.8	543.0	542.2	497.4	559.4	563.2	572 <b>·</b> 8	578.0	563.64
72.4	569 2	575.0	540.3	552.8	554.5	555.2	563.2	555.0	578.2	560.6	550.8	562.50
10.5	564.4	555.0	564.0	560.5	551.0	000 2	300 3	000 0	070 2	000 0	l II	
10 Z	004 4	333 0	1004.0	300 Z	551 0						574.0}	564.23
<u> </u>		70.5.	70.41-			552.8	545'0	558.9	560.0	561.0	0/4 01	
76'6	565 5	585.4	584.8	565.0	573.0	576.6	582*2	582.0	580.0	576.0	580.2	576.13
81.5	581.0	565*6	564.0	577.2	570.0	584.5	585 <b>.2</b>	585.0	583°8	582.0	575.4	577:83
82.5	581.2	582.5	574.0	585.0	586.2	588.2	589.2	596.8	587.0	588.2	589.2	585.20
80.5	586.0	586.2	587.2	588.0	588.8	588.4	587.8	588.4	585.2	586.0	570.2	585.28
75·2	582.2	581.0	583.8	585.5	583.0	585.0					580.0	579.70
						000 U	582.8	582.0	57919	580.0	000 0	013 11
82.5	572.5	577.0	579.5	579.0	579.0		<del></del>	<del></del> _			\ <del></del>	580.36
_			ı —			586.0	585.0	584.8	583.8	590.0	582.2}	
77.2	568.0	568'0	569.0	564.0	574.0	592.8	581.0	580.6	582.2	578.0	566.5	578.60
88'0	570.5	566.2	557.0	563.2	578.7	578.7	58 <b>2</b> ·5	581.5	578.6	583.5	585.0	577:79
86.0	581.6	578.0	577.8	568.8	563.2	579.4	568.2	577.8	577.5	575.4	580.0	578.19
			570.0								- 1	580.18
64.0	565.0	569.0		572.8	582.5	581.5	590.6	585.0	587.0	571.2	582.0	
60'4	574.0	578.0	587.5	561.0	564.0	571.0	575.0	567.4	579.6	567.4	567.8	<b>575°9</b> 4
73.0	574.5	575.0	572.0	577.0	582.8		-					574.86
			_	<b>—</b>		567.2	572.2	584.2	580.0	576.0	573.0}	
72.0	571 0	572.0	568.0	569.0	572.2	573.0	573.2	574.4	580.5	576.2	575.5	572.84
74.83	570.27	570.26	568.65	569.24	586*46	571.73	568.42	573.55	573.25	573*34	572.41	572 61
				TEM	PERATURE	OF THE B	IFILAR MA	GNET.				5
77.5	77.0	76°1	75°7	75°7	7Š·5	74.3	0	<u>•</u>	<u>-</u>	<u>-</u>	<u>-</u> 1	75°06
	l	<u> </u>		l	-	l	73.6	73.2	73.0	72.2	71.5}	10 00
78.7	78.5	77.6	77.2	76.8	76.4	75.8	75.0	74.2	74.2	73.8	73.2	75.64
82.0					70.5				78.0	77.8	76.9	78.53
	81.6	81.2	80.2	80.5	79.5	79.0	78.7	78.2				
83.8	83.2	83.4	83.0	82.7	82.2	82.1	81.4	81.0	80.2	80.0	80.2	81.3
82.6	82.6	82.4	81.8	81.5	80.6	79.8	79.2	78.7	78.0	77.6	77.3	80.48
81.8	81.5	80.5	80.0	79.6	·79°0	78.8	78.0	77'8	77.2	76.6	76.2	78.98
77:0	76.5	76.5	76.2	75.8	75.6						— า l	75.0
			•••	,,,,,		73.6	73.6	73.0	72.8	72.6	$\{-72\cdot_0\}$	75.28
77'4	77:3	75.8	74.4	73.8	73.0	72.5	72.2	71.7	71.2	70.4	69.2	73.88
5.2									71.0	70.2	70.5	72.70
	75.2	74.2	73.5	73.0	72.8	72.2	71.4	71.1				
8.0	77.4	76.6	76.2	76.0	75.7	75.4	75.0	74.7	74.5	74.4	74.2	74.9
9'0	79.0	78 <i>.</i> 5	78.0	77.6	77.5	76.7	76.4	75.8	75.4	75.0	75.4	77:04
9.0	78.8	78.0	77.8	77.6	76.6	76.0	75.0	75.0	74.5	74.0	73°4	76.84
0.4	80.2	79.6	79.0	78.7	78.5		_				n l	
_		.5 5	.50	,,,,		73.2	72.8	72.5	72.2	72.0	71.5}	76.4
5.2	74.8	74.0	70.0	70.5	70.0			$\frac{72.3}{70.2}$	69.8	69.2	68.8	72.8
		74.0	73.2	72.5	72.0	71.5	70.8					
1.0	70.9	70.2	70.0	69.3	68.7	68'4	67.8	67.8	67.6	67.0	66.6	69:20
9.5	69.0	69.0	68.6	68.6	68.2	68.2	68.0	67.7	67.9	68.0	67.6	68.0
8.8	68.8	68.8	68.7	68.6	68.4	68.4	68.9	68.0	67.8	67.5	67.2	68.0
4'0	74.0	73.6	73.3	73.3	72.6	72.4	72.0	71.7	71.5	71.5	71.0	71.6
2.5	72.4	72.0	71.9	71.7	71.6	,		_			- }	
	, <u>4</u> . I	120	113	** *	110	71.0	70:0	70.4	70.0	69.5	69.0}	71.26
3.4	70.0	70:0	70.0			71.0	70.9					70.88
	73.2	72.8	72.0	71.4	70.5	70.0	69.2	69.0	68.4	67.7	67.2	
4.5	74.0	73.5	73.0	72.6	72.2	71.8	71.5	71.0	70.6	70.4	69.8	71.5
4.7	74.0	73.8	73.6	72.8	72.2	72.0	71.2	71.0	70.6	70.2	70.0	72.36
5.3	75.0	74.6	$74 \cdot 2$	73.8	73.2	72.6	72.1	72.0	71.8	71.7	71.5	73.3
	75.6	75.6	75.4	75.0			74.0	73.7	73.2	73.0	72.6	73.69
					74.5	74'1	1	- 1	10 4	100		
5.8	74.8	74.0	73.6	73.2	73.0					— —	$\frac{-}{73.0}$	74.15
5.4	I.		3			74.7	74.4	74.0	73.6	73.2	- 7310 U	
5'4		1	1									<u> </u>
	78.3	77.7	77.4	77.0	76.7	76.3	76.0	75.6	75.2	75.0	74.3	76.41

		ne Scale D	ivision = '	000087 parts	s of the H. ]		ONTAL FO	ORCE.	esponding to	1° decreas	e of Temper	ature, 1·63.	
Mean G gen T	öttin- }	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	4h.	5 <sup>h</sup> .	6 <sup>h</sup> .	7h.	8h.	9h.	10h.	11h.
	1 2 3 4 5	Sc. Div. 576 ° 0 574 ° 5 572 ° 0 528 ° 0 575 ° 2	sc. Div. 572 2 570 4 567 0 544 2 537 8	Sc. Div. 566 0 561 0 559 0 564 2 555 4	sc. Div. 569 6 555 4 552 0 551 4 575 2	sc. Div. 564 ° 0 558 ° 5 547 ° 3 547 ° 0 522 ° 5	sc. Div. 566 5 562 2 552 0 541 4 544 0	Sc. Div. 571 5 568 2 561 8 546 2 538 0	Sc. Div. 571 0 572 2 573 2 558 0 548 0	Sc. Div. 576 ° 0 575 ° 2 581 ° 0 571 ° 4 567 ° 0	sc. Div. 576 5 583 0 590 2 579 4 624 0	Sc. Div. 576 ° 0 577 ° 0 589 ° 6 576 ° 3 585 ° 0	Sc. Div. 570 7 573 2 585 2 579 0 548 0
من	6 7 8 9 10 11 12	575.2 565.8 574.0 584.0 525.8 572.0	574.0 571.5 577.0 585.2 578.8 574.8	568 5 551 0 569 3 583 0 556 4 575 0	560 * 8 547 * 5 560 * 0 574 * 4 571 * 0 541 * 0	556.0 532.5 565.2 568.5 568.0 544.0	552.0 526.0 561.4 568.2 543.0 557.0	554.0 548.5 563.0 572.2 535.0 567.0	564.0 557.0 568.8 589.0 580.0 571.0	569·2 575·2 577·2 592·0 578·0 583·2	573.0 585.0 587.4 594.8 594.0 576.0	573 · 2 573 · 2 585 · 8 592 · 0 569 · 0 578 · 8	568.4 568.2 590.0 587.0 582.0 580.0
SEPTEMBER.	13 14 15 16 17 18 19	575.2 575.0 592.0 595.4 606.2 603.0	551.0 570.0 586.2 595.0 597.5 596.5	550.0 569.5 579.8 594.2 596.6 595.4	549.0 558.2 581.2 587.0 591.2 591.0	551.0 561.9 583.6 574.0 586.6 578.0	549.0 569.2 585.6 572.5 582.9 575.0	557.4 569.6 586.6 580.0 587.0 583.0	566.4 575.2 586.5 584.2 594.0 581.2	576·2 583·0 592·0 595·0 601·0 594·0	574.5 591.6 597.0 601.0 606.5 590.2	576.8 583.0 594.0 596.2 602.0 588.0	568'4 576'4 592'7 598'0 600'0 593'2
	10 21 22 23 24 25 26 27	600.0 514.4 596.6 588.9 598.4 606.4	596.5 488.7 592.8 585.8 591.2 599.4	586.5 456.1 587.5 573.9 589.4 594.4	576.0 467.7 577.2 566.2 580.9 591.6	572·2 516·8 568·2 564·4 579·4 578·2	577.0 525.9 572.0 563.8 578.4 583.6	583.6 545.4 574.0 568.5 595.9 583.8	594.2 596.1 581.4 574.4 593.8 595.2	606.4 603.5 593.0 586.4 601.4 603.2	586.6 626.3 589.0 603.4 604.2 605.2	590.5 639.0 590.4 593.4 606.4 605.9	602'0 580'0 612'4 589'4 606'2 614'2
	28 29 30	611.8 608.6	608.0 608.6 606.1	608.4 604.0 600.6	602.6 601.4 594.0	598.8 590.6	598.8 596.0 588.8	600.0 600.1 590.6	608.6 600.6 598.1	603.6 603.6	606.6 606.6	610.8 601.1 614.6	612.6 606.6 616.8
Hourly	Means	581.01	577.93	572.89	568.21	564.38	565.08	570.42	580.08	588*55	594.64	591.19	588.48
	, li					ERATURE O		LAR MAGN	· · · · · · · · · · · · · · · · · · ·	<u>-</u>		· -	1
	1 2 3 4 5 6	73°6 76°5 77°2 74°8 75°8	73°8 76°0 77°0 75°3 76°4	74°4 76°0 77°0 75°7 76°5	75.4 77.0 76.7 76.2 77.5	76.4 77.6 76.7 76.2 78.0	77°3 78°3 77°0 76°5 78°5	78.8 78.8 77.0 76.8 78.5	79°5 79°7 77°2 77°0 78°2	80°0 80°5 77°2 77°5 78°4	80°.4 81°0 77°.2 78°.0 78°.5	80°6 80°2 77°0 78°2 78°8	80°7 81°0 76°8 78°0 78°7
č	7 8 9 10 11 12 13	74.2 75.0 67.2 66.8 68.5 72.5	75.0 75.4 67.4 66.8 69.0 73.4	76:0 75:4 68:0 67:5 69:6 74:4	77.5 75.9 68.6 68.6 70.6 75.5	78°3 75°8 69°0 69°0 71°4 76°4	78 9 76 0 69 6 69 6 72 2 77 4	79.4 76.1 69.5 69.6 73.0 78.2	80.6 76.1 69.4 69.8 73.6 76.8	81.6 76.2 69.4 69.9 74.4 76.4	81.9 76.0 69.5 70.3 75.2 75.8	82.1 75.6 69.6 70.5 75.0 75.6	82.0 75.0 69.6 70.7 75.4 75.8
SEPTEMBER.	14 15 16 17 18 19 20	74.2 73.0 66.0 65.8 64.1 64.2	74.2 72.5 66.0 65.6 64.0 64.0	74.5 73.0 66.2 65.4 64.0 64.4	75°2 73°2 67°0 65°2 64°8 65°5	76.6 73.0 67.7 65.3 65.9 66.3	77.8 72.8 68.1 65.5 66.5	78.2 72.2 68.2 65.7 67.0 68.4	78.8 72.0 68.4 66.0 67.5 69.0	79.4 72.0 68.6 66.4 68.0 69.7	79.8 72.4 69.0 66.4 68.5 70.4	79.7 72.4 69.0 66.4 68.6 71.0	79.6 72.4 69.4 66.0 68.8 71.4
	21 22 23 24 25 26 27	65.5 61.4 61.4 68.0 63.8 60.0	65.0 61.6 61.4 68.0 63.0 60.0	64.5 61.7 62.2 68.0 63.0 60.5	64.2 63.0 62.8 68.0 62.6 61.4	65.1 63.5 64.0 68.0 62.4 62.0	64.5 63.8 65.2 68.1 62.4 62.7	64.8 64.3 67.4 68.3 62.4 63.0	65°2 64°5 67°5 68°4 62°4 63°4	65 · 4 65 · 2 68 · 2 68 · 2 62 · 4 63 · 2	66.0 66.0 68.9 68.2 62.6 63.5	66.4 66.5 69.4 68.0 62.6 63.5	66.5 66.5 70.2 67.7 62.0 63.5
	28 29 30	56.8 60.5 63.0	56°4 60°5 63°0	56.8 60.8 63.5	57·4 62·4 64·4	58°1 62°4 65°5	59.0 63.6 65.9	59°4 64°4 66°4	59.8 64.6 66.9	60°4 65°2 67°7	61.2 65.8 68.2	62°0 65°8 68°5	62.2 65.6 68.0
ourly l	Means	68.07	68.10	68.42	69.10	69.64	70.18	70.61	70.86	71.21	71.57	71.65	71.67

	One Scal	e Division =	= '000087 p	arts of the ]		RIZONTAI ease in Scale		orresponding	r to 1° decre	ase of Tem	perature, 1°6	3.
12h	13h.	14 <sup>h</sup> .	15h.	16h.	17 <sup>h</sup> .	18h.	19h.	20h.	21h.	22h.	23h.	Daily an Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
571.4	567.2	571.2	573.2	571.6	567.8	569 2	574.0	569.0	568.4	571.2	574.5	571.03
571 '2	582.4	574.0	575.6	574'8	576.1	574.6	571.0	572.0	572.0	571.2	572.0	571.57
585.6	583.0	583*2	585.0	591.0	581.0	591.0	572.0	546.0	556.0	542.0	536 <b>·3</b>	570.10
560.4	566.0	558.0	567.0	564.3	573.0	568.0	574.8	546.2	530.0	546.2	569.4	558°95
562.0	543 2	554.5	557.6	557.0	558.2		<del>-</del>		<b>—</b>		<del>-</del> 1	561.98
						570.6	573.8	572.2	572.0	572.2	573.4	i
568.0	567.0	564.8	568.2	562.4	565.0	557.8	549.2	546.4	550.0	558.8	558.0	562.66
572.0	571.8	575.0	578.0	577.8	579.0	581.0	576.6	579.0	579.0	576.9	573.0	567.52
585.8	579.0	582.2	584.0	585.0	584.0	583.6	583.0	581.5	581.0	583.0	584.2	578.10
580.0	577.8	586.0	a	586.5	590.0	584.2	588.0	569.0	568.2	566.0	596 <b>°</b> 8	581.87
578.0	578.0	580.0	560.2	541.6	564.8	563.2	570.5	560.0	531.4	579.4	570.8	564 95
576'4	576.2	573.0	581.8	580.0	580.2	·		_	_	<u> </u>	1	570.6
_	l —		<b> </b> —	_	l —	577 2 в	578.5	534.0	566.0	577.5	574.0}	370 6
566'0	565.5	566.8	573.5	566.4	563.0	574.0	567.0	558.9	566.6	555.8	585.0	564.78
581'0	583.4	583.8	585.8	586.4	587.0	587.2	587.5	587.5	586.2	589.5	586.2	579.77
589.9	592.8	590.0	584.0	589.3	583.0	586.2	592 0	591.2	587.4	582.2	599.8	588.58
<b>594</b> 0	579.0	591.2	595.0	595.2 c	597.0	597.2	600.0	597.0	596.6	602.4	603.9	592.54
597.2	594.6	595.8	595.8	601.0	593.8	594.8	595.2	597.0	598.6	600.5	603.2	596.62
592.0	592.8	591.0	590.0	591.4	593.0		-				~~~~~	
	-					593.0	598 <b>·8</b>	592.0	590.0	59 <b>5</b> '5	596.2	591.0
605.5	586.0	591.0	601.0	589.0	568.0	610.0	541·2	548.5	233.0	506.0	571.8	580'10
558 <b>·</b> 5	567.5	564.5	560.0	558.0	561.2	565.0	581.6	587.0	593.7	594.0	595.4	560.26
587 <b>·</b> 6	590.0	591.2	593.4	571.4	584.4	586.0	593.2	587.8	581.4	587.4	590.4	586.61
596.7	589 4	592.6	595.6	594.2	596.6	596.0	596.6	596.0	598.4	601 6	599.9	588.00
607.9	604.6	598.4	606.2	600.4	602.6	602'4	598.8		585.4	603.4	607.4	597.56
596 <b>·</b> 2	609.4	609.2	607.5	606'4	606.4	002 4	990 0	598.4	303 4	000 4	001 +	
	003 4	005 2	00.0	005 4	000 4	611.9	510.4	611.9	609.4	612.4	616.4	602.86
589.4	601.9	610.6	611.1	608.1	610.8	610.6	610.8	612.8	615.3	614.0	613.2	607.72
607.6	606.4	609.4	607.6	608.6	603.6	602.8				609.8	608.6	605.24
600.6	593.6	594.0	603.6	612.1	600.6		605.8	608.6	609.8			599.47
000 0	090 0	094 0	003 0	012 1	000 0	590.8	583.6	591.0	590.4	599.6	603.4	033 47
583.88	582 63	583.89	585'63	583.46	583.48	585.73	583.61	578.46	577.56	580.70	587:06	580.78
				TE	MPERATUR	E OF THE I	SIFILAR MA	GNET.				
80.6	79.8	79.4	79.2	78·6	78·3	78°0	77.5	77.2	77.0	76°8	76·7	,7°, 192
81.0	80.6	80.4	80.0	79.5	79.0	78.8	78.7	78.4	78.2	78.0	77.5	78.86
76.7	76.2	76.2	76.4	76.2	76.2	76.2	75.5	75.2	75.2	75.5	75.0	76.21
78.0	77.8	77.5	77.5	77.4	77.0	77.0	76.5	76.5	76.4	76.2	76.0	76.83
78.5	78.5	78.1	77.7	77.0	76.8	'' 0	100	1	10 4	l		
	100	101	1 ' ' '	110	100	75.5	75.5	75.2	75.0	75.0	$\{74.5\}$	77.13
81.8	81.3	81.0	80:5	79.8	79.4					76.0	75.5	78.87
74.4	74.0		80.5			79.0 71.0	78.0	77.0	76.0	68.6	68.0	73.52
69.6	69.0	73.6 69.0	73.0	72.3	71.5		70.6	70.0	69.0	67.0	66.8	68.43
70.9	70.2		68.2	68.3	68.0	67.8	67.4	67.2	67.0			69.29
		70.5	71.7	70.0	69.5	69.3	69.0	69.0	68.8	68.5	68.5 72.8	
	75°2 76°0	75.6	74.7	74.7	74.2	74.2	73.6	73.2	73.2	73.0		73.22
75.5	Į.	75.6	75.2	75.0	74.6	75.7	75.7	75.5	75.3	75.0	$\{74.2\}$	75.49
75°5 75°8		· —	ı —	79.2	78 <b>·</b> 6	75.7					73.5	77.5
75°5 75°8 —	80:0	70.0	) h		/× 6	78.3	77.5	77.0	75.7	74.5	66.8	71.00
75.8 75.8 80.0	80.0	79.8	79.5						~ · · ·			
75.5 75.8 — 80.0 72.6	80°0 71°5	71.2	70.8	70.5	69.5	69.0	68.5	68.1	67.5	67:0		
75.5 75.8 — 80.0 72.6 69.0	80°0 71°5 68°5	71°2 68°4	70°8 68°0	70°5 68°0	69 <b>·</b> 5 67 <b>·</b> 7	69°0 67°5	68.5 67.0	68°1	66.2	66.2	65*8	67.6
75.5 75.8 80.0 72.6 69.0 66.0	80°0 71°5 68°5 65°6	71°2 68°4 65°6	70°8 68°0 65°3	70°5 68°0 65°0	69°5 67°7 65°0	69°0 67°5 64°8	68.5 67.0 64.6	68.1 67.0 64.6	66.5 64.5	66°2 64°4	65°8 64°2	67°63
75.5 75.8 80.0 72.6 69.0 66.0 68.6	80°0 71°5 68°5 65°6 68°5	71.2 68.4 65.6 68.0	70°8 68°0 65°3 67°6	70°5 68°0 65°0 67°0	69°5 67°7 65°0 66°8	69°0 67°5	68.5 67.0	68°1	66.2	66.2 64.4 64.8	65.8 64.2 64.5	67°63
75.5 75.8 80.0 72.6 69.0 66.0	80.0 71.5 68.5 65.6 68.5 71.2	71°2 68°4 65°6	70°8 68°0 65°3	70°5 68°0 65°0	69.5 67.7 65.0 66.8 69.4	69.0 67.5 64.8 66.2	68.5 67.0 64.6 65.6	68°1 67°0 64°6 65°5	66°5 64°5 65°1	66.2 64.4 64.8	65.8 64.2 64.5	67.63 65.39 66.50
75.5 75.8 80.0 72.6 69.0 66.0 68.6 71.3	80.0 71.5 68.5 65.6 68.5 71.2	71.2 68.4 65.6 68.0 70.6	70°8 68°0 65°3 67°6 70°1	70°5 68°0 65°0 67°0 69°9	69.5 67.7 65.0 66.8 69.4	69.0 67.5 64.8 66.2 — 68.4	68.5 67.0 64.6 65.6 — 68.2	68.1 67.0 64.6 65.5 — 68.3	66.5 64.5 65.1 — 68.2	66.2 64.4 64.8 — 67.4	65.8 64.2 64.5 — 66.4	67.63 65.39 66.50 68.38
75.5 75.8 80.0 72.6 69.0 66.0 68.6 71.3 66.8	80.0 71.5 68.5 65.6 68.5 71.2 — 66.3	71 · 2 68 · 4 65 · 6 68 · 0 70 · 6 — 65 · 7	70°8 68°0 65°3 67°6 70°1 — 65°4	70.5 68.0 65.0 67.0 69.9 — 64.8	69.5 67.7 65.0 66.8 69.4 ————————————————————————————————————	69.0 67.5 64.8 66.2 — 68.4 64.2	68.5 67.0 64.6 65.6 — 68.2 63.5	68°1 67°0 64°6 65°5 — 68°3 63°0	66.5 64.5 65.1  68.2 62.6	66.2 64.4 64.8  67.4 62.2	65.8 64.2 64.5 — 66.4 62.0	67.63 65.39 66.50 68.38
75.5 75.8 80.0 72.6 69.0 66.0 68.6 71.3 66.8 66.4	80.0 71.5 68.5 65.6 68.5 71.2 66.3 66.1	71 · 2 68 · 4 65 · 6 68 · 0 70 · 6 — 65 · 7 66 · 0	70°8 68°0 65°3 67°6 70°1 — 65°4 65°5	70.5 68.0 65.0 67.0 69.9  64.8 65.0	69.5 67.7 65.0 66.8 69.4 — 64.4 64.5	69.0 67.5 64.8 66.2 — 68.4 64.2 64.0	68.5 67.0 64.6 65.6 	68.1 67.0 64.6 65.5 — 68.3 63.0 63.0	66.5 64.5 65.1 	66.2 64.4 64.8 	65.8 64.2 64.5 ————————————————————————————————————	67.63 65.39 66.50 68.38 64.73 64.13
75°5 75°8	80.0 71.5 68.5 65.6 68.5 71.2 — 66.3 66.1 70.2	71.2 68.4 65.6 68.0 70.6 ————————————————————————————————————	70°8 68°0 65°3 67°6 70°1 — 65°4 65°5 69°7	70.5 68.0 65.0 67.0 69.9 	69.5 67.7 65.0 66.8 69.4 ————————————————————————————————————	69.0 67.5 64.8 66.2 	68.5 67.0 64.6 65.6 	68.1 67.0 64.6 65.5 — 68.3 63.0 63.0 69.0	66.5 64.5 65.1 ————————————————————————————————————	66.2 64.4 64.8 	65.8 64.2 64.5 — } 66.4 62.0 62.0 68.4	67.63 65.33 66.50 68.33 64.73 64.13
75.5 75.8 80.0 72.6 69.0 68.6 71.3 66.8 66.4 70.2 67.3	80.0 71.5 68.5 65.6 68.5 71.2 — 66.3 66.1 70.2 67.2	71 · 2 68 · 4 65 · 6 68 · 0 70 · 6 — 65 · 7 66 · 0	70°8 68°0 65°3 67°6 70°1 — 65°4 65°5	70.5 68.0 65.0 67.0 69.9  64.8 65.0	69.5 67.7 65.0 66.8 69.4 — 64.4 64.5	69.0 67.5 64.8 66.2 — 68.4 64.2 64.0	68.5 67.0 64.6 65.6 	68.1 67.0 64.6 65.5 — 68.3 63.0 63.0	66.5 64.5 65.1 	66.2 64.4 64.8 	65.8 64.2 64.5 ————————————————————————————————————	67.63 65.33 66.50 68.33 64.73 64.13
75.5 75.8 	80.0 71.5 68.5 65.6 68.5 71.2 — 66.3 66.1 70.2 67.2 62.0	71.2 68.4 65.6 68.0 70.6 ————————————————————————————————————	70°8 68°0 65°3 67°6 70°1 — 65°4 65°5 69°7	70.5 68.0 65.0 67.0 69.9 	69.5 67.7 65.0 66.8 69.4 	69.0 67.5 64.8 66.2 	68.5 67.0 64.6 65.6 	68.1 67.0 64.6 65.5 — 68.3 63.0 63.0 69.0	66.5 64.5 65.1 ————————————————————————————————————	66.2 64.4 64.8 	65.8 64.2 64.5 — } 66.4 62.0 62.0 68.4	67.63 65.39 66.50 68.38 64.78 64.18 67.59
75.5 75.8 80.0 72.6 69.0 66.0 68.6 71.3 -66.8 66.4 70.2 67.3	80.0 71.5 68.5 65.6 68.5 71.2 — 66.3 66.1 70.2 67.2	71.2 68.4 65.6 68.0 70.6  65.7 66.0 70.0 66.6	70.8 68.0 65.3 67.6 70.1 — 65.4 65.5 69.7 66.6	70.5 68.0 65.0 67.0 69.9 	69.5 67.7 65.0 66.8 69.4 	69.0 67.5 64.8 66.2 	68.5 67.0 64.6 65.6 	68.1 67.0 64.6 65.5 — 68.3 63.0 63.0 69.0 65.0	66.5 64.5 65.1 	66.2 64.4 64.8 	65.8 64.2 64.5 — } 66.4 62.0 62.0 68.4 64.2 60.4	67.63 65.33 66.50 68.38 64.74 67.59 66.90 61.90
75.5 75.8 	80.0 71.5 68.5 65.6 68.5 71.2 66.3 66.1 70.2 67.2 62.0 63.4	71.2 68.4 65.6 68.0 70.6 ————————————————————————————————————	70.8 68.0 65.3 67.6 70.1 — 65.4 65.5 69.7 66.6 61.9	70.5 68.0 65.0 67.0 69.9  64.8 65.0 69.5 66.4 61.6	69.5 67.7 65.0 66.8 69.4 	69.0 67.5 64.8 66.2 — 68.4 64.2 64.0 69.6 65.8 61.2	68.5 67.0 64.6 65.6 	68.1 67.0 64.6 65.5 — 68.3 63.0 69.0 65.0 60.8	66.5 64.5 65.1 ————————————————————————————————————	66.2 64.4 64.8 	65.8 64.2 64.5 — } 66.4 62.0 62.0 68.4 64.2 60.4	67.68 65.38 66.50 68.38
75.5 75.8 	80.0 71.5 68.5 65.6 68.5 71.2 — 66.3 66.1 70.2 67.2 62.0 63.4	71.2 68.4 65.6 68.0 70.6  65.7 66.0 70.0 66.6 62.0	70.8 68.0 65.3 67.6 70.1 — 65.4 65.5 69.7 66.6 61.9 62.6	70.5 68.0 65.0 67.0 69.9 	69.5 67.7 65.0 66.8 69.4 ————————————————————————————————————	69.0 67.5 64.8 66.2 ——————————————————————————————————	68.5 67.0 64.6 65.6 	68.1 67.0 64.6 65.5 — 68.3 63.0 69.0 65.0 60.8 — 58.0	66.5 64.5 65.1 	66.2 64.4 64.8 	65.8 64.2 64.5 ————————————————————————————————————	67.63 65.33 66.56 68.33 64.73 64.13 67.55 66.90 61.90
75.5 75.8 80.0 72.6 69.0 66.0 68.6 71.3 -66.8 66.4 70.2 67.3 62.0 63.5 -62.0 65.5	80.0 71.5 68.5 65.6 68.5 71.2 66.3 66.1 70.2 67.2 62.0 63.4	71.2 68.4 65.6 68.0 70.6 ————————————————————————————————————	70.8 68.0 65.3 67.6 70.1 — 65.4 65.5 69.7 66.6 61.9 62.6 — 61.2	70.5 68.0 65.0 67.0 69.9 	69.5 67.7 65.0 66.8 69.4 	69.0 67.5 64.8 66.2 ——————————————————————————————————	68.5 67.0 64.6 65.6 	68.1 67.0 64.6 65.5 — 68.3 63.0 69.0 65.0 60.8 — 58.0 60.7	66.5 64.5 65.1 	66.2 64.4 64.8 — 67.4 62.2 62.8 69.0 64.5 60.4 — 57.3 60.6	65.8 64.2 64.5 66.4 62.0 62.0 68.4 64.2 60.4 	67.63 65.33 66.50 68.33 64.7, 64.1, 67.55 66.96 61.2
75.5 75.8 80.0 72.6 69.0 66.0 68.6 71.3 	80.0 71.5 68.5 65.6 68.5 71.2 66.3 66.1 70.2 67.2 62.0 63.4 — 61.8	71.2 68.4 65.6 68.0 70.6 ————————————————————————————————————	70.8 68.0 65.3 67.6 70.1 — 65.4 65.5 69.7 66.6 61.9 62.6	70.5 68.0 65.0 67.0 69.9 	69.5 67.7 65.0 66.8 69.4 	69.0 67.5 64.8 66.2 ——————————————————————————————————	68.5 67.0 64.6 65.6 — 68.2 63.5 63.5 69.4 61.0 — 58.0 60.5 63.6	68.1 67.0 64.6 65.5 — 68.3 63.0 69.0 65.0 60.8 — 58.0	66.5 64.5 65.1 	66.2 64.4 64.8 	65.8 64.2 64.5 — } 66.4 62.0 62.0 68.4 64.2 60.4 — }	67.63 65.33 66.56 68.33 64.7, 64.1, 67.55 66.96 61.2 60.0
75.5 75.8 80.0 72.6 69.0 66.0 68.6 71.3 -66.8 66.4 70.2 67.3 62.0 63.5 -62.0 65.5	80.0 71.5 68.5 65.6 68.5 71.2 66.3 66.1 70.2 67.2 62.0 63.4 — 61.8 65.2	71.2 68.4 65.6 68.0 70.6 	70.8 68.0 65.3 67.6 70.1 — 65.4 65.5 69.7 66.6 61.9 62.6 — 61.2 64.6	70.5 68.0 65.0 67.0 69.9 	69.5 67.7 65.0 66.8 69.4 	69.0 67.5 64.8 66.2 ——————————————————————————————————	68.5 67.0 64.6 65.6 	68.1 67.0 64.6 65.5 — 68.3 63.0 63.0 65.0 65.0 60.8 — 58.0 60.7 63.4	66.5 64.5 65.1 	66.2 64.4 64.8 — 67.4 62.2 62.8 69.0 64.5 60.4 — 57.3 60.6 63.2	65.8 64.2 64.5 66.4 62.0 68.4 64.2 60.4 	67.63 65.33 66.50 68.33 64.7, 64.1, 67.55 66.96 61.2

	0	ne Scale Div	rision = •00	00087 parts	of the H. F.		NTAL FO		sponding to	1° decrease	of Temperat	ure, 1°63.	
Mean Gö gen Ti	ittin-}	Oh.	1 <sup>h</sup> .	2h.	3 <sup>h</sup> •	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> •	7h.	8h•	9h.	10 <sup>h</sup> .	11h.
	1 2 3	Sc. Div. 598 0 598 0 608 2	Sc. Div. 594.0 595.0 601.2	Sc. Div. 588 0 585 0 594 0	Sc. Div. 576 ° 0 586 ° 8 587 ° 5	Sc. Div. 583 ° 0 582 ° 8 587 ° 2	Sc. Div. 577 5 581 6 589 8	Sc. Div. 589 0 580 6 597 3	Sc. Div. 585 2 593 6 594 6	Sc. Div. 587 6 593 2 605 0	Sc. Div. 590°2 602°0 610°6	Sc. Div. 593°5 601°5 612°2	Sc. Div. 590 6 596 2 607 0
	4 5 6 7 8 9	608.0 605.2 598.0 557.5 578.0 582.0	604.2 601.0 599.0 513.0 583.4 574.0	594.2 596.0 591.2 546.0 585.0 558.0	593°0 586°9 570°5 538°1 579°8 555°2	588 8 583 5 556 0 553 0 567 2 572 8	585 · 2 578 · 8 559 · 0 558 · 0 562 · 4 583 · 0	590 · 2 587 · 5 558 · 0 559 · 2 565 · 5 583 · 2	594.0 588.0 567.0 565.8 567.0 584.4	596.2 594.1 584.5 574.4 575.0 584.6	600°5 601°0 591°0 585°5 573°0 594°0	603 · 2 601 · 0 588 · 0 582 · 4 587 · 5 599 · 0	603.0 602.2 588.8 582.0 589.0 601.0
OCTOBER.	11 12 13 14 15 16 17	611.5 601.4 611.5 614.0 614.5 612.8	596.0 599.0 606.2 611.2 609.4 610.0	593.0 596.7 603.0 605.8 605.4 606.0	599.0 593.5 598.7 599.8 596.8 604.0	595°0 587°0 598°8 595°6 596°2 601°0	593.0 a 584.5 599.2 594.5 600.2 602.0	593 ° 0 585 ° 0 603 ° 2 596 ° 8 602 ° 0 605 ° 0	590.0 595.2 606.2 609.0 611.7	587.9 599.8 608.4 606.0 607.8 616.0	595.0 603.2 605.8 606.0 610.0 626.0	600°0 599°2 603°8 609°5 605°4 620°0	593'8 601'4 603'1 614'5 605'0 618'4
00	18 19 20 21 22 23 24	629°0 620°2 614°0 620°2 624°0 625°0	628.0 624.6 612.2 618.2 621.5 625.4	622.5 611.0 613.7 599.0 612.2 618.0	619.0 603.2 611.0 591.0 609.0 611.0	611.0 b 603.3 608.5 584.0 605.0 610.5	604.0 594.0 602.4 584.3 603.5 611.0	600°0 601°2 609°0 587°0 607°7 617°0	604·2 605·5 608·2 585·6 610·0 619·0	613.0 605.4 619.8 595.3 619.0 606.2	630°0 614°2 613°2 618°8 623°5 619°2	629 ° 0 613 ° 4 629 ° 0 614 ° 2 622 ° 2 621 ° 2	610°5 620°6 613°0 613°5 628°0 625°8
No	25 26 27 28 29 30 31	626.5 617.0 620.2 622.0 622.0 617.5	623.0 616.2 618.5 614.0 617.0 624.0	622°0 610°6 615°0 613°8 621°0	613.8 603.2 605.8 613.5 622.0 618.2	609.0 599.0 601.5 608.4 612.5 616.0	604.2 593.8 600.0 606.0 608.0 617.2	603 · 8 594 · 2 599 · 0 604 · 0 608 · 1 615 · 0	610°4 600°2 601°0 606°0 608°8 620°2	620°0 603°4 613°2 606°2 614°0 620°0	612.4 606.2 614.0 609.0 616.2 620.8	614.8 606.8 618.8 613.4 620.0 627.0	616'2 612'0 625'0 619'3 620'0 629'0
	Means	609.49	605.16	600.83	595.79	593.51	591.74	594.13	597.55	602.07	607.09	608.74	608.48
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	1 2 3	64°2 59°0 55°7	63.8 59.0 55.2	63°5 58°5 56°0	63°0 58°5 57°8	63°0 58°4 58°4	62.8 58.5 58.8	63°0 58°8 59°5	60.0 59.3 60.0	63°0 59°4 60°0	60.4 60.4	63°0 60°5 61°1	62°6 61°1 61°2
	4 5 6 7 8 9	56.4 58.4 61.0 66.0 64.4 59.0	56.2 58.4 61.1 66.0 64.2 58.5	56.4 59.0 62.0 66.0 64.0 58.2	58.0 60.1 63.5 66.2 64.8 58.0	58.4 60.9 64.4 66.4 66.2 58.1	59.6 62.1 65.4 66.8 67.0 58.5	60°5 62°5 65°6 67°0 67°4 58°7	61.2 63.5 66.4 67.0 67.5 59.0	61.4 63.9 66.7 66.6 67.0 59.2	62.9 64.5 67.2 66.6 66.5 59.6	63.5 64.7 67.5 66.6 65.7 60.2	64.0 64.5 67.7 66.0 64.9 60.5
OCTOBER.	11 12 13 14 15 16 17	56.8 61.8 55.9 56.8 56.0 55.8	57.2 61.6 55.5 56.5 55.6 55.1	58.1 61.4 56.0 56.6 55.6 54.8	58.8 61.0 56.7 57.0 55.6 54.5	59.9 60.6 57.0 58.0 56.3 54.3	60.7 60.8 57.6 58.2 57.1 54.6	61.0 60.8 58.0 58.4 57.5 55.0	62.0 60.4 58.3 58.5 58.1 55.0	62.4 59.7 58.4 58.4 58.4 55.0	63.2 59.0 58.8 59.0 58.6 55.1	63.5 58.6 59.0 59.4 59.3 55.0	63.4 58.2 58.7 59.0 59.5 54.3
	18 19 20 21 22 23	48·3 52·6 51·0 54·0 48·2 50·5	48.2 52.5 51.2 53.6 47.8 50.5	48.7 52.5 51.0 52.7 47.2 50.4	50.0 52.3 50.6 53.0 46.8 51.0	51.2 53.0 51.7 53.0 47.3 52.3	52.0 53.8 52.4 53.0 47.8 52.6	52.5 53.4 52.9 52.8 48.4 53.0	52.8 55.0 53.4 52.6 49.2 53.5	53.0 55.2 53.3 52.4 49.3 53.6	53.5 54.8 53.8 52.1 50.0 54.2	54.2 54.8 53.5 52.1 51.0 54.7	53.6 54.5 53.7 51.9 51.3 54.8
	24			50.0	50.2	50.8	51.8	53.0 57.8	54.2 58.0	54.6 58.2	55°5 58°5	55°8 58°3	54.6 57.3
No	25 26 27 28 29 30	49.6 57.4 52.8 52.5 51.4 49.0	50°0 57°4 52°4 51°5 51°2 48°8	57.0 52.6 51.1 50.6 48.5	56.5 52.4 51.7 50.4 49.0	56.6 52.0 52.5 50.5 49.0	57'4 52'2 53'2 51'0 49'0	52.2 53.7 51.5 48.7	52.5 54.0 51.7 48.5	53.8 54.2 52.0 48.5	54.0 54.6 52.0 48.2	54.5 54.6 52.5 48.2	54.5 54.6 51.6 48.1

<sup>&</sup>lt;sup>a</sup> Twenty-five minutes late.

b Three minutes late.

	One Scale	Division =	= *000087 p	arts of the 1	HOI	RIZONTAL case in Scale	FORCE.	orrespondin	g to 1° decr	ease of Tem	perature, 1°6	3.
12h.	13h.	14 <sup>h</sup> .	15h.	16h.	17 <sup>h</sup> .	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 593 0 592 0 608 0	Sc. Div. 602 5 568 8 607 7	Sc. Div. 601.8 576.1 607.0	Sc. Div. 598 0 569 3 604 0	Sc. Div. 599 0 575 0 604 0	Sc. Div. 601 0 572 0 595 0	Sc. Div. 602 0 570 0	Sc. Div. 604 2 562 6	Sc. Div. 600°0 575°5	Sc. Div. 601 0 586 0	Sc. Div. 605 0 589 0	Sc. Div. 583°5 590°8	Sc. Div. 593 48 584 31
601.0 576.4 571.2	599 5 593 2 571 4	599.0 594.0 545.5	599°2 594°2 529°0	597.8 592.6 535.0	599'4 594'2 474'0	605.0 599.8 581.2 476.5	607 <sup>2</sup> 600 <sup>8</sup> 591 <sup>2</sup> 539 <sup>0</sup>	605.6 602.4 594.1 537.4	609°0 603°8 599°0 545°0	607.3 605.5 596.6 583.0	610.0 } 605.0 600.0 586.2	602.68 598.90 593.00 560.17
569 4 574 2 601 0	576·2 567·0 603·0	579°0 565°0 602°2	580.0 547.5 604.0	588.0 557.8 600.2	588.0 553.5 602.0	574.0 534.5 —	566.5 547.2	579°0 530°0	590°0 558°4 —	588.0 562.8 —	588.6 591.0 — 606.0	570°07 566°74 590°50
596.6 594.2 607.2	595.8 591.8 604.0	592°2 595°6 606°2	601.5 602.0 607.2	599°0 598°2 607°0	599 2 601 2 606 2	600.5 595.8 601.5 607.0	602.8 600.8 605.0 607.5	582.5 598.8 605.0 610.0	585.0 601.4 605.4 610.0	611.6 601.0 607.0 609.2	605.0 607.0 613.0	597·26 598·33 605·93
606.2 606.0 615.8	596.0 604.0 612.0	916.0 600.0 200.0	595.0 606.2 618.2	625.0 604.0 618.2	584°0 604°2 620°0	593.5 605.2 — 626.4	599.0 599.2 — 625.8	605.0 602.8 ————————————————————————————————————	610°0 606°2 626°2	610°2 608°0 — 628°4	$\{610.5,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613.0,613$	603.75 605.40 616.67
603.8 609.2 605.0 616.5	603.6 613.8 619.0 617.0	605.8 614.0 618.0	596.5 615.0 604.5 619.0	608.0 614.0 590.0 610.0	600°8 613°8 596°0 615°2	605.0 613.0 611.0	609.0 616.0 612.4	610.4 617.0 614.2 617.5	612.0 619.0 610.4 604.2	617.2 618.0 594.6 610.0	617.0 611.2 620.6 616.4	612.05 612.11 610.35 607.61
628 · 2 613 · 4 620 · 0	625.0 611.6 — 620.2	623.8 606.4 ————————————————————————————————————	622.2 636.0 — 623.0	620.0 616.2 	616·2 610·1 614·4	613.0  621.2 617.0	614.0 621.0 616.0	617°2 620°0 615°0	620°0 612°0	623 <b>·2</b> 626·0 614·0	624.0 $-0$ $627.0$	618.09 618.26 615.77
612.0 624.0 619.0 621.5	616.0 623.0 622.8 616.8	611.8 614.0 621.2 607.2	612.5 620.0 618.8 602.0	614.0 615.8 616.2 608.6	613.0 616.0 617.4 615.0	617.0 613.8 614.4 616.0	616.2 620.0 618.2 620.0	616.0 614.2 622.0 621.2	615.6 620.0 622.2 620.0	616.3 622.2 622.8 620.0	619.6 624.6 622.0 626.0	610'11 614'98 615'74 615'70
632.8	630.2	631.2	629.9	630.2	630.0	620.2	616.0	622.0	625.0	624.0	624.8}	623*45
604.36	604.26	602.99	602.03		598°21 MPERATUR	598.04 E OF THE	601.87	602.30 AGNET.	605.13	608.18	610.65	602.27
62°4 61°0	62.1	61.8	61°5	61.0	60°5	6°0	59.7	59°7	59°4	59°0	59.0	61.8 <b>3</b>
61.0	60.8	60.2 60.0 	59.5 60.0	59.4 59.8 —	58.6 59.5 —	58.2	56.7	57·1  56·8	56.7	56.5  56.7	56·2  56·4	58.89 58.52
64.0 67.5 65.6 64.0	63.7 67.3 65.5 63.5	63.5 67.2 65.1 63.1	62.7 63.2 67.5 65.2 63.0	62 2 63 2 67 4 65 0	61.8 63.0 67.1 64.8	61.5 62.6 67.1 64.8	60.8 62.3 67.0 64.5	60°3 62°0 66°9 64°5	60°1 61°6 66°7 64°5	59.7 61.5 66.5 64.5 61.0	59.0 61.2 66.0 64.5 59.5	60°71 62°26 65°95 65°65 64°02
63:2	63.2	59.4 — 63.0	59 <b>.</b> 4  62.8	63.0 58.8 — 62.6	62.6 58.8 — 62.6	62.0 56.5 62.6	62.0 56.6 62.5	61.7 56.6 62.0	61.5 	57°0 61°8	56·9 61·6	58°53 61°54
58.1 58.8 60.0 53.8	57°3 58°1 58°4 60°2 54°0	57.0 57.8 58.0 60.5 53.7	56°6 57°5 57°5 60°6 53°4	56.7 57.2 57.5 60.5 53.0	56.6 56.8 57.0 60.3 52.6	56.5 56.8 60.0	56°2 56°6 56°6 59°2	56°5 56°6 56°6 58°8	56.6 57.0 56.4 58.2	56°2 57°0 56°2 57°6	56.0 56.6 56.6 —	58.51 57.32 57.57 58.34
53.6 54.0 54.0 51.0	53°4 53°5 54°1 51°0	53°2 53°2 54°5	53.0 53.7 55.0	53°0 52°5 54°7	52.7 52.4 54.3	48.4 52.7 52.1 54.0	48.2 52.5 52.0 53.7	48°1 52°2 52°0 54°0	48.0 52.4 52.0 54.0	48.0 52.4 51.6 54.2	48.0 } 52.6 51.4 54.2	52.82 52.15 53.07 53.30
51'1 54'6	51'3 54'4 —	50.9 51.5 54.2	50.6 51.4 53.6	50.4 51.0 53.4	50.0 51.0 53.0	49.6 51.0 — 50.0	49°2 50°6 — 50°0	48.6 50.3 — 49.8	47.8 50.3  49.8	48.0 50.2 — 50.0	$\frac{48.0}{50.0}$	51.18 49.75 52.22
55°3 57°0 54°4 54°0 51°6 48°0	55.5 57.2 54.0 53.7 51.6 48.0	55.6 56.5 53.5 53.7 51.6	56.0 56.7 52.7 53.4 51.0	56.0 56.4 52.7 53.2 50.6	56.0 55.7 52.7 53.0 50.4	56°0 55°0 52°2 53°0 50°2	56.5 54.6 52.2 53.0 50.0	56.8 54.4 52.2 52.0 49.8	57.0 54.2 52.0 51.8 49.8	57°1 54°0 52°6 51°8 49°5	57.3 53.4 52.2 51.2 49.2	54.38 56.48 52.89 53.00 50.90
	48 0	48.0	47°9	47.9	47°7 —	50.0	50.2	51.0	51.7	52.0	$\begin{bmatrix} \overline{52\cdot3} \end{bmatrix}$	49.10
57.78	57.62	57.41	57:20	57.00	56.72	56.16	55.97	55.83	55.75	55.66	55.36	56.70

	0:	ne Scale Div	vision = '0	00087 parts	of the H. F.	HORIZO Increase	NTAL FO in Scale Div	RCE.	sponding to	1º decrease	of Tempera	ture, 1.63.	
Iean Gi gen Ti	sttin- )	Oh.	1 <sup>h</sup> .	2հ.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> •	7 <sup>h</sup> .	8 <sup>h</sup> •	9h.	10h.	11h.
	2 3 4 5 6 7 8	Sc. Div. 624 2 617 4 614 0 618 0 625 0 622 0	Sc. Div. 622 ° 0 613 ° 8 613 ° 5 618 ° 5 620 ° 0 622 ° 2	sc. Div. 608 0 611 2 609 2 613 8 615 0 619 2	sc. Div. 621 '8 600 '0 603 '4 607 '0 609 '2 614 '4	sc. Div. 616 •0 607 · 5 601 · 5 602 · 0 603 · 0 607 · 6	Sc. Div. 603 ° 0 600 ° 2 602 ° 0 598 ° 0 600 ° 2 604 ° 2	sc. Div. 603 · 5 605 · 0 606 · 6 600 · 0 600 · 0	sc. Div. 604 '6 606 '0 607 '0 601 '2 604 '2 607 '0	sc. Div. 607 '8 605 '5 612 '0 606 '2 609 '2 601 '0	sc. Div. 608 ° 0 605 ° 8 610 ° 0 612 ° 0 610 ° 2 599 ° 0	sc. Div. 600°0 612°5 616°0 611°3 617°8 601°8	8c. Div 606 0 601 0 611 2 611 8 620 0 593 8
ER.	9 10 11 12 13 14	617.8 609.0 614.0 616.6 618.3 621.8	616.8 612.0 612.2 615.0 620.0 620.8	612.0 609.0 608.0 611.0 616.2 616.2	607.4 607.5 603.0 605.2 610.4 611.0	605.6 605.0 600.5 602.2 603.8 604.1	600°0 602°0 596°5 598°4 603°0 597°0	595.0 599.0 598.0 598.0 603.2 595.0	598.0 600.0 599.2 604.2 610.5 599.2	600°0 606°0 605°4 609°4 614°0 604°0	608.0 608.0 609.0 615.4 622.4 608.0	611.5 607.0 602.0 616.2 614.4 611.0	611.2 609.2 608.2 617.2 616.2 614.0
NOVEMBER	15 16 17 18 19 20 21	621.2 620.0 604.5 604.0 620.2 621.4	620°2 618°4 602°0 602°8 620°8 619°2	614.0 611.0 598.0 599.0 616.0 614.8	611 ° 0 613 ° 0 592 ° 2 595 ° 4 609 ° 0 608 ° 8	608.0 613.0 581.8 592.4 603.5 602.5	606°2 620°3 592°0 598°0 602°0 598°5	608.6 602.0 594.0 603.2 609.0 602.6	608.0 593.2 594.2 608.9 614.0 607.1	615.0 603.0 595.5 617.0 609.0 610.0	620°0 597°2 597°9 615°0 615°3 614°0	618°0 597°4 597°9 611°6 617°0 618°0	612.0 591.4 598.6 617.0 608.0 619.2
	22 23 24 25 26 27 28 29	628.0 626.5 625.2 652.2 642.0 634.5	626.2 623.0 625.0 655.5 633.8 631.0	622.0 620.0 627.0 652.0 630.2 626.0	617.5 613.4 624.2 619.0 628.0 621.2	612.8 604.8 624.5 623.4 635.2 617.9	610.0 600.2 615.0 612.2 627.5 614.0	611 ° 0 607 ° 0 624 ° 5 604 ° 0 620 ° 0 604 ° 0	616°2 610°8 621°4 611°2 617°0 611°5	621 · 2 617 · 2 632 · 0 625 · 5 625 · 0 614 · 0	626°0 625°8 639°2 621°0 636°0 607°5	628.4 629.2 643.5 617.5 637.0 616.5	631.0 628.2 641.0 609.5 636.0 614.4
	30	628.2	638.6	639.5	621.0	630.8	634.0	634.6	626.0	625.4	632.8	635.2	635.8
Hourly	Means	621.85	620.93	616.73	610.96	608.38	605.38	605°32	607.22	611.61	614.24	615.26	614.4
		· I	I		ТЕМРЕ	ERATURE O	F THE BIFI	LAR MAGN	ET.				
	2 3 4 5 6 7 8 9	52.4 56.2 57.5 53.8 51.9 53.0	52.6 56.0 57.0 53.4 51.5 53.0	52.8 56.0 56.2 54.0 52.0 52.5 —	52.8 56.2 57.0 54.9 52.0 52.2	53.0 56.7 57.7 55.4 52.5 53.0 —	54·1 57·4 58·0 56·4 53·2 53·6 —	54.7 58.1 58.5 57.0 54.0 54.0	55·1 58·4 58·7 57·5 54·8 54·1 —	55.3 58.6 58.9 58.2 55.2 54.4 	55.9 58.8 59.0 59.0 55.8 55.0	56.4 58.8 59.2 59.0 56.5 55.2 —	56.5 58.6 58.8 59.2 56.5 55.0 —
BER.	10 11 12 13 14 15	60.0 59.4 57.5 57.4 56.0	59.6 59.2 57.1 57.2 55.6	59.4 59.0 57.0 56.6 55.2	59.0 59.0 56.7 56.6 55.0	59°9 59°0 56°5 56°6 55°5	60°5 59°5 56°8 56°6 55°6	61°0 59°6 57°0 56°6 55°8	61.6 59.6 57.2 56.8 56.3	61.5 59.4 57.4 56.8 56.1	61.9 59.6 57.8 57.2 56.6	61.3 60.0 58.2 57.0 56.8	61.0 59.8 57.9 56.4 56.5
NOVEMBER.	16 17 18 19 20 21 22	54.9 55.9 57.0 57.4 50.6 52.3	55°1 55°7 57°0 57°0 50°4 51°6	54.5 55.5 56.7 56.6 50.0 51.3	54.4 56.0 56.8 56.4 50.0 50.4	55.2 56.6 57.2 55.8 51.0 50.6	55.5 56.7 58.0 56.0 51.5 51.0	55.8 56.9 59.0 56.3 51.8 51.0	56.0 57.2 59.8 55.6 52.2 51.5	56·1 57·4 60·0 54·9 52·5 51·5	56.5 57.7 59.9 54.9 53.0 52.0	56.5 57.7 59.4 54.6 52.8 51.3	56.6 57.2 58.9 54.4 52.5 51.3
	23 24 25 26 27 28 29	45.6 50.0 46.7 39.6 39.6 49.4	45.7 50.0 46.4 38.8 39.2 49.4	45°3 49°8 45°0 38°2 38°6 49°4	45.5 49.2 45.0 38.6 39.3 49.6	46.0 49.7 43.6 39.5 39.6 49.6	47.0 50.3 42.2 39.6 39.7 49.6	47.5 50.7 41.8 39.8 40.6 49.8	48.2 51.2 41.0 40.0 41.5 49.9	49.0 51.0 40.3 39.6 42.0 50.5	49.4 51.0 40.2 39.5 42.3 51.2	49.4 51.0 39.8 39.5 42.7 51.5	48.6 50.4 39.5 39.6 43.0 51.4
	(30	42.5	42.6	43.0	43.0	43.5	43.5	43.2	43.2	43.2	43.3	43.2	43.5
Hourly	Means	52.53	52.32	52.06	52.10	52.45	52.83	53.18	53.47	53.57	<b>5</b> 3.88	53.92	53.7

ν	One Scale	Division =	'000087 pa	rts of the H		IZONTAL ase in Scale		rresponding	to 1º decre	ase of Temp	erature, 1.6	3.
12 <sup>h</sup> .	13 <sup>h</sup> •	14 <sup>h</sup> .	15h.	16 <sup>h</sup> .	17h.	18հ.	19 <sup>h</sup> .	20 <sup>h</sup> .	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div. 606'4	Sc. Div. 618.0	Sc. Div. 613.0	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
606.0				611.0	610.4	617.2	610.8	612.4	610.2	608.0	615.0	610.97
614.2	611.5	612.2	612.8	610.0	610.4	611.0	611.4	610.0	612.8	616.0	612.4	609.62
606°0	603.2	598.0	606.0	602.2	602.5	605.0	605.2	614.0	608.6	611.0	611.8	607.50
612.0	613.4	611.0	613.8	612.1	612.0	612.9	618.0	619.2	616.5	618.0	624.0	611.78
620'4	620.0	605'2	597.0	604.4	611.0	610.2	608.0	617.0	620.0	619.0	619.8	611.91
604'0	600.2	608.0	611.2	611.8	611.0		<u> </u>		<u> </u>	<u> </u>	! !	609.73
		_			l —	614.0	615.0	616.2	615.3	613.2	$\{616\cdot 2\}$	609 73
611.0	611.0	612.0	609.0	609.2	607.4	608.6	608.2	609.2	609.8	610.0	610.2	608*29
606.2	605.0	611.2	612.0	611.2	611.8	611'2	613.0	613.0	613.0	615.8	614.0	608.82
609.0	611.4	609.0	608.0	606.0	609.0	608.0	610.0	609.2	612.0	614.0	615.0	607.36
616.8	617.1	616.8	614.0	613.8	613.5	613.0	614.0	618.0	619.0	620.0	620.2	612.70
617.0	613.8	614.4	608.0	607.0	608.0	613.0					604.8	612.5
	615.0	615.0	614.2	614.8		019 0	614.2	615.0	612.4	613.0	_	012 21
615.0	010 0	010 0	014 2	014.0	615.2	C01:0	000:0	60110	<u> </u>	617.6	$\{623\cdot1\}$	613*22
	600:0	60110	617.4	612:0	60010	621.2	620.2	621.8	622.0	617.6		
612.6	622.0	621.8	617.4	613.2	609.8	610.0	613.8	616.1	618.0	621.5	622.2	615.02
595.2	589 2	593.8	595.4	590.0	566.0	595.8	584.0	591 <b>°</b> 8	596.0	586.0	574.0	597.38
604.2	603.9	604.8	604.2	605.0	605.2	605.0	605.0	605.0	605.0	605'0	604'4	600.23
613.2	612.0	611.0	615.0	617.0	616.0	618.0	617.0	618.0	617.6	618.0	620°4	610.73
611.0	610.0	615.0	619.7	616.0	617.2	617.7	616.2	620.0	620.2	622.4	618.8	614.50
319'0	621.4	618*4	622.2	620.0	621.8					_	3.1	
	—					619.2	626.0	618.0	628.5	630.2	630.2	617.12
630.2	629.8	629.6	629.1	629.0	627.2	627.2	627.8	627.0	630.5	628.0	628.0	624.72
528.5	628.5	627.0	625.0	626.0	624.9	625.1	628.0	629.0	629.0	630.0	626.0	622.23
641'0	642.9	640.0	643.0	640.2	642.0	642.0	640.0	638.3	633.0	631.2	653.0	634.26
	621.0	626.0	618.2	630.0	627.0	625.3	614.2	627.4		$\begin{bmatrix} 631.2 \\ 639.2 \end{bmatrix}$	640.0	
0.803									642.4			625.70
319.0	622.2	628'4	620.1	641.4	622.2	626.2	624.0	628.0	621.5	620.0	631.1	627.99
616'2	618.8	609.2	653.3	624'0	626'1					20212	}	622.96
537·1	628.2	624.0	628.8	636.0	634.2	630°0 632°6	631 <b>.</b> 2	634.0	628°0	632 <b>.</b> 2	$\left. \begin{array}{c} - \\ 635.5 \\ 636.2 \end{array} \right\}$	632.78
614.74	615.12	615.20	616.42	616.08	614.47	616.78	616.73	618.62	618.84	618.97	620.25	614.80
	1	1	l	TE	MPERATUR	E OF THE	BIFILAR M.	AGNET.	,	<del></del>		····
0	0	0	0	0	0	0	0	0	0	0	0	0
56.5	56.4	56.5	56.9	56.9	57.0	57.2	57.3	57 <b>·2</b>	57.0	57.0	56*6	55.59
59.0	59.4	59.2	59.0	59.0	58.7	58.4	58.1	57.8	57.5	57.2	57.8	<b>57</b> '95
59.0	58.7	58.2	57.5	57.0	56.6	56.2	55.7	55.2	54.5	54.3	53.7	57.22
58.4	57.8	56.8	56.0	55.6	54.8	54.5	53.2	53.0	53.1	52.7	52.0	55.68
56'2	55.7	55.1		54.2	54.2	54.0	53°5	53.2	53.5	53.3	53.3	54·0
55 <b>'0</b>	55.5		54.6		55.7	07.0	<i>00</i> 0	00 0	00 0	00 0	00.0	
JU <b>U</b>	00 2	55.4	55.2	55.6	1	53.2	53.8	54.6	55.0	55.4	55.8	54.3
60.1	60.1	60.1	60:0	60.0	60.4		60.2	60.5				
	60.1	60.1	60.0	60.2	60'4	60.5			60.5	60.2	60.0	59.2
60.8	60.2	60.2	59.8	59.8	60.0	60.0	59.7	59.5	59.2	59.1	59.0	60.18
59.7	59.8	59.8	59.6	59.4	59.1	58.7	58.5	58.3	58*4	58.2	57.9	59.19
57.7	57.5	57.3	56.9	56.7	56.8	57.1	57.4	57.4	57.5	57.5	57.5	57.2
56.2	56.6	56.4	57.0	56.8	56.9	56.9	56.7	56.8	56.6	56.6	56.5	56.73
56.6	56.6	56.7	56.7	56.6	56.3	_			_		$\frac{-}{54.6}$	55.78
		_				54.3	54.4	54°5	<b>54</b> .8	55.0		
56.3	56.8	57.2	57.1	56.8	56.6	56°4	56.2	55.8	55.9	55.8	55.8	55.99
57.2	57.2	57.3	57.4	57.4	57.4	57.5	57.5	57.4	57.4	57.4	57.4	57.0
58.6	58.1	58.0	57.6	57.5	57.4	57.5	58.0	58.0	58.0	57.6	57.6	58.0
53.6	23.3	$52 \cdot 2$	52.0	51.7	51.2	51.2	51.5	51.5	51.0	51.0	50.4	53.7
52.2	52.2	52.2	52.2	52.0	52.0	52.0	52.0	51.8	51.7	51.7	52.0	51.80
51.3	51.6	51.6	51.2			020	02 0	01.0	OT 1	01 (	02 0	
	01.0	οτ Ο	01.9	51.2	51.2	46.0	46.0	45.6	45.6	45.6	45.5	49.9
48.6	40.0	40.0	40.0	40.00								
50.1	48.8	49.3	49'0	48.8	48.7	48.8	48'8	48.7	49.4	49.8	49.6	48.1
	49.5	49.2	49.0	49.0	48.0	47.4	47.0	47.0	47.0	47.0	47.0	49.2
39.3	39.5	39.0	38.2	38.2	38.8	39.2	39.2	39.5	39.7	39.7	39.0	40.9
40.1	40'4	40.2	40.2	40.0	40.0	39.2	39.2	39'7	40.0	40.4	39.9	39.6
44.0	44.2	44°4	44.8	45.6	46'4	46.8	46.2	46.5	46.8	48*4	48.9	43.3
51.6	50.8	50.4	50.0	50.0	50.0				_		— 1	
43.0	42.1	41.5	41.0	40.7	40.2	41.5 41.0	41.5 41.0	41.5 41.0	41.9 41.2	42.4 41.3	$egin{array}{c} 42.5 \ 41.0 \end{array}$	48°14 42°23
-v v	74 I	41 9	41 U	40 /	40 5	41 0	41 0	410	11 Z	41 9	41 0	42 2
53.66	53.55	53.38	<b>53</b> *19	53.09	53.00	52.24	52'13	52.07	52.12	52.18	52.04	52.8

1   630   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631   631		ı											
1   636°6   641'4   638'7   637'2   630'8   627'8   628'2   628'0   630'0   637'5   631'6   630'0   631'7     3   628'7   628'5   628'0   618'0   618'0   611'5   613'0   611'0   622'0   622'5   622'0   625'5     4   630'0   632'7   632'0   618'0   611'5   613'0   611'0   622'0   625'5   627'0   631'4     5   638'0   632'7   632'0   620'0   617'0   619'0   622'0   622'0   625'5   627'0   631'4     5   638'0   638'2   638'2   638'2   638'8   638'8   638'8   638'8   638'8     6   6   6   6   6   6   6   6   6	Mean Göttin- gen Time.	Oh.	1h.	2 <sup>h</sup> .	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> •	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
2 641-2 641-9 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-0 639-	(1	Sc. Div.			Sc. Div.			Sc. Div.	Sc. Div.		Sc. Div.		Sc. Div
\$ 698.7 622.5 623.6 631.0 618.0 618.9 611.5 613.0 617.0 622.0 622.6 627.6 626.2 622.0 622.0 622.6 625.0 627.6 626.2 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.0 622.	2				636.0								631.2
Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Section   Sect					618.0	615.9		613.0	617.0	622.0	625.5		628.0
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29		635.8	636:0	632.0	628:2	697.7	699:9	 617.6	600.0			_	
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TEMPERATURE OF THE BIFILAR MAGNET.    1	\ 31	637.0	634.0	631.4	627.8	624.4	621.0			632.0			637'3
1	Hourly Means	640.95	640.67	638.22	636.53	631.50	627.19	626*65	628.82	633.57	636.87	638.06	638 2
2									ET.				
3				40.0						40°5	4Î 1	41°6	41.8
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Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Second Process   Seco													47.6
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	H / 16									38.4		39.7	.39*8
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	图 17	39.6											41.4
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1.0	42.2	41.8	41.8									43.5
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$				39.2	38.9	35.6	34.6						36.0
$\begin{bmatrix} 25 & & & & & & & & & & & & & & & & & & $						37.3	37.3	37.0	38.0	39.2	40.6		41.3
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29 43.4 42.8 42.0 41.4 41.5 41.8 42.2 42.0 42.1 42.7 43.1 43.4 43.4 43.6 48.6 48.6 48.5 46.8 47.4 48.0 47.6 48.5 48.5 49.0 49.1 49.1 49.1 49.1	27		_				40.4		41.5	41.4	41.2	41.0	41.2
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Jourly Means 49:54 49:41 49:00 49:11 49:10													47.6
	Iourly Moss-	40.74						±1 0	48 0	48 5	49.0	49'1	49.1

<sup>&</sup>lt;sup>a</sup> Christmas Day.

	One Scale	Division =	: 000087 pa	arts of the H		IZONTAL ase in Scale		rresponding	to 1° decre	ase of Temp	erature, 1°63	3.
12 <sup>h</sup> .	13հ․	14 <sup>h</sup> •	15h.	16h.	17 <sup>h</sup> .	18 <sup>h</sup> .	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 633 2	Sc. Div. 631 °0	Sc. Div. 636 8	Sc. Div. 642 ° 0	Sc. Div. 634 0	Sc. Div. 646 0	sc. Div. 632 ° 0	Sc. Div.	Sc. Div. 630°0	Sc. Div. 636'2	Sc. Div.	Sc. Div.	Sc. Div.
626.9	630.9	629.0	628.6	630.0	628.2	625.0	634 2 625 4	626.6	625.2	634°2 625°2	637.6	635.20
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630.6	632.0	630.8	627.2	634.3	629.8	628.0	630.5	632.0	633.8	633.8	633.2	624.60 629.18
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638.2	638.0	636.8	635'8	635.0	634.7	633.2	634.0	633.6	635.2	635.0	634.8	634.22
628.2	624.0	621.0	621.2	620.8	620.6	626.6	630.0	633.8	638.6	634.5	634.4	628.45
625.0	625.6	595.6	605.8	607.8	618.0	617.2	623.2	626.8	627.1	629.6	621.0	623.55
626.2	630'8	624.8	611.6	614.7	620.2	623.3	623.7	630.2	627.6	623.2	635.0	623.36
629.9	627.0	618.4	625.0	632.4	638.0	633'0	635.0	637.0	633.0	631.5	631.0	630.50
637'4	642.0	643.6	639.2	634.5	640.5	· —		_				ļ
		_	-	_		648'4	648.6	650.0	648.4	649.0	$\left  \frac{-}{655\cdot 4} \right\}$	638.72
653.5	649.0	651.0	651.2	651.4	648.3	649.0	651.2	647.8	645.6	653.2	648.7	650.37
647.4	641.0	641.0	648.8	648.2	647.2	648.8	647.2	647.0	647.8	647.8	648.0	645.69
647.4	645'4	645.4	646.9	644.1	644.7	644'7	644.9	644.7	645.0	645.0	645.0	644.81
646'1	645'1	638.6	643.0	643.1	643.0	643.2	644.8	644.8	644.0	647.0	647.6	642.92
640.0	639.0	639.0	645.5	643.0	641.3	641.1	642.0	642.4	642.2	642.2	642.0	642.05
642.5	642.8	642.0	642.7	643.3	640.2	— ·					!!	
						646.4	648.0	647.8	648.2	648.8	$\frac{-}{650 \cdot 2}$	640.92
652.0	641.2	643.3	641.2	642.5	642.5	643.0	644.9	646.3	646.9	646.5	646.0	644.95
647.8	647.5	646.8	644'1	644.0	641.6	643.5	646.2	646.0	644.2	645.6	649.0	646 43
629.0	587.0	611.0	617.5	623.0	635.0	636.2	636.2	633.0	634.0	632.6	632.3	632.22
640'2	636.2	631.4	631.0	641.0	633.0		_		_			
639.2	638.0	641.0	640.1	640.1	633.9	638.0	640'6	641.8	637.0	638.2	639.0	634.93
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642.0	641.0	640.2	638.0	635.2	637.5	639.0	636.4	636.8	637.4	640.0	639.0	636.37
633.0	633.0	633.2	634.2	633.2	635.0	633.6	635.8	638.4	635.2	635.8	636.2	632.70
637.0	635.2	633.0	633.0	633.2	632.8	632.0	632.4	635.0	634.8	633.8	636.0	632.00
	<u> </u>										639.02	
636.94	634.20	633.47	634.45	635.07	635.83	636.41	636.89	637.90	637.81	638.20	039 02	635 <b>.55</b>
4ΰ5	4η2	41°2	42.0	42°0	42°2	42°5	42°4	42°5	43.0	43.7	43.4	41.41
50.0	50.5	50.9	50.7	50.9	51.3	51.8	52.0	51.8	51.6	51.2	51.5	48.64
47.6	47.0	46.8	46.5	46.2	46.0	45.6	45.0	44.6	44.6	44.6	44.4	47.06
46.5	46.8	47.2	47.6	47.7	47.5	47.4	47'1	46.9	47.4	47°4	47.2	46.07
48.9	48.5	48.2	48°2	48.0	48.0		40.47		4015	40.5	43.0}	46.47
40.5	45.5	45.5	45.0	40.00	40.4	40.0	40.7	41.5	42.5	42.7		
46.7	47.5	47.7	47.6	48.0	48'4	48.5	48.6	49.0	49.2	49.4	49.5	46.55
49°0 48°5	49.0	48.8	48.2	48.2	47.8	48.2	48.2	47.8	47.8	48.2	47.7	48.74
	48.5	48.2	48.0	47.8	47.6	47.8	47.3	46.6	46.0	45'6	45.4	47.27
48.3	48.3	48.2	48.0	47.8	47.0	46.7	46.6	46'4	46.6	46.8	46'1	46.79
44.8	44.5	44.2	44.0	44.0	44.0	44'0	43.8	43.2	43.8	43.5	43.2	44.94
40.7	40.4	40.2	40.2	40.5	40.5					20:0	31.4}	38.59
20.5	20:0				0.510	31.8	31.9	32.0	32.2	32.0	31.43	
36.5	36.0	35.6	35.8	36.0	35.8	35.6	35.4	35'1	35.0	35.1	34.6	34.67
40.2	40.0	40.2	40.1	40.0	39.4	39.0	38.7	38.1	37.6	37.5	37.3	37.73
41.6	41.6	41.5	41.5	41.5	41.5	41.0	40.4	40.0	40.3	40'4	39.9	40.15
42.6	42'4	42.0	41.2	41.0	40.2	39.8	39.0	38'8	38.9	39.0	38.8	40.85
43.1	43.3	43.4	43.2	43.0	43.0	43.3	43.6	43'3	43.0	43.0	42.7	41.65
43.5	43.5	43.5	43.4	43.4	43.1			_			38.0}	41.60
41:0	40.5			_		35.7	36.1	36.6	37.6	38.4		
41.0	40.7	40'5	40'1	40.2	40.0	39.8	39.5	39.9	40.0	40.0	39.7	39.76
37.0	38.0	38.6	38.2	38.2	38.7	38.9	38.7	38.7	38.6	39.2	38.9	37:39
42.0	41.8	41.4	41.6	42.0	42.1	42.0	42.0	42.3	42'3	$42^{\boldsymbol{\cdot}}2$	42.2	40.24
45.0	45 <b>°</b> 8	46.4	46.2	46.5	46.2	38.0	38.0	38.0	38.2	38.7	39.0}	42.72
41.6	42.0	42.4	43.6	44.5	44*4	45.3	45.6	45.7	45.9	<u>-</u> 46·4	46.5}	42.37
44.8	43.6	43.5	43.2	43.2	43.0	43.0	43.6	43.5	43.5	43.5	43.5	44.71
43.2	42.8	43.0	42.4					43.2	43.3	43.3	43.4	42.68
47.2				42.5	42.8	43.0	43.0	(	l			
49.7	47°0 49°6	46°7 49°4	46.7 49.4	46.7 49.2	46'4 49'0	46'8 48'8	46'9 48'6	47.4 49.0	48.0 48.7	48.2 48.8	48.5 48.8	46.74 48.70
				1	1				1	l	1	ì

	0	ne Scale Div	vision = *00	00087 parts	of the H. F.	HORIZO Increase i	NTAL FO n Scale Div	RCE. ision, corres	ponding to	l <sup>o</sup> decrease o	of Temperat	ure, 1°63.	
Mean G gen Ti	öttin- }	Oh.	1h.	2h.	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	.7h.	8 <sup>h</sup> •	9 <sup>h</sup> .	10 <sup>h</sup> .	11h.
	1 2	Sc. Div. 636 2 632 5	Sc. Div. 636°0 638°0	Sc. Div. 636 ° 0 633 ° 2	Sc. Div. 635 ° 0 633 ° 0	Sc. Div. 631 0 629 6	sc. Div. 628 ° 0 620 ° 0	sc. Div. 627 ° 0 620 ° 0	sc. Div. 629 2 622 4	sc. Div. 634°3 630°8	sc. Div. 638 ° 0 637 ° 0	sc. Div. 641 °0 636 °7	Sc. Div. 640'4 640'9
	3 4 5 6 7 8	641.6 634.2 635.8 635.0 647.5	640°8 638°2 639°2 634°2 645°0	640.5 640.4 640.6 634.3 647.0	631 · 2 636 · 4 633 · 0 629 · 0 640 · 2	624.8 624.0 621.0 615.0 630.0	618.6 624.0 614.2 616.0 625.2	619'2 622'0 610'6 616'0 629'4	625.0 624.0 614.0 624.0 637.5	633.8 628.0 619.5 628.6 643.0	639 · 5 633 · 0 633 · 5 635 · 0 645 · 4	641.0 635.2 636.2 638.0 647.5	637'0 634'0 638'3 635'4 645'2
ARY.	9 10 11 12 13 14 15 16	655.0 653.8 660.5 646.0 636.0 632.0 627.5	655°0 	653 · 2 654 · 0 653 · 5 653 · 0 638 · 0 632 · 0 631 · 4	650°0 649°0 661°0 647°0 637°4 623°2 629°1	639.5 	637.5 638.8 642.0 642.0 623.0 614.2 620.2	641.2 641.5 633.0 620.4 619.5 619.0	641.0 647.0 638.5 625.2 627.4 624.8 622.5	648.5 	648.0 658.0 652.0 635.0 635.4 629.5 629.5	651.5 657.0 658.2 643.0 630.2 630.1 632.1	652.0 
JANU	17 18 19 20 21 22 23	650.0 647.0 664.0 650.4 651.5 652.0	650°5 647°0 648°5 649°5 653°0 655°0	648°3 642°0 662°0 642°5 650°4 653°2	643.0 634.0 659.8 628.0 658.8 649.0	636°1 633°5 647°0 620°4 650°2 643°5	633°04 632°5 649°4 629°8 650°8 642°0	634.0 636.8 650.0 631.0 650.2 643.0	639°0 639°3 650°0 630°6 652°5 646°0	642.0 642.0 650.5 635.0 650.1 647.0	644.0 646.7 647.5 634.5 655.0 650.0	647.0 649.0 642.0 642.1 650.5 648.0	645.6 651.0 640.0 640.0 654.5 648.0
	24 25 26 27 28 29 30 31	648.5 646.0 644.0 650.0 643.6 637.5	648.0 646.5 644.7 649.0 643.0 637.0	646.5 645.2 645.2 651.4 648.1 637.0	644.0 638.0 644.0 649.2 638.0 642.0	637·5 630·2 639·2 648·0 648·2 642·8	635.0 630.0 638.2 644.4 641.0 630.0	637.0 629.8 639.2 644.1 638.1 612.0	640.0 633.5 640.0 646.4 641.8 608.0	647.0 637.5 642.0 647.0 632.0 636.0	650°8 641°2 645°2 648°0 637°0 654°0	649°2 642°7 648°0 652°0 637°0 627°2	648 8 637 9 649 0 651 9 624 0 621 6
Hourl	ly Means	644.24	644'52	644.57	640.86	634.58	631.53	630.97	633.45	637.99	642.41	642.78	642.33
		11 0	1 0	1 0			1 0	ILAR MAG		l 0		ο	
	$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$	47°5 46°9	47°5 46°9	47.6 46.0	48.4 45.5	48°5 45°8	48.8 46.0	47.8 46.2	48°3 46°3	47.8 46.7	47°5 47°0	$47.5 \\ 47.2$	47°6 47°1
	3 4 5 6 7 8 9	43.0 47.0 45.5 47.4 37.2 33.7	43.0 46.8 45.5 47.4 36.9 33.5	43.0 45.8 45.1 46.8 36.0 33.2	42.8 44.8 44.8 46.0 36.0 33.0	42.7 46.0 45.5 46.0 36.0 33.6	43.2 46.0 46.1 46.5 36.0 34.5	43.6 44.0 46.4 46.3 35.5 35.5	44.4 45.4 46.7 45.5 35.0 35.7	45.0 46.5 47.0 44.8 34.6 36.0	45.5 47.4 48.0 45.0 34.8 36.6	45.6 47.2 48.6 44.8 35.1 37.0	45.6 46.6 49.0 44.2 34.7 36.0
JANUARY.	10 11 12 13 14 15 16 17	28.6 28.5 36.0 45.0 49.4 50.5	28.7 28.1 36.0 45.4 49.2 50.1	28.5 28.8 35.8 45.5 48.6 49.8	28.4 30.0 35.9 45.6 48.5 49.0	29.9 31.4 36.9 46.2 48.3 48.5	30°4 32°4 39°0 47°5 48°8 48°1	29·2 33·0 40·5 48·0 49·6 46·1	28.5 33.5 41.3 48.4 50.5 46.4	28.0 34.5 42.0 48.3 50.5 46.3	28.0 35.7 43.2 48.3 50.7 45.5	27.6 36.9 43.6 48.3 50.8 44.7	29 3 37 2 43 4 48 1 50 6 44 1
JAI	17 18 19 20 21 22 23 24	37·7 37·4 33·0 37·4 30·5 32·4	38.0 37.4 33.2 38.0 30.6 32.9	38.0 37.2 32.8 37.4 30.5 33.1	37.5 36.4 33.5 37.0 31.0 33.6	38.5 36.0 34.4 36.2 30.9 34.7	38.7 35.7 35.0 36.4 31.4 36.0	40.6 35.5 35.7 35.5 31.7 37.3	41.1 35.5 36.0 35.7 32.0 38.5	41.4 35.7 36.2 36.0 32.0 39.0	41.9 35.8 36.6 35.9 32.5 39.5	42.3 35.6 37.0 35.4 32.5 39.8	42.5 35.5 38.0 34.6 32.9 40.5
	25 26 27 28 29 30	35.8 41.1 40.0 34.6 39.0 40.4	36.0 41.5 40.0 33.8 39.6 40.4	35.6 41.8 39.5 33.8 39.6 39.5	36°3 42°0 39°1 33°5 39°4 39°0	37.5 42.7 38.9 34.0 39.8 40.0	38.0 43.7 39.0 35.0 40.9 40.9	38.5 44.4 38.6 35.9 41.4 40.6	38.6 44.7 39.2 36.5 42.0 40.8	39.5 44.8 37.8 37.3 42.7 40.8	40°2 44°8 37°6 38°4 43°1 41°0	40°2 44°6 37°5 39°4 43°0 40°8	40°2 44°5 36°8 39°4 42°7 40°5
į	31	· -	_			. —	ı —	l <del></del>					

	,	One Scale 1	Division =	•000087 par	ts of the H		IZONTAL se, in Scale		orrespondin	g to 1° decre	ease of Tem	perature, 1·6	33.
12 <sup>h</sup>		13h.	14h.	15h.	16h.	17.h.	18h.	19h•	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. D 639	2	Sc. Div. 638 4 633 0	Sc. Div. 641 2 635 8	sc. Div. 637 9 635 0	Sc. Div. 637 0 633 9	Sc. Div. 636 1 634 0	Sc. Div. 634'0	Sc. Div. 633°9	Sc. Div. 635'0	Sc. Div. 635 0	Sc. Div. 632 6	Sc. Div. 636 0	Sc. Div. 635 35
	-			634.0			640.0	639.0	635.0	635.0	641.0	640.4	633.86
637 631		636.0 626.5	634°0 643°0	620.2	636°0	634.0 631.0	629°0 635°2	633'0 635'6	630°0 632°4	632.0 633.0	636.2	631.2 635.0	633.02 631.62
634		633.6	613.7	624.4	628.8	633.0	631.2	631.0	632.1	632.9	633.2	634.0	629.07
634	•4	634.2	634.0	636.8	637.1	636'1	638.2	640.0	641.4	643'0	644.6	647.0	633'64
649		652.1	654'1 653'0	655.1	655°9 648°0	654.0	653.8	651.0	654.0	652.0	653.0	652.2	646.64
650	_'	648.5	000 0	031 3	046 U	646.2	653.8	656.0	654.4	656.5	656.0	655.8}	650.09
664	•5	662.2	662.0	661.2	660.4	658.2	a	654.8 р	656 0	657.3	658.2	661.0	654.57
654		644.2	639.2	653.2	648'4	645.4	646.5	651.1 c	649.0	650.2	650'0	643.0	649.96
641		642.0	642 <b>.</b> 6	643°3	644 <b>.1</b> 628 <b>.2</b>	642 <b>.</b> 2 627.4	640.0	638.2	638.4	640.0	$641.0 \\ 635.0$	640.0 632.8	$641.32 \\ 631.62$
637 630		636°1	630.2	631.0	629.0	629.0	630°2 629°2	630.0	631 5 630 3	634'0 631'6	629.0	623.8	627.72
634		635.0	635.0	631.3	637.4	637.4						1 1	634.53
-	-			642:0	649:0		648.2	648.2	649.8	650.4	651.8	651.0}	
645 652		646 ° 0 652 ° 8	645°2 653°0	643°2 656°0	642°0 653°3	641.6 653.8	641.4 656.2	642°4 656°6	644'0 657'0	645°1 653°0	646'8 655'0	647.0 654.0	643.43 648.07
646		643.1	645.0	646.4	645.0	642.0	645.0	647.0	647.0	647.4	645.8	642.6	648.06
644	.5	646'2	647.8	650.0	649.0	650.0	647.5	649 0	651.0	651.2	649.4	652.2	642.55
651		651.5	651.0	654'0	650.4	648.0	650.2	646.8	647.2	650.0	653'2	650.7	651.31
648	_'	644.6	641.8	646.0	645.4	643.0	649.6	650.3	651.2	651.2	651.5	$\{-652\cdot0\}$	647.97
647		647.0	647.8	647.8	645.8	645.0	645.2	645.2	645.0	644.2	645'0	647.0	645.21
.632		634.0	632.1	633.0	633.0	636.2	636.0	638.0	637.0	639.0	642.0	643.2	637.25
650 654		646°0 653°7	646'0 643'0	644°2 642°7	646 <b>.</b> 2 641 <b>.</b> 2	648°0 646°0	649°8 644°0	650°2 638°4	649°3	649 0 635 8	649 <b>°</b> 2 640 <b>°</b> 4	649 <b>.</b> 8	645.68 646.14
642		631.4	631.0	630.0	628.2	629.0	631.6	631.1	631.4	633.9	636.1	637.0	636.02
613		632.2	615.4	610.0	614.0	622.0						1	628.38
642	• 20			-			626'0	628.0	629.2	634.0	635.2	637.0}	640.48
042	30	641.55	640'13	640.05	640.14	640.33	641.27	642.11	642 25	042 95	044 02	045 94	040 48
	ı İ	.0	· I o	l o		MPERATUR				. 0	0	9 1	.0
48 48		47.6 47.6	47°4 47°6	45°9 47°2	45°9 47°0	45°6 46°7	45°6	45°9	46°4	46°8	47°0	46°9	4 <sup>8</sup> 7·24
] -	-			-			40.2	41.4	42.0	43.0	43.4	43.3	45.63
46 47		46.0	46.6	46.5	47.3	47.1	47'0	47 <b>.</b> 5 46 <b>.</b> 4	48 <b>'</b> 0 46 <b>'</b> 2	48°0 46°2	47.6 46.0	47.6 45.6	45°53 46° <b>3</b> 4
49		47.0 49.0	47.0 48.4	47.0 47.6	47.0 47.0	46.7 46. <b>5</b>	46'6 46'5	46.4	40 2	40 Z 47 3	47.3	47.2	47.00
43		42.5	41.8	41.6	41.1	40.2	39.2	39.2	39.2	40.4	40'1	38.2	43.29
34		34.2	33.8	33.2	33.3	32.5	32.4	32.6	32.9	33.0	33°3	33.2	34.47
36	- 1	35.7	36.0	35.2	35.5	35 5	29.6	29.2	29.2	29.2	29.0	<u>-</u> }	33.63
30	5	31.0	31.2	31.3	30.8	30.4	<i>29</i> 0	30.5	30.4	30.4	29.8	29.7	29.61
37	.2	37.0	36.4	36.3	35.7	35.6	36'1	36.0	35.7	36.1	36.1	35.8	34.35
43		43.2	42.7	42.6	42.5	42.8	43.0	43.2	43.2	44.0	44.6	44.6 49.5	41.40
51		48 8 51 0	48 <b>·</b> 9 51 <b>·</b> 4	49°4 51°4	49.5 51.5	49.5 51.5	49 <b>°</b> 5 51°5	49 <b>.</b> 4 51.2	49'4 51'2	49 <b>.</b> 5	49°5 51°3	51.0	48'18 50'46
43		42.9	41.6	40.8	40.3	40.0	J1 J					1.	42.95
49							34.2	34.6	35.0	35.2	36.3	37.0}	Ĩ
43 35		42'8 35'2	42 <b>.</b> 6 35.3	42.5	42.0	41.8	41.2 $33.5$	40 <b>.5</b> 33.2	40°5 33°0	40°0 33°4	39 <b>·</b> 2 33 <b>·</b> 5	33.0 33.0	40.55 35.12
38	6	38.2	38°5	35°3 38°2	34.7 38.4	33.2	38 <b>·</b> 4	39 <b>.</b> 0	38.6	38.0	37.6	37.6	36.70
35	4	35.1	33.7	33.6	33.2	33.0	32.8	32.6	32.0	31.2	30.7	30.4	34.57
33		33.6	33.0	32.7	32.2	31.8	31.8	31.8	31.7	31.6	31.9	31'9	31.92
	-	40.7	40.7	40.6	40.5	40.4	34.0	34.3	34.6	35.0	35.5	35.7}	37.10
40	5	40.4	40.8	41.3	41'3	40.6	40.6	40.7	40.8	40.9	41'1	41.0	39.43
44		44.0	43.3	42.2	42.0	42.0	42.4	41.8	41'0	40.5	40.2	40.0	42.70
37°		37.0 40.1	37.0 40.4	36.2	36.2	37.0	37.0	37.0 39.0	36.7 38.7	35.7 38.5	35°2 38°8	34.4 38.5	37°55 37°73
43		43.0	40.4	40°6 42°8	39.8 42.5	39.6 42.0	39 <b>'</b> 4 41 <b>'</b> 6	40°6	40.4	$\frac{38}{40} \frac{3}{2}$	40°6	40.6	37 73 41.42
40	3	40.0	40.0	38.2	38.2	38.5	35.7	35.7	35.7	36.0	36.4	37.0}	39.03
41	62	41.30	41.14	40.81	40.62	40.33	39.60	39.22	39.23	39.32	39.31	39.12	40.17

<sup>&</sup>lt;sup>e</sup> Twelve minutes late.

	Or	ne Scale Div	vision = '00	00087 parts	of the H.F.		NTAL FO		sponding to	1º decrease	of Tempera	ture, 1 63.	
Mean ( gen T	Göttin-}	O <sup>h</sup> .	1h.	2 <sup>h</sup> .	3h.	4 <sup>h</sup> .	5h.	6 <sup>h</sup> •	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
	1 2 3 4 5 6 7 7	Sc. Div. 639 3 628 5 626 0 641 6 648 0 642 0	sc. Div. 640°3 627°3 622°5 638°7 648°4 634°5	Sc. Div. 637 3 628 7 612 2 632 2 643 5 637 0	sc. Div. 634°3 626°9 617°8 631°8 640°5 632°0	sc. Div. 617.5 623.8 617.8 629.0 637.0 609.8	Sc. Div. 633 ° 0 622 ° 1 620 ° 0 629 ° 2 639 ° 0 620 ° 0	sc. Div. 635.6 622.7 619.2 632.0 642.0 626.4	sc. Div. 637'3 625'7 622'0 640'0 650'0 626'0	sc. Div. 637.5 628.1 623.1 644.0 650.3 635.0	sc. Div. 636°3 629°3 626°8 648°2 650°2 626°2	Sc. Div. 634 6 629 5 624 0 650 0 a 650 3 633 8	Sc. Div 633 4 629 3 629 0 648 2 650 0 623 6
JARY.	8 9 10 11 12 13	639'3 633'0 633'2 636'0 640'0 640'0	634'0 631'0 632'5 633'9 641'0 641'2	622.0 626.0 629.0 635.8 642.5 640.0	620°0 618°0 626°8 626°8 636°0 640°0	630°8 617°0 624°6 623°0 626°0 638°3	626°4 614°7 622°0 626°0 625°8 637°2	622.8 617.5 621.0 624.0 625.0 636.4	624.2 622.0 620.0 624.3 630.2 637.0	624.0 619.2 624.0 626.0 630.8 637.9	630°0 616°0 622°0 630°0 628°5 640°1	623°1 624°0 629°0 633°8 630°2 638°8	627.8 622.0 632.4 638.0 631.4 639.0
FEBRUARY	14 15 16 17 18 19 20 21	648.8 649.0 644.2 640.2 632.0 634.2	649.6 648.2 642.4 638.0 636.3 632.0	642.5 631.0 639.0 636.5 632.0 626.2	639°3 638°0 631°5 641°0 627°2 625°9	637 · 3 637 · 4 629 · 2 635 · 7 622 · 1 624 · 1	639°0 635°8 626°0 638°2 620°6 622°4	640°1 646°0 631°0 642°2 623°2 625°1	641 · 2 644 · 0 638 · 4 639 · 2 628 · 8 629 · 8	643 ° 0 649 ° 0 637 ° 7 643 ° 2 635 ° 0 631 ° 0	646°0 649°0° 639°4 633°2 636°0 633°0	636°2 647°6 640°0 638°5 635°0 637°5	639°5 636°0 637°6 637°0 634°5 638°5
	21 22 23 24 25 26 27 28	650°1 636°0 619°5 623°5 633°4 628°0	641.4 636.0 648.0 634.0 630.2 626.2	618°8 630°5 641°5 635°2 628°0 626°0	641°0 625°0 642°2 637°4 626°4 620°2	642.5 625.0 643.2 610.3 620.0 612.0	628.7 620.8 633.0 625.4 619.0 616.5	624.0 620.8 a 624.2 616.8 618.9 613.8	621 · 2 624 · 0 630 · 0 617 · 4 621 · 5 622 · 5	625°0 636°0 610°0 613°2 622°2 623°1	627.0 636.5 634.6 631.1 634.0 629.9	639.0 639.0 631.5 642.8 636.0 633.0	634.0 642.0 643.0 630.2 624.5 631.2
lourl	y Means	636.90	636.98	632.22	631.08	626*39	626.70	627*11	629.86	631.18	633*89	635.72	634.67
			<del>1</del>	·	ТЕМР	ERATURE (	OF THE BIF	TLAR MAG	NET.				
	1 2 3 4 5 6 7	37.5 44.7 49.5 36.0 35.4 38.0	37.9 44.6 49.1 35.2 35.4 38.0	38.4 44.6 49.0 34.6 34.5 38.5	° 38.6 45.0 49.0 34.4 35.5 39.3	38.7 45.5 49.4 34.9 36.2 40.0	39.0 46.5 49.4 35.4 37.0 40.3	39.8 47.5 49.4 36.1 38.0 40.5	41.0 48.0 49.2 37.5 39.2 41.2	41.8 48.3 49.0 37.9 40.0 41.8	42.6 48.5 48.4 39.2 41.0 42.5	31 48'9 47'0 39'5 41'7 43'5	43.3 49.0 45.8 39.5 41.6 44.4
	8	43.5 46.4 44.5	43°5 46°2 45°9	43°3 46°2 45°7	43.6 46.8 45.2	43°9 47°2 45°5	44.6 47.4 46.2	45°2 47°5 46°5	45°5 47°4 47°1	45.4 47.2 47.2	45.9 47.3 47.5 43.5	46.0 47.6 47.5 42.8	45°9 47°0 47°7 42°9
ARY.	9 10 11 12 13 14	43.0 41.6 41.7	42.2 41.6 41.6	41.4 41.0	41.8 42.2 41.0	42.4 43.2 41.2	42'4 43'0 42'2	43°2 43°8 42°8	43.7 45.3 42.9	43°2 45°8 42°6	46.0 42.6	46.0 42.6	46.0 42.3
FEBRUARY.	10 11 12 13 14 15 16 17 18 19 20 21	43.0 41.6 41.7 ————————————————————————————————————	42.5 41.6 41.6 42.5 37.2 40.3 41.4 45.6 45.6	41'4 41'0 — 42'2 36'5 40'4 41'4 45'2 45'3	42.2	43.2	43.0	43.2 43.8 42.8 42.9 36.2 43.2 43.8 45.7 44.8	45°3 42°9  43°2 36°4 43°0 44°4 46°2 44°2	45.8	46.0	46.0	46'0
FEBRUARY.	10 11 12 13 14 15 16 17 18 19 20	43.0 41.6 41.7 42.4 37.5 40.2 41.2 45.7	42.5 41.6 41.6  42.5 37.2 40.3 41.4 45.6	41'4 41'0 - 42'2 36'5 40'4 41'4 45'2 45'3	42.2 41.0 	43·2 41·2 	43.0 42.2 	43.2 43.8 42.8 42.9 36.2 43.2 43.8 45.7	45°3 42°9 	45.8 42.6 	46.0 42.6 	46.0 42.6  43.4 39.0 45.7 46.3 47.4	46.0 42.3  44.0 39.2 45.8 46.6 47.4

<sup>&</sup>quot; Five minutes late.

 $<sup>^{\</sup>mathsf{b}}$  Two minutes late.

c Three minutes late.

8c. Div. 334.7 528.6 531.5 548.0 549.8 528.4	Sc. Div.	<del></del>	1		17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.	21 <sup>h</sup> .	22h.	23h.	Monthly Means.
534.7 528.6 531.5 548.0 549.8		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div,	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
528.6 531.5 548.0 549.8		635.1	634'3	634'3					1		1	
31.5 48.0 49.8					633.1	632.2	634.3	635 <b>.3</b>	632.6	632.6	631.5	634.25
48'0 49'8	629.3	628.2	628.3	627.3	627.5	628.3	634'3	629.3	628.5	628.5	628'3	627.85
49.8	631.0	630.0	631.0	632.6	635.0	633.0	636.0	635.5	628.7	635.2	627.0	626 95
	648.0	646'3	646'0	645.2	638.8	643.2	645'1	646.3	647.0	647.2	647.4	642.22
	647.8	648°0 624°1	646'4 610'0	$646.2 \\ 623.1$	$640.1 \\ 624.0$	642.0	643.2	642.4	637.9	639.0	642'0	644.75
_						637.5	632.5	637.2	637.0	638.0	$_{640\cdot _{2}}\}$	629.51
31.2	631.0	627.8	627.0	633.1	614.5	623.0	622.4	623.5	621.8	626.7	627.0	626.40
23.5	631.0	622.0	627.2	628.8	630.3	628.7	628.5	629.2	630.0	631.5	631.3	625.10
30.3	630.0	630.0	632.0	633.0	630.2	630.0	628'8	631.1	631.3	633.8	626.0	628.46
32.2	634.6	637.0	639.2	639.6	639.8	638.0	637.0	637.2	635.9	636.8	639.2	633.20
33.1	633.0	635.8	632.0	633.2	638.5	638.0	638.0	639.0	640.0	$641^{\circ}2$	640.3	634.56
40.0	641'4	642'4	644'0	644.0	644.0						<u>}</u>	641.77
40.0	641.0	641.5	637.0	635.2	634.0	645°2 633°8	644.0	645.0	645.8	651'6 635'2	649·2 } 644·8	639'93
		642.0		643.0	643.2		633.0	639.8	640.5			
37.0	641.2		643.8			644.4	643.9	643.8	643.7	645.2	645.0	642.80
37.8	639.6	640'0	637.8	635.8	635.0	636.0	636.0	638.5	639.0	641.5	640.2	637.23
37.0	637.0	636.0	635.0	635.0	631.0	637.5	634.0	636.0	634.5	636.0	635.0	636.95
35'0	634.8 636.8	634.5 640.0	635.0	634'1 641'0	$634.2 \\ 639.2$	635.0	637.0	634.2	633.0	633.2	632.8	632.3
36'0	000 8	<u></u>	641.3	0.11.0	009 2	652.4	651.6	655.0	649.2	648.0	646.5}	637.36
34.2	618.2	615.0	579·8	618.5	625.4	606.4	619.1	620.0	627.0	628.0	633.4	625.74
40.8	639.0	635.4	632.1	639.0	637.9	638.8	643.0	644.4	646.0	639 2	640.0	635.30
35.1	609.0	633.5	628 0	642.4	640.0	625.4	631.0	607.5	623.0	631.0	634.7	630.90
21.8	620.2	618.8	629.0	617.0	611.0	614.0	616.0	619.6	612.2	608.0	629.2	622.25
30.0	626.4	627.0	646.6	632.8	634.8	634.2	634.2	632.1	631.4	633.8	634.6	629.68
34'0	634.2	644.0	634.4	634.5	633.8	0010	001 2	002 1			- 7	
		_	_		_	642.8	644°2	642.0	643*9	651.1	656.0}	632*39
34.60	633.32	633.95	632*38	634.23	633.14	634*18	635.30	635.16	635.00	636.35	637.57	633*26
-			1	TE	MPERATUR	E OF THE E	SIFILAR MA	GNET.				
0			0	0	0	۰	٥		o	0	0	0
43.5	43.6	43.6	43.5	43.3	43.0	43.0	43.4	44.0	44.3	44.4	44.8	41.92
49.3	49.3	48.9	48.6	48.6	49.0	49.9	49.7	49.8	49.8	50.0	49.8	48.07
45.0	43.6	42.4	41.2	40.8	40.2	39.6	38.8	37.8	37.6	37.4	36.8	44°39
40.5	39.6	39.2	39.2	39.0	38.7	38.4	37.8	37.3	37.1	36.8	36.0	37.48
41.8	41.8	42.0	41.6	41.6	41.5	41.0	40.4	40^0	39.8	39.2	38.7	39.38
45.0	44.0	43.2	42.0	41.2	40.8				:		43.3	41.48
46:1	40.7					40.9	41.0	41.5	42.0	42.6	43.3	
46.1	46.1	46.4	46.0	46.0	46.2	46.2	46.4	46.4	46.4	46.4	46.4	45.47
47'6	47.6	47.6	47.6	47.6	47.2	47.0	47.0	46.6	46.0	45.5	45.5	46.96
48.0	47.6	47.5	47.3	46`8	46.0	45 3	45.0	44.8	44.2	43.8	43.5	46.10
43.0	42.0	42.2	43.0	42.8	42.5	42.2	41.7	41.4	41.9	41.9	41.5	42.4
45°4 42°4	44.2	43.5	43.0	42.7	41.4	41.1	41.0	41.0	41.4	41'8	41.8	43.09
42 4	42.2	41.3	41.4	41.6	42.0	20:0	40.0	41.2	42.0	42.6	$\{-\frac{1}{42\cdot 8}\}$	41.79
43.5	43.1	4910	40.7	4010	41.7	39.0			39.4	38.8	37.8	41.9
40.5		43.0	42.7	42.2	41.7	41.3	40.7	39.8		40.1	39.9	38.6
40 Z 45°8	41.0	40.5	40.1	39.8	39.8	40.0	40.7	40.5	$\begin{array}{c c} 40.3 \\ 41.0 \end{array}$	40 1	41.0	43.1
46 · 4	46.0	46.0	46.0	44'3	43.5	43.1	42.8	41.9	45.0	45'4	45.6	44.4
47·8	45.9	45.6	45.3	45.1	44.8	44.5	45.0	45.0	1	46 5	46.2	46.4
44.5	47.4 43.6	47.4	47.6	47.0	46.9	46.7	46.7	46.6	46.5	400		
TT 2	70 0	43.8	44.2	44.0	43.2	35.7	36.0	36.5	36.3	36.8	37.0}	42.4
40.8	41.2	41.3	41.4	$\frac{1}{41.2}$	40.8	40.6	39.4	38.5	37.8	37.3	36.0	39.1
40.0	40.0	39.4	37.9	36.5	36.0	35.2	34.6	34.0	33.6	33.5	32.4	36.5
41.4	40.8	39.0	39.4	39.4	39.2	39.4	38.9	38.2	39.0	39.1	39.7	38.2
45.8	45.8	45.3	45.0			$\frac{39.4}{43.2}$	42.0	41.2	40.2	39.5	38.4	42.6
43.2	43.9	43.6	43.4	44.0	44.0		43.4	43.6	43.3	42.8	41.6	42.5
45.2	44.8	44.8	44.0	43.3	43.5 44.2	43.5	40 4	45 0	±0 0	12 0		il.
-	-	_	_		44 2	36.6	36.7	36.9	37.1	37.1	37.4}	42.2
44.25	43.96	43.65	43.39	43.04	42.77	41.82	41.63	41.44	41.33	41.28	41.00	42.3

	O	ne Scale Div	rision = •00	00087 parts	of the H. F.		ONTAL FO		esponding to	o 1º decreas	e of Temper	ature, 1 · 63.	
Mean Göt gen Tin	ttin- }	0h.	1h.	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6h.	7h.	8h.	9 <sup>h</sup> .	10h.	11h.
	1 2 3 4 5 6 7	Sc. Div. 657 6 629 2 634 2 635 2 631 5 635 2	sc. Div. 652 4 628 2 633 2 636 6 629 3 638 2	Sc. Div. 640 2 624 7 630 4 631 4 626 2 634 2	Sc. Div. 613 2 624 2 626 6 624 0 620 2 629 2	Sc. Div. 622 ' 3 618 ' 2 621 ' 6 613 ' 0 618 ' 3 624 ' 0	Sc. Div. 627 '0 618 '2 614 '2 606 '2 614 '7 613 '2	Sc. Div. 613 '2 619 '4 610 '2 609 '3 612 '6 612 '7	Sc. Div. 616.6 620.2 610.6 615.2 612.2 614.8	Sc. Div. 608 0 622 7 619 8 620 7 614 2 625 5	Sc. Div. 635 '4 625 '2 623 '3 623 '2 623 '9 627 '7	Sc. Div. 626 6 626 4 631 2 626 2 629 4 632 0	Sc. Div 624 '2 623 '2 630 '8 621 '2 624 '2 635 '8
	8 9 10 11 12 13	635.0 635.2 627.6 632.2 645.2 647.0	635.0 616.5 635.0 631.3 647.0 645.0	632.5 632.0 631.4 629.0 641.0 639.0	625 · 2 616 · 5 633 · 9 629 · 0 639 · 8 643 · 0	613.8 622.5 623.2 627.0 636.0 641.7	612.4 614.4 619.1 626.2 632.0 638.3	612.0 613.8 619.0 628.6 634.6 636.0	617.8 614.0 612.5 629.5 632.4 637.8	630.8 629.8 621.0 632.0 635.0 639.2	616.2 631.7 632.0 632.0 638.2 651.4	628.6 635.8 629.0 637.0 644.0 651.2	631 °0 640 °0 626 °8 637 °8 644 °8 656 °5
MARCH	15 16 17 18 19 20 21	650.0 646.0 649.1 642.0 628.0 607.6	645:2 641:2 648:1 640:0 585:0 607:0	637'4 636'2 644'2 637'0 558'0 610'0	632.2 628.0 635.0 624.0 541.1 610.0	619.7 621.0 627.7 613.2 554.0 604.5	620.5 617.1 623.8 610.0 575.0 609.8	621.6 625.0 622.5 615.0 c 586.5 608.8	624·4 637·0 624·0 620·0 586·5 609·8	624·1 643·0 636·0 628·6 600·1 609·2	638 · 8 648 · 0 642 · 5 628 · 0 637 · 7 609 · 0	638.5 642.7 648.0 632.2 634.0 606.8	640 ° 0 641 ° 0 646 ° 7 635 ° 8 614 ° 8 606 ° 5
	22 23 24 25 26 27 28	631'2 636'8 620'0 621'3 617'0 628'8	633.0 631.4 622.0 616.0 611.2 631.0	631.0 626.0 612.7 616.5 612.0 630.2	626.5 623.0 605.5 612.6 611.6 623.5	618.6 614.0 609.0 606.0 601.5 621.0	613.2 614.0 602.5 596.0 601.0 623.1	615 · 3 612 · 0 600 · 5 603 · 2 602 · 8 626 · 2	615.0 614.0 609.8 607.5 611.8 628.2	620°0 618°0 611°2 610°0 611°0 633°2	623.0 624.5 618.2 615.2 621.0 634.0	628.0 630.0 628.7 614.2 617.0 633.2	629.0 634.8 630.2 620.4 620.0 634.7
	29 30 31	641.0 637.0 638.0	639°2 634°5 641°0	634.0 627.2 635.0	625 6 622 2 626 8	617.7 612.5 617.3	614.0 614.5 617.2	614.0 612.2 618.0	616.0 616.2 622.2	619 8 625 0 625 8	624 ° 0 630 ° 2 634 ° 8	631.0 633.8 637.8	630.4 636.8 639.8
Hourly N	Means	635.03	633.40	630.05	624.28	618.67	615.87	616.10	618.83	623.60	628.90	631.21	632.4
	1	37.0	37.0	37.0	37.6		39.7			0	. 0	1 0	1 0
	2 3 4 5 6 7	40.5 44.7 44.8 43.5 45.4	40°4 44°5 44°4 42°2 44°6	40.6 44.0 45.0 41.5 45.2	42.7 44.2 46.2 42.4 46.4	38.6 43.5 44.6 47.1 44.5 47.4	39.7 43.5 45.2 48.0 46.1 48.5	40.2 44.5 46.1 48.3 47.0 49.0	40.7 45.3 46.8 48.8 47.3 49.5	41°2 46°0 47°2 48°9 48°4 49°5	41°0 46°5 48°2 49°9 49°0 50°0	41°1 47°2 48°8 50°4 49°6 49°8	41°2 47°6 48°9 50°4 49°7 49°4
	8 9 10 11 12 13	44.1 42.2 40.6 41.1 35.7 37.5	43.5 41.3 40.5 40.6 35.4 37.5	44.8 40.7 41.0 40.3 36.4 37.7	45.6 40.4 42.2 40.7 38.0 38.5	45.8 40.4 42.8 40.6 39.2 39.6	46.6 40.4 44.4 40.8 40.0 41.3	46.8 40.6 44.9 42.0 41.1 41.8	47.4 41.0 45.5 42.4 41.5 42.4	47.4 40.9 45.6 43.0 41.7 43.2	47.4 41.1 46.0 43.5 43.0 44.2	47.9 41.2 46.0 44.5 43.0 44.8	47.9 41.0 46.0 44.2 43.6 45.2
MARCE	15 16 17 18 19 20	38.7 37.4 36.5 44.2 44.9 49.0	38.7 36.4 36.2 44.0 44.9 48.3	39.0 37.0 36.8 44.2 46.4 48.0	39 · 2 37 · 0 38 · 0 44 · 9 47 · 0 48 · 0	39 · 9 37 · 5 39 · 4 46 · 0 48 · 8 48 · 4	41:3 38:0 41:2 47:1 48:7 48:8	42.2 38.8 41.8 48.4 49.7 49.5	42.6 39.6 42.7 49.0 49.9 50.1	42.4 40.4 42.9 49.7 50.0 50.2	42.5 41.4 43.9 51.2 50.6 50.4	42.5 41.7 44.7 52.0 50.8 50.4	42.4 41.9 44.7 52.4 51.7 50.0
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	22 23 24 25 26 27 28	41.8 46.8 47.2 50.0 49.5 40.6	42.0 46.6 47.2 48.7 48.6 40.0	42.4 46.6 48.4 50.5 48.0 40.0	43.0 46.7 49.0 51.4 48.4 40.4	43.0 47.0 49.8 52.0 48.7 40.9	43°1 47°7 49°9 52°4 49°4 41°4	43.8 48.4 49.9 52.4 49.8 41.2	44'0 49'1 50'0 52'1 50'3 41'0	44.0 49.4 50.5 52.2 50.6 41.4	44.4 50.5 51.3 52.6 51.0 42.4	44.9 50.8 51.8 52.6 51.0 42.6	44.5 51.3 52.6 52.5 50.4 43.0
$\begin{pmatrix} 3\\3 \end{pmatrix}$	-	43.5 44.4 42.0	43.7 44.0 43.3	44.8 44.8 44.9	46°4 45°0 45°5	48.0 45.2 45.9	49.0 46.0 46.2	49.8 46.0 46.3	50.0 46.0 46.8	50.0 46.0 46.8	50.0 46.2 46.8	50°3 44°8 46°8	50.0 44.6 46.6
ourly M	eans	42.64	42.29	42.68	43.38	44.07	44.85	45.41	45.84	46.13	46.71	46.97	47.00

<sup>&</sup>lt;sup>a</sup> Six minutes late.

<sup>&</sup>lt;sup>b</sup> Twelve minutes late.

<u> </u>				<del></del>		ZONTAL I				<del> ,</del>		
	One Scale	Division =	'000087 par	rts of the H.	F. Increas	se, in Scale	Divisions, co	orresponding	g to 1º decre	ease of Temp	perature, 1°6	3.
12h.	13 <sup>h</sup> .	14h.	15 <sup>h</sup> .	16h.	17h.	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div,	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
635 4	633'0	620.2	632.1	624'1	622.2	623.8	Sc. Div. 624 2	624.2	625.6	625.2	628.2	Sc. Div. 627 29
627.6		628.9	630.2	630.4	629.2	629.3	632.2	632.2	632.2	633.7	633.2	626.97
630 2		632.2	631.2	629.2	630.4	631.2	632.4	632.6	633.2	633.4	634.2	627.85
612		614.4	619.6	611.4	616.0	613.2	621.6		623.0	624.0	625.3	620.11
	I	620.2	622.0					619.7				
626 4	I			630.2	631.7	631.4	631'6	633.2	634.4	634.2	634.0	624.95
635.8	8 633.8	630.6	612.0	633.7	623.0					******	<del> </del>	626.30
-	-	1 <del>-</del>		i —		628.0	618.8	619.0	626.5	619.0	628.6	020 00
615	618.9	609.8	635.0	623.8	626.7	634.2	626.0	628.5	621.2	619.0	632.6	624 23
638		640.0	638.0	641.0	643.0	643.5	639.6	639.4	640.0	638.8	640.0	632.67
630		633°0	634.2	634.0	635.0	635.8	635.0	635.4	635.2	635.0	633.1	629.93
633		638.0	638.0	640'4	639.8	641.2			644.8	646.0	646.4	635.84
			1				642.0	641'7	-			
645		638.0	638.0	634'1b	638.2	641.4	640'1	639.0	639.0	640.8	644'0	639.68
632	8 638.1	641'9	634.0	638.8	638.0	_		-		_	647.8}	642.55
-		_			·	641.0	645.9	644.5	643.5	648'8	647:85	012 00
640	4   640.9	644.0	643.0	641.5	644.0	643.8	642.8	643.2	643.8	645.2	644.4	637.89
641	0 643.0	644.0	646.2	646.0	646.2	646.6	646.5	646.4	648.2	650.2	649.0	640.81
646		644.2	641.2	644.2	643.4	643.2	642.9	641.1	642.8	637.8	639.0	639.97
633		624.8	611.2	621.0	621.4	610.0	607.9	609.8	619.0	607.0	617.0	622.49
582		604.0										
			584.2	508.0	443.5	576.7	604.0	617.0	597.0	604.0	610.8	584.94
589	0   589.4	610.0	607.5	602.0	567.5						— <u>₹</u> ∥	609.33
-						622.5	625 0	625.6	626.0	629'3	631.2}	
631	6 632.2	631.0	630.3	630.2	631.8	629.2	626 8	627.2	630.1	630.0	631.8	626.92
620		600.0	604.4	604.8	604.5	599.8	602.0	612.0	609.0	618.0	615.4	615.89
617		615.8	617.8	619.1	621.9	607.0	607.5	619.0	622.0	621.6	624.2	616.10
621		619.6	618.0	619.8	619.0	614.4	613.0 q	614.0	614.5	614.0	611.0	614.01
620		622.0	624.8	625.0	624.5	624.3	624.2	627.3	624.4	624.0	632.5	617.99
639	0   636.5	635.8	633.4	638.0	632.2						}	632.46
-	l —			l		637.2	632.0	633.8	633.6	639.3	641.2	032 40
631	8 633.0	632.6	632.2	622.8	630.4	633.0	633.1	633.7	630.0	632.0	635.0	628.60
628		636.0	636.8	637.1	635.0			636.4	640.3	638.0	638.7	630.63
						636.9	637.0					
635	2 636.2	636.3	635'4	632.1	633'4	636.2	638.5	640.0	639.2	642.8	642.0	633.39
629	15 629.44	628.59	628.72	629.03	628.02	629.95	629.56	630.73	631.61	631.81	633.84	627.88
		-!	!	TE:	MPERATUR	E OF THE I	BIFILAR MA	GNET.				,
41°	3   4η5	41.8	42.0	41.8	41.3	41.0	40°7	40°9	40°8	41.0	40.6	.40°29
46		45.4	45.0	44.7	45.0	45.0	44.7	44.9	45.2	45.2	44.8	44.59
481		48.5	48.1	48.0	48.0	47.5	46.6	46'4	46.0	45.3	44.7	46.65
50	2 49.6	49.2	48.5	48.0	47.2	46.8	46.0	45.2	44.2	43.8	43.1	47.26
49	3 48.6	48.2	48.0	47.5	47.4	47.2	46.6	46'1	46'1	46.0	45.6	46.57
49.5		48.4	47 1	46.6	46.3	ľ						
		10 1		1	i .	45.4		45.0	44.6	44.4	$\frac{-}{44 \cdot 1}$	47.07
47		15:0	4500		49.0	45.4	45.2			42.9	42.6	45.25
		45.6	45.0	40.4	43.8	43.5	42.9	43.0	43.0			
40'		40.0	40.0	40.0	40.6	41.0	41.0	40.8	40.7	40.7	40.8	40.75
45		44.6	44.2	43.7	43.0	42.0	42.0	41.6	41.5	41.6	41.6	43    42
43.0		42.6	42.0	41.2	40.6	40.2	39.3	38.4	37.8	37.1	36.5	41.08
43.	5 43.6	43.0	41.2	40.6	39.6	38.6	37.6	37.3	37.0	37.0	37.4	39.80
43 ''		42 6	41.9	41.5	41.2	ì						
_	-	12 0	1 41 9		1	20:0	40.4	40.7	41.0	40.9	40.4}	41.26
42		41.4	4110	40.7	40.0	39.9					37.6	10.17
		41.4	41.0	40.5	40.0	39.8	39.7	39.5	38.8	38.0		40.47
41 .		40.2	40.2	39.8	39.0	38.8	38.4	37.8	37.9	38.0	37.2	39.05
44'8		44.2	44.0	43.9	44.0	44.2	44'5	44.5	44.8	. 44.6	44'4	42.54
52	3 51.4	50.3	49.1	48.8	48.5	47.9	47.2	46.4	46.0	45.9	45.1	48.00
51		50.4					48.2	48.5	48.6	49.0	49.0	48.99
50.0			49.7	49.0	48.5	48.4	1		100			
1	1	50.1	50.1	20.0	49.5		40:0	40:0	40:0	49:0	41.6}	47.63
14:0				<del></del>	<u> </u>	42.2	42.2	42.2	42.2	42.0		
44.9		45.4	45.6	45.6	45.7	45.7	45.4	45.4	45.8	46.2	46.5	44.52
51.5		50.6	50.5	50.0	50.0	49.7	49.3	48.9	48.3	47.9	47.4	48.99
52.8		51.5	51.0	50.4	50.1	50.0	49.8	49.6	49.3	49.4	50.0	50.15
52*2	51.6	51.6	51.4	51.2			51.1	51.1	50.2	50.3	49.8	51.37
49.5					51.2	51.4					41.2	
42.8	-0 0	48.0	46.6	46.0	45.4	44.9	44.3	43.7	42.8	42.2		47.48
1		42.5	41'6	41.4	41.2			i —			$\left\{\begin{array}{c} -1 \\ 43 \cdot 1 \end{array}\right\}$	41.65
5046	.	<del> </del> -	ļ —			41.4	41.6	41.8	42.1	42.5		
50.0		48.3	48.2	47.6	47.2	47.3	46.6	46.4	45.7	45.1	44.8	47.56
45.2	3 45.2	44.2	44.0	43.7	43.2	43.4	43.2	42.4	41.8	41.7	41'3	44.29
46.8		44.5	43.9	43.6			42.6	$\frac{12}{42} \cdot \hat{0}$	41.6	41.5	41.2	44.43
	1 20 0	1 17 0	10 3	100	43.2	43.0	1220	1 22 0	1 11 0	11 0	1 ** 4	11.10
		. t								1	l	
46.7	9 46.21	45.88	45.39	45.02	44.71	44.12	43.80	43.24	43.30	43.12	42.83	44.70

Five minutes late.

	Or	ne Scale Div	ision = '00	0087 parts (	of the H. F.	HORIZO Increase, i	NTAL FO	RCE.	sponding to	1° decrease	of Tempera	ture, 1°63.	
Mean G gen Ti	öttin-}	O <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> •	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10h.	114.
	1 2 a	Sc. Div. 642 2	Sc. Div. 636°7	Sc. Div. 636°2	Sc. Div. 634.5	Sc. Div. 627 3	Sc. Div. 622 8	Sc. Div. 622 • 4	Sc. Div. 626 2	Sc. Div. 631 ° 0	Sc. Div. 636.8	Sc. Div. 641.4	Sc. Div. 636 0
	3	640.0	631.0	608.0	617.0	612.5	597.0	582.2	593.0	613.0 р	613.2	659.0	631.4
•	4 5 6 7 8 9	629.0 622.0 621.2 619.2 609.0 617.0	622.5 615.8 626.0 601.0 608.0 617.5	613.5 610.6 619.4 601.0 605.0 612.0	610 · 2 602 · 2 609 · 9 598 · 2 600 · 0 606 · 8	601.0 593.2 599.5 592.4 591.0 600.0	600.8 595.5 596.1 591.0 ° 590.0 602.0	600.8 603.8 599.1 594.5 d 600.5 604.0	606'4 608'0 620'8 599'2 604'2 610'8	606°0 617°0 635°0 614°5 612°2 614°2	620°8 625°3 602°0 613°5 617°0 618°8	630.8 625.0 620.0 610.0 614.0 618.2	624.2 620.0 633.0 611.2 609.8 616.8
APRIL.	11 12 13 14 15 16 17	633.6 628.0 617.7 614.0 626.0 608.4	630°2 628°4 614°8 612°0 625°0 619°7	624.6 620.4 e 611.8 603.0 617.0 613.0	616.0 610.2 604.0 589.0 604.2 603.8	610.0 601.0 590.8 583.2 593.0 594.1	610.0 600.6 592.5 584.0 593.2 f 594.2	616.8 610.1 598.0 592.2 606.0 598.5	633.4 620.8 608.5 607.2 604.0	638.8 632.7 610.0 620.0 612.5 608.6	649.0 645.4 621.5 628.0 626.0 624.1	639°1 639°0 624°2 632°2 628°8 626°2	606.0 620.0 628.0 623.9 632.0 629.0
	18 19 20 21 22 23 24	640°0 572°2 592°4 600°7 609°0 625°5	637 2 504 5 530 0 598 0 605 2 621 0	630°0 490°5 575°0 584°0 602°4 614°0	622.0 545.1 572.0 585.6 600.0 608.0	621.6 561.0 569.5 582.8 596.2 605.0	625 '4 581 '0 573 '6 575 '5 599 '8 613 '8	629 0 599 0 595 0 586 2 607 5 622 8	633°0 616°0 609°0 587°0 614°2 626°9	646.0 635.0 605.2 602.0 614.1 628.0	642.8 640.0 597.0 604.0 620.5 625.0	645°0 632°0 607°4 596°0 616°8 621°0	647.0 615.8 640.5 603.8 614.0 617.5
	25 26 27 28 29 30	627°0 621°8 628°5 626°4 598°2	623°8 617°7 621°0 621°0 595°0	617.8 613.0 616.2 615.0 607.8	616.0 602.0 619.0 610.0 612.0	611.0 603.0 615.0 610.5 614.0	614.8 604.0 629.0 617.4 600.2	620°0 605°0 619°0 626°2 593°0	623.5 621.0 630.2 625.1 609.1	628.0 622.6 637.4 632.0 612.9	632.0 617.0 631.0 648.2 618.2	626 ' 9 620 ' 0 628 ' 2 635 ' 9 648 ' 0	627.0 621.8 629.5 637.0 641.0
Hourly	Means	621.10	617.40	611.73	607.08	601.29	601.34	605.21	612.66	619.40	625.49	627.65	622.85
	1				ТЕМРІ	ERATURE O	F THE BIFI	LAR MAGN	ET.				
1	' 1 2 a	4 <u>1</u> .0	40.2	4i°0	42.2	43.5	44.5	45.0	45°6	45.5	46°0	46°1	45°8
	3 4	44.4	44.8	45.2	46.6	47.8	49.0	50.0	50.6	51.0	51.8	52.4	52.6
	5 6 7 8 9 10 11	45.5 49.4 51.8 54.0 52.0 51.9	46.9 49.2 51.6 53.7 52.3 52.5	48'3 49'5 51'9 54'0 52'8 53'7	50.0 49.8 51.9 54.3 53.4 54.2	51.4 50.4 52.1 54.8 53.7 54.2	51.8 51.8 52.8 55.5 53.9 54.2	52:3 51:8 53:1 56:4 54:3 54:4	52.6 52.4 53.8 57.5 54.0 54.6	52.6 52.5 54.5 58.5 54.1 54.8	52.6 53.0 55.7 59.4 54.8 54.6	52.5 53.4 56.4 60.0 55.3 54.6	52·3 53·7 57·4 60·5 55·4 54·1
APRIL.	12 13 14 15 16 17 18	48.2 49.5 51.0 49.5 45.7 48.6	48°3 50°1 51°4 49°8 46°4 48°6	48.8 51.2 52.3 49.9 47.1 48.6	49.5 51.5 52.8 50.0 48.2 48.6	50°3 51°6 53°2 49°9 48°6 48°5	50.5 51.9 53.2 49.9 48.8 48.9	50'9 51'9 53'0 49'9 48'7 49'4	51.4 51.9 53.0 50.5 49.2 49.4	51.8 51.9 53.4 51.0 48.7 49.0	52.5 52.4 54.0 51.6 48.3 49.0	53.7 53.0 54.9 52.0 48.3 48.5	53.5 53.0 54.7 52.0 48.7 47.8
	19 20 21 22 23 24 25	41.6 48.9 52.4 61.5 53.5 49.6	41.9 49.1 52.4 61.5 53.0 50.2	42.2 49.3 53.0 61.0 52.6 50.9	42.5 49.0 53.2 60.8 52.4 51.5	43°1 49°6 53°3 60°5 53°0 52°4	43°5 50°0 53°5 60°4 53°6 53°5	44.3 50.8 54.5 60.2 54.0 53.9	45.2 51.4 55.6 60.0 54.0 54.0	46.0 51.6 55.5 59.5 54.4 54.2	46.7 51.9 57.0 59.5 55.3 54.7	47.2 52.4 59.4 59.5 55.7 55.3	48°5 52°2 59°9 59°0 55°5 55°7
	25 26 27 28 29 30	52°3 54°8 49°0 49°8 49°8	52.4 55.0 50.4 49.5 49.8	52.5 55.0 51.0 49.3 49.8	52.8 56.0 51.5 49.0 50.6	53.8 55.8 52.0 49.4 50.9	54.5 55.2 52.3 49.8 51.3	55°5 55°0 52°3 50°2 51°4	56.5 54.7 52.5 50.2 51.8	57.4 54.7 52.6 50.7 52.4	58'3 55'0 52'8 51'8 53'0	58.8 55.0 52.5 51.9 53.4	59.0 55.3 52.3 51.7 53.2
	Means	50.05	50.30	50.69	51.22	51.70	52.12	52.40	52.69	52.89	53.35	53.66	53.6

a Good Friday.

<sup>&</sup>lt;sup>b</sup> Four minutes late.

<sup>&</sup>lt;sup>e</sup> Seven minutes late.

		One Scale	Divsiion =	000087 par	ts of the H.		ZONTAL		prresponding	to 1° decre	ase of Temr	perature, 1.6	3.
	12h.	13 <sup>h</sup> .	14 <sup>h</sup> .	15h.	16 <sup>h</sup> .	17h.	18h.	19 <sup>h</sup> .	20h.	21h.	22 <sup>h</sup> .	23 <sup>h</sup> .	Daily and Monthly Means.
	Sc. Div. 639 0	Sc. Div. 641'0	Sc. Div. 639'0	Sc. Div. 633 5	Sc. Div. 631 0	sc. Div. 632 2	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 610.0}	Sc. Div.
	641.1	598.8	597.0	629.0	607.2	584.6			]			629.0	616.12
	619.6	618.8	625.5	619.4	617.0	628.8	619 <b>.</b> 0 627.4	627.0 622.0	617.4 619.0	617 <b>.</b> 0 623 <b>.</b> 0	622.5 623.2	622.0	617:99
	620.0	625.4	606.0	618.2 570.0	620°0 530°4	613.0	617:0	623.3	616.6 240.0	622.0	620°0 489°0	613.8	614.95 561.15
	625°0 593°7	614.2 596.3	597.0	582.5	596.2	463.5 591.2	493°8 593°0	407 <b>.</b> 8 597 <b>.</b> 1	601.6	435.9	609.0	610.8	600.71
ng San	611'2	607.8	608.0 617.2	613.0 615.0	613·1 617·0	612.8 616.4	613.4	615.0	614.4	614.0	618.4	618.0	609.16
	616.4						627.0	629.2	629.2	632.0	634.0	634.7	617.59
	619.6 623.5	619.8 625.0	620 <b>·1</b> 615 <b>·</b> 0	622 <b>.</b> 0 609 <b>.</b> 0	625°0 615°0	623.0 620.0	627.0 622.2	625 <b>.2</b> 617.0	628°0 620°8	628'0 619'0	628 · 2 618 · 2	630'8 623'1	625°18 620°18
	617.0	605.0	600.0	601.6	606.0	606.4	610.0	613.9	611.9	616.0	616.2	617.4	610.13
	617.8	615.8	621.2 610.2	615.0 59 <b>1.</b> 0	618.0 607.2	620.6	624.7	620.0	620.0	618.8	619.0 626.2	626 <b>.</b> 2 623 <b>.</b> 4	613.57
	629 <b>·</b> 2	634·1 625·9	623.4	626.0	627.0	611.0 626.0	626.0	623.5	611.2	624.0	-	!!	616.16 621.63
	645.0	645.0	645:0	639.2	 643 <sup>°</sup> 4	649.0	639°2 641°2	639°3 625°9	639 · 8 519 · 4	640°2 477°1	640.7 536.6	$\frac{-}{639\cdot 2}$	618.05
	615.0	606.0	610.0	612.8	610'0	614.8	615.2	612.0	598.0	611.2	620.8	624.0	597.59
	619.5	596.8 602.1	599.0 602.0	590.9 604.8	601.1 604.0	604.2 604.8	598 <b>.</b> 0	600°5 604°0	597.1	599.0 605.2	599.0	601 <b>·2</b> 609 <b>·2</b>	594.70 598.42
	617.0	612.8	611.2	613.0	615.0	613.0	615.0	614.2	603°5 615°2	617.6	618.2	622.4	611.86
	616.0	616.0	617.5	618.0	617.4	617.0	622.0	623.8	625.0	623.4	623.2	626.1}	619.75
	618.8	605.2	609.8	618.5	616.4	615.6	616.0	617.4 °	619.0	619.4	620.2	619.8	619:32
	620.0	617.8 618.0	617.8 616.2	618.6 619.0	620 <b>.</b> 0	622°1 626°0	621°1 628°1	622.0 625.0	621.8 613.0	624.0 615.0	622.0 605.0	626:5 627:0	617.61 622.47
	619.0	618.0	605.0	618.0	614.0	620.0	617.0	613.0	580.3	610.0	612.2	595.8	617.79
	626.5	631.0	608.2	608.8	615*2	611.5	612.0	618.1	618.2	618.8	620.0	615.0	614.70
	619.92	616.70	613.00	613.98	615.41	615.03	620°19	620.37	617:26	620.52	621.02	620.96	616.15
					TEM	IPERATURE	OF THE B	IFILAR MA	GNET.				
	45.4	44°6	44°3	44°4	45.0	45°6	<u>°</u> 44.9	<u>°</u> 45`0	° 44.9	° 44.6	<u>~</u> 44.8	· 44·4}	44.36
	52.9	52.4	52.4	51.8	51.3	50.6						46.6	48.96
	52.0	51.0	50.8	50.2	50.0	49.5	46.7 49.4	46°1 49°4	46.1 49.2	46'0 49'2	46.0 49.2	46.63 49.2	50.33
	53.6	53.4	53.2	53.2	53.0	52.8	52.5	52.3	52.3	52.2	52.2	52.2	52.07
	58°3 59°6	57.6 58.2	57°5 57°4	57.0 57.0	56.0 56.6	55°7 55°7	55°2 55°2	54°7 54°4	54.0 54.0	54.2 53.4	54.0 52.9	53.9 52.5	54.63 56.06
	55°I	$54\cdot 2$	53.8	53.4	52.9	52.4	52.1	52.0	52.0	51.8	51.7	51.6	53.29
	53.8	53.1	52.4	51.9	51·5 —	51·2 —	46.5	46.5	46.6	47.4	48.0	48.4}	51.88
	53.7	52.6	52.3	52.0	51.8	51.5	51'1	51.0	51.0	50.8	50.4	49.6 51.1	51·13 51·98
	53.4 54.0	53.2 53.2	52.9 53.3	52.9 52.9	52.8 52.6	52.6 52.2	52.6 52.0	52 2 51 5	51.8 50.9	51.3 50.4	50.0 50.0	49.8	52.50
	51°3 48°9	50.4	49.7	49'1	48.7	48.2	48.0	47.2	46.8	46.5	46.2	46*0 48*7	49°34 48°16
	48.0	48.5 47.1	48°1 46°6	47°8 46°2	47.8 43.5	47.8 43.0	48.2	48°2	48.2	48 4	48.5	40 (	46.10
	49.4	<u></u> 49'4					40.4	41.0 49.0	41°4 49°0	41.4 49.2	41.6 49.4	41 · 4 } 49 · 1	46.85
	52.2	52.0	49'4 52'4	49.5 52.5	49.5 52.8	49.4 53.0	49 <b>·</b> 4 53 <b>·</b> 4	53.0	53.0	52.8	52.6	52.3	51.59
	60'6 59'0	61.4	62.1	62.5	62.5	62.0	62'0	61.9	61.5 <b>5</b> 5.0	61.5 $54.5$	61.5 54.5	61.6 54.2	58:37 58:35
	55.5	58 <b>°</b> 5 54°6	58.2 54.3	57.8 54.0	57.2 53.4	56.6 53.0	56°0 52°6	55.5 $52.0$	51.7	51.3	51.3	50.0	53.36
	55.6	55.1	55.0	54.2	54.5	54.0	51.2	51.2	 51.3	51.4	51.7	$\begin{bmatrix} - \\ 52 \cdot 0 \end{bmatrix}$	53.05
	59.0	58.7	58.7	58.2	57.5	57.0	57.2	56.8	56.6	56.2	55.2	55.2	56.27
	55°0 51°9	54°0 51°1	53.0 50.4	52.5	51.6	51.1	50.6	50°3 49°5	49.8 49.5	49.4 49.5	49°2 49°5	48.5 49.8	53.19 50.87
	51.7	51.4	51.3	49.7 51.5	49°5 51°5	49.7 51.1	49 6 51 1	51'0	50.8	50.8	50.4	50.0	50.66
	52.5	51.6	51.3	51.3	<b>5</b> 0°8	50.5	50.2	49.6	49.2	49.0	49.1	48.5	50.86
· ·	53.42	52.71	52.35	52.01	51.28	51.23	50.39	50.13	49.96	49.79	49.70	49.21	<b>5</b> 1°56

<sup>&</sup>lt;sup>4</sup> Five minutes late.

e Eight minutes late.

f Ten minutes late.

	One Scale	Divisi	ion = *00	0087 parts (	of the H. F.		ONTAL FO		esponding to	) 1º decrease	of Temper	ature, 1 63.	
Mean Götti gen Time.			1h.	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6h•	7h.	8h.	9h.	10h.	11h.
( )	Sc. 1 623		Sc. Div. 621'9	Sc. Div. 625 0	Sc. Div. 622 0	Sc. Div. 603 9	Sc. Div. 598 0	sc. Div. 609 °0	Sc. Div. 613 2	Sc. Div. 625 ° 0	Sc. Div. 636 0	Sc. Div. 632.0	Sc. Div. 627.4
	3   624 4   621 5   621 6   624 7   622 8   450	.0 .8 .8	624.5 621.0 620.8 620.0 623.0 539.0	621.2 614.4 612.0 616.4 618.0 538.0	616.0 603.0 603.8 609.8 605.0 545.2	614.0 601.2 598.8 603.4 596.2 589.0	611.0 603.0 602.0 597.2 598.0 580.0	615.9 609.0 607.8 600.0 603.8 593.5	622.0 616.2 613.4 609.6 605.0 612.0	618.0 621.2 624.4 613.7 605.0 611.0	633.0 625.8 624.0 614.0 613.0 610.4	620°2 628°2 621°8 616°2 613°0 604°0	619.4 625.4 622.2 616.0 615.2 597.0
10	1 607 2 604 3 599 4 608 5 581	·8 ·8 ·5	607.0 602.7 601.2 600.9 607.0 596.5	609.0 600.0 596.0 592.5 597.0 610.2	603 · 2 596 · 4 594 · 0 588 · 0 589 · 8 604 · 4	598.0 596.8 593.5 583.0 586.5 580.4	598*4 602*5 596*8 585*6 590*0 584*2	600.0 602.8 601.9 590.0 597.0 598.8	609.0 607.9 606.0 599.0 610.8 613.2	608.8 607.0 608.0 608.0 628.0 619.8	610 · 4 607 · 2 609 · 1 614 · 0 622 · 8 607 · 8	608:4 602:8 607:7 614:2 618:2 622:0	608.4 605.0 601.0 610.2 614.2 614.0
XVM 1 1 1 1 2 2 2 2 2 2 2 2 2 2 3	7   598 8   595 9   599 0   599 1   603 2   605	.0 .0	594.4 598.0 589.0 596.0 597.5 604.5	586°2 591°2 596°9 593°0 591°0 598°4	577.9 589.2 590.0 581.8 588.4 597.0	569.0 583.5 593.2 589.0 586.4 596.2	575.6 577.1 595.5 588.0 590.0 591.8	594.6 568.0 597.0 594.0 597.4 589.8	612.0 586.0 602.0 595.4 599.0 594.9	611.2 588.0 607.0 607.5 d 600.0 600.8	611.4 597.0 603.0 610.0 616.0 602.7	619.0 597.4 601.5 611.4 616.2 605.0	609.0 605.0 604.0 630.5 611.2 604.0
24 26 26 27 28 29	4   605 5   613 6   607 7   625 8   600 9   599	0 0	602 · 2 612 · 4 614 · 0 624 · 1 600 · 8 593 · 9	598.0 605.0 613.0 619.0 604.8 592.0	594.8 602.0 602.0 605.0 597.2 570.0	594.0 595.0 598.0 596.8 588.8 568.5	597.6 594.0 599.5 602.0 595.4 596.2	600°1 598°0 604°0 611°2 607°0 608°4	600°9 604°0 612°8 621°8 609°0 605°8	608.0 611.0 611.4 636.0 609.0 612.4	611.0 614.0 611.0 643.2 609.4 597.8	609.4 606.8 609.8 645.8 608.0 608.0	612.5 614.0 612.2 643.5 608.2 601.0
( 3:	616		619.0	613.8	608.7	596.0	590.2	611.0	618.0	622.0	623 0	634.0	624.0
Hourly Me	eans 608	57	607*33	603.97	597.27	592.40	594-20	600*25	607.52	612.92	614.97	615.48	614 53
	1   48°	5	49°3	5°0.2	21.0	51°4	51°4	LAR MAGN	51°9	52°4	53°1	53.0	52°·6
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2	7 5 0 6 0	49°0 52°5 53°3 54°9 57°8 60°0	51.5 53.6 54.3 55.4 58.8 59.9	51.6 54.2 55.2 56.5 60.2 60.5	51.6 54.5 56.1 58.1 61.3 61.2	51.6 54.8 56.8 58.4 62.2 61.4	51.7 55.5 57.2 59.0 62.4 61.6	52.2 55.6 57.8 60.0 62.9 61.3	52.5 55.8 58.5 60.7 63.2 61.3	52.5 56.1 59.1 61.8 63.5 62.0	53°0 56°2 59°5 62°3 63°5 62°8	53.6 56.4 59.5 62.5 63.5 63.2
MAY.	61 61 63 63 63 63 65 65 65 65 65 65 65 65 65 65 65 65 65	7 0 5 0 5	58.5 61.4 63.3 63.4 61.8 60.4	59°0 61°2 64°1 64°4 62°2 61°2	59°0 61°4 65°5 65°2 64°0 62°0	60°8 62°3 66°1 66°4 65°1 63°0	62.0 63.2 66.8 66.2 65.0 63.9	62.2 64.0 67.4 66.0 65.2 64.3	62.4 64.5 67.4 66.0 65.2 64.8	62.8 64.9 67.9 66.3 65.2 65.5	63 · 4 65 · 4 67 · 5 66 · 5 65 · 2 66 · 3	63.6 65.6 67.2 66.5 65.4 66.9	63.6 65.3 67.0 66.8 65.2 67.1
18 19 20 21 22 23	60° 62° 62° 62° 62° 62° 60° 62° 60° 60° 60° 60° 60° 60° 60° 60° 60° 60	0 0 0 4 0	60.6 60.4 62.8 64.0 59.0 61.0	60.8 61.0 62.6 62.4 59.0 61.3	61.5 61.8 62.9 62.5 59.0 61.6	62.4 62.6 63.7 63.1 59.4 62.0	63 · 3 63 · 5 64 · 4 63 · 6 60 · 0 62 · 8	63.6 64.5 64.7 64.0 60.5 63.5	64.4 65.0 65.4 64.0 61.2 64.0	65.0 65.7 65.9 64.5 61.8 64.5	65.5 66.4 66.5 64.7 62.5 65.2	65°8 66°7 67°0 65°0 63°0 65°4	65.8 66.8 67.0 65.0 63.1 65.4
24 25 26 27 28 29 30	61° 60° 57° 56° 57° 64°	0 3 0 8 5	61.4 60.0 57.7 56.7 58.0 64.1	61.4 60.9 58.4 58.0 58.0 63.6	61.5 62.0 58.6 58.6 58.5 64.0	61.6 62.9 59.0 59.6 59.6 64.5	62.0 63.6 59.3 60.0 60.4 65.3	62'1 64'0 59'1 60'5 61'3 65'3	62.4 64.8 58.8 61.0 62.6 65.4	62.7 65.7 58.8 61.2 63.6 65.5	63 · 2 66 · 1 59 · 0 61 · 8 65 · 0 65 · 6	63 · 4 66 · 0 59 · 4 62 · 2 65 · 6 65 · 9	63.9 66.0 59.7 62.3 66.0 65.8
\ 31	58.		58.1	58.0	57.5	57.5	57.4	56.9	56.8	56.4	56.5	56.5	56.4
ourly Mea	ms 58 ·	40	58.85	59.33	59.87	60.60	61.10	61.42	61.78	62.18	62.59	62.85	62.90

<sup>&</sup>lt;sup>a</sup> Off scale.

<sup>&</sup>lt;sup>b</sup> Seven minutes late.

<sup>&#</sup>x27; Nine minutes late.

	One Scale	Division =	*000087 pa	rts of the H		IZONTAL se, in Scale		orrespondin	g to 1° decre	ease of Tem	perature, 1°6	3.
12h.	13h.	14h.	15 <sup>h</sup> .	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
sc. Div. 634'0	Sc. Div. 620 2	8c. Div. 617 2	Sc. Div. 633 5	Sc. Div. 623'8	Sc. Div. 617.5	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
621.8 621.1 620.0 616.5 625.0 595.8	621.3 621.0 620.0 614.8 620.2 593.6	623 · 2 620 · 0 619 · 0 613 · 5 594 · 6 593 · 0	620°6 617°7 616°0 614°2 603°5 594°0	618.8 617.0 618.0 615.8 586.4 595.0	621.9 620.0 620.0 612.4 592.0 595.6	628.8 622.0 619.2 620.0 612.6 539.8	630°0 622°8 623°0 620°2 617°0	629.7 622.0 620.0 622.0 618.5 473.5	627.9 621.4 622.0 623.0 613.2 279.4	629.6 623.0 621.5 623.4 624.5 534.7	624.0 619.0 621.0 626.2 614.8 454.3	620.71 618.04 617.50 613.70 574.84
606 2 603 4 596 0 610 4 602 2 615 8	603.9 602.5 599.5 610.8 605.0 609.2	601.9 602.0 600.0 601.2 609.0 584.9	604.0 602.5 600.8 602.0 609.2 608.0	604.0 603.0 603.0 604.0	603.7 604.8 603.8 603.0 610.9 614.4	605.0 604.0 603.5 600.4 599.6 609.5	607.2 608.0 605.0 600.0 c 600.3 610.0	600.0 601.0 600.2 599.8 601.9 607.0	608.5 606.0 598.0 601.4 602.2 604.6	609.5 607.0 600.8 600.2 604.5 593.9	614.0 607.4 599.8 601.5 608.0 596.2	602.68 601.10 601.23 605.75
604.0 606.2 608.8 601.4 613.2 605.2	593.7 593.0 587.0 600.0 602.1 602.3	589.0 589.0 598.8 593.2 592.9 602.0	581.0 591.2 612.5 600.9 591.0 602.5	579.0 591.4 583.8 597.1 590.8 600.7	583.8 595.6 586.0 601.0 602.0 600.3	590.0 576.0 593.0 593.2 596.9 599.0	590°0 588°2 596°0 593°1 594°2 602°0	592.0 584.8 596.8 593.7 598.8 599.0	594.0 584.5 596.0 589.8 598.4 600.2	598 · 2 595 · 0 598 · 8 592 · 1 596 · 0 598 · 0	594·2 598·0 598·1 592·0 598·0 603·4	601.56 592.34 592.56 596.20 598.81 599.57
609.0 610.4 610.0 610.0 612.2 604.0	610°0 603°2 611°4 604°8 611°5 598°8	608.5 606.4 613.5 606.3 604.0 597.0	607.4 598.2 613.0 606.0 601.0 595.4	607·3 594·0 614·2 609·2 604·2 596·0 °	603·2 597·0 616·0 584·5 611·0 596·2	613.0 603.2 596.2 616.9 597.8 616.0	606.0 607.8 597.8 617.5 608.0 602.0	604·2 605·0 595·0 618·8 612·0 553·5	604·2 607·8 602·4 619·0 604·2 583·7	606°0 610°0 601°2 618°8 602°5 576°5	605.8 } 612.0 606.0 622.0 608.0 604.1	601 · 80 605 · 21 603 · 21 611 · 91 613 · 61 600 · 72
626.0	623.2	620.0	619.2	622.2	628.4	620°0	616.1 611.0	612.2 618.8	612.0 621.0	611.0 627.8	$\{614.1\}$	600 <b>.</b> 45
611.11	606.86	604.72	606.38	605.00	605.20	605.39	607.13	606.66	606.66	607.98	608.54	606.31
							BIFILAR M.					
52°6	52°3	52.3	5 <b>1</b> .7	5η6	5 <b>i°3</b>	47:0	0	47:0	4010	40:1	$\left \begin{array}{c} \stackrel{\circ}{\overset{\circ}{48\cdot 2}} \end{array}\right\}$	50.62
53.6 56.3 59.4 62.5 63.2	53.7 56.0 59.0 61.5 62.6	53.7 55.5 57.9 60.9 62.2	53.5 55.4 57.5 60.5 61.8	53.4 54.9 57.0 60.2 61.5	52.6 54.2 56.8 59.8 61.2	47.2 52.3 53.8 56.4 59.4 61.2	47.5 52.0 53.4 55.8 59.0	47.8 51.4 53.4 55.0 58.4 60.8	48.0 51.2 53.4 54.7 57.8 60.8	48°1 51°0 53°0 54°4 57°4 60°7	50.4 52.3 53.8 56.5 60.6	52.00 54.52 56.56 59.06 61.46
63.0 63.6 65.2 66.9 67.0 65.2	62.6 	63.0 64.4 65.9 67.0 64.6	61.3 62.5 64.0 65.5 65.8 64.0	61.0 	60°9  62°2 63°6 65°3 64°6 63°2	60°4 62°0 63°5 65°0 64°0 62°7	60.0 61.8 64.0 65.0 63.2 62.0	59.8 61.8 63.5 64.8 62.6 61.4	59.2 62.0 63.0 64.6 62.1 60.9	58.8 61.6 63.0 64.1 61.6 60.2	58·4 61·7 62·6 63·6 61·2 59·6	60.95 61.81 63.64 65.63 64.95 63.45
67.4 	65.5 66.5 67.0 64.6 62.9 65.1	66.6 	65.8  64.1 65.8 66.2 63.5 62.0 64.5	65.4 	65.0 	62.2 62.9 64.6 64.2 62.5 61.0	61.9 62.4 63.8 63.5 62.0 60.8	61.4 62.0 63.2 63.0 61.4 60.5	60.7 61.6 62.8 62.5 61.0 60.4	60°5 61°2 62°6 62°2 60°4 60°0	$ \begin{array}{c}  - \\  60 \cdot 0 \\  60 \cdot 5 \\  62 \cdot 1 \\  62 \cdot 0 \\  59 \cdot 6 \\  59 \cdot 8 \end{array} $	63.70 63.19 64.15 64.53 63.13 61.00
63'9 65'6 59'8 62'5 66'4 66'0	63.7 65.3 59.6 62.3 66.4 65.5	63.5 65.0 59.2 61.9 66.2 65.0	63·2 64·6 58·6 61·4 66·2 64·2	63·2 64·2 58·1 61·2 66·0 64·0	63.0 63.5 57.8 60.8 65.8 63.7	63.8 62.5 62.4 57.5 60.2 65.6	63.0 62.2 61.0 57.0 59.4 65.4	62.7 61.8 60.0 56.6 59.0 65.4	62.7 61.4 59.0 56.3 58.5 65.2	62.5 61.0 58.5 56.0 58.0 65.0	62.0} 60.4 57.4 55.5 57.7 64.5	63°39 62°37 62°85 58°27 60°03 63°56
56.5	56.2	55.8	55.6	55.2	 55 <b>`</b> 5	60°4 55°6	60.0 52.2	59 <b>°</b> 6 55°5	59°5 55°5	59°2 55°5	58.8 } 55.3	56°41
62.92	62.64	62 22	61.73	61.44	61.04	60.27	59.83	59.43	59'11	58.78	58.31	60.82

d Five minutes late.

e Four minutes late.

	(	One Scale Di	ivision = '(	00087 parts	s of the H. I		ONTAL F , in Scale D		responding t	o 1º decrea	se of Tempe	rature, 1·63	
Mean gen	Göttin- Time.	Oh.	1h.	2h.	3h.	4 <sup>h</sup> .	5h.	6h.	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
	$ \begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \end{pmatrix} $	Sc. Div. 618'0 612'0 612'2 611'9 619'0	Sc. Div. 620 0 620 0 610 4 613 9 624 8	Sc. Div. 620 ° 0 612 ° 4 610 ° 2 607 ° 3 618 ° 0	sc. Div. 615'0 615'8 602'8 600'0 613'0	\$c. Div. 599 * 5 598 * 2 597 * 3 601 * 0 609 * 0	Sc. Div. 592 ° 0 594 ° 8 602 ° 2 605 ° 0 609 ° 0	Sc. Div. 611 '8 593 '0 606 '0 615 '0 613 '2	Sc. Div. 617 0 605 2 609 0 617 0 620 0	sc. Div 615 4 601 4 618 0 617 0 626 0	sc. Div. 634 ' 2 601 ' 6 618 ' 0 619 ' 0 629 ' 0	Sc. Div. 633 2 620 0 617 9 618 0 625 0	Sc. Div. 615 '4 613 '1 617 '0 614 '0 619 '8
	7 8 9 10 11 12	620°2 615°0 609°8 605°0 605°8 617°0	617.0 608.8 613.1 584.0 600.0 611.0	610.5 604.0 607.0 599.0 598.8 605.0	610°0 598°5 605°4 594°2 592°0 603°7	598.6 595.4 600.0 575.0 581.5 604.2	597·2 601·0 600·5 571·4 588·0 594·0	605.4 603.2 609.6 591.1 588.2 593.8	603.4 608.2 612.1 606.5 590.0 602.2	614.4 612.9 620.5 622.0 603.8 618.4	614.2 621.1 623.0 628.0 593.8 612.0	619'0 621'1 616'0 614'0 592'0 621'0	616·1 614·0 614·0 621·8 610·0 637·0
JUNE.	13 14 15 16 17 18 19 20	601.0 623.2 615.9 611.0 608.0 606.0	574.0 620.8 612.3 613.5 605.2 605.0	588.0 617.0 613.4 612.0 604.5 600.8	575°2 612°4 606°0 606°2 604°7 595°0	573.5 606.1 596.7 599.0 600.7 587.8	585.8 617.2 a 601.0 598.0 592.2 593.2	601.2 617.5 607.5 602.5 600.2 601.2	586'3 620'0 622'0 607'6 603'8 611'8	630°2 620°7 631°0 614°4 617°0 616°0	641.3 633.8 623.0 619.3 621.2 617.9	644'0 622'0 634'0 621'2 627'8 616'2	632·0 622·5 622·0 622·4 619·4 613·0
	21 22 23 24 25 26 27	618.0 617.0 614.0 612.8 606.0 604.8	614.3 612.0 611.0 603.0 605.8	611.8 601.0 603.5 604.6 597.0 600.2	597.0 613.0 594.8 598.0 595.0 596.0	602.6 604.0 590.0 593.0 593.0	601 · 2 595 · 0 ° 584 · 8 593 · 5 594 · 0 597 · 0	601.0 596.0 585.6 595.0 601.8 600.0	601.5 600.0 593.0 602.0 605.0 601.9	614 8 606 0 594 0 607 8 607 2 611 0	616.8 607.5 600.8 613.8 610.5 610.0	621.8 607.0 604.1 614.2 606.0 605.0	619.0 605.0 606.1 607.0 598.0 595.6
	28 29 30	607.0 606.0 603.2	607.4 605.5 604.8	601.0 601.0	592.0 602.4 594.2	589°0 605°4 585°0	593.0 592.5 579.0	594°2 596°2 588°1	603.0 609.8 598.3	604.8 598.2 607.0	597.2 605.4 614.0	602 0 608 2 608 0	607.2 607.9 602.5
Hourl	y Means	611.23	608.79	605.85	601.24	595.21	595.10	600.70	606.02	613.46	616.40	616.87	614.30
			. 1	. !			F THE BIFI		1	}	Ī		
	$egin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \end{bmatrix}$	55.7 59.2 59.8 61.0 57.0	55.6 59.2 60.5 61.0 57.4	55.6 59.4 61.2 61.8 57.9	56.2 60.0 61.5 61.9 58.0	56.9 60.7 61.8 62.6 58.8	57.6 61.5 62.4 62.6 59.5	58.4 62.3 63.0 63.5 60.0	59.4 63.0 63.4 63.7 61.0	60°0 63°2 64°0 63°7 61°4	60°3 63°0 64°4 64°3 62°4	61.0 64.6 64.4 63.0	61°0 64°5 64°5 64°1 63°2
	7 8 9 10 11 12 13	59°0 62°3 61°6 67°3 65°0 60°0	59.4 62.3 61.7 67.3 65.4 60.5	60.5 62.0 62.1 67.3 65.7 61.4	61.7 62.4 62.8 67.3 66.0 62.0	62.8 62.5 63.6 67.2 66.4 62.0	62.8 62.9 64.8 67.5 66.8 62.6	64.0 63.2 65.5 67.5 67.0 62.6	64.8 63.8 66.2 67.5 66.8 62.8	65.4 63.5 67.3 67.5 66.9 63.4	66.7 64.0 68.4 67.5 66.8 63.8	67.0 64.4 69.7 67.5 66.5 64.4	67.6 64.2 70.4 67.3 66.2 64.9
JUNE.	14 15 16 17 18 19 20	59°0 53°4 57°4 56°8 58°7 62°2	59.0 53.0 58.0 57.0 59.8 62.2	59.0 53.0 58.8 58.4 60.8 62.2	59.0 53.0 59.4 60.3 61.0 62.2	59'0 53'3 59'9 60'6 62'0 62'5	59.0 54.0 60.6 61.1 62.8 63.0	58.6 54.5 61.0 61.7 64.0 63.4	58.0 55.2 61.4 62.1 64.6 63.6	57.5 56.0 61.9 62.5 65.0 63.9	57.4 57.5 62.0 63.2 65.4 64.1	57.4 58.6 62.2 63.6 65.4 64.5	57·1 59·7 62·2 64·6 65·3 65·0
	21 22 23 24 25 26 27	61.5 62.2 63.5 65.3 66.0 68.9	62.5 62.4 63.5 66.1 66.5 69.5	63.4 62.1 65.2 67.2 66.9 70.4	64.2 63.4 66.1 67.9 67.4 71.6	65.4 63.6 67.0 68.5 68.0 72.1	65.6 64.0 67.4 69.2 68.9 73.0	66.0 64.5 67.4 69.4 69.6 73.3	66.0 65.5 68.0 70.0 70.4 73.8	66.2 66.3 68.1 70.3 71.5 74.0	66.4 66.9 68.8 71.1 72.5 74.5	66.6 66.8 69.6 71.6 72.6 74.9	66.6 67.4 69.8 72.0 72.6 75.1
	28 29 30	70°9 67°9 66°2	70°5 67°7 67°0	70*4 67*7 68*0	70.4 68.3 68.9	70°4 68°6 70°0	71.0 69.4 70.6	71:3 69:7 71:0	71.5 70.6 71.4	72·1 71·6 71·8	72.8 72.0 71.9	73·4 72·0 72·4	73.4 72.2 72.4
lourly	Means	61.84	62:12	62.63	63.19	63.70	64.25	64.71	65.17	65.28	66.08	66*47	66.67

<sup>&</sup>lt;sup>2</sup> Nine minutes late.

<sup>&</sup>lt;sup>b</sup> Eight minutes late.

	One Scale	Division =	= '000087 p	arts of the I		RIZONTAI		correspondi	ng to 1° dec	rease of Ten	ape <b>r</b> ature, 1	63
12h.	13h.	14h.	15h.	16 <sup>h</sup> .	17h.	18h.	19 <sup>h</sup> •	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 625 0 612 7 607 4	sc. Div. 618 0 608 9 607 5	Sc. Div. 600 2 608 0 610 0	Sc. Div. 607 0 610 0 610 0	Sc. Div. 608 9 609 8 601 0	sc. Div. 609 4 610 0 606 0	Sc. Div. 609 6 611 2 610 0	sc. Div. 614'4 608'0 610'0	Sc. Div. 610 8 609 0 611 4	Sc. Div. 614 ° 0 620 ° 5 610 ° 2	Sc. Div. 613 8 608 8 610 2	Sc. Div. 605 0 611 4 611 3	Sc. Div. 613.65 608.99 609.42
613.0 613.0	609.0 613.6 611.0	611.0	617.0 614.1 596.0	615.0 614.2 599.8	620.0 614.6 — 598.7	617.2 607.0 599.0	615.0 606.4 599.0	616.9 615.7 585.0	614.0 613.4 586.5	616.8	617.9 619.0 606.6	613.60 616.33 605.55
606.0 621.0 590.6 615.6 627.0	608.0 603.5 591.4 605.8 617.0	609.0 608.5 598.0 596.5 602.0	608.0 615.0 601.2 599.0 597.0	611.5 610.0 591.4 603.1 591.0	609.0 609.2 597.9 606.1 597.2	610.0 606.2 595.9 610.0	610.3 614.9 596.0 608.5	610.5 605.0 599.4 608.0	609.0 609.2 600.2 610.0	609'4 607'8 600'0 606'0	612.0 608.0 600.0 616.5	609.00 610.39 598.92 601.21 607.77
612.0 619.0 619.4 624.0 611.9	614.0 619.2 610.2 612.0 615.3	606.0 613.5 613.0 608.8 604.1	600.0 613.4 612.2 607.1 601.5	605.0 618.4 618.5 607.2 601.0	605.0 614.0 612.2 606.9 598.4	584.5 614.0 613.0 600.0 598.0	585.0 612.6 609.4 616.0 602.2 603.5	618.0 612.2 614.2 616.4 608.0 604.5	618.0 613.0 615.0 603.7 608.0 603.0	614°4 612°7 616°2 612°1 610°4 604°0	616.0 618.2 618.1 611.0 609.0 606.2	606.55 617.40 614.27 609.61 606.50
608.0 619.2 606.8 604.0 602.0 599.0	615.0 608.4 604.0 600.0 598.5	605.0 614.0 605.8 603.5 602.0 598.5	601.2 604.1 602.0 600.0 599.8	605.0 605.0 602.0 597.5 600.2	605.0 609.2 603.1 601.5 593.5 601.8	610°2 608°5 605°2 601°5 595°0 601°0	612.0 600.0 596.0 600.2	612.8 613.0 606.2 601.8 588.0 601.1	612.5 613.9 607.0 603.2 597.4 d 602.2	611.0 613.9 610.0 605.8 601.5 603.3	614.0 614.0 611.1 609.4 604.0 604.0	607°34 610°75 605°92 600°85 601°23 600°96
605.0 593.2 608.0 607.7	597.2 596.8 599.0 591.1	594.4 593.5 599.0 591.0	597.0 	598.0 593.1 597.0 578.5	594.0 597.6 571.0	596°1 594°9 597°0 585°0	599'0 594'4 595'2 586'4d	600.7 601.8 594.5 596.5	601'4 593'8 580'0 593'4	600.0 603.0 600.0	606.0 600.0 600.0	600.67 597.34 600.45 594.70
611.19	607:02	604.46	603.70	603 '40	603.23	603.62	604:30	606.21	605.87	608.15	609.45	606.21
			<del></del>	TE	MPERATUR	E OF THE 1	BIFILAR MA	GNET.	r	<del></del>	<del></del>	
61.2 65.0 64.4 64.0 63.3	61 · 2 64 · 6 64 · 0 63 · 2 63 · 3	61.3 64.1 63.6 62.5 63.0	61.0 63.8 63.4 61.8 62.6	61.1 63.4 63.0 61.4 62.1	60.8 62.8 62.6 60.5 61.5	60.5 62.6 62.5 60.0	60°2 62°0 62°2 59°5	60.0 61.2 61.8 58.8	59°5 61°0 61°8 58°5	59.1 60.4 61.4 58.0	59.0 59.8 61.1 57.8 - 59.0}	59.27 62.11 62.62 61.69 60.81
67.4 64.4 70.6 67.3 65.8 65.1	66.6 64.0 70.4 67.3 64.6 65.2	66.1 63.8 70.1 67.0 64.1 64.8	65.5 63.5 69.7 66.6 63.3 64.4	65.1 63.2 69.7 66.5 62.9 64.2	64.7 63.0 69.3 66.0 62.2 64.0	61.9 64.3 62.7 69.0 65.9 61.9	61.6 63.9 62.7 68.6 65.7 61.1	61.0 63.5 62.4 68.5 65.5 60.7	60°4 63°2 62°2 68°2 65°3 60°3	60°2 63°0 62°0 68°0 65°3 60°0	62.4 62.0 67.7 65.0 59.4	64.06 63.06 67.25 66.75 64.24
57 · 2 60 · 2 62 · 2 64 · 9 65 · 1 65 · 3	57.0 60.2 62.2 65.0 64.5 65.2	56°3 60°2 62°0 64°6 64°1 65°2	55.8 60.2 61.1 64.0 63.7 64.5	55.5 59.7 60.4 63.5 63.5 64.0	55.0 59.0 60.2 62.7 63.5 63.5	60°0 55°0 58°5 59°8 62°0 63°4	59.8 55.0 58.2 58.9 61.6 63.0	59.6 54.6 57.8 58.5 60.5 63.0	59.5 54.2 57.6 57.6 60.0 62.8	59.5 54.0 57.4 57.2 59.2 62.8	59.5 53.6 57.0 57.0 58.4 62.8	62:33 56:80 56:97 60:08 61:60 63:21
66.6 67.5 70.0 72.4 72.6	66.6 67.4 69.9 72.5 72.6	66'4 67'0 69'4 71'8 71'5	66°2 66°4 69°3 71°0 71°2	65.8 66.0 69.0 70.4 70.6	65.5 65.6 68.6 69.5 70.1	61.8 65.1 65.2 68.2 69.0 69.6	61'9 64'6 64'8 67'6 68'2 69'2	61.7 64.0 64.7 67.1 68.0 69.0	61.5 63.6 64.5 66.6 67.5 68.9	61.5 63.1 63.4 66.2 66.8 68.8	61.0 63.0 63.0 65.5 66.2 68.4	63°16 65°04 65°03 67°57 69°25 69°81
75.0 -73.2 72.2 72.4	74.0 72.8 72.1 72.2	73.8 	73.4  71.6 70.8 71.0	73.4 71.4 70.3 70.5	73.0 71.0 70.0 70.0	73.5 70.6 69.7 69.0	73 4 70 2 68 0 68 2	73.0 69.8 67.5 67.8	72.5 69.0 67.0 67.4	72·1 68·7 66·5 66·6	71.7 68.4 66.2 65.7	72:91 71:13 69:57 69:75
66.74	66.48	66.09	65.61	65.25	64.79	64.30	63.85	63.46	63.10	62.74	62.33	64*46

	One	e Scale Divi	sion = *000	0087 parts o	f the H. F.		ONTAL FO		sponding to	1º decrease	of Tempera	ture, 1°63.	
Mean G gen Ti		O <sup>h</sup> .	1h.	2 <sup>h</sup> .	3h.	4h.	5 <sup>h</sup> .	6h.	7h.	8h.	9h.	10h.	11h.
	1 2 3	Sc. Div. 606 5 603 1 602 0	Sc. Div. 604 0 599 0 600 2	Sc. Div. 595°0 594°0 594°8	Sc. Div. 584.7 590.8 588.8	Sc. Div. 588 0 592 0 591 0	Sc. Div. 594 7 591 2 596 5	Sc. Div. 595 8 587 8 600 0	Sc. Div. 594 ° 0 590 ° 9 601 ° 8	Sc. Div. 593 4 594 0 605 4	Sc. Div. 593.6 596.0 601.0	Sc.Div. 598'8 598'0 598'2	Sc. Div. 599 0 596 8 595 8
	4 5 6 7 8 9	594.0 592.0 601.1 589.0 588.0 568.2	592.8 588.0 590.3 580.0 582.4 584.0	590°0 586°4 578°0 576°8 578°0 556°0	587.4 578.7 581.5 580.0 571.0 550.0	583 · 4 577 · 1 566 · 0 578 · 8 573 · 4 540 · 0	584.0 584.0 569.0 577.0 569.5 556.3	591.2 598.0 585.0 577.2 571.8 569.5	602.2 600.4 607.0 578.5 587.4 557.0	601.5 610.7 607.0 585.2 582.0 592.0	601.0 601.8 601.4 586.0 611.4 591.0	591.4 603.0 597.0 589.0 618.0 588.0	591 '8 598 '0 591 '2 593 '4 608 '5 574 '5
JULY.	11 12 13 14 15 16 17	584.4 577.4 583.5 593.5 592.2 585.5	586.4 578.6 582.0 588.0 587.0 575.7	572.0 577.5 570.0 583.5 580.8 581.2	557°2 576°0 574°0 574°2 579°2 576°0	548.0 565.0 567.0 572.2 576.0 568.0	541.7 567.0 571.4 570.8 578.0 564.0	552.0 565.0 585.0 579.8 .584.0 563.8	563.0 566.4 590.0 584.2 586.8 570.0	579°3 562°3 593°5 592°8 593°5 582°0	582.4 564.0 595.8 602.2 595.0 590.2	577.2 572.0 604.0 600.5 598.0 596.0	576.0 581.0 598.0 597.8 589.0 600.0
	18 19 20 21 22 23 24	590°2 585°0 590°0 592°1 591°0 598°6	587°5 584°2 586°8 592°0 593°0 597°0	581.6 577.2 581.4 583.4 593.9 590.5	572.5 576.0 574.8 589.0 585.0 585.0	571.4 570.0 568.2 591.8 581.5 583.0	578.0 565.0 569.7 590.0 587.6 586.4	574.8 561.0 571.0 589.5 585.4 591.0	574.5 575.3 575.0 589.0 588.0 601.0	582.5 585.0 588.2 595.8 597.0 606.0	578.0 598.4 591.4 598.8 612.4 610.0	581.4 598.0 593.8 594.8 598.1 606.0	591'2 588'2 593'2 597'0 603'8 595'8
Augu	25 26 27 28 29 30 31 st 1	592°1 618°0 608°5 612°0 611°2 610°8	584.6 606.5 608.5 600.6 609.4 607.0	584.0 598.5 601.2 603.2 605.0 605.0	580°5 591°5 597°0 590°1 595°7 597°0	570°0 591°5 599°5 590°8 589°0 590°0	579°0 590°5 606°5 590°9 593°0 589°5	589.5 591.5 609.5 592.4 606.4 591.5	609.5 601.5 608.6 597.5 609.5 595.0	620°0 611°8 610°8 600°5 607°5 601°2	622.5 610.2 610.0 606.0 624.0 602.8	620°0 611°5 610°0 607°7 614°2 606°8	608 2 604 0 608 0 606 5 608 2 602 8
	Means	595.07	592.04	586.19	581.25	577.28	579.68	584.14	589.10	596.11	598.69	598.21	595*74
	(1)	66.0	66°1	66°8	67°8	erature o	69°9	ilar magn 70°8	т. 71°•4	72.2	73.0	7å·4	74.0
	<b>2</b> 3	67.8 70.0	68.5 70.5	69°2 71°4	70.9 72.3	$\begin{array}{c} 72.1 \\ 73.4 \end{array}$	73.0 74.6	74.0 75.4	74.5 76.7	75·4 77·4	76.0 78.0	76·2 78·4	76·4 78·5
-	4 5 6 7 8 9	71.6 73.2 72.2 73.2 74.9 76.2	72.0 73.0 72.2 73.5 75.9 75.8	72.9 73.0 72.0 74.2 76.5 75.4	73.2 73.0 73.0 75.0 77.1 75.6	74.6 73.1 74.3 77.7 78.6 76.0	75.8 73.7 75.0 78.4 79.4 77.0	76.4 74.4 76.2 79.0 79.8 77.4	77.2 75.3 76.5 79.8 80.4 78.0	77.8 76.1 77.5 79.3 80.4 79.0	78.4 76.6 78.5 79.0 80.6 79.9	78.8 77.2 79.0 79.4 80.2 80.0	78.4 77.2 79.4 79.8 80.0 79.8
JULY.	11 12 13 14 15 16 17	75.2 76.0 71.3 69.3 71.0 74.1	76.0 76.4 71.4 69.0 71.3 74.2	77.0 77.1 72.0 69.0 71.8 74.0	77.7 77.6 72.5 69.4 72.7 75.0	78.0 78.5 73.2 69.8 74.0 76.1	78.5 79.7 73.7 70.8 75.0 77.8	78.0 80.7 73.6 71.7 76.1 79.0	78.4 81.5 73.9 72.4 76.8 80.4	79'1 81'9 74'0 73:2 77'5 80'8	80.0 81.0 73.9 74.4 78.0 80.5	80.6 80.9 73.5 74.6 78.4 80.1	80°5 80°2 73°4 74°4 78°0 80°0
	18 19 20 21 22 23 24 25	76.4 77.5 76.5 76.2 71.7 69.4	77.0 77.7 76.5 76.6 72.1 69.3	77.5 79.0 76.6 76.8 72.7 70.0	79°4 79°2 76°6 76°6 73°4 70°6	79.4 79.0 76.7 77.2 73.5 71.5	80.6 79.2 77.3 77.5 73.6 71.5	81.5 79.4 78.0 78.0 73.5 71.6	82.7 79.0 78.4 78.2 73.5 71.5	82.0 79.2 78.8 78.5 73.5 72.0	83.0 79.8 79.3 78.8 73.6 72.4	83.5 79.5 79.7 79.0 74.4 72.4	84.0 79.8 79.2 79.0 74.5 72.4
	26 27 28 29 30 31	71.0 63.0 63.0 64.4 66.6 64.8	70'4 64'0 63'5 65'2 66'6 65'1	70°0 66°0 64°6 66°0 66°6 65°2	69.0 66.6 65.5 67.0 66.4 65.8	69.2 67.0 65.5 67.5 66.6 67.4	68.8 67.5 66.5 68.5 66.6 67.4	68:5 67:5 67:5 69:0 66:5 68:0	68.5 67.5 67.5 69.4 67.5 69.0	68.4 67.6 68.3 69.9 67.5 69.0	68.8 67.4 68.7 70.0 68.0 69.5	69.0 67.5 69.1 70.3 69.0 69.5	69.4 67.5 69.0 70.3 69.5 69.4
Augus	st 1												

	One Scale	Division =	·000087 par	ts of the H.		IZONTAL e, in Scale I		rresponding	to 1º decrez	ise of Temp	erature, 1·63	L. T
12h.	13h.	14h.	15h.	16h.	17 <sup>h</sup> .	18h.	19հ.	20h.	21h.	22h.	23 <sup>h</sup> .	Daily and Monthly Means.
Sc. Div.	Sc. Div. 600'0	Sc. Div. 599 0	Sc. Div. 598 2	Sc. Div. 598 4	Sc. Div. 595.8	Sc. Div. 590°0	Sc. Div. 596.8	Sc. Div. 598 2	Sc. Div. 598 1	Sc. Div. 600'0	Sc. Div. 601.8	Sc. Div. 596.89
601.5 598.0	600.0	594.0	591.1	592.1	595.2	594.0	593.0	590 Z 591 0	591.0	592.0	595.9	594°21
591.1	595.0	598.0	592.4	590.0	592.0		<del></del>				1 18	
			_			587.8	587.0	589.0	587.8	588.0	593.0	594.44
592.0	593.0	593.0	593.0	593.2	593.0	594.0	598.0	605.6	589.2	587.0	597.4	593 30
598.0	597.4	593'0	595.0	586'1	593.5	597 0	598.0	594.8	591.2	593.5	586.1	593.40
591.2	590.0	589.0	593 6	578.4	569.8	573.8	580.0	578.5	586.8	578.8	586.0	586.27
588.0	586.8	583.4 616.4	583°1 545°5	585.0	583.2	585.1	585.1	583.8	581.0	585.0	587.1	<b>5</b> 83.65
616.0	630'0 574'4	580'4	568.0	542·5 567·4	542.0 569.4	549.0	428 0	567.5	576.9	552*2	577.2	574.36
574.0	3/4 4					582.0	575.0	574.2	575.0	576.0	574.2}	571.52
580.0	580.4	580.0	573.2	573 <b>.</b> 5	579.8	575.0	581.8	572.8	576.0	577.2	573.3	572.61
587.8	582.0	587.5	578.8	579.0	584.2	580'0	583.4	584.0	585.4	579.2	580.1	576.82
594.2	588.2	581.8	581.0	587.4	589.0	590.0	574.0	582.0	582.0	572.0	595.0	584°63
590.0	589.8	590.0	591.7	591.7	591.0	592.2	588.0	590.0	590.0	592.0	593.0	588.70
586.4	590.2	589.0	595.0	594.2	592.5	588.8	590.0	589'6	290.0	584.8	587.1	588.21
597.0	586.8	561.0	572.0	583.0	581.3	500.0	E00.H	506:3	505.0	E07:0	584.4}	580.94
	582.0	578.8	579.5	579°5	581.2	582°0 581°2	583.7 579.8	586°1 585°0	585.0 587.4	587.8 581.2	586.4	581*39
587 4 585 8	584.2	583.2	586.0	583.9	583.9	584.6	584.2	584.0	587.4	585.0	590.0	582.74
589.7	583.0	587.5	590.8	594.5	597.0	586.2	585.0	594.0	584.2	585.8	589.0	585.44
593.8	597.2	592.5	592.0	592.0	595.0	581.6	595.2	591.0	593.0	595.0	595.0	592.35
593.5	587.2	592.0	586.8	587.4	591.8	591.2	592.8	593.0	594.0	596.0	597.5	592.50
598.8	590.0	594.0	595.0	598.0	590.4						$\frac{-}{593 \cdot 2}$	594.70
						592.1	593.2	591.4	593'1	593.4	593.2 }	
587.8	592.0	597.0	593.0	598.0	600.2	599.0	599.7	599.0	606.5	607'0	610.0	597.87
604.0 610.0	598.1	603 · 9 603 · 7	603.0	603°0 604°5	603°2 604°5	603.0	595°0	592 <b>°</b> 0	605°0	608.0 606.0	609.2	602.17 $606.26$
601.0	601.2	605.0	607.0	603.0	604.0	604.0	606.8	607.0	603.8	604.4	603.2	602.04
614.2	607.0	609.0	593.4	590.8	603.8	604.8	607.1	606.0	605.0	606.7	606.2	605.30
602.4	602.0	605.4	606.1	606.0	599.0							602.81
						606.0	606'4	607.2	609.6	609.4	608.5}	002 01
593.75	591.64	591.21	590.12	590.00	590.92	590.45	590.92	591.35	591.74	591.20	593.49	590.43
					IPERATURI		IFILAR MA					
7å·8	73.8	7å·0	72.6	$7\mathring{2} \cdot 2$	7i°6	71°0	7°00	69.2	68.7	68°5	67.7	70.52
76.5	76.5	75.8	75.0	74.4	73.8	73.3	72.9	$72 \cdot 2$	71.4	70.8	70.0	73.19
78.2	78.5	77.5	76.6	75.3	74'8	-			<u> </u>		- \	74.87
		l —				74.2	74.1	73.6	72.7	72.3	71.9}	
77.8	77.4	77:0	76.4	76.1	75.5	75.3	74.6	74.4	74.0	73.7	73.2	75.52
77'1 79'4	76 <b>·</b> 9	76.0 78.5	75.6 77.8	75°4 77°0	74.9 76.2	74.5 75.4	74.0 75.1	73.7 74.6	73·2 74·0	73 <b>·</b> 0 73 <b>·</b> 8	72°4 73°6	74.69 75.85
79.6	79 2	79.0	78.5	78.2	77.6	77.5	$77 \cdot 2$	77.0	76.0	76.5	75.0	77.48
79.4	79.6	79.2	79.0	79.0	78.8	78.8	78 °0	77.6	77.5	77.0	76.4	78.20
79.4	79.0	78.2	78.4	78.0	77.8				'			
_	<b>—</b> .	_	<b>—</b>			77.0	76.6	76.3	76*0	75.5	$\frac{-}{75\cdot 2}$ }	77.41
80.4	80.0	80.1	80.0	79.2	78'6	78.2	78.0	77.6	77.2	76.8	76.0	78.38
80.0	79.2	78.3	77.2	77.0	76.2	75°5	74.7	73.9	73.1	72.8	72.5	77.58
73°2 74°4	73.0	72.6	72.0	71.6	71.4	70.7	70.4	70.0	69.5	$69^{\circ}2$ $71^{\circ}2$	68.7 70.8	72.03
77.8	74.0	73.5	73.2	73.0	72.7	72.5	72.1	72°0 75°3	71.5 75.0	74.6	74.2	72:04 75:51
80.0	77.6	77°0 79°4	76.6 79.2	76 4 79 0	76.0 78.6	75.7	75.4	- (3 3		17 U		
_	-					78.8	78.2	78.0	77.7	77.5	77.6}	78'16
84.0	83.7	81.9	81.5	80.8	80.4	80.0	79.6	79.0	78.6	78.5	78.0	80.55
80.0	79.6	79.2	78.8	78.6	78'1	78'0	77.8	77.4	77.2	77.0	76.6	78.61
79.0	78.5	78.0	77.5	77.4	77.2	76.9	76.6	76.4	76'3	76.0	76.0	77.47
79.0	78.0	77.4	76.7	76.0	75.0	74.7	74.2	73.6	73.0	72.4	71.9	76.43
74.5 72.2	74.9	74.2	74.0	73.6	72.8	72.0	72.0	71.0	70.8	70.2	70.0	72.92
12 2	72.0	71.8	71.6	71.4	71.2	74.0	73.8	73.6	73.4	72.9	$\left[\begin{array}{c} -1 \\ 72 \cdot 4 \end{array}\right]$	71.87
69.2	68.2	68.0	67.5	67 1	66.6	66.0	65.6	65.2	64.5	64 0	63.5	67.75
68.0	68.0	67.6	66.9	66.6	65.9	65.4	65.2	65.0	64.2	63.2	63.0	66.20
68.8	68.2	68.0	68.0	67.5	67.0	66.2	66.0	65.2	65.0	64.2	64.0	66.28
70.0	70.0	69.5	69.2	69.0	68.8	68.5	68.4	68.2	67.7	67.5	67.1	68.40
	69.0	68.2	68.4	68.2	67.6	67.4	67.0	66.7	66.3	65.8	65.4	67:36
69.0						3		į.	[	1		
	69.2	68 6	68.1	68.0	67.5	67.1	66.7	66.2	65.9	65.2	65.0}	67:39

	OI.	e Scale Div	ision = '00	0087 parts o	of the H. F.	Increase, i	n Scale Div	isions, corre	sponding to	1º decrease	of Tempera	ture, 1°63.	
Mean G gen Ti	öttin- }	Oh.	1h.	2 <sup>h</sup> •	3h.	4 <sup>h</sup> •	5 <sup>h</sup> .	6 <sup>h</sup> •	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10h.	11h.
	2 3 4 5 6 7	Sc. Div. 610 ° 0 614 ° 0 611 ° 8 576 ° 0 594 ° 0 598 ° 2	Sc. Div. 610 2 610 0 618 8 567 0 588 2 596 0	Sc. Div. 610 2 603 0 610 1 566 6 589 5 577 5	Sc. Div. 603 ° 0 604 ° 0 608 ° 6 550 ° 0 587 ° 5 572 ° 5	Sc. Div. 597 ° 0 593 ° 8 606 ° 1 579 ° 0 583 ° 0 580 ° 0	sc. Div. 592.5 589.8 602.4 578.5 578.0 572.5	sc. Div. 593 ° 0 592 ° 0 603 ° 2 549 ° 0 575 ° 0	sc. Div. 598 2 600 1 604 1 582 5 584 0 581 4	sc. Div. 601*2 597*8 613*7 594*0 600*0 588*2	sc. Div. 603 * 5 608 * 9 608 * 4 605 * 0 603 * 0 601 * 8	sc. Div. 609 5 607 0 614 6 583 5 597 0 608 0	sc. Div 613 1 601 8 611 0 587 5 599 8 603 2
T.	8 9 10 11 12 13 14 15	593.0 596.2 597.0 603.0 602.2 609.5	597°0 595°8 594°0 595°0 602°0 597°0	592.5 585.0 586.0 583.0 596.0 578.8	585 0 583 1 578 2 573 5 582 0 572 2	580°3 582°4 578°0 572°5 571°0 556°0	579°8 582°0 578°5 577°5 566°5 554°0	587·3 584·8 580·0 580·0 568·0 581·2	595.0 590.0 583.5 586.0 575.8 602.2	603°1 593°5 591°0 594°0 587°0 597°6	606 0 598 0 591 2 603 0 592 8 597 9	621.0 596.5 596.0 602.5 603.2 592.8	599.0 592.5 591.5 604.8 600.8 596.5
AUGUST.	16 17 18 19 20 21	594·2 609·8 607·0 610·0 607·0 614·8	593.0 609.8 606.0 612.5 605.5 610.0	595.0 600.0 599.8 607.5 600.0 600.2	587.9 594.5 593.5 602.0 598.6 590.0	576.5 584.4 587.5 600.8 597.0 587.0	566.5 577.0 585.0 598.0 601.2 590.5	575.8 581.0 587.5 606.0 600.5 597.2	579.0 581.5 592.5 619.0 601.5 609.8	588.8 605.0 606.0 618.8 605.9 612.2	595.0 596.0 607.5 620.2 600.5 611.0	600.0 594.0 597.5 612.2 600.8 624.0	594.2 603.5 612.2 608.0 604.0 599.6
1	23 24 25 26 27 28 29	600.8 597.0 595.5 600.0 601.0 597.0	598.0 595.0 585.0 599.0 598.8 595.0	591:5 589:0 568:5 611:9 591:2 586:0	583 ° 0 582 ° 8 571 ° 0 599 ° 0 583 ° 2 580 ° 0	576.0 575.0 569.0 580.8 579.0 570.0	573.5 573.0 552.0 579.8 580.0 571.8	582.8 582.0 573.0 583.8 579.6 571.2	591.0 594.0 509.6 592.1 586.7 582.8	597.5 596.5 598.4 599.0 603.0 591.5	601.5 604.4 596.2 608.0 605.5 598.8	607.0 601.8 595.0 597.8 615.0 609.0	600°0 602°4 590°6 608°0 617°0 606°0
(	30 a 31 a	_		=	_		<del>-</del>	_	_	-	_		<u> </u>
Hourly	Means	601.62	599.11	592.45	586.02	581.75	579.18	582.87	591.76	599.32	602.67	603.57	601.96
			·	·	ТЕМР	ERATURE (	F THE BIF	ILAR MAGN	ET.				
	2 3 4 5 6 7 8	65.1 65.9 66.8 68.1 68.8 69.5	66.0 66.4 67.4 69.0 69.2 69.5	66.0 67.0 68.2 70.0 70.5 70.5	68.0 68.0 69.6 71.4 71.5 70.2	68.5 69.0 69.6 72.4 74.0 70.6	68.5 69.8 71.4 73.4 75.0 71.5	69°0 69°8 71°5 73°4 75°5 72°2	69.8 69.6 71.9 73.5 75.4 72.6	70°2 70°0 72°1 74°0 76°0 72°9	70°4 70°6 73°4 74°5 75°8 73°2	71°0 71°0 73°7 74°5 76°5 73°4	71.4 71.4 73.5 74.2 76.0 73.1
T.	9 10 11 12 13 14	67.4 70.6 72.4 69.0 71.5 72.6	67.5 70.6 72.4 69.0 71.8 73.0	67.5 70.6 72.6 69.0 72.8 73.4	68:0 71:2 72:5 70:0 74:0 74:4	68.5 72.5 73.0 71.0 74.6 75.4	69.6 74.0 72.5 72.0 75.5 75.6	70°2 74°5 73°0 73°0 76°0 76°0	71.1 74.4 73.5 78.5 75.4 76.8	72.6 75.4 73.5 74.0 76.2 77.1	74.0 75.5 73.5 74.8 76.3 78.0	75.0 75.8 73.5 75.1 75.6 77.9	80.7 76.0 74.5 74.6 75.7 77.5
AUGUST.	16 17 18 19 20 21 22	74.4 74.5 69.6 64.5 65.0 64.8	74.8 75.2 69.4 65.0 65.0 65.2	75.4 75.5 69.5 64.0 64.7 66.0	76.4 76.2 70.5 64.0 65.4 66.6	77.3 76.0 70.5 64.7 66.5 67.3	78.4 76.5 70.0 65.2 67.0	78.6 76.4 70.0 65.5 67.9	79°3 76°0 70°1 65°5 68°5 68°0	79.7 76.5 70.3 65.6 68.8 68.4	80°2 76°5 70°5 66°5 69°6 69°7	80°2 76°0 71°0 67°0 69°9 70°5	80.0 76.0 70.7 67.2 70.0 70.8
1	23 24 25 26 27 28 29 30 a	65.4 65.7 65.8 68.0 69.2 66.3	66.5 66.0 65.8 67.0 68.8 66.9	67.5 66.4 67.5 67.0 68.8 68.5	68:3 66:9 68:5 68:0 69:0 68:8	69:2 68:0 70:0 68:6 68:9 69:5	69.5 68.5 70.8 69.6 69.1 69.7	70.0 69.0 71.3 70.4 68.8 69.8	70.0 70.0 71.8 71.5 69.0 69.7	70.8 70.4 72.6 72.1 69.4 70.0	71.0 71.2 73.5 73.0 69.8 70.7	71.5 71.6 73.4 74.0 70.5 71.0	71.5 72.2 73.5 73.2 70.4 71.5
	31 a												
ourly I	Means	68:37	68.64	69.12	69.89	70.65	71.27	71.65	71.95	72.44	73.01	73:32	73.5

<sup>&</sup>lt;sup>a</sup> The 30th and 31st days are omitted from the Means, the readings having been affected to an uncertain amount by the induced magnetism of the vertical iron shafts of Robinson's anemometer.

	One Scale	Division =	·000087 pai	rts of the H.		ZONTAL se, in Scale 1		orresponding	to 1° decre	ase of Temp	perature, 1°6	3.
12 <sup>b</sup> .	13h.	14h.	15 <sup>h</sup> .	16 <sup>h</sup> .	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
sc. Div.	Sc. Div. 604 1	sc. Div.	Sc. Div. 604 0	Sc. Div. 603 8	Sc. Div. 604 0	Sc. Div. 604 4	Sc. Div.	Sc. Div. 604 0	Sc. Div.	Sc. Div. 604.5	Sc. Div.	Sc. Div. 604 20
603.7	603.0	606.9	606.0	607.5	608.8	610.0	610.0	609.0	607.0	609.2	607.0	604.60
615.0	613.0	621.9	597.0	547.2	455.6	540.6	538.7	569.2	575.5	580.0	575.0	589.23
588.0	588.2	587.0	596.8	581.0	578.4	583.8	587.3	588.0	577.0	592.0	590.2	581.52
578.2	582.4	584.0	590.0	597.9	588.6	593.0	589.2	573.0	572.2	593.8	594.0	588'14
618'2	584.0	584.0	590.0	584°4 —	580.4	585.0	594.0	591.5	<u> </u>	596°0	595.0}	589.76
602.0	594.8	596.0	600.0	604.0	605.0	597.0	593.0	594.0	596.0	592.0	598.2	596.29
596.0	596.0	599.0	594.0	597.0	596.0	595.8	595.4	595.2	595.5	595.0	597.5	593.01
500'2	596'0	597.5	599.8	601.0	598.2	602.8	595'0	597.8	597.3	598.6	599.2	592.85
598.2	591.0	597.0	597.0	597.9	597.1	597.0	597.2	597.6	592.2	597.0	600.5	593.10
501.2	602 9	598.2	598.6	592.7	590'8	591.0	598.8	599.5	599.8	607.5	612.0	593.35
87.0	585.4	592.0	591.4	592.0	593.5	590.0	— 591·5	592.0	593.5	593.0	595.0}	588.8 <b>3</b>
590.5	590.0	593.0	597.2	597.0	594.5	594.2	593.2	598.0	593.2	601.4	605.0	591.40
02.2	601.0	601.5	600.2	597.4	597.0	592.8	597.0	593.0	603.4	602.0	602.0	596.93
01.5	611.0	606.0	597.0	592.9	599.2	604.0	604.9	604'0	607.5	607.2	608.5	601.06
507.2	607.8	610.0	609.0	610.8	610.4	611.0	608.5	611.2	601.5	611.2	610.0	609:33
604.2	608.4	610.8	609.4	608.5 621.0	611.4 573.0	611.0	616.2	614.0	614.0	611.2	613.2	606.49
606.2	608.0	609 0	609 0	621 0	3/3 0	592.5	587·8	589.2	582.4	587.4	599.0	600.45
97.5	599.0	591.0	588.2	591.4	595.8	594.4	595.5	600.7	594.1	596.1	596'9	593.47
95.4	592.4	597.2	592.1	595.9	596.0	588.8	566.4	566.0	575.4	579.0	589.5	588.62
290.0	585.5	586.4	581.0	579.2	572.0	572.2	578.5	580.5	582.5	581.2	592.0	581.87
601.0	595.0	594.0	595.0	596.0	600.0	595.0	599.0	602.0	599 <b>°</b> 5	600.0	600.8	597:35
599.0	599.0	603.0	598.5	587.2	600.0	601.6	600.0	598.0	590.0	592.0	599.2	596.15
98.0	602.0	596.0	590.6	603.4	603.8	610.0	608.7	610.8	611.0	610.0	610.8	596.42
_		_		_		• —		— ·				-
				<u> </u>								
599.56	597.51	598.60	597.16	595.30	589.56	594.09	<b>5</b> 93 <b>·</b> 80	594*94	594.16	597.40	600.03	594.77
	1			'TI	MPERATUE	RE OF THE	BIFILAR M.	AGNET.			l II	
71.2	71°3	71.0	7°°5	70°3	70°0	69°0	68.0	68.0	66°8	66°5	66°0	68°84
72.0	71.8	71.4	71.4	71.4	70.0	69.5	69.5	69.0	67.3	67.0	66.2	69.39
73.2	73.5	73.5	72.7	72.1	71.9	71.4	70.7	70.2	69'4	69.0	68.6	71 07
74.0	73.2	73.0	72.6	72.0	71.6	70.8	70.5	70.0	69.5	69.4	69.2	71.84
73.4	73.1	73.2	72.7	72.5	72.3	72.1	71.7	71.0	70.7	70.7	70.5	72.84
73.0	72.5	72.5	72.3	72°1	71.9	67.5	67.5	67.4	67.5	67.5	$\frac{-}{67\cdot 3}$	70.76
75.3	74.4	74.2	73.5	73.0	73.0	72.5	72.0	72.0	71.2	71.0	70.8	71.89
75.5	75.3	75.0	74.5	74.4	74.0	74.0	73.6	73.4	73.2	72.6	72.5	73.71
74.7	74.0	72.8	72.4	$72 \cdot 2$	71.4	71.0	70.6	70.2	70.0	69.6	69.2	72:30
75.0	74.4	74.0	73.8	73.6	73.2	73.0	72.8	72.6	72.2	71°9	71.9	72.64
76.0	75.6	75.5	75.0	74.7	74.5	74.0	73.7	73.2	73.0	73.0	72.6	74.44
77.8	77.2	77.0	77.0	77.0	76.8	77.0	76.7	76°0	 75·5	75.5	$\left\{\begin{array}{c} \overline{75\cdot2} \end{array}\right\}$	76.10
81.0	80.2	80.0	79.0	78.5	77.7	77.5	76.7	76.2	76·0	75.4	75.0	77.84
76.0	75.2	75.1	75.0	74.6	74.2	73.6	73.0	$72.\overline{5}$	72.0	71.5	71.2	74.81
70.0	69.0	68.0	67.5	66.8	65.9	65.6	65.3	65.1	64.9	64.7	64.7	68.32
67.8	67.0	66.2	66.3	65.8	65.4	65.0	65.0	64.2	64.2	64.0	63.2	65.42
70.0	69.7	68.8	68.0	67.7	67.2	66.2	66.4	65.9	65.4	65.0	65.6	67.27
71'8	72.0	71.4	70.4	69.7	69.4				_		66.0}	68.33
71.5	71.0	70.7	70:4	60:0		68.4	67.8	67.4	66.8	66.4		
$\frac{71.5}{72.4}$	$71.0 \\ 72.0$	70.7	70.4	69.6	69.2	68.6	68.0	67.5	66.8	66.2	66.0 66.2	69.04
73.6	73.0	70°9 72°1	69.8 71.5	69.5 70.6	69°0 70°2	68.5 69.8	68.2 69.5	67.6 69.5	67 <b>·</b> 2	66.4 68.0	67.0	68°90 70°37
	72.7	72.4	72.2	71.0	71.0	71.0	71.0	70.7	70.4	70.0	69.6	70.78
73.0	71.0	71.0	70.5	70.2	70.0	69.4	69.0	68.2	68.0	67.5	66.6	69.34
73.0 70.7		70.6	70.4	$70.\overline{2}$	70.0						67.7}	
	71.0		}	l	l	69.0	68.8	68.5	68.2	68.0	1 67.7 }	69.43
70.7	- T 0		<del></del>						1			
70.7 71.6	71 0 —	1 1 1			_	_	_	<u> </u>	_			_

	On	e Scale Divi	ision = ·00	0087 parts o	f the H. F.		NTAL FO		sponding to	1º decrease	of Tempera	ture, 1'63.	
Mean Go gen Ti	l	Oh.	1h,	2 <sup>h</sup> .	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> •	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10h.	11ħ.
	1 a	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	2 a 3 4	602°0 606°2	601.2 596.0	600.7 598.0	593.0 593.2	588.0 591.0	593.0 596.5	594.0 603.0	599·5 602·0	606.0 607.0	604.0 611.2	623.0 616.0	623.0 611.2
	5 6 7 8 9 10 11 12	615.0 611.0 611.8 621.4 600.4 610.5	610°2 606°2 605°5 601°0 600°0 605°0	605.5 602.0 597.7 595.0 599.8 598.5	593.0 589.8 587.0 591.5 592.0 588.5	583.0 578.2 579.4 593.8 586.0 579.5	585.0 b 584.0 576.0 580.0 585.0 575.0 c	586.0 586.8 581.6 595.6 592.0 580.0	592.0 596.8 590.0 588.5 607.0 586.8	602.5 607.0 598.0 600.0 616.0 595.8	600°2 609°8 604°1 617°0 620°5 605°8	612.8 615.7 604.0 618.0 617.0 612.5	614'2 610'0 606'0 600'0 622'8 612'0
SEPTEMBER.	13 14 15 16 17 18	598.5 621.2 620.9 627.0 614.0 613.0	582.0 617.8 616.1 626.0 613.0 607.5	573°0 608°0 607°0 625°0 608°0 597°8	581.0 600.0 596.0 615.0 598.0 585.4	557 · 2 597 · 0 590 · 0 598 · 0 583 · 0 578 · 0	574.2 601.1 594.0 591.0 579.0 582.5	571.0 608.5 594.0 589.0 586.0 582.2	581.6 615.0 598.0 591.5 591.2 586.1	608'2 624'0 604'0 605'0 594'8 596'8	600'2 624'0 614'0 610'0 601'0 595'6	604'8 624'2 617'0 625'5 603'4 606'5	610'4 620'5 620'0 620'4 606'0 608'5
<b>32</b>	19 20 21 22 23 24 25	617.8 615.8 617.0 611.0 597.0 570.3	614·2 612·2 618·0 608·0 ———————————————————————————————————	606.8 604.0 612.5 603.4 — e 557.0	596.8 598.9 600.0 602.2 502.8 548.1	585.0 592.0 609.0 605.0 491.8 546.1	586.1 588.0 604.5 602.5 439.9 546.2	594.8 593.0 604.5 611.0 490.2 555.0	594.0 603.0 607.0 619.0 603.7 572.2	609'4 615'0 631'0 605'0 515'0 581'0	618.0 619.0 620.0 612.5 602.7 585.0	621.0 618.0 607.4 613.0 584.0 583.0	619 0 616 5 613 8 623 1 577 7 586 5
,	26 27 28 29 30	598.0 582.0 600.5 602.5	277.7 577.5 602.0 605.0	475.8 574.0 596.5 600.0	518.5 564.0 593.0 593.4	545.4 560.0 589.0 584.8	557.5 565.0 577.2 .580.0	551.0 572.5 543.0 578.2	563°5 581°5 608°0 576°2	597.5 589.0 616.0 583.1	602.0 598.0 631.2 605.8	592.0 598.5 646.8 609.2	580°0 590°2 642°0 606°5
Hourly	Means	608.63	603:97	598.65	590 91	584.23	583.90	586.44	594.86	604.30	609.42	613.21	612.86
		1		1	ТЕМЕ	ERATURE	OF THE BII	FILAR MAG	NET.				
	$\begin{pmatrix} 1^{a} \\ 2^{a} \end{pmatrix}$	-	<u>-</u>	-	•	<u>-</u>	<u>-</u>	<u>-</u>	<u>~</u>	<u>~</u>	<u>-</u>	<u> </u>	<u>•</u>
	3 4 5	66.5 66.7	66.6 65.4	66.7 65.3	66.7 65.0	67.7 65.0	68.5 65.2	69°0 65°2	70°0 65°2	70°3 65°2	71·3 65·2	71·7 65·2	71 · 4 65 · 1
	6 7 8 9 10 11	62'1 63'7 66'4 65'8 61'5 60'1	62.5 64.2 66.6 65.5 61.7 60.0	63:5 65:2 67:4 65:2 62:2 62:0	65.0 66.6 67.6 65.0 63.0 62.7	65.0 67.6 68.6 64.9 63.7 63.5	65.0 68.2 70.0 65.4 64.2 64.0	65.3 68.4 70.9 65.4 64.3 64.4	65.6 68.6 71.5 65.6 65.0 64.6	66.2 68.7 71.7 66.0 65.4 65.2	66.8 68.9 72.0 65.8 66.0 65.6	67.4 68.7 72.0 66.0 66.4 66.2	67.6 68.5 72.0 66.1 66.4 66.4
SEPTEMBER.	12 13 14 15 16 17 18 19	62.7 56.5 54.2 56.4 59.5 62.9	62.5 56.2 55.0 57.0 59.3 63.0	62.5 56.4 55.7 57.5 59.8 63.3	62.6 56.5 57.2 58.8 60.9 63.3	62:5 56:7 57:8 60:0 62:2 63:6	62:8 57:0 58:2 61:0 63:3 64:0	62.5 57.2 58.8 61.4 63.9 64.2	62.5 57.4 59.3 61.9 64.4 64.5	62°3 57°8 59°8 62°0 64°8 64°5	62.0 58.2 60.5 63.0 65.2 64.6	61 · 4 58 · 9 61 · 7 64 · 0 65 · 5 65 · 0	60.5 58.9 62.5 64.3 65.5 64.6
_	20 21 22 23 24 25 26	60.8 60.0 57.5 60.5 63.5 60.0	61.2 60.2 58.0 60.5 	61.2 60.8 59.0 61.3 — 59.0	61.4 61.7 60.0 62.2 63.2 59.2	61.5 62.0 60.5 63.0 63.0 59.5	61.7 62.3 61.2 63.8 63.1 60.0	62.0 62.9 61.8 64.0 63.1 60.3	62.4 63.3 62.4 64.5 63.3 60.7	62.5 63.5 62.6 65.3 63.3 61.0	62.4 64.2 63.5 66.5 63.3 60.9	62.8 64.9 64.2 67.0 63.3 61.4	62.8 65.4 64.8 67.4 63.3 61.0
	27 28 29 30	62.1 61.7 56.8 55.0	62.5 61.5 56.5 55.0	62.7 61.6 56.9 56.0	63.0 62.1 57.0 57.2	63.5 62.1 57.4 58.0	64.0 62.6 57.4 58.4	64.5 62.6 58.0 58.8	65.5 62.4 58.6 59.0	66°2 62°7 58°4 59°0	67.5 62.7 58.4 59.0	68°3 62°4 58°8 59°4	68.5 62.2 58.6 59.7
	Means	60.79	60.80	61.29	61.89	62.40	62.92	· <del></del>		<u> </u>			64.6

The observations on the 1st and 2d days are omitted from the Means, the readings having been affected to an uncertain amount (up to four hours on the 2d) by the induced magnetism of the vertical iron shafts of Robinson's anemometer.

\* Eight minutes late.

	One Scale	Division =	*000087 pa	rts of the H	F. Increa	se, in Scale	Divisions, c	orrespondin	g to 1° decre	ase of Tem	perature, 1 6	
12h.	13 <sup>h</sup> .	14h.	15h.	16h.	17 <sup>h</sup> .	18h.	19h.	20h.	21h.	22h.	23h.	Daily a Monthl Means
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
606.0 —	596.0 608.8	604.0	604.8	607 · 2 605 · 0	604.5 615.0	605.0	605.0	607.0	607.9	609.9	610.5	603.8
		l —				609.0	611.2	612.0	612.4	616.0	616.0}	606.6
617.0	615'1	605°2	603.0	603.2	597.2	604.2	609.8	611.0	609:5	610.0	613.0	604.0
611'5	609.2	609.0	608.8	609.0	608.0	611.2	611.0	611.0	612.0	612.0	612.0	605.1
606.5	605.0	606.0	607.0	604.8	605.0	606.1	607.2	608.5	610.0	610'2	612.2	601.2
611.0	613.0	598.0	610.0	608.4	606 2	603.8	604.4	611.0	608.0	608.2	609.2	603.8
624.8	616.8	609.0	606.6	610.2	612.9	612.9	612.0	611.8	613.2	613.2	616.0	608.2
611.9	610.2	605'1	607.2	607.7	608.2					-	$\left.\begin{array}{c} - \\ 598.0 \\ 623.2 \end{array}\right\}$	598.9
						593.5	602.0	598.8	601.0	582.0	598.0	
599.0	597.2	597.0	606.0 q	603.0	601.0	603.0	611.0	618.2	620.0	620.5	1 0-0 - 11	597.5
627.5	620.0	620 0	619.0	621.0	621.0	620.0	621.4	618.8c	621.0	620.6	620.9	617.19
619'8	617.0	620.0	614.5	615.8	615.8	619.8	620.2	623.5	624.2	625.0	625.0	612.9
622.4	612.8	617.0	614.2	631.0	609.0	612.0	612.2	613.0	613.2	617.0	614.0	612.9
611.0	611.0	612.0	612.0	611.8	614.2	611.9	611.2	602.0	606.5	612.0	612.0	604'3
612.2	612.0	613.0	611.0	612.0	614.0						617.8	603.6
612.2	609.0	614.0	610:0	608.8	601.0	609.0	605.8	610.0	610.0	620.5		
615.0	616.0		610.0		601.0	603.5	605.0	610.0	609.2	615.8	616.2	607.40
612.0	610.2	615.0	615.4 613.6	$620.2 \\ 616.1$	622·2 611·0	617.0	616.1	616.2	618.0	616.0	615.4	611.58
609.1	583.6	604.8	604.0	609.0	608.8	611.0	608.0	611.5	608.8	613.5	616.5	612.03
594 <b>°</b> 2	583.0	561.4	561.3	560.2		584.8	554.0	537.5	570.5	579.5	531.0	595.5
586.2	586.2	588.8	591.5	592.0	561.5 592.0	557.5	559.0	553.8	569.0	573.5	576.0	555 24
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584.0	576.0	583.0	587.2	589.8	575 0	594.4	565.0	580.0	527.6		583.4	548.56
280.0	577.5	585.0	594.0	596.4	597.7	593.0	586.0	582.0	581.9	583°8 591°4	595.5	585.74
598.7	605.2	584.0	282.0	289.8	574.0	579.0	601.6	600.0	593.5	601.0	608.0	598.88
610.0	614.4	610.0	610.0	609.2	610.0	612'0	611.0	597.5	600.0	613.0	613.2	602.5
	<del></del>					012 0	011 0	611.0		<del></del>	010 2	
610.10	606.67	606.07	606.72	608.74	606.76	604.01	605.04	605.48	604.95	607.07	603.07	602.76
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o 	. 0	<u> </u>	-	·	o .	<u> </u>	<u> </u>	<u> </u>	·	-	<u> </u>	-
71.0	70.0	69.5	68.8	68.6	68.3	67.6	67.1	66.6	66.4	66.1	65.7	68.42
65'1	64.8	65.0	65.0	64°9	64.8			5	- ·	<del>-</del>		
<del>-</del>				_	_	64.7	64.3	63.9	63.7	63.2	$\frac{-}{62\cdot 8}$	64.83
67.9	67.7	67.4	66.9	66.7	65.9	65.7	65.2	65.0	64.6	64.4	64.0	65.56
	67.8	67.6	67.5	66.7	66.7	66.7	67.0	66.6	66.2	66.5	66.5	67.16
$68^{\circ}5$	72.0	71.5	71.0	70.6	69.7	69.0	68.2	67.8	67.5	67.0	66.3	69.55
68°5 72°0												
68°5 72°0 66°2	65.5	65.0	65.0	64.6	64.2	63.6	63.1	62.7	62.1	61.9	61.7	
68°5 72°0 66°2 66°6	65.5 66.2	65°6	65°0 64°9	64.6 64.1	63.6	$\begin{array}{c} 63.6 \\ 63.2 \end{array}$		$62.7 \\ 62.2$	$\begin{array}{c} 62.1 \\ 61.5 \end{array}$	61.9 61.2	61.7	
68°5 72°0 66°2	65.5	65.0	65.0	64.6		63.2	63°1 62°9 —	62.2	61.2	61.2	60.2	63.85
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68°5 72°0 66°2 66°6 66°4 — 60°2	65.5 66.2 66.0 — 59.7	65°0 65°6 65°0 — 59°4	65.0 64.9 64.4 — 58.5	64.6 64.1 64.0  58.5	63.6 63.8  58.0	63·2 	63.1 62.9 — 63.5 57.2	62°2 	61.5 63.2 57.0	61.2 	60.5 63.0 56.8	63.88 63.91 60.18
68°5 72°0 66°2 66°6 66°4	65.5 66.2 66.0 - 59.7 58.8	65.0 65.6 65.0  59.4 58.4	65.0 64.9 64.4 — 58.5 57.7	64.6 64.1 64.0  58.5 57.0	63.6 63.8  58.0 57.0	63·2 63·5 57·7 56·5	63°1 62°9 — 63°5 57°2 56°2	62.2 	61.5 63.2 57.0 55.4	61.2 63.0 56.7 55.1	60.5 63.0 56.8 54.6	63.88 63.91 60.18 57.08
68°5 72°0 66°2 66°6 66°4 60°2 59°5 63°0	65.5 66.2 66.0  59.7 58.8 62.3	65.0 65.6 65.0 	65.0 64.9 64.4 — 58.5 57.7 61.0	64.6 64.1 64.0 	63.6 63.8  58.0 57.0 60.2	63·2 	63.1 62.9  63.5 57.2 56.2 58.9	62.2 	61.5 63.2 57.0 55.4 58.0	61.2 63.0 56.7 55.1 57.5	60.5 	63.88 63.91 60.18 57.08 59.18
68.5 72.0 66.2 66.6 66.4 - 60.2 59.5 63.0 64.0	65.5 66.2 66.0 	65.0 65.6 65.0 	65.0 64.9 64.4 — 58.5 57.7 61.0 62.1	64.6 64.1 64.0 	63.6 63.8  58.0 57.0 60.2 61.1	63·2 	63 · 1 62 · 9 	62 · 2 	63 · 2 57 · 0 55 · 4 58 · 0 60 · 0	61.2 63.0 56.7 55.1 57.5 60.0	60.5 	63.88 63.91 60.18 57.08 59.18 60.98
68.5 72.0 66.2 66.6 66.4 	65.5 66.2 66.0 	65.0 65.6 65.0 	65.0 64.9 64.4 — 58.5 57.7 61.0 62.1 63.7	64.6 64.1 64.0 	63.6 63.8  58.0 57.0 60.2 61.1 62.6	63·2 	63.1 62.9  63.5 57.2 56.2 58.9	62 · 2 	61.5 63.2 57.0 55.4 58.0	61.2 63.0 56.7 55.1 57.5	60.5 	63.86 63.91 60.16 57.08 59.18 60.99
68.5 72.0 66.2 66.6 66.4 - 60.2 59.5 63.0 64.0	65.5 66.2 66.0 	65.0 65.6 65.0 	65.0 64.9 64.4 	64.6 64.1 64.0 	63.6 63.8  58.0 57.0 60.2 61.1	63·2 	63.1 62.9 	62.2 63.4 57.0 56.0 58.5 60.2 62.3	61.5 63.2 57.0 55.4 58.0 60.0 62.8	61.2 	60.5 	63.88 63.91 60.18 57.08 59.18 60.98 62.99
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68.5 72.0 66.2 66.6 66.4 	65.5 66.2 66.0 	65.0 65.6 65.0 	65.0 64.9 64.4 	64.6 64.1 64.0 	63.6 63.8 	63·2 	63.1 62.9 	62.2 	61.5 63.2 57.0 55.4 58.0 60.0 62.8 — 61.0 60.1 59.5 61.5	61.2 63.0 56.7 55.1 57.5 60.0 63.0  61.0 60.2 59.0 61.0	60.5 63.0 56.8 54.6 57.2 59.5 63.0 	63.86 63.91 60.16 57.08 59.16 60.99 62.99 63.22 61.48 62.16 62.02 64.56 62.44
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68.5 72.0 66.2 66.6 66.4 60.2 59.5 63.0 64.0 64.8 64.7 62.5 65.5 64.8 67.1 63.2 61.2 68.0	65.5 66.2 66.0 	65.0 65.6 65.0 	65.0 64.9 64.4 	64.6 64.1 64.0 	63.6 63.8 	63·2 63·5 57·7 56·5 59·8 61·0 62·3 — 61·0 60·6 61·2 62·4 65·0 61·9 — 60·6	63.1 62.9 	62.2 63.4 57.0 56.0 58.5 60.2 62.3  61.0 60.2 60.0 61.8 64.4 61.3  60.8	61.5 63.2 57.0 55.4 58.0 60.0 62.8 — 61.0 60.1 59.5 61.5 64.4 61.0 — 61.2	61.2 63.0 56.7 55.1 57.5 60.0 63.0  61.0 60.2 59.0 61.0 64.0 60.8  61.5	60.5 63.0 56.8 54.6 57.2 59.5 63.0 	63 · 86 63 · 91 60 · 16 57 · 06 59 · 16 60 · 96 62 · 96 63 · 22 61 · 48 62 · 16 62 · 16 62 · 44 60 · 66 60 · 6
68.5 72.0 66.2 66.6 66.4 60.2 59.5 63.0 64.0 64.8 64.7 62.5 65.5 64.8 67.1 68.0 62.0	65.5 66.2 66.0 	65.0 65.6 65.0 	65.0 64.9 64.4 	64.6 64.1 64.0 	63.6 63.8 	63·2 63·5 57·7 56·5 59·8 61·0 62·3 — 61·0 60·6 61·2 62·4 65·0 61·9 — 60·6 65·0	63.1 62.9 	62.2 63.4 57.0 56.0 58.5 60.2 62.3  61.0 60.2 60.0 61.8 64.4 61.3  60.8 63.7	61.5 63.2 57.0 55.4 58.0 60.0 62.8 — 61.0 60.1 59.5 61.5 64.4 61.0 — 61.2 63.2	61.2 63.0 56.7 55.1 57.5 60.0 63.0  61.0 60.2 59.0 61.0 64.0 60.8  61.5 62.9	60.5 63.0 56.8 54.6 57.2 59.5 63.0 	64.68 63.88 63.91 60.18 57.08 59.18 60.99 63.22 61.48 62.18 62.02 64.58 62.44 60.63 65.03
68.5 72.0 66.2 66.6 66.4 60.2 59.5 63.0 64.0 64.8 64.7 62.5 65.5 64.8 67.1 63.2 61.2 68.0 62.0 58.5	65.5 66.2 66.0 	65.0 65.6 65.0 	65.0 64.9 64.4 	64.6 64.1 64.0	63.6 63.8 58.0 57.0 60.2 61.1 62.6 63.6 61.0 62.2 62.8 65.4 62.0 61.0	63·2 63·5 57·7 56·5 59·8 61·0 62·3 — 61·0 60·6 61·2 62·4 65·0 61·9 — 60·6 65·0 58·8	63.1 62.9 	62.2 63.4 57.0 56.0 58.5 60.2 62.3 61.0 60.2 60.0 61.8 64.4 61.3 60.8 63.7 57.9	61.5 63.2 57.0 55.4 58.0 60.0 62.8 — 61.0 60.1 59.5 61.5 64.4 61.0 — 61.2 63.2 57.0	61.2 63.0 56.7 55.1 57.5 60.0 63.0  61.0 60.2 59.0 61.0 64.0 60.8  61.5 62.9 56.5	60.5 63.0 56.8 54.6 57.2 59.5 63.0 	63.86 63.91 60.16 57.08 59.16 60.99 62.99 63.22 61.46 62.02 64.56 62.44 60.66 65.06 60.67
68.5 72.0 66.2 66.6 66.4 60.2 59.5 63.0 64.0 64.8 64.7 62.5 65.5 64.8 67.1 63.2 61.2 68.0	65.5 66.2 66.0 	65.0 65.6 65.0 	65.0 64.9 64.4 	64.6 64.1 64.0	63.6 63.8 58.0 57.0 60.2 61.1 62.6 63.6 	63·2 	63 1 62 9 	62.2 63.4 57.0 56.0 58.5 60.2 62.3 61.0 60.2 60.0 61.8 64.4 61.3 60.8 63.7 57.9 57.5	61.5 63.2 57.0 55.4 58.0 60.0 62.8 — 61.0 60.1 59.5 61.5 64.4 61.0 — 61.2 63.2 57.0 57.3	61.2 63.0 56.7 55.1 57.5 60.0 63.0  61.0 60.2 59.0 61.0 64.0 60.8  61.5 62.9 56.5 56.2	60.5 63.0 56.8 54.6 57.2 59.5 63.0 	63 · 86 63 · 91 60 · 16 57 · 06 59 · 16 60 · 96 62 · 96 63 · 22 61 · 48 62 · 16 62 · 16 62 · 44 60 · 66 60 · 66 63 · 66 63 · 66 63 · 66 64 · 56 66 · 66 66 · 66 66 · 66 67 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 66 68 · 6
68.5 72.0 66.2 66.6 66.4 60.2 59.5 63.0 64.0 64.8 64.7 62.5 65.5 64.8 67.1 63.2 61.2 68.0 62.0 58.5	65.5 66.2 66.0 	65.0 65.6 65.0 	65.0 64.9 64.4 	64.6 64.1 64.0	63.6 63.8 58.0 57.0 60.2 61.1 62.6 63.6 61.0 62.2 62.8 65.4 62.0 61.0	63·2 63·5 57·7 56·5 59·8 61·0 62·3 — 61·0 60·6 61·2 62·4 65·0 61·9 — 60·6 65·0 58·8	63.1 62.9 	62.2 63.4 57.0 56.0 58.5 60.2 62.3 61.0 60.2 60.0 61.8 64.4 61.3 60.8 63.7 57.9	61.5 63.2 57.0 55.4 58.0 60.0 62.8 — 61.0 60.1 59.5 61.5 64.4 61.0 — 61.2 63.2 57.0	61.2 63.0 56.7 55.1 57.5 60.0 63.0  61.0 60.2 59.0 61.0 64.0 60.8  61.5 62.9 56.5	60.5 63.0 56.8 54.6 57.2 59.5 63.0 	63 * 84 63 * 9. 60 * 18 57 * 08 59 * 18 60 * 9. 62 * 9. 63 * 22 61 * 44 62 * 04 62 * 04 60 * 66 65 * 03 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 67 * 60 * 60

<sup>°</sup> Three minutes late.

d Fifteen minutes late.

	Oı	ne Scale Div	rision = '00	0087 parts	of the H. F.		NTAL FO in Scale Div		esponding to	1º decrease	e of Temper	ature, 1•63.	
Mean G gen T	öttin-}	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> •	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10h.	11h,
	$\left( egin{array}{c c} 1 & \\ 2 & \\ 3 & \end{array}  ight)$	Sc. Div. 612 2 616 4	Sc. Div. 610.0 616.8	Sc. Div. 611 8 613 0	sc. Div. 603 8 602 0	sc. Div. 596 2 594 0	sc. Div. 593°2 609°2	sc. Div. 592 ° 0 613 ° 0	Sc. Div. 598 ° 0 604 ° 5	sc. Div. 600 5 613 0	sc. Div. 604 2 608 3	sc. Div. 615.0 611.0	Sc. Div. 606'0 610'0
	5 6 7 8 9	622.0 623.5 617.5 615.8 607.2 617.8	620°0 618°0 613°0 610°2 603°7 615°0	620°0 609°0 603°2 604°4 604°0 609°0	619.0 600.0 599.2 597.6 597.0 605.0	613.5 600.0 592.0 592.0 595.0	611.0 605.0 593.0 592.0 596.2 601.5	605°0 610°0 598°2 598°0 599°5 603°0	613.0 614.0 603.0 612.2 610.0 602.0	616.5 611.2 609.6 612.8 622.5 608.0	616°1 619°0 613°1 618°2 619°0 618°0	617.0 622.8 611.8 619.2 608.0 621.0	621.0 606.0 613.6 622.0 613.0 627.2
OCTOBER.	11 12 13 a 14 15 16 17	618.8 630.8 625.0 616.4 626.8 619.5	616.5 623.0 611.0 611.0 626.0 618.8	610°0 613°0 540°0 606°2 622°0 613°0	607.0 614.2 567.0 591.0 614.0 612.0	599°0 605°8 589°0 603°5 603°7	599.0 607.5 595.0 603.8 607.5 597.5	604.0 615.0 617.0 599.0 604.0 609.0	611.5 624.0 610.0 610.0 614.5 615.0	614.2 626.0 610.0 611.0 613.0 608.2	607 · 2 619 · 2 611 · 0 615 · 5 620 · 0 619 · 5	624.0 617.2 613.0 618.5 621.0 620.2	624.4 627.8 599.0 620.0 620.2 620.9
00	18 19 20 21 22 a 23 a 24	619 2 613 0 621 0 621 0 630 5 403 0	612.0 600.0 618.2 617.5 625.5 38.0	611.0 596.0 607.0 614.8 618.0 423.3	592.2 590.1 605.0 611.0 619.0 399.6	601 · 2 606 · 5 599 · 7 603 · 8 613 · 0 587 · 4	604.2 592.4 597.0 594.1 609.0 522.6	602 ° 9 584 ° 0 601 ° 2 600 ° 0 608 ° 0 627 ° 7	599.0 598.7 607.0 604.0 613.8 600.7	600°1 597°3 604°0 611°0 620°2 607°0	606'0 601'0 612'5 619'5 625'8 525'4	604·3 605·0 619·0 620·2 626·6 577·7	607.8 611.2 621.6 623.0 619.0 630.0
	25 a 26 27 28 29 30 31	585°3 607°0 628°0 633°5 620°0 631°5	551 2 601 0 624 0 629 0 640 0 629 4	460°0 598°8 616°0 623°4 611°0 622°0	503.8 595.0 607.8 615.0 628.0 617.9	544.2 591.4 600.4 604.0 618.8 607.0	590.6 589.0 596.5 600.0 612.2 604.0	597°5 597°0 599°0 606°5 610°5 609°2	554.0 602.5 603.0 615.0 602.0 614.0	628.0 606.5 612.2 622.0 609.7 619.0	590.0 609.5 618.0 623.0 616.0 622.7	606.0 609.6 622.0 626.0 620.8 626.0	601.5 608.0 627.5 632.0 623.0 621.5
Hourly	y Means	619.95	616.96	610.85	605.63	601.25	600*26	602.73	608.04	611.59	614.80	617.25	618.23
		1				0		LAR MAGN	· · · · · · · · · · · · · · · · · · ·		0	0	
	$\left( egin{array}{c} 1 \ 2 \ 3 \end{array}  ight)$	57.4 54.2	58°2 54°4	59°0 55°2	59°0 56°7	58.7 57.8	59°0 58°2	59.0 59.0	59°8	59°2 60°6	59°4 61°9	59°8 62°2	59°9 62°5
	4 5 6 7 8 9	55.0 60.0 61.5 62.4 62.1 58.9	55.4 60.0 61.5 61.9 62.1 58.0	56.4 60.0 61.4 61.8 62.1 59.8	58.2 60.5 61.2 61.6 62.1 60.2	59.0 60.7 61.3 61.5 62.4 60.8	59.6 61.5 61.4 61.7 62.8 60.8	60°3 62°5 61°8 61°9 63°0 60°9	61.2 62.9 62.0 61.9 63.0 60.9	61.7 63.7 61.9 61.7 63.0 61.0	62·2 64·8 62·1 61·7 63·0 61·7	62.4 65.3 62.1 61.8 63.2 62.0	62.4 65.2 62.0 61.8 63.0 62.0
OCTOBER.	11 12 13 a 14 15 16 17	54.2 54.5 53.4 50.8 47.4 50.9	54.6 54.5 53.2 50.2 47.3 51.0	55.5 54.5 53.3 50.0 47.5 51.9	56.4 54.6 53.5 50.9 47.0 52.9	56.3 55.0 53.4 51.4 48.5 54.0	56.5 55.2 53.5 52.2 50.0 54.5	56.5 55.3 53.6 52.8 50.8 55.0	57.0 55.0 53.9 53.3 51.0 55.8	57.4 54.4 54.4 53.4 51.4 56.4	57.5 54.6 54.5 53.5 51.8 57.4	57.6 54.8 55.0 53.5 51.9 58.0	57.8 54.5 55.3 53.5 52.0 58.0
,00	18 19 20 21 22 a 23 a 24	56°1 59°4 54°0 55°4 52°5 52°9	55.5 58.6 53.4 54.3 52.0 52.6	56.5 58.6 53.8 54.0 51.9 52.6	57.4 59.5 54.0 54.4 51.9 53.1	57.6 59.5 55.7 54.6 51.9 54.1	58.8 60.0 56.5 55.1 52.4 54.9	59.4 60.0 57.0 55.1 52.5 55.5	60°2 60°4 57°3 55°5 52°6 55°8	61.5 61.0 57.5 55.5 52.8 56.8	62.5 61.5 58.6 55.9 53.2 57.8	63°0 61°9 59°5 55°5 53°4 59°0	62.9 61.1 59.5 55.4 53.0 59.0
	25° 26 27 28 29 30 31	55.6 49.0 43.9 44.8 48.1 52.0	55.4 49.0 43.4 44.5 48.5 51.4	55.6 49.4 43.5 45.8 48.7 51.4	55.5 49.4 44.3 47.0 49.3 52.2	56.1 49.6 45.4 48.3 51.3 53.0	56°3 49°8 45°8 49°0 52°2 54°0	56°4 50°1 46°1 49°4 52°5 55°0	56.6 50.1 46.9 49.7 53.0 55.7	56°5 49°8 47°7 50°6 53°6 55°7	56.4 50.3 48.4 51.7 54.2 56.2	55.6 50.3 48.4 51.8 55.1 56.6	54.5 49.5 48.6 51.6 54.3 56.3
		II————	<b></b>								_	_	

<sup>&</sup>lt;sup>a</sup> Not included in the Means, on account of disturbance.

	One Scale	Division =	'000087 par	ts of the H.		ZONTAL : se, in Scale !		orresponding	g to 1º decre	ease of <b>T</b> em	perature, 1°6	3.
12h.	13h.	14 <sup>h</sup> .	15 <sup>h</sup> .	16h.	17h.	18h.	19 <sup>h</sup> .	20 <sup>h</sup> .	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 608 0 612 0	Sc. Div. 612'8 613'5	Sc. Div. 614°5 614°0	Sc. Div. 615°0 615°0	Sc. Div. 612'0 615'2	Sc. Div. 610.8 615.0	Sc. Div. 613.5	Sc. Div. 616.8	Sc. Div. 616'6	Sc. Div. 616.8	sc. Div. 618'2	Sc. Div. 618 0	Sc. Div. 609 00
	-				—	620.0	621.0	622.0	622.8	623.4	$ \frac{-}{621 \cdot 2}\} $	613.60
620.2	620.5	620'0	620.0	619.3	622.1	619.8	620.2	620'0	620.8	620.8	623.0	618.37
613°0 614°8	612.4 616.0	614.2 615.8	615.0 618.2	613.2 619.0	613.0	615°2 619°0	614.0 616.0	616.0	615.2 615.2	618.0 616.8	616.0 619.4	612.99 611.34
620.0	619.8	619.5	620.5	621.0	632.0	623.0	627.2	614.8	607.8	612.2	616.6	613.70
620.0	607.0	607.5	611.4 609.0	616.8	604.2	612.7	615.0	615.4	614.2	615.0	615.2	609.56
614.6	623.4	609.1		614.8	616.1	619.0	618:4	618.0	621.4	619.8	$\left\{ \begin{array}{c} -1 \\ 622 \cdot 5 \end{array} \right\}$	613.69
625.8	625.8	621.0	622.0	621.8	623.0	623.0	620.0	624.8	628.0	629.0	630.0	617.91
628.6	635.0	631.2	626.0	615.4	611.2	609.0	595 <b>5</b>	601.0	604.0	606.0	600.2	616.12
609'0	605.0	608.0	612.0	612.0 621.8	612.5	613.0	614'2	616.4	617.0	619.7	619.0	606.03
621.2 611.0	621.0	620.4	624.1	624.0	624 <b>.</b> 2 628 <b>.</b> 0	624.0 628.3	626.9	627°0 624°8	626°0 623°0	$628.8 \\ 622.2$	630.0 628.5	616.44 619.48
624.1	606.1	622.3	619.6	620.0	620.4	-	- 020 0	-			- )	
			<b> </b>		_	607.5	608.5	611.8	613.7	601.2	618.2 }	613.88
611.2	609.7	610.0	611.5	610.0	615.5	615.9	614.5	611.9	614.5	616.2	616.2	609.05
613°0	614.7	$\begin{vmatrix} 613.0 \\ 617.2 \end{vmatrix}$	611.8	613.0	605.9	615.0 611.0	616.2 609.0	618.0 615.3	620°2	620°4 615°5	621.2 620.5	607.18 611.92
625.0	625.8	626.8	627.1	627.6	628.0	629.0	629.0	629.2	632.0	631.8	630.0	620.05
624.0	614.4	619.0	618.0	619.0	631.0	632.8	641.3	583.0	203.0	222.2	480.2	592.37
632.0	594.0	581.0	565.5	543.0	565.0	187.0	366.0	108.8	479°0	434.2	554.5}	481.35
586.0	590.0	592.5	596.0	599.0	600.0	603.0	598.2	602.4	603.8	605.0	606.9	583.12
617.5	619.8	621.0	620.5	620.0	618.8	622.2	621.6	$624.\overline{2}$	625.5	626.8	628.5	611.72
630.2	627.8	630.2	628.7	631.1	633.0	628.0	629.4	629.0	630.8	631.0	631.0	621.44
630.0	630.9	630.0	634.0	632.8	633.0	632.4	633.0	633.0	632.0	624.5	628.0	625.13
623°0 625°6	628°2 618°8	618.8	621.5	626.0 624.0	625.0 623.2	624.6	620.2	627.0	627.5	615.0	616.2	620.21
	-	-	-			622.2	625.0	624.2	623.0	625.8	$\{622 \cdot 0\}$	621.04
619.41	619:24	619.07	619.04	619.55	619.51	619.74	619.20	619.95	620.50	619.94	621.49	615:17
					MPERATUR	E OF THE	BIFILAR MA					
59°8	59°5	59°2	58.0	57.6	57.0	5 <b>6</b> °9	56°6	56°4	56°2	55°6	54.9	58.14
62.0	61.1	60.5	60.2	60.0	59.5	57.0	56.6	56.4	56.0	55.9	55.5}	58.47
62.1	61.6	61.4	61.2	61.0	61.0	60.6	60.4	60.5	60.5	60.1	60.0	60.15
64.6	64.4	64.0	63.8	63.6	63.2	63.0	62 <b>.2</b>	62.5	62.2	62.2	61.8	62.70
61.9	61.7	61.7	61.7	61.7	61.8	62.0	62.0	62.0	62.0	62.0	62.1	61.78
61.8	61.5	63.0	61.5 62.4	61.8	$\begin{array}{c c} 61.9 \\ 61.4 \end{array}$	$62.0 \\ 61.2$	62.0 61.2	60.6 61.9	62·3 60·1	62.6 59.5	62.5 59.3	$61.88 \\ 62.03$
61.7	61.4	61.0	61.0	60.2	60.2			-	— —			
				<b>—</b>		56.0	55.8	55 6	55.4	55.4	$\frac{-}{55\cdot 4}$ }	59.43
57.6 54.5	57.1	56.6	56.4	56.2	55.5	55.2	54.5	54.5	54.3	54.3	54.3	55.99
55.3	54.5 55.3	54.4 53.8	54°3 53°0	54°1 52°6	54.0 52.5	53.8 52.2	53.7 52.0	53.5 51.8	53°5 51°7	53'4 51'5	53.4 51.0	54°33 53°32
-53.0	51.6	51.0	50.6	50.3	50.3	49.8	49.1	48.2	48.0	47.6	47.4	50.95
51.7	51.8	51°6	51.5	51.1	51.4	51.0	50.8	50.6	50.7	50.6	50.8	50.43
57.9	57.4	57.0	56.8	56.7	56.2				~~		56.4}	55.81
62.9	62.5	62.4	62.1	61.6 —	61.3	57·3 61·1	57.0 61.0	57.0 61.0	61.0 61.0	56.8 60.2	56.4 5 60.2	60.38
61'0	59.8	59.5	58.8	28.6	28.0	28.0	57.7	57.2	56.6	55.8	54.9	59.06
59.5	59.5	59.5	59.2	58.8	58.5	57.5	57.3	57.0	56.5	56.4	55.7	57.16
55.0	54.6	54.0	53.6	53.2	52.6	52.4	52.2	51.9	52.0	52.0	52.5	54.03
52 6 58 8	52·3 57·9	52.1	52.3	52·1	52.2	52.2	52.2	52.4	52.3	52.3	52.3	52.39
	019	57·7 —	57.4	56.6 —	56°2	53.7	54.0	54°3	54.5	55°0	55.6}	55.66
53.6	53.0	52.7	52.5	52.3	51.9	51.2	51.3	51.0	50.7	50.3	49.8	53.80
49.0	48.5	48.0	47.8	47.6	47.0	46.4	45.5	45.0	44.7	44.5	44.1	48.10
48.8 51.3	48.5	48.2	47.5	47.0	46.7	46.7	46.4	46.3	46.0	45.8	45.5	46.49
54.2	50°0 54°3	50°0 54°1	49.5	49.2	49.2	49.0	48.8	$\frac{49.0}{52.5}$	49.0	49°1 52°5	48.0 52.3	49.01
56.4	56.1	55.6	54'0 55'1	53·7 55·0	53°5 55°0	53.2	52.6 —		52.5			52.52
	-		_	_		52.9	53.0	53.4	53.6	54.0	$\left \begin{array}{c} -53.9 \end{array}\right\}$	54.31
<del></del> -			<u> </u>									

	On	e Scale Div	ision = '006	0087 parts o	of the H. F.	HORIZO Increase, i	NTAL FO	RCE. sions, corre	sponding to	1° decrease	of Tempera	ture, 1°63.	
Mean G gen Tir	öttin-}	O <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>հ</sup> .	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
(	1 2 3 4 5 6 7	Sc. Div. 617 0 605 2 610 0 623 5 623 2 631 0	Sc. Div. 615 '9 605 '0 610 '0 620 '0 620 '0 627 '8	sc. Div. 585 ° 0 601 ° 2 610 ° 0 616 ° 0 622 ° 8 622 ° 2	Sc. Div. 573°0 600°0 609°0 609°2 614°1 612°7	Sc. Div. 610°5 597°0 600°0 602°0 608°1 608°0	sc. Div. 616°0 597°5 593°0 597°2 605°1 617°5	Sc. Div. 594 · 5 596 · 0 591 · 8 595 · 8 610 · 6 605 · 0	sc. Div. 606°0 599°0 598°2 596°1 615°0 612°0	sc. Div. 603 * 8 602 * 4 607 * 2 606 * 0 618 * 9 630 * 0	sc. Div. 610°0 600°5 605°4 605°0 620°0 621°5	Sc. Div. 620 ° 0 602 ° 2 607 ° 2 604 ° 0 624 ° 0 621 ° 5	Sc. Div 613 (6 598 8 609 7 611 (6 628 (6
JR.	8 9 10 11 12 13	637.0 633.0 625.0 630.0 633.1 638.0	623°0 622°5 627°0 624°4 630°3 632°4	624.0 615.0 623.0 618.2 623.0 628.0	621'4 605'0 614'0 607'0 615'0 621'5	620.5 605.4 b 601.2 596.0 607.0 615.0	612.5 596.0 596.5 590.3 601.2 597.5	609.5 593.0 598.0 593.2 603.2 597.0	615°0 592°5 606°2 599°0 609°0 617°0	610°5 606°2 610°0 608°5 621°0 613°0	609.0 614.4 605.8 618.0 624.5 622.0	621.0 608.8 613.6 623.0 632.0 636.0	633.8 613.1 614.0 620.4 636.0 625.0
NOVEMBER	14 15 16 17 18 19 20 °	639 ° 0 649 ° 5 631 ° 8 630 ° 8 630 ° 5	638.0 650.0 630.6 626.6 631.0 550.0	632.5 635.0 625.0 618.0 624.5 627.0	621.0 618.2 614.0 617.0 619.0 637.4	619.0 619.0 608.2 623.5 615.0 609.0	604.0 614.8 607.2 622.0 610.0 608.0	609.0 608.2 605.0 621.2 614.0 610.0	616 · 2 605 · 0 602 · 0 621 · 5 624 · 0 622 · 2	620 0 610 0 615 0 624 0 635 0 635 8	629.6 630.3 624.0 620.8 665.0 636.8	636°0 617°1 629°0 632°0 622°4 641°2	638 (629 (623 (628 (625 (641 (641 (641 (641 (641 (641 (641 (641
	21 22 ° 23 24 25 ° 26 27	650°0 604°2 604°4 604°0 604°5 631°4	646.5 601.2 604.0 604.8 604.5 630.2	640°0 598°8 602°0 607°0 575°0 627°0	631.0 596.0 594.5 598.5 606.0 615.8	625 2 593 0 586 7 600 0 604 0 615 0	592.8 595.0 584.0 602.0 598.0 619.0	644.5 594.0 586.5 583.0 596.0 615.3	627 · 5 599 · 0 593 · 0 576 · 0 604 · 2 615 · 0	661 ° 0 602 ° 5 604 ° 0 597 ° 0 609 ° 2 624 ° 0	649.0 596.0 607.0 599.0 621.0 628.8	648°0 600°.5 608°.7 632°.2 623°.9 633°.5	659 ( 598 ( 596 ( 643 ( 610 ( 612 (
ı	28 29 30	657°2 658°2	652°0 656°0	652.0 651.3	646°5 647°5	642°3 645°0	638.0 638.0	638.0 638.0	641.0 642.0	642.0 641.0	648.0 648.0	651 ° 0 647 ° 0	652°( 651°(
Iourly	Means	628:17	625.32	618.67	612.93	610.20	606.53	604.69	609.91	615.83	620.42	622:37	621 - 4
		11	1		ТЕМРІ	ERATURE O	F THE BIF	LAR MAGN	ET.				
	1 2 3 4 5 6 7	53.9 57.2 58.6 57.8 54.4 51.1	54.0 57.2 58.3 57.2 53.8 50.6	54·1 57·1 58·5 57·2 53·4 51·0	54.4 57.4 58.5 58.5 53.4 51.5	55.0 58.8 59.0 58.6 53.6 51.6	55.3 59.3 59.2 59.4 54.1 51.9	56.4 59.9 59.7 59.7 54.5 52.3	56.7 60.3 60.1 60.0 54.7 52.3	57.3 60.9 60.2 60.0 54.9 52.8	57.9 61.5 60.1 60.4 55.8 53.5	58.6 62.0 60.0 61.0 56.0 53.7	58°4 62°0 60°0 60°8 55°0 53°1
ER.	8 9 10 11 12 13 14	49.4 55.8 52.2 50.4 49.4 49.2	50.0 56.2 52.2 50.0 48.4 49.0	49.9 56.2 52.0 50.0 49.0 49.0	50.0 56.2 52.4 50.0 49.4 49.7	50°5 56°5 52°3 49°8 49°8 49°9	51.1 57.0 52.4 50.5 50.0 50.7	51.6 57.5 52.5 51.2 50.8 51.0	52.4 57.8 52.6 51.4 50.9 51.5	52.8 58.4 52.7 51.3 51.1 51.7	53.4 59.2 52.6 51.0 51.2 52.0	53.7 59.3 52.5 51.2 50.7 52.0	53 · 9 59 · 1 52 · 0 51 · 0 50 · 8 51 · 8
NOVEMBER	15 16 17 18 19 20 °	47.2 47.0 53.2 54.2 51.3 42.5	47.3 47.0 53.0 54.0 51.0 42.5	47.4 47.0 53.0 53.6 50.4 43.0	47.9 47.4 52.7 53.2 49.5 43.9	48.5 47.6 53.0 53.5 48.8 44.4	49.5 48.4 53.6 53.8 48.8 45.2	49.5 49.2 54.0 54.0 48.3 46.0	49.6 50.0 54.2 54.0 48.2 46.2	50°5 50°3 54°2 53°6 48°0 46°6	50.0 51.0 54.9 54.1 47.8 47.1	49.7 51.1 54.9 54.3 47.0 47.2	49°1 51°2 55°3 54°0 47°0 46°4
	21 22 ° 23 24 25 ° 26 27 28	45.7 51.6 55.5 54.2 49.0 45.6	46.0 51.0 55.4 54.2 48.0 45.5	46.4 50.8 55.4 53.9 47.4 44.9	47.0 50.6 55.0 53.9 47.0 44.7	47.4 50.6 55.2 54.8 46.9 45.2	48.7 51.6 55.8 55.0 47.3 46.0	49.8 52.0 56.0 55.0 47.5 46.2	50°4 52°8 56°1 54°8 47°4 46°2	51.2 53.2 56.2 54.5 46.8 46.6	51.6 54.2 56.3 54.5 46.5 47.2	52·2 54·4 56·5 54·6 46·9 47·0	52.6 54.4 56.4 54.0 46.9 45.1
	29 30	34·5 35·8	34·4 35·8	34°2 35°5	34·2 36·1	34·1 37·7	35°1 38°5	35.6 39.4	36.2 39.8	37.5 40.0	38·2 40·8	39.0 41.2	38°8 41°2
lourly	Means	50.62	50.40	50.30	50.42	50.72	51.27	51.69	51.98	52.22	52.59	52.73	52

<sup>&</sup>lt;sup>a</sup> Thirteen minutes late.

<sup>&</sup>lt;sup>b</sup> Two minutes late.

<sup>°</sup> Not included in the Means, on account of disturbance.

	One Scale	Division =	·000087 pa	rts of the H		IZONTAL ase, in Scale		eorrespondin	g to 1° decr	ease of Tem	perature, 1	63.
12h.	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>b</sup> .	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
602.6	642.0	637.2	591.4	554.0	582.0	580.2	576.0	584.2	591.1	601.2	600.8	600.31
299,9	605.8	601.0	604.2	602.2	597.0	599.3	590.4	612.0	602.4	612.2	607.0	601.59
610'5	612.0	611.8	607.0	607.4	607.5	607.4	604.0	614.5	610.0	608.0	620.0	607.15
613'4	613.8	615.0	614.1	611.0	618.0	616.8	616.0	620.2	622.5	622.0	622.0	612 11
627.5 629.0	631.4 628.5	629.5 630.0	$629.1 \\ 629.2$	630.0 633.0	626.0	625.0	623.8	624.2	615.2	624.8	628.5	621.99 625.30
	— <sub>-</sub>			<u> </u>	—	621.9	617.6	637.0	638.0	640°6	639.0}	
630.2	626.8	625.2	616.0	623.7	624.6	626.0	625°0°	625.2	627.5	627.0	630.3	622.70
610.0	606.2	603.9	611.7	610.0	611.0	611.8	621.0	621.0	622.0	626.5	626.0	611.92
622.4	614.0	618.2	619.0	611.5	612.5	603.4	620.0	628.0	627.0	626.0	629.5	615.24
623.0	619.2	617.0	625.0	625.0	617.0	622.0	631.0	632.0	630.8	631.2	630.2	617.97
631.5	633.0	630.0	632.2	627.2	629.2	632.8	632.7	631.2	630.2	631.1	632.0	625.36
622.0	635.0	636'8	635.0	635.0	633.0						$\{637.8\}$	627.71
						638.0	636.8	637.0	637.0	637.2		
637.0	637.0	637.0	633.9	634.0	637.0	636.8	633.0	635.0	637.8	638.0	632.0	630.45
629.0	629.2	627.2	623.7	627.2	625.2	628.0	629.0	630.0	630.0	634.2	633.7	626.35
620.5	615.0	614'0 632'0	627.0	629.0	625.5	622.1	625.8	625.0	624.2	622.4	629.0	620.62
621.0	631.0	632 0	627.2	630.0	628.0	630.0	630.0	631.2	623.9	625.3	629.0	626.03
632°2 638°0	641.8 635.0	628 4	636.0 638.0	639°6 637°8	612.0	627.0	629.0	629.0	 630.0	631.2	632.0	628.53
	_			-		645.8	641.0	643.0	645.0	647.0	648.0	631.01
616.0	654.0	629.0	641.0	471.0	661.0	578.0	590.0	579.0	577.0	592.0	597.0	619.15
601.3	606.3	605.0	605.0	603.1	603.0	602.0	602.4	601.2	603.2	604.0	605.0	600.82
624.5	621.0	623.7	621.0	593.2	582.8	600.8	596.2	603.7	601.0	595'9	598.3	601.36
636.8	638.0	648.7	585.5	567.1	574.4	567.7	534.2	538.4	597.4	575.0	598.5	596.21
624.3	607.0	614.1	629.0	629.0	622.0	620.0	621.5	621.5	619.9	621.9	627.5	613.08
626.0	630.2	631.0	633.0	635.0	632.0	_		_	_	—	. — ı 🛮	
	l — .	_				647.0	650.5	648.0	651.0	655.0	657.2	631.81
654.0	656.0	654.0	654.0	655.8	655.0	654.8	655.0	655'4	656.0	656.4	655.7	650.71
653.0	651.0	651.0	652.2	652.2	653.3	652.2	652.8	651.7	650.0	644.3	648.8	648.77
623.69	625.79	624.91	624.17	621.66	620.21	621.97	622.58	626.02	625 25	626.80	628.32	620.34
	020 10	021 01	021 1	021 00	020 21	021 37	022 00	020 02	020 20	020 00		020 01
	1	1	 I	1	MPERATURI	E OF THE I	1	ı	I	1	i 1	· · · · · · · · · · · · · · · · · · ·
$58^{\circ}2$	57°5	57.5	57.6	57°5	57°8	58°0	57.5	57°4	57°2	5 <sup>9</sup> .0	56°9	56° 75
61.4	61.1	60.5	60.2	60.0	59.9	59.5	59.2	59.1	59.1	59.0	58.7	59.64
60.0	60.0	60.0	59.9	59.9	59.4	59.2	59.5	59.5	59.3	59.0	58.1	59.42
60.5	60.3	59.5	58.8	58.5	58.2	57.3	56.2	56.0	55.6	55.5	55.3	58.43
54.8	54.6	54.3	53.9	53.6	53.2	53.2	53.2	53.0	52.8	52.2	51.5	53.94
53 0	52.6	52.0	51.5	51.3	51.0	_	_ :		_			
			l <u>—</u>		l —	48.0	48.0	48.4	48.5	48.5	48.8	51.12
53.8	54.6	54'5	54.2	54.2	54.2	54.1	54.0	54.0	54.6	54.8	55.2	52.97
58.7	57.5	57.0	56.2	56.0	55.4	55.0	54.0	53.2	53.0	52.8	52.5	56.28
52.3	52.2	52.0	51.8	51.8	51.8	51.8	51.5	51.4	51.3	51.0	50.7	52.00
51.0	50.8	50.6	50.0	50.0	50.0	50.0	50.0	50.0	50.0	20.0	50.0	50.42
50.6	50.4	50.4	50.4	50.7	51.3	51.2	50.5	50.2	50.1	49.2	49.2	<b>50</b> °22
51.8	51.4	50.6	50.1	49.8	49'1						$\frac{-}{47\cdot 1}$	49.60
40.0	I .—			<u> </u>	-	46.5	46.3	46.8	46.7	46.6		
49.4	48.8	48.5	48.2	48.0	47.8	47.5	47.5	47.4	47.2	47.4	47.0	48.37
51.3	51'4	52.0	52.0	52.0	52.3	52.5	52.5	52.5	52.5	52.9	53.0	50.59
56.0	56.0	56.0	55'5	55.2	55.2	55.5	55'2	55.0	54.8	55.0	54.7	54.61
54.4	54.2	54.4	<b>54</b> 5	54.6	54.6	54.6	54.0	53.6	53.1	52.5	51.6	53.85
47.8	47.2	46.6	46.5	46'1	45.1	44.7	44.2	44.2	43.9	43.8	43.0	47.08
46.0	45.0	45.0	44.9	44.7	44.7	1	44.4	44.4	$\frac{-}{44\cdot 2}$	44.4	$\frac{-}{45\cdot 4}$	44*94
52.9	52.6	52.5	52.0	52.0	52.3	44.4 52.6	53.0	52.0	51.7	51.7	51.8	50.67
54.9	55.0	55°2	55·2	55.2 55.2			55°4	55.3	55.1	55.2	55.9	53.81
57.0	56.2	56·2	56·0	55·7	55.7	55.6 55.4	54°9	54.2	54.2	53.7	53.4	55.23
54.2	54'0	53.0	53.0	52.9	55.5	52.6	52.0	51.7	51.4	50.2	49.5	53.37
47.0	46.6	46.8	46.8	32 9 46.7	52.8		46.0	45.0	45.3	45.2	45.6	46.73
45.2	44.8	44.9	44.5	44.3	46.5	46.2	40 U	450	70 0	400	I	
_					44.1	34.0	33.6	33.4	33.2	34.0	$\frac{-}{34\cdot 3}$	42.57
38.6	37.8	37.4	37.5	37.4	37.0	37·0	37.2	37.2	36.8	36'4	35.6	36.58
41.9	41.2	41.4	41.4	40.8	40.7	41.0	40.2	40.2	40.8	40.2	40.2	39.71
_ ' '												

	On	e Scale Div	ision = •00	0087 parts o	of the H. F.		NTAL FOI n Scale Div		sponding to	1° decrease	of Tempera	ture, 1•63.	
Mean Gö gen Ti	ittin- }	Oh.	1 <sup>h</sup> .	2h.	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> •	8 <sup>h</sup> .	9 <sup>h</sup> .	10 <sup>h</sup> .	11h.
	1 2 3 4	sc. Div. 653 ° 0 636 ° 5 622 ° 1 647 ° 0	Sc. Div. 651°0 656°0 628°2 645°0	Sc. Div. 650°0 646°0 633°0 640°0	Sc. Div. 649 0 647 5 628 0 639 6	sc. Div. 647 5 646 5 609 2 645 7	sc. Div. 646'0 642'0 616'5 633'8	Sc. Div. 646 0 639 0 610 2 630 6	Sc: Div. 663 ° 0 641 ° 2 615 ° 6 633 ° 0	Sc. Div. 663 ° 0 629 ° 5 617 ° 1 627 ° 0	Sc. Div. 653 ° 0 619 ° 8 626 ° 0 630 ° 0	Sc. Div. 652 ° 0 620 ° 4 632 ° 2 638 ° 9	Sc. Div. 644.8 630.0 633.0 640.2
	5 6 7 8 9 10	650°8 654°0 665°0 634°0 635°4 638°5	650°0 654°2 644°0 636°0 633°2 630°9	645 6 651 0 638 0 639 0 638 2 627 0	644.0 647.0 637.0 621.0 628.0 630.0	637.0 646.0 620.0 617.4 616.2 621.0	634.4 640.0 624.0 603.0 620.0 615.0	636.0 640.0 622.0 620.0 612.4 614.8	638.0 640.8 625.0 621.4 612.0 608.6	637.5 645.0 629.2 626.0 612.0 618.0	641 0 647 5 633 0 628 0 622 5 622 0	642.8 647.4 634.8 630.6 618.0 609.0	647.0 655.4 634.6 635.5 620.5 620.0
DECEMBER.	12 13 14 15 16 17 18 a	646.0 642.0 649.5 654.2 639.0 631.0	645 · 8 648 · 0 650 · 3 654 · 4 643 · 4 627 · 0	645.0 649.0 648.0 655.2 655.0 609.0	631 ° 0 639 ° 5 645 ° 2 649 ° 0 677 ° 0 603 ° 0	625°0 633°0 636°0 644°0 582°0 634°0	613.0 621.1 630.5 639.0 652.5 620.0	620°0 626°0 626°8 637°0 593°0 615°0	620.0 622.8 628.5 647.0 590.4 617.0	631.0 624.2 633.1 652.2 612.5 634.0	635.0 634.0 633.5 660.4 611.0 635.0	642.0 642.2 646.0 669.0 632.0 636.0	640.8 644.0 646.0 664.0 626.0 634.2
A	19 20 a 21 22 23 24 25 b	120°8 613°0 641°4 643°5 646°0	151'2 620'0 643'2 640'0 644'8	292 · 2 611 · 0 640 · 0 640 · 0 646 · 0	251 · 7 604 · 0 622 · 2 637 · 0 645 · 0	461.5 612.2 636.0 630.0 642.5	495°5 616°0 633°7 631°3 636°7	502.0 612.0 620.3 623.8 631.0	505.8 617.8 622.0 626.0 631.0	619.0 617.5 626.0 637.3 639.0	635°1 616°0 620°0 637°0 645°0	692.5 625.5 635.8 640.8 641.2	659 0 629 0 641 0 637 0 647 0
	26 27 28 29 30 31	665°0 660°0 652°0 635°0 630°3	663°0 660°2 650° <b>5</b> 635°0 630°0	658°0 657°8 651°0 635°0 630°8	655°0 654°1 643°5 631°5 629°0	649 · 2 648 · 0 639 · 2 627 · 5 624 · 0	640°0 639°0 634°0 620°5 620°0	642.0 635.0 645.0 619.5 622.8	646°0 638°0 629°5 621°0 624°0	652°0 643°4 640°2 616°4 625°0	649°0 649°2 621°5 617°5 625°8	660°0 652°2 626°4 628°0 628°0	663.0 656.0 626.0 630.2 631.2
Hourly	Means	643.88	644.05	642.90	638.92	630.63	629.25	626.05	627.61	631.42	632*40	637:30	639.26
	<u> </u>	40.4	40°·3	40°5	41°0	41.9	F THE BIFI 42.4	LAR MAGN	et. 43°5	44.0	44.6	45.2	45°6
	1 2 3 4 5	46.8 46.5 44.6	46.7 46.2 44.3	46.0 46.0 43.6	46.0 46.0 43.6	46.0 46.0 43.6	46.4 46.4 44.0	47°4 46°6 44°0	48.0 46.4 44.0	48.4 46.1 44.2	44.6 49.0 46.0 44.4	48.8 45.9 44.3	48 5 45 2 43 8
	6 7 8 9 10	41.6 43.2 47.0 51.5 54.0 51.6	41.6 43.5 46.5 51.4 53.8 51.1	41.2 43.5 46.1 50.5 53.6 51.0	41.2 43.7 46.4 50.4 53.9 51.2	42.6 44.3 46.9 50.4 53.8 51.3	43.4 44.9 48.0 50.6 54.4 51.4	44.5 45.5 48.6 50.6 54.7 51.5	44 8 46 4 49 2 50 5 55 4 51 7	45.2 47.5 49.4 50.0 55.0 51.5	45.5 48.9 49.8 50.5 55.2 52.2	45.2 49.2 49.8 50.7 55.2 52.3	45.2 49.4 49.7 51.0 55.0 51.4
DECEMBER.	12 13 14 15 16 17 18 a	49.0 47.3 47.4 41.4 38.5 40.0	49.0 47.2 47.1 41.4 38.5 40.0	49.7 46.2 47.2 41.3 37.5 38.9	48.5 46.4 46.7 40.2 37.4 38.8	48.5 46.5 47.3 39.4 38.0 39.4	48.8 47.5 48.1 39.1 38.0 39.8	48.9 48.1 48.4 39.5 39.0 40.5	49.4 48.4 48.1 40.2 40.3 41.2	49.5 48.3 48.1 40.5 40.4 41.6	49.5 48.2 48.8 41.2 42.0 42.5	49.5 47.4 48.7 41.3 42.8 42.9	49.5 47.0 48.4 41.2 43.0 42.6
	19 20 a 21 22 23 24 25 b	40.6 34.6 38.2 41.6 38.6	39·9 35·4 38·4 41·4 38·2	39°4 35°2 38°4 40°5 38°2	39.0 35.0 38.4 40.0 38.7	38·1 35·2 38·6 39·6 39·0	38·3 35·7 39·1 39·9 39·5	38.6 35.8 40.0 39.5 39.5	38.8 36.4 41.0 39.0 40.5	39.0 36.7 41.5 39.4 40.6	38.8 37.5 42.4 39.8 41.3	38.8 37.5 42.5 40.5 41.6	37.5 36.9 43.0 40.4 42.2
	26 27 28 29 30 31	32.5 37.9 45.0 49.4 52.5	33·1 38·2 45·0 49·9 52·6	33°0 38°2 45°1 50°1 53°0	33.0 38.7 45.4 50.3 53.0	33·2 39·2 46·7 50·5 53·0	33.8 39.6 47.2 51.3 53.0	34.0 40.0 48.4 51.4 52.9	34.0 40.7 48.9 51.4 52.9	33.8 41.4 48.9 51.4 52.8	34.0 41.9 49.3 51.9 53.4	33.0 42.0 49.3 52.1 53.6	33.0 42.0 48.9 52.2 53.2
Hourly	Means	44.51	44.20	43.98	43.96	44.23	44.69	45.07	45.46	45.61	46.14	46.18	46.07

<sup>&</sup>lt;sup>a</sup> Not included in the Means on account of disturbance.

	One Scale	Division =	*000087 pa	rts of the H.		ZONTAL 1 se, in Scale		orresponding	; to 1° decre	ease of Tem	perature, 1°6	3.
12 <sup>h</sup> •	13h.	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17h.	18 <sup>h</sup> •	19 <sup>h</sup> .	20h.	21 <sup>h</sup> .	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div. 649 5	sc. Div. 654°0	Sc. Div. 651 0	Sc. Div. 647.0	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 644.0	Sc. Div. 648.2	Sc. Div.	Sc. Div. 648 21
645 0 624 0	616.9	619.0	614.2	614.0	645.0	645 9 621 2	646°2 610°0	624.0 615.0	628.0	629.6	639 0 631 0	628.78
634.4	636.0	635.0	638.8	637.0	633.0	640.0	637.9	639.0	641.0	643.0	645.8	630.20
644.5	633.0	649.0	641.0	643.0	641.0	-	- 1				$\{651.1\}$	641.19
	648.5	649.0	649.2			641.2	645'4	648.2	648.8	651.5	651.1	
648.0 653.0	651.8	640'8	637.1	649 <b>.</b> 4	649 <b>·</b> 8 639 <b>·</b> 2	649°2 632°0	650°2 634°8	651.0 635.0	652'0 634'0	652.7 630.0	652.0 638.0	646.05 643.11
637.1	630.0	624.4	618.2	619.0	630.6	624.0	640'0	635.0	633.0	635.0	626.0	631.63
637.0	639.0	639.2	637.1	634°2	632.2	634.3	629.0	633.0	633.8	631.0	635.8	630.31
615.0	613.0	606.0	605.0	591.0	590.0	608.2	616.4	624'0	635.0	621.8	623'0	617:38
630.0	622.0	624.0	630.0	631.8	633.2				C1010	C41:0	640.4}	627.53
642.0	637.8	634.8	632.9	638.1	639.1	637°1 638°0	637.8 637.0	637.8 641.2	640.0 643.0	641.8 642.8	640.4	635.93
645.0	642 0	641.4	640.2	641.0	643'4	642.8	644.7	643.0	645.0	642.0	646.5	639.28
646'0	646'8	646.0	645.8	646.8	644.0	642.0	649.5	645.2	647.5	650.0	652.0	643'13
663 5	658.7	643.0	654.0	652.0	651.0	644.0	646.8	645.8	639.0	638.8	644.0	650.25
625 0 638 0	626.0	635°0 645°0	648.8 640.0	618.0 633.1	619.2	626.0	623.0	622.0	631.0	612.0	620.2	625.83
U00 U	000 4	0.49 0		000 1	638.1	458.0	422.2	518.5	455.7	308.0	110.8}	557°47
660.0	880.0	733.0	695.0	643.0	635.0	634.8	595 0	598.0	605.0	605.0	612.0	553°42
629.2	634.8	635.0	636.0	635.2	634 0	646.0	637.5	638.2	640.0	637.5	636.8	626.44
655.0	642'0	638.0	640.0	636.5	624.2	624.4	633.2	636'1	636.0	642.0	639.0	634.50
648:0 644:2	645.0	642.5 646.2	645°0 647°0	642.8 644.0	641.8	643.8	640.0	641'0	642.9	641.0	640.8	639.10
——	— U47 5	040 2		044 0	644.6	_		-	_		_ \	647.97
						662.0	662.0	665.0	664.0	664.5	665.0	
662.8	664.0	663.0	661.0	661.0	660.0	659.6	663.0	663.0	663.0	661.0	661.2	657.70
656'1	655.0	655.2	650.0	650.0	647.5	647.0	648.0	649.2	648.0	652.2	654.0	650'21
631.8	630°0 626°8	620.7 632.2	636.0 630.2	638 · 2 629 · 0	632.8 626.1	629°4 627°7	631.0 626.8	633°3 628°0	634.0 627.8	$636.0 \\ 627.4$	636°2 629°9	635°31 627°53
632.7	633.1	633.7	632.0	634.8	633.0	635.0	633.2	632.0	630.7	630.2	631.8	629.74
640.85	638.72	637.80	638.38	636.45	635.32	637.55	638.49	638.24	640.90	640.10	640.85	636.98
			<u> </u>	те	MPERATUR	E OF THE		AGNET.			!!	
46°0	46°3	46.0	46°0	46.2	47.0	47.0	46°8	46°7	46°6	46°9	46°8	44 <sup>°</sup> 61
48.4	47.5	47.6	48.0	47.8	47.4	47.2	47.2	47.4	47.2	47.0	46.5	47:39
45.0	45.0	44.9	44.7	44.7	44.5	44.5	44.2	44.2	$44^{\circ}2$	44.5	44'4	45.35
43.7	43.0	43.0	42.7	42.6	43.0	40:4	40.4	40:4	40.6	41.5	41.6}	42.97
46.0	45.6	45.6	45.8	45.4	45.2	40°4 45°2	44.0	40.4 43.6	43.5	43.4	43.3	44.11
49.2	48.7	48.5	48.0	47.4	47.0	47.0	46.8	47.0	47.0	47.2	47.0	46.70
50.5	50.2	50.5	50.4	50.2	50.2	50.1	50.6	50.7	51.3	51.5	51.5	49.39
51'1	51.5	51.6	52.0	52.2	52.4	52.7	53.0	53.5	53.5	53.5	53.6	51.61
55'0 51'4	54.7 50.5	54.5 50.0	54.0	53.6 49.5	53.4 49.0	53.2	23.0	52.6	52.2	52.2	51.6	53 92
	<u> </u>		49.6	49 5	49 0	47.5	47.5	47.5	47.8	48.0	$\left\{ \begin{array}{c} -1 \\ 48 \cdot 2 \end{array} \right\}$	50.50
49.5	49.0	48.2	47.8	47.5	47.5	47.2	47.0	46.6	47.5	47.8	47'3	48.48
47.0	47.5	47.9	47.5	47.4	48.0	48.2	47.8	47.6	47.5	47.5	47.0	47.48
48'1 41'5	48 1	47.6	47.2	46.5	45.5	45.0	43.0	42.6	42.4	42.0	42.0	46.43
42.5	$\begin{array}{c c} 41.8 \\ 42.5 \end{array}$	42.0	41.9	41.5	41.5 41.4	$\begin{array}{c c} 41.5 \\ 41.2 \end{array}$	41.2 40.8	41.0	40.4 38.9	40°1 39°4	39.0 39.0	40.84
42.6	42.7	43.2	43.2	43.5	43.2	714	40 6	40 2	-		— <u>)</u>	l
	_	_		_	<b> </b>	38.5	38.8	39.2	40.2	40.4	40.7}	41.0
36 <b>.</b> 4	35.6	36.1	36.0	36.4	36.0	36.0	34.9	33.9	33.2	32.9	33'4	37:00
43.0	35.8 42.5	36.0	36.0	35.0	34.9	34.0	34.9	36.0	37.0	37.9	38.4 41.8	36.03 40.9
41.0	42.5	41.5 40.6	41.1 40.5	41.4	41.8	41.2 40.4	41.5	41.5	41°5 40°0	42.0 39.4	39.0	40 9
41 A	42.3	41.7	40.7	40.3	40.0			<del>-</del>			1 1	10 2
42.8			t			i —	<b> </b>	<u> </u>	<u> </u>	_	_ }	38.0
42.8		-	_				1 00 4	31.0	31.6	32.0	32.5)	II
42.8	_			_		30.0	30.4					-00
42·8 — 32·7	32.6	32.7	33.0	33.0	33.0	33.2	33.2	34.2	36.1	37.0	37.6	33.7
42.8	32.6 43.0	32.7 43.8	33.0 43.5	33.0 44.4	33.0 44.2	33.2 44.7	33°5 45°2	34.5 45.2	36°1 45°3	37.0 45.7	37.6 45.5	42.2
42.8 — 32.7 42.7 49.1 52.8	32.6	32.7 43.8 49.5	33.0 43.5 49.6	33.0 44.4 49.2	33.0 44.5 48.6	33·2 44·7 48·7	33.5 45.2 49.2	34.5 45.2 49.2	36.1 45.3 49.2	37.0 45.7 49.4	37.6 45.5 49.4	42°2 48°2
42.8 — 32.7 42.7 49.1	32.6 43.0 49.4	32.7 43.8	33.0 43.5	33.0 44.4	33.0 44.2	33.2 44.7	33°5 45°2	34.5 45.2	36°1 45°3	37.0 45.7	37.6 45.5	42.2

	Or	ne Scale Div	ision = '00	0087 parts (	of the H.F.		NTAL FO		sponding to	1° decrease	of Tempera	ture, 1°63.	
Mean G gen T	Göttin-)	Oh.	1 <sup>h</sup> •	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> •	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
······································	1	Sc. Div. 632 0	Sc. Div. 633 5	Sc. Div. 633 5	Sc. Div. 634 ° 0	Sc. Div. 629 2	Sc. Div. 625.4	Sc. Div. 622'4	sc. Div. 621.7	Sc. Div. 617 1	Sc. Div. 619.0	Sc. Div. 623 6	Sc. Div 627 0
	2 3 4 5 6 7 8	643.8 640.0 649.4 652.3 662.0 658.2	645 * 4 636 * 0 650 * 4 653 * 8 660 * 0 656 * 4	644.0 637.2 650.4 656.0 659.0 657.8	641 '9 631 '5 644 '9 651 '0 671 '2 652 '0	637 · 1 628 · 0 631 · 4 641 · 0 656 · 8 642 · 1	627 · 4 623 · 4 624 · 4 634 · 0 643 · 2 633 · 8	627.0 622.4 629.6 633.5 634.2 635.9	627.0 619.4 633.4 637.5 635.6 630.8	623 ° 0 615 ° 5 634 ° 2 640 ° 2 637 ° 0 628 ° 8	626.0 615.7 637.4 643.8 644.8 640.0	634.6 628.2 644.0 648.2 653.0 649.0	627'8 633'4 645'8 650'2 654'0 651'0
JANUARY.	9 10 11 12 13 14 15	672.1 674.0 625.0 640.0 626.6 629.0	670.5 673.8 624.5 630.0 621.8 630.0	676 ° 0 673 ° 0 610 ° 5 619 ° 0 620 ° 0 626 ° 0	680°0 667°5 626°0 573°2 608°0 625°8	650°0 656°5 631°5 622°8 605°0 613°9	645.0 642.5 620.0 618.2 600.0 606.0	647°0 650°0 620°0 615°0 605°9 607°0	650°8 658°5 632°7 617°0 609°0 613°5	660°5 663°0 616°0 638°0 613°0 621°2	670°5 670°0 613°8 631°2 625°0 626°5	677.5 676.0 638.0 646.0 606.0 628.0	676.0 682.2 649.0 622.0 630.5 628.5
JANI	16 17 18 19 20 21 22	621.0 640.0 652.5 643.3 642.4 644.0	623.8 639.0 652.5 640.0 642.9 642.5	625 ° 0 639 ° 5 652 ° 0 646 ° 0 643 ° 6 643 ° 8	624.0 637.0 662.8 642.0 640.5 640.0	615 0 631 0 641 2 639 0 633 0 640 0	610.0 622.0 638.0 627.0 628.5 631.8	613.0 621.8 628.4 628.5 625.0 626.0	616.0 616.8 636.0 633.2 628.5 628.0	617.0 628.8 634.2 638.2 627.5 632.0	623.5 636.8 631.0 642.0 629.0 640.0	631.0 647.0 645.0 630.0 627.5 652.0	632'9 645'5 648'0 641'0 623'5 648'8
	23 24 25 26 27 28 29	631 ° 0 640 ° 0 630 ° 0 627 ° 0 635 ° 0 610 ° 0	649 ° 0 639 ° 0 634 ° 2 627 ° 0 638 ° 0 606 ° 2	630°0 634°0 632°2 630°0 637°4 616°0	625 ° 0 624 ° 0 623 ° 9 625 ° 0 624 ° 0 610 ° 0	629.0 613.2 612.0 611.0 616.0 614.0	625.0 606.2 611.2 600.0 614.0 605.0	628 ° 0 608 ° 2 611 ° 0 597 ° 0 620 ° 0 602 ° 0	621 · 8 614 · 0 620 · 0 612 · 0 627 · 5 610 · 5	626.0 621.0 621.0 624.0 637.2 616.0	639 · 2 627 · 9 625 · 0 631 · 0 638 · 0 621 · 2	644.0 642.5 634.0 638.0 649.0 625.5	639.0 635.0 637.0 638.0 638.8 625.1
	30 31	641.2	640.0	638.9	636.0	627.8	618.8	615.8	620.0	623.9	628.9	632.6	638.0
Hourly	y Means	640.85	640.78	639.65	635*43	629.52	622.34	622.10	625.82	629.01	633.74	640.39	641.08
<u></u>		54.5	54°5	54.5	54.6	$\begin{array}{c c} \hline & 5\mathring{4}^{\bullet}5 \\ \hline \end{array}$	54.8	ILAR MAGN	тет. 54°9	54.6	54.6	54.4	5 <b>4</b> °2
JANUARY.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15	54.5 45.6 47.5 42.0 38.0 35.9 39.4 — 26.9 25.2 34.3 42.4 47.6 50.0	45.5 47.0 42.0 37.6 36.0 39.5 — 26.5 26.5 34.0 42.6 47.7 50.4	54.5 45.4 46.2 41.7 37.3 36.4 39.5 — 25.0 26.7 34.3 42.6 47.5 50.1	45.7 46.6 41.3 37.2 36.4 39.8 	46·1 46·4 41·3 37·9 36·6 40·3 — 25·5 26·7 36·0 43·4 47·9 49·8	46·1 47·0 41·7 39·0 37·1 41·0 26·0 27·5 37·0 43·7 48·2 50·2	46.2 47.0 42.0 39.1 37.6 41.9 - 27.0 28.3 37.5 43.8 48.5 50.7	46·4 46·4 42·5 39·8 38·0 42·9 28·0 29·7 39·2 44·3 48·6 51·3	46.2 46.3 44.4 39.8 37.6 43.2 	46.9 46.4 45.6 39.7 37.3 43.8 28.8 31.8 40.6 44.6 49.0 52.2	54.4 	47 · 5 46 · 0 45 · 9 39 · 1 37 · 8 44 · 2 29 · 6 33 · 0 41 · 6 45 · 4 49 · 5 52 · 2
JAN	16 17 18 19 20 21 22 23	43.7 43.0 35.1 43.0 46.5 42.2 	43.5 42.5 35.1 43.1 46.4 42.2 	43·1 41·5 35·4 42·8 46·4 41·4	43°3 41°5 36°2 42°7 46°5 41°2	43·3 41·5 37·6 43·5 47·4 41·0	43.5 41.4 37.8 44.9 48.4 41.6	43.5 40.5 38.1 45.1 49.0 42.0	43.8 40.6 38.7 45.6 49.5 41.9	44.0 40.9 38.6 46.4 49.5 41.5	44.8 41.7 38.9 47.5 49.8 42.5	45.4 41.8 39.5 48.4 49.5 44.0	45.8 40.5 39.4 48.2 48.6 44.2
	24 25 26 27 28 29 30	44.0 49.8 50.5 48.8 46.0	44.5 49.4 50.0 48.2 46.0	44.2 48.7 50.0 48.2 45.8	38.5 44.6 48.4 49.9 48.3 46.0	39.0 45.4 48.0 50.0 48.8 46.4	40.5 45.8 48.8 50.6 49.7 47.0	41.4 46.3 49.0 51.4 49.5 47.0	41.8 46.6 49.2 51.9 50.0 47.4	42.8 46.9 48.9 51.9 49.5 47.4	44.0 47.8 49.4 52.1 49.5 47.3	44.8 48.4 49.4 52.1 49.5 47.8	44.5 48.5 49.3 51.6 49.2 47.8
	31	43.7	44.0	44.0	44.6	44.6	45'1	45.2	45.6	45.8	47.1	48.1	48.6
Iourly	Means	42.42	42.39	42.18	42.35	42.65	43.25	43.26	44.02	44.19	44.76	45.24	45.0

18.   18.   14.   15.   16.   17.   18.   19.   20.   21.   22.   25.   Monday   18.   18.   19.   20.   21.   22.   25.   Monday   18.   18.   19.   20.   21.   22.   25.   Monday   18.   18.   18.   19.   20.   21.   22.   25.   Monday   18.   18.   18.   19.   20.   21.   22.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.   25.		One Scale	Division =	·000087.par	ts of the H.	• •	IZONTAL se, in Scale		orresponding	g to 1º decre	ease of Tem	perature. 1 · 6	33.
## 172   680°   680°   680°   680°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°   681°	12 <sup>h</sup> .							1			1		Daily an Monthl Means
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1890   6891   6841   6811   6811   6811   6812   6822   6844   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832   6832			l —			—						[ 618 <b>.</b> 0 ∫	ı
Hard   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast   Gast	332.0	635.2	634.0	633 <b>·2</b>	630.0	637.0	634.2	634.8	635.2	635.0	637.2	639.5	627.8
\$\frac{1}{100} \text{of } \frac{641}{1} \cdots \text{of } \frac{637}{1} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{cos} \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text{of } \text													
\$280 0 \$635.0 \$639.2 \$638.2 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.5 \$641.0 \$643.5 \$645.6 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$644.0 \$640.0 \$644.0 \$644.0 \$640.0 \$644.0 \$640.0 \$644.0 \$640.0 \$644.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$638.0 \$6													
Al' 8													
100							638.0	639 <b>.</b> 5	641.0	643.5	645.6	644.0	635*3
100	341 <b>'</b> 8	648.8	647.0	641.9	643.0	635.0	l —		—	_	<u> </u>	3	640.0
13079   63870   64070   644*0   644*2   644*0   640*0   640*0   640*15   641*6   640*5   641*0   636*8   636*2   636*2   636*2   636*2   636*2   636*2   636*2   636*3   638*5   632*1   631*2   631*3   630*0   631*5   630*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636*0   636					l <u> </u>		643.8	644.2	645.9	637.8	639.4	641.5	040 0
\$\frac{835^{\corr} 635^{\corr} 635^{\corr} 635^{\corr} 635^{\corr} 630^{\corr} 620^{\corr} 200^{\corr} 620^{\corr} 500^{\corr}	240*0	626.0	640.0	644.0	644.9	644.0							636.8
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$													
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$													
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	329.0	634.5	636.0	636.0	637.8	627.4	617.2	616.4	615.4	626.5			624.4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										533.5	537.0		609*5
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							1					4 1	
\$\begin{align*} \begin{align*} \begi	024 0	024 0	020 2	020 0	021 2	02, 0	690:5	697:0	605.6	645.0	644.0	642.0	621.6
\$\begin{align*} \begin{align*} \begi	0000		200.0	04014	045.0	0.40.5						C42.0	69510
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	638.8	638 0	638 2	640 4	645 3	642 5	642 2	644 0	645 0	641 0	642 5	043 2	055 9
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	<b>63</b> 8 • 95	640.40	640.50	640.36	641.33	637.43	637.48	638.01	634.45	637.05	638.98	640.32	636.08
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	·											1 0 11	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	54.2	53.8	53.4	53.4	53.3	53.3	<u> </u>	-	-	-	•	! 1	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		000	1	00 1			45.2	45.5	45.5	46.0	46.1	46.2	52 1
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	17 · C	47.7	17.5	47.5	17:6	10:0					10.0	48.5	47.1
$\begin{array}{cccccccccccccccccccccccccccccccccccc$												40.0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$													. 44 8
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	45.0	43.9	42.8	41.5	40.7	40.2	40.2	40.0	40.0				42 0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	39.0	38.1	37.1	36.9	36.7	36.5	36.4	36.0	35.0	34.4	35.4		37.5
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			37.7						38.4		39.0	39.2	37.3
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							ì						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0	( TT (	1 4 7 0	770	100			20.0	27.0		28.0	27.7	38.8
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	00:-	-	00.00		004:							94.5	07.0
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$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						35.1							
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	46'0								46.7	47.5	47.5		45.0
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$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						, <del></del> .							
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	40'1	38.8	38.0	37.0	36.4	36.4	36.1	35.7	35.5	35.7	35.2		39.0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	39.2											42.5	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$													
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							44 1	43 4	43 2	43 2	43 0		40 5
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	44.6	43.8	43.6	43.0	42.5	41.7						}	40.8
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		1 — 1				<u> </u>	36.0	36.0	35.7	36.0	36.5	36.63	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	44.6	44.2				43.4							42.1
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						50.4							
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		49.3	49.4	49 4	49.2	47.8	47.2	46.8	46.5	46.3	46'1	46.0	48 4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	47.5								1				
48.8     47.0     46.2     45.2     44.5     44.0     43.8     43.7     43.5     43.5     43.3     43.1     45.1						1	41.2				42*3	42.5	45 5
	48.8	47:0	46:2	45.9	44.5							43.1	45.1
		T   U	704	TU 2	77.0	- <del></del>	70 O	TO 1	100	70 U	10.0		10 1.

	On	e Scale Div	ision = '00	0087 parts	of the H. F.		ONTAL FO		esponding to	1º decrease	of Tempera	ature, 1 63.	
Mean ( gen T	Göttin-}	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	4h.	5 <sup>h</sup> .	6h.	7h.	8h.	9h.	10h.	11h.
	7 1 2 3 4 5 5	sc. Div. 646°9 657°8 650°0 648°2 648°1	sc. Div. 647 3 646 1 650 0 646 0 647 4	sc. Div. 646.5 650.4 650.8 645.5 646.0	sc. Div. 640 0 650 0 641 5 639 5 643 4	Sc. Div. 636 ° 0 636 ° 4 631 ° 5 631 ° 5 633 ° 8	sc. Div. 628 * 5 628 * 8 622 * 0 622 * 4 a 630 * 2	Sc. Div. 624'2 622'0 623'0 621'0 631'9	sc. Div. 624 ° 0 628 ° 0 626 ° 0 619 ° 8 635 ° 0	Sc. Div. 631 °0 639 °0 628 °0 626 °8 637 °8	sc. Div. 633.0 643.5 634.0 634.2 638.6	Sc. Div. 638 ° 0 648 ° 5 640 ° 0 638 ° 8 643 ° 0	8c. Div 641 '0 648 '5 641 '0 643 '2 645 '0
ŁY.	6 7 8 9 10 11 12 13	656°0 644°2 645°0 647°0 660°0 661°0	652·2 641·0 641·2 648·1 653·5 661·5	649'2 635'5 640'4 648'0 661'0 658'2	643.2 641.5 634.0 648.0 663.8 657.4	635.0 629.0 621.5 636.0 665.0 659.0	632.0 613.0 605.0 634.0 645.4 648.0	637.0 598.0 623.0 627.0 641.8 640.0	643.0 633.5 623.0 613.0 642.1 636.0	639 · 2 643 · 0 652 · 5 629 · 2 650 · 0 638 · 8	638.8 642.8 625.0 638.2 654.0 643.0	650°0 647°5 643°0 641°8 655°1 646°2	659 ° 0 652 ° 0 632 ° 4 645 ° 0 656 ° 2 655 ° 0
FEBRUARY.	15 14 15 16 17 18 19 20	660°2 650°0 647°3 646°0 648°2 643°0	661.0 648.2 646.0 647.0 646.8 641.2	658 1 636 0 646 2 646 0 641 2 636 0	652.0 646.0 641.0 639.0 638.0 625.0	646.0 642.5 631.0 636.0 626.0 628.5	648.0 638.0 624.0 628.2 620.0 635.0	649.0 628.0 626.0 627.8 622.0 635.0	655°0 628°0 630°6 629°0 628°0 639°0	658.0 640.0 635.4 638.0 641.0	653.0 642.0 634.0 642.0 638.5 638.6	652.0 638.0 636.9 643.5 642.0 639.0	641.0 641.0 640.0 645.0 645.0 637.0
	21 22 23 24 25 26 27	584.0 597.5 616.0 565.8 636.8 645.5	320.0 595.0 618.0 553.6 588.0 647.0	506.0 586.0 613.0 545.2 621.6 643.0	638.8 591.5 615.0 578.0 639.0 639.5	616.5 592.5 610.5 601.7 612.4 630.0	588.5 588.2 601.2 600.5 613.0 624.0	618:5 601:5 572:5 610:6 617:5 611:3	617.0 595.0 614.0 612.0 614.0 614.0	569°3 570°0 624°2 612°0 624°0 618°0	608°3 642°0 613°0 623°0 623°5 623°0	729.5 609.8 624.0 626.0 634.0 627.5	736'9 613'0 614'0 631'0 632'8
	28 29	653°0 645°0	642°0 645°0	648.0 643.0	640°0 638°8	630 <b>.</b> 5 636 <b>.</b> 0	621.8 628.2	616 <b>.</b> 4 620 <b>.</b> 6	628°2 622°8	598°0 625°2	621.8 628.2	636.0 639.0	635°2 640°0
Iourly	Means	644*39	639*92	639.21	638*85	632*43	625.70	622.85	627.74	633.35	635.03	640.25	640.84
	· · · · · · · · · · · · · · · · · · ·				TEMPI	RATURE C	F THE BIF	ILAR MAGI	VET.				
	1 2 3 4 5	43.2 41.8 46.3 44.8 46.0	6 42 7 41 8 46 0 44 5 46 2	42.1 41.4 45.5 44.7 46.0	41.6 41.8 46.3 45.0 45.4	41.7 42.7 47.2 46.4 46.2	42.0 43.5 47.8 47.3 46.8	42.4 44.0 48.3 47.6 46.8	42.4 44.7 49.0 48.0 46.0	43.0 45.0 49.2 48.0 45.5	43.6 47.0 50.1 48.4 45.5	44.2 48.1 51.1 48.4 45.2	44.0 48.5 51.3 48.6 43.9
Υ.	6 7 8 9 10 11 12 13	39.0 39.4 41.5 40.5 32.0 36.1	38.4 39.0 41.4 40.5 31.5 36.0	37.8 38.4 41.6 40.0 32.0 35.2	37.0 37.6 42.5 39.4 33.0 34.9	37.0 38.0 42.5 39.4 33.9 35.9	37.4 39.0 42.3 39.4 34.4 37.0	37.8 40.1 41.8 39.4 34.4 37.2	38.4 41.3 42.5 39.4 34.9 38.5	39.2 41.5 43.0 39.6 35.7 39.7	40.5 42.6 43.0 39.8 35.9 41.0	41.0 43.0 44.0 40.3 38.4 41.8	42.7 43.2 43.5 39.8 38.8 42.6
FEBRUARY.	14 15 16 17 18 19 20	38.7 43.0 42.8 44.0 45.6 46.0	38.5 42.4 42.5 43.4 45.6 45.5	38.9 42.0 42.9 44.0 45.6 45.1	40.2 42.3 44.5 45.0 46.5 45.2	41.4 42.7 46.0 46.0 47.0 46.0	42.2 42.8 47.0 47.0 48.0 46.8	42.8 43.0 47.5 47.6 48.5 48.0	43.7 43.7 48.4 47.6 49.8 48.6	44.6 44.7 48.6 48.4 50.4 48.8	45:3 46:0 49:2 49:5 50:7 48:7	45.5 47.5 49.9 50.3 51.0 50.3	45.4 48.0 49.6 50.9 51.3 50.0
	21 22 23 24 25 26 27	45°2 49°8 49°4 45°2 42°0 43°3	45.2 49.8 49.0 44.8 40.4 42.7	45.2 49.2 49.3 44.0 40.7 43.5	46.3 49.0 49.2 44.0 41.0 45.2	46.9 49.0 49.6 43.7 42.0 46.1	47.9 49.5 49.6 44.2 42.9 46.1	48.2 49.9 49.2 44.5 43.3 45.9	47.5 50.2 48.7 45.3 43.6 46.0	49.5 50.4 48.5 46.0 43.4 46.3	51.0 50.5 49.0 46.4 43.8 46.7	51.5 50.8 49.0 46.4 45.0 47.6	52.4 50.5 49.0 46.6 45.2 47.4
	28 29	42.8 44.2	42.0 44.4	41.8 44.0	41.2 44.4	42°3 45°0	43°1 45°4	44.2 45.4	45°1 45°3	45.8 44.9	46.3 44.9	46.8 44.2	46.5 44.2
ourly l	Mean <b>s</b>	42.52	42.12	42.02	42.33	42.99	43.57	43.91	44.39	44.77	45.39	46.06	46.13

<sup>&</sup>lt;sup>a</sup> Three minutes late.

	One Scale	Division =	·000087 pa	rts of the H		SE, in Scale		orrespondin	g to 1° decre	ease of Tem	perature, 1°6	53
12h.	13h.	14 <sup>h</sup> .	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily a Monthl Means
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div
546*2	647.0	647.4	646.5	648.0	646.0	647.0	645.5	646.8	648.4	646.8	651.0	641.70
	642.0	641.3	642.8	644.2	645.0	647.2	646.0	647.0	ľ			641.79
344.0		642.4	629.3	624.0					645.6	648.0	647.4	643 3
641.4	641.2				630.0	635.1	632.0	640.2	644.8	645.0	649.0	637.18
642.9	642.8	642.8	643.0	642.0	641.8	643.4	646.7	647.7	650.0	647.5	649.0	639.8
648'0	647.0	647.2	650.0	650.9	651.2	<u> </u>	i —			l	- 7	640.20
	_ <del></del>	<del></del>				623.0	610.0	638.0	628.0	638.0	$ {653\cdot 2}\} $	040 21
<b>329°0</b>	645.5	645.0	634.0	638.0	638.5	636.0	641.2	642.8	643.2	644.8	641.4	642.2
642.0	640.8	631.2	642.0	631.2	627.8	626.0	632.0	640.2	629.0	628.1	630.2	634.5
8.88	637.8	633.8	637.7	640.0	642.0	640.0	641.4	648.0	645.8	647.0	648.0	636.7
647.0	643.8	644.2	652.0	653.0	653.0	658.0	657.0	656.7	657.7	658.5	658.5	645.6
960.0	661.0	661.8	663.0	663.0	660.0	663.0	662.0	662.0	662.0	662.0	662.2	
552.2	653.0	654.0	653.0	658.0	657.0	000 0	002 0	002 0	002 0	002 0		657.9
00Z Z	000 0	004 0	000 0	000 0	007 0	655.0	650.0	ccoio			660.0}	653.6
	05010	640:0	C46:0	605.0	604.0		659.8	660.0	661'4	660.0		
643.0	652.0	648.2	646.8	635.2	634.8	630.0	627.7	619.0	641'0	642.0	640.8	645.58
$640^{\circ}2$	644.0	642.2	640.8	640.6	637.0	638.9	638.7	638.0	638.2	641.0	645.5	640.1
641.0	644.2	644.1	643.3	643.0	638.5	639.0	645.0	647.3	646.2	646.3	647.1	640'1
642.0	642.2	643.8	643.0	643.5	644.0	647.1	643'1	644.0	645.0	647.0	648.4	641.6
645'6	646.8	647.5	649.0	645.0	646.5	640.0	638.8	635.2	642.8	638.0	648.0	639.8
39.0	645.0	636.2	636.0	633.8	636.6		_				i _ II	
	"	"				610.0	617.1	563.0	600.0	594.1	593.9	626.79
77.2	594.0	667.5	573.6	631.4	610.2	638.2	617.0	290.0	586.2			<b>500.10</b>
										589.0	570.0	599.0
05.0	605.0	602.0	609.1	607.8	641.0	620.2	525.1	594.0	585.0	602.5	606.0	599*30
522.0	618.0	641.0	617.5	623.5	628.5	630.0	599.0	543.0	585.0	596.0	530.5	607.06
321.0	622.0	616.0	627.5	623.0	614.0	612.0	540.5	501.2	536.4	480.7	640.7	590.9
319.0	632.0	636 <b>·2</b>	626.2	631.4	634.2	636'3	633.1	635.0	636.0	637.5	640.0	627.1
36.2	638.8	633.4	645'1	626.0	636.7	-	-					
	l —	l —	l —	ł		642.0	640.9	647.0	645.4	645.0	650.8	635.13
33.0	635.2	638.9	640.0	637.0	639.0	641.0	640.5	640.0	638.6	641.2	648.0	635.10
641.4	646.8	644.8	644.0	645.5	647.0	643.0	645.0	645.0	646.0	649.0	651.2	639.9
711 1	010 0	011 0	011 0	010 0	011 0	010 0	010 0	010 0	040 0	049 0	051 2	009 90
63 <b>9</b> °56	642.13	641.90	641.41	639.99	640°40	638:39	634.04	629.87	635.20	634.07	640 64	636.62
					MPERATUR					001 01	010 01	000 0
				0	O	e OF THE I	o o	o o	0	l	0	
	i	l	1	į	ŀ		1	Į	ļ		i li	
44.0	43.7	43.6	43.9	43.9	43.9	43.7	43.6	43.4	43.3	43.0	42.0	43'12
48.5	47.5	47°5	47.5	47.0	46.4	46.3	46.2	46.3	46.3	46'3	46.4	45.5
$51^{\circ}4$	50.2	49.7	49.0	47.5	47.4	45.7	45.9	45.5	45.4	. 45 2	44'9	47.7
49'0	48.7	48'4	48.2	47.4	47.0	46.8	46.3	46.1	46.0	46.0	46.0	46.9
43.7	42.9	42.6	42.5	42.0	41.8	l —	_		-			
						37.0	37.2	37.5	37.7	38.0	38.8	42.9
42.7	42.5	42.5	42.0	41.6	41.0	41.0	40.6	40.4	40.2	40.5	40.2	40.0
43.2	43.3	43.4	43.6	43.8	43.5	43.2	43.1	43.0	43.0	42.5	42.3	41.7
43'7		)				43.0	42.7					40 · P
	43.6	43.6	43.6	43.4	43.4			42.6	42.4	42.7	42.0	42.70
39.2	38.7	37.8	37.0	37.0	36.0	35.1	34.9	33.2	32.5	32.8	32.2	37.70
38.2	38.2	37.4	37.0	36.9	36 <b>.2</b>	36.2	36.0	36.0	35.7	3 <b>5</b> .7	36.0	35.6
42.5	42.6	42.5	42.0	41.6	41.5	<b>-</b>					38.8}	38.8
			,			36.0	36.4	36.6	36.9	37.8		
	46.0	46.1	46.0	45.8	45.6	45.6	45.5	45.1	44.5	44.0	43.7	43.8
46.0	47.6	46.6	46.0	45.4	44.7	44.5	44.0	44.0	43.8	43.6	43.0	44.2
	48.6	47.8	46.8	46.6	45.2	45.2	45.0	44.7	44.5	43.8	44.0	46.2
48.0		50.4	49.5	49.5		48.5	47.4	46.5	46.3	46.0	46.0	47.6
48.0 49.0	50.0		l		49.1							
48.0 49.0 50.6	50.8	"^	49.8	49.5	49.0	48.5	48.2	47.6	47.4	47.1	46.6	48.5
48.0 49.0 50.6 51.0	50.3	50.3		48'8	48.6				_	—	44.4}	47.2
48.0 49.0 50.6 51.0 50.1	20.0 20.3	49 9	49.5			44.5	44.5	44.5	44.7	44'6		
48.0 49.0 50.6 51.0 50.1	50°3 50°3	49.9				51.2	51.4	51'1	20.9	20.0	49.7	49.7
48.0 49.0 50.6 51.0 50.1 - 52.5	50°3 50°0 — 52°4	49°9 	52.0	51.8	51.7		10.0	48.6	48.6	48.8	49.0	49°4
52·5 50·0	50°3 50°3	49.9				48.8	48.3		l io o	100	1 30 0 1	49 4
48.0 49.0 50.6 51.0 50.1 - 52.5 50.0 49.0	50°3 50°0 — 52°4	49'9 	52.0 49.2	51.8 48.8	51.7 49.0	48.8						
48.0 49.0 50.6 51.0 50.1 - 52.5 50.0 49.0	50°3 50°0  52°4 50°0 48°0	49.9 52.4 49.6 47.6	52°0 49°2 47°7	51.8 48.8 47.0	51.7 49.0 46.8	48.8 46.6	46.3	46'0	46.2	46.0	45.6	48.0
48.0 49.0 50.6 51.0 50.1 	50°3 50°0 	49.9 52.4 49.6 47.6 45.0	52°0 49°2 47°7 44°5	51.8 48.8 47.0 44.0	51.7 49.0 46.8 44.0	48.8 46.6 44.3	46°3 44°5	46°0 44°2	46.2 44.0	46.0 44.0	45.6 43.1	48°0 44°7
48.0 49.0 50.6 51.0 50.1 	50°3 50°0 	49:9 52:4 49:6 47:6 45:0 46:6	52.0 49.2 47.7 44.5 46.6	51.8 48.8 47.0 44.0 46.3	51.7 49.0 46.8 44.0 45.5	48.8 46.6 44.3 45.7	46°3 44°5 45°7	46.0 44.2 45.6	46.2 44.0 44.2	46.0 44.0 43.8	45.6 43.1 43.5	48.0 44.7 44.0
48.0 49.0 50.6 51.0 50.1 	50°3 50°0 	49 · 9 52 · 4 49 · 6 47 · 6 45 · 0 46 · 6 46 · 4	52.0 49.2 47.7 44.5 46.6 45.9	51.8 48.8 47.0 44.0	51.7 49.0 46.8 44.0 45.5 44.8	48.8 46.6 44.3 45.7	46°3 44°5 45°7	46°0 44°2 45°6	46.2 44.0 44.2	46.0 44.0 43.8	45.6 43.1 43.5	48.0 44.7 44.0
48.0 49.0 50.6 51.0 50.1 	50°3 50°0  52°4 50°0 48°0 45°3 45°5 46°7	49.9 52.4 49.6 47.6 45.0 46.6 46.4	52.0 49.2 47.7 44.5 46.6 45.9	51.8 48.8 47.0 44.0 46.3 45.4	51.7 49.0 46.8 44.0 45.5 44.8	48.8 46.6 44.3 45.7 — 43.0	46.3 44.5 45.7 — 42.8	46.0 44.2 45.6 — 42.9	46.2 44.0 44.2 — 42.7	46.0 44.0 43.8 — 43.2	45.6 43.1 43.5 	48.0 44.7 44.0 45.0
48.0 49.0 50.6 51.0 50.1 	50°3 50°0 	49.9 52.4 49.6 47.6 45.0 46.6 46.4 	52.0 49.2 47.7 44.5 46.6 45.9 —	51.8 48.8 47.0 44.0 46.3 45.4 46.4	51.7 49.0 46.8 44.0 45.5 44.8 — 46.5	48.8 46.6 44.3 45.7 — 43.0 46.5	46°3 44°5 45°7  42°8 46°1	46.0 44.2 45.6 — 42.9 45.1	46.2 44.0 44.2 	46.0 44.0 43.8  43.2 44.5	45.6 43.1 43.5 	48 ° 0 44 ° 7 44 ° 0 45 ° 0 44 ° 9
48.0 49.0 50.6 51.0 50.1 	50°3 50°0  52°4 50°0 48°0 45°3 45°5 46°7	49.9 52.4 49.6 47.6 45.0 46.6 46.4	52.0 49.2 47.7 44.5 46.6 45.9	51.8 48.8 47.0 44.0 46.3 45.4	51.7 49.0 46.8 44.0 45.5 44.8	48.8 46.6 44.3 45.7 — 43.0	46.3 44.5 45.7 — 42.8	46.0 44.2 45.6 — 42.9	46.2 44.0 44.2 — 42.7	46.0 44.0 43.8 — 43.2	45.6 43.1 43.5 	48.0 44.7 44.0 45.0

	On	ie Scale Div	ision = ·00	0087 parts o	of the H. F.	HORIZO Increase, i	NTAL FO	RCE.	esponding to	1º decrease	of Tempera	iture, 1°63.	
Mean G gen T	öttin-}	0h.	1 <sup>h</sup> .	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6h•	7h.	8h.	9h.	10h.	11h.
	1 2 3 4	Sc. Div. 651'0 650'1 655'0 654'2	Sc. Div. 649°2 647°0 655°4 656°0	Sc. Div. 644 ° 0 643 ° 1 647 ° 0 652 ° 0	\$c. Div, 634 ° 0 639 ° 0 640 ° 0 648 ° 0	Sc. Div. 637 5 635 0 633 0 638 8	sc. Div. 633 ° 0 627 ° 2 625 ° 5 630 ° 2	Sc. Div. 631'1 626'0 625'8 628'0	Sc. Div. 634 0 632 2 631 6 630 5	Sc. Div. 637 8 637 5 640 0 640 0	sc. Div. 638 0 641 0 647 0 647 0	Sc. Div. 640°0 646°0 650°5 648°8	sc. Div. 641°0 650°0 651°2 650°0
	5 6 7 8 9 10	658.0 648.5 639.8 638.0 649.0 652.0	658.0 644.8 632.4 635.0 644.0 652.0	654.0 639.2 637.8 631.0 644.0 647.5	646.5 635.6 629.0 625.0 640.0 639.2	634.8 629.0 616.0 621.0 632.0 630.8	632.8 624.8 597.2 615.0 623.0 621.2	635.0 623.9 608.5 614.4 618.0 616.4	640.5 635.0 620.0 617.8 620.2 619.4	661 · 3 637 · 6 626 · 0 625 · 0 628 · 2 623 · 8	651.7 641.0 621.0 632.0 635.5 634.4	643°8 638°0 636°0 637°0 639°2 641°8	651'0 643'8 627'5 640'2 643'0 644'2
MARCH.	12 13 14 15 16 17	648.8 657.0 658.0 672.0 607.0 633.3	649.2 651.8 655.0 667.0 617.0 631.2	641.4 655.1 643.0 660.5 607.0 634.0	634.0 651.4 621.0 645.0 596.8 632.9	629.0 648.0 643.5 636.5 587.5 629.6	626.8 646.4 642.3 637.5 607.8 624.4	623 · 4 645 · 0 634 · 0 629 · 5 626 · 4 624 · 8	632.0 648.0 652.5 642.0 629.3 633.0	640 ° 0 645 ° 0 658 ° 0 635 ° 5 653 ° 0 632 ° 2	641.5 650.8 655.0 642.2 657.1 643.0	646.5 644.2 651.7 652.2 648.4 627.0	648.0 649.0 640.2 656.6 648.0 636.5
	19 20 21 22 23 24 25	589.0 616.0 632.5 635.5 622.4 633.7	580°2 612°0 633°0 631°4 629°8 632°0	553°0 614°0 630°5 626°8 639°4 603°0	561.0 611.4 622.0 623.0 633.5 597.0	576.0 602.0 614.0 613.0 626.0 596.0	558.8 602.0 609.0 610.0 616.1 618.0	592.0 603.0 602.0 609.6 608.1 608.5	625.0 613.0 605.8 612.6 613.0 618.0	663.0 608.5 619.8 619.0 617.8 616.0	696.0 618.0 628.2 615.8 618.8 619.0	664.6 619.0 633.0 629.2 641.0 622.0	657.0 617.4 638.8 633.0 633.5 628.5
	26 27 28 29 30 31	640.6 642.0 637.2 635.4 614.7	641.0 639.0 632.0 634.2 611.3	625.0 635.8 627.2 633.8 605.0	615.0 629.0 619.4 627.9 614.7	608.5 623.0 613.8 617.1 610.0	608 8 613 5 609 2 610 7 593 0	612.6 613.5 613.4 612.0 593.5	608.5 623.8 615.9 620.0 612.0	620°8 638°0 623°1 628°8 618°0	631.9 626.0 628.9 644.0 624.0	626.0 637.4 634.1 645.0 643.8	640.2 637.6 632.4 635.0 632.0
Hourly	Means	639.66	637.81	632.37	626.34	621.23	617.19	617.72	625.39	633'10	638.10	640'23	640.95
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \end{pmatrix}$	42°2 41°0 39°8 40°5	41°4 40°0 39°8 40°0	42°2 39°0 39°2 40°3	42.7 38.5 39.0 42.0	43°3 38°9 39°7 44°7	44°3 39°6 41°3 44°5	45°3 40°2 42°2 44°9	45.7 41.7 43.0 44.8	45°9 41°7 44°0 44°0	45°6 42°3 45°0 43°6	45°8 42°4 45°0 43°0	45.7 41.9 45.3 42.0
	5 6 7 8 9 10	38·4 44·4 48·6 46·3 42·0 44·2	38.5 44.2 48.2 45.7 41.5 44.0	39°0 44°2 48°6 45°5 41°5 45°5	39.7 44.4 48.6 45.3 42.4 46.8	40.4 44.6 49.0 45.7 44.0 47.4	41.2 45.0 50.0 46.3 45.0 48.3	41.6 46.0 51.0 46.9 45.7 48.4	42·2 46·7 51·7 47·2 45·8 48·4	43.2 48.1 51.9 48.4 47.0 48.8	44.6 49.4 52.5 49.4 48.2 49.3	46.0 49.8 53.2 50.0 49.2 50.0	46°2 50°0 52°5 49°4 49°2 49°4
MARCH.	12 13 14 15 16 17 18	45.2 40.8 34.0 34.5 41.0 41.4	44.2 40.1 34.0 34.7 41.5 41.5	43.6 40.1 34.4 35.7 41.6 41.6	43.6 40.8 35.2 36.4 41.6 43.7	43.6 40.8 35.6 37.0 41.5 45.0	44·1 41·0 35·8 38·0 42·4 46·3	44·1 41·0 36·0 39·0 42·8 46·6	43°8 41°5 36°4 39°4 43°1 47°0	44.0 41.6 37.2 40.2 43.7 47.4	44·3 41·7 38·1 40·6 44·1 47·4	44.6 41.9 38.7 41.6 44.6 47.5	44.7 41.9 39.2 41.7 45.5 47.5
	19 20 21 22 23 24 25 26	44.8 49.2 48.8 53.6 47.6 51.0	44.4 49.0 48.8 52.8 48.4 50.8	44.4 50.0 49.2 52.0 49.3 50.1	44.0 51.6 49.5 51.5 50.0 51.0	44.5 52.5 49.8 52.1 50.5 51.0	45.7 53.2 50.5 52.7 51.2 51.3	46.0 53.5 51.0 52.9 51.5 51.4	46°3 54°1 51°2 53°0 52°0 51°9	46°2 54°5 51°3 52°5 52°5 52°0	47°3 55°5 51°4 52°6 53°4 52°8	47°3 56°3 51°6 53°6 55°0 53°3	47.2 56.6 51.9 53.8 54.0 53.3
	26 27 28 29 30 31	47.2 47.2 52.3 52.2 52.9	47.0 47.5 52.8 52.6 52.0	47.0 48.0 53.8 53.0 52.2	47·3 48·5 54·8 54·0 52·5	47.9 49.9 55.2 54.5 53.5	49.0 51.0 55.6 54.7 54.5	50°3 51°9 55°6 54°7 55°6	51.3 52.1 55.6 55.0 56.4	51.6 52.4 56.6 55.0 56.1	52·2 53·0 57·6 55·4 57·2	52°5 53°8 58°8 55°4 58°0	52°2 54°4 60°0 55°5 58°3
	Means	44.86	44.64	44.85	45.39	46.02	46.76	47.26	47.68	48.07	48.69	49.22	49.23

	One Scale I	Division = '	000087 part	ts of the H.		ZONTAL : e, in Scale I		rresponding	to l <sup>o</sup> decrea	se of Temp	erature, 1•63	•
12h.	13 <sup>h</sup> .	14 <sup>h</sup> •	15h.	16h.	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23 <sup>h</sup> .	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 647.8	Sc. Div. 648 0	Sc. Div.	Sc. Div. 648 2	Sc. Div. 642 65
344'0	643.5 654.0	645.6 652.0	648.0 652.0	646.8	645.0 653.8	646.0	647 4 655 0	654.7	654.6	656.0	655.8	646.67
551 ° 0 650 ° 4	642.0	649.0	648.8	651.8	652.9	653.1	651.8	657.3	656.0	655.0	654.0	646.84
652.3	657.1	656.8	656.6	657.0	657.2		_				]	651.07
_						659.0	658.0	663.0	663.0	661.6	660.6	
647.0	646.0	646.2	641.0	642.0	642.4	645.5	640.5	644'0	645.0	645'0	647.2	645.80
637.6	643.0	646.0 626.0	643.0	644.5 627.8	642.0 628.8	641.0	638 <b>.</b> 4 634 <b>.1</b>	637 <b>.</b> 2 634 <b>.</b> 6	638.0 633.7	637·2 636·1	636.0 635.8	$638.55 \\ 628.22$
634'0 641'8	642.0 638.4	640.0	641.2	643.0	643.0	645.0	645.4	646.0	645.8	646.2	648.0	635.63
644.7	645.8	647.3	647.8	647.0	649.0	648.4	651.0	652.0	650.0	651.2	652.0	641.76
646.0	645.0	645.0	646.5	645.5	646.0			- 1			}	641.46
						650.0	647.8	651.5	651.0	650.0	648.0}	
650.6	651.0	652.0 659.0	653°0 669°6	651.2 665.0	652.0 659.5	655°0 624°8	655.0 618.7	657 <b>.</b> 4 635 <b>.</b> 0	659.5 653.2	657·2 654·1	658°0 655°0	646°37 649°93
658°8 645°0	654°0   653°0	651.8	653.8	651.2	650.2	654.0	643.8	659.0	657.4	657.0	675.0	650.23
655.4	658.2	647.2	642.8	643.4	610.0	606.4	611.0	608.2	626.5	610.4	590.0	636.93
650.5	643.4	631.0	636.5	635.0	635.0	635.0	636.2	636.8	638.0	639.0	637.8	630.80
644.0	620.8	630.0	631.0	630.0	632.0	-				-	<u></u> }	621.55
	617.0	617:0	620.2	594.0	598.2	619°8 588°4	551.6 570.0	580.7 583.6	588.6 593.0	623°2 624°0	583.5 } 622.2	607.63
640°0 608°8	617 0	620.8	620 2	623.5	598 Z 623·7	625.5	626.2	630.0	631.8	631.0	631.0	617.82
625.0	622.4	617.0	621.8	628.0	625.0	633.6	630.3	632.0	633.0	633.0	633.0	625.11
629'0	634.0	628.5	624.2	632.0	634.0	634.8	631.0	633.5	630.8	625.0	641.2	626.55
633.0	630.0	626.5	625.0	620.0	587.5	611.0	630.5	631.2	629.5	629°4	620.9	623.91
614'0	619.2	622.5	616.8	622.2	621.0	619.8	637.3	623.9	623.1	636.1	634.8	620'11
622.4	633.2	637.4	636.2	637.1	643.8	634.0	632.8	630.0	642.5	640.0	643.5	629.66
638'3	633.5	637.1	626.2	628.0	632.0	630.8	633.0	639.5	635 4	640.5	638.0	632.13
630.0	630.0	633.0	625.0	629.8	630.2	631.7	634.0	634.0	633.0	635.0	631.5	627.66
635.0	626.0	622.0	628.5	633.0	630.0	632.8	618.8	609.0	617.5	604.8	605'0	625.26
614.5	626.0	622.0	600.0	602.3	605.2	611.0	615.0	622.0	612.1	624.5	620.2	614.45
638.62	637.97	637.36	636.63	636*46	634*42	633.84	631.28	634.60	636.67	638.56	637 27	633.20
<del></del>		1			EMPERATU				0 1	0	l o li	
$4\mathring{5}$ * $4$	44.7	44.5	44.3	44.0	44.0	44.0	43.2	43.3	43.3		42.5	44.06
42.0	42.4	42.0	41.6	41.2	41.0	40.0	40.0	39.6	40.0	40°0 41°4	39.8 41.0	40.70 41.85
44.6 41.2	43 2 40 4	42.6	42.1	41.6 39.8	41°2 39°5	40.8	40°4	41.0	41.2	41 4	i II	
71 2		40.1	40 0		-	33.2	33.9	34.6	36.2	36.7	37.6}	40.34
46.2	45.2	44.4	44.0	44.0	44.0	43.9	43.5	43.8	43.5	44.4	44.6	43.02
49.8	49.5	49.0	49.0	49.0	49.0	49.2	49.2	49.0	48.8	48.9	48.7	47.75
52.0	51.5	51.1	51.0	50.4	50.0	49°5 45°1	49.5 44.9	48.7 44.8	47.6 44.8	47°1 44°0	46.6 43.0	50°03 46°38
48'6 49'1	47.6 47.5	46.6 46.5	46.2	46°0 44°7	45.5 43.6	43.0	44.0	44.2	44.6	44.6	44.2	45.14
49'1	48.2	48.2	47.5	47.5	47.4		-					47.13
	· -		l —			45.5	45.4	45.4	45.4	45.4	45.2}	
44.7	44.0	43.6	43.4	42.7	42.0	42.0	42.2	42.1	41.6	41.3	41.3 34.2	43°36 38°94
40°5 39°4	39.0	38.0	36.8	36.2	36.3	36.6 34.6	37.0 34.3	36.5 34.2	35.5 34.1	34.7 34.4	34.1	35 93
40.5	39.5	37.6 39.2	36.2	35.6 39.0	34.6	38.7	39.3	39.5	40.2	41.7	41.5	39.00
45.6	44.6	44.4	43.4	43.4	43.4	42.7	42.0	41.5	42 0	42.0	41.9	42.98
48.0	47.9	48.3	48.3	48.2	48.0						- }	45.90
40.0		<b>!</b> —	_			45.0	44.8	45.0	45.1	45.1	45.1	47.29
$\begin{array}{c} 48.2 \\ 56.4 \end{array}$	48 4	48.6	48.6	48.6	48.8	49.0	49.1	49.0	49.0	49.0	49.0	52.58
51.6	55'4 51'1	54.4	53°2 50°5	52°5 50°5	52.0 50.6	50.7	51.2	52.4	52.9	53.1	53.2	51.00
54.0	53.4	52.9	52.1	51.6	51.3	51.0	50.4	50.0	49.5	49.1	48.8	51.9
<b>54</b> °3	53.6	53.2	52.2	52.5	53.0	53.0	52.5	52.0	51.2	51.2	51.2	51.9
<b>5</b> 3 · 5	53.5	53.5	53.6	53.6	53.2		10:5	10:0	40:0	10:0	47.7	51.2
52.3	51.5			50:0	40:6	48.7	48.5	48°0 48°4	48.2	48.0 47.7	47.73	49.5
54°4	51.5 53.8	50.6 53.3	50°3 52°8	50°0 52°5	49°6 52°4	49.2	51.8	51.7	51.9	52.0	52.3	51.7
60.4	59.6	58.6	56.8	56.0	55.2	54.8	54.4	54.4	54.0	53.0	52.6	55.7
55.7	54.8	54.2	54.4	54.4	53.9	53.5	53.4	53.2	53.0	53.1	53.0	54.1
58.5	58.4	28.0	57.6	57.6	57.2	56.3	55.3	54.0	53.2	53.3	53.0	55.2
49'11	48.42	47.94	47.43	47.15	46.88	46.07	45.94	45.81	45.78	45.83	45.56	46.8

				<u> </u>		'. Increase,		21		61		7.01	
lean Gö gen Tii	me.	O <sup>h</sup> .	1h.	2h.	3h.	4h.	5 <sup>h</sup> .	6h.	7h.	8h.	9h•	10h.	11h.
	1 2	Sc. Div. 630'0	Sc. Div. 620 0	Sc. Div. 619 0	Sc. Div. 614.5	sc. Div. 613 0	Sc. Div. 612 0	Sc. Div. 617.5	Sc. Div. 623*8	Sc. Div. 629 8	Sc. Div. 633 '0	Sc. Div. 635 2	Sc. Div. 635 2
	3	605.0	618:0	611.0	588.5	594.0	592.0	602.5 603.2	621.4 606.8	620°8 618°8	632.8 626.6	665.4 626.4	634.0 628.0
	5	623°0	614.0	617.5 623.2	610.2	597.8	593.5	598.9	601.8	615.0	635.0	625.0	640.0
	6	624.3	627.2	610.0	600.5	601.0	598.0	594.0	595.0	613.0	620.0	628.5	633.0
	7 8	598.0 621.0	575°0 619°0	918.0 918.0	611.0 611.0	581.2	585.6 607.0	579·5 607·8	575°0 606°8	610.4	624.5	619.8	631.2
	9	628.0	630.2	627.0	618.0	608.4	598.2	596.2	608.0 601.0	605.0	610.6	617·3 625·5	621.0
1	11 12	$625.8 \\ 627.6$	620.0	621.2	617.0	612.5	604.5	610.0	627.0	620°0 621°8	624.5	625.0	623.0
	13	631.0	630.8	627.0	618.0	615.8	615.6	615.0	618.0	624.0	634.0	636.7	638.2
APRIL.	14 15	643.0 $645.2$	642.0 639.3	635°2 624°0	627 · 9 626 · 5	621°0 617°2	613.8	620°2 618°4	623°0 621°0	626°8 637°8	633.8	638.8 637.0	639°2
AP)	16 17	625.4	628.0	626.6	618.0	613.4	610.6	618.4	621.0	624.0	638.5	640.0	652.0
	18 19	636.0	627.5 640.0	619.2	616.0	609.0	612.0	622°0 626°8	630.0	633'0 641'0	635.2	$628.0 \\ 642.4$	635°0 645°0
	20 21 a	643.0	641.5	638.2	630.0	623.2	618.0	624.0	622.0	628.0	634.0	639.2	633.8
	22 23	626.2	624.0	603.0	603.0	603.0	611.2	608.0	612.2	613.2	614.0	624.0	621.0
1	24	639'0	638.8	635.0	628.0	621.0	615.0	626.0	629.0	634.8	636.0	638.0	638.0
	25 26	643°0 644°0	642°0 640°0	629°0	621.0 618.2	617.0 611.2	625.0 613.8	629'0 620'4	630.0	$635.2 \\ 634.0$	637.8 637.0	637.8	637 <b>.</b> 9
ļ	27	646'4	646.0	638.2	629.1	626.8	631.0	636.0	639.0	641.0	641.5	643.0	642'0
	28 29	$644.0 \\ 621.5$	642'0 620'8	630.0	628 0 621 8	626.5 589.0	632'1 589'0	$638.2 \\ 618.0$	647.0	648.5 619.0	$652.0 \\ 639.2$	654.0 637.5	646.5 640.2
	30				-		-	-				_	
ourly I	Means	630.78	628.50	623.50	616*43	611.30	610.70	615.62	619.90	625.57	632.57	635.36	634.91
	1		······································	1	1	i	F THE BIFI		<u> </u>			1	
(	$\frac{1}{2}$	52.0	52°0	5 <u>1</u> .9	50°·5	50°·3	50.7	5η0	50°6	50°•4	50°4	50°·4	50°4
	3	45.3	45.8	47:3	48.5	49.5	51.0	51.5	52.1	52.2	52.4	52.8	53.0
	5	53.4 51.2	53.4 51.6	53°0 52°0	53°2 52°4	53'4 52'9	53.6 53.5	53.6 53.9	53.7 54.0	53°8 54°2	54.0 54.6	54°0 54°9	53 <b>·7</b> 5 <b>5·3</b>
	6	50.0	50.4	51.4	52.2	53.2	54.0	54.2	54.2	55.2	56.3	57.3	57 <b>.5</b>
İ	7 8	54'0 50'8	54.0 51.7	54.9 52.5	55°7 53°5	56'1 54'4	56.5 55.0	56.6 55.5	56.6 55.8	56.6 56.8	57°0 57°6	57°9 58°7	58.0 59.2
	9			-	- 1				-	_			_
	10 11	54.5 59.6	55°4 59°4	55°9	58.0 58.5	59.2 $58.4$	59.4 58.8	60°2 59°2	61.0 59.2	62.0 59.5	62.7 59.5	63.5 59.4	64.9 59.0
	12	54'1	55.2	56.0	56.2	57.0	57.5	57.5	58.2	58.2	59.1	60.0	60.0
1	13 14	54°5 49°9	54.5 50.4	54°2 50°7	53°5 51°2	53.5 51.5	53.5 52.0	53°5 52°8	54.0	54°0 53°6	54.0	54.0	54.1
	15 16	51.2	52.9	54 0	54.8	55.2	56.6	56.6	53°2 56°6	57.2	54.0 58.0	54.6 58.9	54°5 59°9
, ,	17	52.8	53.4	54.0	54.1	54.1	54.6	55.0	55.2	56.0	56.3	56.3	56.6
	18 19	50.0 44.0	49.5 44.2	49°3 45°8	49°6 47°5	49.6 48.0	50°5 48°9	50°7 49°7	50°3	49.5 50.4	49·5 50·9	49.5 51.7	49°0 51°9
	20 21 a	47.4	48.0	49.2	49.8	20.3	51.0	51.4	51.8	52.4	<b>53.</b> 0	54.0	54.7
	22 23	53°4 —	53.0	53.0	52.9	53 <b>·3</b>	53.6	54.2	54.7	55.8	56.5	56.8	57.3
	24	47.4 $46.2$	47.4 47.6	47 <b>.</b> 9 49.0	48.0	48.2	49.0	49.5	50.1	50.6	51.2	51.2	51.0
	$\frac{25}{26}$	50.0	51.0	52.2	50°0 52°6	50°0	50.4 53.0	50°9	51.2 52.8	52.0 53.0	52.4 53.0	52.6 53.5	52.6 58.4
- [	27	49.4	49.8	50.7	51.7	52.4	53.0	53.6	54.0	54.5	55.4	56.0	56.3
	28 29	52.1 53.2	52.0 53.5	51.5 53.5	51°3 53°4	51.5 53.7	52.0 54.2	52°2 54°5	52°5 55°3	52.6 55.5	53°4 56°2	54.0 56.9	54°0 57°0
	30	-	-	-			_			<del>-</del>	—		
	]]·									'			

<sup>&</sup>lt;sup>a</sup> Good Friday.

T							IZONTAL	-					
		One Scale	Division =	•000087 par	rts of the H.	F. Increas	se, in Scale	Divisions, co	orresponding	to 1º decre	ase of Temp	erature, 1°6	3.
-	12 <sup>b</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> •	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .	21h.	22h.	23h.	Daily and Monthly Means.
	Sc. Div.	Sc. Div. 621 2	Sc. Div.	Sc. Div.	Sc. Div. 622 ° 0	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	-			_			607.0	610.2	602.0	600.4	605.0	621.5	619.98
	633.2	617.7	616.1	614.0	597.5	590.0	602.0	599.0	627.0	628.5	625.5	626.0	615.08
	629.8	626.5	627.0	630.0	628.0	629.0	629.0	626.8	627.5	629.0	631.0	631.4	621.28
-	632.0	631.0	627.0	629.0	634.0	546.5	565.5	587'1	618.3	633.2	625.8	620.2	615.50
	639'0	643.0	602.0	647.8	635.5	405.4	522.3	462.7	181.8	277.5	519.7	579·9 603·2	560'88
- 1	616.4	603.2	596 <b>·</b> 2	607.2 619.0	618.8	618.0 593.0	604.4	610.0	613.0	611.5	608.2	. i	600.10
	618.2	617.0	017 0	013 0	010 0	010 0	618.0	615.8	616.0	624.0	626.0	$\{626.5\}$	616.83
	623.2	617.0	619.6	614.0	617.6	613.0	620.0	618.2	622.2	621.0	622.5	622.0	616.33
	622.0	623.0	623.0	625.0	625.0	624.1	626.0	627.0	627.0	627.2	628.8	628.9	621.62
ı	625.8	624.0	625.0	625.8	626.2	627.2	628.8	629.2	630.0	630.6	630.1	631.0	626.21
	637.6	636.0	634.4	635.0	637.0	638.2	638.0	638.0	637.8	641.5	641'6	644.0	631.80
	640.0	640.0	640.0	640.0	640.8	638.0	638.8	639.0	639.5	641'6	642.0	645.0	635.61
	637.4	602.0	605.5	603.0	612.0	597.0		<u></u>	627.2	626°5	625.0	$\{-628\cdot 2\}$	623.63
	C04:0	599.0	587.0	619.0	619.0	$\frac{-}{617.2}$	620.0 615.0	$624.0 \\ 625.0$	623.8	622.0	625.8	628.8	621.73
	624.0 638.0	637.0	632.0	628.0	626.4	633.8	635.8	636.0	638.1	632.6	634.9	634.9	629.23
	640.2	631.9	636.0	636.0	636.1	636.9	637.0	639.0	638.2	639.0	637.0	642.0	635.96
ŀ	634.0	635.0	623.0	615.8	619.0	619.2			<del>-</del>			— າ∥	
	624.0	623.1	617.0	622.2	625.0	623.4	618.2	592.4	555.0	556 <b>·</b> 5	622.0	636·1 }	620.89
- [				_	_		633.2	635.0	636.5	641.0	638.5	638.2	621.70
	637.8	638.0	639.2	630.0	645.0	638.0	640.4	641.2	643.0	643.2	644'4	643.0	635.91
	640.0	637.3	635.9	639.0	638.8	641.0	641.6	640.6	641.0	642.8	642.5	643.0	636, 17
ļ	637.0	637.8	639.0	639.2	640.5	639.0	639.8	641.0	642.1	643.1	644.0	644.5	635`00
Ì	642.0	638.5	634.0	637.0	638.0	639.0	637.0	637.8	640.2	642.2	642'2	643.2	638.80
ı	641.0	639.0	642 1	639.8	644.2	656.2	656.0	634'0	617.7	616.1	620.0	622.2	638.45
	634.8	616.8	607°8	— 618.0	625.0	616.1	614.0	616.6	617.0	617.8	632.0	631.0}	621.27
ļ	632.46	625.74	623.99	626.18	627.21	620.82	624.59	624.47	625.25	626.57	630.21	631.95	625.18
			1	<u> </u>	ТE	MPERATUR	E OF THE	BIFILAR M.	AGNET.			ļI	
	50°5	5°00	49°6	49.4	49°0	48.7	°	0	°	0	°	° )	。 49 <b>·2</b> 4
	-	_	_	_	_		46.0	45.8	45.6	45.6	45.5	45.5	
İ	52.9	52.6	52.6	52.2	52.2	52.2	52.4	52.4	52.7	53.5	53.6	53.4	51.42
	53.4	53.0	52.8	52.9	52.3	51.8	51 <b>.</b> 5	51.4	51.4	51'4	51.4	51.5	52.82
	55.7	55.1	55.0	54.2	54.1	54.0	54.0	53.2	53.2	53.2	52.6	51.0	53.57
	57 9 58 2	57.0	56.2	55.6	55.2	54.8	54.0	53.6	53.2	53.0 $52.2$	53°1 51°7	53 · 2 51 · 2	54°29 55°31
	59.8	57.8 59.0	57 <b>·</b> 2 58 <b>·</b> 6	56.0 57.9	55°0 57°6	54°2 57°4	53.7	53.4	53.0				· · · · · · · · · · · · · · · · · · ·
- {			- Jo U	-		57 <del>T</del>	56.4	56.0	55.7	55.2	55.1	54.6}	56.05
	64.4	63.9	63.5	63.0	62.5	61.9	61.0	60.9	60.4	60.1	60.0	59.8	60.75
	58'5	58.3	58.0	58.0	58.0	57.8	57.6	57.2	57.0	56.4	56.0	55.4	58.22
	60.0	59.2	59.0	58.6	58.4	58.2	58.0	57.6	57.3	57.0	56.0	55.2	57.66
	54.0	53.8	53.2	52.5	52.0	51.5	51.0	50.7	50.4	50.0	49.6	50.0	52.76
	54.0	53.5	53'2	53.0	52.7	52.8	52.8	52.5	52.3	51.2	51.2	51.4	52.48
	59.9	58.6	57.2	56.2	56.1	56.0	55°0	54.5	54.0	53 <b>°</b> 6	53.5	$\frac{-}{53\cdot 2}$	55.86
	57.0	56.5	56.0	55.5	55.0	55.0	55 0 54 0	54 5 54 0	53.4	53.0	52°6	51.6	54.67
	48.8	48.2	48.6	48.6	48.4	48.2	48.3	48.0	46.7	46.0	45.2	45.1	48 64
	52.2	52.0	51.2	51.0	50.2	49.9	49.0	48.9	48.3	48'1	47°8	47.5	49.15
-	55.0	54.5	53.6	53.4	53.5	53.1		53.6	<del></del>	<u>-</u> 54.5	<u>-</u> 54.6	54.0}	52.49
	57.5	57.2	56.7	56.1	55.8	55.6	53.3		48°5		48.0	$\frac{340}{47.6}$	53.49
	50.8	50.4	50.2	49.6	49.0	48.8	49.5 48.5	49.0 48.2	48 5 47.7	48°0 47°4	48 0	46.2	48.97
1	52.6	52.0	$\frac{50}{51.5}$	50.7	50°4	48 8 50 4	48 5 50°5	$\frac{48}{50.2}$	50.0	50.0	50.0	50.0	50.55
	54.4	53.8	$\frac{51}{52}$ .7	52·2	50 4 51.9	51.6	50 5 51.5	$\frac{50}{51}$ 2	50.2	20.3	20.0	49.7	52.30
	56.2	55.2	55.0	54.2	54.4	54.1	54.0	53.4	53.2	23.0	52.8	52.5	53.57
, I	54.5	54.6	54.6	54.4	54.4	54.4	54.4	54.0	53.9	53.9	54.0	54.0	53.34
	56.8	56.5	55.6	54.6	54.0	53.4		—	<u> </u>			50.7}	54.06
-							52.4	52.2	21.8	51.5	51.2		
	55.54	55.03	54.60	54.12	53.78	53.52	52.82	52.53	52.22	51.99	51.73	51.35	53.36

	On	e Scale Div	sion = '000	0087 parts o	f the H. F.	Increase, in	n Scale Divi	sions, corres	sponding to	1° decrease	of Temperat	ure, 1 63.	
Mean G gen T	ottin-}	Oh.	1 <sup>h</sup> .	<b>2</b> ħ₊	3h.	4h.	5 <sup>հ</sup> .	6h.	7 <sup>h</sup> .	8h.	9h.	10 <sup>b</sup> .	11h.
	1 2 3 4 5 6 E	Sc. Div. 627 ' 5 638 ' 0 635 ' 2 631 ' 0 632 ' 0 623 ' 0	Sc. Div. 628 0 638 0 633 2 630 0 632 0 610 0	Sc. Div. 626 0 633 0 617 2 623 8 623 0 619 5	Sc. Div. 612 0 614 8 619 0 620 5 612 5 603 2	Sc. Div. 617 0 608 5 610 0 605 0 603 0 607 0	sc. Div. 611 5 605 5 606 9 598 0 604 0 595 0	Sc. Div. 612 2 620 5 611 3 612 0 603 0 598 0	sc. Div. 616 2 630 0 620 0 626 0 612 0 600 8	sc. Div. 626 2 640 8 628 5 639 0 615 0 606 4	Sc. Div. 634 ' 6 637 ' 1 630 ' 0 648 ' 0 621 ' 0 621 ' 2	Sc. Div. 651 '8 642 '0 625 '0 630 '0 631 '0 616 '0	Sc. Div. 638 4 643 0 630 0 635 5 624 6 611 0
	7 8 9 10 11 12 13	600°0 618°2 611°5 622°0 636°5 628°0	597.0 616.0 586.0 619.2 635.5 623.0	597.5 605.4 579.0 620.0 629.0 618.0	585.0 602.0 597.0 610.0 623.5 615.4	591.8 608.6 589.5 610.0 621.0 610.5	590.4 608.0 614.0 607.5 616.0 612.2	600°5 625°0 585°5 607°0 633°5 616°0	603.7 621.2 602.0 610.0 635.0 627.0	611 · 2 623 · 0 599 · 0 618 · 5 640 · 8 627 · 0	625°0 633°0 614°0 623°5 644°2 637°1	622.2 616.0 619.8 624.0 633.0 635.8	630°0 628°0 625°0 623°8 626°1 634°5
MAY.	14 15 16 17 18 19 20	642·2 635·9 634·0 595·4 599·5 600·4	636.8 624.7 633.0 617.0 612.0 598.6	624.4 626.9 625.0 611.0 593.0 595.0	618.0 619.0 611.0 612.0 574.2 584.9	616.2 613.0 609.5 607.0 575.0 594.0	618 2 616 0 603 0 605 0 578 2 605 8	623.0 625.0 617.0 599.0 591.8 595.0	632.0 626.0 625.0 582.2 586.1 603.0	640°0 640°5 635°0 621°5 593°2 610°0	642.0 642.2 630.8 622.8 603.0 605.8	638.0 635.0 658.0 629.2 614.2 608.0	638.0 632.5 643.4 612.8 605.0 611.5
	21 22 23 24 25 26 27	621.8 624.0 630.5 616.0 610.0 617.0	626.7 623.0 627.0 606.0 612.2 608.0	620.0 622.8 611.5 607.0 612.4 588.5	607.8 611.0 610.0 614.2 604.3 597.0	600.0 600.0 606.4 606.0 603.0 588.0	598.8 597.5 609.0 600.4 604.1 598.5	606.0 598.0 610.0 603.2 607.0 602.0	619.8 603.0 616.8 610.4 619.8 616.9	618:5 614:0 624:8 616:1 621:0 614:0	621.5 618.0 591.2 625.0 618.8 627.2	610.0 617.2 612.2 615.0 621.0 638.0	620.0 621.4 614.0 626.5 619.0 647.0
	28 29 30 31	608.0 615.5 630.9	612.0 613.0 627.5	610.8 600.0 	589.0 601.0 617.2	591.8 598.0 606.8	600.0 600.0 615.8	602 5 604 0 620 5	605°0 606°5 617°2	607.0 613.2 618.2	610°2 618°8 633°6	614.0 617.8 636.0	612 <b>.</b> 2 614.3 619.8
Hourl	y Means	621.63	619*46	613:97	606.87	603.28	604'31	608.46	613.84	620.83	625.17	626.30	625°4
,	$ \left(\begin{array}{c}1\\2\\3\\4\\5\\6\end{array}\right) $	50.7 52.0 56.0 57.2 59.7 63.5	50.6 52.2 57.0 57.5 60.5 64.3	50.7 52.5 57.8 57.8 62.0 64.8	51°5 53°6 58°7 58°4 63°5 65°5	52.2 54.6 60.0 59.7 64.4 66.0	53.3 55.6 60.5 60.5 65.2 66.8	53.6 56.2 60.5 61.2 66.0 67.5	53.7 57.0 60.7 60.8 66.7 68.2	53.8 58.0 61.0 60.6 67.5 68.8	54.0 59.0 61.8 60.2 67.3 69.8	54.4 59.2 62.4 60.1 68.6 70.4	54.6 59.2 62.7 59.6 68.4 70.6
	7 8 9 10 11 12 13	59.5 58.0 58.7 57.6 53.6 54.0	59.5 58.5 59.5 57.5 54.3 53.8	59.9 59.2 60.5 57.0 55.1 53.5	60.8 60.0 61.2 57.3 56.0 53.6	60°5 60°7 62°2 57°6 57°0 53°8	60°8 61°0 62°2 58°2 57°6 53°3	61.2 61.4 62.2 58.5 58.0 53.0	61.5 61.8 62.5 58.0 58.6 53.9	62.0 62.2 62.4 58.0 59.2 54.1	62.4 62.4 62.4 57.8 59.8 55.0	62.9 62.0 62.5 58.0 60.6 55.7	63 ° 0 62 ° 0 62 ° 4 58 ° 2 61 ° 0 54 ° 9
MAY.	14 15 16 17 18 19 20 21	52.6 56.6 56.1 58.8 62.5 65.0	53.5 56.7 56.7 60.0 62.5 64.8	54·3 57·0 57·8 60·9 63·2 65·1	55.0 57.4 58.7 62.0 64.4 65.9	56°1 58°2 59°7 62°5 66°0 66°9	56.9 58.9 60.4 63.0 67.0 67.7	57.7 59.4 60.8 63.5 68.3 68.8	58.2 59.5 61.5 64.4 69.2 69.0	58.8 60.0 62.4 65.0 69.9 69.6	58.8 60.3 63.4 66.2 70.5 69.7	58.6 60.7 64.0 67.2 70.5 69.7	58°3 61°0 64°4 67°6 70°5 69°5
	21 22 23 24 25 26 27 28	64.0 62.4 60.9 63.5 64.2 62.2	63.7 62.0 61.5 64.0 64.9 62.8	63.6 62.3 62.0 64.0 65.6 63.5	63.8 62.3 62.2 64.6 66.0 64.2	64.5 62.1 63.2 64.8 66.5 65.1	64.5 62.6 64.0 65.8 66.7 65.8	65.6 62.6 64.9 67.0 66.1	65.0 62.4 65.9 67.6 67.2 66.5	65.7 62.5 67.0 68.5 68.0 67.2	66°3 63°0 67°6 69°6 68°4 68°0	66.2 63.4 68.6 71.1 70.4 68.5	66°1 63°5 74°2 71°2 70°3 69°5
	28 29 30 31	65°3 66°3 59°5	65.2 66.8 60.0	66'1 67'4 60'5	66.2 68.0 60.8	67.5 68.5 61.0	67.7 68.5 60.9	68.5 68.5 60.9	69°2 68°8 61°0	69 <b>.5</b> 69.2 61.0	70.3 69.2 62.0	71.0 68.9 62.4	71 · 8 68 · 6 62 · 4
lourly	y Means	59.27	59.65	60.15	60.81	61.23	62.05	62.55	62.92	63.40	63.90	64.37	64.6

12 <sup>h</sup> .	-	Division =	000087 par	ts of the H.		IZONTAL e, in Scale l		rresponding	to 1° decre	ase of Temp	erature, 1°6	3.
	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>հ</sup> .	19 <sup>h</sup> •	20h.	21h.	22 <sup>h</sup> .	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div. 630 9	sc. Div. 634 0	Sc. Div. 635 ° 0	Sc. Div. 634'9	Sc. Div.	Sc. Div. 638'4	Sc. Div. 623 °0	Sc. Div. 628 8	Sc. Div. 632 0	Sc. Div. 630'0	Sc. Div. 636 5	Sc. Div. 629 33
41.0		622.0	616.0	617.0								029 00
	637.0				614'4	617:0	625.8	627.0	628.0	625.0	631.2	627 18
	623.0	624.5	628.0	625.0	622'1	624'1	625`8	626.2	630.0	618.5	639.0	624.35
34.2	630.0	631.5	627.2	630.0	630.8	631.5	631 2.	631.4	627.0	631.0	632.0	627.77
26.4	$612^{\circ}2$	612.8	617.1	610.8	615.9	619:2	618.4	615.0	616.2	617.8	621.0	617:33
20.0	615.0	617.8	608.5	608.8	609.4							
200	010 0		_		000 1	614.0	608.5	601.5	603.0	611.0	615.5	610.17
	C11:0	607.0	597.5	605.2	500:5							coció
31.2	611.0				598.5	602.0	598.5	602.5	616.2	618.0	618.4	606.69
22.2	622.0	621.8	621.0	620.0	620.0	623.0	621.2	622.0	623.2	614.8	604'0	618.33
20.0	611.7	617.5	608.0	602.0	605.0	608.8	606.0	597.1	610.0	619.0	618.4	606.07
27.0	626.8	622.0	633.0	631.3	634.0	629.0	627.8	632.0	631 8	632.0	637.0	623.30
25.9	626.1	624.2	624.5	624.0	615.0	615.4	627.6	628.0	625.0	627.2	629.0	627.75
	632.5	633.0	635.2	633.0	638.0	010 1	021 0	020 0	020 0	02. 2	020 0	
35.8	002 2	000 0	000 0	000 0	000 0	69616		20711	607:0		240.0	630.00
		00110				636.0	636.0	637.1	637.0	639.0	642.8	
35.0	635.0	634.0	635.0	637.3	639.0	638.0	636.8	638.2	637.8	637.0	638.0	633.75
37.0	629.5	630.2	630.8	636.6	633.8	635.8	633.9	630.0	629.0	633.0	632.0	630.36
18.2	634.2	631.8	627.1	597.1	601.0	592.0	515.2	546.5	606.5	621.0	603.2	613.28
22.3	780.0	666.3	597.0	613.0	600.0	599.0	597.5	594.0	601.2	603.2	605.0	616.42
	605.0	604.0	603.0	604.5	609.5	625.0	603.0		612.0	597.5		600.00
97.0						040 U	0000	614'6	012 0	09/ 0	599.8	000 00
04.0	608.0	606.1	612.0	609.5	610.0						_ <del>_</del> _ }	604*40
· —						612.2	593.5	609.8	609.2	610.0	$\frac{-}{609\cdot 2}$	
616'0	616.0	617.0	615.8	616.0	616.2	616.4	615.5	617.5	619.2	620.0	621.0	615.73
322.8	620.2	621.4	622.8	623.9	624.3	627.9	627.4	630.0	630.8	623.5	631.0	619.00
39.0	609.0	605.8	606.0	606.0	607.2	607.0	610.2	608.2	612.0	613.0	612.0	612.48
617.0	605.0	605'4	606.0	607.0	600.0	587.0	601.0	608.2	610.0	610.0	608.4	608.78
619.0	616.0	617.2	619.0	607.0	613.2	634.5	597.8	585.0	603.7	616.8	616.0	612.41
628.0	611.0	606.5	615.4	616.2	618.0		·				่ — า∥	C1010C
		l <u> </u>			l	609.0	609.0	610.0	610.2	609.0	608.8	$612^{\circ}22$
509.2	611.0	612.2	612.0	611.9	611.1	608.3	610.5	610.8	610.0	612.2	612.0	608'06
613.0	612.2	616.3	618.0	618.4	618.8	613.0	619.0	613.0	613.0	621.0	620.0	612.66
640.0	636.2	638.0	612.0	608.0	611.0	625.0	627.0	622.5	628.2	631.2	628.5	624 15
624.94	626.16	621.20	617.90	616.83	616.82	618.09	612.86	614.34	618.99	620.07	621.11	617.48
		1		<u> </u>	EMPERATUI	· · · · · · · · · · · · · · · · · · ·					1	
- <u> </u>		0	0					,— <del></del>		52°·3	52.0	
55.0	54.6	54.4	54.0	54.0	53.4	53.0	53.0	52°5	52°4			53.07
59.0	58.8	58.2	57:5	57.3	56.8	56.3	56.3	56.3	56.3	56.0	56.0	56.43
62.8	62.0	61.8	61.5	61.4	61.0	60.2	59.8	59.2	59.0	58.2	57.1	60'13
59.2	59.4	59.4	59.3	59.1	59.2	59.3	59 2	$\frac{59.2}{2}$	59.4	59.4	59.3	59.39
67.6	66.7	66.0	65.2	65.3	64.6	64.5	64.3	63'8	63.2	63.0	62.5	64.87
70.2	70.0	69.0	68.2	68.4	68.0						$\frac{-}{59.5}$	66.12
, —						62.5	62.0	61.3	60.9	60.3	59.5 }	
62.6	62.4	61.8	61.3	60.8	60.4	60.0	59.5	59.0	58.6	58.0	57.6	60.67
62.0	61.2	61.0	60.6	60.2	60.4	60 2	60.0	59.7	59.4	59.4	58 6	60.52
62.0	61.5					59.2	58.9	58.7	58.3	58.0	58.0	60.61
		61.0	60.6	60.3	59.6							
58.5	58.2	57.6	57.5	57.0	56.6	56.5	55.9	55.2	54.8	54.5	53.9	57.0
61.0,	60.2	59.5	58.6	58.5	57.2	56.8	56.0	$55^{\circ}5$	55.0	54.9	54.0	57.40
54'1	53 3	52.8	52.6	52.3	52.0	l —					— Դ∥	53*40
1		l			_	53.0	52.9	52.8	52.5	52.5	$\left\{\begin{array}{c} -1 \\ 52 \cdot 3 \end{array}\right\}$	oo 40
58.3	58.0	57.5	57.4	57.2	57.0	57.0	57.0	56.7	56.9	57.0	57.0	56.93
61 0												
	60.5	60.0	60.0	59.2	58.4	57.8	57.5	57.0	56.6	56.2	55.8	58.5
64.4	63.6	63.0	62.4	62.0	61.0	60.2	60.0	59.8	59°7	59.4	58.8	60.8
68.0	68.0	67.5	66.9	66.2	65.5	64.8	64.3	63.6	63.2	63.5	62.5	64.4
70.2	70.0	69.5	68.0	67.6	67.2	67.0	66.5	66.3	66.0	65.2	65.2	67.2
69.5	69.0	68.8	68.2	67.9	67.5	_			50 0	_		
	l	1			1		63.2	63.9	63.8	64.0	$\overline{64\cdot 2}$	66'90
'	60:0		07.0		-	63.6						0/15
66.5	66.0	65.5	65.3	65.0	64.4	63.8	63.4	63.0	63.0	62.8	62.6	64 5
66.3	63.4	63.0	62.6	62.0	61.5	61.5	61.3	61.0	60.8	60.8	60.9	62.23
63.6 63.6	69.9	69.5	69.0	67:8	67.0	66.5	65.6	65.0	64.6	64.3	64.0	66.0
66.3 63.6 70.5		69.3	68.6	67.6	67.1	66.6	66.0	65.2	65.0	64.2	64.4	67.0
66.3 63.6 70.5	71.0			01.0								l
66.3 63.6 70.5 71.0	71.0		67.8	67.2	66.6	65.7	65.2	64.2	63.9	63.5	63.0	66.6
66.3 63.6 70.5 71.0 70.3	69.0	68.1	1 ~	. r	67.0				l —		$\begin{bmatrix} -65.4 \end{bmatrix}$	66.4
66'3 63'6 70'5 71'0 70'3 69'0	68.9 68.0	68.0	67.7	67.4	1 0. 0							
66'3 63'6 70'5 71'0 70'3 69'0	68.9 69.0	68.0	<u> </u>			67.0	66.2	66.0	65.9	65.6		
66°3 63°6 70°5 71°0 70°3 69°0 — 72°6	68.9 68.0	68.0	<u> </u>						65.9	65.6		
66°3 63°6 70°5 71°0 70°3 69°0 — 72°6	69.0 68.9  72.2	68.0	71.2	70.7	70.0	69.3	69.0	68.6	68.0	67.2	66.5	68.9
66.3 63.6 70.5 71.0 70.3 69.0  72.6 68.1	69.0 68.9  72.2 67.2	68.0 71.6 66.0	71·2 65·5	70.7 64.5	70.0 64.0	69.3 69.3	69.0 69.0	68.6 61.0	68.0 60.5	67.2 60.0	66°5 59°5	68 9 65 8
66°3 63°6 70°5 71°0 70°3 69°0 —	69.0 68.9  72.2	68.0	71.2	70.7	70.0	69.3	69.0	68.6	68.0	67.2	66.5	68°99 65°86 60°59

Vol. III.

	0	e Scale Div		0007	Rah - IV To	HORIZO	NTAL FO	RCE.	sponding to	1° decrease	of Temperat	ture 1'63	<del></del>
										-			
Mean G gen Ti	ottin-}	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> •	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10h.	11h.
	,	Sc. Div,	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	631.8	624.4	621.2	611.3	603.6 595.0	606.5 597.4	618.4 607.8	626°0	630.0 625.0	631.0 629.0	$\begin{array}{c} 628.0 \\ 628.5 \end{array}$	$626.0 \\ 625.2$
	3	617.0	618'8 614'8	616.0 606.2	607°0 598°3	591.5	597.0	600.0	606.2	616.0	619.0	623.0	626.2
	4 5	616.0	612.0	601.2	604.0	 597 <b>:</b> 0	594°0	601.0	606.0	610.4	622.2	621.2	621.2
!	6	620.5	619.0	616.0	614.8	599.9	605.0	601.2	614.1	616.1	621.4	626.8	629.0
	7	635.2	631.8	625.0	618.1	612.0	613.0	613.0	625.0	633.5	632.5	631.0	631.0
	8	629.8	623.1	620.0	616.0	610.0	602.0	615.0	622.0	625.0	628.0	626.0	627.0
	9	628.0	627.0	624.2	620.0	617.6	618.0	624.0	631.2 632.2	634°0 644°5	625.8 625.8	$\begin{array}{c} 625.2 \\ 628.5 \end{array}$	619'8 635'0
	10 11	624.0	619.5	617.0	611.0	609.0	622.0	622.5	052 Z —	<del></del>	020 0	026 B	
	12	622.0	626.5	622.5	613.8	604.2	602.2	614.8	627.0	630.5	631 8	631 1	623.0
	13	639.5	636.0	630.0	626.2	608.0	608:0	612.0	611.6	628.0	637.0	636.0	634.0
ΕĖ	14 15	637.0	638.8	637.0	632.5	618.0	599.0	619°0 608°7	$637.5 \\ 612.0$	639 <b>.</b> 5	662.5 622.0	651'0 606'0	647.0 609.2
JUNE	16	628.0 607.0	624.0	597.3	610°0 594°0	589.0	610.0 591.8	591.2	596.2	596.0	600.2	602.2	597 <b>.</b> 0
F	17	602.8	604.2	598.4	590.0	589.0	587.5	592.0	596.0	596.2	600.0	601.2	599'0
	18		-	``			_ <del>-</del>				-	-	
	19 20	615.8	615.2	606.0	598.0 604.0	591.4 599.0	582.0 598.5	587.0 601.0	604.0 607.0	617.5 617.0	603.0	625°0 610°2	629'0
,	21	617.5	605.0	595.0	596.0	593.2	595.0	607.5	628.0	630.0	652.0	625.4	624.2
	22	605.5	588.8	604.5	598.0	580.0	585.0	587.0	602.1	604.0	643.0	656.0	627.5
	23	607.0	608.0	606'8	595.5	589.0	589.0	598.0	610.0	620.0	622.0	618.2	619'0
	24 25	613.0	613.2	607.0	601.0	594.0	601.0	612.0	612.0	618.0	622.0	623.6	622'0
	26	603.0	605.0	603.8	600.0	586.0	587.0	595.0	598.5	612.0	608.0	625.0	613.0
	27	608.0	603.2	599.5	590.0	590.5	594.0	594.0	597.0	607.0	602.0	606.0	606.2
	28 29	609.0 616.2	607.0	600°0 598°2	590.8	591.8	596.2	607.8	613.8	611.2	609.2	614.4	616.0
	30	615.0	613.2	607.0	592.0 606.5	592.0 594.0	591.2 600.0	602.0 607.5	610.0	601.0 608.0	605.0	614.0 612.0	611.8
Hourly	Means	618.06	615.38	611.31	605.34	598.20	598.93	605.36	613.49	618.60	622.60	622.90	621.10
					ТЕМР	ERATURE (	OF THE BIF	ILAR MAGI	NET.				
	<i>-</i> 1	57°4	58°4	59°4	60.0	60°4	61.2	61°5	62.2	62°4	63.2	63°•5	63°6
	2	58.8	59.6	60.8	62.0	63.2	64.0	64.2	64.9	65.4	66.1	67.2	67.4
	3	64.5	65.3	65.6	66.3	67.4	68.3	69.3	70.0	70.0	71.0	71.3	71.2
	4 5	65.6	66.3	67.3	67.5	67.9	68.0	68.3	68.3	68.2	68.2	68.4	68.2
	6	61.9	61.9	61.9	62.0	61.9	62.0	62.2	62.6	63.0	63.3	63.9	64.2
	7	58.6	59.2	59.8	60.3	61.0	61.0	61.5	62.0	62.8	63.4	64.2	65.2
	8 9	59`1 62`7	64.0 64.0	61.0 64.4	62°0 65°2	63.4 66.3	64.2	64.5	65.1	65.7	66.5	67.0	67.4
	10	66.3	66.4	67.3	68.0	68.7	69.0 66.8	67°3	69.8 68.0	68.7 70.2	69 <b>°</b> 8	70°4 71°0	70°8 71°0
	$\begin{array}{c} 11 \\ 12 \end{array}$	61.9	62.0	62.4									
	13	58.4	59.0	59.4	62.8 60.0	63.0 60.7	62.8 61.0	$62.5 \\ 61.0$	62.4 61.5	$\begin{array}{c} 62.9 \\ 62.2 \end{array}$	63·5 62·5	64.2 63.0	64.6 63.7
	14	57.6	57.4	57.8	57.8	58.0	59.3	59.7	59.7	60.2	61.0	61.8	62.6
NE	15	60.8	61.9	63.6	65.0	67.4	70.0	72.5	75.0	76.9	78.5	80.2	80.4
JUNE	$\begin{array}{c c} 16 \\ 17 \end{array}$	74.5 75.0	75°0 75°4	76.5	77.6	78.7	79.6	80.8	81.4	81.9	82.8	83.0	82.2
	18			75.6	76.2	77.5	78.7	79.5	79.8	79.5	79.9	80.3	79.5
	19	73.0	72.8	73.7	73.9	74.3	74.5	75.8	76.4	76.7	76.6	76.5	76.5
	$\frac{20}{21}$	72.0 69.0	72.4 69.3	72.5 69.3	73°3 69°5	73.5	74.0	74.3	74.5	74.8	75.1	75.4	74.5
İ	22	67.4	67.0	67.5	68.2	69 <b>.</b> 9	69.9 70.0	70°0 70°5	70°2 71°4	70°5 71°7	71.0 72.2	$71.8 \\ 72.3$	72°4 72°0
	23	67.6	67'8	67.8	68.0	68.2	70.0	70.7	71.8	73.8	74.2	74.0	72.6
	24 25	67.2	67·5	68.3	69.0	69.5	70.3	70.3	70.2	70.8	71.5	72.3	72.5
	26	70.0	71.0	71.9	$\frac{-}{72.3}$	73.8	74.6	75.7	76.5	77.6	78.2	78.7	78.7
	27	70.8	71.0	71.6	72.5	72.9	73.9	74.3	75.0	76.0	76.4	77.0	76.5
	28	73.0	73.0	73.0	73.4	73.6	73.5	73.8	73.8	73.8	74.4	74.6	74.3
ļ	$\begin{bmatrix} 29 \\ 30 \end{bmatrix}$	69.4 69.0	69.6	70°8 70°2	72.0 71.0	72.8 71.0	72.8 72.2	$\begin{array}{c} 72.6 \\ 72.6 \end{array}$	72·9 73·5	73.8 74.4	74.4 74.5	74 8 75 3	75°3 75°2
	Means	65.83	66*26	66.90	67.54	68.26	68.91	69.43	69.97	70.22	71.15	71.62	71.63

12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15h.	16 <sup>h</sup> .	17h.	18h.	19 <sup>h</sup> •	20 <sup>h</sup> •	21 <sup>h</sup> .	22h.	23h.	Daily an Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
25.0	619.0	617.0	616.3	616.0	617.0	617.0	616.2	619.0	619.2	619'8	619.0	619°95
27.2	622.0	625.0	622.0	611.8	613.5	612.8	613.0	613.3	616.8	616'1	616.2	616.68
24.0	628.0	609:8	615.0	609.1	597.2						[611.0]	611'94
20.2	611.0	612.8	612.8	616.0	617.0	614.0	613.8 622.1	618.0 621.8	618.4 619.0	612.2	618.0	613.15
28.0	627.2	628.0	629.0	630.0	628.0	627.8	627.0	627.5	630.0	628.0	631.2	621.90
29.0	625.0	628.2	628.8	629.0	628.0	626.0	621.8	624.8	626.2	628.2	630.0	626.08
<b>25 0</b>	621.0	626.0	623.8	624.8	624'2	624.0	619.1	621.8	623.0	625.1	624.8	621.9
$21 \ 2$	616 2	621.2	622.0	612.1	602.1	608.6	608.2	608.4	615.5	614.8	621.2	619.40
16.0	605.0	606.2	607.0	606.8	610.0			<del>_</del>			614.0}	618.78
26.0	625.0	623.0	626.0	626.0		625.0	617.0	617.0	617.5	617.0	614.03	623.74
32°0	630 0	632.0	633.2	630.1	626.5 633.5	626 <b>.</b> 5 632.0	625°9 631°2	630°0 629°4	$630.0 \\ 628.2$	626 <b>.</b> 5 631.8	629°0 630°2	$628.3^{\circ}$
21.0	629.0	627.2	626.0	620.4	622.8	621.8	630:0	619.0	$626.2 \\ 624.2$	627.0	626.0	629.72
02.5	600.0	598.8	600.0	600.4	596.8	597.0	602.0	601.0	601.0	602.0	604.9	607.48
94.2	590.0	592.0	590.3	591.0	592.5	592.0	593.2	596.0	595.5	599.0	601.2	595.4
95,5	595.0	595.0	598.0	595.0	597.0	_					_	598.74
	61010	602:0	60010	500.0		604.0	603.0 %	605.0	606.1	607.9	612.0	
05°0 21°0	612.0 605.5	603.8 607.0	608°2 602°2	598.0 597.2	598.8	601.0	600.8	598.0	595.6	606.2	604.2	604°98
01.5	613.0	607.0	602.2	602.0	599.4	604°0 602°0	604.8 604.2	604.5 609.9	605.0	609.0	611.0	609.28
28.0	615.0	591.0	595.0	604.0	595 4	598.0	586.5	591.0	602.2	607.1	610.0	604.30
14.0	618.0	607.5	605.0	607.0	603.0	602.0	598.2	609.0	611.8	607.4	609.8	607.30
12.0	606.0	611.0	611.0	613.0	607.0		- 1		_		- 1	609*38
					<del></del>	608.8	602.8	607.2	601.4	602.2	604.0}	
07.0	593.2	596.0	598.2	599 2	.598.5	602.2	600.0	601.0	601.4	598.8	603*0	601.4
01'0 09'4	601.4 610.2	606.2 614.0	605°0 604°2	605 4 602 0	605.4	606.0	605.0	605.5	610.0 606.0	607.0 611.6	607.0 611.2	602 44
10.0	612.0	607.5	614.0	606.9	608.0	608.0	600.0	613.5	596.0	606.0	606.2	605.38
08'0	608.0	609.0	616.8	611.8	606.2	607.8	909,0	605.8	618.0	617.2	607.5	608.88
15.50	612.99	611.62	612.01	610.19	609.03	611.47	610.07	611.52	612.28	613.40	614.07	612.32
<del></del>	<u> </u>			ma.	MDED AGVID	E OF THE	 	CATA				
00.21	0,10	0		1		1	o SIFILAR MA		0		20.	
64.5 67.6	$6\overset{\circ}{4}^{*}2$	63.5	63.0	62.4	61.6	61.0	60°4	60.0	59.6	59.2	58.9	61.31
70°8	67 <b>.</b> 4 70 <b>.</b> 5	67°0 70°0	66.9 69.2	66.4 69.3	66°1 68°7	66.0	65.7	65.5	65*2	65.0	64:8	64.90
	-	100		- US 0	68 7	66.5	66.3	66.0	65.8	65.2	$\left\{ \phantom{00000000000000000000000000000000000$	68'10
68.0	67.5	66.6	66.2	66.0	65.7	64.4	63.2	63.0	62.2	62.1	61.4	66.51
64.0	63.8	63.0	62.6	62.0	61 6	61.2	60.2	60.0	59.0	58.2	58.2	61.87
65'3	65.0	64.0	63.1	62.4	61.5	60.6	60.2	59.8	59.4	59.0	58.5	61.57
67°4	66.5	66.0	65.6	65.2	64.8	64.4	64.0	63.5	63.1	62.7	62.5	64.23
70°6 71°2	70°4 71°4	69'6	69.4	69.0	68°5	68.1	68.0	67.6	67.0	66.6	66.3	67.78
	(1 4	71.0	71.0	70.5	69.5	64.5	63.8	63.3	$\frac{-}{62.7}$	62.3	$\frac{-}{61\cdot 4}\}$	67:96
64'3	63.8	63.0	62.2	$\frac{-61.6}{}$	60.7	60.3	59.5	59.0	58.2	58.0	57.9	61.82
63.7	63.5	62.5	62.0	61.2	61.0	60.4	60.0	59.6	59.2	58.6	58.0	60.93
33.4	63.4	63.4	63.6	62.8	62.4	62.0	61.8	61.2	60.8	60.2	60.3	60.78
80 <b>.</b> 8	80'4	79.2	78.6	78.2	77.0	76.0	75.5	75.3	74.9	74.3	74.0	74.02
79.5	82°8	81.8	80.8	80.0	79.5	78.5	77.5	77.0	76.5	76.0	75.2	79.29
	78.3	78.0	77.5	77.3	77.0	$\frac{-}{75.4}$	75.0	$\frac{-}{74.5}$	74.0	73.8	73.6}	77.12
76.0	75.6	75·5	75.0	74.5	74.3	73 4	73.6	73.2	73.0	72.4	72.2	74.58
74'0	73.5	$72 \cdot 5$	72.6	72.2	71.2	70.7	70.2	70.0	69.2	69.0	68.6	72.5
72.6	72.2	71.5	71'3	70.4	69.6	69.5	69.3	68.6	68.2	68.0	67.8	70.09
71.6	71.0	70.8	70.2	70.3	70.0	69.5	69.0	68.8	68.4	68.2	68'1	69.84
72.6 72.4	71.8	71.2	70.6	70.0	69.5	69'1	68.6	68.2	67.8	67.6	67.4	70.04
_	71.7	70.2	70.2	69.8	69.0	70:4	70:1	71.8	71.0	70.6	$\frac{-}{70.4}$	70.48
78'4	77.0	76.0	75.7	75.0	$\frac{-}{74\cdot 2}$	72.4 $73.5$	72°1 73°1	$\frac{71.8}{72.9}$	71.0 72.6	70.6	70 4 5	74.68
6.0	75.6	75.6	75.3	75.0	74 2 74 5	73.5	73.8	73.5	73.3	73.3	73.0	74.2
0 0	$73 \cdot 7$	73.4	72.8	72.5	72.3	71.2	71.0	70.5	70.0	69.7	69.4	$72 \cdot 71$
41							71.0	71.0		69.6	69.4	
74°1 75°1	74.6	74'1	74.0	73.2	72.4	7201	71.2	11 0 1	70.7	09 0 1		72.44
74·1 75·1 75·4			74.0 74.6	$\begin{bmatrix} 73.2 \\ 74.5 \end{bmatrix}$	72.4 74.1	$72.0 \\ 73.7$	73.4	73.2	72.4	71.8	71.2	73.02
74°1 75°1	74.6	74'1										

	Oı	ne Scale Div	ision = '00	0066 parts	of the V.F.		ICAL FOR in Scale Div	isions, corre	esponding to	1° decrease	of Tempera	ture, 1 80.	
Mean G gen Ti	Föttin-}	O <sup>h</sup> .	1 <sup>h</sup> .	2հ.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9 <sup>հ</sup> .	10h.	11 <sup>h</sup> .
	$\begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$	Sc. Div. 183 3 171 0 170 8	Sc. Div. 180'4 171'0 170'9	Sc. Div. 180 4 171 6 170 9	Sc. Div. 179'9 169'9 170'9	Sc. Div. 180 5 169 8 170 3	Sc. Div. 178°7 169°1 168°3	Sc. Div. 179°0 169°6 167°6	sc. Div. 180 3 171 3 169 9	Sc. Div. 180°3 172°3 172°0	Sc. Div. 180°3 172°3 171°8	Sc. Div. 180°3 171°7 169°8	Sc. Div 180°3 170°7 169°0
	4 5 6 7 8 9	179.8 175.8 171.1 160.6 167.4 171.4	179.8 176.6 171.1 164.3 167.7 172.2	180°5 175°1 171°6 163°5 170°0 170°5	179°3 174°1 171°3 164°2 169°7 170°6	178 · 4 172 · 4 170 · 4 164 · 9 169 · 7 170 · 6	176.7 170.7 169.9 165.4 169.7 169.3	175.6 170.7 170.1 165.4 169.7	175.6 171.8 171.7 167.8 169.7 167.6	174.5 172.3 172.1 169.2 169.7 170.3	174 · 2 171 · 2 170 · 6 169 · 2 169 · 5 169 · 7	173°1 172°0 169°8 168°5 169°0 170°4	173°1 172°6 169°2 169°3 169°3
JANUARY.	11 12 13 14 15 16 17	178·1 182·0 178·2 172·1 161·9 174·7	175.7 182.8 175.5 172.5 164.1 179.0	178 · 2 183 · 2 179 · 4 173 · 5 164 · 6 180 · 2	178 ° 9 183 ° 6 178 ° 8 170 ° 3 164 ° 4 178 ° 5	178.6 182.0 178.3 166.6 162.5 179.9	178.6 180.6 177.6 166.9 164.9 180.9	178 · 8 181 · 6 176 · 4 167 · 2 165 · 5 178 · 1	179°4 181°2 175°2 166°7 165°5 178°2	178.6 179.6 172.4 164.4 167.7 184.7	179.5 179.6 171.2 162.5 169.0 187.2	179.5 179.6 172.8 162.5 170.5 188.0	179 2 179 6 171 3 161 4 169 6 187 7
JA	18 19 20 21 22 23 24	193.7 191.1 178.3 181.7 188.4 176.8	193°1 191°1 179°1 180°2 187°8 179°4	193°1 190°0 179°9 183°0 184°9 179°2	193.0 188.9 179.8 182.3 184.8 177.3	#92°3 188°9 180°8 182°8 183°1 175°8	189.9 187.1 179.8 184.6 181.7 174.8	188 · 9 187 · 1 180 · 0 182 · 5 179 · 7 175 · 8	189°8 186°6 180°4 188°1 179°7 174°7	189 · 8 187 · 7 180 · 2 187 · 2 179 · 7 182 · 3	188.7 184.7 178.0 186.2 179.7 181.3	185 · 8 181 · 7 176 · 5 184 · 4 179 · 0 179 · 6	184.4 181.3 175.9 183.7 176.7 178.4
Feb.	25 26 27 28 29 30 31	170.6 168.5 169.4 169.0 161.7 169.7	170.6 167.7 169.3 169.0 161.1 170.6	170°6 168°9 169°3 168°3 161°1 170°7	169.0 170.9 167.9 166.8 160.5 169.5	168.6 172.1 170.2 166.8 159.8 169.6	169°1 172°0 168°5 165°4 158°2 174°9	168.6 172.0 166.4 164.5 158.2 176.5	169°2 171°3 166°4 164°5 159°8 176°5	169 · 1 170 · 9 168 · 1 165 · 0 160 · 4 177 · 3	166°1 170°7 168°1 164°6 159°9 176°3	164.7 169.1 167.1 163.0 159.9 175.6	164.5 168.5 168.4 164.0 160.3 173.9
Hourly	y Means	174.71	174.91	175.27	174.63	174.29	173.83	173.53	174.03	174.77	174.15	173.48	173.0
	. 1	40.0	40°3	40°5	40.7	ure of the	e vertical	L FORCE M.	AGNET.	4ΰ2	, <u>°</u>	.0	10
, j.	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \end{pmatrix}$	46 ° 2 47 ° 2	40 3 46 4 47 0	40°5 46°0 47°0	46.0 46.6	46.2 46.6	41 0 46 8 46 8	41.0 47.0 47.4	40°8 47°0 47°8	41.2 47.0 47.8	41°6 46°8 48°0	41°8 46°8 48°6	42°0 47°6 48°4
	5	40.0		1 —	_	_							
	6 7 8 9	42.6 45.2 46.6 51.2 49.0 47.6	42.6 45.6 46.6 50.8 48.8 47.6	42.6 45.6 46.6 50.5 48.0 47.2	42.6 45.5 46.7 49.7 47.8 46.8	42.9 45.6 46.8 49.5 48.0 46.6	43.6 46.6 47.6 49.7 48.4 46.9	44.2 47.0 48.0 49.7 48.4 47.1	44.6 47.4 48.0 49.7 48.6 47.6	45°4 47°3 48°2 49°6 48°6 47°6	45.7 47.1 48.7 49.4 48.8 47.6	45.7 47.1 48.8 49.4 49.0 47.6	47.1 49.0 49.0 48.6
IANUARY.	7 8 9 10 11 12 13 14 15 16 17	45°2 46°6 51°2 49°0	45.6 46.6 50.8 48.8	45.6 46.6 50.5 48.0	45.5 46.7 49.7 47.8 46.8 ————————————————————————————————————	45.6 46.8 49.5 48.0	46.6 47.6 49.7 48.4	44.2 47.0 48.0 49.7 48.4 47.1 	47.4 48.0 49.7 48.6	47·3 48·2 49·6 48·6	47·1 48·7 49·4 48·8	47°1 48°8 49°4 49°0	46.4 47.1 49.0 49.0 48.6 47.0 
JANUARY.	7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	45.2 46.6 51.2 49.0 47.6  41.8 40.0 41.8 45.2 50.5 42.0  31.6 35.0 41.7 38.3 36.0 42.6	45.6 46.6 50.8 48.8 47.6 — 41.0 40.0 41.8 45.2 50.2	45.6 46.6 50.5 48.0 47.2 — 41.2 40.0 41.8 46.0 49.6	45.5 46.7 49.7 47.8 46.8 — 41.5 39.4 42.0 45.0 49.1	45.6 46.8 49.5 48.0 46.6 — 41.4 39.4 42.4 46.4 49.1	46.6 47.6 49.7 48.4 46.9 — 41.6 40.0 43.2 47.0 49.0	44.2 47.0 48.0 49.7 48.4 47.1 — 42.2 40.6 43.8 47.5 48.7 39.4 — 34.5 37.1 40.7 37.6 39.8 43.2	47.4 48.0 49.7 48.6 47.6  42.6 41.0 44.6 47.8 48.6	47:3 48:2 49:6 48:6 47:6 41:6 46:0 48:5 48:2	47.1 48.7 49.4 48.8 47.6 	47.1 48.8 49.4 49.0 47.6 42.7 42.4 47.6 49.6 47.6	47.1 49.0 49.0 48.6 47.0 42.8 47.3 50.2 47.6 37.8 
JANUARY.	7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	45.2 46.6 51.2 49.0 47.6  41.8 40.0 41.8 45.2 50.5 42.0  31.6 35.0 41.7 38.3 36.0	45.6 46.6 50.8 48.8 47.6 — 41.0 40.0 41.8 45.2 50.2 41.6 — 32.1 35.0 41.3 37.7 36.3	45.6 46.6 50.5 48.0 47.2 41.2 40.0 41.8 46.0 49.6 40.6 - 32.2 35.0 41.0 39.1 37.0	45.5 46.7 49.7 47.8 46.8 41.5 39.4 42.0 45.0 49.1 40.2 - 33.0 35.5 40.5 38.6 36.7	45.6 46.8 49.5 48.0 46.6 	46.6 47.6 49.7 48.4 46.9 — 41.6 40.0 43.2 47.0 49.0 39.6 — 34.0 36.8 40.6 38.1 38.7	44.2 47.0 48.0 49.7 48.4 47.1 — 42.2 40.6 43.8 47.5 48.7 39.4 — 34.5 37.1 40.7 37.6 39.8	47.4 48.0 49.7 48.6 47.6 41.0 44.6 47.8 48.6 39.6 35.5 37.6 41.0 37.7 40.0	47:3 48:2 49:6 48:6 47:6 41:6 46:0 48:5 48:2 38:8  35:9 38:2 41:6 37:9 40:5	47.1 48.7 49.4 48.8 47.6 — 42.7 42.4 46.8 49.3 47.6 38.8 — 36.3 38.6 42.6 38.6 41.0	47.1 48.8 49.4 49.0 47.6 42.7 42.4 47.6 49.6 47.6 39.8 42.6 39.0 41.7	47.1 49.0 49.0 48.6 47.0 42.8 42.8 47.3 50.2 47.6

	One Scale	Division =	·000066 pa	rts of the V		RTICAL F se, in Scale		orresponding	g to 1° decre	ease of Tem	perature, 1.8	0.
12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.	21 <sup>b</sup> .	22h.	23h.	Daily an Monthly Means.
Sc. Div.	Sc. Div. 167.5	Sc. Div. 165 4	Sc. Div. 177.6	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 176.0	Sc. Div. 176 0	Sc. Div. 173 4	Sc. Div.	Sc. Div.	Sc. Div.
69.5	169.5	169.5	169.5	168.4	168*4	168.4	170.0	171.1	173 4	173.4 172.3	$173.2 \\ 172.3$	177°0 170°4
69.0	169.9	170.7	172.2	169.9	171.0						179.8	172.6
$\frac{-}{72.4}$	173.5	173.7	173.6	172.5	172.5	179.6 172.5	179.6 173.7	179 <b>.</b> 4 174 <b>.</b> 9	179°9 175°2	179°9 175°2	179.8	175.2
71.4	173.0	175.1	175.6	175.1	175.3	175.3	168.5	174.3	174.4	172.7	$\begin{bmatrix} 173.7 \\ 172.7 \end{bmatrix}$	173.2
70.2	170.3	169.8	169.8	167.5	167.8	166.7	164.8	164.8	157.1	155'1	162.4	168.1
70°0 69°3	169.5 169.3	169.5 169.3	169°2 170°6	169°2	169.8 170.6	169 8 170 1	169'8 169'2	168.8 169.5	168°8 169°7	167.0 169.6	167°2 170°5	167°5 169°5
71.7	172.4	172.4	172.5	173.4	172.4			109 3	10 <i>9 1</i>	109 0	1	
-		170:6	170:0	10010		180.3	176.7	181.1	176.0	180.2	177.7	172.9
78°8 78°2	178.8 180.3	179.6 183.2	179.6 186.6	180°0	179°8 179°5	180.0 179.5	180°0 179°5	180.4 179.5	180°4 179°5	180°4 178°6	181.0 177.8	179°2
69.5	169.8	171.7	171.3	170.2	170.2	179.5	179.0	171.3	166.7	166.0	171.6	172.7
62.0	162.0	162.5	162.4	163.4	162.7	162.7	164.4	162.7	162.7	161.5	161.9	164.8
70°9 .87°7	170 <b>·</b> 9	170°9 186°2	172.0 185.8	170°5 183°2	170°5 183°2	171.8	170.4	163.3	163.5	168.6	174.7	167.8
.01 1	100 2		_	100 2	100 2	195.5	196.6	196.3	193.5	193.5	$ \frac{-}{193\cdot 8}\} $	185.7
85.7	186.8	188.8	188.8	189.3	190.5	189.3	189.3	190.2	190.0	189.9	189.6	189.6
81.0 71.9	180 5 170 1	179°3 173°2	179°3 171°9	178°2 172°9	178.6 174.2	177.8	178.6	174.6	178.2	178.2	177.6	182.8
82.8	183.5	184.7	183.7	183.7	185.7	174.5 185.7	175°5 186°4	178'0 186'8	$179.1 \\ 188.2$	180°2 188°2	180.5 189.6	177°1 184°8
88'6	180.8	180.8	180.3	181.7	181'4	182.3	178.4	165.9	176.9	168.5	172.3	180.1
178'4	176.5	174.9	173.4	173.2	172.8	172.9	172.9	171.1	 170°8	170.6	170.6}	175.5
64 '9	164.9	166.0	166.2	166.2	165.5	165.2	167.3	167.3	167.9	167.9	169.1	167.4
168.7	169.2	170.2	170.2	169'4	170.0	170.3	171 1	171.0	171.2	168.4	170.8	170.1
167°6 164°0	169.4 164.5	167.9 163.9	179°2 163°9	170°3 165°1	174.9 160.5	172.2 163.1	170.5 161.6	172°1 159°7	172°1 160°5	168.7 160.5	170.9 160.8	169°7 164°1
158.9	159.0	159.0	159.0	159.3	160.4	157.4	157.1	157.1	160.3	162.5	167.7	159.9
174.9	175.5	176.2	175.8	175.8	175.8	191.6	— 191·4	191.4	190.0	189.2	186.9	178.1
172.92	172.71	173.13	174.07	173.30	173.40	174.92	$\frac{1314}{174.42}$	174.02	174.01	173.59	174.75	173.9
	1 2 1 2	, 1,0 10	112 01	<del></del>	RATURE OF			·	***************************************	110 00	11110	110 0
42°8	42.6	42.6	43.0	43.0	43.4	43.6	43.1	43.5	44.0	44.6	45.4	42.2
47.6	48.2	47.8	47.6	48.2	48.4	48.1	47.6	47.2	46.8	46.6	47.0	47.1
48.6	48*4	48.6	48.4	48'4	48.5	$\frac{-}{42.0}$	42.0	$\frac{-}{42 \cdot 2}$	$\frac{-}{42\cdot 4}$	$\frac{-}{42.4}$	$\frac{-}{42\cdot 8}\}$	46.4
46.7	46.8	46.7	46.9	46.8	46.8	46 7	46.4	45.6	$45.\overline{2}$	45.0	45.2	45.1
47.0	47.0	46.6	46'6	46.4	46.0	45.8	46.1	46.2	46.4	46.6	46.4	46.4
48.8 48.8	49°2 49°0	49.5	49.8	50.1	50.3	50.6	50.1	50.2	50.7 $49.2$	50.9	51 0 49 0	48.8
49.0	48.6	49.0	49°2 48°4	48.8 48.4	48.6 48.4	48 6 48 4	48.7 48.4	49.0 48.3	48.2	49 <b>·</b> 1 48 <b>·</b> 3	48.0	49°3 48°4
46.2	46.4	46.0	46.0	46.0	45.8	<del></del>		i		· —	40.8	45.3
42.6	42.6	42.4	${42\cdot 2}$	40:0	40:0	40.8	40.8	40.8	40.8	41°2 40°6	40.8 } 40.2	41.8
42.6	42 6	43.2	$\begin{array}{c c} 42 & 2 \\ 42 & 6 \end{array}$	42°2 42°0	$42.0 \\ 42.0$	$\frac{42.0}{42.2}$	$\begin{array}{c} 41.1 \\ 42.4 \end{array}$	41°1 42°4	41.0 $42.4$	40 6	40 2	41.8
47.5	46.8	47.0	47.5	47.6	47.6	47.2	47.0	46'4	46.2	46.0	45.2	$45^{\circ}4$
50°5 47°2	50.6	50.6	50.6	50.5	50.4	50.3	50.3	50.7	50.9	51.0	50.5	48.9
36.6	47.0 37.6	46.8 36.9	$\begin{array}{c} 45.7 \\ 36.9 \end{array}$	45.6 37.0	45 · 2 37 · 0	44°9 —	44°2 —	43.8	43.6	42.6	42.5	46'8
1			_	_	-	30.9	30.9	31.3	31.8	31.9	31.7	37.0
	37.4	36.8	36.9	36.3	36.3	35.9	35.9	35.6	35.4	35.2	35'1	35.4
	40°5 45°6	40.8 44.6	41'1 44'8	41.0 44.1	41.4	41.6 41.8	41.5 41.2	41.5 40.2	41.6 39.7	$\frac{41.6}{39.3}$	41.6 38.8	39'1 41'8
		38.7	38.5	38.0	$\frac{42.8}{37.7}$	37.3	36.6	36.4	36.0	35.8	35.8	37.9
39.9 44.6 39.4	39.0		41.8	41.2	40.8	40.6	40.5	40.8	41.2	41.6	41.8	40.2
39.9 44.6 39.4 42.8	39°0 42°6	42.4	4		45.4		<u> </u>	46.1	$\frac{-}{46.4}$	40.5	$\left  \begin{array}{c} -1 \\ 46.5 \end{array} \right $	44'1
39.9 44.6 39.4 42.8 43.6	39°0 42°6 43°6	42 4 44 2	45.0	45.2	40 4	45.7	45.5		40 4	1 4h 7	40.5	
39·9 44·6 39·4 42·8 43·6 — 50·0	39°0 42°6 43°6 	44·2 - 49·6	49.1	48.8	49.4	45 7 49 5	45°5 48°7	48.6	48.4	46.7 48.0	47.5	48.3
39.9 44.6 39.4 42.8 43.6 - 50.0 46.6	39°0 42°6 43°6  49°5 46°1	44.2  49.6 46.2	49·1 45·7	48.8 46.5	49·4 46·5	49·5 46·2	48.7 45.8	48.6 45.8	48 4 45 7	48.0 45.6	47.5 45.2	48°3 46°1
39·9 44·6 39·4 42·8 43·6 — 50·0	39°0 42°6 43°6 	44.2 49.6 46.2 49.5	49°1 45°7 49°2	48.8 46.5 49.3	49.4 46.5 49.3	49.5 46.2 49.2	48.7 45.8 48.8	48.6 45.8 48.2	48.4 45.7 47.8	48.0 45.6 48.8	47.5 45.2 49.3	48:3 46:1 47:8
39.9 44.6 39.4 42.8 43.6 50.0 46.6 49.0 50.0 53.5	39°0 42°6 43°6  49°5 46°1	44.2  49.6 46.2	49·1 45·7	48.8 46.5 49.3 50.4	49.4 46.5 49.3 50.4	49.5 46.2 49.2 50.5	48.7 45.8 48.8 51.0	48.6 45.8	48 4 45 7	48.0 45.6	47.5 45.2	48°3 46°1
39.9 44.6 39.4 42.8 43.6 	39°0 42°6 43°6 	44.2 49.6 46.2 49.5 49.8	49°1 45°7 49°2 50°4	48.8 46.5 49.3	49.4 46.5 49.3	49.5 46.2 49.2	48.7 45.8 48.8	48.6 45.8 48.2 51.3	48.4 45.7 47.8 51.3	48'0 45'6 48'8 51'6	47.5 45.2 49.3 51.6	48°3 46°1 47°8 50°1

	On	e Scale Divi	sion = .000	0065 parts o	f the V. F.	Increase, i	n Scale Div	isions, corre	sponding to	1° decrease	of Tempera	ture, 1.80.	
lean Gö gen Ti	ittin- }	Oh•	1h.	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> •	8h.	9 <sup>h</sup> .	10h.	11h.
		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
1	$^{\sim}2$	184.8	187.3	188.3	188°5	188.2	188.8	188'1	187.2	186.0	186.2	184.0	183.1
1	3	177.2	177.2	176.7	173.7	173.3	172.7	171.8	170.6	170.3	169.5	168.3	167.6
ļ	4	171.6	172.7	170.8	167.3	166.2	164.9	165.9	167.3	168.1	170'3	169.7	169.7
1	5	167.0	167.0	167.3	164.7	162.5	163.3	164'2	163°9 163°7	163°9 163°7	162.5 162.8	162.5 161.7	164 <b>'</b> 0
	6 7	166.1 162.9	166.8 166.8	167°5 169°4	164°5 166°3	163°5 164°5	162·1 163·7	163°2 164°2	161.6	164.1	164.6	165.6	165.6
	8 9	188.6	189 <b>·</b> 8	190 <b>·</b> 0	184.0	189 <b>°</b> 6	189.6	190.5	190.4	191.1	190.6	189.9	190.6
	10	194'1	195.0	194.6	193.4	191.5	190.8	191.5	190.2	188.4	187'1	186.7 176.8	186.7
	11	180.7	179.7	179.9	179.9	180.2	178.4	177.8 181.3	177·1 179·6	177°1 179°6	178°7 178°5	170.8	175°9 178°6
X	12 13	181°1 175°5	182 <b>·</b> 8 175 <b>·</b> 7	185 <b>°</b> 0 174 <b>°</b> 8	181 <b>'</b> 9	181.7 175.2	181.7 174.5	173.2	172.3	171.0	170.0	169.5	169.5
JAB	14	171.0	171.6	173.9	174.0	173.0	171.4	171.4	169.8	170.2	169.9	169.2	171.0
FEBRUARY.	15 16	169.3	166.0	173.4	172.4	171.6	171.7	173.8	173.6	177.2	178.3	176.2	176.4
Œ	17	175.3	175.2	174.5	173.9	172.4	169'5	169 <b>'</b> 2 169 <b>'</b> 4	168·5	170°0 170°3	170°1 170°6	170°6 171°3	170.6 170.3
,1	18 19	173°0 176°6	176'0 178'6	175°3 180°0	171 <b>·</b> 9 179 <b>·</b> 1	169 <b>.</b> 4	169 <b>°</b> 4 176°0	176.0	176.3	176.7	176.8	177.5	178.0
	20	180.8	181.4	178 7	178.9	176.2	175.6	175.6	175.3	175.3	172.6	170.5	170.2
	21 22	170.6	170.5	169.8	168.4	167.8	166.5	166.1	165.8	166*4	166.9	167.8	169.0
	23	183.7	184.2	184.3	177.7	178.6	178.6	177.1	177.6	178.3	177.0	178.3	178.4
	24	180.3	182.2	182.2	181 9	180'4	180°4	178.8	176.2	176.2	176.0	175.6	177.0
	25	182.0	183.9	183.9	182.7	181.0	181.0	179.9	179·9 185·7	180°0 185°7	180'0 188'8	181.0	182.9 189.7
	26 27	186.8	189.8	193.6 199.5	175 <b>.</b> 9 192 <b>.</b> 9	185°5 194°3	184.8 192.0	185 <b>·7</b> 189 <b>·</b> 9	186.0	187.2	185.9	185.9	185.2
	28	183.0	184.7	185.2	185.6	185.2	184.7	183.7	183.3	182.4	182.7	182.3	180.3
Mar				-		_	_				_		
Hourl	y Means	178*49	179:34	179.94	177:36	177.07	176.34	176.18	175.24	175.80	175.68	175.29	175.55
					TEMPERAT	TURE OF TH	Œ VERTICA	L FORCE M	AGNET.				
		0	0	0	0	0	0	0	0	, 0	0	0	
	( 2	35.6	35.4	35:0	35.0	35.6	36.2	37.0	37.9	38.2	39.0	39.8	39.8
	3	42.6	42.8	43.2	43.9	44.0	44.5	45.2	45.1	45.9	46.7	47.6	47.8
	4	46.6	46.6	49.0	47.5	48.4	48'6	48.6	48.6	48.6	48.8	48.6	48.0
	5	48.6 49.4	48.4 49.1	48.8 48.6	49.4	50°3 48°9	50.4 49.3	50°4 49°5	50.6 50.6	50°6 50°5	51.0 51.0	51.3	50.7 51.3
	7	49.0	48.6	48.8	48.4	49.0	49.8	50.1	50.3	20.0	49.7	49.9	49.6
	8 9	33.8	33.8	34.2	34.4	35.2	35.0	34.9	34.5	34.7	35.1	35.4	36.1
	10	33.8	33.6	33.6	33.6	33.7	34.0	34.8	35.6	36.5	37 2	37.6	37.4
	11 12	40°2 40°0	41.4 39.5	41.0	41.1	41.1	41.9 40.4	42.6 40.8	43.0 41.3	43.0 41.6	$\frac{42.8}{42.6}$	$\begin{array}{c} 43.2 \\ 42.6 \end{array}$	$\begin{vmatrix} 43.4 \\ 42.5 \end{vmatrix}$
Σį	13	43.3	43.4	43'4	43.4	43.5	44.0	45 0	45.6	46.1	47.0	47.6	47.6
UAE	14	46.8	45.4	44.8	43.5	43.6	44.3	44'6	45.6	46.0	46.9	47.0	46.7
FEBRUARY.	16	42.0	42.3	42.3	42.2	43.6	44.0	44.4	44.6	44.6	44.6	44.8	44.6
E	17 18	43.8 44.7	43.6 43.9	43.4 44.7	43.9	44.4	45.5	46.2	46.6	46.6	47.0	47.4	47.0
	19	42.4	43 9	44 7	44.8	45.4	45.8 41.8	46.6 42.6	46'8 43'0	47.0 43.0	47.4 43.0	47.6 42.9	47.8 42.4
	20	41 4	41.6	41.3	41.5	41.5	42.1	42.7	42.8	43.4	44.6	45.0	45.7
	$\begin{array}{c} 21 \\ 22 \end{array}$	46.8	46.6	46.6	46.6	46.8	48.0	48.5	48.8	48.2	48.2	48.4	47.8
	23	38.2	37.8	37.6	40.6	39.6	39.8	40.4	40.6	40.6	41.0	41.4	41.2
	24	39.4	39.2	39.4	38.8	38.9	39'4	40.7	41.5	42.2	42.6	42.6	42 2
	25 26	39.8 37.2	38.8	38.8	38.6	39.0	39.2	39.8	40.5	40.6	41.0	41.5	41.1
	$\frac{26}{27}$	31.2	30.2	36.8	44.0 34.1	37.9 32.1	37.8 33.1	38.0 34.6	38.0 36.2	38.0 37.6	38·1 38·2	38.3	37°3
	1 41	40.0	39.2	38.4	38.3	38.2	39.4	40.0	40.0	40.1	40.6	40.8	41.0
	28	10 0				1	l	Ī	1	i	Ī	1	i
Mar 			_	_			_	_	_			_	-

12 <sup>h</sup> .	-		_				Divisions, c	orresponain	r to 1º decre	ease of Tem	perature, 1°8	30.
. 1	13h.	14 <sup>h</sup> .	15 <sup>h</sup> .	16h.	17h.	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Daily an Monthly Means.
		g . To:		!			<u> </u>			0.70		
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
183'1	183'1	182.4	182.3	181.0	179.6	179'6	177'8	177.7	176'3	175.8	174.8	183*10
168.0	167.6	167.6	166.7	167.6	167.6	167.6	168.8	168.8	168.0	167.7	168.8	170.1
169.7	169.1	169.6	169.1	168.5	169.4	169.4	170.3	170.1	170.1	170.0	163.2	168.8
163.7	164.0	164.0	164.8	163.8	163.8	164.1	163.8	163.8	163.8	164.2	165.3	164.2
164.2	163.9	163.9	163.9	165.2	165.1	164.6	164.6	165.7	166.2	161.8	164.1	164.2
165'9	165.9	166.9	169.2	170.9	171.3	_					186.3	170.3
	10015	10114		-		179.6	180.3	180.8	184.4	184.4	186.37	
191.3	192.5	191.4	191.3	191 3	191.6	192.9	192.8	192.8	192.8	194.8	193'1	190.9
186.5	186.2	184.4	184.7	185.8	186.2	184.5	184.0	183.1	181.9	181.0	181.0	187.4
177.0	179.0	179.5	181.7	181.1	180.8	180.7	180.7	180.7	180.4	179.6	180.6	179.3
179°9	181.3	181.3	181.3	181.3	181.3	178.4	179.9	179.2	178.9	176.3	175.4	180.1
169.5	171.6	170.0	167.9	172.2	171.4	169.7	170.7	170.6	170.8	168;3	170.9	171.7
173.9	174.8	172.8	174'7	173.1	170.9	_		l —			<u> </u>	172:3
			<del>-</del>	l —		172.5	167.1	171.3	177.5	178.0	174.4	
178.5	178.4	176.3	176.1	177.8	175.8	175.8	174.7	175.5	175.2	174.8	175'3	174.7
171'5	171.5	172.4	172.4	172.2	172.2	170.3	170.5	170.5	172.9	172.9	173.0	171 7
170.3	170.5	171.0	170.5	170.2	171.0	172 6	172.6	172.6	175.3	176.9	177.2	172 0
180.3	179.6	179.6	182.9	182.9	182.9	181.5	179.3	179.3	179.2	179.3	179.3	178.9
171.3	170.0	171.7	171.7	171.3	171.3	167.7	169.8	170.5	170.2	170.2	170.7	173.2
	168.7	168.7	168.8	170.8	170.8	101 1	109 0	1102	110 2	1102	l _ '	
169'4	100 /	100 /	100 0	170 8	170 8	179.0	174.7	177.4	176.4	182.8	$\{183.7\}$	171.1
	1	150.0	15040	15010	150.0							150.5
178.3	178.3	178.3	179.6	179.6	179.3	180.2	180.0	180.0	180.3	180.3	180.3	179.5
177.3	179.4	179.4	179.0	179.5	179 5	180.3	180.3	180.3	181.3	182.0	181.6	179.40
192'4	192.4	198.2	193.1	186.2	184.6	184.0	181.9	182'1	184.3	182.6	184.7	184.3
189'7	190.3	190.3	190.9	190.0	187.6	188.0	189 1	189.8	191.4	191.6	195'8	188.5
185.0	182.7	180.5	179.7	181.4	180.2	180.3	179.4	179.0	179.7	181.2	182'1	186'18
181'9	181.8	181.8	180.9	181.2	181.5						— 1	185 14
_	_	_	_	_	_	193.6	191.2	191.2	190.5	190.2	193.8}	189 14
176.60	176.76	176.75	176.81	176.91	176.50	177:37	176.85	177.19	177.83	177.80	178.14	177.00
	1		'	TEMPE	RATURE OF	THE VERT	CICAL FORCE	CE MAGNET			<u> </u>	
0	0	0	0	0	0	0	0	0	0	0	0	0
39.8	40.0	40.1	40.5	40.6	41.4	41.4	41.6	42.2	42.0	42.4	42.4	39*18
47.8	48.0	48.0	47.8	47.8	47.8	47.4	47.4	47.0	46.6	46.8	46.6	46.18
47.8	47.8	47.6	47.6	47.6	47.6	47.4	$47 \cdot 2$	47.3	47.5	47.5	47.6	47.8
50.4	50.4	50.3	50.3	50.2	50.7	50.8	50.3	50.5	50.5	50.3	49.7	50.18
20.8	50.4						50.3	50.0	49.7	49.5	49.2	20.00
		50.7	50.3	50.3	50.3	50.3	30 3			±5 0		
49.4	49.4	49.0	48.3	47.5	46.6	99.5	24.0	34.2	<del>-</del> 34.6	35.0	33.0}	$45^{\circ}32$
25:0	25.4	-			0.5.0	33.5	34.0					
35.6	35.4	35.5	35.3	35.2	35.0	34.7	34.2	33.8	34.0	34.0	34.0	34.74
37.4	37.6	38'3	38.2	38.0	38.0	38.4	39.4	40.0	40.0	40.3	40.6	36.98
43.0	42.5	41.6	41'1	40.9	41.2	41.2	41.1	40.9	40.9	40.9	40.1	41.6
42.2	42.2	41.7	41.5	41.6	41.6	42.0	42.3	42.5	42.7	43.1	43.5	41.60
47.7	48°3	48.2	47.6	47.7	47.6	47.8	47.4	47.4	47.0	46.7	46.8	46*28
46'6	46.5	45.9	45.8	45.6	45.3			_	_		— <u>Դ</u> ∥	44.40
				_	-	40.0	40.2	40.4	41.0	41°4	41.6}	44 40
44*4	44.6	44.2	43.8	43.6	43.4	43.5	43.3	43 5	43.6	43.6	43.6	43.70
46.8	46.6	46.2	45.8	45.9	45.7	45.6	45.2	45.0	45.2	45.5	45.0	45.58
47.6	47.6	47.6	46.8	46.6	46.6	46.0	45.3	44.2	43.6	43'1	42.3	45.8
41.7								41.4	41.8	41.8	41.6	41.8
	41.6	41.4	41.5	41.2	41.2	41.4	41.3					
46.1	47.0	47.1	47.0	46.8	47.0	47.6	47.4	47.5	47.5	47.4	47.2	44 '9'
47.6	47.8	47.4	47.2	47.0	47.0	<u> </u>		-			${\frac{-}{38\cdot 4}}$	45 '2'
		_		-		37.8	38.7	38.8	38.9	38.2		*
41.0	41.0	41.0	41.2	40.8	40.8	40.6	40.0	39.9	39.9	39.8	39*4	40'1'
41.7	41.6	41.6	41.0	40.6	40.3	40.3	40.4	40.0	40.0	40.0	40.2	40.6
40.7	40'4	40.0	40.0	40.0	40.0	40.0	39.6	39.6	38.7	38.3	37.6	39.7
37.0	36.8	36.5	36.0	35.3	34.6	34.4	33.6	33.5	$32 \cdot 2$	32.0	31.6	36.2
38.3	39.0	40.0	40.0	40.0		40.3	40.4	40.0	40.0	40.0	40.0	37.2
41.0					40.2	G OF	TUT		10 0	10 0		
_	41.0	41.0	41.0	40.9	40.6	34.6	34.2	34.2	33.9	33.6	$\frac{-}{33\cdot 6}$	38.5

	On	ne Scale Divi	ision = '00	0065 parts o	f the V. F.	VERTIC Increase in	CAL FORC	E. sions, corres	ponding to	1° decrease (	of Temperat	ure, 1'80.	
Mean G gen Ti	öttin-}	Oh,	1h,	2 <sup>h</sup> .	, 3h,	4 <sup>h</sup> •	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
	2 3 4 5 6 7	Sc. Div. 193°8 182°2 174°8 166°6 165°6 172°6	Sc. Div. 193 6 183 5 173 7 166 6 165 4 173 6	Sc. Div. 191 0 182 2 173 4 165 0 165 4 173 1	Sc. Div. 186 '7 180 '6 170 '7 163 '3 163 '1 171 '2	Sc. Div. 183 '9 176 '2 167 '0 161 '9 162 '6 168 '6	Sc. Div. 181 ° 0 173 ° 5 165 ° 5 158 ° 8 163 ° 7 167 ° 7	Sc. Div. 181 ° 0 172 ° 1 165 ° 4 157 ° 5 163 ° 3 167 ° 7	Sc. Div. 180 ° 0 171 ° 5 165 ° 3 158 ° 5 163 ° 0 166 ° 8	Sc. Div. 179°4 170°3 165°8 160°1 162°7 168°8	sc. Div. 179'4 170'9 164'7 159'7 162'2 169'5	Sc. Div. 179 6 171 4 164 1 157 9 162 3 169 5	Sc. Div. 178 2 170 0 165 9 157 6 161 5 170 6
	8 9 10 11 12 13 14	167.0 159.3 166.2 161.3 155.1 150.2	167.3 162.9 166.3 160.0 150.2 150.7	168.0 162.9 163.4 159.9 146.7 156.9	166.8 161.8 163.8 158.8 148.4 153.8	162.6 158.5 156.7 157.7 148.6 159.3	159'8 156'5 153'9 157'7 149'8 158'9	160'4 157'1 153'2 157'1 151'3 158'7	161'1 157'1 154'3 157'5 157'0 160'8	160°6 157°7 156°1 157°5 158°2 164°5	160°0 157°9 157°0 157°5 158°8 161°1	160.0 157.9 155.7 158.9 162.1 163.7	159°5 157°8 154°7 158°0 168°7 163°7
MARCH.	15 16 17 18 19 20 21	169 ° 9 168 ° 8 169 ° 3 156 ° 7 159 ° 7 160 ° 2	171°5 159°6 170°9 155°5 159°1 160°2	168.4 162.3 170.9 159.7 159.1 162.1	167.7 167.2 173.3 159.3 156.4 161.6	168.4 169.8 170.5 158.6 154.5 162.3	168 4 170 7 167 4 156 3 153 4 161 8	168°1 172°2 167°4 155°0 153°4 161°8	168.8 169.6 167.9 154.9 154.1 161.8	171.9 171.7 166.6 153.9 155.1 163.7	179.7 173.5 165.1 154.3 155.1 164.0	179 · 5 174 · 4 163 · 4 155 · 4 155 · 3 162 · 5	179.9 167.5 164.4 156.6 156.0 162.5
	22 23 24 25 b 26 27 28	169°9 158°1 162°4 —	169°9 159°2 162°4	168°0 160°3 162°4 —	164.2 159.5 160.8	166°9 158°5 159°2 —	159.0 159.7 °— —	158°1 160°0	157°1 159°7 — — —	158°3 160°6 —	158 · 9 161 · 2 — — —	159°3 160°1 ————————————————————————————————————	159°3 161°5
	29 30 31	_		_				1		_ _ _	<u>-</u>		=
Hourl	y Means	166.32	165.98	165 94	164'91	163.70	162 17	162.04	162:34	163.18	163.52	163.65	163.69
		11			TEMPERAT	TURE OF T	HE VERTIC.	AL FORCE	MAGNET.	1			
	$\left(\begin{array}{c}2\\3\\4\\5\\6\\7\end{array}\right)$	34.0 40.2 44.6 48.8 49.7 44.7	34·2 39·8 44·0 48·4 49·3 44·5	35.0 40.0 44.6 49.2 49.2 44.6	36.6 40.8 45.6 49.2 49.5 44.9	38·2 42·0 47·3 49·6 49·5 46·0	38.7 43.4 48.1 50.3 49.1 46.7	40.0 44.0 48.2 50.6 49.6 46.7	40.6 44.6 48.0 51.3 49.7 46.7	41.0 45.2 48.1 51.3 49.9 46.7	41.6 45.7 48.8 51.9 50.5 46.8	41.8 46.2 49.2 53.2 50.8 46.8	42.0 45.8 49.1 53.3 50.5 46.6
	8 9 10 11 12 13 14	47.5 50.6 49.0 51.5 54.6 54.9	47.4 49.4 48.6 51.6 54.6 54.5	47.3 49.6 49.7 51.5 54.4 54.1	47.6 50.3 50.0 51.8 54.0 54.3	48.8 51.5 51.7 52.6 54.0 54.3	50.0 52.3 52.2 52.8 54.3 54.5	50.0 52.6 53.2 53.0 54.6 54.5	50.6 52.4 53.7 53.1 55.2 54.7	51.0 52.4 53.7 53.5 55.2 54.7	51.6 52.7 53.9 53.6 55.0 55.1	51.9 53.1 54.4 53.5 54.6 54.8	52.0 53.3 54.5 53.7 55.3 54.3
MARCH	15 16 17 18 19 20 21	46.8 45.4 44.9 53.3 53.2 52.7	46.8 44.3 44.6 53.3 52.5 52.3	47.2 44.1 44.6 53.1 52.6 51.5	46.7 43.7 45.0 53.4 53.6 51.1	46.8 43.6 45.9 54.1 54.1 50.6	46.7 43.9 47.2 54.3 54.6 50.6	46.9 44.2 47.7 54.9 55.0 50.3	47.0 45.5 48.2 55.5 55.5 50.2	47.4 45.8 48.7 55.6 55.7 50.2	47.6 47.0 50.4 56.1 56.5 50.4	47.6 48.2 51.1 56.2 56.4 51.1	47.6 49.4 51.1 56.0 56.3 51.7
	22 23 24 25 <sup>b</sup> 26 27 28	47:4 52:0 51:7 —	47.5 52.0 51.2 —	48.2 51.9 50.8	48.9 51.8 50.6 —	50.0 51.6 50.7 —	50.6 51.5 c	51·2 51·8 — — —	51.5 51.9 ————————————————————————————————————	51.7 52.0 — — — —	53.0 52.0 — — —	52·4 52·0 ————————————————————————————————————	52:2 52:0 — — — —
	29 30 31	=	_ 									_ 	
Hourly	y Means	48:29	47.98	48.12	48.44	49.11	49.59	49.95	50.29	50.49	51.01	51.27	51.38

<sup>&</sup>lt;sup>a</sup> Three minutes late.

<sup>&</sup>lt;sup>b</sup> This day not included in the Sums and Means.

	One Scale	Division =	.000065 ba	arts of the V		ERTICAL ase, in Scale		orrespondin	g to 1° decr	ease of Ten	perature, 1°	30.
12h.	13 <sup>h</sup> .	14h.	15h.	16h.	17 <sup>h</sup> .	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
sc. Div. 178 2	Sc. Div.	Sc. Div. 176.8	Sc. Div. 176 8	Sc. Div. 176.7	Sc. Div. 177.6	Sc. Div.	Sc. Div. 180 0	Sc. Div. 180 0	Sc. Div. 180'0	Sc. Div. 180 9	Sc. Div. 183 8	Sc. Div. 181 42
170'4	170.4	170.4	170'9	170.9	172.5	171.1	171.1	170.4	167.9	169.9	171.3	172.98
165.9	165.9	163.5	162.8	164.3 a	162.9	163.1	163.8	163.0	165.3	165.3	165.5	166.15
157°3 163°3	157.6 163.4	157.6 162.7	157°2 163°0	163.0	160.6 166.2	162.2 165.8	160.7	160.7	162.0	160°0 169°2	160°3	160.42 164.62
169'9	168.9	168.9	167.9	167.9	168.0	100 8	165.7	169.2	169.2	109 4	1	
					_	170.4	169.7	169.5	169.1	167.7	167.5	169.38
158'1	156°8 157°8	157.8 156.4	160°3 157°2	160.3	160.5	160.2	160.8	160.4	160.4	160.5	70410	161.28
157.8 155.4	154.2	155.0	158.4	159.0	159.6 158.1	160°9	161°1 154°1	161.8 157.3	163°2 159°3	162.4 161.3	164.0 161.3	159.50 157.78
159.8	160.6	159.6	159.5	157.5	158.7	158.4	156.6	156.2	154.0	155.0	155.0	158.05
161.9	157.6	157.4	157.7	153.3	157.5	160.2	142 9	137.9	149.8	149.2	152.5	153.87
163'4	163°4	163.7	159.1	163.3	160.9	1.00.40		—			168.9}	162.06
183 2	176.7	174.4	174.0	172'1	164.6	169°3	168.2	169.0	168.8	168.9		171.50
166.3	166'3	165.9	165.9	164.6	163.6	164.4	166.6 164.4	166°2 164°0	172.7 157.2	173°2 157°4	166°2	166.52
164.7	161.5	156.2	155.9	156.5	156.5	156.2	153.8	154.4	156.2	156.2	155.2	162.50
156.3	155.3	154.4	154.8	154.8	156.9	156.9	158 1	158'1	158.1	158'1	158.1	156.50
156'0	155.6	156.8	157.7	157.3	157.5	157.5	158*4	158.5	157.6	155.6	157 9	156.57
162.0	162.3	163.8	163.8	164.6	164.6	168.5	170.6	169.7	169.7	169.7	$\left \begin{array}{c} - \\ 167.9 \end{array}\right\}$	164.24
159.7	160.6	161.3	159.7	161.8	161.8	161.8	162.9	162.9	162.2	158.8	158.1	161.70
160.9	161.7	162.9	161.2	161.0	163.0	162.5	162.4	162.4	162.4	161.9	161.9	160.95
-	-		_		-	-		<u> </u>	<u> </u>	—	-	·—
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	<u> </u>	-	-	_	_	-				_	<u> </u>	
163.53	162.74	162.29	162.20	162.36	162:57	163.09	162.61	162.60	163.27	163.07	163.90	163.40
			1	TEMPE	RATURE OF	THE VERT	CICAL FORC	E MAGNET		·		
4Î · 9	42.4	42°8	43.0	42.4	42°5	42°1	4î·3	4i°6	4Î 1	40°7	40.3	$4\overset{\circ}{0}$ $\cdot 24$
46.0	46'1	45.8	45.8	45.7	45.7	45.6	45.8	45.7	45.7	45.8	45'4	$44^{\circ}45$
49'1	49.3	49.5	49.8	49.7	50.0	49.8	49'9	49.6	49.2	49.0	49.1	48.32
53.5 50.2	$53.3 \\ 50.2$	52.8 50.0	52.8	52.1	51.7 48.8	51.0	50.8	50.7	50.9	50.3	50.0 45.6	51·12 49·13
46.6	46.8	47.0	50°2 47°2	49.5 47.2	47.2	48.2	48.0	47.8	47.0	46.4		
_	_	<del>-</del>		-		46.2	46.5	46.6	46.7	46.8	47.0}	46.40
51.7	52.2	51.5	51.5	51.5	51.5	51.2	51.0	51.2	51.4	51.4		50.21
53.6	53.2	53.4	53.2	52.7	51.8	51.5	51.0	50.0	49.8	49.5	49 1	51.63
54.5 53.3	54°5 53°3	54°0 53°4	54.0 53.3	53.3 53.3	52.8 53.3	52.5 53.3	52·5 53·3	$52\cdot2$ $53\cdot2$	51.6 $53.7$	51.5 54.0	51.4 54.5	52·47 53·09
55.3	55.6	56·3	56·3	56.0	55.8	55.8	55.6	55.6	55.6	55.3	55.2	55°17
54.1	53.3	53.0	53.2	52.8	52.2	_		_				52.18
47.5	·				_	45.8	46.4	46.8	46.5	46.8	46.8	
47.5 49.4	47.5	47.5	47.3	47.2	46.9	46.9	46.8	46.4	46.0	45.6	45.8	46.46
51.1	49°3 53°5	48 <b>·</b> 9 54 <b>·</b> 1	48'4	47.8	47.5 54.1	47 · 2 53 · 9	47.2 54.4	46.4 54.3	46°6 53°8	$46^{\circ}3$ $53^{\circ}5$	45.0 53.5	46.46 50.59
56.0	56.0	56.2	54.0 56.1	54·3 55·0	54 1 54 5	54°2	54.4	53.8	53.5	53.5	$53 \cdot 2$	54.64
55.9	55.6	$55\cdot 4$	55.6	55.2	54.8	54.3	$54 \cdot 3$	53.9	53.2	53.2	53.3	54.64
51.8	52.0	51.3	50.7	20.3	50.0						— 1 l	50.05
52.3	51:0					47.0	46.8	47.0	47.0	47.0	47.6	
51.8	51.0 51.5	51.2 51.3	51.3 51.5	51 5 51 6	51.6 51.7	51.8 51.5	51.7 50.6	51.4 50.3	51.5 50.5	52.1 $51.2$	51.6 51.4	50°99 51°56
	_	or o	— —	01.0	01 /	OI 9	- 00 6				— I	—
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	Oı	ne Scale Div	vision = '00	0066 parts	of the V. F.	VERTI	CAL FORG in Scale Div	CE.	sponding to	1º decrease	of Tempera	ature, 1 • 64.	
Iean Gi gen T	ottin-}	O <sup>h</sup> .	1 <sup>h</sup> .	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6h.	7 <sup>h</sup> .	8 <sup>h</sup> •	9 <sup>h</sup> .	10 <sup>h</sup> .	11ħ.
	1	Sc. Divi	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	2 a 3 4	225·9 221·6	225 · 9 221 · 2	222.9 221.2	220°9 216°0	215.5 212.7	214.5 211.3		216·1 212·9	216.9 215.3	216.5 216.5	218.0 216.2 214.0	218.9 213.5
	5 6 7 8 9	214.5 214.5 219.4 226.4	207.0 216.6 219.2 224.6	202·2 217·5 219·3 223·1	204.9 216.8 218.1 223.1	208'3 217'2 217'0 219'0	210.5 215.8 217.1 218.9	220°4 215°8 217°1 219°1	223.7 216.2 218.1 218.5	230°4 217°4 222°3 218°8	240°1 218°7 220°3 218°8	250°3 219°5 220°1 218°8	236 · 1 218 · 7 219 · 4 217 · 5
	10 11 12	226.6	226.9	226.9	225.1	224.8	221.7	221.7	221.9	221.7	224.0	224.0	224.2
APRIL.	13 14 15 16 17 18	228.6 231.5 224.2 209.0 222.9 217.4	228 ° 9 224 ° 5 224 ° 5 217 ° 2 223 ° 9 216 ° 1	229 · 2 221 · 6 224 · 6 216 · 2 223 · 9 216 · 1	229·2 222·3 223·6 216·4 220·4 214·7	225.6 221.5 221.9 221.4 219.5 214.3	226.2 221.8 221.9 223.0 218.3 212.9	227 · 3 221 · 8 221 · 9 229 · 3 219 · 9 212 · 9	228.2 221.8 223.6 233.5 218.4 212.8	231 · 8 229 · 3 224 · 4 236 · 2 217 · 9 212 · 8	234.7 225.7 224.4 238.1 220.1 211.2	234.0 231.3 228.5 237.8 219.6 210.2	232.1 231.3 230.4 235.5 215.6 209.3
	19 20 21 22 23 24 25	223.6 210.8 202.2 202.8 203.1 201.4	222 · 4 210 · 8 203 · 3 202 · 7 202 · 2 203 · 8	219 · 5 209 · 2 203 · 3 203 · 7 202 · 5 203 · 8	218.0 207.4 205.2 202.7 202.7 203.7	214.4 204.0 203.7 202.1 203.3 204.5	212.5 202.1 204.7 200.6 203.3 205.7	211.1 200.4 b 205.0 199.6 202.9 204.8	212.5 200.4 ° 204.5 199.4 203.2 204.6	213.5 200.4 204.7 200.6 202.5 208.7	213.5 200.3 206.3 202.7 203.0 209.6	213.5 201.0 206.4 203.5 202.9 208.6	213·5 200·4 207·6 203·1 202·7 215·6
	26 27 28 29 30	218'8 209'4 210'3 208'6	216.3 208.2 210.3 209.5	213.5 207.6 209.9 207.6	211.0 206.6 209.3 207.3	208°2 206°8 208°0 206°3	208°1 204°6 207°4 203°0	207.7 203.7 208.8 201.7	208.8 203.9 207.6 201.5	208.8 203.9 208.6 201.8	207 ° 9 205 ° 1 208 ° 6 203 ° 9	208.5 204.3 208.6 202.6	205 · 4 206 · 3 209 · 8 201 · 9
Hourl	y Means	216.24	215.91	215.01	214.12	213.04	212.43	213.08	213.57	215.16	216.09	216.70	215.8
		ī	1		TEMPERAT	URE OF TH	IE VERTICA	AL FORCE M	IAGNET.				
	1 2 a	<u>-</u>	<u>-</u>	<u> </u>	<u>-</u>	° _	°	<u> </u>	<u>-</u>	· -	<u> </u>	<u>°</u> 52·3	52·3
	3 4	47.6 50.3	48°2 50°6	49.6 50.2	49°6 52°2	51.0 52.4	51°3 53°2	52.0 53.2	52°4 54°3	52·4 54·2	52.8 54.6	53.6 55.3	53°6
	5 6 7 8 9	54.1 55.0 52.5 49.2	53.4 54.5 52.5 49.5	53.5 54.2 53.0 50.3	53.6 54.5 52.9 51.0	54.6 54.7 52.7 51.8	55°3 55°2 52°6 52°2	55°5 56°6 52°9 52°1	55.8 56.3 52.7 52.4	56°1 56°4 52°7 52°6	56.5 56.6 52.7 53.2	56.7 56.6 52.6 53.6	57:1 56:3 53:3 53:6
	10 11 12	48.5	48.3	47.7	48.2	49.4	49.9	51.0	52.1	51.9	52.5	52.4	51.8
APRIL.	13 14 15 16 17 18	44.2 44.4 48.3 47.2 50.0 53.5	44.3 46.0 48.4 47.6 50.3 54.0	44.3 46.8 48.1 48.7 50.8 54.0	44.7 47.0 48.7 49.0 51.6 54.4	45.4 47.1 49.0 49.6 53.1 55.1	45.8 47.5 48.5 49.8 54.3 55.5	45.6 47.4 48.8 49.9 54.8 55.7	45.1 47.6 48.8 50.1 55.3 56.3	45.0 47.8 48.8 50.5 55.6 56.3	45.7 48.6 49.3 51.0 56.0 57.2	46.2 49.1 49.8 51.3 56.3 57.3	46.6 49.0 50.2 51.5 56.7 58.2
	19 20 21 22 23 24 25	50.7 57.1 59.0 60.1 59.6 59.8	51.3 57.0 59.2 59.7 59.4 59.4	52.9 57.2 59.0 59.0 59.3 59.2	52.6 58.2 58.7 59.2 59.4 58.8	54·1 59·3 58·5 60·0 59·4 58·3	55.2 60.0 58.5 60.0 59.8 58.3	55°3 60°0 58°5 60°4 60°2 58°3	56.0 61.0 59.1 60.4 60.2 59.2	56°3 62°0 59°2 60°3 61°0 59°0	57.0 62.5 59.3 60.5 60.8 58.5	57.5 62.5 59.4 61.0 60.8 58.4	58.2 62.2 59.6 60.0 60.8 58.4
	26 27 28 29 30	51.3 56.3 57.2 57.2	52°3 57°2 57°5 57°2	53.7 57.8 57.0 57.3	54.3 57.7 56.6 58.0	55.8 58.3 57.1 58.5	56°3 58°4 57°3 59°0	56°5 59°0 57°3 59°2	57°1 59°2 57°5 59°5	57.5 59.2 57.5 60.0	57.6 59.2 57.5 60.1	58.5 59.0 57.3 60.0	59°3 59°2 56°8 60°5
Hourly	Means	52.74	52.95	53.50	53.23	54.14	54.2	54.80	55.12	55.32	55.63	55.88	56.0

<sup>&</sup>lt;sup>a</sup> Not included in the Means.

<sup>&</sup>lt;sup>b</sup> Two minutes late.

	One Scale	Division =	*000066 pai	ts of the V.		RTICAL F se, in Scale		orresponding	g to 1° decre	ase of Tem	perature, 1°6	4.
12h.	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> •	17h.	18 <sup>h</sup> •	19 <sup>h</sup> .	20 <sup>h</sup> .	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Drv.	Sc. Div.	Sc. Div.	Sc. Div.	Sc, Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
218.9	218.9	220.5	219.9	220.9	219.8	221.1	223 1	214.1	217.9	222.5	225.4	
216.1	215.8 214.4	215.5 214.4	216 <b>.</b> 4 215 <b>.</b> 2	218'9 214'6	219·2 215·3	220.7	220.7	221.3	221.9	221.6	221.6	218.82
		_	-			212.4	212.5	215.6	215.6	215.6	214.5	215.05
227.7	224.5	224.5	223.3	221.3	221.3	210.0	214.5	217.5	207.3	198.9	214.6	218.91
218.7 219.4	215.7 218.5	215.7 218.9	215.4 218.5	214'3 219'8	206.0 219.5	206'1 219'1	211·1 218·4	209°3 223°8	207.0 223.8	207°0 223°8	219.4 226.4	214.60 219.89
218.2	218.4	218.5	218.4	220.7	220.7	<u> </u>					1 . II	221.55
224.2		224.0	223.0	223.0		219.5	218.2	225.8	228.3	228.3	225.5	
224 2		224 U	225 U	223 0	223.0	231.1	232.9	232.6	231.0	231.0	231.0}	225.86
229.3	234.3	230.6	225.4	227.5	232.4	232.3	231'9	231.9	231.3	233.7	232.4	230.37
231'1	231.1	226.9	226.6	223.7	224.3	223.0	220.7	224'1	219.5	224.4	223'3	225.13
230'4 236'5	223.6 235.9	228·1 232·8	227 <b>·</b> 1 225 <b>·</b> 6	223.7	223.5	209.8	206.2	205.6	205°1 197°1	204'6	203 · 1 221 · 3	220.80 222.60
213.1	213.4	213.4	212.7	210°1 212°7	$211.2 \\ 212.7$	214.0 212.1	206 2	213.8	214.0	215.4 212.7	214.2	216. 63
209.3	211.1	211.1	210.6	210.6	210.6					_	$\{\frac{112}{222\cdot 1}\}$	213.59
	-					206.5	215.6	219'3	219'3	219.3	222.13	
213.5 200.4	211.5 200.4	209.5	209.2	209.5 200.6	209.5	209.5 195.4	210.4 204.7	210.4 204.4	209.8	209°2 204°0	209'4 206'3	212 <b>·</b> 90 202 <b>·</b> 84
209 4	200 1	202.2	200.3	200.6	200 2	203.3	204 7	204.4	204.4	204 0	200.3	204 32
203.1	200.9	201.2	202.6	202.8	202.8	203.6	203.7	203.7	202.5	204.2	204.2	202.46
201.2	202.6	202.6	202.6	200.6	202.8	220.3	193.9	188.0	193.7	193.2	202.7	200.78
215.6	213 4	213.3	213.3	198.7	208.6	212.6	213.7	215.7	216.3	218.0	$\frac{-}{217.6}$	209.65
204.5	204.3	204.5	206.1	204.0	202.5	205.8	206.7	206.7	206.0	209.3	209.3	208.03
205.6	206.7	206.7	206.6	206.5	206.6	206.6	205.6	205.8	208.4	208.4	210.3	206.43
209.8	209.8	209.8	210.6	210.4	209.0	209.1	205.5	206.6	208.6	207.5	210.4	208.93
201.0	201.0	201.5	201.5	201.5	201.0	201.2	200.8	200.6	200.6	202.6	202.5	202.99
215.24	214 82	214.18	213.54	212.00	212 43	212.36	212.05	213.03	211.98	212.93	214.95	214.02
				ТЕМРЕІ	RATURE OF	THE VERT	ICAL FORC	E MAGNET				
•	0	•	6	o	0	0	٥	0	0		0	<u> </u>
52 2	52.2	51.7	51.0	51·0	50.2	50.3	49.7	49.0	48'8	48.4	48.2	
54.3	53.8	54.2	53.4	52.5	52.0	51.7	51.6	51.3	51.2	51.1	51.0	51.76
55.7	55.2	55.3	55.0	55'1	54.7				~		$\frac{-}{54 \cdot 2}$	53.84
56.7	58.0	58.0	56.5	56.0	55.5	54·0 55·3	54.0 $55.4$	54°1 55°2	54°1 55°2	54°1 55°2	55.3	55.60
56.3	56.8	56.9	56.8	56 <b>·</b> 6	56.2	56·2	55.6	55°5	54.2	54.3	53.4	55.68
54.0	53.2	52.9	51.8	51.6	51.2	51.0	50.2	50.5	50.0	49.5	49.4	52.04
<del></del>	53'2	53.3	52.5	51.7	51.2	4019	<del>-</del> 47∶5	<del>-</del> 47.5	47.7	48.0	47.8}	50°92
51.4	50.8	50.8	50.6	50.3	50.0	46.8	4/ 0	4/ 3 —		<del></del>		48.94
	l →			<u></u> ,		44.6	44.2	44.4	44.3	44.3	44.4}	
46'6	46.6	46.6	45.8	45.4	45.2	44.6	44.6	44.2	44'0	44.0	44.3	45.20
49°0 50°5	49°0 51°0	48.8 51.2	49.2	49.0	49.2	49.0	48.8	48.4	48.6 49.1	48.8 48.3	47.6 47.5	48.07 49.33
51.8	52.8	52.7	51.3 52.3	50°5 51°7	49.7 51.6	49.5 51.5	51.2	49.3	50°8	50.2	50.2	50.57
56'6	56.8	56.3	56.6	56.2	56.0	55.8	55.2	54.7	54.6	54.0	54.0	54.66
58.3	58.3	58.2	57.8	57.6	57.4						50.9}	55.28
58·0	58·5					53.3	52.3	52.0	51.8	51.4	50.9	56.29
62.4	62.0	58.5 62.0	$\begin{array}{c} 58\cdot2 \\ 62\cdot2 \end{array}$	57.8 62.0	57.6	57·5	57.8 61.0	57.7 60.6	57°5 60°1	57.5 59.8	59.6	60.60
60.0	60.0	61.1	61.1	60.6	61.8	60.0	60.0	59.2	59.4	60.6	60.6	59.62
60.0	60.2	60.4	60.5	60.0	59.8	59.6	59.7	59.6	59 <b>°</b> 6	59.8	59.8	59.97
60'8 57'8	60.9	60.8	60.8	60.6	60.5	60.3	60.4	60.2	60.4	60.4	60.0	60.28
97 8 —	57.6	57.3	57.2	57.0	56.6	<u></u>	52·5	52.2	51.7	51.3	$\begin{bmatrix} \overline{} \\ 51 \cdot 1 \end{bmatrix}$	56.70
59.4	59.5	59·4	59 <b>·</b> 1	58·7	58 1	53°0 57°7	52 5	56.6	56.9	56.6	56.2	56.90
59.0	59.2	59.0	58.3	58.1	58.1	58.1	58.1	58.1	57.7	57.4	57.0	58.28
57·0	57.0	57.2	57.4	$57^{•}4$	57.3	57.2	57.3	57.2	57.3	57.5	57.3	57.24
60.2	60.5	60.5	60.5	60.7	60.7	61.0	60.4	60.2	60.0	60.0	59.6	59.63

	One	Scale Div	vision = '00	00066 parts	of the V. F.	VER'	ΓΙCAL FO in Scale Di	RCE. visions, corr	esponding t	o 1º decreas	e of Temper	ature, 1 64.	
Mean Göt gen Tim	e. }	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	4 <sup>h</sup> .	5h.	6h.	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10h.	11h.
(	1 2	Sc. Div. 204 2 199 5	Sc. Div. 203 4 200 0	Sc. Div. 201 8 200 4	Sc. Div. 200 0 197 6	Sc. Div. 198'8 196'5	Sc. Div. 198 8 195 6	sc, Div. 199 * 5 195 * 6	sc. Div. 199 5 196 6	Sc. Div. 200°2 199°8	sc. Div. 200 4 198 8	Sc. Div. 200 '4 198 '7	Sc. Di 201 3 198 8
	3 4 5 6 7 8 9	203 · 6 204 · 2 203 · 6 207 · 4 204 · 0 201 · 2	203 · 4 202 · 3 203 · 6 206 · 9 203 · 9 201 · 2	201'9 199'3 202'3 206'0 203'0 199'5	198.6 199.3 200.0 206.0 200.6 199.2	203 · 2 199 · 3 197 · 0 204 · 1 199 · 0 199 · 8	204'4 201'2 199'2 202'8 199'3 202'4	202'3 202'2 199'7 204'9 198'7 197'7	201'9 202'8 199'7 204'9 198'7 202'4	203·1 205·8 203·9 205·2 201·3 209·6	209'3 207'1 206'0 207'3 202'4 214'6	220°5 209°2 203°0 203°3 204°3 216°0	222 2 210 2 204 2 205 3 205 1 210 2
AY.	10 11 12 13 14 15	209 · 8 206 · 2 201 · 7 199 · 9 196 · 0 205 · 6	209'7 196'9 205'2 199'0 199'4 205'4	211 '4 211 '0 209 '7 199 '4 199 '4 203 '7	215·2 211·0 210·7 198·1 199·4 202·1	214'8 212'2 210'7 198'1 198'4 198'3	215 · 6 211 · 5 211 · 9 196 · 8 198 · 4 195 · 2	215 1 215 3 211 6 198 4 195 4 194 3	216·3 225·0 211·6 198·4 197·0 194·5	218'3 233'5 210'3 198'4 197'0 194'5	218·3 216·5 213·8 197·4 196·3 195·6	217.8 246.3 207.6 195.8 195.6 196.2	218.7 244.3 205.2 195.9 197.9 195.3
1 1 2 2 2 2 2	17 18 19 20 21 22 23	199'4 215'8 205'1 194'9 210'4 210'7	199.0 213.1 206.1 200.2 204.3 208.5	198'8 210'3 205'4 199'0 205'3 204'0	199 · 4 207 · 0 203 · 2 199 · 0 205 · 8 203 · 2	195°1 206°6 203°2 205°4 204°5 199°8	193 · 9 206 · 6 204 · 1 206 · 2 204 · 1 203 · 8	193 · 1 206 · 7 204 · 1 206 · 0 204 · 2 203 · 8	194.6 209.1 204.1 206.0 204.4 200.7	197 · 9 209 · 1 208 · 5 211 · 0 205 · 7 200 · 8	198.5 209.4 203.6 209.2 207.0 200.8	199'1 209'4 203'6 208'1 207'0 199'2	200 · 2 207 · 6 203 · 6 206 · 6 207 · 0 198 · 4
2 2 2 2 2 2 2 3 3	5 6 7 8 9	193.7 192.9 186.8 184.3 187.0 181.5	194.5 191.9 184.5 182.9 185.7 183.0	191.0 188.5 183.0 180.9 183.8 184.5	193°3 188°5 182°7 179°5 182°7 184°3	193.0 186.3 178.3 178.3 182.7 182.6	193.0 186.1 176.9 177.2 178.0 179.1	193.4 184.0 177.5 178.1 178.3 177.2	194.4 180.7 178.4 178.1 178.3 177.7	194.4 179.1 178.9 178.9 178.3 179.6	196.7 180.6 178.9 179.4 178.3 183.2	194.6 182.0 177.5 179.7 179.1 185.9	194.6 183.0 178.4 180.3 181.4 191.6
ourly Me	eans	200.36	199.77	199.36	198.71	197.92	197.77	197.58	198:30	200.15	200.36	201.23	201.8
			0	59.8		0		L FORCE M		_0 }	. 0	0 1	
2	$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	59°5 60°6	59°6 60°6	91.0	60°0	60°2	60°3 62°6	60°4 63°0	60°4 63°6	60°8	61°0	61.0 64.6	61°2
2 2 2 2	3 4 5 6 7 8	59.0 60.8 61.6 57.7 58.8 61.4	59.4 60.8 61.6 58.5 60.0 61.2	60°0 61°0 61°0 58°7 60°4 61°0	61.2 60.6 61.6 58.9 60.8 61.0	62.0 61.0 62.0 59.1 61.6 61.0	63°0 61°4 62°3 59°6 62°0 61°2	63°3 61°4 62°4 59°8 62°6 61°5	63°2 61°6 62°0 60°0 62°4 61°4	63.6 61.6 61.6 60.0 62.8 61.4	64.0 62.3 62.0 60.0 63.8 61.0	64.4 62.5 62.1 60.2 63.4 61.0	65 · 2 62 · 6 62 · 2 60 · 4 63 · 0 61 · 0
7 V 12 13 14 15 16 17 17 17 17 17 17 17 17 17 17 17 17 17	1 2 3 4 5	52.7 54.2 56.9 61.6 63.0 59.7	52.7 54.8 56.9 61.6 62.4 59.6	52.8 55.7 56.7 62.1 62.0 59.7	52°1 56°5 57°2 63°0 62°0 60°0	51.8 57.0 58.1 63.6 62.0 61.0	52°3 57°5 59°0 64°4 62°2 62°0	52.5 57.7 59.3 64.6 62.8 62.4	52.7 58.0 59.6 64.8 63.3 63.0	53°0 58°4 60°0 65°2 63°4 63°4	53°3 58°9 61°0 65°6 63°7 63°9	54.0 59.5 61.6 65.9 64.0 64.4	54.3 59.6 62.0 65.8 64.0 64.2
17 18 19 20 21 22 23 24	3   1   1   1   1   1   1   1   1   1	62.7 55.6 56.3 58.3 54.8 57.3	62:3 56:3 57:0 59:0 55:8 57:4	61.6 56.7 58.1 59.2 56.6 58.6	61.9 57.3 58.4 59.4 57.0 59.2	61.6 57.8 59.0 59.4 58.5 59.8	61.6 58.3 59.0 59.5 59.0 60.6	61.2 58.0 59.3 59.5 59.2 61.0	61:0 58:2 59:7 59:4 59:8 61:1	61.4 58.2 61.0 59.3 59.9 61.9	61.0 58.8 61.4 59.3 60.0 62.9	60 7 59 3 61 6 59 3 60 0 63 4	60.5 59.7 61.6 60.0 60.0 63.6
25 26 27 28 29 30 31		61.4 65.6 68.8 69.4 69.1 70.0	61.6 66.4 69.6 70.0 69.2 69.0	62.0 67.0 70.0 70.5 69.7 68.5	62.6 67.5 70.8 71.0 70.1 68.7	63.4 68.7 71.7 71.3 70.3 68.9	64.5 69.3 72.4 71.3 70.7 69.5	65°1 69°8 72°6 71°3 70°9 69°9	66:0 70:3 72:7 71:5 71:0 70:7	66'3 71'0 73'1 72'1 71'5 71'3	66.6 71.6 73.6 72.2 71.9 71.5	67:0 72:8 73:8 71:8 71:9 72:0	67.3 73.0 74.3 71.8 71.5 72.6
ırly Mea	-	60.65	60.80	61.17	61.55	62.03	62.2	62.75	62.98	63.31	63.68	63.93	64.07

ننبت				<del>_</del>	<del></del>	V:	ERTICAL	FORCE.	7	<u></u>	· <del></del>		· · · · · · · · · · · · · · · · · · ·
		One Scale	Division =	•000066 pa	rts of the V	. F. Incre	ase, in Scale	Divisions, c	orrespondin	g to 1° decr	ease of Tem	perature, 1 · 6	34.
	12h.	13h.	14h.	15h.	16h.	17 <sup>h</sup> .	18h.	19h.	20h.	21h.	22h.	23.	Daily and Monthly Means.
	Sc. Div. 201'2	Sc. Div. 201 5	Sc. Div. 200 8	Sc. Div. 200 7 193 9	Sc. Div. 200 7 193 3	Sc. Div. 201 2	Sc. Div. 198*9	Sc. Div.	Sc. Div.	Sc. Div. 199 2	Sc. Div. 199 2	Sc. Div. 199 2	Sc. Div. 200 39
	196.5 209.0	196.3	196.1	200.6	175.0	193.3	177·7 177·5	189.0	195°2 196°0	195·2 196·0	200.7	202·6 }	196°15 200°42
	210.2	208.9	205.5	205.5	203.9	192.9	193.9	194.9	194.7	197.8	198.7	201.3	202.13
	201.9 209.2	209.2	205.2	201.2	203.5	202.0	203.6	196.3	198.8	203.2	206.0	206.0	204.52
	206.5 207.0	204.4	202.1	201.7	201.2	199.0	198.9	200.1	200.1	200.3	200.9	200.7	201.51
. ·	218.7	218.7	223.7	229.4	214.5	202.7	207.5	208.0	209.2	210.3	209.6 184.6	209.6	211.67
	219.4	214.0	207.5	208.2	194.5 191.7	199.6	212.3	198.2	207.5	209'4	207.4	195.7 199.5	212.64
	205°2	204.2	195.7	190.0	193.6	193.8	191.7 192.9	197.9	200.4	200.4	201.3	195 5	203.82 196.32
	197.1	196.4	198.2	198.9	198.9	198.9	198.9	200.5	200.5	200.9	201.7	204.0	198.2
	194.6	194.6	195.4	195.4	197.3	197.5	204.8	207.3	205.9	205.6	205.1	205.2	199.56
	200.5	198.8	203.3	209.5	208.5	208.3	203.1	205.7	204.6	206.3	212.6	215.4	201.90
	204.7	204.7	204.7	206.3	209.4	205.6	193 <b>.</b> 4	202.7	207.2	204.3	196.3	208.4	206.60 203.15
	203.6 204.9	201 4	206.4	206.9	206.9	206.9	208.9	207.0	204.3	202.9	200.2	202 9	203 13
	206.3	206.3	206.3	206.3	206.3	206 3	206.0	206.5	206.5	206.5	195.6	206.7	205.60
	197.2	196.6	196.6	204.6	210.3	209.7	192.2	191 2	197.4	196.9	199.3	196.4	200.92
	194.6	192.6	190.2	190'1	190'9	190.9	190'3	190.3	190.2	191.1	192.7	192.3	192.63
	181.9	181.9	182.4	182.7	182.3	181.0	183.1	182.9	182.9	182.9	182.7	186.8	184.05
	177°5 180°3	177.0	177°0 180°3	177°0 180°2	177.9	177°3 181°7	177.6 182.5	180°0 183°4	180'9 184'2	179 <b>.</b> 4 183 <b>.9</b>	180°0 185°2	178.7 187.7	179 <b>·</b> 25 181·15
	182.2	182.7	182.9	179.9	174.3	177.1	174.4	179.2	182.1	180.6	174.3	176.1	179 99
,	185.6	185.5	185.7	190.9	167.9	167.6	170.2	180.0	185.0	180.4	181.9	180.9	181.32
	199'81	199.00	198.09	198.28	195.54	194.92	194.48	196.10	197.68	197.48	197.02	197.24	198:30
					TEMPE	RATURE O	THE VER	rical forc	E MAGNET.		!	'	
	61°2 64°6	61.3	6j.3	61.1	61.0	6j.0	6 <b>ì·2</b>	61°4	6j.3	6 <b>1</b> 2	6 <u>1</u> .0	60°8	60°75
	-	64.6	64.4	64.2	64.6	64.6	63.4	62.7	61.7	61.2	60.2	59.6}	62.85
	65.6 62.6	65.6	66.6	65.8	65.2	66.6	64.7	63.6	62.8	62.0	61.6	61.5	63.33
	62.5	62.8 62.2	62.6 $61.7$	62.8 61.7	62.6 61.6	62.4 60.8	62'0 60'4	60.0	61.8 59.6	61.6 59.2	61.4 58.5	61.2 58.2	61.19
į	60'4	60.4	60.7	60.4	60.0	59.8	59.7	59.0	58.8	58.7	58.9	58.7	59.52
	63'0	62.8	62'8	62.6	62.6	62.4	62.6	62.2	62.2	62.0	61.9	62.0	62.11
	61.0	61.0	61.4	61.4	61.5	61.6	57.3	56.8	56.2	55·7	55°3	54.7}	59.92
1	55.0	55.0	54.9	54.8	54.8	54.8	54.4	54.0	54.0	54.0	54.0	53.8	53.65
	60'4 62'8	60.6	61.8	61.8	61.2	60.4	59.4	59.2	58.8	57.8	57.5	57.4	58.50
	66.0	62.8 65.8	63.0 65.6	62.6 $65.4$	62'4 65'3	62.0 65.0	62.0	62°4 64°6	$\begin{array}{c} 62.2 \\ 64.5 \end{array}$	$\begin{array}{c} 62.2 \\ 64.5 \end{array}$	62.0 $64.5$	61.7 63.6	60.68 64.49
	64.6	64.2	63.8	63.1	62.6	62.0	64.8 61.8	61.6	61.2	60.7	60.2	60.0	62.24
	64.6	64.6	64'4	64.2	63.8	63 <b>.4</b>		 64·4	63.8	63.4	63.8	$\{-63\cdot 3\}$	62.97
	60.4	60.0	59.7	59.5	59.0	58.8	64°2 58°2	57.4	56.7	56.0	55°8	55.3	59.76
	59.7	59.5	59.5	59.2	58.2	58.2	57.8	57.5	57.3	57.6	57.5	56.0	58.02
	62.2	62.0	61.8	61.8	61.6	61.2	60.6	60.2	59.7	59.3	58.8	57.5	59.96
	59.8 59.8	59.6	59.4	58.6	58.3	58.0	57.5	57.0	56.4	55.8 57.6	55.4	54.8	58.43
	63.6	63.6	59.3 63.8	58.9 63.6	58.7 <b>6</b> 3.5	58·7 63·3	58 <b>·</b> 6	58 <b>·</b> 5	57.8	57.6 —	57.4	$\frac{57.7}{61.2}$	58·47 61·68
	67.2	67.3	67.8	67.8	67.4	67.2	62.6 66.8	62.4 67.2	62°2 66°6	62.0 66.6	61.6 66.1	61 · 2 <i>f</i> 65 · 6	65.72
	73.0	73.2	72.6	71.5	71.2	71.0	70.2	70.1	69.9	69.6	69.2	68.6	70.12
	74.5	74.7	74.3	74.2	73.6	73.6	73.1	72.0	71.4	71.0	70.2	69.4	72.31
	71'8 71'3	71'9	72.1	72.1	71.6	71.1	70.8	70.4	70.2	70.0	69.4	68.3	70.99
	72.6	70°8 72°6	70.5 72.2	70.9 $72.3$	72.3 $72.0$	72°3 71°5	72.3	72:3	70.8	70.5	71.2	$\frac{71.2}{69.4}$	71.02 70.84
-	64:04						71.2	71.5	71.2	70:5	70.2		
	64.24	64.17	64.15	63.95	63.74	63.23	63.01	62.70	62.27	61.95	61.71	61.51	62.76

	Oı	ne Scale Div	rision = •00	0066 parts	of the V.F.	VERT	ICAL FOR	CE.	sponding to	1º decrease	of Tempera	ture, 1 • 64.	
Mean G gen T	öttin- )	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> •	5 <sup>h</sup> .	6 <sup>h</sup> •	7 <sup>h</sup> •	8 <sup>h</sup> •	9 <sup>h</sup> .	10h.	11h.
	( 1 2 3 4 5 6 6	sc. Div. 183 '9 181 '9 192 '6 187 '7 189 '3 200 '9	Sc. Div. 183°0 184°9 192°1 187°1 188°2 200°8	sc. Div. 183'6 184'9 191'3 186'2 189'8 198'6	Sc. Div. 185 ' 5 184 ' 9 190 ' 4 186 ' 2 190 ' 2 195 ' 8	Sc. Div. 184'4 183'2 190'4 186'7 190'9 194'3	Sc. Div. 184°2 182°9 188°7 185°7 193°5 195°0	Sc. Div. 182 4 184 4 187 3 185 7 195 7	sc. Div. 183°1 185°7 180°6 186°5 194°9 196°5	sc. Div. 183°0 189°7 193°7 190°8 194°8 199°8	sc. Div. 183°3 195°1 193°4 190°1 194°3 194°4	sc. Div. 182 · 9 196 · 7 192 · 8 190 · 1 196 · 2 188 · 7	Sc. Div. 184'0 198'0 194'1 189'9 196'2 190'3
	7 8 9 10 11 12 13	207.8 197.8 199.8 199.5 193.7 195.1	205 · 2 197 · 1 198 · 7 192 · 0 192 · 8 192 · 1	204·1 196·3 197·3 191·5 190·7 186·8	200°1 199°7 195°7 190°4 189°1 187°8	196.0 195.5 195.6 188.0 188.1 186.7	195.2 194.3 197.2 186.7 188.1 185.2	195.0 195.6 194.1 185.3 189.0 184.2	195.9 196.2 192.7 186.1 190.4 184.3	195.8 195.9 192.0 187.8 191.2 186.6	195.7 194.9 191.6 187.8 191.0 189.0	195.0 195.7 191.2 187.7 192.2 190.4	194.0 195.7 191.1 187.8 191.9 190.4
JUNE.	14 15 16 17 18 19 20	181.4 178.8 183.8 181.0 180.0 183.3	184.7 174.4 186.2 182.6 179.7 183.3	187.4 181.5 185.4 183.2 181.0 184.5	188'9 179'1 186'8 183'5 180'3 184'5	183.4 186.7 186.8 182.0 179.9 184.8	181.9 183.4 184.2 182.2 178.9 183.8	186:1 182:7 187:0 180:0 176:5 183:0	186°1 184°5 183°5 180°0 176°8 182°9	184.9 184.3 183.5 180.0 177.0 184.1	186.8 187.7 182.7 182.3 176.2 186.3	187.5 190.0 182.7 181.5 175.4 186.9	184.7 188.0 181.3 179.0 174.1 186.9
	21 22 23 24 25 26 27	201.2 199.2 185.7 179.8 182.4 180.4	203.4 196.0 187.4 182.5 182.8 180.4	202.5 196.7 187.4 181.8 181.7 180.6	201.8 194.1 187.4 178.3 181.0 178.9	197.4 193.9 186.7 179.4 178.2 175.8	198.4 193.0 184.0 175.7 175.0 172.5	196.7 192.5 182.6 175.2 173.3 171.4	195°4 191°2 182°2 176°5 171°1 170°0	194.8 192.9 184.3 174.8 171.9 171.6	195.5 192.3 183.9 173.5 173.7	196.2 193.2 184.5 174.7 173.7	199.0 190.0 182.6 174.7 174.2 179.6
	28 29 30	180.3	179°9 172°5	180°5 174°5	180°5 173°4	179 <b>.</b> 4 170 <b>.</b> 9	179 <b>.</b> 4 167.2	178°1 168°3	175°6 167°0	176 <b>·</b> 9 168 <b>·</b> 7	179°6 168°7	176 <b>·</b> 4 168 <b>·</b> 7	175°3 170°0
Hourl	y Means	188'08	188.07	188.07	187.47	186.35	185.24	184.89	184'45	185.80	186.36	186.48	186.26
					TEMPERAT	_							
·	1 2 3 4 5 6	68.7 69.0 65.7 66.4 65.4 61.0	69.4 69.0 66.0 66.8 65.2 61.4	69.7 68.7 66.2 67.4 64.8 61.8	69°3 69°2 66°6 67°4 64°4 62°4	69·3 69·5 67·0 67·4 64·0 62·8	69.5 69.4 67.0 67.6 64.0 62.8	69.8 69.6 67.2 68.0 63.9 62.8	70°3 69°6 67°1 68°7 64°2 62°8	70°5 69°6 67°2 69°0 64°5 63°0	71°2 69°5 67°6 69°0 64°6 63°2	71°5 69°5 67°9 68°7 64°7 63°3	71°8 69°8 68°2 68°2 64°8 63°6
	7 8 9 10 11 12 13	59°3 61°0 63°4 65°6 63°6 63°4	59.5 61.0 63.6 65.5 64.3 63.5	59.7 61.1 64.3 66.0 64.6 64.0	60.6 61.8 64.6 66.6 65.1 64.0	61.6 63.6 65.3 67.3 65.4 64.4	62.8 64.2 65.8 67.6 65.7 66.0	63.7 64.6 66.3 67.8 66.0 66.4	63.4 65.0 66.6 68.0 66.0 66.8	63.7 65.4 67.4 67.7 66.0 67.0	64.3 66.0 68.6 68.0 66.0 67.2	64.8 66.6 69.2 68.2 66.0 67.4	65.5 66.6 69.5 68.4 66.4 67.2
JUNE.	14 15 16 17 18 19 20 21	66.6 69.4 67.6 69.3 71.5 70.6	66.6 69.6 67.6 69.1 71.5 70.6	66.6 69.5 68.0 69.0 71.5 70.0	67.4 70.3 68.5 69.2 71.4 70.5	68.8 70.5 69.3 70.0 71.5 69.8	69.5 70.6 69.5 70.7 71.8 69.7	70.0 70.5 69.5 71.5 72.5 69.6	70.5 70.5 70.4 72.1 73.3 69.7	70.9 70.5 71.0 72.5 74.0 69.5	71.6 70.7 72.0 73.0 74.7 69.4	72·2 70·7 72·5 73·2 75·2 69·2	72.6 71.0 72.6 73.5 75.5 68.6
	21 22 23 24 25 26 27 28	59°5 61°2 65°6 69°6 70°8 72°7	59°2 62°0 65°6 69°2 70°5 71°7	59.8 62.2 65.6 69.5 70.5 71.5	60.3 63.0 66.0 70.3 71.8	61.0 63.8 66.6 70.9 70.9 72.0	61.6 64.6 67.7 71.5 71.7 72.5	61.8 65.6 68.6 72.3 72.3 72.9	62.4 66.0 69.0 73.3 72.9 73.0	62.6 66.6 69.7 73.9 73.2 72.9	62.8 67.6 71.0 74.7 74.0 73.0	63.4 68.4 71.3 74.7 74.7 73.0	63.6 68.5 71.9 75.2 74.6 73.0
	29 30	71·2 74·4	71·1 74·0	71.0 74.6	71·4 74·6	71.6 75.6	72.6 76.0	72·8 76·0	73°4 77°0	74·0 77·0	74·4 77·2	74.7 77.5	75·2 77·9
Hourly	y Means	66.63	66.67	66.83	67.19	67.69	68:17	68.24	68.92	69.20	69.67	69.94	70.14

	One Scale	Division =	·000066 pai	ts of the V.		RTICAL For se, in Scale		orresponding	; to 1º decre	ase of Temp	erature, 1°6	4.
12 <sup>h</sup> .	13h.	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Daily an Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
185.0	187.7	170.7	174.9	177.0	181.1	179.0	176.9	176.9	178.6	171.0	171.0	180.58
194°3	188.0	191.1	188.6	184.7	186.9	193.9	191.5	182'9	185 <b>.8</b>	193.3	195.2	188.73
194°1	191.7	191.7	189.6	189°2	185.8	186.7	186.7	186.7	185.3	188.2	188.3	189.6
189.2	188.9	188.8	189.6	189.3	189'6	188.3	188.2	188.0	187.4	192.6	190.2	188.48
196.5	196.4	193.9	195.0	191'4	188.9	196.7	193.7	194.1	1 <b>9</b> 9°3	201.5	201.5	194.2
190'4	204.0	203.0	200.8	202.1	202.7	202.6	202.6	204.2	204.3	206.6	$_{207\cdot 7}\}$	199.2
197.4	198.9	198.4	204.1	199.0	178.8	202 0 195 <b>°</b> 3	193.6	195.0	169.2	199.1	194.2	195.9
196'8	198.2	193.9	193.8	196.8	194.5	195.9			196.8	198.4	199.9	
189.5	187.8	187.8	185'2	186.3	186.1	186.1	196.8	196.9		191.8	191.2	196°3:
		188.9	188.5	189.1			190.0	191.9	191.8			
187.7	187.8	191.2			189.1	187.5	190.8	190.4	193'1	193.7	195.7	189'4
191.8	191'8		191.2	192.4	192.4	193.6	193.1	192.2	195.9	194.5	196.9	191.9
191.4	192.5	192.0	193.6	193.6	193.7	70040					176.9	188.4
	10410	10116	101.5	15010	150.0	189'0	189.0	187.8	185.7	178.6	176.91	
184.6	184.2	181.6	181.7	178.6	176.3	177.1	156.4	160.8	170.4	181.4	183.0	180.8
190.0	185.9	186.0	184.3	179'3	182.4	179.8	171.4	180.0	181.3	176'6	181'4	182.4
180.0	180.7	180.0	179.4	179.9	179.9	180.6	180°4	180'4	177.1	179.9	182.2	182.2
180.0	177.5	178.1	173.4	176.4	176.4	170.5	162.4	164.8	179.5	179.5	180.0	178.1
173.7	173.7	174.7	174.4	174.4	174.4	176.8	178.2	178.2	178.2	181.0	181.8	177.3
187'9	187.9	187.9	189.2	190'0	190.8				i		— า∥	187.7
	—		l —			200.2	195.4	190.3	187.1	184 <b>.4</b>	199.9	
202.2	204.2	203.5	191.9	192.8	195.4	194'0	194.7	191.6	190.7	194.9	199.2	197:39
187.4	187.4	188.0	187.6	187 9	188.0	183.1	187.0	188.8	1 <b>8</b> 8.8	177.5	184.2	190.0
180'6	182.0	179.1	176.3	177.0	174.8	174.5	176.4	178.7	176.6	172.8	175.3	180.9
175.9	176.9	174.4	174.5	175.5	175.5	175.5	176.3	176.6	178.1	180.2	181.3	176.98
174.2	174.7	174.7	175.8	175.8	176.6	159.7	166.9	169.8	174.2	172.6	178.9	174.70
182.4	182.4	182.4	181.8	178.7	178.4						14	
						170.6	173.9	177.9	178.9	173.6	179.6}	177.24
174.2	173.7	175.8	176.8	175.3	176.4	175.8	178.6	177.3	176.7	175.4	175.4	177:28
169.3	168.6	169.3	169.0	167.3	166.8	168.8	168.8	170.0	170.0	171.3	175.4	169.74
		<u> </u>										
186.39	186.67	185.65	185.07	184.61	183.91	183.91	183.08	183.26	183.88	185.03	187.20	185.69
			<del></del>	ТЕМРЕН	ATURE OF	THE VERT	ICAL FORC	E MAGNET	•			
72°0	7 <b>i</b> 8	71.7	7 <b>1°</b> 9	71.7	71.5	71.2	70 <b>°5</b>	7 <b>0°</b> 3	7 <b>0</b> °0	69.7	69°4	70°58
69.8	69'1	69.0	69.0	68.0	67.8	67.9	67.5	67.0	66.7	66.4	65.6	68.59
68.8	68.8	68.8	68.2	68.4	68.0	67.6	67.8	67.6	67.6	67.2	67.4	67.5
68.0	67.8	67.7	67.8	67.5	67.3	67.0	66.7	66*4	66.2	65.8	65.8	67.4
64.9	64.9	64.8	64.6	64.0	63.8	63.2	62.6	62.1	61.8	61.6	61.4	63.9
63.6	63.2	63.4	63.6	63.0	62.5						111	
	002			00 0		60.0	59.9	59.8	59.5	59.3	59.3	61.98
65.4	65.6	65.6	65.1	64.8	64.4	63.7	62.8	62'5	61.6	61.0	60.6	63.00
67.1	67.5	67.4	67.2	66.6	66.0	65.5	64.8	64.4	64.0	63.6	62.8	64.7
69.2	69.5	69.2	69.0	68.8	68.6	68.4	67.6	67.2	66.7	66.6	65.4	67.1
68.6	68.6	68.0	68*2	68.1	67.7	67.6	66.6	65.8	65.0	64.6	63.6	67.0
66.4	66.6	66.4	66.0	65.6	65.4	64.9	64.6	64.4	63.7	63.1	63.0	65.2
67.0	66.6						UTU	UI 1				
J. U	00.0	66.6	<b>6</b> 6.1	65*7	65.2	68.0	67:5	67·1	66.9	66.2	66.0}	66.1
72.6	70.0	70.0	7010	70.0	71.0			70.7		69°7		
71.2	72.9	72.6	72.8	72.0	71.6	71.2	71.0		70.2		69.0	70.4
	71'3	70.8	70.8	70.3	70.2	70.2	69.2	68 <b>.</b> 5	68.0	67.8	68.2	70.0
73.0	73.0	72.7	72.5	72.5	72.0	71.6	71.0	70.6	70'4	70.2	69.5	70.7
73.7	74.2	74.2	74.2	74.0	73.5	73.0	72.9	72.7	72'0	71.5	71.2	72.0
75.7	75.2	75.0	74.5	74.4	73.7	73.3	73.1	72.5	72.0	71.4	70.8	73.1
68.1	67.7	67.4	67.0	66*5	66.3						59.6}	66.6
Coic				_	_	60.0	60.0	60.0	60.0	60.0	59.63	
63 6	63.6	63.7	64.0	64.2	64'1	63.8	63.2	63.2	62.6	61.8	61.2	62.4
69.5	69.6	68.8	68.6	68.2	68.0	67.4	66.8	66.6	66.4	65.6	65.1	66.2
72.3	72.4	72.7	73.5	73.3	72.9	73.0	72.5	71.5	71.1	70.7	69.9	70.1
75.5	75.3	75.1	75.1	74.6	74°4	73.6	73.0	72.4	71.9	71.3	71.0	72.8
74.6	75.0	74.9	74.5	74.4	74.2	74.0	73.7	73.7	73.5	73.3	73.0	73.1
73.0	72.8	72.6	72.4	72.4	72.3				<b>-</b>	l —	1	
	_	_				73*1	72.7	72.5	72.2	71.7	$\left \begin{array}{c} \overline{71.5} \end{array}\right\}$	72.4
	75.7	75.6	75.5	75.0	74.9	74.2	74.3	73.9	73.7	73.2	73.0	73.6
75 <b>.</b> 5								75.8	75.0			
75 <b>.2</b> 78 <b>.</b> 0	78.1	78.1	77*7	77.5	77'1	76.9	76.6	100	100	74.8	74.5	76.3

	Oı	ne Scale Div	vision = ·00	00067 parts	of the V. F.		ICAL FOI	RCE.	esponding to	1º decrease	e of Tempera	ature, 1°64.	-
Mean gen	Göttin- }	Oh.	1 <sup>h</sup> .	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{pmatrix}$	Sc. Div. 174.8 160.7 169.0 170.0	Sc. Div. 172 3 163 7 167 7 171 8	Sc. Div. 169 5 167 4 168 1 170 5	Sc. Div. 169 5 169 9 167 1 174 6	Sc. Div. 168 6 167 0 169 4 176 5	Sc. Div. 169 '7 169 '8 170 '8 176 '5	sc .Div. 170 '9 171 '0 172 '8 175 '5	Sc. Div. 163 8 172 5 174 3 174 7	Sc. Div. 165 7 174 3 176 3 175 0	Sc. Div. 165 ' 7 176 ' 0 175 ' 1 174 ' 6	Sc. Div. 167 '9 176 '0 179 '5 173 '0	sc. Div. 171 ° 0 175 ° 1 178 ° 8 172 ° 5
	5 6 7 8 9 10	144'4 180'5 180'7 179'7 172'7 161'3	166.5 181.2 183.0 177.9 170.9 163.4	166.1 179.5 185.5 176.3 169.1 161.5	170.7 179.0 184.3 175.0 166.4 156.4	171.5 180.4 182.0 172.2 163.8 157.5	172.7 177.8 181.2 172.3 162.0 158.4	171.0 176.4 180.2 168.9 160.6 160.3	172·3 174·8 178·5 169·3 161·7 160·3	173 · 4 177 · 4 177 · 7 173 · 3 160 · 4 163 · 3	172.8 179.3 177.8 174.5 158.6 164.3	175.5 177.2 179.8 175.0 159.0 171.9	179.0 175.3 179.8 175.6 158.3 177.8
JULY.	12 13 14 15 16 17 18	172:3 182:7 185:3 190:5 191:4 182:8	168.0 186.2 188.8 185.2 191.4 183.7	167:2 181:4 185:0 187:5 190:1 184:6	169°7 181°4 188°0 187°5 188°0 184°7	168.7 180.6 189.1 188.1 186.9 184.6	170.8 181.5 190.1 189.6 a 186.4 182.1	173.7 183.5 190.1 190.5 187.3 183.1	173.6 181.6 191.5 189.1 188.3 185.3	179'8 184'6 190'3 191'5 184'3 186'7	184.0 187.0 190.8 191.1 184.3 186.7	186'9 187'5 192'9 191'1 182'1 186'8	184°2 190°8 193°8 190°8 184°9 186°3
	19 20 21 22 23 24 25	180'4 177'2 176'8 170'2 175'3 182'9	178.5 176.0 177.2 172.9 175.9 180.5	177 · 3 175 · 0 177 · 2 173 · 0 175 · 5 180 · 5	176.0 174.5 176.2 171.0 174.9 175.6	175.0 172.9 178.0 169.7 172.3 172.1	175.0 169.1 177.9 169.8 173.6 171.4	176°0 168°4 177°0 168°9 173°3 171°6	173.5 168.4 175.2 167.9 176.5 174.4	175 · 4 167 · 4 174 · 2 169 · 9 179 · 8 180 · 2	175.5 168.3 174.0 173.1 178.7	173.9 168.8 168.3 173.4 183.5 178.4	172.7 170.0 172.7 174.1 183.2 176.4
	26 27 28 29 30 31	179.0 176.8 173.4 162.7 168.9	178.5 179.5 173.0 162.3 168.8	175 * 4 178 * 1 166 * 6 165 * 6 168 * 8	174.2 178.6 164.6 163.9 171.7	174.2 176.6 162.8 162.6 167.9	170 · 4 173 · 6 161 · 6 163 · 1 168 · 6	169°2 172°2 164°1 162°6 168°7	169°2 171°5 174°1 161°8 169°9	171 · 4 173 · 2 167 · 9 160 · 5 173 · 9	173.5 171.4 167.6 164.7 171.5	174 · 5 171 · 4 163 · 4 166 · 0 172 · 4	176.4 174.3 164.9 171.7 176.6
lourly	y Means	174.90	175.73	174.90	174.57	173.74	173.55	173.62	173.85	175.10	175.54	176.12	177:30
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	74·3 73·6 72·5	75°0 73°8 72°5	75°2 74°3 72°9	75°8 74°7 73°5	76.7 75.0 73.9	77°3 75°5 74°5	77.5 76.4 74.6	77°5 75°7 74°6	77°.9 75°.8 74°.6	78°3 75°9 74°7	78°3 75°9 74°8	78·1 75·7 75·0
	4 5 6 7 8 9 10	70°3  73°7 73°0 70°2 72°1 76°1 77°5	70.7 	71·1 74·5 72·2 69·6 73·0 76·6 78·2	71.6 	72.0 75.1 73.5 70.0 74.3 78.3 79.0	73.0 75.2 73.8 70.5 74.2 79.7 80.0	73.6 	74·3 75·6 74·0 71·1 74·1 82·0 80·8	74.5 75.8 74.2 71.5 74.1 81.6 80.9	75·3 76·8 74·3 72·8 74·5 82·6 80·7	75.7 77.3 74.9 73.5 74.2 83.7 80.3	75.8 77.9 75.2 74.0 75.0 83.2 80.3
JULY.	12 13 14 15 16 17 18 19	73.4 69.7 65.1 65.0 64.6 65.6	73.2 69.8 64.8 65.0 65.0 66.4	73.4 70.0 65.5 65.5 65.4 66.5	73.5 70.5 66.0 65.5 66.0 67.7	73.5 70.3 66.0 65.6 66.7 68.0	73.7 70.3 66.2 66.0 67.6 69.2	73.7 70.3 66.4 66.0 67.4 69.0	73.7 70.2 66.0 66.0 68.0 69.6	74.2 70.2 66.1 66.5 68.5 70.0	74.3 70.3 66.6 66.7 69.3 70.7	74.4 70.1 66.3 66.9 69.5 71.0	75.2 69.7 66.6 67.3 69.6 71.3
	20 21 22 23 24 25 26	71.4 72.5 72.4 72.1 73.7 70.5	71.5 72.5 72.0 72.1 73.8 71.3	71.5 72.8 72.0 72.5 73.4 71.5	72.0 73.5 72.3 73.2 73.0 72.0	72·5 74·0 72·5 73·7 73·0 72·8	73°1 74°0 72°7 74°0 73°0 73°3	73.7 75.5 73.0 74.3 72.5 73.5	74·2 75·6 73·5 74·5 72·5 74·0	74.4 75.9 73.7 75.4 72.3 74.8	74.7 76.5 74.3 75.8 72.5 75.1	75°3 76°5 74°5 76°1 72°5 75°5	75.5 76.5 74.7 76.3 72.5 76.0
	27 28 29 30 31	72.1 70.5 72.8 76.8 76.0	72'3 69'3 73'3 77'2 75'8	73.0 71.6 73.9 77.4 75.5	73:0 71:5 74:8 77:5 76:0	74.5 71.9 75.5 78.0 75.9	74.5 73.1 76.3 78.6 75.8	74.5 73.4 77.0 78.7 76.4	74·1 73·8 77·3 79·2 76·5	74·3 74·4 77·3 79·7 76·7	74.5 74.5 78.0 80.3 77.0	74.8 75.0 78.6 80.7 77.7	75:0 74:8 78:9 80:7 77:5
urly I	Vieans	71.76	71.88	72.18	72.60	73.04	73.2	73.83	74.01	74.27	74.70	74.96	75.12

<sup>\*</sup> Four minutes late.

<sup>&</sup>lt;sup>b</sup> Fifteen minutes late.

		One Scale	Division =	·000067 par	ts of the V		RTICAL F		orresponding	r to 1° decre	ease of Tem	perature, 1.6	54.
	12 <sup>h</sup> .	13h.	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19 <sup>h</sup> •	20h.	21h.	22h.	23h.	Daily and Monthly Means.
*	sc. Div. 172°7 178°4 181°5 174°2	Sc. Div. 176°3 178°4 181°9 174°3	Sc. Div. 171 3 174 6 180 9 172 3	Sc. Div. 175°6 174°3 176°7 174°7	Sc. Div. 176 4 175 7 170 5 174 8	Sc. Div. 175 6 172 6 166 6 175 0	Sc. Div. 173 '9 175 '0 149 '7	Sc. Div. 172°3 166°7 157°9	Sc. Div. 158°7 166°8 166°7	Sc. Div. 151'4 163'8 168'0	Sc. Div. 148'6 157'0 171'0	Sc. Div. 166 7 168 4 168 5	sc. Div. 168 '70 170 '63 171 '20
	176.8 176.6 179.5 175.2 159.8	178 · 1 179 · 2 175 · 5 173 · 8 161 · 9	171.7 179.5 175.5 171.9 162.4	173.5 179.3 174.5 171.9 161.2	166.2 179.3 174.3 171.8 162.3	171 · 2 179 · 4 176 · 2 172 · 4 160 · 8	170'9 171'4 179'4 172'4 168'I 160'8	173 · 1 157 · 4 178 · 9 172 · 3 169 · 5 160 · 0	167.6 167.7 179.8 170.4 170.2 155.4	164.0 175.4 180.3 170.7 168.3 152.5	167.6 177.7 181.0 178.8 172.0 145.2	163·2 } 180·0 181·0 180·0 173·5 157·3	172°37 170°96 178°85 177°94 172°86 160°96
	169.5 	167.5 	167.5 174.6 186.5 190.0 188.9 183.5	162.2 175.6 184.9 188.2 189.6 184.4	164.1 174.5 178.0 187.8 190.2 185.0	158.9 169.1 181.2 184.7 190.0 184.4	163.7 169.1 172.9 179.4 190.4 185.9	163.7 168.3 176.6 181.8 189.7 189.5	165 · 2 169 · 4 176 · 2 189 · 1 176 · 1 187 · 5	164.7 170.5 184.7 192.2 178.6 186.9	161'3 164'5 186'7 193'2 183'3 180'3		163 · 94 173 · 15 183 · 12 189 · 12 188 · 24 186 · 07
	186.4 	185°1 172°9 170°4 172°8 173°3 183°8	181 · 9  173 · 2 170 · 4 172 · 2 170 · 1 184 · 7	180°4 	180.0  172.6 170.9 173.5 170.5 b 178.5	180°0	170°1 165°7 163°3 180°4 169°7 177°7	169 8 153 7 164 4 173 0 171 2 173 7	158.4 160.4 165.7 168.5 171.7 175.0	174'0 165'0 166'0 170'6 171'7 177'6	174.6 165.6 172.0 162.4 173.0 174.5	179.4 } 165.9 171.3 166.1 175.0 182.1	180.73 171.42 170.12 173.64 171.47 178.06
	173 · 1  173 · 8 171 · 6 167 · 2 173 · 4 171 · 9	172°3 173°8 170°8 171°3 169°8 171°9	171°3  174°8 169°0 171°1 163°5 177°4	170°3 174°4 169°1 165°2 155°7 169°4	171.0 171.0 168.9 165.2 154.6 170.3	170°9 164°9 170°9 165°7 154°6 170°3	173°5 163°8 171°6 163°7 156°2 158°4	170.6 166.4 170.9 160.6 156.5 162.6	168 ° 0 163 ° 4 171 ° 9 160 ° 9 165 ° 4 157 ° 3	168'3 161'7 170'2 161'1 166'5 154'9	166.7 178.5 170.7 161.1 166.5 169.5	170.4 } 178.2 171.2 166.1 167.7 174.3	173.71 172.25 172.67 165.97 163.25 169.00
	176.23	176.53	175 25	173.89	173:39	172.68	170.26	169:30	168.64	169.61	170.49	173.70	173.72
6	77.9	77.5	77.1	76°6	темре 76°2	76'0	75.8	75.5	75°0	75°0	74.4	7å·9	76 <sup>°</sup> 37
ž.	75°9 75°0 76°4	75°8 75°0 76°6	76.0 74.4 75.8	76.0 73.8 75.4	75.6 73.5 75.0	75 · 2 73 · 5 74 · 6	74·5 73·0	74·3 72·2	74·2 71·6	73.8	73·7 70·8	72.4 70.2	74.99 73:42
	77.7 75.2 74.4 75.8 82.5 80.1	77.5 75.0 74.4 76.1 82.1 80.0	77'0 74'5 74'6 76'4 81'8 80'0	76.7 74.3 74.5 76.1 81.5	76.5 74.0 74.2 75.8 80.5 80.0	76·2 73·2 73·7 75·5 80·4 79·7	75°9 75°5 72°6 73°4 75°5 80°0	75.6 75.2 72.4 73.2 75.0 79.7	74'9 74'9 72'0 72'7 74'8 79'4	74.5 74.4 71.7 72.5 74.7 79.2	75.0 73.8 71.6 72.3 74.9 78.8	73.9 73.0 70.8 71.8 75.0 78.4	74·23 75·60 73·40 72·31 74·65 80·13
	75.2 69.7 66.9 68.0 69.8 71.5	75°0 69°2 67°0 68°0 69°7	74.9 69.0 67.0 67.6 69.5	80°3 74°9 68°6 67°0 67°3 69°2	74·3 68·2 66·6 67·0 69·0	74.0 67.8 66.6 66.7 68.6	76.6 73.7 67.5 66.3 66.2 68.0	76.5 73.0 67.0 65.3 65.8 67.1	75.8 72.4 67.0 65.0 65.4 66.6	74.9 71.7 66.4 64.5 65.0 66.5	74.0 71.2 66.0 64.4 64.6 66.4	73·2 71·2 65·3 63·8 64·0 65·6	78.57 73.65 68.88 65.92 66.15 67.65
	75.8 76.3 74.7 76.4 72.5 76.0	71.5 75.6 76.0 74.5 76.4 72.5 76.2	71.5 75.5 75.7 74.7 76.3 72.5 76.2	71.0  75.5 75.3 74.1 75.9 72.7 76.2	70.7 	70.0 75.0 74.8 73.0 75.2 72.5 75.8	72.0 74.5 75.0 72.9 74.9 72.3	71.6 74.3 74.5 73.0 75.1 72.0	71.6 74.0 74.2 73.1 74.8 71.6	71.6 73.6 74.0 72.7 74.5 71.2	71.0 73.0 73.5 72.5 74.0 71.2	70.5 } 72.8 72.8 71.5 74.0 70.5	69.98 73.95 74.71 73.25 74.71 72.45
	75.0 75.0 78.5 80.7 77.5	75.2 75.0 78.5 80.5 77.3	74.5 75.0 78.5 80.1 76.5	74.3 75.3 78.5 80.0 76.2	74.0 75.1 78.7 79.5 76.2	73.7 74.8 78.5 79.3 75.9	74.6 73.2 74.3 78.2 78.7 75.4	74.0 72.3 74.3 78.0 78.5 74.7	73.5 72.0 74.2 77.8 78.0 74.1	73.0 71.6 74.5 77.3 77.5 73.6	73.0 71.0 74.7 77.0 77.0 73.4	72.5 70.8 74.2 76.7 76.4 72.5	74.05 73.51 73.76 77.08 78.79 75.84
	75.50	75.11	74.91	74.71	74.41	74.08	73.72	73.33	72.98	72.63	72.34	71.77	73.63

	<del></del>			<del></del>	<del>_</del>		CAL FOR			-0.7	4.55		
	On	e Scale Div	ision = '00	0067 parts o	f the V. F.	Increase, i	n Scale Div	isions, corre	sponding to	1º decrease	of Tempera	ture, 1'64.	
Mean G gen T	öttin- }	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> •	3h.	4 <sup>h</sup> •	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> •	9 <sup>h</sup> .	10h.	11h.
·	1	Sc. Div. 174.9	Sc. Div. 175°0	Sc. Div. 171 4	Sc. Div. 171 5	Sc. Div. 170 5	Sc. Div. 169°3	Sc. Div. 173 6	Sc. Div. 170°7	Sc. Div.	Sc. Div. 174.5	Sc. Div. 175°9	Sc. Div. 177°8
	2 3 4 5 6 7 8 9	177'3 167'8 167'9 163'2 143'7 158'2	170.6 171.3 167.4 162.1 153.3 157.2	174.7 170.0 165.5 159.7 156.2 164.4	172.9 169.7 164.6 158.8 158.5 165.4	171.8 167.6 162.6 159.3 162.3 167.7	170.6 166.8 161.8 158.8 165.7 171.6	170°8 165°4 161°8 157°0 165°4 171°6	172.0 164.6 161.8 159.1 166.5 172.3	171 · 4 165 · 7 160 · 3 158 · 2 165 · 7 175 · 0	169°0 164°0 159°8 159°7 180°9 179°6	169.0 162.3 161.7 159.3 169.2 175.8	170.7 162.0 157.5 164.3 167.9 171.0
JST.	10 11 12 13 14 15	169.8 182.8 182.0 169.8 170.7 161.4	169°8 182°0 180°8 164°4 174°1 168°1	174.8 179.6 179.8 159.7 166.2 169.9	176.8 178.7 179.8 162.6 165.0 169.5	176.2 175.5 177.3 164.5 166.5 168.5	175.8 a 174.8 172.2 165.5 167.5 c 169.5	176.4 175.0 172.2 165.8 166.8 169.5	174.8 173.3 173.5 166.7 166.8 170.7	172.5 174.6 177.8 167.2 172.9 169.9	174.0 175.9 177.1 168.7 176.0 169.6	173 · 4 173 · 1 179 · 7 167 · 2 181 · 1 172 · 3	173 · 4 174 · 5 182 · 6 166 · 0 173 · 1 175 · 7
AUGUST.	16 17 18 19 20 21 22	174.5 181.2 182.2 184.4 186.1 178.1	176.5 182.7 186.2 184.1 185.0 176.2	176 · 2 183 · 1 186 · 2 184 · 9 183 · 7 b 178 · 2	175°3 181°9 185°7 184°9 181°4 175°3	174 · 2 180 · 3 186 · 2 182 · 5 179 · 8 175 · 2	174.0 178.7 186.3 185.3 177.9 174.6	175°5 180°9 187°0 184°1 176°5 174°7	178.0 182.8 185.5 183.6 175.0 175.9	176.9 182.5 184.9 183.6 177.5	177.0 181.7 187.6 184.4 179.4	175.5 183.2 186.4 184.4 179.0 184.0	175°0 183°2 185°3 184°4 181°8 183°4
	23 24 25 26 27 28 29	182°1 174°7 182°6 181°5 176°2 175°0	178 · 9 184 · 6 181 · 6 179 · 2 178 · 3 171 · 7	179 ° 9 183 ° 8 179 ° 8 178 ° 9 175 ° 9 170 ° 5	177 · 2 181 · 0 176 · 9 177 · 7 174 · 7 169 · 2	174 · 4 179 · 2 174 · 9 175 · 3 174 · 4 169 · 0	173 · 2 178 · 1 174 · 0 172 · 7 173 · 3 167 · 0	173 · 5 176 · 8 172 · 1 169 · 5 175 · 3 168 · 6	175°4 178°3 172°1 169°1 177°4 170°9	170°3 179°7 173°0 174°5 176°9 170°6	177.5 177.8 171.9 179.3 174.2 172.2	182 · 1 176 · 7 171 · 4 183 · 7 189 · 3 176 · 7	190°8 180°8 171°8 199°6 188°8 175°4
	30	171.9	171.0	168.0	166.8	166.7	165.2	164.7	163.8	163.6	163.7	164.8	162.3
Hourly	Means	173.85	174.31	173.88	173.15	172.39	171.93	171.94	172.33	172.76	174.42	175.28	176.12
					TEMPERAT	URE OF TH	IE VERTICA	AL FORCE I	MAGNET.				
1	<u> </u>	72°2	73.3	73°·5	7å·7	74.4	74.9	<b>7</b> 5°1	75°0	75°5	76°1	76°0	76°3
	2 3 4 5 6 7 8 9	71'3' 73'0 76'3 78'2 76'5 75'5	71.5 73.5 76.5 78.1 76.0 75.2 — 71.9 70.0	72.0 74.0 77.0 78.0 76.3 76.0 — 71.6 70.2	72.5 74.3 77.7 78.5 76.5 74.5 — 71.7 70.5	73.0 75.0 78.7 79.7 77.5 74.3 — 72.6 71.3	73.7 76.0 80.3 80.3 77.5 74.5 — 73.3 72.0	74.7 76.5 80.2 80.6 78.3 74.7 74.0 72.8	75°3 77°5 80°5 80°7 79°0 75°5 — 74°2 73°0	76:0 78:0 81:0 80:8 79:3 75:5 74:3 73:2	77:0 79:0 81:6 81:0 79:5 75:8 	77.0 79.5 82.0 81.4 80.0 75.7 	77.2 80.0 82.2 81.4 80.4 75.7 75.7 74.2
AUGUST.	12 13 14 15 16	70.0 74.0 73.5 73.0	70°3 74°0 73°5 73°6	70°3 74°3 74°0 73°7	70.8 74.3 74.9 74.3	72·3 75·0 75·2 75·0	73.0 76.0 76.0 76.0	73 7 76 5 76 2 76 5	74.3 77.1 76.5 77.0	74.8 77.5 76.7 77.2	75.5 77.0 77.0 78.0	76°2 77°3 77°3 78°5	76·3 77·7 77·5 78·5
AUG	17 18 19 20 21 22 23	71.5 68.3 65.7 67.5 67.0 70.6	71.6 68.3 66.0 67.3 67.3 70.4	71.6 68.5 66.3 67.0 68.0 70.3	72·3 68·7 66·3 66·7 68·2 70·2	73.0 69.2 66.5 66.8 69.0 70.2	73.5 69.5 67.0 67.0 70.0 70.7	73.7 69.4 67.3 67.0 70.5 71.0	73.7 69.2 67.5 67.0 70.6 71.2	73.7 69.3 68.0 67.5 71.0 71.3	74.0 69.5 68.4 67.6 72.0 71.7	74.2 69.8 68.3 68.0 72.2 71.7	74·2 70·0 68·5 68·3 72·7 71·7
	24 25 26 27 28 29	68.5 66.7 69.5 69.5 70.8 71.7	68.7 67.4 69.5 69.8 70.5 71.9	68.8 68.2 70.5 70.3 70.5 72.3	69.4 69.0 70.7 71.1 70.7 72.7	70°5 69°7 71°0 71°8 71°0 73°5	70.8 70.0 71.6 73.0 71.7 74.4	71·1 70·5 72·0 73·5 72·0 75·1	71:1 71:0 72:5 74:0 72:7 75:2	72.4 71.3 73.0 74.2 73.3 74.8	72.5 72.0 73.5 75.0 74.3 74.7	71.7 72.3 73.7 75.0 74.5 74.4	71.6 72.8 73.5 74.5 74.5 74.0
	30												
		72.3	72.2	73.2	74.0	74.6	75.0	75.2	76.0	76.5	77.0	77.5	77.5

<sup>&</sup>lt;sup>a</sup> Fourteen minutes late.

	One Scale	Division =	'000067 pa	rts of the V		RTICAL F se, in Scale		orresponding	g to 1° decre	ase of Temp	perature, 1 • 64	
12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> •	16 <sup>h</sup> .	17h.	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Daily an Monthly Means.
Sc. Div.	Sc. Div. 1	'Sc. Div.	Sc. Div. 170°9	Sc. Div. 171.5	Sc. Div. 171'9	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
10 2						157.8	156.1	161.0	161.6	164.9	172.9	170.41
70.9	174.8	169.3	166.2	168.0	168.0	169.4	165.2	169'1	170.4	169.7	168.9	170.48
63.2	160.3	161.3	162.4	160.3	161.9	162.7	162.5	162.5	162.5	163.6	167.0	164 49
60.2	156.7	158.7	158.6	158.6	158.6	159.0	159.6	157.8	157.8	158.9	159.0	160.6
59.9	168.1	159.0	140.3	114.8	91.9	151.4	152.5	150.6	80.0	106.4	143.8	147 4
	167.5	160.4	161.7	139.9	149.6	144.6	90.8	128.7	150.2	140.4	150.8	154.4
65.2	170.4	169'4	170.2	160.3	165.8	144 0	90 0	120	100 0	110 1	<i>i</i> 11	
70.8	170 4	103 1	1700	100 0	100 8	145.6	162.7	161.1	165.5	163'6	169.0}	166.8
	176.6	177:3 ь	176.3	173.7	160.2	161.8	162.0	169.9	169.6	177.8	180.7	172.7
72.0								168.7	175.5	179.3	179.8	174.5
70.1	170'6	175.2	169'1	169.3	175.0	176.1	161.0			145.3	162.0	170.2
77.8	170.5	171.3	171.3	168.4	166.7	155.4	160.8	154.9	147.7			
66.0	166.0	166.5	167.0	167.0	152.5	146.4	129.3	162.6	162.0	165.3	170.8	162.8
69.7	167.8	169.8	161.8	147.8	164.6	136.7	151.3	140.0	149.3	162.9	161.3	163.7
71.4	167.9	169*4	163.1	163.6	134.3						164.0}	163.3
	<u> </u>	<u>-</u>	<u> </u>			144.7	136.1	158.7	158'9	154'0	164.03	
75.9	173.0	174.7	170.0	176.2	176.6	175.0	175.0	178.7	180.1	180.1	179.8	175.9
82'3	183.2	185.0	184.0	183.3	177.0	183.1	184.0	183.0	182.4	183.3	185.0	182.4
85'3	183'8	184.2	184.8	185.2	184.6	183.8	173.8	178.4	183.7	182.9	184.7	184.3
84.4	183.7	183.8	183.4	184.6	183.9	183.9	184.3	183.5	182.5	176.9	184.7	183.7
79.1	179'1	178.0	175.7	174.5	174.0	172.7	168.0	167.9	172.7	176.3	178.2	177.4
80'4	181.6	180.0	179.1	179.1	179.1	l —		1			18	170.5
	102					178.3	179.4	180.1	180.2	181.4	181.7}	178.7
86.2	186.5	184.6	174.1	187.0	183.2	171.7	176.2	176.2	178.3	179.6	177.9	179.0
78.9	179.2	178.2	181.2	182.8	176.7	175.0	170.2	177.9	177.6	170.9	174.9	178.1
	171.8	172.4	175.3	169.6	169.3	171.3	169.9	173.4	169.6	173.1	173.1	173 4
71.5						164.8	168.2	168.2	172.3	172.4	176.4	176 0
93.3	176.7	173.1	173.0	174.5	171.6		162.5	162.9	168.6	167.7	166.8	172.0
76'2	171.1	170.0	155.7	155.6	167.9	169.7	102 0	102 9	100 0	101 1	_ #1	
76.9	182.7	180.7	179.9	177.6	172.1	1.001.0	10417	105.5	167.8	170.4	$ \frac{-}{171.9}\}$	172.13
						163.9	164.7	165.5			168.6	165.00
163.2	165.2	161.8	162.4	164.8	165.1	165.6	167.8	166'9	166.8	168.8	<del></del>   -	165.8
174.23	173°40	172.28	169.93	167.62	165.47	164.25	161.32	165.71	165.15	166.77	171.30	170.8
0						THE VERT	ICAL FORC	E MAGNET.	0 1	0	0 11	
76°3	76°2	75°7	75°5	75°3	7 <b>5°</b> 3	74.3	73.7	73.1	72.8	$\frac{-}{72 \cdot 2}$	$\{-72.5\}$	74.54
76.6	76.8	76.6	76:5	76.4	76.1	75.5	75.5	74.7	74.5	73.7	73.3	74.89
			76.5		79.2	78.7	78.2	78.4	78.0	$77 \cdot 2$	76.5	77.60
80.5	80.7	80.0	79.5	79.3			81.0	80.6	80.5	79.8	79.2	80.3
82.3	82.5	82.3	82.0	81.8	81.5	81.0	80.7	78.8	79.2	79.5	79.0	80.5
81.4	81.5	81.4	81.2	82.5	81.8	81.0			77.9	76.5	76.2	
80.4	80.3	79.7	79.5	79.5	79.0	78.7	78.2	79.0	11 9	10.0		78.4
75.6	75.4	76.0	75.7	75.5	75.2	<del></del>	70.0	70:0	$\frac{}{72\cdot7}$	72.5	$\frac{1}{72\cdot 0}$	74.7
						73.3	73.5	73.2				
75.7	75.5	74.5	73.7	73.5	72.7	72.5	72.0	71.2	71.0	70.1	69.6	73.0
74.3	74.2	73.7	73 1	73.2	72.3	72.8	71.3	71.2	71.0	70.6	70.3	72.19
76.5	76.0	76.4	76.4	76.3	75.9	75.5	75.2	74.7	74.7	74.7	74.3	74.3
77'8	78.0	77.8	78.0	78.2	78.0	77.2	76.8	76.1	75.5	75.2	74.5	76.4
77.6	77.5	77.3	78.5	78.0	76.3	76.1	75.7	75.2	74.7	74.2	73.6	75.9
78.7	79.0	78.8	78.5	78.5	78.5	<b>—</b>	. —				71.5}	75.7
	_	_				73.0	72.8	72.5	72.2	71.7	71.53	
74'3	74.0	73.6	73.0	72.4	71.5	71.1	70.8	70.4	70.0	69.6	69.2	72.3
70.0	69.8	69.6	69.5	69.3	68.6	68.2	67.8	67.6	67.5	66.9	66.5	68.7
68.2	68.2	68.2	68.2	68.3	68.2	68.3	68.0	67.6	67.7	67.9	67.8	67.6
68.4	68.2	68.5	68.2	68.3	68.3	68.0	68.0	68.0	67.6	67.5	67.1	67.6
$72 \cdot 7$	72.7	$\frac{00.2}{72.7}$	72.6	72.5	72.5	72.2	71.9	71.4	71.2	71.2	71.2	70.9
71.7	71.7	71.3	71.3	71.1	71.0	,20				-		
· <u>_</u> '	11 /	110	11.0	111.	110	70.8	70.7	70.5	70.0	69.5	$\frac{-}{69\cdot 2}$	70.8
72.0	70.0	70.0	71.0	71.0	71.0	70.8	. 69.5	69.3	69.0	68.2	67.5	70.5
72.6	72.3	72.2	71.8	71.6			71.3	71.2	70.7	70.2	70.0	70.9
73.5	73.0	73.0	72.7	72.2	72.2	72.5		$\begin{vmatrix} 71 \cdot 1 \end{vmatrix}$	70.7	70.5	70.2	71.9
	73.7	73.3	73.5	72.7	72.1	71.7	71.5			70.5	71.5	$\frac{71.9}{72.8}$
74.5	74.5	74.2	74.4	74.1	73.9	72.5	71.9	71.7	71.6			
74.7	74.8	76.1	76.0	75.5	75.2	75.0	74.9	74.7	73.9	73.8	73.1	73.5
73.8	73.2	73.5	73.4	73.0	72.8			——————————————————————————————————————	70.0	F0.0	$\{-\frac{1}{72\cdot 8}\}$	73.5
1	I		l —		. —	74.4	74.0	73·3 75·4	73·3 74·8	73.3	72.83	75.6
77.5	77.3	77.2	77.0	76.7	76.2	76.0	75.7	10 ±	170	74.6	144	10 0

	Or	ie Scale Div	ision = '00	0066 parts	of the V. F.		FICAL FO		sponding to	1° decrease	of Tempera	iture, 1°64.	
Mean ( gen T	Göttin-}	O <sup>h</sup> .	1 <sup>h</sup> •	$2^{ m h}$ .	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6h.	7h.	8h.	9 <sup>h</sup> .	10h.	11h.
	1 2 3 4 5 6	Sc. Div. 169°1 165°9 163°6 142°5 153°1	sc. Div. 165°5 165°9 163°6 141°7 152°4	Sc. Div. 166°5 165°0 162°8 149°2 154°3	sc. Div. 165 '7 164 '1 162 '7 156 '2 157 '9	Sc. Div. 164.0 160.9 162.0 161.9 162.5	Sc. Div. 161 1 159 7 162 5 164 1 167 5	Sc. Div. 160 5 159 5 162 4 166 9 169 3	sc. Div. 160°5 159°2 163°4 167°3 192°5	Sc. Div. 161'1 159'7 165'9 168'2 180'6	Sc. Div. 161 1 159 6 165 3 168 6 193 6	Sc. Div. 161'1 158'0 165'5 169'7 182'4	sc. Div. 160'9 157'1 164'2 172'6 174'3
œ	6 7 8 9 10 11 12	170.4 155.4 176.9 183.6 139.2 164.9	168 · 1 156 · 1 179 · 0 182 · 1 156 · 5 169 · 2	166 · 1 157 · 7 178 · 1 182 · 1 159 · 8 167 · 0	164.3 157.5 177.3 180.5 168.1 165.7	163.5 161.8 174.7 178.3 174.6 169.8	163.5 168.8 178.8 179.2 173.6 167.0	163.5 176.4 180.8 178.0 179.8 168.4	161.5 178.9 181.2 179.7 184.6 169.1	161.2 186.5 183.2 182.7 179.3 171.6	159°8 189°0 186°4 184°0 178°4 169°7	159°8 177°3 185°4 184°6 180°9 176°1	159°0 173°1 184°4 184°8 177°8 171°7
SEPTEMBER.	13 14 15 16 17 18 19	164.3 165.0 183.4 176.4 184.6 186.6	163.4 165.0 184.1 178.1 184.2 186.1	164.2 166.8 182.9 178.6 185.3 186.1	166.3 167.2 180.4 179.5 184.4 183.8	166°3 169°6 179°1 181°0 183°7 182°9	166.3 h 170.3 178.7 181.2 183.3 181.9	167.8 170.3 179.6 182.0 182.4 181.9	168.6 174.4 180.2 183.3 181.7	166.7 176.6 180.9 184.4 182.7 181.9	165:3 177:7 181:4 185:4 182:2 183:8	165.9 176.6 180.1 188.0 181.5 181.7	166.4 177.6 180.1 187.2 180.3 180.0
	20 21 22 23 24 25 26 27	183.9 114.6 193.0 176.8 179.1 187.5	182 1 134 8 194 9 178 9 187 3 189 3	182.0 147.2 193.3 177.5 187.7 190.9	182.5 172.8 191.8 177.4 185.5 188.8	182.8 194.2 189.9 177.6 188.0 189.6	182 8 198 9 188 4 180 0 187 4 189 3	184.4 212.8 186.4 178.8 189.5 188.3	188°3 236°0 185°3 182°3 191°2 187°4	189 ° 9 236 ° 5 187 ° 7 183 ° 8 188 ° 6 190 ° 2	196.6 227.7 184.4 183.7 188.6 189.6	189.9 222.6 184.4 184.1 189.1 188.5	187°2 213°2 185°0 182°4 188°7 190°6
	28 29 30	196°1 192°4 186°3	197·1 192·4 187·0	196.6 192.3 186.0	195.4 190.6 182.5	194.0 188.2 182.5	193 <b>·5</b> 185 <b>·4</b> 180·6	194.4 184.8 180.2	196.4 184.9 180.2	196.8 184.8 180.1	194.2 182.0 181.4	193.5 184.4 182.5	191.5 184.4 182.7
Hourly	Means	171.29	173.38	174.08	174.96	176.28	176.68	178.04	180.76	181.52	181.65	180.2	179.12
<del></del>					TEMPERAT		1	AL FORCE	MAGNET.		ı i		ı
	1 2 3 4 5 6	78.7 75.5 76.8 74.5 75.5	74·0 75·9 76·6 75·0 75·7	74·3 75·7 76·4 75·2 76·0	75.0 76.0 76.2 75.4 76.4	75.7 76.5 76.3 75.3 77.2	76.3 77.3 76.5 75.9 77.2	77°0 77°8 76°5 76°1 77°4	77°6 78°5 76°5 76°2 77°1	78·3 79·0 76·5 76·5 77·4	78·5 79·3 76·5 76·9 77·5	79°0 79°5 76°5 77°0 77°7	79°0 79°7 76°1 77°0 77°7
<b>R.</b>	7 8 9 10 11 12 13	74.5 75.0 67.5 66.8 68.4 73.2	75.0 74.8 67.5 66.5 68.7 73.3	75.5 75.5 68.0 66.9 69.0 74.2	76.5 75.5 68.1 67.5 69.7 74.9	77.0 75.5 68.7 67.5 70.5 75.2	77.5 75.5 68.7 68.5 71.2 75.9	78.0 75.5 68.7 68.6 71.7 76.0	78.8 75.6 68.5 68.7 72.3 75.8	79.5 75.7 68.5 68.2 73.0 75.4	80.0 75.4 68.6 69.0 73.6 75.3	80°3 75°0 68°7 69°3 73°7 75°0	80°3 74°3 68°6 69°5 74°0 75°2
SEPTEMBER.	14 15 16 17 18 19 20	74.0 73.1 65.5 65.7 64.2 63.7	74.0 72.5 65.5 65.5 63.9 64.0	74'3 72'5 66'0 65'3 63'7 64'6	74.5 72.5 66.6 65.0 64.4 65.0	75°5 72°3 67°3 65°0 65°1 65°7	76.6 72.3 67.6 65.5 65.6 66.5	77.0 71.7 67.6 65.5 66.0 66.8	77.3 71.5 67.6 65.5 66.5 67.7	78.0 71.5 67.8 65.5 66.6 68.5	78.5 71.7 68.3 65.6 67.3 69.5	78°5 71°5 68°5 65°6 67°5 69°5	78.5 71.7 68.4 65.5 67.7 69.8
	21 22 23 24 25 26 27	65.5 66.0 61.8 69.3 63.7 60.2	65°1 64°8 61°8 68°2 63°0 60°3	64.6 63.7 62.6 68.0 63.0 60.3	64.4 63.4 63.1 67.7 62.5 60.7	64.5 63.5 63.6 67.7 62.5 61.2	64'3 63'7 64'6 67'7 62'3 61'8	64.2 64.0 65.2 68.1 62.3 62.0	64.6 64.0 66.1 68.0 62.0 62.5	64.7 64.5 66.6 68.0 62.0 62.4	65.2 65.4 67.3 67.6 62.3 62.5	65.4 65.7 67.9 67.6 62.5 62.7	65.5 65.6 68.5 67.5 62.8 62.7
	28 29 30	56'9 60'3 62'5	56.7 60.5 62.9	57.0 60.9 63.7	57.2 61.0 64.6	58'0 61'6 64'6	58.5 62.7 65.4	58.9 63.4 65.6	59·3 63·6 65·7	59.4 64.0 66.5	60.0 64.5 67.0	60.5 64.5 67.3	60.6 64.5 67.3
fourly	Means	68.22	68.14	68'34	68.61	68.88	69.44	69.68	69.90	70.15	70.21	70.65	70.69

<sup>•</sup> Forty minutes late.

b Thirteen minutes late.

		D'-!-!	.000000			ERTICAL				4.57		
	One Scale	Division =	= .00000ee ba	arts of the V	. F. Increa	ase, in Scale	Divisions, o	correspondin	ng to 1° decr	ease of Tem	perature, 1°	64.
12h.	13h.	14 <sup>h</sup> .	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
\$c. Div 160°8 157°1 164°9 172°5 175°5	161 7 157 3 164 9 172 6	Sc. Div. 161'9 159'2 164'7 173'5' 162'8	sc. Div. 161 '8 159 '4 164 '7 168 '4 151 '2	Sc. Div. 164'0 159'5 164'7 165'3 159'2	Sc. Div. 163 '9 160 '7 164 '7 165 '6 164 '2	Sc. Div. 163 '9 160 '2 143 '0 162 '5	sc. Div. 163 2 160 1 164 8 142 6	sc. Div. 162 '6 158 '7 151 '2 140 '4	sc. Div. 164'1 159'0 129'8 139'7	sc. Div. 162 6 163 1 144 2 140 6	sc. Div. 164*1 163*6 159*7 143*6	sc. Div. 163°11 160°52 160°22 159°01
159 1 171 4 183 1 184 8 176 2 171 6	171.4 181.9 184.7 170.7	159°2 174°0 182°4 180°4 167°3 168°4	159°0 173°3 182°3 — 172°8 166°2	161'9 173'4 182'3 179'6 158'9 166'7	161.6 170.6 182.3 180.0 163.1 167.7	166.5 159.1 174.0 182.3 180.0 164.3	165.5 150.7 174.9 183.7 178.6 165.5	167°1 152°2 174°9 182°8 169°8 153°0	168:2 149:1 175:0 182:2 159:9 133:5	167 1 154 5 176 5 182 2 158 5 156 5	170.4 } 153.6 174.6 183.5 174.0 168.8 159.5 }	167.75 160.01 171.77 181.55 178.69 166.80 164.89
165 °8 175 °6 180 °3 187 °2 180 °3 178 °9	5   175·2 180·3 187·7 180·4	166°5 175°5 180°1 187°7 181°7 176°8	163.5 175.5 182.3 185.6 181.5 178.0	156'8 180'9 182'3 185'6° 180'3 178'8	159.5 177.0 178.7 185.5 181.4 177.7	162.7 a 126.6 176.9 176.4 185.7 182.7	159.8 153.9 179.6 181.1 185.6 184.2	133.9 154.6 179.6 181.0 186.2 184.3	144.0 159.1 180.9 179.9 182.7 185.2	157.8 145.2 180.9 178.6 184.4 179.6	165.7 181.6 173.7 184.0 180.7	161 '44 174 '85 180 '23 183 '87 182 '44 180 '22
187 7 210 3 190 2 182 7 189 7 189 3	3   196.4 2   184.2 7   181.5 7   189.7	203 · 9 193 · 9 182 · 1 180 · 7 190 · 4 186 · 6	203.7 192.4 180.8 180.1 189.4 186.6	189.6 188.8 185.7 180.6 184.9 186.6	191 5 183 3 180 6 181 4 186 4 186 6	177.5 200.0 168.6 179.1 181.4 180.7	167.8 167.5 186.3 178.8 182.9 181.8	176°1 182°6 184°5 177°2 183°5 181°8	177.0 151.2 181.0 180.2 183.5 178.4	180.7 131.2 180.6 175.4 182.7 169.4	180.7 129.3 191.8 175.6 179.1 185.4	182.09 190.38 184.77 180.93 185.78
191 · 5 184 • 4 180 · 5	184.5	192°1 184°5 184°4	192°2 183°8 186°6	191'9 184'5 183'4	192.5 186.0 182.1	189°3 192°0 185°9 183°0	185.1 192.2 186.7 176.3	191.2 192.4 187.4 177.0	193.6 192.2 187.1 180.3	195.9 192.3 185.9 182.0	195·2 } 192·0 186·0 181·3	193.55 186.51 182.22
178.9	00 178.05	177.72	176.84	176.01	175.95	173.24	173.05	171.77	169.11	169.55	172.98	175.88
				TEMPER	ATURE OF	THE VERT	CAL FORCE	E MAGNET.				
79.0 79.5 76.0 76.7 78.0	79.7 76.0 76.5	78.5 79.5 76.2 76.5 78.5	78.5 79.0 76.0 76.5 78.2	78.1 78.8 75.5 76.5 78.2	77.8 78.5 75.3 76.4 77.0	76.5 78.3 75.5 76.3	77°0 78°1 75°5 76°1	76·8 77·6 75·5 76·2	76·7 77·2 75·5 76·2	76·7 77·2 75·5 76·0	76.7 77.3 74.8 76.0 - 74.5}	77.06 77.97 76.03 76.12 76.70
80.0 73.7 68.6 69.5 74.4 75.0	73.7 68.5 69.6 74.5	80°0 73°3 68°3 69°7 73°3 75°2	80°0 72°6 68°3 — 74°0 74°7	79°3 72°0 68°2 69°5 74°2 74°5	79.0 71.0 67.8 69.4 74.2 74.3	75.4 78.4 71.0 67.6 69.0 73.7	75·3 77·6 70·0 67·3 69·0 73·5	75.0 77.3 69.4 67.1 69.0 73.2	74.8 76.3 69.0 67.0 69.0 73.1	74.6 76.0 68.5 67.0 68.7 72.5	75.8 68.1 66.7 68.5 72.5	78.05 73.15 68.02 68.61 72.45
78.7 71.7 68.1 65.5 67.7 69.7	78.8 71.0	78·8 70·6 67·7 65·6 67·7 70·2	78.6 70.3 68.0 65.5 67.4 69.5	78.6 70.0 67.8 65.0 67.2 69.4	78.4 69.5 67.5 65.0 67.0 69.0	75°3 77°7 69°1 67°4 64°7 67°0	75.7 77.0 68.8 67.0 64.5 65.5	75.7 76.3 68.5 67.0 64.5 65.4	75.5 75.5 68.0 66.6 64.5 65.0	75.5 74.7 67.3 66.0 64.4 64.7	74.5 73.8 67.4 65.7 64.0 64.4	75.03 76.82 70.71 67.23 65.18 66.04
65.5 65.6 68.6 67.0 62.0 62.5	65.5 65.4 70.0 67.0 61.7 62.5	65.2 65.5 70.3 66.5 61.7 62.5	64.8 65.0 70.5 66.5 61.5 62.5	64.6 64.8 70.0 66.3 61.5 62.4	65.0 64.5 70.5 66.0 61.3 62.2	68.0 64.8 64.5 70.0 66.0 61.2	68 0 65 0 64 0 69 7 65 2 61 0	68:0 64:8 63:7 70:1 65:0 60:7	67.8 64.5 63.5 70.0 64.7 60.6	67.4 63.8 63.3 69.8 64.5 60.6	66.5 66.4 62.6 69.5 65.7 60.5	67.70 64.91 64.45 67.42 66.91 61.88
61.0 64.6 67.3	61 · 2 64 · 6 67 · 0	60°8 64°7 66°8	60°8 64°6 66°8	61.0 64.5 66.5	60.6 63.8 66.4	58.7 60.4 63.7 66.2	58.5 60.5 63.5 65.5	58.7 60.8 63.2 65.5	58°3 60°5 63°0 65°3	58.0 60.4 63.2 64.9	57.5 60.5 62.9 64.6	60°98 59°65 63°24 65°66
70.61	70.70	70.52	70.40	70.17	69.90	69.48	69.18	69.04	68.77	68.21	68.36	69.54

<sup>&</sup>lt;sup>c</sup> Four minutes late.

	On	e Scale Divi	sion = .00	0066 parts o	of the V. F.		CAL FORO		esponding to	1º decrease	of Tempera	ture, 1 • 64.	
Mean Gö gen Ti	ittin- }	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	4h.	5 <sup>h</sup> .	6 <sup>h</sup> ·	7h.	8h.	9h.	10h.	11h.
	1 2 3	Sc. Div. 183 2 184 7 198 4	Sc. Div. 184.7 184.7 199.2	Sc. Div. 185°2 189°0 198°9	Sc. Div. 189°5 191°6 196°4	Sc. Div. 186.5 191.6 194.7	Sc. Div. 186.7 191.0 194.5	Sc. Div. 186°3 193°1 195°7	Sc. Div. 187 4 198 3 191 7	Sc. Div. 181'9 198'3 193'8	Sc. Div. 189 5 208 5 192 3	Sc. Div. 189 8 204 4 191 3	Sc. Div. 189 8 205 5 191 2
	4 5 6 7 8 9	197'4 192'4 189'3 159'3 186'7 174'4	198.7 192.0 189.3 134.7 186.7 176.7	197.7 192.1 190.9 140.3 185.4 181.8	196.3 189.7 186.9 172.6 184.3 184.9	195°2 190°4 184°9 182°9 184°5 191°6	192°1 190°4 184°9 183°4 184°5 195°4	190°4 189°5 184°2 188°5 187°0 198°4	190°3 190°9 187°5 193°8 185°3 197°2	189°9 190°3 193°0 186°8 186°7 198°0	189.6 191.8 194.4 186.3 186.7 196.7	188'9 190'8 190'9 186'3 188'2 195'7	187.5 190.5 190.1 187.7 188.9 195.0
OCTOBER.	11 12 13 14 15 16 17	195.5 190.7 197.6 198.7 197.6 197.7	193 · 2 190 · 5 198 · 4 197 · 7 198 · 0 198 · 8	193.4 191.6 197.7 200.0 199.1 201.2	193 · 2 191 · 2 196 · 4 196 · 6 199 · 5 202 · 1	191.7 192.3 195.3 195.7 199.0 201.9	191.5 a 192.0 195.5 195.6 198.5 201.1	191.5 191.6 197.3 196.8 197.6 200.6	193 · 2 195 · 5 196 · 9 198 · 4 198 · 8 200 · 6	194'9 196'0 196'9 197'9 197'4 202'4	190°9 196°7 196°9 196°2 198°1 202°3	191.8 198.4 196.0 194.7 196.2 201.1	190°7 197°8 196°2 194°0 195°1 198°3
.0C.	18 19 20 21 22 23 24	209.5 205.8 205.5 197.7 213.5 208.8	209.5 204.7 205.2 200.4 213.7 208.8	207.4 204.7 206.5 200.9 213.8 208.7	208·3 203·0 205·2 202·5 214·6 207·0	206·1 b 201·5 204·4 202·7 214·5 204·2	204.0 201.3 204.0 201.8 211.0 203.6	205 · 6 201 · 5 203 · 7 211 · 4 211 · 0 203 · 6	205 · 2 201 · 3 203 · 0 202 · 6 211 · 0 203 · 2	204·4 202·6 204·3 207·2 211·9 204·7	205 · 4 202 · 6 202 · 8 208 · 7 208 · 7 204 · 8	206.5 204.0 206.2 208.8 209.0 199.6	217.5 206.6 207.0 210.5 208.6 204.4
Nov.	25 26 27 28 29 30 31	209.0 196.3 201.4 204.2 203.0 207.5	208.5 197.7 204.2 204.7 200.9 208.6	208.5 198.3 200.9 203.9 202.8 208.8	209·2 198·5 202·2 204·2 202·1 208·8	207.4 197.8 202.8 202.8 204.5 208.9	206°3 197°2 201°5 202°8 204°5 208°2	205 · 1 197 · 2 202 · 1 201 · 4 204 · 2 208 · 2	203·3 196·7 202·1 201·5 204·2 208·2	203.6 197.2 202.5 202.5 204.8 209.4	201.7 198.8 200.5 202.5 205.3 209.4	200°1 197°3 200°5 202°5 205°6 209°4	201'3 198'5 201'7 200'6 206'2 209'4
Hourly	Means	196.21	195.93	197:39	197.66	197.62	197.16	197.91	198.08	198.49	198'82	198.30	198.91
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	64.4 59.0	63.8 53.8	63°4 58°6	63°3 58°6	62°7 58°5	62°.8 58°.5	63°0 59°0	62.8 59.1	63°5 59°2	63°4 59°3	63°6 59°5	62°5 60°0
	4 5 6 7 8 9	57.0 57.0 58.6 60.8 66.4 64.0 59.5	5 .5 57.0 58.6 60.9 65.6 64.0 59.3	56.0 57.8 58.8 61.5 65.8 64.0 59.1	57.1 57.6 60.5 62.5 65.6 64.3 59.6	57.5 57.6 60.3 63.5 66.0 65.3 59.3	57.7 58.7 61.0 64.0 66.3 66.0 59.3	58.5 59.6 61.4 64.5 66.3 66.3 59.0	59.0  60.1 62.3 65.1 66.3 66.6 59.2	59.0 60.6 62.5 65.5 66.2 66.1 59.4	59°3 61°5 63°0 65°7 66°0 65°6 59°3	60.0 62.0 63.3 66.0 66.0 65.0 59.5	60.0 -62.5 63.2 66.5 65.6 64.3 59.5
OCTOBER.	11 12 13 14 15 16 17 18	56.5 61.0 56.0 57.0 56.4 56.7	56.9 60.8 56.3 57.0 56.5 56.2	66.5 60.6 56.3 57.0 56.5 55.7	58.8 60.5 56.8 57.8 57.2 55.2	59°2 60°2 57°2 58°2 56°4 55°0	60°0 60°3 57°7 58°2 57°1 55°2	60.0 60.3 58.0 58.2 57.5 55.3	60.5 60.0 58.2 58.3 57.9 55.4	60.6 59.6 58.2 58.2 57.9 55.4	61.5 59.2 58.6 58.7 58.3 55.3	61.7 59.0 59.0 59.1 58.7 55.4	61.8 58.7 58.8 59.0 59.0 55.2
)	19 20 21 22 23 24 25	48.9 53.1 51.4 55.7 48.4 50.1	49°1 53°0 51°6 55°0 48°3 50°2	52.0 52.7 52.2 53.3 48.0 50.2	50°2 52°6 51°6 53°4 47°6 50°6	51.0 53.2 52.2 53.3 47.6 51.6	51.5 53.5 52.4 53.8 48.1 52.0	51 · 9 54 · 2 53 · 0 53 · 2 48 · 4 52 · 0	52.0 54.4 53.1 53.0 49.0 52.6	52.4 54.4 53.1 52.6 49.0 52.8	53.0 54.5 53.6 52.4 49.5 53.4	53.2 54.5 53.5 52.3 50.0 53.8	53.6 54.3 53.2 52.2 50.2 54.2
	26 27 28 29 30 31	50.0 57.0 53.4 52.2 51.3 49.2	50.0 56.8 53.0 52.0 51.3 49.0	50.0 57.0 54.0 51.5 51.1 49.0	50°2 56°2 54°0 51°6 50°6 49°0	50°4 56°2 53°0 52°1 50°7 48°7	51.4 57.0 52.9 52.4 51.0 48.5	52.0 57.2 52.7 53.1 51.1 48.7	53.0 57.3 52.3 53.3 51.4 48.4	53.4 57.4 52.6 53.7 51.3 48.2	54.2 57.8 53.2 54.0 51.4 48.2	54.5 57.6 53.8 54.0 51.8 48.2	54.3 57.2 54.2 54.4 51.6 48.4
TAOA.											-		

<sup>&</sup>lt;sup>2</sup> Twenty-five minutes late.

	One Scale	Division =	*000066 pai	ts of the V.		RTICAL For se, in Scale		orresponding	g to 1º decre	ease of Tem	perature, 1°6	<b>54.</b>
12h.	13h.	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17b.	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Daily an Monthl Means
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 188'9	Sc. Div. 190°0	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 188 1	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div 186 8
190'3 214'3	224.4	202.2	184.7	187.9	180.4	178°3 184°4	187 <b>·</b> 9	176.8	194.7	189.6 192.6	184.4 192.4	194.2
191.7	192.2	192.2	193.7	194.0	193.4	101 1	170 0		131	132 0		
101 1	_			_		195.8	196.1	196.4	196.6	198.1	198.1}	194.8
187.2	188.1	188.6	188.7	189.1	189.1	190.1	191.1	191.1	190.4	187.8	189.2	191.0
187.2	189.2	188.2	188.4	187.8	185.6	183.9	186'9	186.5	186.3	182.4	182.8	188.5
190.5	190.5	197.2	156.0	171.6	164.7	126.9	165.6	156.8	163.9	179.6	175.6	179°3
190.5	190.5	189.3	184.8	180.5	180.8	172.9	166'1	177.1	181.2	185.9	185.6	179.4
188.9	188.9	186.8	197.0	190.3	181.0	178.3	168'4	159.2	164.0	169'4	169.9	182.3
195.0	194.1	188.3	187.8	190.3	190.4						193.9	190.2
		10111	70010			199.5	201.2	191.0	176.6	172.3	193.9	
191.4	191.1	191.1	189.8	191.1	191.1	190.2	189.0	191.3	191.7	188.2	190'4	191.5
198'0	201'1	201.4	195.8	198.8	198.0	196.2	192.6	195.4	195.4	197.5	196.6 197.5	195.4
198.6	198.7	195.9	196.6 198.8	196.6	196.7	196'9 196'7	198.4	198.4	199.2	198.3		197.2
195'1	199.5	199.5 191.4	192.1	189°1	193.5 193.8	198 7	195'7 192'9	198'4 196'0	196°3 197°5	194.0 196.9	195.0 196.5	196°4 196°2
195°1 197°8	196.2	198.9	201.2	204.0	203.7	195 /	192 9	190 0	197 0	190 9	190 0	
101 0				201 0		209.8	209.2	209.3	211.2	207.6	209.5	202.8
225.2	236.5	216.6	215.0	197.8	204.7	205.6	206.1	206.1	200.7	200.6	205.8	208.7
204.0	204.3	204.8	204.8	204.9	204.9	204.9	204.9	204.9	206.3	205.3	205.2	204.1
206.3	204.4	204.5	203.9	204.3	205.1	201.4	204.8	203.6	203.4	186.7	193.0	203.2
211.8	210.7	210.7	207.4	206.8	210.1	210.0	208.0	207.3	203.2	204.7	208.5	206.4
208.7	207.3	208.1	208.1	208.4	204.3	205.3	205.2	207.1	208.6	208.7	208.8	209.5
203'1	206.1	205.6	198.9	204.9	205.4	<u> </u>				_	— Z	205.4
	-					207.4	207.2	206.9	206.9	206.9	209.0}	
201.5	200.5	198.9	199.5	199.2	198.9	198.6	199.6	198.9	198.1	196.3	196.2	202.1
198.5	198.5	195.4	199.2	198.9	198.2	191.9	195.0	197.6	199.0	199.2	201.8	197.7
201.8	202.6	204.2	203 2	202.3	202.2	204'1	202 1	202.1	200.3	200.6	202.9	202.1
201.0	201.6	202.5	202.4	202.5	195.2	201.1	201.1	204.9	204.4	204.2	203.8	202.4
206'9	206'9	208.5	210.5	208.6	208.7	205.2	200.1	201.5	206.2	206.2	207.0	205.1
210.9	209.3	210.2	210.3	210.3	210.4	208.8	208.4	208.0	207.0	205.7	206.6}	208.7
199.68	200.62	198.91	196.56	196.45	195.57	194.01	194.84	194.84	195.46	195.03	196.54	197.1
				TEMPE	RATURE OF	THE VERT						
62°4	62.1	6i°8	61°5	6 <u>1</u> °1	60.6	60°4	60°2	60°0	59°·7	59°2	59°0	61°9
60.0	60.0	59.8	60.3	60.0	59.2	58.8	58.6	58.4	58.0	57.7	57.0	59.0
59.8	59.8	59.5	59.5	59.5	59.4				_	_	า∥	58.1
		—			ļ <del></del>	56.7	57.0	57.2	57.2	57.0	56.8	
62 6	62.6	62.4	61.8	61.4	61.4	61.0	60.7	60'4	60.0	59 7	59.2	60.2
63 2	63.0	62.8	62.7	62.7	62.7	62.5	62.0	61.8	61.7	61.5	61.0	61.7
66.5	66.5	66.3	66.8	67.0	66.6	66.6	66.4	66.5	66.4	66.2	66.0	65.1
65.5	65.5	65.1	65.0	64.9	64.7	64.6	64.6	64.5	64.5	64.5	64.6	65.4
63.8	63.2	63.1	63.0	63.1	62.6	62.1	61.9	61.7	61.4	60.8	60.0	63.6
59.8	60.0	60.0	59.7	59.0	58.9	57·2	57.2	57.2	57.2	57.3	56.7}	58.8
61.8	62.0	62.0	61.9	61.7	61.5	61.2	61.5	61.2	$\frac{37.2}{61.2}$	61.0	61.0	60.9
58.2	58.0	57.8	57.4	57.3	57.2	57.2	57.1	56.9	56.9	56.7	56.0	58.6
<b>58.3</b>	58.5	58.1	58.0	57.6	57.4	57.1	57.4	57.3	57.3	57.5	57.4	57.6
59.0	58.3	58.0	57.8	57.8	57.5	57.2	56.9	57.0	57.0	57.0	56.8	57.7
59.2	59.2	59.5	59.8	60.0	59.8	59.7	59.5	59.0	58.2	58.2	57.3	58.3
54'8	54.7	54.2	54.5	53.8	53.2		_	- 1	_	_		
	ļ <u> </u>				<u> </u>	49.2	49.0	49.0	49.2	49.0	$\frac{-}{48.7}$	53.5
53.4	53.4	53.2	53.2	53.0	53.0	53.0	53'0	52.7	52.7	52.7	53.1	52.3
54.2	54.0	53.6	53.1	53.0	52.7	52.4	52.7	52.5	52.2	$52^{\circ}2$	51.8	53.2
54.2	54.4	54.4	55.2	55.2	55.0	54.5	54.2	54.6	54.4	54.6	54.7	53.6
51.7	51.4	51.2	51.0	50.8	50.3	50.2	49.5	49.2	49°2	49.2	48 4	51.7
50.2	50.6	50.8	51.0	50.8	50.5	50 <b>°5</b>	50.6	50.3	50.2	50.2	50.0	49.5
54.0	53.8	53.6	53.2	53.2	53.0		<u> </u>	<u> </u>	<u></u>	40:0	50.0}	51.8
54·5	54:6			===		50.2	50.0	50.0	50.0	49.9	50.0) 56.8	53.7
56.7	54.6 56.9	55·2	55°3	55°3	55.4	55.5	55.8	$56.2 \\ 55.2$	56°3 55°0	56.6 54.5	56.8 $54.2$	56°4
54.0	53.8	56 <b>·3</b> 53 <b>·</b> 6	56.7 53.0	56.3	56.1	55.7	$55^{\circ}4$ $52^{\circ}4$	$52 \cdot 2$	52.0	52.0	54.2 $52.2$	53.0
53.8	53.8	53.6	53.4	53.0	52.9 52.8	52·4 52·8	52 4 52 8	$52 \cdot 2$	51.9	51.7	51.3	52.8
51.4	51.2	51.5	51.0	50.6	50.3	50°2	49.8	49.7	49.2	49.4	49.2	50.7
O1 T	48.4	48.4	48.2	$\frac{30}{48}$ .2	48.0	<u> </u>	_	_		_	$\left \begin{array}{c} -13 & 2 \\ 51 \cdot 6 \end{array}\right\}$	49.0
48'4	1	ļ				<b>=</b> ^.^	PO.0	20.1	F1.0	~~.~	F1.0 (	10 0
	57.40	57.26	57:17	<u>-</u>	56.78	50.0	50.5	50.4	55.95	51.3	55.29	56.6

NOVEMBER.	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Sc. Div.  206 5 196 7 194 8 197 7 203 6 203 3 — 198 0 188 4 189 3 192 7 191 8 193 7 — 196 6 195 3 101 6	Sc. Div. 206'2 196'4 195'6 201'5 203'6 201'1 — 196'9 189'0 189'3 192'7 191'5 195'1	2h.  Sc. Div.  202 '7 195 '6 193 '9 202 '9 203 '6 202 '8  195 '0 189 '4 189 '3 194 '3	3h.  Sc. Div.  200 '3 194 '4 193 '7 200 '7 203 '2 202 '1 196 '4 190 '4	sc. Div. 200 '5 195 '7 193 '9 199 '3 200 '0 200 '8 — 193 '9	sc. Div. 199'9 194'4 193'9 197'0 198'6 198'8	sc. Div. 201 5 194 7 194 4 196 8 197 9	Sc. Div. 200 5 194 7 194 9 195 4	Sc. Div. 202.8 194.7 194.9	9h.  sc. Div.  204 1 194 9 193 7	10h. Sc. Div. 206 '8 194 '9	Sc. Div.
NOVEMBER.	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	206.5 196.7 194.8 197.7 203.6 203.3 	206'2 196'4 195'6 201'5 203'6 201'1 	202'7 195'6 193'9 202'9 203'6 202'8 	200'3 194'4 193'7 200'7 203'2 202'1  196'4 190'4	200.5 195.7 193.9 199.3 200.0 200.8 — 193.9	199'9 194'4 193'9 197'0 198'6	201.5 194.7 194.4 196.8 197.9	200.5 194.7 194.9	202.8 194.7 194.9	204·1 194·9	206.8 194.9	203.9
NOVEMBER.	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	196'7 194'8 197'7 203'6 203'3 — 198'0 188'4 189'3 192'7 191'8 193'7 — 196'6 195'3	196'4 195'6 201'5 203'6 201'1 	195.6 193.9 202.9 203.6 202.8 	194.4 193.7 200.7 203.2 202.1 — 196.4 190.4	195 '7 193 '9 199 '3 200 '0 200 '8 ————————————————————————————————————	194'4 193'9 197'0 198'6	194.7 194.4 196.8 197.9	194.7 194.9	194.7 194.9	194'9	194'9	
NOVEMBER.	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	196'7 194'8 197'7 203'6 203'3 — 198'0 188'4 189'3 192'7 191'8 193'7 — 196'6 195'3	196'4 195'6 201'5 203'6 201'1 	195.6 193.9 202.9 203.6 202.8 	194.4 193.7 200.7 203.2 202.1 — 196.4 190.4	193'9 199'3 200'0 200'8 — 193'9	193 <b>'</b> 9 197 <b>'</b> 0 198 <b>'</b> 6	194'4 196'8 197'9	194.9	194.9			10011
NOVEMBER.	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	194'8 197'7 203'6 203'3 — 198'0 188'4 189'3 192'7 191'8 193'7 — 196'6 195'3	195'6 201'5 203'6 201'1 	193'9 202'9 203'6 202'8 	200'7 203'2 202'1  196'4 190'4	199'3 200'0 200'8 — 193'9	197 <b>.</b> 0	196°8 197°9			193.7	100.	193.1
NOVEMBER.	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	203.6 203.3 	203.6 201.1 	203.6 202.8 	203 · 2 202 · 1 196 · 4 190 · 4	200.0 200.8 193.9	198.6	197.9	195.4	10~0		193.7	193.7
NOVEMBER.	7 8 9 10 11 12 13 14 15 16 17 18 19 20	203·3	201·1 196·9 189·0 189·3 192·7 191·5	202'8 195'0 189'4 189'3 194'3	202'1 	200.8				195.0	194'6	194'0	194.0
NOVEMBER.	8 9 10 11 12 13 14 15 16 17 18 19 20	198.0 188.4 189.3 192.7 191.8 193.7 — 196.6 195.3	196'9 189'0 189'3 192'7 191'5	195°0 189°4 189°3 194°3	196°4 190°4	193.9	198-8		199.0	199.8	198'8	198'8	195'9
NOVEMBER.	9 10 11 12 13 14 15 16 17 18 19 20	188.4 189.3 192.7 191.8 193.7 ————————————————————————————————————	189.0 189.3 192.7 191.5	189'4 189'3 194'3	190.4			199.5	199.5	201.3	203.9	206.1	205.2
NOVEMBER.	11 12 13 14 15 16 17 18 19 20	189°3 192°7 191°8 193°7 ————————————————————————————————————	189°3 192°7 191°5	189°3 194°3			190.6	191.2	192.1	192.2	192.4	191.3	189.7
NOVEMBER.	12 13 14 15 16 17 18 19 20	192.7 191.8 193.7 — 196.6 195.3	192 <b>.</b> 7 191.5	194.3	100*0	189'0	185.2	185.5	184.4	185.3	185'3	185.3	186.7
NOVEMBER.	13 14 15 16 17 18 19 20	191.8 193.7 ————————————————————————————————————	191.5		190.2	190'9	189.3	188.7	188.6	192.0	191'1	191.6	190.5
NOVEMBER	14 15 16 17 18 19 20	193.7  196.6 195.3		20415	194'6	194.9	192.9	191.8	192 <b>.</b> 9	193 <b>.</b> 7	198.7 194.6	192 <b>·7</b> 193 <b>·1</b>	192.9
	15 16 17 18 19 20	196.6 195.3	195 1	194.5	194°1 196°1	195 <b>°</b> 0	194 <b>'</b> 8 195 <b>'</b> 6	195'0 195'9	195 6	195.9	195.8	195 1	193.1
	17 18 19 20	195'3		— 196.0	_	<b>—</b>	<b>—</b> ,		·		_		-
	18 19 20		196.3	196.1	195.0	193.7	192.4	192'9	194.6	194.5	194.5	194.5	195.0
	19 20		195.3	193.3	193'3	190.7	189.6	189.6	196.7	206.4	201.5	192.7	194'8
	20	191.6 193.5	196 <b>'</b> 1	195 <b>·</b> 9 195 <b>·</b> 2	194 <b>'</b> 9 194'7	193°7 195°4	192°1	190 <b>°2</b> 197 <b>°1</b>	190 <b>.</b> 6	190 <b>.</b> 7	190 <b>°</b> 5	191 <b>·</b> 9 197 <b>·</b> 1	190°5
		201.7	204.1	204'1	205.8	202.7	204.2	204 0	204.0	202.8	202.7	201.1	205.6
		202.0	202.4	203.9	203.9	202.8	203.2	203.2	202.9	202.7	202.7	201.2	206.2
	22							—					
	23	211.0	211.2	209.3	209.1	209.2	209.2	209.2	210.9	210.6	209.0	207.7	207:9
	24	204.9	204'6	204.7	202.9	203.8	200.0	201.4	203.0	204.7	204.7	204.7	204.9
	25 26	207.2	$207.2 \\ 219.2$	212.3	$213.7 \\ 218.8$	213.4 220.0	216.7	218°3 221°2	219.6 221.2	219.7 225.7	221°0 226°7	221.7 230.8	221 · 2 234 · 4
}	20 27	219 6	219 2	215.5 $219.2$	217.8	218.7	219.7 218.7	$\frac{221}{220}.4$	$\frac{221}{220.4}$	220.2	221.4	221.1	218.0
- 1	28	201.0	202.4	200.2	200.0	202.5	202.8	203 1	205.2	204.1	203.7	203.8	203.5
	29 30	213.8	212.5	211.8	210.7	212.7	212.6	212.7	213.6	215.6	214.5	214·5	214.7
ourly l	Means	200.59	200.96	200.87	200.67	200.37	199.52	199.85	200.24	201.55	201.56	201.09	201.5
		<u></u>			TEMPERAT	URE OF TE	E VERTICA	L FORCE I	IAGNET.			<u>'</u>	
		•	0	0	o	0	0	0	0	ø	0	0	
1	$\sqrt{2}$	51.6	51.9	52.2	52.2	52.7	53.3	53.6	54.2	54.4	55.0	55*4	55.6
. 1	3	56.2	56.0	56.0	56.2	57.4	57.1	57.5	57.7	57.8	58.4	58.2	58.4
	4	56.7 54.0	56°5 53°5	56.0	57.3	57.3	57:3	57.6	58.0	58.2	58.2	58.2	58.0
- 1	5 6	52.2	52.5	54°2 52°2	54.4 52.2	$\begin{array}{c} 55.2 \\ 52.6 \end{array}$	55°2 52°7	56°0 53°4	56 <b>°</b> 4 53°8	$57^{\bullet}0$ $54^{\bullet}2$	57 <b>·</b> 4 54·7	58°2 55°0	58°8
- 1	7	53.2	53.4	52.2	52.2	52.6	53.4	53.2	53.8	54.0	54·3	54.3	54.8
	8	<u> </u>	<u> </u>									-	
	9	55.8	56.2	56.3	56.4	56.9	57.7	58.1	58'1	58.2	58.6	59.0	59.2
	10	59.4 59.2	59 <b>.</b> 4 59 <b>.</b> 2	59.1 59.0	59.2	59.4	60.0	60.2	60.5	60.5	60.6	60.6	60.6
	$\frac{11}{12}$	58·2	59 2 57.6	57.3	59°1 57°2	59°2 56°8	59°3	59°3 56°7	59°3 57°0	59°3 57°0	59·5 57·2	59.6 57.3	59°6
	13	57.0	57.0	56.6	56.2	56.2	56.2	56.2	56.5	56.6	56.9	57.0	57.0
ER	14	56.0	56.2	56.0	55.4	55.2	55.6	55.6	56.0	55.6	26.0	55.9	56.8
NOVEMBER	15 16	54.5	54.7	54.7	54.2	54.6	55.3	55.5	 55`5	 55`7	<u>-</u> 56.2	<u>-</u> 56'1	56.0
ME )	17	55.3	55.2	55.3	55.8	56.3	56.3	56.3	56.7	56.9	57.3	57.2	57.0
0	18	57.3	57'2	56.8	56.6	57.2	58.0	58.4	59°2	59.3	59.4	59.1	59.0
A	19	57.4	57.2	56.8	56.6	56.1	56.2	56.3	55.6	55.2	55.2	55.1	54'4
	20	51.2	51.0	50.8	50.4	51.1	51.4	51.5	51.2	52.0	52.2	52.0	53.0
	$\begin{array}{c} 21 \\ 22 \end{array}$	52.0	52°0	51.3	50.7	50 <b>·</b> 9	51.1	51.2	51.4	51.4	51.7	51.8	51.8
	23	46.2	46'3	47.4	46.6	46.7	47.2	47.4	47.5	48.6	48.6	48.2	48.8
1	24	49.6	49.8	49.3	49.0	49.4	50.0	50.3	50.4	50.4	50.4	50.4	50.3
1	25 26	47.6 39.4	47°4 39°5	45.2	45.3	44.0	42.8	43.2	41.5	41.1	40.8	40.5	40.0
	<b>40</b>	39.9	39.7	40°2 40°4	39.4 40.0	39.4	39.8	40.0	40.0	40'0	39.9	39.8	39.8
		49.3	49.2	50.2	50.2	40°0 49°5	40°4 49°4	40.5 49.8	41.4 49.4	41.4 50.0	41.5 50.6	42.0 51.2	43°1
	27	_	_									_	_
		43.0	43.0	43.2	43.0	43*4	43.6	43.6	43.6	43.4	43.3	43.2	43'4

12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily a Month Mean
Sc. Div,	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div
03.9	204.0	200.0	198.3	198.3	1			193.4	192.5	191.3	192.5	ii .
93 <b>.</b> 1	192.8	191.7	191.8		197.4	193.8	194.3					199.8
93°5	192 8	195.2	193.6	192.1	192.4	192.2	192.2	192.8	193.0	195.4	195.4	193.9
	1			195.8	196.1	196.7	194.6	190.3	193.5	198.0	197.7	194.5
95.7	196.3	197.1	195.6	198.9	199.2	193.9	193.0	193.0	198.0	197.9	201.1	197.0
96°8 04°4	197.8	199.0	202.5	202.1	201.1	201.1	200.6	198.9	199.5	203.2	203.2	200.3
			200 1	199 3	199 3	199.0	199.2	198.5	197.7	197.8	198.2	200.9
89.7	189.2	189.2	188.9	189.0	188.0	188.2	189.2	189.4	189.2	189.0	188.9	191.1
86.6	186°4 a	187.8	187.3	189.2	188.9	190.2	188.8	188.6	189.6	188.2	189.1	187.7
90.0	190.6	190.0	189.6	190.6	190.6	189.5	190.5	190:5	191.8	191.8	192.7	190.3
91.7	193'0	191.3	193.0	193.0	194.3	194.3	194.3	193.9	193.6	192.3	192.4	193.4
93.1	197.2	197.8	197.2	198.5	197.3	196.3	195.6	195.0	193.4	193 3	193.1	194.7
96.6	196.2	196.2	195.2	195.4	195.4	-				l —	1 1	
<u> </u>	193.5	193.6	704:0	l —		196.7	197.8	197.6	197.6	197.4	197.7	190 2
93.9			194.0	195.7	196.4	196.4	195.2	196'3	196.3	196.3	196.3	195.0
95'7	195.7	195.7	195.7	195.6	184.4	169.5	168.8	168.8	194.7	189.3	173.2	190.20
92'3	193.0	193'9	193.8	193.8	193.8	193.8	194.8	194.0	194.0	194.0	193.6	193.0
99.5	199.5	202.0	201'9	202.9	202.8	202.8	202.8	202.7	202.6	202 5	203.1	199 2
08 <b>.2</b>	207.8	205.6	202.8	203.5	203.4	203.2	199.5	201.5	202'8	202.8	202.6	203.63
	200 1	200 1	204 1	204.1	204.3	211.0	210.0	210.7	212.1	211.0	$\{ \frac{1}{211.0} \}$	205.59
07.8	207.8	207.1	207.8	205.2	206.6	204.8	207.2	207.0	206.1	205.2	204.8	207:99
05.8	205.8	204.2	205.1	205.1	205.1	204.8	207 2	208.7	208.7	$\frac{203 \cdot 2}{209 \cdot 7}$	204.6	207 98
21.5	221.6	221.8	203 1 221 <b>·5</b>									
38.1	233.0	228.3		222.8	222.4	221.8	221.4	221.2	221.3	221.3	219.4	218.74
			228.5	214.3	220.5	220.4	215.0	203.7	210'4	216.0	220.0	221.71
16 <b>·2</b> 05 <b>·</b> 3	218.2	215.4 205.5	212.8	201 · 4 202 · 4	205 · 4 202 · 4	207.4	205.7	204.6	200.3	198.8	198'4	213.37
- 14'4	214.3	214.9	219.3	202 4 — 219°2	202 4	214.5 216.8	214·2 211·3	214·1 210·3	210.0 214.1	210.0 216.6	$\{212.5\}$	205 · 42 214 · 39
										· · · · · · · · · · · · · · · · · · ·		
01.60	201.74	201.51	200.85	200.33	200.22	200.07	199*39	198.62	200.11	200.36	200.12	200.56
				TEMPER	ATURE OF	THE VERT	ICAL FORCE	E MAGNET.				
0	0	0	0	0	o	٥	0	0	0	0	0	0
55.8	55.8	56.2	56.3	56.2	56.7	56.8	57.0	57.0	56.8	56.6	56.4	54.99
59.0	59.0	59 2	59.2	59.0	58.6	58.4	58.2	58.0	57.8	57.4	57.2	57.83
58 3	58.3	57.8	57.4	57.0	56.7	56.2	56.0	55.3	55.2	54.6	54.2	56.94
57.5	57.0	56.6	56.2	56.7	55.2	54'5	54'1	53.7	53.2	53.0	52.7	55.43
55'3	55'1	54.7	54.3	54.0	54.0	53.9	53.8	53.2	53.2	53.3	53.1	53.72
54'4	<b>54</b> .6	54.6	55.2	55.2	55.1						— 7 ∥	54.15
 50•5		<u> </u>	<u> </u>			53.8	54.2	55.0	55.2	55.3	55.3}	
59.5	59.6	59.6	59.7	59.8	60.2	60.1	60.0	59.8	59.8	59.8	59.8	58.67
50.5	60.7	60.0	59.8	59.8	59.8	59.6	59.6	59.4	59.2	59.2	59.1	59.84
9'5	59'4	59.4	59.3	59.2	59.1	58.7	58.6	58.6	58.4	58.2	58.2	59.10
7'3	57.2	57.2	56.9	56.7	56.6	56.7	57.3	57.2	57.4	57.6	57.4	<b>57</b> °15
7.0	56.8	56.9	57.2	57.1	57.0	57.0	56.8	56.8	56.8	56.9	56.6	56.81
6.3	56.3	56.4	56.5	56.3	56.3	<u> </u>	54.3	54.2	54.5	54.5	$\frac{-}{54 \cdot 5}$	55.62
6.4	57.0	57.0	57 0	56.6	56.4	54.8 56.2	56.1	56.0	55.7	55.5	55.5	55.77
7.0	57.0	57.2						57.2	$\frac{55}{57} \cdot \frac{7}{2}$	57.3	57.4	56°75
8.6	58.2		57.1	57.2	57.2	57.3	57.2					
4.7		58.0	57.9	57.9	57.8	57.7	58.1	58.0	58.0	58.0	57.6	58.05
2.7	54.5	53.0	52.7	52.4	52.2	52.1	52.4	52.3	51.5	51.3	51.3	54.27
1.6	52.6 51.7	52.8 51.6	52.4	52.5	52.4	52.5	52.0	51.7	51.7	<b>5</b> 1.6	51.6	51.85
		— 01 0	51.4	51.4	51.2	47.2	47.0	46.8	46.6	46.6	$\frac{-}{46.0}$	50.27
8.7	49.0	49.2	49.0	48.8	48.7	48.8	48.7	48.2	49.0	49.3	49.7	48.20
0.2	49.6	49.3	49.0	48.8	48.0	47.8	47.7	47.7	47.5	47.5	47.6	49.17
9.8	39.6	39.2	39.3	39.3	39.3	39.4	39.6	39.6	39.7	39.8	39.6	41.41
0.4	40.4	40:4	40.4					40.0	40.1	40.3	40.5	40.00
3.6	44.0			40.4	40.3	40.0	40.0			49.0	49.2	43.75
1.0	50.6	44.7 50.4	45.2	46.4	47.3	47.2	47.3	47.5	48'4	49 0	_	
_		JU 4	20.3	20.3	50.5	42.2	42.0	41.8	42.2	42.4	${43.0}$	48:20
3.3	42.5	42.1	41.4	41.0	40.9	42 2	41.4	41.4	41.4	41°4	41.3	42.48

	O	ne Scale Div	rision = '00	0065 parts o	of the V. F.		ICAL FOR n Scale Div		sponding to	1° decrease	of Tempera	ture, 1°64.	
Mean G gen T	löttin-}	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	4 <sup>h</sup> •	5 <sup>h</sup> •	6 <sup>h</sup> .	7h.	8 <sup>h</sup> .	9h.	10h.	11 <sup>6</sup> .
	1 2 3 4 5	Sc. Div. 216 6 213 7 203 1 210 0 206 9	Sc. Div. 216 '6 214 '0 202 '2 210 '0 206 '6	Sc. Div. 215 ° 0 214 ° 0 203 ° 2 208 ° 0 207 ° 7	sc. Div. 218 3 213 7 203 2 208 8 208 3	sc. Div. 218 · 3 212 · 5 204 · 4 208 · 9 205 · 4	Sc. Div. 218 '7 209 '0 204 '4 210 '3 206 '2	Sc. Div. 219 5 209 7 204 7 210 8 205 5	Sc. Div. 221 ° 0 209 ° 3 205 ° 5 211 ° 8 205 ° 0	Sc. Div. 220°5 208°0 206°1 211°3 205°6	Sc. Div. 217 °6 206 °8 205 °7 210 °3 205 °5	Sc. Div. 217 6 205 8 205 7 211 0 204 2	Sc. Div. 218 1 204 6 206 6 211 0 205 0
	6 7 8 9 10 11 12	213 · 5 203 · 6 206 · 0 208 · 1 207 · 7 212 · 1	213 · 3 203 · 9 205 · 4 208 · 5 208 · 7 214 · 5	212 · 4 206 · 5 207 · 3 209 · 3 209 · 6 215 · 7	210.7 204.5 207.0 210.1 208.9 217.2	210.4 203.2 205.9 209.2 205.2 218.2	210°0 202°3 205°7 210°2 205°2 217°2	209°3 202°3 205°7 208°7 207°3 218°7	209 9 204 2 205 4 208 7 210 3 217 4	210°3 205°0 206°7 210°2 211°5 220°0	210°1 205°2 207°0 208°2 211°5 220°0	209'1 204'4 209'0 208'1 211'5 219'7	208'1 204'6 210'3 206'7 211'3 220'4
DECEMBER.	13 14 15 16 17 18	227.6 227.0 216.1 214.2 210.3 207.6	230°2 227°9 216°1 214°2 212°4 207°4	226°1 222°3 218°4 214°2 210°8 210°8	227.8 222.3 217.8 213.2 214.1 209.3	226.0 224.8 215.6 212.1 211.8 207.8	225 · 1 224 · 8 215 · 6 209 · 8 211 · 5 206 · 6	225°1 222°9 213°8 208°6 212°4 207°7	225°1 222°9 212°1 208°6 211°3 207°7	225 · 2 222 · 9 212 · 1 210 · 4 209 · 7 207 · 7	224.8 221.2 211.3 209.6 209.3 207.0	224 ' 4 221 ' 4 211 ' 8 209 ' 0 208 ' 8 207 ' 0	222.6 220.4 211.8 209.2 209.1 208.2
	20 21 22 23 24 25 a	216.0 213.7 215.2 208.3	216 · 1 213 · 7 215 · 7 208 · 3	214.1 214.0 215.9 207.5	213 '9 214 '1 213 '1 208 '5	213.7 214.3 213.4 209.6	213.7 214.3 214.5 209.5	213.7 214.5 214.5 208.6	213.0 217.7 217.9 207.8	212.6 218.5 216.0 206.6	210.6 218.3 214.9 206.3	210°9 218°3 219°6 206°2	210°9 218°2 218°4 208°1
	26 27 28 29 30 31	213.0 200.3 205.1 205.7 198.4	213.0 200.3 205.7 205.7 198.9	213 6 	213.7 201.9 208.0 203.6 200.7	214.7 201.0 208.1 201.7 200.7	213·3 201·1 207·5 201·7 200·0	211.8 202.8 209.9 201.5 200.0	211.2 204.1 210.1 201.5 199.1	211.3 204.1 210.1 200.4 199.1	211.4 203.9 209.8 200.4 197.9	211.7 205.1 209.1 200.0 196.2	211.2 204.1 208.5 200.0 198.6
Hourl	y Means	210.76	211.13	211.11	211.26	210.65	210.32	210.38	210.72	210.84	210.18	210.22	210.5
		1						AL FORCE I					
	$\left( egin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{array} \right)$	41°3 43°4 50°6 44°4 47°3	41°2 43°5 50°1 44°4 47°2	40°9 43°5 49°3 44°7 46°9	40°4 43°6 48°4 44°4 46°6	40°0 44°1 48°4 44°7 46°8	40°2 45°4 47°6 45°0 47°5	40°2 45°5 48°4 45°2 47°5	40°2 46°0 48°4 45°0 47°9	40°4 46°4 48°2 45°2 48°0	40°9 47°4 48°0 45°6 48°4	41°2 47°6 47°9 46°2 48°4	41°6 48°7 47°8 46°4 48°3
	6 7 8 9 10 11 12	43.0 48.7 47.2 45.6 45.8 43.0	43.5 48.8 47.2 45.6 45.4 42.6	43°2 48°4 46°8 45°1 45°2 41°8	43.2 48.2 46.4 44.5 45.4 41.2	43.4 48.5 46.0 44.5 46.2 40.5	43.8 49.1 46.1 45.2 46.6 40.5	44.4 48.7 46.4 45.8 46.0 40.4	44.5 48.6 47.1 46.0 45.6 40.4	44.7 48.4 47.3 46.5 45.2 40.0	45.2 48.6 47.4 47.3 45.2 40.0	45.5 48.6 47.4 47.8 45.4 40.0	45.9 48.5 47.7 48.0 45.1 40.0
DECEMBER.	13 14 15 16 17 18 19	32:0 34:6 38:0 40:0 39:7 41:9	32·3 34·2 38·0 40·0 39·0 41·7	32.6 33.9 37.4 39.6 39.1 41.5	33°1 34°4 37°4 39°7 38°4 41°5	33°2 34°9 38°0 40°8 38°1 42°2	33.4 36.0 38.7 40.8 39.0 42.5	33.8 36.4 39.1 41.5 39.4 42.5	34°1 36°9 39°7 41°8 39°7 43°0	34.8 37.4 39.9 41.8 40.7 42.7	35.2 38.4 40.2 41.8 41.2 43.0	35.9 39.0 40.4 41.8 41.2 42.4	36.4 39.2 40.4 41.8 41.6 42.6
	20 21 22 23 24 25 a	38.1 40.0 38.1 42.2	38.2 40.2 38.0 42.2	38.2 39.4 37.4 42.9	38.2 39.1 37.4 42.2	38.2 37.1 37.3 41.7	38.2 36.1 37.2 42.4	38.7 35.6 37.0 43.4	39°2 34°9 37°7 43°7	40.0 34.9 38.5 44.2	40°2 35°3 39°8 44°4	40°2 35°8 40°0 44°5	40°2 36°3 .41°0 44°4
ı	26 27 28 29 30 31	39.6  46.6 43.6 43.6 48.2	39.9  46.4 43.0 43.8 48.2	39.4 	38:7 	39°4 45°8 41°4 45°0	40°0 46°1 41°6 45°5	40°1 45°7 41°6 45°9	40.6 45.4 41.6 46.4	40.6 	40.7 	40.4 	41.0 45.0 42.4 47.3
Hourly	Means	42.2	42.48	$\frac{48.1}{42.23}$	$\frac{46.4}{41.95}$	$\frac{46.9}{42.04}$	47.4	47.8	47.7	48.0	48.2	48.5	48.7

<sup>&</sup>lt;sup>a</sup> Christmas Day.

	One Scale	Division =	·000065 pa	rts of the V	.F. Increa	RTICAL 1 ase, in Scale	Divisions, c	orrespondin	g to 1° decr	ease of Tem	perature, 1°	64.
12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15h.	16 <sup>h</sup> .	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily an Monthl Means.
Sc. Div.	Sc. Div. 218'4	Sc. Div. 220 1	Sc. Div. 218 6	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
218'4		202.1	202.2	217.7	213.0	213.0	214.7	214.2	213.2	213.2	209.7	216.78
203.7	203.1			202.4	200.6	200.0	198.6	199.0	200.3	200.9	201.6	205.65
206.2	207.1	206'8	207.3	207.3	207.7	208.7	209.1	209.6	208.5	208.5	208.5	206.25
209.7	209.3	208.1	206.4	206.2	207:2	207.7	207.4	207.4	207.4	205.0	206.9	208.79
204.4	206.2	205.4	205.5	205.9	205.9		_			l <u> </u>	- 1	ľ
	<b>-</b>				l	217.6	217.1	216.8	215.5	214'2	215.3 }	208.40
208:1	207.7	206.2	206.6	206.5	205.6	205.6	205.4	204.6	203.7	203.3	203.4	208.09
204.7	205.5	206.3	207.6	207.7	207.3					205.0	206.0	205.0
	211.2	225.4	218.8	213.0		205 1	205.2	205.2	205.6			
211.7					208.4	206.3	204.0	203.9	207.0	208.4	208.1	208.6
6.808	202.5	207.6	207.3	207:3	209.0	207.1	207.3	207.3	207.0	205.0	205.0	207.7
211.2	211.7	213.0	215.3	214.4	214.4	214.4	212.6	208.5	208.5	212.3	212.2	210.73
220'4	220.1	220.5	221.6	220.3	219.1						— 1	000.0
	<b>!</b> —	l —		<b>—</b>		228.1	227.7	227.5	227 2	227.4	$ 228^{4}$	220.8
22.9	223.7	223.7	223.8	222.2	222.2	223.4	221.4	224.5	224.1	$\frac{224.5}{224.5}$	224.2	224.6
15.4	215.1	213.9	220.5	$\frac{220.2}{2}$	215.4	215.4	216.4	224.3	220.8	216.7	216.1	220.30
11.8	211.6	211.6	212.0	211.4	210.8							
						211.7	212.3	212.3	212.2	213.3	214.2	213.2
208.2	209.7	210.8	210.5	210.5	210.6	210.5	211.6	212.6	214.0	210.2	210.0	210.9
209.1	209'4	209'4	208.7	208.7	208.7	208.7	206.2	206.4	206'8	206.0	207.3	209'4
208.2	208.2	208.2	208.2	208.1	207.4			_			ז	210.0
_	-	<u> </u>	<u> </u>			217.2	214.6	217:3	216.9	215.5	215.5	∠10 U
210.7	213.5	213.0	214.3	211.4	213.5	214.6	214.2	214.7	214.4	214.4	214.1	213.43
17.8	217.8	217.3	214.7	216.1	216.0	214.2	214.2	214.5	213.9	213.7	214.0	215.5'
217'4	222.9	215.8	215.2									
208'2				213'0	198.9	208.0	209.1	206.9	207.0	205.3	205.4	213.08
_	207.8	204.0	203.5	202.0	200.0	214.7	211.4	$\frac{-}{215.1}$	212.6	211.0	$\{\frac{1}{212\cdot 4}\}$	208.25
09.6	209.6	208.7	207.4	203.3	201.2	-					200·3 }	208.00
	005.4					200.0	200.5	200.5	200.6	200.5	200 3 )	
204.1	205.4	203.2	203.7	204.2	204.2	203.1	204.2	205.6	204.3	203.5	201 1	203 29
208.2	209.0	209 0	209.0	208.8	208.3	207.7	205.7	205.6	205.4	205.1	205.4	207.83
500.0	201.0	201.2	200.8	200.3	200.2	200.0	201 3	201.3	199.2	199.6	198.3	201.30
205.0	205.2	205.0	196.7	197.3	197.4	197'0	197.2	196.7	197.7	196.7	197.0	199.0
											[ <u></u> ]	
210.18	210.50	210.63	210.23	209.47	208.20	210.00	209.60	209.94	209.78	209.50	209:36	210.50
4Î 6	41°2	4η2	1 .0	<del></del>	<del> </del>		CICAL FORC			9 _	. 0 . 1	.0
			42°0	42.0	42.2	$4\mathring{2} \cdot 2$	$4\mathring{2} \cdot 3$	$4\mathring{2}$ $\cdot$ $3$	42°6	43.3	43.4	4 <b>1 4</b> 5
49'3	49.7	50.0	50.2	50.2	50.6	51.0	51.6	51.4	51.2	51.0	50.9	48.01
47.8	47.4	47.2	47.0	46.7	46.5	46.2	45.6	45'4	45.2	45 1	45.0	• 47 • 42
46.3	46.3	46.7	47.1	47.2	46.9	46.9	46.7	46.5	46.7	47.0	47.2	45.95
48'4	48.3	48.2	48.0	47.9	47.7	l	1		10 .			
_	10 0		1 .		1 4 1	40:4	40:0	41.9	41.6	42.3	$\left \begin{array}{c} -1 \\ 42.7 \end{array}\right\}$	46.18
46.2	46.4		47:1	4710	47.0	40.4	40.9	41.3	41.6			15.00
		46.6	47.1	47.3	47.6	47.7	47.6	47.8	48*4	48.7	48.8	45.86
48.6	48.6	48.4	48.0	48.0	47.6	48.0	48.2	47.8	48.0	48.0	47.4	48:32
47.8	48.0	47.8	47.6	47.6	47.5	47.5	47.2	46.7	46.4	46.2	45.9	47.0
47.6	47.5	47.4	47.4	47.2	46.6	46.4	46 4	46'3	46.2	46.2	46.3	46.39
44.7	44.4	44.3	44'0	44.0	43.6	43.4	43.6	43.4	43.4	43.4	43.2	44.69
40.0	39.8	40.0	39.7	40.0	40.5							
		-0-0	00.	100	102	32.3	32.2	32.4	32.6	32.3	$\left\{ -\frac{1}{32\cdot 1}\right\}$	38.5
36.3	36.1	35.9	9010	20.5	00.4						35.2	34.89
			36.0	36.2	36'4	36.0	35.8	35.6	35.4	35.4		
39.4	39.3	39.1	39.3	39.2	39.3	38.8	38.7	38.3	38.1	37.2	37.0	37:40
40.5	40.5	40.5	40.7	40.7	40.5	40.2	40.0	40.0	40.0	40.0	40.0	39.6
41.6	41.6	41'3	41.1	41.0	40.2	40.0	39.9	39.7	39.5	39.9	39.6	40.7
41.7	41'9	42.1	42.4	42.4	42.3	42.4	42.6	42.6	42.4	42.4	42.4	41.0
43.0	43.0	43.5	43.0	43.0	42.8						1	
_		10 2	1	70 0	740	2010	27.0	$\frac{-}{37\cdot3}$	97:0	38.1	38.1	41.2
40.4	39.9	40:0	40:0	40.0	40.1	36.6	37.2		37.8			90.4
37.0		40.0	40.0	40.2	40.0	39.7	39.7	39.8	39.8	39.8	39.9	39.4
	37.6	38.0	38'1	37.9	38.1	38.3	38.5	38.5	38.2	38.4	38.4	37.58
41.6.	41.5	40.8	41.4	42.0	42.4	42.2	42.2	42.9	42.6	43.0	43.0	40.2
44'4	44.6	45°2	46.0	46.2	46.4					_	$\frac{-}{39\cdot 2}$	42.7
41.5	41.5	42.0	42.8	43.4	$\frac{-}{44.2}$	39.1	39 <b>·</b> 1	38.9	39.0	39.1		42.10
]				-	<b>-</b>	45.4	45'6	45.7	45.5	45.7	47.0}	42 1
44'9	44.0	43.6	43.3	43.4	43.4			43.2	43.6	43.8	43.7	44.7
42.2	42.5	42.2				43'4	43.4				43.6	
47.0			42.3	42'4	42.5	42.6	43.0	43.2	43*4	43.6		42'4
49.3	46.4	46'4	46.6	46.6	46.6	47.0	47.4	47.6	47.6	47.6	47.8	46.2
727 A 1	49.2	49'4	49.3	48.9	48.8	48.6	48.4	48.4	48.4	48'4	48.4	48.3
43.80									)			

	0	ne Scale Di	ivision = '(	00066 parts	s of the V. H		ΓΙCAL FO , in Scale D		responding 1	to 1° decreas	se of Tempe	rature, 1•64	
Mean ( gen 1	Göttin- }	Oh.	1h.	2h.	3h.	4 <sup>h</sup> •	5h.	6h.	7h.	8h.	9h.	10h.	11h.
	$\begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$	Sc. Div. 197.0 197.8	sc. Div. 197 0 198 4	Sc. Div. 196.5 199.3	Sc. Div. 197 4 199 3	Sc. Div. 196.7 199.3	Sc. Div. 197 1 198 9	Sc. Div. 198 6 200 0	Sc. Div. 198.6 200.0	Sc. Div. 198 5 200 0	sc. Div. 199 0 200 0	Sc. Div. 198 6 200 0	Sc. Div. 199'1 202'0
	4 5 6 7 8 9	207.5 199.7 203.2 200.0 212.0 223.4	208 ° 0 199 ° 1 203 ° 2 200 ° 0 215 ° 7 223 ° 4	207.5 199.5 201.3 200.7 216.6 220.0	205 · 4 200 · 0 201 · 4 200 · 7 215 · 0 220 · 0	205 '9 198 '4 200 '6 200 '5 215 '6 220 '0	206.6 199.7 201.7 201.7 218.7 220.0	206·2 203·9 201·5 201·7 220·0 220·6	206·2 203·9 202·6 201·9 222·5 217·7	205.5 200.6 202.0 202.3 221.0 217.4	205°3 200°0 201°0 195°7 220°0 218°5	203.6 200.6 199.8 196.3 219.2 218.8	204.2 200.5 198.5 203.7 220.3 219.3
JANUARY.	11 12 13 14 (15 16 17	225.5 225.0 214.7 200.3 193.2 189.4	227.4 225.8 214.7 200.6 193.3 189.6	228'8 223'2 215'0 200'6 194'6 190'5	226.0 223.2 213.6 200.0 194.5 191.6	225·3 220·6 213·6 198·3 194·5 192·4	225·2 219·5 211·4 197·4 194·9 194·1	227·3 219·5 210·0 197·6 193·4 195·1	228·2 219·5 211·2 197·7 192·5 197·7	228·2 220·1 211·1 198·5 192·4 197·7	229 · 3 219 · 2 208 · 4 197 · 4 192 · 5 198 · 3	229 · 3 217 · 4 208 · 5 197 · 1 191 · 8 198 · 3	229.5 215.6 207.5 196.6 191.7 198.8
J	18 19 20 21 22 23 24	213.0 213.4 215.1 208.9 220.1 221.7	212.6 213.1 215.1 210.5 220.1 220.1	212'1 213'4 215'1 210'1 219'9 218'7	212°1 211°9 215°1 210°0 216°5 217°1	211·1 213·3 215·2 213·7 218·2 216·0	211.1° 213.8 214.1 215.6 219.4 214.2	208 · 2 215 · 8 215 · 4 215 · 0 220 · 5 213 · 1	207·4 215·4 215·4 214·5 220·5 212·5	207 · 4 215 · 4 215 · 4 216 · 4 218 · 9 211 · 7	205'3 214'3 215'4 217'4 220'9 210'0	205 · 3 214 · 3 214 · 9 218 · 9 219 · 8 206 · 7	205 · 4 214 · 3 213 · 9 219 · 1 221 · 1 208 · 0
	25 26 27 28 29 30 31	214.5 206.6 206.6 214.7 208.6 207.2	214·5 206·6 207·4 216·7 206·7 207·2	214.5 206.6 205.7 216.5 203.8 208.6	212.8 204.0 207.1 215.3 202.6 206.8	210.6 203.1 208.1 216.3 206.3 205.7	210.0 201.2 208.4 214.9 205.0 203.5	210.0 200.9 208.8 214.0 205.0 206.9	210.6 198.5 208.1 213.1 205.0 207.8	210°3 199°9 209°1 211°0 202°8 218°1	209·1 199·9 209·4 209·3 203·4 255·2	207 9 199 9 209 6 208 1 205 0 225 8	208·3 200·4 210·3 209·2 207·1 225·3
Hourly	y Means	209.20	209.49	209.50	208.44	208*43	208.39	208.81	208.81	208.91	209.78	208 29	208.83
		0	0		TEMPERAT					·	· · · · · · · · · · · · · · · · · · ·		
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	48°4 46°7	48°3 46°6	48°0 46°3	48°1 46°0	48°1 45°8	48°2 46°2	47°5 46°2	47°9 46°3	47° 4 46° 6	47.4 47.0	47°0 47°0	47°2 47°1
	4 5 6 7 8 9	43.0 47.2 45.6 46.6 38.7 34.3	42.8 46.8 45.5 46.6 38.0 34.1	42.9 46.2 45.4 46.5 37.3 34.0	42.8 45.7 45.0 46.1 37.3 33.8	42.7 46.3 45.3 46.2 37.1 34.0	42.8 46.4 46.0 46.3 37.4 34.6	43.1 45.0 46.3 46.4 36.7 35.2	43.6 44.9 46.3 45.6 36.0	44.1 46.2 46.4 45.0 35.4 36.0	44.4 46.8 46.9 45.0 35.5 36.5	44.6 46.8 47.5 44.8 35.6 36.9	44.5 46.7 48.0 44.5 35.7 35.9
JANUARY.	11 12 13 14 15 16 17	29°3 30°1 36°2 45°0 49°8 50°8	29.5 29.7 36.3 45.0 49.4 50.4	29.8 30.1 36.1 45.0 49.0 50.0	29.8 30.5 36.2 45.1 48.6 49.4	30°1 31°1 37°1 45°4 48°4 48°8	30.8 32.1 38.6 46.6 48.8 48.6	30°1 32°8 40°0 47°0 49°4 47°6	29.1 33.4 39.7 47.6 50.0 46.9	29.0 33.9 40.7 47.7 50.3 46.5	28.8 35.0 42.0 47.8 50.4 45.9	28.7 35.8 42.4 47.8 50.5 45.4	29.5 36.3 42.6 47.8 50.2 44.8
JA	18 19 20 21 22 23 24	37.8 39.2 34.0 39.1 31.2 32.8	38.0 38.7 34.0 39.1 31.2 33.0	38.1 38.7 34.0 39.1 31.3 33.4	38·1 38·1 34·3 38·4 31·9 33·9	38·4 37·7 34·6 37·4 31·6 34·6	39·1 37·2 35·3 37·1 31·6 35·5	39.7 37.1 35.9 36.9 32.1 36.2	40.0 37.1 35.9 36.6 31.5 37.8	40.2 36.9 36.2 36.9 31.9 38.1	40°4 36°8 36°4 36°6 32°1 39°0	41 2 36 5 36 8 36 2 32 4 39 3	41.6 36.4 38.1 35.5 33.0 39.5
	25 26 27 28 29 30 31	36.2 40.5 40.2 35.0 39.1 40.0	36.1 40.7 40.4 34.6 39.3 40.0	35.8 41.0 39.8 34.2 39.5 40.0	36.8 41.4 39.8 34.4 39.9 39.9	37.6 41.7 40.0 34.4 39.4 40.1	38·1 42·6 39·8 35·1 39·7 40·4	38.1 43.4 39.3 35.8 40.0 40.5	38.3 43.6 39.7 36.1 40.7 40.6	39.1 43.9 39.1 36.7 41.4 40.4	39.5 44.2 38.4 37.8 42.0 40.6	39.7 44.0 38.5 38.2 42.0 40.4	39.5 44.0 37.6 39.0 41.6 40.4
ourly	Means	39.88	39.77	39.67	39.67	39.77	40.19	40.32	40.43	40.62	40.89	41.00	41.04

<sup>&</sup>lt;sup>a</sup> Twenty minutes late.

<sup>&</sup>lt;sup>b</sup> Twelve minutes late.

				<del>-</del>		ERTICAL						
1	One Scal	e Division =	= .00000ee k	arts of the	V. F. Incre	ease, in Scal	e Divisions,	correspondi	ng to 1° dec	rease of Ter	nperature, 1	64.
12h.	13h.	14h.	15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 198 8 200 8	198.8	Sc. Div. 199 3 200 0	Sc. Div. 199 2 200 0	Sc. Div. 199 2 200 2	Sc. Div. 198'8 200'0	Sc. Div. 199 2	Sc. Div. 199 4	Sc. Div. 199 4	Sc. Div. 199°2	Sc. Div. 195°0	Sc. Div. 197.8	Sc. Div. 198.26
204.5		203.8	204.5	202.1	202.2	207.8	209 <b>.</b> 6	209.6	207 <b>.</b> 4 195 <b>.</b> 0	206.7 204.1	207.2 }	201.85
200.9	201.8	198.1	197.0	197.9	198.4	198.4	198.8	201.4	201.9	202.9	202.6	200.25
197.4		200.5	201.8	203.4	202.3	202.3	201.6	201.4	201.5	200.4	200.5	201.18
205.6		208.1	207.9	208.2	209.8	210.4	210.5	210.2	210.8	210.7	212.0	204.83
219 2 219 0		220.4	220.4	220°1 220°4	221.9	221.9	220.6	221.5	221.5	221.5	221.7	219·44 221·07
-					-	225.0	225.8	225.5	225.2	225.1	$\left\{ \frac{-}{222\cdot 4} \right\}$	
226.0	225 0	223.0	220.6	222.2	223.1	<del>-</del>	225'1 a	225.1	225.5	223.6	225.0	225.85
215.7	215.7	220.3	216.9	217.7	217.4	214.6	216.4 p	216.4	217.0	214.7	214.7	218.59
205.7	205.7	205.7	206.1	205.6	204.9	204.6	204.7	204.7	204.9	202.9	200.7	208.16
195 4		190.6	190.1	195.5	195.5	190.3	192.6	192.6	194.1	194.1	193°3	196.45
194 9 201 2		202.0	203.5	204.3	189 9 204 4	189.9	190.4	190.6	190'4	190.1		191.97
				<b>!</b> —		215.7	215.5	215.0	215.0	213.5	$\left\{ \frac{1}{214\cdot 5}\right\}$	201.66
205 3	204.3	203.6	203.8	205.1	206.1	206'1	207.5	206.6	208.5	207.6	207.3	207.62
214.5		214.6	215.1	215.3	215.9	216.6	216.6	216.4	216.4	215.1	215.1	214.77
212.3	210.1	209.0	208.8	210.2	209.1	208.4	207.6	207.5	209.2	212.8	210.1	212:30
218.9	218.1	218.1	218.2	218.1	218.7	220.0	219.0	220.2	220.7	220.0	221.1	216.73
221.1	220 · 4 207 · 7	221.3 207.8	218.3	220.3	223.2	223.2	222.4	222.6	222.1	221.0	221.7	*220.26
l —	<u>-</u>			—	l —	213.7	215.3	215.4	215.5	214.2	214.7	212.72
208.3	208.5	207.0	206.3	205 9	205.9	206.1	205.8	206.6	206.6	206.6	206.6	208.89
201.4	202.5	204.0	204.0	204.2	204.8	204.5	204.5	205.7	205.7	206.0	206'3	203.38
210.3	210.1	211.4	212.1	212.1	213.2	212.3	212.3	213.2	213'1	213.5	213.7	210.25
208.0	208.0	210.0	209.5	210.6	210.4	210.3	205.5	205'1	203.9	207.7 207.4	209.7 207.1	210.74
220 3	219.4	219.4	200 2	205.7 222.0	206.1	207.9	207.7	206.8	207.3		· 7	206.36
_			_			220*4	220.3	220.3	213.0	212.8	212.6}	216.29
208.58	8 208.39	208.48	208.30	208.63	208.78	209.27	209*31	209.76	209.67	209.63	209.67	208 96
	1 0	1 0	I 0				CICAL FORCE			1 0	0 [[	
47°4 47°5	47.4 47.5	47.3 47.4	46.6 47.0	46.3 47.0	46°0 46°6	46.0	46 0	46°4 —	46°6	46°7	46°6 — ₹	4 <sup>9</sup> ·20 45·54
						40.6	41.4	42.0	42.5	43.0	42.7}	
44.5	45.0	45.2	45.0	46.7	46.6	46.6	47.2	47.4	47.6	47.4	47.4	44.91
47 0 48 6	47.0	47.0	46.8	46.7	46.6	46.9 46.5	46°3 46°4	46°2 46°6	46°2 46°7	46°3 46°9	45.8 47.0	46 41 46 67
43.7	42.6	47.7 42.0	47.4	47.0	46.6 40.2	39.7	39.4	39.2	40.0	40.0	40.0	43 30
35.8	35.2	35.3	33.7	33.8	33.9	33.8	33.9	34.0	34.0	34'1	34.5	35.23
35.9	36.3	36.1	36.1	36.0	36.1	<del></del>	_				$\frac{1}{29\cdot 4}$	34.05
30.6	01.1					30.2	30.3	30.0	29.7	29.4		1
38.0	31·1 37·2	31.3	31'0 36'6	31.0 36.2	36.0 30.8	36.6	30.5 36.6	36.3	31.0 36.2	30°8	30.8 36.3	30.19 34.59
42.2	42.2	42.2	42.2	$\frac{30.2}{42.2}$	42.4	42.6	42.8	42.8	43.5	$\frac{30.5}{43.6}$	44.4	40.87
48'4	48.4	48.4	48.6	48.8	48.9	49.1	49.3	49'3	49.3	49.3	45.8	47.56
50.8	50.6	$51 \cdot 2$	51.5	51.2	51.2	51.2	51.1	50.8	51.0	51.0	51.0	50.30
44'8	44.1	43.0	41.8	41.0	40.2			<u> </u>		1	$\frac{-}{37\cdot 2}$ }	43.64
49:0	47.40	1	-			35.5	35.6	36.0	36.2	36.6		
42°2 36°4	41.8	42.2	42.2	41.7	41.5	41'1	40.7	40.6	40.5	40'1	40.0	40.30
39.2	36°3 40°0	36.2	36.2	36.0	35'1	34.9	34.2	34.0	34.4	34.3	34.0 39.1	36°35 37°55
36.0	35.8	39 <b>·</b> 9 34 <b>·</b> 8	39 <b>·</b> 9	39.7 34.7	39 <b>.</b> 4 34.1	39 <b>.</b> 6	40°0 33°6	$40 \cdot 0$ $32 \cdot 8$	39.5 $32.3$	39 <b>·</b> 3	31.3	37 55 35 61
33.2	33.6	33°2	33.1	34.7 $32.7$	32.3	32.5	32°4	32·3	32.1	32.2	32.2	32.23
40.0	39.7	39.7	39.8	40.0	40.0		-	1			$\frac{32.5}{35.9}$	36.90
39.7	20:0			40.0		35.2	35.2	35.3	35.7	35.9		1
44.0	39.6	39.8	40.5	40.6	40.2	40.0	40.0	40.0	40.0	40.0	40.4	38.98
37.8	43.8 37.4	43°3 37°1	$42.5 \\ 37.2$	42°3 37°1	41.6 37.3	41.8 37.3	42.0 37.3	41.4 37.3	40.8 36.6	40'4 36'3	40.0 35.1	42.29 38.18
39.4	39.6	39.8	39.9	39.7	39.5	39.3	39.1	38.9	38.8	38.9	38.9	37.63
41.9	42.1	42.4	42.2	42.0	41.9	41.4	40.6	40.4	40.2	40.5	40.0	40.83
41.3	40.6	40.5	39.2	39.3	39.3						$\frac{1}{37 \cdot 1}$	39.17
41.41	41.30	41.10	40.66	40:00	40:50	35.6	35.6	35.7	36.0	36.5	39.34	
	41 Q∩	41'13	40.88	40.80	40.56	39.92	39.52	39.20	39.52	39.52	o9 o4 ∥	40.28

<sup>°</sup> Ten minutes late.

	On	ie Scale Divi	sion = •000	0065 parts of	f the V. F.		CAL FORO		sponding to	1° decrease (	of Temperat	ure, 1°64.	
Mean G gen T	öttin-}	Oh.	1h.	2 <sup>h</sup> .	3 <sup>h</sup> •	4 <sup>h</sup> .	5 <sup>h</sup> .	6h.	7 <sup>h</sup> •	8h.	9 <sup>h</sup> .	10h.	11 <sup>h</sup> .
	1 2 3 4 5 6	sc. Div. 214 · 2 198 · 7 192 · 6 208 · 0 211 · 0 202 · 0	sc. Div. 214'2 200'4 196'3 211'3 210'4 203'1	Sc. Div.  212 · 5 200 · 1 192 · 9 215 · 5 214 · 4 200 · 0	sc. Div. 210 1 199 2 192 8 213 2 213 2 200 3	Sc. Div.  210 6 198 6 191 2 212 4 212 1 202 3	Sc. Div.  212 '3 197 '3 193 '2 211 '1 211 '9 203 '2	sc. Div. 211'2 196'7 194'7 214'4 210'2 205'4	sc. Div.  209'4 195'6 194'6 213'4 209'5 206'9	sc. Div.  208 ° 0 195 ° 2 193 ° 6 212 ° 3 208 ° 0 209 ° 9	sc. Div.  205 *8 196 *1 194 *7 209 *7 206 *6 214 *0	Sc. Div.  205 '8  195 '5  194 '7  210 '0 a  205 '0  212 '8	Sc. Div. 203.7 195.5 197.7 208.6 204.8 212.8
FEBRUARY.	7 8 9 10 11 12 13 14	203·1 197·1 197·9 200·7 205·0 203·9	202.8 198.7 197.6 200.6 205.7 203.3	202·2 195·3 197·6 203·3 206·0 204·3	198.5 194.5 198.1 202.9 203.4 204.1	199.7 193.9 197.9 201.6 201.7 203.1	198.6 193.7 195.9 202.2 201.8 201.5	199'8 194'5 195'0 202'1 201'8 200'0	199'9 195'0 195'8 201'3 200'2 201'1	199'3 195'1 195'8 202'4 199'8 201'8	200'3 195'3 195'8 202'4 199'2 203'4	199°2 197°6 195°8 204°3 199°5 202°8	199°2 199°1 195°8 204°3 199°7 201°7
FEBR	15 16 17 18 19 20 •	203.9 206.7 207.0 204.5 198.4 195.6	204.2 206.7 206.6 204.5 198.0 197.5	202 · 2 208 · 7 206 · 6 203 · 2 198 · 8 197 · 6	202°3 211°5 205°1 202°1 198°8 196°6	202'2 210'1 204'7 200'7 199'0 196'1	202'2 210'3 203'8 200'3 198'2 196'1	200.5 210.1 202.2 198.3 197.1 198.4	200.6 212.0 201.4 198.3 197.1 199.0	201.7 211.5 200.8 199.0 197.1 200.0	203·2 210·3 b 199·5 198·2 195·8 199·7	202.5 210.2 198.7 197.5 194.9 200.0	201'0 210'1'0 198'9 196'4 194'9 200'0
	22 23 24 25 26 27 28	200.9 213.1 207.6 204.3 208.7 201.1	201.6 218.0 213.4 211.6 214.1 203.6	202.8 217.7 218.1 209.4 213.8 204.7	202 · 8 215 · 4 207 · 6 207 · 2 212 · 8 204 · 2	203 ° 0 213 ° 7 208 ° 1 206 ° 0 210 ° 3 203 ° 4	204.5 211.6 211.5 205.4 208.3 204.5	205 · 5 211 · 2 ª 210 · 3 204 · 3 206 · 8 203 · 3	207.6 — 211.4 208.1 206.5 201.9 —	209'1 210'9 210'9 205'5 208'7 200'8	207'1 214'9 203'7 205'3 201'0	212.8 213.6 203.7 204.5 201.4	214'4 212'3 214'3 201'0 207'9 201'4
Hourly	y Means	203.28	205 17	205*32	204.03	203 43	203.31	203.08	202.90	203.22	202.70	202.73	203.18
		<u>                                     </u>	· · · · · · · · · · · · · · · · · · ·	<u> </u>		TURE OF TH	IE VERTICA		AGNET.	1			
	$\left( egin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \end{array} \right)$	37·3 44·7 49·2 37·9 36·3 39·1	37.8 44.3 49.0 37.1 36.2 39.0	38·1 45·4 49·0 36·6 36·3 39·7	38·3 45·4 48·7 37·1 36·2 39·5	38.5 45.5 48.9 36.4 37.0 39.9	38.7 46.4 48.9 36.5 37.2 40.3	39°3 47°0 48°9 36°9 38°0 39°8	39.6 47.3 48.7 37.6 38.5 40.2	40.6 47.6 48.3 38.1 39.3 40.8	41.4 47.7 48.2 38.9 39.8 41.4	42.0 48.2 46.9 39.1 40.2 42.0	42·2 48·2 46·2 39·3 40·4 42·6
ARY.	8 9 10 11 12 13 14	42.8 46.2 45.6 43.4 41.4 41.7	43°0 46°2 45°8 43°0 41°4 41°7	43.5 48.8 45.9 42.2 41.7 40.8	43.8 47.5 45.0 42.3 42.7 40.8	43.7 47.2 45.2 42.6 42.6 41.0	44·2 47·2 45·8 42·4 43·4 41·8	44.6 47.2 46.3 42.6 43.8 42.3	44.9 47.2 46.6 43.2 44.3 42.8	45.0 47.1 46.6 42.9 44.7 42.5	45.4 47.1 47.0 43.0 45.0 42.5	45.5 47.1 47.2 42.6 45.1 42.5	45.4 47.2 47.4 42.6 45.3 42.4
FEBRUARY.	15 16 17 18 19 20 21	41.8 38.9 40.0 41.6 45.2 46.0	41.6 38.2 40.0 41.4 45.6 46.0	41.3 37.8 40.6 41.4 45.9 45.6	41.2 36.6 40.4 41.4 45.0 45.2	41.4 36.7 40.8 41.8 45.0 45.4	42·2 36·9 41·4 42·4 45·2 45·3	42·4 36·7 42·4 43·1 45·5 44·9	42·3 37·0 43·0 43·8 45·6 44·2	42·3 37·2 43·6 44·1 46·3 44·0	42.4 38.0 44.4 44.5 46.6 43.8	42.2 38.4 44.9 45.2 46.8 43.9	42·3 38·2 45·0 45·8 46·5 44·4
	22 23 24 25 26 27 28	37·1 36·3 33·3 39·9 39·1 42·7	36.9 35.3 33.5 39.3 38.8 42.2	36.9 35.8 34.0 39.3 38.8 42.0	37:1 37:3 35:1 39:6 40:5 42:1	37·1 37·1 35·3 40·5 40·3 42·6	38.6 37.4 36.3 41.3 41.3 43.7	38.7 37.9 37.7 42.0 42.1 44.2	40.0 38.0 42.4 42.7 44.4	40°1 38°1 38°8 42°9 42°6 44°8	40.0 39.8 43.9 43.4 44.4	40.0 40.0 44.4 42.9 44.6	39.7 39.4 40.0 44.8 42.7 44.6
lourl	y Means	41.15	40.97	41.14	41.50	41.35	41.87	42.26	42.80	42.85	43.42	43.55	43*4

a Five minutes late.

<sup>&</sup>lt;sup>b</sup> Two minutes late.

VERTICAL FORCE. One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1'64. 13h. 16h. 17h. 18h. 19h. 20h. 21h. 22h. 23h Monthly 12h. Means. Sc. Div. Sc. Div. Sc. Div. Sc. Div. Sc. Div. Sc. Div. Sc. Div. Sc. Div. Sc. Div. Sc. Div. Sc. Div. Sc. Div. Sc. Div. 203'4 203.5 203.6 203.3 203'4 203.2 201.5 201.2 206.23 202.4 204.0 198'8 203'4 195.2 193'8 194.0 194.7 194.7 193.6 192.8 192.0 191.7 190.0 190.5 195.29 195'1 198:90 203.4 203.5 202.4 203'1 203.3 204.1 204.4 206.1 208.3 208.0 199.6 198'4 208.3 208'4 208.6 209.0 208.8 210.7 210.7 211.5 211'2 211.0 210.59 208'1 208.3 204.8 204.8 204.5 204.5 205.1 204.2 202.1 204.8 204.5 205.2 204.5207.12 204.8 209:5 210.4 209.5 205.0 204.7 211'0 206'68 207.8 203.1 } 206.9 207.8 206.4 205.5 197.4 200.0 199.1 200.0 200.0 199'0 196.1 197.3 197.1 199.45 200.0 200.0 198'1 196.59 198'0 199.3 197.6 195.8 195.8 196.1 196'2 196.9 198.1 198.3 197.6 198.7 196.0 196.4 197.04 195.5 199'0 199.0 199.4 199.7 199.8 195'3 195'4 195.5 199.0 203.9 203.9 204'1 203:30 204.5 205.6 203.5 204.0 204'0 204'3 204'1 205.0 204.5 202'4 201.9 204.7 204.3 203.8 203.8 205.2 205.2 205.0 204.7 203.9 202.95 201.3 204.7 205'6 204.9 204'4 201.2 201.2 203.57 208.4 207.5 203.0 } 205.8 204'9 203.0 201.4 202.8 203'1 205.2 205.7 202.68 200.6 204'0 205.2 205.4 205.6 198.5 200.4 207:2 205.1 207.2 207:1 208:41 207.2 208.2 208.4 208.4 204.0 205'1 207:0 208.8 202:41 198.3 198.7 198.9 201.7 203.3 203.3 203.3 204.1 204.3 203.9 204.5 198'3 198.4 197.3 199.0 199.6 200.0 200.0 198.5 198.5 199'1 198.4 197.4 199.42 196'8 196.00 194.0 194.0 192.7 193'9 195.4 195'4 195.4 195.6 194.3 195.8 195.4 194'0 198.7 201.0 200'0 199.0 200.0 201'4 200.39 212.0 212.7 209.3 201.1 199.2 198:3 211.7 222.6 210.00 219.2 231.5 238.1 205.5 184.2 207.2 206.7 213.0 214.2 214.0 211.1 212.3 212.5 213.2 214.5 215'1 215.2 215.2 213.5 215.4 213'43 209'9 210.3 209.7 209.7 203:5 209.83 215.2 209.4 208.9 195.2 196.6 206.8 206'8 217.3 215'1 197.9 198.4 193.0 200.8 204.4 203.37 207.7 205.6 196.5 201.6 199.5 202'1 203.1 202.1 200.3 200'6 205.07 199.9 201.3 202.1 205.9 202'3 198.7 198.2201.6 201.0 202.3 199.5 199.6 198.7 200.7 201.4 204.22 211.1 } 210.7 212.9 211.4 210.4 211.3 203.27 202.35 202.73 203.77 203\*33 203:40 203.07 203'68 204'29 202.66 203'32 203'13 203.37 TEMPERATURE OF THE VERTICAL FORCE MA GNET. ٥ 0 44.0 41.27 43'4 43.6 44'6 42.4 42.7 42.9 42.7 42.742.5 42.3 43.0 48\*4 48.7 49.2 49'4 49.6 49.7 50.0 49'4 47.70 48.2 48.2 47.9 48.4 44.85 42.4 41.6 41.1 40.6 40.0 39'6 39.2 39.0 38.2 45'6 43.4 44.4 38.7 38.2 38.0 37.8 37.0 38:15 39.2 38.7 38.7 39'4 39.8 39.6 39.0 40.5 40.7 40'2 40.0 40'0 39.8 39.8 39'19 40.4 41.0 41.0 40'9 40.9 43.5 41'4 40.8 43.3 42.742'1 41.05 40.7 40.4 40'4 41.3 41.7 42.6 } 46.0 46.2 45'13 46.0 46.0 46.0 46'1 46'0 46'5 45'4 45.4 45.8 46.0 47.0 46.5 46'0 45.6 45.5 47.01 47.6 47.4 47.0 47.4 47.6 47.6 47.1 46.0 46.05 45.2 45.0 47.4 47.2 47.0 47.2 46.8 45.6 44.7 44.4 44.2 41.9 41.4 42:38 42'8 42.2 42.6 42.8 42.242.3 41.5 41.6 41'4 42.241'9 45'0 44'4 43'2 43'0 41'3 41.4 41.3 41.4 41.4 41.6 42.96 43.8 42.4 41:7 42.2 42.341.4 41.5 41.65 39.7 40.8 41'2 42.0} 39.8 41.9 41.5 41.57 41.7 40.6 3919 43.0 39.5 39.1 43.0 43.0 42.4 41.2 39.5 38.71 39.4 39.7 39.8 40.4 40.3 40.1 40.0 39.7 40.0 39.6 39.7 39.7 45.0 45'4 43.1 42.2 41.5 41.7 41.4 42.85 44'9 44'3 43.6 43'4 45.4 45.2 44'6 45.2 45.2 45.1 44'03 45.8 45'6 44.2 44.7 45.444.9 44.4 46'8 46'6 46'6 46.8 46.7 46'33 46.6 46'9 47.4 47.4 47.3 47.1 46'6 44°4 44'6 44.4 43.2 44'0 44.2 42.61 37.1 36.3 36.3 36.3 36.4 36.8 37.0 39.8 39.18 40.4 40'6 40.8 40.8 40.2 39.5 39.0 38.6 40.7 40.8 39'2 36.90 35.0 33.6 36.8 35'6 34.3 34.0 39.5 39.5 38'7 37.8 37.0 40'1 39'1 38.10 39'8 39.1 39.1 39.5 39.3 39.1 39.1 39.7 39.8 39.1 45'1 42.6 41.941.0 40.0 39.2 42.34 45.0 44.7 44.7 44.1 43.7 43.5 43'4 44.8 44.0 44.4 44'2 43.9 43.8 42.82 45.0 45.0 44.9 44'6 44.6 44'9 44.8 44.7 44.6 44.6 44.542.39 37.8 37.9 38.0 37.5} 37.9 37.8 43'62 42:33 43.63 43.53 43'31 43'12 42.81 42.02 41.82 41.70 41.56 41.5541.38

<sup>\*</sup> Three minutes late.

	On	a Saala Div	ision — • 00	OOGS parts (	of the V F		ICAL FO		esponding to	o 1º decrease	of Tempera	ature, 1°64.	
Mean G gen Ti	öttin- )	Oh.	lsion ≡ 00	2h.	3 <sup>h</sup> .	4 <sup>h</sup> .	5h.	6h•	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
	1 2 3 4 5 6	Sc. Div. 211 ' 3 211 ' 0 201 ' 5 199 ' 4 204 ' 4 197 ' 1	Sc. Div. 210°0 210°4 201°7 199°6 205°7 196°6	Sc. Div. 210'3 210'3 201'9 199'0 206'4 198'9	sc. Div. 208 5 203 5 201 3 195 7 a 194 9 196 8	Sc. Div. 206 ° 0 203 ° 6 201 ° 3 194 ° 9 198 ° 7 194 ° 5	sc. Div. 204 ' 9 203 ' 9 199 ' 7 194 ' 9 198 ' 6 193 ' 0	sc. Div. 208 '3 202 '7 199 '1 195 '4 196 '6 193 '0	Sc. Div. 208 2 201 4 199 6 196 1 196 2 191 2	Sc. Div. 212 1 201 0 199 6 196 3 196 9 192 8	sc. Div. 221 0 200 4 197 9 196 3 196 9 189 7	Sc. Div. 224 1 199 9 196 7 197 2 196 1 193 0	Sc. Div. 224 '4 198 '9 195 '2 197 '2 195 '7 193 '0
	7 8 9 10 11 12 13	197°3 195°0 206°3 205°2 210°5 210°6	199°1 198°5 206°3 206°8 211°0 210°6	199°1 200°1 207°4 208°1 212°6 210°6	191 · 2 204 · 5 204 · 2 205 · 0 210 · 8 208 · 4	194.5 204.9 202.9 205.0 208.2 207.4	195·3 204·9 200·7 205·9 207·1 205·3	197.0 208.0 201.5 205.0 207.1 205.2	197.0 206.8 205.6 204.3 206.6 202.9	198.4 208.0 204.0 202.4 206.3 202.9	199.7 206.4 202.5 201.8 205.4 201.5	202·5 206·7 202·3 200·7 206·4 202·5	200.5 206.8 202.9 201.7 205.0 209.6
MARCH.	14 15 16 17 18 19 <sup>d</sup> 20	206.6 211.2 213.1 198.7 190.4 195.8	208.4 214.3 214.1 201.3 175.7 195.9	208.2 213.9 213.5 200.0 171.8 197.2	209.2 209.5 207.9 198.4 176.9 197.0	205.9 209.8 207.6 196.0 186.4 196.2	205 · 2 208 · 0 205 · 6 193 · 5 203 · 6 194 · 6	203°3 206°9 205°1 190°7° 209°0 193°3	203·1 207·0 204·9 188·4 202·4 192·0	203.8 207.7 203.8 188.3 206.5 193.0	204.9 209.0 202.4 187.0 239.6 193.0	204.6 207.0 200.5 187.6 212.2 194.4	204.6 207.0 200.6 188.4 208.3 196.8
	21 22 23 24 25 26 27	208·3 193·4 196·1 189·2 190·1 205·2	207 · 9 195 · 0 196 · 1 191 · 7 194 · 6 207 · 7	207°0 197°2 194°9 190°8 195°3 208°2	206.5 197.2 196.0 188.0 195.4 206.0	205.7 195.8 192.4 186.7 194.4 204.7	204.5 194.6 191.6 185.6 193.3 205.7	204·3 193·2 190·6 187·1 192·6 207·6	202.8 191.5 192.4 188.0 193.3 207.4	202.7 192.5 193.9 188.8 193.3 207.4	202.7 192.5 196.1 190.4 194.8 209.3	202.7 192.0 195.8 190.6 193.9 209.6	203.0 193.6 195.7 191.7 194.5 205.4
	28 29 30 31	203°4 196°8 205°1	202.8 200.6 204.3	200°4 200°0 200°5	197.6 198.9 202.1	194'9 198'2 201'9	194'9 198'8 202'6	194°1 198°2 202°1	194.0 198.8 198.2	194.8 199.1 199.3	194.8 199.5 198.8	193.6 199.1 198.6	193 · 4 202 · 3 199 · 1
Hourly	Means	202.41	203.20	203.23	201.33	200.46	199.72	199.54	199.14	199.58	199.80	199.93	200.27
	7 1 2 3 4 5 6 7	37·4 40·5 44·7 45·1 43·8 45·4	37·4 40·4 44·6 45·0 43·3 45·3	37.9 41.0 44.2 45.8 43.4 45.4	39.0 43.0 44.4 47.0 48.0 46.3	39°3 42°9 44°7 47°1 44°9 47°4	39.9 42.8 45.2 47.5 45.8 48.0	39.6 43.4 46.0 47.8 46.4 48.4	40°0 44°4 46°4 47°9 47°0 48°6	40°4 45°0 46°8 48°2 47°4 48°7	40.6 45.6 47.4 48.9 48.2. 49.6	40.6 46.1 48.0 49.3 48.4 49.0	40°6 46°2 48°2 49°4 48°6 49°0
	8 9 10 11 12 13 14	44.5 42.2 40.4 41.4 37.0 38.1	44.1 41.6 40.3 40.9 36.6 38.0	45.4 40.9 40.6 40.8 37.0 38.7	47.2 40.6 41.8 41.2 38.2 39.0	46.4 40.6 42.2 40.6 39.3 39.3	46.6 40.6 43.3 40.6 40.0 39.8	46.7 40.8 43.7 41.4 40.0 40.7	47.0 41.0 44.2 41.7 39.9 41.2	47'0 41'0 44'4 42'2 40'2 41'8	46.7 41.0 45.8 42.3 41.6 42.8	47.0 41.1 44.9 43.4 41.5 43.4	47.0 40.7 45.0 43.2 42.0 43.8
MARCH	15 16 17 18 19 <sup>d</sup> 20 21	40.2 38.0 37.2 44.2 45.4 48.9	39.7 37.8 37.5 43.7 45.6 48.4	39.6 37.8 38.2 44.2 46.3 48.0	39.2 39.5 40.2 44.5 47.0 48.0	39.4 38.2 40.0 45.3 47.6 48.4	39.8 38.2 40.3 46.4 48.1 48.8	39.8 38.5 41.0 47.3 49.1 49.2	42.2 39.8 41.7 47.6 49.3 50.0	42.0 40.0 41.8 48.6 49.5 50.0	42°1 40°4 42°5 49°4 50°0 50°0	42.1 40.7 43.4 50.6 51.0 50.0	42.0 41.0 43.6 51.0 51.0 49.4
	22 23 24 25 26 27 28	41.7 46.6 47.4 50.6 49.8 41.3	41.6 46.4 47.4 49.8 49.3 40.8	41'9 46'4 48'2 51'0 48'6 41'0	42'4 46'5 48'8 52'0 48'6 41'4	42.6 46.5 49.6 52.2 49.0 41.4	42.6 46.9 49.8 52.1 49.3 41.4	43.2 47.5 49.8 52.0 49.6 41.2	43°3 48°4 49°5 52°2 50°0 41°0	43.5 48.7 49.9 52.4 50.1 40.8	43.8 49.4 50.5 52.5 50.3 41.4	44.2 50.0 51.2 52.5 50.3 41.9	44.2 50.2 51.8 52.4 50.0 42.2
	29 30 31	43.0 44.6 41.6	43.4 44.2 42.4	44.5 44.9 44.4	44.9 45.4 44.7	47.0 45.7 45.2	47.4 46.0 45.6	48.2 46.0 45.7	48.6 45.7 46.0	48.7 45.7 46.4	48.7 45.6 46.0	49°2 45°0 46°0	49'0 44'6 46'0
lourly I	Means	42.91	42.69	43.07	43.92	44.05	44*41	44.77	45.50	45.45	45.89	46.15	46.19

<sup>&</sup>lt;sup>a</sup> Six minutes late.

b Twelve minutes late.

<sup>&</sup>lt;sup>c</sup> Five minutes late.

		One Scale	Division =	•000065 par	rts of the V.		RTICAL F		orresponding	g to 1° decre	ase of Tem	perature, 1°6	4.
	12 <sup>h</sup> .	13 <sup>h</sup> .	14h.	15 <sup>h</sup> .	16 <sup>h</sup> .	17h.	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Daily and Monthly Means.
	sc. Div. 226 8 198 7 195 3 203 7 196 8	sc. Div. 225 2 199 9 195 1 201 8 199 5	sc. Div. 210'9 200'6 195'1 205'7 198'9	Sc. Div. 219 '8 201 '1 195 '6 202 '2 198 '9	Sc. Div. 216 · 3 201 · 1 195 · 6 204 · 3 198 · 0	Sc. Div. 215 '9 202 '1 195 '6 201 '9 197 '0	Sc. Div. 211 6 202 1 196 2 203 4 196 4	Sc. Div. 211 '7 202 '1 196 '7 196 '8 194 '7	Sc. Div. 211 1 201 6 197 2 197 3 195 6	Sc. Div. 211 1 201 0 197 6 199 7 196 2	Sc. Div. 209 9 200 8 198 4 199 6 196 5	sc. Div. 209 '9 200 '9 198 '9 203 '2 196 '8	sc. Div. 213 '72 202 '46 198 '03 199 '23 198 '02
	193 7 203 8 206 8 203 9 203 3	194.6 203.4 207.0 203.9 203.3	195.7 202.4 209.3 202.2 204.4	195.7 198.2 209.7 202.9 205.7	191.8 	191.3 200.0 207.8 202.0 205.8	195.4 200.0 205.0 205.7 207.6	192.7 195.3 205.4 205.8 207.2	192.7 200.0 207.2 203.0 209.5	192.7 194.0 207.2 202.3 211.2	187 · 9 183 · 3 207 · 2 204 · 2 209 · 6	192'3 } 190'3 207'3 203'2 209'6	193.59 197.54 205.84 203.68 205.62
	204.3 211.0  204.9 206.7	204.2 209.9  203.7 207.4	205.0 207.2 	207.4 207.5 — 205.4 207.7	210.1 b 207.1 206.4 208.3	210.7 207.1 206.9 209.1	209.9 209.1 207.3 209.6	210.0 206.2 207.5 209.6	210.3 206.2 208.2 209.6	210·3 206·2 210·4 210·7	211.9 203.8 210.4 210.7	211.0 205.6 210.6 211.1	208·42 206·85 206·44 209·20
	201'0 189'3 212'2 203'5	201.5 190.0 216.2 203.4 ————————————————————————————————————	201.5 192.5 217.7 203.4 ————————————————————————————————————	201.3 192.6 203.9 195.3 — 201.0	201.2 194.4 164.3 197.9 — 201.3	200°7 194°3 79°6 183°6 — 200°7	200.7 191.7 174.6 — 203.1 200.7	199 · 2 191 · 6 200 · 9 204 · 0 200 · 6	198.3 191.6 206.3 205.5 195.1	195.4 191.9 202.5 ————————————————————————————————————	198.5 189.1 195.4 ————————————————————————————————————	198.5 182.0 197.5 ————————————————————————————————————	203 · 20 192 · 05 193 · 91 198 · 41 201 · 65
5	202.7 194.1 194.7 190.6 194.7 205.4	197.6 191.1 189.5 194.7 206.0	197.5 191.2 188.4 194.8 206.0	198.2 192.0 188.6 198.2 205.3	195 9 191 4 189 1 198 2 196 1	195.2 190.7 189.1 198.2 196.1	193 · 2 175 · 8 190 · 3 198 · 6	182.3 174.0 186.6° 202.6	180·3 187·2 186·6 201·8	193 °0 189 °4 186 °5 203 °0	195 · 4 188 · 9 188 · 5 199 · 2	195.7 188.5 188.5 204.9	193 · 62 191 · 10 188 · 79 196 · 43 205 · 42
	193.9 200.8 198.7	194.8 201.1 199.2	194.8 202.0 199.8	195°1 202°3 202°1	196.6 203.5 200.8	197 <b>.0</b> 202.8 200.6	204.4 197.0 202.6 202.8	206°3 197°0 202°6 202°5	206.5 196.5 202.5 204.0	204.8 196.6 203.8 204.3	205.5 191.9 203.8 204.3	203·5 } 191·4 205·1 205·5	195.89 200.97 201.55
	201.12	201.16	200.99	201.15	200.85	200.08	200.78	199.65	200.21	200.79	199.92	200.45	200.68
	40°6	41.0	41.3	4η5	41°4	RATURE OF	41°0	40.7	40°4	40.3	40°4	40°4	40°12
•	45°9 47°9 49°4 48°7	45.6 48.0 49.3 48.2	45.4 48.0 49.0 47.6	45°0 48°0 48°6 47°8	44.7 48.0 47.6 47.6	44.8 48.0 47.6 47.4	44.7 47.6 47.2 47.4	44.6 46.9 46.5 47.3	44.8 46.6 45.6 46.5	45.0 46.2 45.0 46.4	45.1 45.7 44.7 46.4	44.7 45.2 44.1 45.9	44°23 46°53 47°23 46°77
	48.6 	48.6 — 46.3 40.4 45.0 43.1	48 2 45 8 40 1 45 0 42 6	47.5  44.9 40.0 43.7 42.0	47.1 	46.8 	44.5 43.2 40.6 42.7 40.4	44.4 43.4 40.7 42.4 39.6	44.4 43.4 40.6 42.0 39.2	44.4 43.4 40.6 41.8 38.4	44.0 43.3 40.2 41.8 37.7	44.7 43.2 40.4 41.8 37.3	46.85 45.31 40.69 43.15 41.03
	42.1 43.3 41.9 41.0	42.5 42.4 	42°2 42°2 — 41°4 39°8	41 · 4 42 · 2 41 · 4 40 · 0	40.5 41.9  41.1 39.7	39.8 41.4  40.4 39.6	39.1 39.8 40.3 39.5	39.1 40.5 40.0 39.2	38.7 40.5 39.6 39.1	38.6 	38·3 40·5 39·0 38·8	38·3  40·6} 38·2 37·8	39.75 40.93 40.55 39.33
	43.6 51.0 51.0 49.8	43.7 50.5 52.2 49.7	43.8 49.7 52.2 49.8	43.6 49.3 51.5 50.0	43.6 48.9 51.1 50.0	43.6 48.5 50.3 50.0	43.8 48.2 50.2 — 42.6	44.2 47.3 49.7 — 42.0	44.2 47.0 49.3 — 42.1	44.4 46.5 49.3 — 42.2	44.2 46.2 51.0 — 42.4	$   \begin{array}{c}     43.9 \\     46.0 \\     49.2 \\     \hline     \\     41.7   \end{array} $	42°25 47°58 49°45 47°56
	44.3 50.4 51.8 52.2 49.7 42.2	45°0 50°4 52°4 52°0 48°6 42°2	45.2 49.7 52.9 51.6 48.0 42.3	45.6 49.9 52.0 51.6 47.4 41.7	45.6 50.0 51.3 51.5 46.6 41.6	45.6 49.8 51.2 51.5 46.0	45°6 49°8 51°2 51°4 45°4	45.4 49.5 51.4 51.7 44.7	45.3 49.3 50.8 51.6 44.2	45.6 48.7 50.3 51.2 43.6	46.0 48.4 51.0 51.0 42.6	46.6 48.0 51.4 50.8 42.3	44.20 48.64 50.48 51.66 47.67
	48°3 44°8 45°5	47.7 44.8 44.8	47.6 44.4 44.6	47.6 44.2 44.0	47.5 43.8 43.8	41.6 	41.6 47.2 43.4 43.4	41.7 47.1 42.8 43.2	41.7 46.8 42.4 42.4	42.0 46.4 41.9 42.2	42.3 45.7 41.5 42.0	-42.5 $44.8$ $41.7$ $41.8$	41.63 46.94 44.27 44.22
	46.09	45.96	45.70	45.42	45.14	44.90	44.29	44.09	43.82	43.62	43.43	43.23	44.60

<sup>&</sup>lt;sup>d</sup> Not included in the Means, on account of disturbance.

VERTICAL FORCE.  One Scale Division = '000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1 *64.														
Mean G gen T	öttin-}	O <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	<b>5</b> h.	6 <sup>h</sup> •	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10h.	11h.	
	1	Sc. Div. 205 7	Sc. Div. 205 9	Sc. Div. 204 5	sc. Div. 204°0	Sc. Div. 201 2	Sc. Div. 198'7	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 199 1	Sc. Div. 199'4	Sc. Div. 200 9	
	$\frac{2}{3}$	188.9	193.7	192.6	192.6	194.3	193.6	192.0	197.4	205.2 a	202.6	225.4	211.0	
	4 5 6 7 <sup>b</sup> 8 9	201.0 194.4 187.1 183.5 189.7	198.0 194.6 188.2 185.5 188.2 187.7	194.7 193.3 185.3 187.3 185.9 184.8	193.5 193.3 184.7 184.4 185.2 182.8	192 · 1 191 · 4 183 · 3 184 · 4 184 · 1 181 · 2	190°4 190°2 182°4 185°0° 184°1 181°8	190°2 189°2 184°3 185°0 d 183°6 182°9	185.8 189.2 187.2 186.3 185.9 183.8	185°8 189°2 190°8 185°7 187°6 185°2	185.8 190.1 187.1 184.4 187.7 186.6	192.4 190.5 188.9 181.7 186.2 186.8	192.6 189.8 190.0 181.8 185.1 186.4	
APRIL.	11 12 13 14 15 16 17	195°2 192°3 190°6 192°5 199°6 188°2	194·2 189·7 189·5 192·3 197·6 184·1	192.9 188.0 e 186.9 191.0 196.3 187.5	191.6 187.1 186.6 190.6 194.8 189.6	188.4 186.5 185.0 190.6 193.7 188.6	186.8 184.4 184.8 192.0 192.7 f 190.6	186.8 184.8 185.0 192.0 193.3 191.4	187.1 185.6 187.9 190.8 192.0 191.9	188.4 186.9 189.9 191.6 193.3 193.3	188'4 189'6 194'4 192'9 195'1 194'9	186.7 189.6 194.7 192.6 195.7 195.6	186.0 198.2 198.0 196.0 196.0	
	18 19 b 20 b 21 b 22 23 24	206°3 148°0 177°7 170°6 186°6 193°1	205·3 136·0 160·9 170·6 187·7 191·5	204.6 143.0 150.6 171.0 189.0 190.1	202.8 174.5 174.4 172.8 189.3 187.8	199.5 184.5 181.7 173.3 188.2 186.6	198°2 196°4 183°8 175°3 188°0 183°4	197.6 197.7 185.0 179.2 187.5 182.8	196.9 206.9 203.8 178.6 186.7 183.2	197.6 220.6 194.8 186.9 186.5 184.3	195 '9 222 '8 191 '1 179 '6 186 '0 184 '1	195 ° 9 208 ° 6 184 ° 7 178 ° 0 185 ° 0 183 ° 1	195.0 202.1 195.7 178.8 184.8 183.8	
,	25 26 27 28 29 30	186.6 182.6 191.2 188.4 175.6	187.7 181.9 188.0 190.4 174.9	186.5 181.7 185.4 190.6 183.5	186°3 181°1 184°5 189°9 183°8	184.6 181.1 182.6 188.7 187.3	182.4 181.1 182.8 188.0 188.1	180:7 181:1 183:1 188:0 188:1	179.5 183.2 186.1 188.7 190.8	179°1 184°2 188°1 188°7 190°8	178 · 4 183 · 2 188 · 6 190 · 8 193 · 6	177.7 184.2 189.5 196.8 196.3	177'9 184'6 190'0 197'6 197'7	
Hourl	y Means	189.81	189.22	188.74	188.17	187.33	186.87	186.90	187.55	189.07	189.33	190.85	190.26	
					TEMPERAT	URE OF TH	IE VERTICA	AL FORCE M	IAGNET.					
	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	4i°0	4ΰ0	41.2	42°0	43.2	44.0	44.5	45.0	45.2	45°5	45°5	45.4	
	3 4	44.3	44.6	45.4	46.5	47.3	48.3	49.3	49.6	50.0	50.8	51.1	51.2	
	5 6 7 b 8 9 10	46.0 48.6 52.2 56.1 52.3 51.9	46.5 48.8 51.8 54.4 53.2 52.3	48.1 49.6 52.0 54.4 53.6 53.9	49.4 49.5 52.0 54.5 53.5 54.2	50.0 50.0 52.2 55.0 54.0 54.4	51.0 50.4 52.5 55.5 54.0 54.0	51'3 51'0 52'8 56'1 54'1 54'5	51.5 51.4 53.2 56.5 53.6 54.4	51.6 51.9 53.7 57.4 53.8 54.6	51.8 52.2 54.4 58.2 54.5 54.4	51.8 52.5 55.2 59.0 54.8 54.2	51.8 52.5 56.2 59.2 55.0 54.1	
APRIL.	12 13 14 15 16 17	48.0 49.8 51.1 49.5 46.3 48.6	47.9 50.4 51.6 50.1 46.6 48.6	48.4 50.9 52.5 50.2 46.9 49.0	49.0 52.0 53.2 50.1 47.4 48.6	49.6 52.0 53.1 50.0 47.6 48.6	50.2 52.0 53.1 49.8 48.2 49.0	50°2 52°0 53°0 49°6 48°2 49°2	50.3 51.5 53.0 50.0 48.7 49.3	51.0 51.4 53.2 50.3 48.5 49.2	51.4 51.8 53.5 50.4 47.8 48.8	52.6 52.2 54.2 50.6 48.0 48.4	52'3 52'5 54'3 51'2 48'2 47'7	
	18 19 <sup>b</sup> 20 <sup>b</sup> 21 <sup>b</sup> 22 23 24	41.6 50.3 52.4 61.7 53.5 50.2	41.6 49.5 52.4 61.7 53.5 50.8	41.8 49.4 53.0 61.0 52.8 51.2	42.2 49.1 53.2 60.6 52.4 51.7	42.6 49.4 53.2 60.4 52.3 52.2	42.8 49.6 53.2 60.3 53.0 53.0	43.5 50.2 54.2 60.0 53.6 53.3	44.2 50.7 54.5 60.0 54.0 53.6	44.5 51.0 55.6 60.0 54.2 53.4	44.6 51.2 57.0 59.6 54.5 54.2	46.0 51.0 58.2 59.6 55.2 54.7	47 · 2 51 · 5 58 · 8 59 · 2 54 · 8 55 · 0	
	25 26 27 28 29 30	52·2 55·3 49·2 49·5 49·5	52.2 55.4 50.2 49.5 49.6	52·2 55·3 50·5 49·2 49·7	52.2 55.7 50.9 49.2 50.6	53°1 55°5 51°3 49°2 51°0	54.0 55.2 52.0 49.2 51.1	54.7 54.7 52.2 49.6 51.1	55.7 54.5 52.2 49.8 51.2	56.2 54.5 52.1 50.1 51.6	57 · 1 54 · 6 52 · 2 51 · 0 52 · 1	57.5 54.7 52.0 51.2 52.4	58.0 54.5 52.0 50.7 52.2	
lourly	Means	50.52	50.42	50.76	51.10	51.42	51.78	52.01	52.18	52.39	52.69	52.96	52.96	

<sup>\*</sup> Four minutes late.

b Not included in the Means, on account of disturbance.

One Scale Division = *000065 parts of the V. F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1 · 64.  12h 13h, 14h, 15h, 16h, 17h 18h 19h 20h 21h 22h 23														
12h.	13h.	14h.	15h.	16 <sup>h</sup> .	17h.	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23.	Daily a Monthl Means		
sc. Div. 200°0	sc. Div. 200 4	Sc. Div. 200 0	Sc. Div. 200°0	Sc. Div.; 199 2	Sc. Div. 199*2	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div		
228.1	202.2	198.1	173.6	183.0	185.9	198.4	197.0	198.4	194.5	195.7	189.1			
<u>-</u> 192 <b>˙</b> 6	193.2	191.3	191.2	191.2	190.2	184.4 191.5	184.6 193.6	189.5	189.7	199°0 193°7	198.9	196.1		
189.3	189.3	188.9	188.0	189.0	189 4	188.4	183.9	188.2	189.0	186.9	187.1	189.69		
201.8	207.4	204.1	180.0		132.9	148.0	145.5	110.1	124.7	165.0	168.3	175.09		
184°0 186°2	184.8 186.2	184 <b>·</b> 9 187 <b>·</b> 2	184°1 185°9	184°1 187°1	184°5 188°3	184.2	185.0	180.8	181.0	185.8	186.2	184.3		
186.1	186.0	185.9	186.0	186.0	186.0	-	187.7	187.6	187.6	189:1	189°5	186.8 187.8		
 186:3	186.7	186.7	186.8	188.2	188.2	195.0 188.7	195 <b>·</b> 9	196.4 188.7	195 <b>.</b> 9	194.6 190.1	194·5 }	188 8		
188.3	188.3	190.0	190.7	189.3	189.0	189.0	189.7	189.9	190.6	187.7	190.7	188.6		
194'8	196.2	197.4	194.8	193*4	190.3	189.9	190.3	190'3	191'4	191.7	191.7	191.08		
193°6 194°9	194.7 194.8	194.7 195.5	194 <b>.</b> 2	193.0	193 <b>'</b> 7	194.8   195.8	195°0 195°3	195.0 191.8	191 <b>.</b> 9	191.5 193.6	194·3 192·6	192.88 194.08		
196.2	195.9	195.3	196.5	198.2	198.6	_					$\left\{\begin{array}{c} 192 & 6 \\ -206 & 3 \end{array}\right\}$	194 0		
93.8	192.9	193.2	192.8	194.1	194.0	206.2 193.4	205.6 193.0	206'1 145'8	206.5 137.0	206.7 127.7	206.3 §	186.42		
196.0	195.0	190.8	189.2	188.2	187.6	188.4	185.9	178.3	187.3	186.2	186.6	187.56		
84.2	178.9	166.4	167.5	164'6	159.3	164.7	167.0	171.0	170.0	170.4	170.3	175.77		
178.1	177.9	179.1	179.8	177.7	179.3	179.7	179.7	182.2	183.5	183.0	185.3	178*33		
.85 <b>°4</b> .83°7	184.7 184.0	184.0 183.7	185.7 184.6	185.7 184.8	184°5 184°7	185 <b>.7</b>	186 <b>.8</b>	187 <b>·</b> 9	188.2	188.3	191.2	186.82		
_						187.7	187.7	186.7	186.2	186.6	188.4	185.94		
77'9 84'6	179.5 184.8	179°3 185°4	178°3 186°3	179'0 187'8	179 <b>°</b> 1 188°5	179·1 189·5	179.0 e	178'0 190'0	175°3 191°0	177°2 190°4	179°9 191°4	180°37 185°40		
92'0	192.6	192.3	193.1	193.2	193.2	191.7	186.1	184.2	181.0	169.2	179.6	187.04		
98.8	203.1	184'4	183.6	191.5	191'1	191'1	185.5	157.5	169'4	169.9	173.7	186.92		
194.9	192.2	193.9	188.6	179'1	189.2	179'9	185.2	189.0	193.0	193.0	195.3	188.52		
191.24	190.37	189.43	187°79	188.28	188.91	189*46	189.16	188.18	188.29	188.76	189.99	188.93		
	· · · · · · · · · · · · · · · · · · ·				ATURE OF	THE VERT					<u> </u>			
45.2	44.7	44.6	44.6	45.0	45.5	<u>.</u>	<u>-</u>	-	<u>.</u>	<u>-</u>	- }	。 44 <b>·</b> 19		
51.8	51.6	51 <b>.</b> 8	52.0	51.3	51.0	44 <b>°</b> 6	44.8	44.8	44.6	44.5	44.2}			
<u> </u>			_	·		46.4	46.3	46.2	46.0	46.2	46.6	48.58		
51.5 52.4	51.0 52.8	50°6 52°9	50°3 53°1	50°1 53°0	49.8 52.9	49.4 52.6	49.4 52.5	49.4 52.2	49°3 52°3	49°3 52°4	49.0 52.2	50.00 51.65		
U4 4				58.2	57.8									
56.4	57.0	57.1	57.7	00 - 1	01 0 1	57.0	56.4	56.0	56.2	56.4	56.0	55.02		
56°4 58°7	58'0	57.5	57.0	56.6	56.0	55.4	55.2	54.4	54'1	53.6	53.3	56.09		
56.4 58.7 54.6		57°5 53°8	57°0 53°6	56°6 53°2	56.0 52.7			54.4 52.2			53·3 51·7	56.09 53.38		
56.4 58.7 54.6 53.5	58.0 54.2 53.1	57.5 53.8 52.3	57°0 53°6 51°7	56.6 53.2 51.5 —	56.0 52.7 51.3	55.4 52.5 — 47.0	55.2 52.2 — 47.0	54.4 52.2 	54.1 52.2  47.4	53.6 51.8 	53·3 51·7 	56.09 53.38 51.85		
56.4 58.7 54.6 53.5 - 52.0	58.0 54.2 53.1 — 51.8	57.5 53.8 52.3 — 52.0	57.0 53.6 51.7 — 52.4	56.6 53.2 51.5 — 52.0	56.0 52.7 51.3 — 51.4	55.4 52.5  47.0 51.4	55.2 52.2 	54.4 52.2 	54.1 52.2 	53.6 51.8 	53·3 51·7 — 47·8 50·0	56.09 53.38 51.85		
56.4 58.7 54.6 53.5  52.0 52.5 54.2	58.0 54.2 53.1 — 51.8 52.7 54.2	57.5 53.8 52.3	57°0 53°6 51°7	56.6 53.2 51.5 —	56.0 52.7 51.3 — 51.4 52.6	55.4 52.5 — 47.0	55.2 52.2 — 47.0	54.4 52.2 	54.1 52.2  47.4	53.6 51.8 	53·3 51·7 	56.09 53.38 51.85 50.66 51.90		
56·4 58·7 54·6 53·5 	58.0 54.2 53.1 51.8 52.7 54.2 49.6	57.5 53.8 52.3  52.0 52.9 53.6 49.3	57.0 53.6 51.7 — 52.4 53.0 53.2 49.2	56.6 53.2 51.5 — 52.0 52.6 52.8 49.1	56.0 52.7 51.3 ————————————————————————————————————	55.4 52.5 	55.2 52.2 47.0 50.7 52.4 51.7 47.4	54.4 52.2 	54.1 52.2 47.4 50.4 51.1 50.5 46.9	53.6 51.8 	53.3 51.7 	56.09 53.38 51.85 50.66 51.90 52.57 49.20		
56·4 58·7 54·6 53·5 	58.0 54.2 53.1 	57.5 53.8 52.3 	57.0 53.6 51.7  52.4 53.0 53.2 49.2 47.8	56.6 53.2 51.5 — 52.0 52.6 52.8 49.1 47.5	56.0 52.7 51.3 	55.4 52.5 	55.2 52.2 47.0 50.7 52.4 51.7 47.4 47.5	54·4 52·2  47·2 50·8 51·8 51·2 47·1 48·4	54'1 52'2 47'4 50'4 51'1 50'5 46'9 48'4	53.6 51.8  47.6 50.0 51.5 50.3 46.5 48.6	53.3 51.7 	56.09 53.38 51.85 50.66 51.90 52.57 49.20 47.88		
56.4 58.7 54.6 53.5 	58.0 54.2 53.1  51.8 52.7 54.2 49.6 48.4 47.8	57.5 53.8 52.3 	57.0 53.6 51.7 — 52.4 53.0 53.2 49.2 47.8 46.8	56.6 53.2 51.5 	56.0 52.7 51.3 — 51.4 52.6 52.2 48.5 47.3 44.5	55.4 52.5 47.0 51.4 52.7 52.0 48.2 47.5 40.6	55.2 52.2 47.0 50.7 52.4 51.7 47.4 47.5 41.0	54·4 52·2 47·2 50·8 51·8 51·2 47·1 48·4  41·4	54.1 52.2 47.4 50.4 51.1 50.5 46.9 48.4 — 41.2	53.6 51.8 	53:3 51:7 	56.09 53.38 51.85 50.66 51.90 52.57 49.20 47.88 46.27		
56.4 58.7 54.6 53.5 - 52.0 52.5 54.2 50.5 48.3 47.7 - 47.9	58.0 54.2 53.1 51.8 52.7 54.2 49.6 48.4 47.8 48.6	57.5 53.8 52.3 	57.0 53.6 51.7 — 52.4 53.0 53.2 49.2 47.8 46.8 — 48.6	56.6 53.2 51.5 	56.0 52.7 51.3 — 51.4 52.6 52.2 48.5 47.3 44.5 — 49.0	55.4 52.5 47.0 51.4 52.7 52.0 48.2 47.5 40.6 48.7	55.2 52.2 47.0 50.7 52.4 51.7 47.4 47.5 41.0 48.8	54·4 52·2 	54.1 52.2 47.4 50.4 51.1 50.5 46.9 48.4 	53.6 51.8  47.6 50.0 51.5 50.3 46.5 48.6  41.3 50.6	53:3 51:7 47:8 50:0 51:3 50:0 46:7 48:6 41:4 50:4	56.09 53.38 51.85 50.66 51.90 52.57 49.20 47.88 46.27 46.32		
56.4 58.7 54.6 53.5 	58.0 54.2 53.1  51.8 52.7 54.2 49.6 48.4 47.8	57.5 53.8 52.3 52.0 52.0 52.9 53.6 49.3 48.4 46.9 48.6 52.0	57.0 53.6 51.7 52.4 53.0 53.2 49.2 47.8 46.8 48.6 52.2	56.6 53.2 51.5 52.0 52.6 52.8 49.1 47.5 44.9 48.6 52.4	56.0 52.7 51.3 	55.4 52.5 47.0 51.4 52.7 52.0 48.2 47.5 40.6 48.7 53.0	55.2 52.2 47.0 50.7 52.4 51.7 47.4 47.5 41.0 48.8 53.0	54·4 52·2 47·2 50·8 51·8 51·2 47·1 48·4 49·0 53·0	54.1 52.2 47.4 50.4 51.1 50.5 46.9 48.4 41.2 50.2 52.7	53.6 51.8  47.6 50.0 51.5 50.3 46.5 48.6  41.3 50.6 52.7	53:3 51:7 47:8 50:0 51:3 50:0 46:7 48:6 41:4 50:4 52:6	56.09 53.38 51.85 50.66 51.90 52.57 49.20 47.88 46.27 46.32 51.34		
56.4 58.7 54.6 53.5 52.0 52.5 54.2 50.5 47.7 47.9 51.5 59.3 59.1	58.0 54.2 53.1 51.8 52.7 54.2 49.6 48.4 47.8 48.6 51.5 60.0 59.2	57.5 53.8 52.3 52.0 52.9 53.6 49.3 48.4 46.9 48.6 52.0 62.5 58.6	57.0 53.6 51.7 52.4 53.0 53.2 49.2 47.8 46.8 48.6 52.2 63.6 58.2	56.6 53.2 51.5 52.0 52.6 52.8 49.1 47.5 44.9 48.6 52.4 63.7 57.6	56.0 52.7 51.3 	55.4 52.5 47.0 51.4 52.7 52.0 48.2 47.5 40.6 48.7 53.0 62.7 56.3	55.2 52.2 47.0 50.7 52.4 51.7 47.4 47.5  41.0 48.8 53.0 62.6 56.0	54·4 52·2 47·2 50·8 51·8 51·2 47·1 48·4 49·0 53·0 61·7 55·5	54.1 52.2 47.4 50.4 51.1 50.5 46.9 48.4 41.2 50.2 52.7 61.7 55.2	53.6 51.8 	53:3 51:7 47:8 50:0 51:3 50:0 46:7 48:6 41:4 50:4 52:6 61:8 54:2	56.09 53.38 51.85 50.66 51.90 52.57 49.20 47.88 46.27 46.32 51.34 58.32		
56.4 58.7 54.6 53.5 52.0 52.5 54.2 50.5 54.2 50.5 47.7 47.9 51.5 59.3 59.1 54.6	58.0 54.2 53.1 51.8 52.7 54.2 49.6 48.4 47.8 48.6 51.5 60.0 59.2 54.8	57.5 53.8 52.3 52.0 52.9 53.6 49.3 48.4 46.9 48.6 52.0 62.5 58.6 54.6	57.0 53.6 51.7 52.4 53.0 53.2 49.2 47.8 46.8 	56.6 53.2 51.5 52.0 52.6 52.8 49.1 47.5 44.9 48.6 52.4 63.7 57.6 54.0	56.0 52.7 51.3 	55.4 52.5 47.0 51.4 52.7 52.0 48.2 47.5 40.6 48.7 53.0 62.7 56.3 53.1	55.2 52.2 47.0 50.7 52.4 51.7 47.4 47.5 41.0 48.8 53.0 62.6 56.0 52.5	54·4 52·2 47·2 50·8 51·8 51·2 47·1 48·4 49·0 53·0 61·7 55·5 52·2	54.1 52.2 47.4 50.4 51.1 50.5 46.9 48.4 	53.6 51.8 	53:3 51:7 47:8 50:0 51:3 50:0 46:7 48:6 41:4 50:4 52:6 61:8 54:2 50:8	56.09 53.38 51.85 50.66 51.90 52.57 49.20 47.88 46.27 46.32 51.34 58.32 58.57 53.40		
56.4 58.7 54.6 53.5 52.0 52.5 54.2 50.5 47.7 47.9 559.3 59.1 54.6 55.0	58.0 54.2 53.1 51.8 52.7 54.2 49.6 48.4 47.8 	57.5 53.8 52.3 52.0 52.9 53.6 49.3 48.4 46.9 48.6 52.0 62.5 58.6	57.0 53.6 51.7 52.4 53.0 53.2 49.2 47.8 46.8 	56.6 53.2 51.5 52.0 52.6 52.8 49.1 47.5 44.9 48.6 52.4 63.7 57.6	56.0 52.7 51.3 	55.4 52.5 47.0 51.4 52.7 52.0 48.2 47.5 40.6 48.7 53.0 62.7 56.3 53.1	55.2 52.2 47.0 50.7 52.4 51.7 47.4 47.5  41.0 48.8 53.0 62.6 56.0	54·4 52·2 47·2 50·8 51·8 51·2 47·1 48·4 49·0 53·0 61·7 55·5	54.1 52.2 47.4 50.4 51.1 50.5 46.9 48.4 41.2 50.2 52.7 61.7 55.2	53.6 51.8 	53:3 51:7 47:8 50:0 51:3 50:0 46:7 48:6 	56.09 53.38 51.85 50.66 51.90 52.57 49.20 47.88 46.27 46.32 51.34 58.32 58.57 53.40		
56.4 58.7 54.6 53.5 	58.0 54.2 53.1 51.8 52.7 54.2 49.6 48.4 47.8 48.6 51.5 60.0 59.2 54.8 55.0 58.0	57.5 53.8 52.3 52.0 52.9 53.6 49.3 48.4 46.9 48.6 52.0 62.5 58.6 55.2 58.0	57.0 53.6 51.7 52.4 53.0 53.2 49.2 47.8 46.8 	56.6 53.2 51.5 52.0 52.6 52.8 49.1 47.5 44.9 	56.0 52.7 51.3 	55.4 52.5 47.0 51.4 52.7 52.0 48.2 47.5 40.6 48.7 53.0 62.7 56.3 53.1  51.6 57.1	55.2 52.2 47.0 50.7 52.4 51.7 47.4 47.5 41.0 48.8 53.0 62.6 56.0 52.5 ————————————————————————————————————	54·4 52·2 47·2 50·8 51·8 51·2 47·1 48·4 49·0 53·0 61·7 55·5 52·2 51·5 57·0	54·1 52·2 47·4 50·4 51·1 50·5 46·9 48·4 	53.6 51.8 47.6 50.0 51.5 50.3 46.5 48.6 41.3 50.6 52.7 61.7 55.0 51.7 51.8 56.1	53:3 51:7 47:8 50:0 51:3 50:0 46:7 48:6 -1 50:4 50:4 50:4 50:4 50:8 51:8 54:2 50:8 -1 50:3	56.09 53.38 51.85 50.66 51.90 52.57 49.20 47.88 46.27 46.32 51.34 58.32 58.57 53.40 52.99 55.90		
56.4 58.7 54.6 53.5 52.0 52.5 54.2 50.5 47.7 47.9 51.5 59.1 54.6 55.0 58.3 54.3 54.3	58.0 54.2 53.1 51.8 52.7 54.2 49.6 48.4 47.8 48.6 51.5 60.0 59.2 54.8 55.0 58.0 58.0 53.7	57.5 53.8 52.3 52.0 52.9 53.6 49.3 48.4 46.9 48.6 52.0 62.5 58.6 54.6 55.2 58.0 53.0	57.0 53.6 51.7 52.4 53.0 53.2 49.2 47.8 46.8 	56.6 53.2 51.5 52.0 52.6 52.8 49.1 47.5 44.9 	56.0 52.7 51.3 	55.4 52.5 47.0 51.4 52.7 52.0 48.2 47.5 40.6 48.7 53.0 62.7 56.3 53.1 51.6 57.1 51.0	55.2 52.2 47.0 50.7 52.4 51.7 47.4 47.5 41.0 48.8 53.0 62.6 56.0 52.5 ————————————————————————————————————	54·4 52·2 47·2 50·8 51·8 51·2 47·1 48·4 49·0 53·0 61·7 55·5 52·2 51·5 57·0 49·8	54.1 52.2 47.4 50.4 51.1 50.5 46.9 48.4 	53.6 51.8 47.6 50.0 51.5 50.3 46.5 48.6 41.3 50.6 52.7 61.7 55.0 51.7 	53:3 51:7 	56.09 53.38 51.85 50.66 51.90 52.57 49.20 47.88 46.27 46.32 51.34 58.32 58.57 53.40 52.99 55.90 53.13		
56.4 58.7 54.6 53.5 52.0 52.5 54.2 50.5 47.7 47.9 559.3 59.1 54.6 55.0	58.0 54.2 53.1 51.8 52.7 54.2 49.6 48.4 47.8 48.6 51.5 60.0 59.2 54.8 55.0 58.0 53.7 51.2	57.5 53.8 52.3 52.0 52.9 53.6 49.3 48.4 46.9 48.6 52.0 62.5 58.6 54.6 55.2 58.0 50.4	57.0 53.6 51.7 52.4 53.0 53.2 49.2 47.8 46.8 	56.6 53.2 51.5 52.0 52.6 52.8 49.1 47.5 44.9 	56.0 52.7 51.3 	55.4 52.5 47.0 51.4 52.7 52.0 48.2 47.5 40.6 48.7 53.0 62.7 56.3 53.1 51.6 57.1 51.0 49.4	55.2 52.2 47.0 50.7 52.4 51.7 47.4 47.5 41.0 48.8 53.0 62.6 56.0 52.5 ————————————————————————————————————	54·4 52·2 47·2 50·8 51·8 51·2 47·1 48·4 49·0 53·0 61·7 55·5 52·2 51·5 57·0 49·8 49·3	54.1 52.2 47.4 50.4 51.1 50.5 46.9 48.4 	53.6 51.8 47.6 50.0 51.5 50.3 46.5 48.6 	53:3 51:7 47:8 50:0 51:3 50:0 46:7 48:6 	55 02 56 09 53 38 51 85 50 66 51 90 52 57 49 28 46 27 46 32 51 34 58 32 58 57 53 40 52 99 53 13 50 65 50 28		
56.4 58.7 54.6 53.5 	58.0 54.2 53.1 51.8 52.7 54.2 49.6 48.4 47.8 48.6 51.5 60.0 59.2 54.8 55.0 58.0 58.0 53.7	57.5 53.8 52.3 52.0 52.9 53.6 49.3 48.4 46.9 48.6 52.0 62.5 58.6 54.6 55.2 58.0 53.0	57.0 53.6 51.7 52.4 53.0 53.2 49.2 47.8 46.8 	56.6 53.2 51.5 52.0 52.6 52.8 49.1 47.5 44.9 	56.0 52.7 51.3 	55.4 52.5 47.0 51.4 52.7 52.0 48.2 47.5 40.6 48.7 53.0 62.7 56.3 53.1 51.6 57.1 51.0	55.2 52.2 47.0 50.7 52.4 51.7 47.4 47.5 41.0 48.8 53.0 62.6 56.0 52.5 ————————————————————————————————————	54·4 52·2 47·2 50·8 51·8 51·2 47·1 48·4 49·0 53·0 61·7 55·5 52·2 51·5 57·0 49·8	54.1 52.2 47.4 50.4 51.1 50.5 46.9 48.4 	53.6 51.8 47.6 50.0 51.5 50.3 46.5 48.6 41.3 50.6 52.7 61.7 55.0 51.7 	53:3 51:7 	56.09 53.38 51.85 50.66 51.90 52.57 49.20 47.88 46.27 46.32 51.34 58.32 58.57 53.40 52.99 55.90 53.13		

d Five minutes late.

e Eight minutes late.

	Or	ne Scale Div	vision = '00	00066 parts	of the V. F.		ICAL FOR		esponding to	) l° decreas	e of Temper	ature, 1°64.	
Mean Ge gen Tir	öttin-}	Oh.	1h.	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> •	6h.	7 <sup>h</sup> .	8 <sup>th</sup> .	9 <sup>h</sup> .	10h.	11h,.
ſ	1	Sc. Div. 194'8	Sc. Div. 191.7	Sc. Div. 191.8	Sc. Div. 188.5	Sc. Div. 187 4	Sc. Div. 188.8	Sc. Div. 190°1	Sc. Div. 190°6	Sc. Div. 190°5	Sc. Div. 191'9	Sc. Div. 191'9	Sc. Div. 191 '9
	2 3 4 5 6 7 8 a	194.7 189.6 185.9 183.7 176.5 121.5	191°1 187°4 184°9 183°7 176°5 143°6	188 2 185 0 182 8 181 5 174 1 160 9	186 3 182 5 180 2 179 4 170 3 164 2	185 · 4 180 · 9 176 · 2 176 · 6 167 · 2 164 · 2	184.4 180.3 174.9 174.8 166.8 170.7	185.0 180.5 176.2 171.7 165.7 175.5	186.4 181.2 175.0 171.0 164.6 177.5	187·2 181·1 175·0 171·4 166·2 175·5	188°2 181°5 176°3 171°4 167°3 176°4	188.8 180.9 175.7 172.5 168.5 175.4	188.7 181.4 175.6 171.8 168.9 174.2
_	9 10 11 12 13 14 15	178.4 171.0 168.3 167.1 169.2 167.9	175 · 8 171 · 7 167 · 5 166 · 3 169 · 2 161 · 1	175.8 172.2 165.7 163.5 168.0 163.8	173 · 4 171 · 3 162 · 6 162 · 1 166 · 1 160 · 9	168.9 167.5 162.6 162.1 164.8 160.1	169.9 164.8 162.1 162.6 164.8 162.3	170°5 163°9 161°9 163°9 163°9 164°7	172·1 164·8 161·1 165·3 165·4 165·9	166.5 164.5 161.0 b 166.5 168.2 169.5	166.5 165.5 162.1 165.9 166.3 168.2	170°3 164°6 163°4 164°9 165°6 166°0	170°2 166°5 163°3 164°0 166°9 162°8
W	16 17 18 19 20 21 22 23	174.7 174.4 169.4 169.6 170.1 172.6	173°1 171°8 166°5 169°5 172°4 172°0	170°8 169°9 167°1 169°1 171°8 171°2	169°3 169°3 167°1 166°5 173°1 171°8	169°2 167°0 163°3 165°3 171°1 171°3	169.4 168.3 161.7 163.8 171.1 167.3	170°5 166°4 161°7 164°4 171°1 165°8	173.5 166.4 161.0 168.8 170.3 165.4	173.0 166.4 162.0 169.8 d 172.3 165.4	173.0 164.9 161.7 171.6 173.4 166.2	173°0 164°0 161°7 171°3 172°0 166°2	172.7 165.3 164.4 173.8 172.9 166.2
	24 25 26 27 28 a 29	169.6 171.6 175.9 178.8 171.9 162.6	168 ° 9 171 ° 0 173 ° 6 176 ° 8 170 ° 7 165 ° 7	168 '9 167 '9 172 '4 174 '6 171 '9 164 '4	167.9 167.5 171.0 172.9 171.9 161.0	167 · 9 167 · 4 170 · 4 172 · 2 169 · 6 163 · 5	168.6 164.9 170.4 170.2 171.4 164.4	167.1 162.7 172.5 169.9 171.3 161.9	167.1 162.7 172.1 170.5 171.8 162.3	167.1 162.8 171.4 172.3 169.8 163.5	167.3 163.3 174.2 172.3 168.8 162.1	167.3 163.3 176.4 173.9 168.4 164.2	168 1 166 7 176 5 180 1 169 5 164 1
	30 31	173.0	173.3	174.4	173.7	173.2	172.6	173.4	173.4	178.2	178.2	181.8	181.6
Hourly l	Means	175.34	174.13	173.08	171.50	170.19	169.67	169.55	170.10	170.69	170.97	171.29	171.98
	1	48.5	49.4	49°7	50.6	50.9	51.2	51°3	MAGNET.	5 <u>1</u> .8	52°·3	52.3	52°·3
	2 3 4 5 6 7 a 8 a	47.6 50.9 52.8 54.4 57.2 60.3	48·3 52·1 53·3 55·4 58·0 59·5	50.0 53.1 54.0 55.7 59.0 59.5	50°4 53°5 54°8 56°3 60°0 59°7	50.7 53.9 55.8 57.3 60.4 60.5	51 · 1 54 · 6 56 · 4 58 · 0 61 · 3 60 · 7	51·2 54·9 56·8 58·5 61·1 60·7	51.4 55.0 57.2 59.1 61.4 60.7	51.7 55.2 57.6 59.4 61.5 60.5	52.5 55.4 58.3 60.0 61.8 61.2	52.8 55.6 58.8 60.4 62.0 61.0	52.8 55.9 58.7 60.6 62.6 61.8
AY.	10 11 12 13 14 15 16	58:4 61:3 62:5 63:2 62:5 59:7	58.7 60.7 62.5 63.4 62.0 60.2	59.0 60.7 62.8 64.2 62.2 60.7	59.0 61.0 64.1 64.6 62.7 61.3	59·3 61·5 64·6 64·8 63·5 62·3	60.6 62.2 65.4 65.0 64.0 62.7	61:0 62:7 65:8 65:0 64:0 63:1	61:3 63:4 66:1 65:0 63:7 63:6	61.5 63.5 66.4 65.2 63.7 64.1	62.0 64.0 66.3 65.5 63.7 64.7	62:3 64:3 66:4 65:5 64:1 65:3	62.5 64.2 66.0 65.5 63.9 65.6
	17 18 19 20 21 22 23	60°2 60°2 61°5 61°0 59°6 59°7	60.4 60.5 61.6 61.2 59.2 60.2	60.5 60.9 61.9 61.6 59.0 60.7	61.1 61.4 63.0 62.0 59.2 60.9	61.7 61.8 63.0 62.5 59.0 61.3	62.5 62.6 63.4 62.7 59.0 61.8	62.5 63.0 63.6 63.0 59.7 62.3	63°3 63°6 64°2 63°3 60°5 62°7	63.6 64.3 64.5 63.4 60.9 63.4	63.9 64.6 65.0 63.6 61.3 63.6	64.5 64.9 65.5 63.8 61.5 63.8	64.4 65.4 65.6 63.7 61.7 64.0
	24 25 26 27 28 a 29	61:3 60:4 58:3 56:2 58:4 64:5	61.1 60.4 58.7 56.7 58.6 64.2	61.1 60.9 58.7 57.8 58.5 63.4	61 '0 61 '4 59 '0 58 '2 58 '8 63 '8	61.0 62.1 59.1 59.0 59.2 64.5	61:3 62:7 59:2 59:0 59:7 64:7	61.4 62.9 59.2 59.2 60.3 64.8	61.6 63.5 58.3 59.7 61.3 64.7	61.3 64.3 58.5 59.9 61.6 64.8	62.0 64.6 59.2 60.3 63.3 65.1	62.4 64.6 59.2 60.7 63.7 65.3	62.5 64.6 59.3 61.0 64.3 65.3
	31	59.0	58.2	58.5	58.1	57.8	57.5	57.3	57.1	56.2	56.4	56.3	56.2
ourly M	leans	58.42	58.64	58.99	59.45	59.89	60.33	60.57	60.85	61.11	61.49	61.75	61.83

<sup>&</sup>lt;sup>2</sup> Omitted in the Means, on account of disturbance.

<sup>&</sup>lt;sup>b</sup> Seven minutes late.

12h.	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17h.	18 <sup>h</sup> .	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Daily an Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 189 0	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
193.1	193.0	191 0	109 0	189.1	188.9	194.3	194·7	194·7	193.4	193 <b>·</b> 4	$_{193\cdot 2}\}$	191.58
.89*0	189.4	187.2	187.0	186.5	185.9	186.8	187.0	187.0	187.3	189.6	189.6	187.78
81 4	181.4	182.0	182.2	182.5	182.5	183.2	184.0	182.8	183'8	185.4	186.0	182.91
75.6	175'9	176.7	177.9	177.9	178.1	178.1	177.8	178.6	178°5	178.6	183.7	178.17
71.8	171.8	173.5	173.8	172.6	173.7	173 7	171.9	170'1	168.0	172.6	176.5	174°15
70'0	174.4	183 8	175.6	171.9	176.9	123.5		$46^{\circ}2$	46.1	. 118 <b>°</b> 6	110.6	153*49
74.2	174.2	174'3	173.7	175.0	175.3				-	.—	176.4	169.08
		100.0	17010			174.3	174.3	167.8	167.1	171.6		
70'2	170.2	166.8	170.2	170.2	170.3	170'3	166.9	170.3	171.3	171.3	171.7	170.84
66.8	166.8		167.2	167.2	167.8	167.8	167.4	167.8	169.0	162.5	168.4	167.24
63.3	164.6	163'8 167'5	163°6 163°7	162.2	164.0	164.7	164.5 c	165.8	165.2	166.2	166.5	164.01
63'0	162.4	165.1	165 7	163°7 165°7	163.7	165.1	165'1	168.1	168'4	168.9	168.6	165.10
64'9	165.2	168.6	169'7		165.7	165.7	168.8	169.3	169.3	161.2	158.2	165.99
62.8	170.4	100 0	109 1	170.0	170.9	168.8	171.1	171.1	172.2	173.1	174.4	167°35
75.0	175.0	170.0	176.0	170.4	173.6	168.8	173.4	163.7	163.1	170.5	176.1	171.57
.66*5	165.3	164.9	166.3	151.7	158.7	163.1	166.9	158.2	159.5	165.3	166.2	165.30
66.9	165.8	165.2	162.3	163.9	165.5	168.0	166.3	163.3	164.4	165.0	164.7	164.5
68.7	168.3	167.2	165.1	166.8	165.4	161.0	162.5	167.6	168.4	169.3	168.6	167.60
72.2	172.6	171.5	173.1	173.1	172.2	169.2	171.2	171.2	170°9	172.2	173.2	171.8
66.2	166.3	163.7	166.7	166.3	166.4						- 11	
						164.9	166.6	166.9	168.2	168.1	168.7	167°54
1671	167.1	167.1	166.6	166.8	168.3	168.6	168.2	168.7	171.6	171.6	172.9	168*38
66.7	169.0	168.7	168.7	168.7	168.4	169.4	170.8	172.0	172.4	173.4	174.9	168.12
75°3	174.0	173.9	174.6	175.0	175.7	175.7	175.9	175.6	175.6	178'9	180.7	174.49
78'1	174'8	174'8	174.9	174.8	161.0	164.2	173.4	174°9	171.4	170.0	167.6	172.68
70.4	164.6	162.3	161.8	150.2	161.1	159.7	141'2	98.8	130.0	132.0	151.8	159.62
64'1	164'1	164.2	164.9	164.7°	164.7	<b>—</b>			—	, <del></del>	$\frac{-}{174\cdot 4}$	165.97
		1-010				173.9	171.4	171.7	172.6	172.6	174'45	
181.2	179.1	178.8	181.0	179.5	178.2	177.7	177.7	179.0	178.7	179.0	179.0	177.37
171'76	171.85	171.40	171.76	170.84	170.86	171.45	172°33	172.12	172.33	173.01	174.10	171.76
	1 0				ATURE OF	THE VERT	CAL FORCE	E MAGNET.	0 1	0	9 (1	•
<b>52°3</b>	52°0	5 <b>1°</b> 8	51°6	5η4	5η2	47.2	47.4	47.4	47.5	47.6	47.7}	50.28
53.0	53.0	53.1	53.5	53.1	52.5	52.3	52 <b>·2</b>	51.6	51.2	50.8	50.5	51.53
55.9	55.6	55.4	55.2	54.8	54.4	54.0	53.8	53.2	$\begin{bmatrix} 53.7 \\ 53.7 \end{bmatrix}$	53.1	52.8	54.26
58.6	58.4	58.0	57.8	57.3	57.0	26.8	56.8	56.8	56.3	56.2	54.6	56.63
60.6	60.4	60.0	60.5	60.0	60.0	59.8	<b>5</b> 9.8	59.0	58.5	57.8	57.2	58.6
62'6	62.0	62.2	61.1	60.9	61.3	61.3		61.7	61.6	61.0	61.3	61.0
61.7	61.2	61.3	60.8	60.2	60.4	-		_				60.2
-			l <u></u>			59.4	59'1	59.0	59.0	59.0	59.0}	
62.2	62.3	62.1	62.7	62.7	61.9	61.7	61.6	61.6	61.5	61.2	61.2	61.20
63.8	63.8	63.6	63.2	63.2	63.3	63.0	63.2	63.4	63.8	63.9	62.5	62.9
65.5	65.2	65.3	65.1	65.6	65.4	64.8	64.3	64.3	64.3	64.1	63.4	64.8
65'3	65'4	65.4	65.5	65.1	64.3	63.2	63.1	62.5	61.9	61.2	61.1	64.2
64.3	64.3	63.7	63.2	63.3	62.9	62.5	61.8	61.4	60.6	60.2	60.0	62.8
65.9	65.7	65.2	65.1	64.7	64.2					-	60.3	62.9
64'4	64:0	60.7	<u>-</u>			62.4	61.7	61.3	60.7	60.5		
65°4	64.0	63.7	63.6	63.4	63.0	62.5	62.3	62.0	61.5	61.0	60.5	62°5
65°6	65°5	65°4 65°5	65.2	65.0	65.2	64.8	63.7	62.9	62.5 62.4	62.3 61.8	61.8 61.2	63°4 63°7
63 <b>.</b> 7	63.2	63.3	65.3	64.5	64.1	63.7	63.5	62.7	60.8	60.6	60.0	62.4
61.7	61.6	61.2	63'1 61'4	62.7 61.3	62.5	62.2	62°0 60°6	61'3 60'4	60.4	60.0	60.0	60.4
63.8	63.8	63.6	63.7	63.2	60.7 63.5	60.6		00 4	00 4	00 0		
					00.0	62.3	62.3	62.0	62.2	62.0	$\{61.5\}$	62.4
62.5	62.6	62.7	62.5	62.2	$\frac{-}{62\cdot 2}$	62.0	61.7	61.2	61.1	60.7	60.3	61.6
64'6	64.4	64.7	64.0	63.2	63.1	$\frac{62.2}{62.2}$	61.2	60.4	59.5	59.2	58.4	62.4
59.3	59.3	59.2	59.0	58.6	58.2	58.0	57.7	57.2	56.6	56.3	55.7	58.4
61.1	61.1	60.8	61.0	60.7	60.0	90.0	59.5	59.0	59.0	59.0	58.4	59.4
64.2	64.2	66.2	66.2	66.7	66.7	66.7	66.7	66.3	65.7	65.2	64'9	63.5
65'0	64.9	64.5	64.0	63.8	64.5			_				63.2
	_	_				60.3	60.0	59.8	59.6	59.2	58.5	56.4
56'5												
56°5 61°79	61.72	56.0	55.2	55'0	54.7	54.6	55'3	55.4	55.4	55.4	55.3	60.3

d Five minutes late.

<sup>\*</sup> Four minutes late.

	Oı	ne Scale Div	vision = '00	0066 parts	of the V.F.		ICAL FOR		esponding to	1º decrease	of Temper	ature, 1°64.	
Mean ( gen T	Göttin- }	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	4h.	5h.	6 <sup>h</sup> .	7h.	8h.	9h.	10h.	11h.
	7 1 2 3 4 5 6	Sc. Div. 178 4 164 8 165 3 168 8 173 0	Sc. Div. 177'4 167'2 166'9 167'7 172'4	Sc. Div. 175 ° 6 169 ° 2 167 ° 0 166 ° 6 171 ° 8	Sc. Div. 174'0 169'5 165'9 166'6 171'8	Sc. Div. 171.6 168.6 164.8 166.3 172.4	sc. Div. 171 °6 166 °0 166 °0 165 °0 171 °1	sc. Div. 174'8 164'4 164'4 165'0 168'9	Sc. Div. 172°5 165°0 163°3 165°0 168°6	Sc. Div. 172 * 8 166 * 4 163 * 1 166 * 1 170 * 3	Sc. Div. 175*2 168*3 164*3 166*2 169*4	Sc. Div. 177°7 166°2 165°7 166°2 167°7	Sc. Div. 178 4 165 8 167 9 166 3
	7 8 9 10 11 12 13	168.7 169.8 166.6 157.6 163.3 168.6	166.4 168.1 166.1 154.9 161.6 168.6	164.8 167.0 165.8 157.3 160.9 166.8	163°1 167°9 164°0 157°3 157°1 165°2	161.0 167.2 163.4 154.9 154.8 166.4	159.6 168.3 163.1 155.7 157.0 166.5	164.2 167.8 162.8 157.8 160.4 164.7	160°5 167°1 162°8 162°6 160°4 166°7	161.8 166.3 161.9 162.6 163.1 167.8	160°3 166°8 165°4 162°2 163°5 166°1	161°1 167°0 158°4 161°1 169°0 168°0	160°1 167°0 155°0 163°8 166°7 170°8
JUNE.	13 14 15 16 17 18 19 20	170°3 182°8 172°1 169°1 170°0 166°2	166.8 182.9 172.2 169.5 169.3 165.4	168.6 183.1 171.0 167.1 167.8 165.2	170.4 182.0 170.8 163.3 165.5 165.0	173.0 179.6 169.6 162.8 163.0 164.8	172.4 179.8 a 167.6 164.2 160.9 162.5	180.7 179.8 166.3 165.0 159.9 161.0	184.4 178.7 165.4 167.0 161.0 160.7	189°1 175°0 165°2 165°7 163°1 162°2	189.7 176.4 166.1 166.0 163.1 163.9	192°3 174°7 169°7 165°4 165°2 163°3	185.4 173.2 169.6 164.1 165.0 162.3
	21 22 23 24 25 26 27	163°1 163°0 161°8 158°9 156°4 151°8	162.5 162.5 161.3 158.3 155.2 151.6	161.4 162.5 159.4 156.3 155.8 148.6	163.9 161.8 158.1 155.6 155.6 148.6	157.8 161.8 157.4 154.9 151.8 147.5	155.8 159.5 c 154.8 152.3 150.4 145.8	155°8 158°2 154°8 151°8 150°0 145°1	155°8 156°3 154°8 150°3 150°0 144°8	157.0 157.5 155.5 149.6 150.4 144.2	157.8 159.1 155.8 150.5 150.4 145.6	158°4 159°4 155°3 150°2 149°5 146°0	159.5 159.8 154.3 149.6 147.8 145.5
İ	28 29 30	149 9 152 8 154 4	149.9 152.8 154.4	151 · 2 152 · 5 152 · 2	148'3 152'8 150'4	147.4 153.0 149.5	147.4 151.8 147.5	147.4 150.6 147.1	148'1 148'9 148'8	146.7 146.0 148.8	145.8 146.8 149.7	147.0 149.0 152.1	148'9 149'5 151'8
Hourly	Means	164.90	164.30	163.67	162.87	161.74	160.87	161.10	161.13	161.47	162.09	162.2	162.10
							E VERTICAL						
;	1 2 3 4 5 6	55°3 59°2 60°0 61°3 58°4	55.3 59.2 61.0 61.0 58.4	55°3 59°2 61°4 61°6 58°2	56.0 59.5 61.3 61.6 58.6	56.5 60.1 61.3 62.3 59.1	56.5 61.0 61.6 63.0 59.2	57.4 61.4 62.1 62.6 59.4	59°0 61°6 62°5 62°7 60°2	59°6 61°5 62°8 62°6 60°2	59.8 61.8 63.5 63.1 60.8	60°2 62°3 63°6 63°1 61°4	60.0 63.0 63.6 63.1 61.4
	7 8 9 10 11 12 13	60°0 62°3 61°5 66°6 64°3 60°5	60°0 62°3 61°5 66°6 64°5 60°5	60°4 62°2 61°6 66°6 64°8 61°0	61.0 62.1 62.3 66.6 65.0 61.1	61.7 62.1 62.5 66.6 65.5 61.1	62.5 62.3 63.7 66.6 66.0 61.7	63.0 62.5 64.3 66.7 66.0 61.7	63.5 62.6 64.7 66.5 65.9 62.0	63.7 62.7 65.6 66.6 65.9 62.3	64.7 63.3 66.6 66.7 65.7 62.6	65.5 63.5 67.5 66.7 65.7 63.3	65.9 63.5 68.5 66.7 65.5 63.6
JUNE.	14 15 16 17 18 19 20	59.0 53.3 59.0 59.2 59.0 61.8	59°3 53°3 58°7 59°2 59°3 62°0	59.2 53.8 59.1 59.3 60.0 61.7	59.0 53.8 59.5 60.0 60.2 61.7	58.8 53.8 60.0 60.4 61.5 61.8	58.8 54.2 60.4 60.5 62.1 62.4	58°0 54°5 60°6 60°6 63°4 62°5	57.6 54.7 60.5 61.0 63.3 62.8	57.2 55.5 60.6 61.3 63.5 63.2	57.1 56.7 61.0 61.9 64.0 63.3	57.0 57.7 61.4 62.5 64.2 63.5	56.9 58.6 61.2 63.3 64.2 63.7
	21 22 23 24 25 26 27	62.4 62.6 63.0 65.5 65.8 68.5	62:5 62:5 63:5 65:7 66:4 68:2	62.7 62.1 63.9 66.3 66.6 69.7	63.4 62.7 64.8 66.6 66.9 70.4	64.2 63.2 65.7 67.5 67.4 71.0	64.5 63.5 66.3 68.2 68.0 71.5	64.6 63.7 66.5 68.5 68.5 72.0	64.9 64.4 66.5 68.7 69.3 72.4	65.2 64.7 66.8 69.3 69.7 72.5	65.3 65.5 67.3 70.0 70.6 73.0	65.5 65.5 68.3 70.3 71.2 73.5	65.5 65.7 68.5 70.4 71.5 73.7
	28 29 30	70°5 67°6 67°0	70°1 67°4 67°0	69.7 67.5 67.5	69.7 67.8 68.0	70°3 68°3 68°9	70 <b>.</b> 4 68.7 69.5	70·5 69·3 69·7	70·5 69·8 70·2	71·2 70·1 70·5	— 71`6 70`7 70`7	72.0 70.7 71.3	72°3 70°9 71°1
Iourly	Means	62.06	62.13	62:36	62.68	63.14	63.28	63.82	64.12	64.43	64.90	65.28	65.47

<sup>&</sup>lt;sup>a</sup> Nine minutes late.

b Three minutes late.

19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   20.   21.   22.   29.   Manual Rev.   19.   19.   19.   19.   19.   20.   21.   22.   29.   Manual Rev.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.   19.		One Scale 1	Division = `	000066 par	ts of the V.	F. Increase		ORCE. Divisions, co	rresponding	to 1° decrea	se of Temp	erature, 1.6	4.
\$260   176'8   174'6   171'7   166'6   170'4   170'2   170'2   170'2   170'2   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15h.	16h.	17 <sup>h</sup> .	18h.	19h.	20h.	21h.	22 <sup>h</sup> .	23h.	Daily ar Monthl Means.
\$528   166'1   165'8   165'6   166'2   166'2   166'2   166'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3   160'3	Sc. Div.				Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		Sc. Div.		Sc. Div.	Sc. Div.
## 167:3   1667:3   1667:3   167:3   167:3   167:3   1667:6   1667:0   1667:1   167:4   167:8   168:9   167:5   1669:3   1667:3   1667:3   1667:3   1667:3   1667:3   1667:3   1667:3   1667:3   1667:4   1666:4   1666:0   1660:0   1660:9   167:7   167:4   167:4   167:8   167:5   167:7   167:7   1667:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1   167:1													
8673 16673 16678 16678 16778 16778 16778 16775 16879 17074 17178 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 17371 1											161'7		
6672 16674 16676 16670 16679 16777 16477 16471 16871 16970 16877 17077] 16877 17073] 16877 17077] 16877 17077] 16877 16970 16871 16474 16971 16972 16172 16172 161878 16474 16970 16872 16971 16674 16676 16676 16676 16676 16676 16676 16673 16478 16878 16875 16879 16579 16579 16579 15873 15875 15676 15573 16776 16776 16776 16776 16776 16776 16779 16879 16879 16879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15879 15													165.79
18							167.5	168'9	170.4	171.8	173.1	173.1	167.6
\$978   160°5   161°4   169°1   169°2   161°2   161°2   161°2   168°8   154°4   159°0   166°2   169°1   162°6   166°7   166°0   166°1   166°3   166°3   168°3   168°1   161°6   166°6   166°7   166°3   161°8   162°5   165°9   155°9   153°3   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5   155°5	66 2	100 4	100 0	100 0	100 9	167 7	10447	10411	1.00.1	100:0	100.7	170.7	168.7
6677   16470   1641   16445   16670   16670   16676   16677   16673   16418   16275   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570   16570		160.2	161.4	160.1	160:9	161:0							
567   16479   15479   15575   15579   15579   15579   15575   15575   15575   15575   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15777   157171   15773   15775   15776   15776   15776   15776   15777   157171   15773   15775   15776   15776   15775   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   15776   157776   157776   157776   15776   15776   15776   15776   15776   157776   157776   15777   157776   15776   15776   15776   15776   15776   15776   15776   15776   15776   157776   157776   157776   157776   157776   15776   15776   15776   15776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   157776   1577													
671   166°0   168°9   163°1   161°8   158°7   159°5   156°9   154°8   155°8   157°5   161°5   159°5   166°4   166°4   166°4   166°9   167°7   161°7   161°5   168°6   164°4   166°9   167°7   161°7   161°5   168°6   164°4   166°9   167°7   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5   161°5													
667   1673   1717   1679   1667   1664   1664   1669   1671   1677   1645   1686   1644   1649   1679   1677   1645   1686   1644   1646   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   1670   167													
183-13												101 0	
167   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168							100 4	100 9	101 1	107 7	104 0		
82°6   182°6   178°5   180°2   179°0   177°7   171°8   177°5   177°9   177°5   174°6   180°4   178°4   178°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3   172°3	10 1	140 0	101 3	170 0	100 9	107 7	1/0.9	140.0	157.0	160:0	170:1	170.2	167.5
1273   16972   17070   16973   17078   17178   17278   17278   17278   17277   17673   17575   16975   16475   16879   16875   16876   16870   16677   16974   16676   16672   17075   17075   17675   16475   16475   16475   16476   16476   16470   16570   16673   16972   16672   16475   16475   16474   16476   16470   16471   16473   16473   16676   16771   16475   16477   16473   16473   16473   16676   16771   16475   16477   16473   16473   16473   16676   16771   16579   15579   15579   15572   15577   15875   15577   15875   15577   15875   15577   15875   15577   15875   15577   15875   15577   15875   15577   15875   15577   15875   15577   15875   15577   15875   15577   15875   15577   15875   15577   15875   15577   15875   15577   15677   15677   15677   15677   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577   16577	89.6	182'6	178.5	180.5	179:0	177.7							170.4
189° 6   168° 9   168° 6   168° 9   168° 6   168° 9   168° 7   168° 1   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   168° 6   1													
164*5   164*5   162*8   163*6   163*6   163*4   163*8   164*9   165*0   165*0   165*3   163*2   165*2   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3   161*3													
164*4													
162'5   161'3   161'3   161'3   161'3   163'6   163'6   163'6   164'5   164'7   164'3   166'6   167'7   153'9   159'9   159'9   159'9   159'9   158'0   156'2   159'2   159'7   158'5   159'4   161'3   166'7   162'9   162'9   159'4   161'3   160'7   162'9   162'9   159'4   161'3   160'7   162'9   162'9   159'4   161'3   160'7   162'9   162'9   159'4   161'3   160'7   162'9   159'4   161'3   160'7   162'9   159'4   159'5   159'1   159'8   153'1   153'1   148'6   148'6   151'0   152'2   153'2   154'4   154'5   155'7   156'4   152'4   144'5   144'6   144'8   148'9   148'9   148'9   149'6   159'5   150'6   151'3   152'6   152'6   152'2   152'0   151'2   149'7   145'1   144'6   144'2   144'2   144'2   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'													
159'9   159'9   158'0   156'2   156'2   159'2   159'7   158'5   159'4   161'3   160'7   162'9   162'9   159'9   159'0   160'2   168'2   158'5   158'5   158'5   158'5   158'5   158'7   159'4   161'3   160'7   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'9   162'							101 2	102 6	102.0	104 2	100 4	1 _ 11	
1899   1890   1890   1890   1860   1860   1860   1890   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891   1891					100 0	100 0	164.5	164.7	164:3	164:3	166.6	167:1	163.6
160'2   160'2   168'2   158'5   158'5   158'5   158'5   158'5   158'7   158'7   158'0   161'7   163'1   159'8     158'1   158'1   158'1   158'1   158'1   158'5   158'5   158'5   158'7   158'0   161'7   163'1   159'8     149'6   148'9   148'9   148'9   149'5   149'6   150'5   150'6   151'3   152'6   152'6   152'2   152'0   161'2     145'1   144'6   144'6   144'6   144'2   144'2   144'2   144'5   145'5   145'5   146'6   146'6   146'6   146'6     148'8   148'4   148'9   149'7   147'8   148'6   145'1   144'5   145'5   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'6   146'	59.9	159.9	158.0	156.2	159.2	159.7							150.4
1581													
149'6   148'9   148'9   149'9   149'9   149'9   151'1   151'0   151'1   151'2   152'4   154'5   155'7   156'4   152'2   151'2     145'7   145'1   144'6   144'6   144'2   144'2   144'5   144'5   144'5   144'5   146'6   146'6   146'6   146'6   146'6   146'6   148'8   149'2   149'7   149'5   149'7   149'5   149'5   146'0   146'2   146'2   153'3   153'2   148'3   148'5   148'6   148'6   149'2   149'7   149'7   149'5   147'9   151'3   143'1   147'6   155'1   149'8   148'5   148'5   148'6   149'2   149'7   149'7   149'5   147'9   151'3   143'1   147'6   155'1   151'8   152'5   152'5   152'5   151'5   147'3   145'3   145'5   145'0   152'7   154'7   156'9   158'7   151'0   158'1   151'8   142'6   160'8   160'51   159'65   159'87   160'61   161'16   162'91   164'31   161'9   168'4   63'0   62'2   62'3   62'7   62'2   62'3   61'6   61'5   61'3   60'7   60'7   60'2   61'4   63'4   63'0   62'8   63'0   62'6   62'5   62'4   62'0   62'0   62'0   61'7   61'3   62'2   62'8   61'5   61'3   60'7   60'7   60'2   61'5   61'3   60'7   60'7   60'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8   61'8									154.4		155.5	157.1	
147'8   148'1   149'0   149'5   149'6   144'2   144'2   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'5   144'													
145'7   145'1   144'6   144'6   144'2   144'2   144'5   144'5   145'5   146'6   146'6   146'6   146'6   148'6   148'6   149'7   147'8   148'6   145'3   146'0   146'2   146'2   153'3   153'2   148'8   148'6   149'6   149'7   149'5   147'9   151'3   152'5   152'5   152'5   151'5   147'3   145'3   147'5   147'9   151'3   152'7   156'9   158'7   151'5   152'5   151'5   147'3   145'3   147'5   148'0   152'7   154'7   156'9   158'7   151'5   158'7   156'9   158'7   151'0   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   156'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'7   158'9   158'9   158'9   158'9   158'9   158'9   158'9   158'9   158'9   158'9   158'9   158'9   158'9   158'													
Hay										-		1 1	
							144.5	144.5	145.5	146.6	146.6	146.6	146'1
	148.8	148.4	148'9	149.7	147.8	148'6							148'3
151'8   152'5   152'5   151'5   147'3   145'3   147'5   148'04   152'7   154'7   156'9   158'7   151'0   162'41   161'86   161'88   161'10   161'45   160'51   159'65   159'87   160'61   161'16   162'91   164'31   161'9      Temperature of the vertical force magnet.													
60.1 60.2 60.3 60.3 60.3 60.0 60.0 60.0 60.0 59.6 59.4 59.2 58.7 63.5 63.5 63.2 62.8 62.7 62.2 62.3 61.6 61.5 61.3 60.7 60.2 61.4 63.4 63.0 62.8 63.0 62.6 62.5 62.4 62.0 62.0 62.0 62.0 61.7 61.3 62.2 62.7 62.5 62.1 61.7 61.2 61.0 61.0 60.0 59.6 59.3 58.8 58.5 58.5 61.8 61.8 61.8 61.8 61.4 61.4 61.0 — — — — — — — — — — — — — — — — — — —	162.41	161.86	161.88	161.10	ļ			159.87					161.8
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65.7   65.5   65.4   64.8   64.4   63.9   63.7   63.5   63.5   63.2   63.0   62.6   63.3   63.1   63.1   63.1   63.0   62.8   62.5   62.4   62.4   62.8   62.4   62.0   61.5   68.5   68.5   68.7   68.5   68.5   68.3   68.0   67.9   67.7   67.5   67.4   67.0   66.6   66.2   66.0   65.5   65.5   65.0   64.9   64.7   64.6   64.5   66.1   65.3   64.3   63.7   63.4   62.7   62.3   61.7   61.0   60.6   60.4   60.1   60.0   63.9   64.2   64.0   63.6   63.3   63.0   63.9   64.2   64.0   63.6   63.3   63.0   63.9   64.2   64.0   60.2   59.7   59.0   59.0   59.5   63.5   63.5   63.3   62.7   62.5   61.8   61.4   60.7   60.2   59.8   59.0   63.9   64.1   64.0   64.4   63.5   63.2   63.0   63.0   63.0   63.0   62.6   62.5   62.4   65.8   65.6   66.0   65.5   65.5   65.5   65.3   65.3   64.5   64.1   65.8   65.6   66.0   65.5   65.5   65.5   65.5   65.3   65.3   68.7   68.6   68.6   70.0   70.0   69.4   68.5   68.1   68.7   70.4   70.6   70.5   70.5   69.7   69.3   69.6   69.3   68.7   68.6   68.4   68.4   68.4   68.7   71.3   71.0   70.5   70.0   69.5   69.0   68.4   67.7   67.2   66.7   66.0   69.1   60.0   60.1   60.0   60.2   60.0   60.2   60.0   60.2   60.0   60.2   60.0   60.2   60.0   60.2   60.0   60.2   60.0   60.2   60.0   60.2   60.0   60.2   60.0   60.2   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60.0   60	01.8	61.8	61.8	l	61'4	61.0					-	[ <del>[ ]</del> ]	60.3
63.5 63.1 63.1 63.0 62.8 62.5 62.4 62.4 62.8 62.4 62.0 61.5 68.6 68.5 68.5 68.5 68.3 68.0 67.9 67.7 67.5 67.4 67.2 66.1 68.5 68.5 68.3 68.0 67.9 67.7 67.5 67.4 67.2 66.1 67.2 67.0 66.6 66.2 66.0 65.5 65.5 65.5 65.0 64.9 64.7 64.6 64.5 66.1 63.9 64.2 64.0 63.6 63.3 63.0 — — — — — — — — — — — — — — — — — — —	65.7	67.2											
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<sup>&</sup>lt;sup>e</sup> Seven minutes late.

<sup>4</sup> Five minutes late.

	On	ne Scale Div	ision = •000	0066 parts o	f the V.F.		CAL FOR		sponding to	1° decrease	of Tempera	ture, 1 64.	
Mean G gen Ti	li	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6h.	7 <sup>h</sup> •	8h,	9h.	10 <sup>h</sup> .	11h.
	1 2 3	Sc. Div. 157°5 152°8 149°8	Sc. Div. 157°5 152°3 149°2	Sc. Div. 154.5 151.5 148.6	Sc. Div. 151 9 149 0 148 0	Sc. Div. 150°5 146°3 142°5	Sc. Div. 150°4 144°2 138°8	Sc. Div. 149°5 142°9 138°3	Sc. Div. 146'3 140'9 138'3	Sc. Div. 147°5 138°9 138°7	Sc. Div. 146°8 138°9 138°7	Sc. Div. 147°6 140°5 138°2	Sc. Div. 147 7 141 8 139 5
	4 5 6 7 8 9 <sup>a</sup>	145 '4 142 '5 134 '4 139 '7 139 '9 143 '0	146°1 143°5 138°3 138°6 139°1 143°0	144.0 144.5 138.3 137.6 138.6 139.9	144.0 143.9 138.7 137.6 135.2 139.9	140.6 143.9 139.8 135.0 132.1 139.2	139.6 143.2 139.6 133.0 130.7 137.0	137.0 142.2 137.1 133.3 132.6 139.1	138.5 141.6 137.1 131.6 136.2 138.9	138·1 141·9 140·0 133·7 138·5 143·6	137.0 141.9 140.0 134.5 144.7 143.6	136.2 142.3 138.3 135.3 155.4 143.6	136°6 142°3 136°9 135°3 161°0 141°1
JULY.	11 12 13 14 15 16 17	139 3 138 4 140 3 153 4 148 6 139 4	138.5 138.4 140.3 151.8 147.4 136.3	140°1 139°2 142°9 151°1 145°5 135°6	136.7 138.4 143.2 150.1 143.1 138.3	135.8 133.8 141.1 149.2 141.0 136.5	134.5 132.9 141.6 147.3 139.8 135.2	136°9 132°0 142°7 147°0 139°1 134°2	136°9 131°3 142°7 146°0 136°7 133°4	139.9 130.6 144.5 145.1 137.6 134.1	138°9 131°4 145°5 145°2 137°6 135°5	137.7 134.1 145.2 144.6 138.5 140.1	137.8 135.7 148.4 145.7 137.0 142.7
J	18 19 20 21 22 23 24	136.7 131.3 138.3 133.5 143.6 148.7	134 ° 9 131 ° 6 138 ° 3 135 ° 3 142 ° 9 148 ° 7	135°3 131°3 138°3 134°8 142°9 147°4	133.5 132.4 138.3 136.4 142.1 145.8	129.0 132.4 135.8 138.7 142.1 145.3	128.2 132.2 134.8 137.8 142.1 146.3	125 ° 9 131 ° 7 134 ° 8 135 ° 9 139 ° 6 146 ° 3	124'9 131'7 133'7 134'2 140'6 145'5	127 <b>.9</b> 132.5 134.9 135.1 140.8 146.3	127 '9 135 '1 134 '9 134 '7 144 '1 147 '6	127.5 135.1 134.6 135.6 144.2 147.6	129°1 135°7 135°0 136°5 146°3 147°7
	25 26 27 28 29 30 31	145.6 160.9 162.2 160.0 155.4 158.6	148.2 159.0 160.5 158.3 154.7 156.6	150°2 159°6 160°5 156°1 154°7 154°8	150°3 158°0 159°0 154°6 154°7 153°4	151.0 156.8 156.4 153.5 154.9 153.4	151.9 155.4 153.1 153.5 154.9 153.2	153°6 154°1 152°6 151°5 154°9 150°3	154.1 154.4 152.9 152.6 154.8 151.2	159°0 155°7 155°2 153°1 153°8 151°5	158°1 157°4 154°9 153°1 155°4 153°2	159.6 155.5 154.9 152.2 155.1 151.8	160'5 157'5 154'9 152'2 155'0 151'8
	g. 1 yMeans	146.13	145.78	145.35	144.67	143.25	142.33	141.63	141.18	142.31	142.77	142.92	143.49
	ace of the State of the second						HE VERTIC						
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	66.4 68.1 69.6	66°4 68°4 69°7	66°7 68°5 70°5	$6\overset{\circ}{7}\overset{\circ}{1}\overset{\circ}{3}$	67.6 70.6 72.3	68°7 71°5 73°3	69°6 72°3 73°7	70°0 72°7 74°8	70°5 73°4 75°3	71°3 74°0 75°9	71°5 74°5 76°5	72°2 74°7 76°7
	2 3 4 5 6 7 8 9 a 10 11 12 13 14	71.5 72.7 71.8 73.3 74.5 76.7	71.5 72.5 71.8 73.3 74.5 75.3	72.0 72.5 71.6 73.6 75.0 75.4	72·3 72·5 72·3 74·0 75·8 75·4	73°5 72°5 73°3 75°6 76°8 75°5	74·3 72·8 74·0 76·7 77·5 76·3	74.8 73.0 74.6 77.4 78.1 76.5	75.4 74.0 75.4 78.0 78.5 77.0	76.2 74.6 75.7 78.0 78.7 77.5	77.4 75.2 76.5 77.5 79.3 78.2	77.0 75.4 77.0 78.0 79.0 78.6	76.7 75.5 77.5 78.3 78.5 78.1
JULY.		75.5 75.8 72.0 68.5 70.9 73.8	75.7 76.3 71.9 68.5 71.1 74.2	76.3 76.5 72.0 68.5 71.3 74.0	77.1 77.0 72.4 69.3 72.0 74.3	77.2 77.8 72.7 69.5 73.0 75.4	77.5 78.4 73.2 70.3 73.7 76.5	77·1 78·9 73·3 70·7 74·5 77·3	77.3 79.7 73.2 71.5 75.4 79.0	77.7 80.0 73.4 72.0 75.6 79.0	78.5 79.6 73.4 73.1 75.5 79.0	79.0 79.5 73.2 73.5 76.6 79.0	79.0 79.3 73.6 73.5 76.5 78.6
-		76.5 77.0 76.2 76.7 72.3 69.5	77.0 77.6 76.0 76.5 72.5 69.3	77.0 77.9 76.0 76.5 72.6 70.0	78.0 78.3 76.0 76.2 72.9 70.2	78°3 78°0 76°3 76°3 72°9 70°5	79°2 78°4 76°5 76°5 73°1 70°8	80.0 78.4 77.0 76.7 73.0 71.0	80°3 78°2 77°3 77°2 73°1 71°0	80.6 78.4 77.5 77.3 73.0 71.1	81.5 78.5 78.3 77.4 73.3 71.5	81.5 78.5 78.4 77.7 73.4 71.5	82·3 78·6 78·4 77·5 73·5 71·5
Δn	25 26 27 28 29 30 31 g. 1	71.0 63.5 63.3 64.5 66.4 64.6	70.4 63.9 63.4 65.3 66.5 65.1	69.7 64.1 63.8 65.9 66.5 65.3	69.5 65.5 64.4 66.4 66.0 65.9	68.7 66.0 65.5 66.7 66.4 67.0	68.5 66.5 65.7 67.4 66.3 67.3	68°3 66°7 66°3 67°7 66°5 67°5	68.0 66.7 66.5 68.3 66.5 67.9	68.2 66.7 66.8 68.5 66.6 68.0	68°2 66°5 67°4 68°6 67°0 68°5	68°3 66°7 67°7 69°2 67°5 68°5	68.3 66.5 67.6 69.3 67.7 68.5
	Means	71.08	71.16	71.33	71.77	72.27	72.82	73.18	73.63	73.91			74.6

<sup>\*</sup> Omitted in the Means, on account of disturbance.

VERTICAL FORCE.  One Scale Division = '000066 parts of the V.F. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.64.													
	One Scale	Division =	: '000066 pa	rts of the V	.F. Increa	ise, in Scale	Divisions, o	correspondin	g to 1° decr	ease of Tem	perature, 1	64.	
12h.	13h.	14h.	15h.	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Daily and Monthly Means.	
Sc. Div. 147 2 141 8	Sc. Div. 146 6 142 3	sc. Div. 146.6 141.7	Sc. Div. 146 9 142 0	Sc. Div. 147 0 142 7	Sc. Div. 147 1 143 6	Sc. Div. 148 0 144 1	Sc. Div. 149 7 144 3	Sc. Div. 150.8 144.3	Sc. Div. 151.6 144.5	Sc. Div. 152.8 146.4	Sc. Div. 152.8 148.7	Sc. Div. 149 '78 144 '43	
138.0	137.7	138.2	139 3	140.0	135.0	144.0	144.1	144.1	143.2	143.2	144.0}	141.60	
137.5 142.4	138 · 2 142 · 6	138.2	138.5	138.5	140.3	140.3	140.3	133 · 9 142 · 6	130.5	138.8	140.2	139°10 141°81	
136'9	135.0 135.6	135 <b>'</b> 9	138°3	135.4 134.5	136.5	138°3 136°4	137°3 136°5	138.8	140.0	140.0	140°1 139°9	137.96	
135.6 163.5 140.9	165 · 4 141 · 2	161.0 133.7	98.3	139.4	122·4 134·3	137.0	80.2	132.6	143°2	134.0	143.0	135.68 137.68	
_	_			<del>-</del>		136.9	133.2	128.0	130.5	133.0	138.7	137.94	
137.8	137.9 135.7	133°0 134°9	134.7 137.2	135.4 137.7	136.4 135.7	$\begin{vmatrix} 127.8 \\ 136.2 \end{vmatrix}$	124.2	131.9	135.5	140.7	139°1 141°4	136.14	
135°7 147°9	146'8	147.2	148.9	146.4	146.4	142.8	137 · 2 143 · 8	138 <b>·2</b> 143·8	140.7 145.6	141.5 152.0	153.4	136°18 145°14	
144.9	145.4	145.4	145.4	145.6	145.6	145.6	145.7	145.7	146.3	147.5	148.6	147.01	
137 · 1 144 · 1	138.0 145.1	137·3 143·2	137·3 138·0	136.9	138.1	137.5	138.2	139.3	137.5	138.3	137.4	139·38 137·42	
	100:7	197.7	199.6	100:0	100:4	134.2	134.9	134.9	135.9	136.7	137.6		
129°1 135°7	126.7 135.0	127.7 133.7	128.6 134.4	129°0 133°2	129.4 134.8	130.0	130.8	131'3	131.6 134.4	131.3 135.2	131.3 137.1	129.90	
134.5	134.4	134.4	133.3	132.2	133.7	120.9	128.1	129.5	132.6	134.8	135.6	133.70 133.99	
136.2	136.4	137.4	137.4	132.3	119.2	134.3	136.9	135.2	142.9	143.7	145.2	136.10	
145°1 146°7	143 · 9 146 · 7	143°9 146°7	144·1 146·7	145°1 145°5	147·3 140·5	145.7	145.7	145.7	148.1	148.1	150.1	144.34	
						142.7	143.0	142.5	142.5	144'3	144.5	145.65	
157'1	156.6	155.1	155.6	155.0	155.4	154.8	155.3	155.3	159.9	158.3	158.8	154.97	
156.9	155.6	155.6	155.5	155.6	156.4	156.6	152.8	154.3	157.4	159.2	162.2	156.77	
155°0 151°4	155°0	155.0	154.0 151.5	154°2 150°6	154.5 148.3	154.1	155°7 150°4	155°7 150°4	153°8 151°6	158 <b>.</b> 2 151.3	159'8 153'1	155.92	
154.3	153.3	152.5	154.1	153.2	149.7	153.6	153.6	154.8	155.0	155.9	156.2	152°55 154°37	
151.3	151.3	151.3	151.8	149.7	151.1	152.6	152.9	154.8	154.6	154.8	156.5	153.02	
143.12	142.86	142.03	142.35	141.85	141.25	141.65	141.96	142.17	143.26	144.81	145.57	143.11	
	· · · · · · · · · · · · · · · · · · ·			ТЕМРЕН	RATURE OF	THE VERT	CICAL FORC						
72°5 74°9	72°5 75°0	$7\overset{\circ}{2} \cdot 2$ $75 \cdot 3$	71°.9 74°0	71°5 73°6	71°1 73°3	70°7 72°8	69.7 72.1	69.3 71.5	68.6 70.9	68.4 70.5	68°0	$6\overset{\circ}{9}.77$ 72.17	
76.7	76.7	76.2	76.3	75.0	74.2	74.0	73.5	73.0	72.5	72.1	$\left\{\begin{array}{c} \overline{} \\ 71.5 \end{array}\right\}$	73.83	
76.5	76.2	75.7	75.5	75.2	74.9	74.5	74.5	74.2	74.0	74.0	73.6	74.65	
75.4	75.2	74.9	75.3	74.7	74.5	74.5	74.2	73.8	72.8	72.7	72.3	73.90	
77.5	77.5	77.5	77.0	76.1	75.7	75.3	75.5	74.5	73.5	73.5	73.3	74.93	
78.2	78.3	78.1	77.6	77.5	77.1	76.8	76.5	75.8	75.5	75.0	74.6	76.45	
78.5 78.0	78.5 77.7	78°5 77°5	78.2 77.3	79°5 77°1	79°5 77°0	79·4 	77.6  76.5	78·2 — 76·2	77.7  76.0	77.0  75.5	$\frac{76.8}{75.0}$	78°58 76°71	
78.9	78.7	79.0	79.3	78.7	78.3	78.6	77.5	77.1	76.6	76.3	75.7	77.61	
78.7	78.4	78.0	77.2	76.8	76.3	75.7	74.8	73.8	73.6	72.8	72.4	76.97	
72.7	$72\cdot\hat{5}$	72.3	71.6	71.5	71.0	70.5	70.1	69.6	69.3	69.1	68.2	71.79	
73.5	73.3	73.1	73.0	72.6	72.1	72.0	72.3	72.0	71.5	71.3	70.7	71.51	
76°3 78°6	76 1 78 6	76°1 79°0	76°5 78°6	76.7 78.4	76.0 78.1	76 <b>·</b> 0	75 <b>·</b> 3	74·5 —	74.4	74.4	73.7	74.67	
	-					77.8	77.7	77:5	77.0	76.9	76.7}	77.29	
82.5	82.3	80.9	81.0	80.2	80.2	80.0	79.2	78.6	78'3	78.3	78.1	79.67	
78.7 78.0	78.6	78.4	78.0	77.7	77.6	77.5	77:3	76.8	76.5	76.2	76.5	77.83	
77.5	77.7	78.0	78.1	77.9	78.0	78.0	77.5	77:3	76.7 $73.2$	76.4 73.0	76.6	77.25	
73.7	77.0 74.0	76.5 74.0	76.5 73.4	76°3 72°7	$\begin{array}{c} 75.7 \\ 72.5 \end{array}$	$\begin{array}{c} 75.0 \\ 72.5 \end{array}$	74 · 5 71 · 6	74.0 70.5	73.2	70.0	$\begin{array}{c c} 72.1 \\ 69.5 \end{array}$	$75.99 \\ 72.52$	
71.3	71.0	71.0	71.0	71.0	72.5						$\left\{\begin{array}{c} \frac{69}{72 \cdot 2} \end{array}\right\}$	72.52	
68.4	68.0	67.6	67.3	66.7	66:4	73.5	73°0 65°2	73.0 64.7	72'8 64'2	72.5 64.0	63.5		
66.8	66.8	66.8	66.2	66.0	66.4 65.6	65°7 65°5	65 °C	64.8	$64.5 \\ 64.5$	64.0	63.5	67 <b>.</b> 45 65.63	
67.4	67.0	67.3	67.5	67.0	67.0	66.2	66.0	65.6	65.4	65.0	64.4	66.03	
69'1	69.1	69.0	69.2	69.2	68.7	68.2	68.2	68.3	67.8	67.3	66.7	67.87	
68.1	68.2	68.3	68.0	67.8	67.5	67.3	66.6	66.2	66.0	65.2	65.2	66.87	
68.5	68.3	68.2	67.6	67.4	67.3	67.0	66.5	66.0 —	65.2	65.2	$\frac{-}{65.0}$	66.94	
74.55	74.41	74.28	74.05	73.68	73:35	73.18	72.73	72.28	71.83	71.55	71.13	72.98	

Vol. III.

	Or	e Scale Div	ision = '00	0066 parts o	of the V. F.		ICAL FOR in Scale Div		sponding to	1° decrease	of Tempera	ture, 1 64.	
Mean ( gen T	Föttin-}	O <sup>b</sup> .	. 1 <sup>h</sup> ,	2 <sup>h</sup> •	3h.	4 <sup>h</sup> .	<b>5</b> <sup>h</sup> •	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10 <sup>h</sup> .	11h.
	$\begin{pmatrix} 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \end{pmatrix}$	Sc. Div. 156 5 156 0 141 4 152 0 151 9 147 4	Sc. Div. 155°0 155°0 146°5 156°0 151°9 147°2	Sc. Div. 152°5 154°4 144°1 145°0 145°8 147°9	Sc. Div. 151'9 154'5 142'0 144'3 143'2 147'9	Sc. Div. 155°1 151°3 140°6 148°2 143°9 146°8	Sc. Div. 154'9 148'8 139'3 147'1 136'9 146'7	Sc. Div. 154 1 149 6 139 3 146 1 137 4 145 6	sc. Div. 148 *8 151 *1 140 *1 151 *5 138 *5 144 *9	Sc. Div. 149 6 149 8 141 8 148 2 140 1 146 8	Sc. Div. 149°6 150°2 140°7 153°5 139°8 149°1	Sc. Div. 148 6 149 3 141 9 154 7 137 9 153 7	Sc. Div 147'4 149'6 140'0 148'8 145'4 151'7
Ι.	9 10 11 12 13 14	150.7 147.1 143.3 149.4 146.0 141.5	151.5 146.4 143.9 148.5 145.0 140.8	150°7 147°4 143°9 148°2 142°8 140°1	151.6 145.6 143.7 146.8 141.2 139.8	151.6 143.5 144.2 145.1 139.6 136.2	148.2 142.6 144.1 143.3 138.2 139.0	146.6 139.6 143.2 143.1 135.5 139.2	147.2 139.4 141.5 142.9 135.7 139.2	145.1 139.5 141.4 142.9 135.8 138.1	144.0 138.2 141.4 142.1 137.7 138.1	146.8 138.5 142.3 141.8 140.0 138.1	146°1 138°6 142°4 144°2 139°7 138°7
AUGUST.	15 16 17 18 19 20 21	138.0 137.2 145.0 159.5 155.1 155.4	137 · 1 135 · 3 145 · 0 159 · 5 153 · 7 155 · 4	131 · 9 133 · 2 144 · 8 157 · 1 153 · 3 152 · 4	133°5 132°4 142°7 157°0 153°3 151°0	132 · 1 131 · 2 141 · 7 157 · 9 151 · 8 150 · 2	132.9 130.3 145.3 158.4 150.6 150.9	131.7 131.7 144.7 157.7 152.0 150.9	129'9 131'9 145'7 157'7 151'7	131.1 133.8 148.1 157.7 151.4 151.8	132.8 134.3 149.9 157.0 150.4 149.5	134.4 136.0 148.9 155.9 150.4 151.7	133°3 138°5 153°1 155°4 150°4 149°7
	22 23 24 25 26 27 28	159.4 154.7 154.4 142.2 147.6 140.1	156°4 154°6 150°1 147°4 148°6 148°8	155.2 153.3 148.3 153.0 148.6 148.5	154.6 151.5 148.3 153.5 148.0 148.2	153°3 151°3 147°8 151°2 147°5 145°9	152·3 152·1 147·8 148·5 147·5 145·7	153°5 150°8 155°8 148°3 150°0 148°6	154.6 151.6 160.1 147.8 150.2 148.2	154.5 152.9 155.3 146.8 152.2 149.1	155.8 155.4 150.2 146.3 150.4 149.0	155.4 153.0 150.0 144.8 149.9 149.5	152.7 152.3 150.9 144.8 149.5 149.3
į	29 30 a 31 a	149·5 151·0	148°1 150°3	148°1 148°5	143.7 148.5	143°5 148°5	143.4 149.0	142.7 149.0	141 °9 150 °0	143.5 152.0	144.5 153.8	145 1 152 7	147'8 152'0
Iourly	Means	148.82	149.15	147.60	146*94	146.17	145.47	145.62	145.88	145.99	146.06	146.40	146°3
					EMPERATU	RE OF THE	VERTICAL	FORCE MA	GNET.				
	2 3 4 5 6 7	65.3 66.2 66.7 68.3 68.7 69.5	65.0 66.2 67.4 68.8 68.7 69.3	65.0 66.5 67.9 69.6 70.4 69.0	66.0 67.3 68.8 70.5 70.5 69.5	67.5 68.3 69.5 71.3 73.0 70.0	67.7 68.5 70.1 71.5 73.5 70.5	68.0 68.6 70.5 72.0 73.8 71.4	68.5 68.6 70.7 72.3 73.7 71.7	68.8 69.0 71.0 73.0 73.7 72.0	69.4 69.5 71.9 73.5 74.5 72.5	70.0 69.7 73.0 73.2 75.5 72.3	69.9 69.5 72.5 74.2 72.1
ľ.	8 9 10 11 12 13 14	67.2 70.5 71.9 69.0 71.2 72.5	67.0 70.6 71.7 69.6 71.5 72.5	67.0 70.6 72.0 69.4 72.1 72.7	67.3 70.6 71.8 69.4 73.2 73.4	67.5 71.6 71.7 70.5 73.5 74.3	68.5 72.6 71.8 71.5 74.4 74.5	69.1 73.3 72.2 72.0 74.7 74.7	69.6 73.4 72.4 72.5 74.5 75.4	70.6 73.7 72.5 72.8 75.0 75.6	71.5 74.5 72.5 73.5 75.0 76.0	72.0 74.5 72.5 73.8 74.7 76.3	72.5 74.5 72.6 73.7 74.5 76.5
AUGUST	15 16 17 18 19 20 21 22	74.5 74.5 69.5 64.4 63.5 64.7	74.5 75.0 69.4 64.0 64.1 65.0	75:3 75:3 69:5 64:1 63:8 65:8	76.7 75.4 69.5 63.5 64.3 66.5	76.5 75.3 69.3 64.3 65.5 66.7	77.0 75.5 69.5 64.4 66.0 66.8	77.4 75.5 69.5 64.5 66.5 66.9	78.0 75.5 69.5 64.7 66.9 67.3	78.0 75.7 69.5 64.7 67.4 67.5	78.5 75.5 69.5 65.3 68.0 68.1	78.6 75.5 69.7 65.4 68.3 69.0	79.5 75.4 69.6 65.7 68.5 70.0
	23 24 25 26 27 28 29	65.5 65.5 66.0 66.6 69.3 67.3	66.5 66.0 65.8 66.6 68.8 67.2	67:3 66:0 66:4 66:8 68:8 67:5	68°1 66°5 67°5 67°3 68°6 67°0	68.6 67.2 69.0 68.3 68.6 69.0	68.7 68.5 69.5 68.6 69.0	68.7 68.5 70.0 69.3 68.5 69.3	69.0 68.7 70.5 69.6 68.3 69.0	69°3 69°0 71°7 70°4 68°5 69°3	69.5 69.8 72.5 71.5 68.7 69.5	69.7 70.1 71.6 72.0 69.4 70.2	70.0 70.5 71.6 71.6 69.5 70.3
(	30°a 31°a	67°0 66°3	67.0 66.3	68.0 66.2	69.0 66.4	69.8 66.2	70°3 66°6	70.5 67.0	70.7 67.0	70°8 66°7	71°3 66°8	71.0 66.8	71 · 5 66 · 7
	Means	68.26	68.38	68.70	69.13	69.87	70.30	70.62	70.85	71.20	71.70	71.96	71.8

<sup>&</sup>lt;sup>a</sup> The observations on the 30th and 31st days are omitted from the Means, the readings having been affected to an uncertain amount by the induced magnetism of the vertical iron shafts of Robinson's anemometer.

	One Scale	Division =	000066 par	ts of the V		RTICAL F		orresponding	g to 1° decr	ease of Tem	perature, 1 · 6	4.
12 <sup>h</sup> .	13 <sup>h</sup> •	14 <sup>h</sup> .	15 <sup>h</sup> •	16h.	17h.	18h.	19 <sup>h</sup> •	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
149.5	147.9	147.6	146.6	146.7	146.7	147.0	147.6	147.7	150.1	152.8	156.7	150.45
149.0	148.5	148.0	146.2	145.6	144.2	143.2	143.1	146.0	151'9	147.5	145.6	149'11
140.0	139 <b>·</b> 9 147 <b>·</b> 2	$141.8 \\ 147.2$	146°8 146°0	142.5 143.2	112.0	114.6	137.2	133.7	124.1	143.0	146.0	138.30
148°8   151°1	147 Z 148 5	141 2	144.3	145 2	139.8 132.6	147°3 135°9	148°2 151°2	143.7 151.5	139°3 151°5	142.6 143.4	142.8 144.4	147°15 143°91
150.8	146.7	146.7	137.0	137.5	137.5	l —					150.3	146.40
14011	146:4	 143 <b>°</b> 9	144.0	143.6	195:5	142.8	144.3	149.4	145.4	149.5		'
146'1	146'4 137'6	139.7	138.8	138.8	135.5 139.4	138.7 138.8	140.4 139.8	143.0	144.8	145'9 141'1	147'9 142'3	145.85
138.6 142.6	142.0	142.1	142.7	143.0	143.9	142.2	140.4	141.1 141.0	141'3 146'3	146.3	146.1	140'99 143'08
142 1	146.1	140.6	140.3	140.3	140.3	141.1	141.1	142.7	145.2	143.4	145.0	143.60
138.3	138.3	138.3	138.8	139.0	139.0	139.1	140.2	141.2	140.0	141 5	140.1	139.65
135.2	136.5	135.6	136.6	137.6	141.6					<b>—</b>	1 . [	137.60
					l —	133.1	134'4	135.0	135.8	134.8	137.5	
131'3	131'3	131.1	129.6	130.1	129'9	130.2	128.9	116'3	127.0	131.3	135.5	131.30
136'8	136'1	135.3	135'3	135.7	138.9	137.3	139.6	140.0	140.0	141.2	141.1	135.96
152.1	152.0	152.7	146.0	150°9 155°2	155.3	155.0	155.4	155.4	155.1	155.1	159.2	149.96
155°1 150°6	153°8	155°2 150°6	154.6 150.6	151.1	155°2 151°1	155°2	156.0 152.8	154.6 152.8	154°2 153°6	150°8 153°5	155.7 155.7	156°10 152°00
145.7	145.6	145.6	147.8	147.8	122.9	131 0	-				- }	
						147.3	140'6	148.5	149.1	150.3	159.4	148.77
150.0	150.0	151.2	152.7	153.1	151.6	152.2	152.0	145.7	144.7	147.6	147.9	152.35
150.7	150.7	150.5	152.2	152.2	151'4	146.3	135.4	134.8	135.3	131 2	142.7	148.62
153.6	152.9	151.8	151.8	151.8	146'1	146.2	141.6	145'2	144.3	145.5	143.7	149.73
144.8	144.2	143.6	142.6	144'8	143.6	143.0	145.6	145.6	146.6	147.4	147.4	146.41
142.8	143.0	143.8	145.2	148.0	146'6	146'7	147.4	145.8	135.0	134.0	133.5	145.91
147'1	147.1	147.1	147.0	147.9	148.5						- }	147.46
						148.9	148.9	148.6	147.0	145.0	145.1	
148.3	148.3	144.4	146.0	145.8	145.8	145.8	145.4	146.1	146.1	149.3	149.3	145.93
151.4	151.7	149.4	149.1	149.3	149.3	149.5	152.0	154.5	154.2	155.8	156.2	151.14
145.54	145.11	144.79	144.32	144.21	141 '40	142.63	143.85	143.73	143.65	144.36	146.32	145*44
	,			ТЕМРЕ	RATURE OF	THE VERT	CICAL FORCE	E MAGNET				
69°9	70°∙0	69°7	70°1	7ő·1	78°0	68.4	67.9	67.9	66°8	66°5	66°0	68.10
70.2	70.5	70.2	70.5	70.2	70.4	70.3	70.3	70.0	68.0	67.4	66.2	68.89
72.7	72.5	72.5	72.5	73.2	73.4	72.9	72.7	71.7	71.0	70.5	70.0	71.07
72.5	72.4	72.4	72.3	71.5	71.0	70.7	69.8	69.2	69.3	69.0	68.6	71.06
72.8	72.5	72.7	72.2	72.0	71.7	71.5	71.0	70.4	70.2	70.3	70.3	71.99
71.8	71.6	71.5	71.3	71.0	70.8	-					67.7	70.07
70.0	<u> </u>					67.3	67.3	67.1	67.3	67:3	67:75	
72.2	72.4	72.5	72.3	72.3	72.0	72.5	72.3	72.0	72.0	71.5	71.5	70.64
74.5 $72.7$	74.3	74.2	74.5	74.1	74.0	73.6	73.5	73°3 69°9	73.0	$\begin{array}{c} 72.7 \\ 69.4 \end{array}$	72.0	73.09
73.9	72·5 73·7	72.5	72.0	71.7	71.2 72.5	70.7 72.4	70·4 72·2	$\frac{69}{72}$ .0	$69.5 \\ 72.0$	71.6	69:2 71:6	71.55 72.03
74.6	74.5	73°3 74°4	$73^{\circ}1$ $74^{\circ}2$	72.8 74.2	72.5	73.8	73.3	73.3	73.3	73.0	73.0	72 03
76.2	76.3	75.7	75.7	75.7	75.6	'-	-50	·		15 0		
					, <del>-</del>	77.3	76.5	76.1	75.7	76.0	75.5	75.29
79.5	79.2	79.0	79.2	78.3	77:6	77.1	76.7	76.3	76.0	75.3	74.7	77.22
75.5	75.3	75.5	$75 \cdot 2$	75.2	74.4	73.5	72.8	72.3	71.7	71.3	71.0	74.49
69.3	68.5	67.7	66.8	66.5	65.5	64.9	64.4	64.3	64°5	64.4	64.4	67.72
66.0	65.5	65.2	65.5	65.4	65.0	64.8	64.2	64.5	64.5	64.3	63.7	64.76
68.5	68.3	68.2	67.5	67.3	66.8	66.8	66.2	66.2	65.2	65.3	64.7	66.45
70°5	70.5	69.7	69.2	69.5	69.5	68.5	67.7	67.4	66.7	66.3	$\overline{65\cdot7}$	67.74
70.2	70.0	70.0	69.8	69.5	69.1	68.2	67.7	67.5	66.8	66.5	65.8	68*42
70.7	70.7	70.0	69.0	68.6	68.2	68.1	67.9	67.5	67.2	66.2	66.2	68.53
71.6	71.4	70.8	70.6	69.8	69.8	69.2	69.5	69.0	69.0	68.8	67.4	69.24
71.5	71.5	71.4	71.3	71.3	71.0	71.0	71.4	71.0	70.6	70.4	70.3	70.02
72.2	$72 \cdot 2$	71.4	70.8	70.7	70.2	70.0	69.7	69.7	70.1	69.7	69.7	69.68
70.4	70.4	70.1	69.6	69.4	69.0						1	68.83
71.2	70.0					68.4	68.3	68.3	68.3	67.7	67.4	
112	70.6	71.0 66.0	66.0	69.5 65.8	65.6 65.0	68.6 65.4	68.4 64.3	68°2 63°8	67·5 63·5	67.0 63.1	63.0	69°35
	hh.	1013 11	DE 11	i na x	no h	00 4	n4 0	000	เบยอ	1 00 1	1 00 0	เบอเด
66·5 72·09	71.95											

	Oı	ne Scale Div	rision = '00	00066 parts	of the V.F.		ICAL FOR n Scale Div		esponding to	1° decrease	of Tempera	iture, 1°64.	
Mean gen T	Göttin- }	Oh.	1 <sup>h</sup> •	2 <sup>h</sup> .	3h	4 <sup>h</sup> .	5 <sup>h</sup> .	6h.	7 <sup>h</sup> ·	8h.	9 <sup>h</sup> .	10h.	11h.
	( 1 a	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	$\begin{bmatrix} 2\\3\\4\\5 \end{bmatrix}$	151·3 153·8	152.7 151.7	151.8 152.5	151.8 123.8	149 · 6 154 · 2	151.6 148.2 154.9	149:3 145:8 157:8	149°3 144°9 157°7	149°3 146°7 157°8	148.3 146.4 157.8	146.3 146.3 160.9	147·2 150·2 159·1
	6 7 8 9 10	160°1 158°4 153°1 152°8 163°9 161°1	161.4 157.0 152.3 151.4 164.1 164.8	157.5 156.4 151.9 151.4 158.9 161.5	156.4 157.8 151.4 151.4 158.7 160.2	155°3 152°7 149°5 151°9 156°9 158°8	155.9 b 152.6 147.4 151.9 154.9 158.1	154.9 150.0 144.9 155.3 154.9 158.1	154.0 148.7 144.9 155.3 155.9 159.0	154.5 151.0 144.9 152.9 155.9 159.0	155.0 152.3 144.8 163.8 155.9 158.5	154.3 151.3 143.5 164.7 154.0 162.1	153.9 150.2 143.6 165.0 154.6 155.6
SEPTEMBER.	12 13 14 15 16 17 18 19	143.8 170.8 174.6 170.9 163.8 161.9	148.5 173.3 173.4 170.5 163.8 161.9	131 · 4 172 · 2 171 · 5 167 · 9 164 · 4 161 · 2	131.7 169.6 170.0 165.4 163.1 159.3	150.0 169.6 167.8 163.9 160.3 159.5	153°2 169°6 167°8 163°5 162°7 159°5	162.7 169.6 168.7 166.5 163.8 158.5	165 ° 4 169 ° 6 169 ° 6 162 ° 8 163 ° 6 159 ° 6	169.7 170.3 169.6 164.1 162.0 161.2	173°8 170°3 166°8 163°4 161°3 159°7	175°1 168°3 165°7 163°4 160°4 159°8	173°5 168°2 164°4 163°4 159°0 162°2
	20 21 22 23 24 e 25 26	162.1 164.5 166.1 155.3 143.6 175.0	163.3 163.8 164.9 158.9 f 175.0	163°3 162°5 162°2 160°3 138°8 174°5	162.5 161.3 160.6 155.6 154.0 173.5	162.0 161.1 161.6 156.1 150.5 172.6	162.0 161.1 159.4 156.4 172.5 172.5	161.6 159.4 159.5 157.6 197.6 171.1	160.7 159.4 162.8 160.6 195.7 171.9	162.8 159.3 167.2 161.7 184.1 171.4	164.9 159.5 166.9 157.0 191.7 171.4	165.4 159.2 163.1 154.8 190.4 169.7	166.0 158.7 162.0 157.1 182.7 170.7
	27 e 28 29 30	165°3 173°3 178°2	121'3 166'3 175'7 180'3	138.3 167.6 174.6 178.9	154.5 162.6 173.5 178.3	164.7 162.4 171.5 177.9	160°2 163°1 171°3 176°2	164°3 165°1 175°9 176°2	169.7 168.5 193.2 174.9	169 7 169 6 198 7 173 1	169 .7 170 .6 200 .5 175 .6	162°3 176°9 199°5 173°5	159.5 177.6 191.1 171.9
Hourl	y Means	162.73	163.41	161.26	160.39	160.24	160.10	160.81	161.95	162.88	163.46	163.27	162.64
			<del></del>	1	TEMPERAT	URE OF T	E VERTICA	L FORCE	MAGNET,		1		
	1 a 2 a 3 4	62°5 63°3 66°1 65°5	62°3 63°4 66°5 65°0	62.5 64.3 66.4 64.9	62°5 65°0 66°3 64°7	63°3 65°6 67°0 64°7	63°5 66°2 68°0 64°9	63°7 66°5 68°4 64°9	63°9 67°0 68°7 65°0	64.5 67.7 69.2 64.6	65°3 68°4 69°9 64°6	66°3 68°8 70°2 64°5	65.7 69.3 70.4 64.6
	5 6 7 8 9 10	62.7 63.5 66.0 65.7 60.5 60.7	62.5 64.0 66.2 65.3 61.0 61.0	63°5 64°5 66°7 64°9 61°7 61°5	63.8 64.7 66.7 64.7 62.5 61.7	64.4 66.6 67.6 64.9 63.0 62.5	64.5 67.3 68.7 65.0 63.3 63.3	64.5 67.2 69.5 64.7 63.5 63.3	64.7 67.2 70.0 65.0 64.0 63.7	65:3 67:3 70:2 65:2 64:3 63:8	65.7 67.5 70.5 65.4 64.5 64.5	66.1 67.6 70.7 65.5 64.7 64.5	66:3 67:5 70:5 65:5 65:1 64:5
SEPTEMBER.	12 13 14 15 16 17 18	62.7 56.5 55.1 57.4 59.9 62.5	62.4 56.3 56.0 57.8 59.5 62.4	62:3 56:3 57:1 58:2 60:2 62:5	62 1 56 3 57 2 58 5 60 5 62 5	62 · 3 56 · 5 58 · 0 59 · 0 61 · 5 62 · 7	62:3 56:5 58:3 59:8 62:1 62:9	62:3 56:6 58:5 60:2 62:4 63:3	62.0 57.1 58.8 60.5 62.9 63.5	61.7 57.7 59.0 60.7 63.3 63.5	61.5 58.0 59.5 61.5 63.6 63.5	61.8 58.2 60.0 61.7 63.9 63.6	60°6 58°5 60°5 62°4 63°6 63°5
	19 20 21 22 23 24 e 25 26	60.8 60.0 58.8 62.5 66.0 60.0	60.7 60.0 59.2 61.3 — f 59.6	60.7 60.8 59.0 61.7 63.5 59.2	60.7 61.3 60.0 62.5 63.1 59.0	60.7 61.5 61.0 62.6 63.0 59.5	60.9 61.4 61.0 63.0 63.1 59.6	61.0 61.9 61.1 63.4 63.1 60.0	61'4 62'5 61'4 63'7 63'3 60'2	61.5 62.5 61.5 64.5 63.1 60.1	61.5 63.0 62.1 65.5 63.0 60.0	61.6 63.5 62.6 65.8 62.9 60.5	61.5 63.5 63.1 65.8 62.8 60.5
	27 ° 28 29 30	61.5 57.0 56.0	63°7 61°7 57°4 56°0	64.7 61.5 57.2 57.1	62.5 62.7 57.2 57.6	62.5 62.7 57.7 58.0	63°2 62°5 58°0 58°4	63.5 62.5 58.2 58.6	64.2 62.2 58.4 59.0	64.5 62.3 58.5 59.1	65°5 62°5 58°5 59°1	66.4 62.4 59.0 59.0	66.5 61.5 58.5 58.5
	Means	60.97	60.99	61.27	61.21	62.02	62.35	62.55	62.81				63.47

<sup>&</sup>lt;sup>a</sup> The observations on the 1st and 2nd days are omitted from the Means, the readings having been affected to an uncertain amount (up to 4<sup>h</sup> on the 2nd) by the induced magnetism of the vertical iron shafts of Robinson's anemometer.

<sup>b</sup> Eight minutes late.

-1						VE	RTICAL F	ORCE					
		One Scale	Division =	·000066 pa	rts of the V				orrespondin	g to 1° decre	ease of Tem	perature, 1.6	64.
	12h-	13 <sup>h</sup> •	14 <sup>h</sup> .	15h.	16 <sup>h</sup> .	17h.	18h.	19 <sup>h</sup> .	20 <sup>h</sup> ∙	21h.	22 <sup>h</sup> .	23 <sup>h</sup> .	Daily and Monthly Means.
	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	147°2 151°1	147°3 151°1	147°3 146°1	147 3 147 2	147·3 147·7	147°9 149°4	147·9 149·4	147 <b>·</b> 9 150 <b>·</b> 0	148'9 151'0	148 <b>·</b> 9 152 <b>·</b> 6	150°3 149°8	151·4 }	148.47 149.22
	157.1	157.8	153.9	156.0	158.6	156.7	155.6	156.1	156.1	156.9	157.8 155.2	157.8	156.35
. 4	153°8 150°4	152.0 148.4	151°1 148°4	151.6 152.1	151.6 151.7	151 °0 152 °4	151.0 121.2	155°2 149°1	155°3 149°5	155 <b>°</b> 6 149 <b>°</b> 5	155°5 150°8	157°8 152°1	154 78 151 85
i	143'0 163'1	143 <b>'</b> 9 162 <b>'</b> 2	144'6 166'8	143.7 162.8	143°9 159°8	145°0 158°5	146°5 158°6	148 <b>'</b> 9 159 <b>'</b> 9	149°7 159°7	149.7 160.8	149'0 160'3	151.9 160.3	147°17 158°36
i	154.6 155.6	154.6 156.0	155°1 156°0	155°3 156°5	156.8 156.7	156.8 156.7	156.6	156.6	156.8	155.2	156.6	164.6	157.02 155.08
	173.3	169.8	169.9	169.5 c	170.0	170.1	155°0 165°1	153·5 162·4	150.8 164.6	148.5 168.5	125.4 168.5	$\frac{-}{134.4}$ 170.8	162.55
	168°2 163°4	168 · 2 162 · 7	169'8 164'5	168.3	169.2	169.6	169'6 164'8	170.2 166.8	171.2 d 166.8	172 · 0 168 · 7	172.0 167.8	172.8 168.2	170°12 167°49
	164.4	162.5	163.8	164'9 166'3	165.5 152.6	165 <b>.</b> 8	162.0	162'3	162.3	162.3	158.8	160'7	163.28
	159°7 162°5	157.5 162.5	156.2 159.3	161.3	158°8 159°3	159°2 158°3	158.4	158.7	156.8	159.4	160.3	$\frac{160.3}{161.3}$	160.50 160.66
	167.9	167.1	165.9	162.3	161 4	 159 <b>·</b> 6	162'3 160'1	162.6 160.6	162.6 161.3	160.6 161.3	158.9 163.6	164.9	163.02
	158.7 160.2	158°3	159°2 157°8	159°2 158°1	159°2 157°7	160°9 153°6	160.6 157.8	161 <b>·</b> 8 154 <b>·</b> 9	161.8 158.8	163.0 158.2	163.0 158.9	163.7 157.8	160°80 160°26
	157.7 190.8	166°2 186°5	158.4 182.3	159°1 174°1	158°1 174°1	158°1 171°9	153°8 162°2	139°3	122.7 164.2	132·3 171·0	129°3 171°7	107.5 171.9	151 · 41 173 · 17
	168.2	168.2	167.8	166.6	168.0	169.0	156.4	134.4	128.3	155.0	141.4	106.9}	162.50
	159°5 177°6	159°2 177°3	160.8 186.8	160°7 174°9	163.9	168.8 172.0	153.6 167.2	163.0	162.9 167.0	164.5 170.6	164.5 166.4	164.8 170.6	160°02 170°13
	181 · 8 171 · 9	202.0	173·1 172·2	180.4 171.5	170.4 177.1 172.0	177·4 172·3	177·4 172·3	170.2 171.2	170°3 172°7	175.6 172.7	175.6 172.5	176.7 172.5	180 70 174 20
	162.02	162.28	161.53	161.18	160.28	160.33	159.64	157.82	157.10	159.51	157.37	156.53	160.79
		1			TEMBER	ATUREOR	THE VERT	CAL FORCE	MAGNET.				
	65.5	67.0	66.3	65.8	65.6	65.2	65.3	65.0	65.0	64.5	64.2	63.5	64°55
	69.5	69.2	69.0	69.3	69.2	68.8	68.2	68.3	68.0	67.6	67:3	66'6	67:37
	69.7	69.5 64.3	69°5 64°6	68.7 64.5	68.5 64.4	68'2 64'3	67.7	66.8	 66.6	66.3	65.8	$\frac{65.3}{63.1}$	67.90 64.42
	66'4	66.3	66.4	66.2	66.0	65.5	64°3 65°2	64·1 64·8	63.6 64.8	63°4 64°5	$\begin{array}{c} 63.2 \\ 64.5 \end{array}$	64.2	64.95
	67.4 70.5	67.0 71.0	66 <b>·</b> 9 70·5	66.9 70.9	66.7 70.7	66.5 70.0	69.0 66.6	66.5 68.5	66.2 68.0	66 <b>°</b> 5 67 <b>°</b> 8	66°7 67°2	66.5 66.3	66.48 68.90
	65.5 65.0	65·4 64·6	65.0 64.8	64.7 64.0	64.5 63.6	64·3 63·5	63.7 62.8	63°1 62°5	62.6	62.0 61.5	61.6 61.1	61.3 61.1	64.40 63.11
	64.2	64.2	64.0	63.8	63.6	63.3	63.5	63.2	63.5	63.0	63.2	$\frac{-}{63\cdot 5}$	63.27
	60°1 58°8	60.0	59.6	59.0	58.8	58.5	58.5	58.0	58.0 56.5	58.0 56.3	57.6 56.0	57·1 55·3	60:30 57:18
	61.0	58.6 61.3	58.2 60.8	58.2 60.4	58.0 60.0	57.6 59.8	57·2 59·9	56.8 59.2	59.0	58.7	58.2	57.9	58.93
	62.5 63.5	62°3	62'0 63'3	61:5 63:3	63.0 61.0	60.7 62.5	60°5	$60.3 \\ 62.5$	60°1 62°5	60'1 62'6	60.0 62.6	60.0 62.7	60°36 62°38
	63.3	— 63.8	63.7	63.7	63.6	63.6	61.2	61.0	61.0	61.0	60.7	60.5	62.66
	61.2 63.6	61.5 63.6	$\begin{array}{c} 61.3 \\ 63.2 \end{array}$	61.8 62.5	$\begin{array}{c} 61.5 \\ 62.4 \end{array}$	61.2 $62.2$	60.7 61.4	60°5	60°3 60°4	60°2	60 <b>·</b> 1	60.0 59.1	61.69 60.98
	64.0 65.7	64.5 65.6	64.5 65.5	63.7 65.3	63·4 65·5	$62.7 \\ 65.4$	62.5 64.6	62.5 64.5	62.7 64.6	$62^{4}$ $64^{4}$	62.0 $64.4$	62°3 64°5	62°00 64°26
	62.8 60.5	62.5 61.0	62.8 61.0	62.8 61.0	62·1 61·0	62.0 60.7	61.8	61.6	61.2	61.3	61.3	61.2	62.63
į	66.2	66.2	66.4	65.7		_	60°9	63.9 63.9	60.5 63.6	63.0 60.8	61.5 62.6	$\{\begin{array}{c} -1 \\ 61 \cdot 3 \\ 62 \cdot 1 \end{array}\}$	60°37 64°47
	61.3 59.2	60.9	60.7	60.2	65.5 59.7	65°0 59°4	64.7 59.0	58.3	57.7	57.5	57.2	57.3	60.65 58.15
	58.5	59.5 58.6	59.0 59.0	59.0 59.8	59°8 58°5	58°2 58°6	58°1 58°2	57°5 58°4	57.4 58.8	57·2 58·7	56.4 59.0	56°3 58°5	58.33
	63.48	63.20	63.38	63.15	62.92	62.58	62.17	61.84	61.67	61.20	61.32	61.10	62:35

<sup>&</sup>lt;sup>c</sup> Fifteen minutes late.

d Three minutes late.

<sup>°</sup> Omitted in the Means, on account of disturbance.

	Оп	ne Scale Divi	sion = '000	066 parts of	f the V. F.	VERTI	CAL FORO	CE.	ponding to 1	° decrease o	of Temperatu	ıre, 1°64.	
Mean G gen T		0h.	1 <sup>h</sup> .	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7h.	8h.	9h.	10h.	11 <sup>h</sup> .
.	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	Sc. Div. 174 1 175 5	sc. Div.   173 7   175 5	sc. Div. 174.7 174.9	sc. Div. 170 5 172 9	Sc. Div. 169'4 171'3	Sc. Div. 169°7 169°7	Sc. Div. 168 6 169 6	Sc. Div. 168 6 169 6	sc. Div. 169'5 166'6	Sc. Div. 169 5 164 1	Sc. Div. 172.6 164.5	sc. Div. 174*4 165*0
	3 4 5 6 7 8 9	174'1 164'0 163'0 163'1 161'2 167'3	173.4 165.3 163.0 162.0 161.2 167.3	171'4 165'2 163'0 164'0 161'2 167'1	166.1 165.3 164.8 164.0 158.6 165.9	167.5 165.0 164.6 163.8 157.9 163.7	166'8 163'1 163'3 161'9 157'1 161'8	167.5 161.6 164.6 162.5 158.4 161.8	165.7 161.5 166.0 162.5 158.4 163.7	164.5 161.5 165.7 163.2 162.8 163.7	163'1 161'5 164'2 163'2 166'9 164'2	162.5 161.7 163.9 163.2 165.3 163.3	163.4 159.6 163.9 163.3 167.4 163.3
OCTOBER.	10 11 12 13 a 14 15 16	173°3 173°2 46°3 181°2 178°9 176°2	173°3 173°2 163°5 180°6 176°1 175°0	172.3 173.2 153.8 179.7 176.1 175.0	172'3 173'2 145'8 172'0 177'1 173'3	170.7 170.9 167.4 179.0 180.8 172.7	170.7 170.0 173.3 178.3 180.8 172.7	170.7 170.0 180.0 179.4 184.7 172.4	169.8 173.0 185.7 179.5 187.5 175.5	172.2 174.9 192.9 181.7 187.5 175.4	171.8 176.7 187.4 181.7 184.5 173.1	170'9 173'7 183'7 179'8 183'6 170'8	170 · 1 173 · 8 176 · 4 178 · 7 181 · 0 170 · 5
OCI	17 18 19 20 21 22 a 23 a	161.4 163.6 172.6 169.9 174.1 137.3	165.5 165.4 175.0 170.8 174.2	165 · 5 167 · 2 171 · 8 174 · 1 176 · 4 213 · 5	164.3 162.5 169.4 174.4 176.3 152.0	162.9 163.7 169.4 173.2 176.6 184.9	164'3 163'0 169'4 171'2 176'6 188'5	165 '4 164 '4 169 '4 170 '8 176 '6 219 '8	167 1 168 1 171 8 172 4 177 6 209 3	166.5 164.7 171.8 172.5 179.0 199.0	166'9 165'5 168'7 172'6 182'2 181'9	165.6 166.4 168.7 172.5 184.4 174.2	166.9 166.5 168.8 172.2 182.7 204.2
	24 25 ° 26 27 28 29 30 31	180°4 187°1 194°7 193°4 183°1 181°4	180.7 189.0 197.2 194.2 183.1 181.9	161:3 183:0 195:7 197:1 183:1 182:2	188.8 185.6 193.9 192.3 182.8 179.8	200.6 185.7 195.2 189.4 177.6 177.3	189.5 188.4 194.4 187.4 175.4 173.4	186°9 187°9 195°3 187°4 181°3 173°4	191 '9 188 '2 193 '3 187 '7 180 '4 173 '4	203.5 188.9 193.3 188.1 181.2 173.4	196.5 188.8 190.6 184.5 180.0 174.4	190°3 188°0 190°6 183°9 178°5 174°4	187'9 188'9 191'7 183'9 179'6 174'4
Hourly	y Means	174.20	174.62	174.43	172.77	172.35	171.49	172'14	172.90	173'16	172.57	172.02	172.15
		ii o	1 0				HE VERTICA						
	$\begin{pmatrix} 1\\2\\3 \end{pmatrix}$	58°0 55°2	58.8 55.2	59°7 55°0	59°4 56°8	59°0 57°6	58.0 58.0	59°0 58°2	59°1	59°0 59°2	59.0 60.0	59°0	59°0 60°5
	4 5 6 7 8 9	55.3 59.8 61.5 61.5 59.8	56.0 59.7 61.3 61.5 61.4 60.0	56.4 59.7 61.2 61.3 61.5 60.2	58.8 60.0 61.0 60.8 61.3 60.2	58°2 60°0 60°7 60°7 61°5 60°4	59.0 60.5 60.7 60.8 61.7 60.4	59°3 61°4 60°9 60°8 62°1 60°4	60°0 61°5 61°0 61°0 62°3 60°5	60.4 62.3 60.9 60.8 62.3 60.5	60.6 62.9 61.2 60.9 62.3 60.5	61.0 63.5 61.2 61.0 62.4 60.7	61.2 63.5 61.1 61.0 62.5 60.7
OCTOBER.	11 12 13 a 14 15 16 17	55°2 55°4 53°8 51°5 48°2 51°3	55.5 55.0 54.0 51.3 48.2 51.5	56.0 55.0 55.0 51.3 50.0 52.0	56.8 55.0 56.5 53.7 49.5 53.4	57.0 55.2 54.6 52.7 49.8 53.7	56.7 55.4 54.5 52.6 50.5 54.2	56.6 55.6 54.4 53.0 50.9 54.4	56.7 55.2 54.3 53.3 50.9 55.0	56.5 55.0 54.4 53.3 51.2 55.4	56.5 55.1 54.7 53.3 51.5 56.3	56.6 55.2 54.5 53.3 51.6 57.0	56.7 54.7 55.0 53.3 51.8 57.3
OCI	18 19 20 21 22 a 23 a 24	56.7 60.0 55.3 57.2 52.7 54.2	56.2 59.4 55.0 56.5 52.7	56.5 59.6 59.0 55.2 52.4 54.0	57·2 59·6 56·7 55·2 52·2 53·7	57.8 59.5 56.3 55.4 52.2 54.7	58.6 59.8 56.8 55.5 52.2 54.9	59.0 59.8 57.0 55.4 52.2 55.2	59°0 60°0 57°0 55°2 52°2 55°4	59°5 60°2 57°4 55°5 52°5 56°4	60°5 60°3 58°0 56°0 53°0 57°2	61.0 60.5 58.7 55.5 53.2 58.1	61.2 60.4 58.8 55.4 53.0 58.2
	25 a 26 27 28 29 30 31	57·2 50·1 44·8 46·4 49·0 52·0	56.2 50.0 44.2 46.6 49.2 51.5	56.0 53.1 44.8 47.6 49.2 51.5	56.2 50.8 45.0 47.4 49.5 52.0	56.5 50.6 45.4 48.0 51.0 52.5	56.6 50.2 46.1 48.4 51.4 53.5	56.7 50.2 46.1 48.9 52.0 54.2	56.6 50.5 46.5 49.0 52.1 54.9	56.0 49.2 47.2 49.5 52.2 55.2	56.2 50.1 48.0 50.5 53.2 55.3	55.8 50.2 48.0 50.7 54.1 55.9	55·2 49·6 48·4 50·4 53·3 55·5
Hourl	y Means	54.80	54.73	55.26	55.46	55.29	55.90	56.12	56.33	56.49	56.91	57.16	57:10

<sup>&</sup>lt;sup>a</sup> Omitted in the Means, on account of disturbance.

1				· · · · · · · · · · · · · · · · · · ·		777770	TITOLAT TO	D CE			<del></del>		
	_	One Scale I	Division = '	000066 part	ts of the V.		TICAL FO		rresponding	to 1º decrea	ase of Temp	erature, 1°64	
-	12h.	13h.	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> •	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Daily and Monthly Means.
	Sc. Div. 174'4 166'0	Sc. Div. 170°1 166°0	Sc. Div. 170 1 166 7	sc. Div. 170'8 168'7	Sc. Div. 171 2 168 7	Sc. Div. 172 3 168 9	Sc. Div. 172 3	Sc. Div. 168'8	Sc. Div. 169'9	Sc. Div. 172 9	Sc. Div. 172 9	sc. Div. 172°9	Sc. Div. 171 41
1	163.4	 163'4	163.5	163.5	163.5	163.5	170'8 163'9	170°8 164°0	172.0 164.0	172°2 164°2	172.0 164.0	172·3 }	169°76 165°45
1	163'5 164'0	162.5 163.9	162°2 163°9	162°2 163°7	162.4 163.7	162 <b>·</b> 2 163 <b>·</b> 3	162·2 163·3	162·2 163·1	162°2 163°1	162·1 163·1	162.0 163.1	16 <b>2</b> .0	162.62 163.80
	163'2 170'2	164°1 176°3 165°7	163 2 173 4 165 6	162.5 164.5 165.6	161.6 164.0 165.6	162.2 164.5 165.3	162 <b>.2</b> 140.6	162°1 155°7	155°8 155°7	157°9 163°6	161.5 163.6	162 <b>.</b> 6 163 <b>.</b> 7	162·32 162·17
ı	164'3  170'1	170'1	171.8	171.8	172.0	171.8	169.5 171.8	169.5 171.8	169.9 171.6	169·5 171·6	169.6 171.8	169·8 }	165.96 171.49
1	173.8	173.4	173.4	173.4	176.9	173.6	169.4	169.4	169.4	156'1	149.6	139.2	169.74
	178°7 179°7	178 <b>'</b> 7 181'8	184.4 182.1	180.5 182.7	180.5 182.7	178°2 182°7	179 <b>.</b> 4 179 <b>.</b> 5	179.8 179.7	178 <b>.</b> 4 184.1	180'4 182'1	178.8 178.7	180°1 178°7	175 59 180 25
1	181'0 170'5	182°3 172°4	182.4 174.3	181.9 174.5	181.0 174.5	180°7 174°7	180.7	180.1	180.2	179.9	180.7	179'6	181·21 169·99
Ì	 166 <b>·</b> 9	163°1	 165°1	163.0	162.9	162 <b>·</b> 9	166°2 162°3	165°2 161°8	167.6 160.1	152.0 160.1	147'1 161'4	$\frac{-}{158\cdot 2}$	163.82
	166.5	166°4 166°5	166°4 166°7	166.7 167.5	166.7 169.1	168 2 168 5	168.8 164.1	170.4 159.0	170.8 164.2	171'3 166'1	170.6 167.8	171.0 168.9	166.87 168.42
	166'8 172'7	172.7	173.0	173.0	173.9	175.1	174.1	174.2	174.2	174.6	174.8	174.8	173.07
	180'8 192'8	184 <b>°</b> 9 195°5	184°5 195°9	184 <b>·</b> 2 186 <b>·</b> 7	184 <b>·</b> 2 176 <b>·</b> 4	176°2 174°5	176.2	177.7	152.8	152.8	108.0	$\frac{107.0}{-139.6}$	171.08 180.17
		185.0	186°1	183.9	183.3	 184°5	—ь 184°5	—ь 183 <b>·</b> 0	b	139.4 186.6	138'1 188'4	139.6 5 187.3	186.63
	191.3	190.0	190.0	190.1	190.8	190.5	188.7	192.0	192.0	194*4	194.5	194.7	189.52
	190.6	191.6 185.7	190°1 185°7	190°1 185°7	186.0	190°1 182°8	184.0 182.7	184'3 188'6	184'3 188'6	190.6 186.4	190 <b>.</b> 9	$\frac{193 \cdot 2}{185 \cdot 7}$	191 <b>·</b> 49 187·37
	179°6 175°6	180°4 174°5	180°6 174°6	184°3 176°3	182 <b>.</b> 4 175.6	182.6 175.6	180.4	179°2 —	179.6	180.6	182.5	182.8	180°88 176°49
		-		150164			180.6	180.4	179.7	179'4	174.3	169.8}	
	172.64	172.86	172.85	172.84	172.97	172.82	170.82	171.47	171.77	171.40	170.87	170.93	172*46
	59°5	59.0	58.7	58°8	58.4	58°2	58.0	57.4	57.1	56.8	56°4	55°·6	58°41
	60.2	60.5	60.0	59.8	59.6	59.4	57.4	57°4	57.0	56.4	56.5	56.0}	58.12
	60.8	60.7	60.2	60.5	60.4	60.3	60.3	60.1	60.0	60.0	60.0	60.0	59.58
	$63.2 \\ 61.0$	63.3	62.8	62.5 61.0	$62.3 \\ 61.0$	62.3 $61.5$	62°1 61°5	62'1 61'5	62°0 61°5	61 <b>.</b> 9	61 <b>.</b> 9	61.7 61.3	61.79 61.17
1	61.0	61.1	61.1	61.1	61.5	61.4	61.4	61'4	61.4	61.4	61.6	61.5	61.17
	$62.5 \\ 60.7$	63.0 60.7	62.5 60.6	62.3 60.5	61.5 60.5	61.2 60.5	61.3	62.2	62.3	60.2	<u>-</u>	59·8  55·8}	61°76 59°34
	56.9	57.0	57.0	56.9	56.7	<u>-</u>	56.5 56.2	56°2 56°0	56.0	56°0 55°4	55 <b>·</b> 9 55 <b>·2</b>	55'8 J 55'1	56.32
	54.6	55.0	54'8	54.6	54.8	54.8	54.7	54.7	54.6	54.4	54.2	54.2	54.88
-	55°0 53°2	55°0 52°3	54.2 52.0	54.2 51.7	53.8 51.2	54°1 51°2	53.4 50.6	53°2 50°2	53°0 49°5	52.8 49.2	52.8 48.7	52·1 48·7	54°14 51°71
	52.0	52.2	52.0	51.2	51.3	51'3	51.3	51.3	51.3	51.5	51.1	51.4	50.95
	57 <b>·</b> 2	56.9	56.6	56.4	56.2	56.0	57.8	57.6	57°5	57.2	57.1	57·0}	55.62
	61°2	61.5 59.5	61.4	61.0	$\begin{array}{c} 61.1 \\ 59.2 \end{array}$	60.9	60.8	61.0 58.5	61.0 57.6	61.0	61.0	60°2 55°9	59.80
	59.0	59.2	59.0 59.5	59.0 59.4	59.2	59.0 59.0	58.6 59.2	59.2	58.9	57°3 58°4	56.6 57.4	57.2	59°13
	55.4 52.5	55'2	55.0	54.3	53.5	53.3	53.2	53.0	52.7	52.9	52.9	52.9	<b>54.6</b> 8
	58°4	52 4 58 4	52·2 58·2	52·2 57·5	52.0 56.9	52·4 56·5	52.2 — — b	52.2 — — p	52.2 — —	52.5 — 55.2	52·5  56·4	52.5 57.5}	52°47 56°35
	54.5	54.0	53.7	53.7	53.7	23.0	52.4	52.0	51.8	51.2	51.2	50.4	54.46
	$\substack{49.2\\48.5}$	49.0	48.6	48.4	48.4 47.4	48.0 47.2	47.4	46.6 47.2	46°1 47°0	45.6 47.0	45°4 47°0	44.8 47.0	48.84 46.85
	$50^{\circ}2$	49.8	49.5	50.0	49.9	50.0	49.8	49.2	49'2	49.2	49.3	49.2	49.11
	53 <b>°</b> 4 55°8	53.7 56.0	53 · 4 55 · 5	53°5 55°4	53.4 55.2	53°2 55°2	53'1	53.0	52.6	52.6	52.4	$\begin{bmatrix} 52.2 \\ -53.7 \end{bmatrix}$	52°20 54°12
	57.08		F0.00				53.4	53.3	53.6	53*9	54.0	-	
	30 10	57.07	56.80	56.65	56.49	56.38	56.00	55.88	55.68	55.43	55.26	55.05	56.07

	Λ-	e Scale Di <del>v</del> i	sion - •00	OOSS names a	fthe VF	VERTIC	CAL FORC	E.	sponding to	1° decrease	of Tempera	ture, 1 • 64.	
Mean G gen T		Oh.	1h.	2h.	3h.	4h.	5h.	6 <sup>h</sup> .	7b.	8h.	9 <sup>h</sup> .	10 <sup>h</sup> .	11 <sup>h</sup> .
	1 2 3 4 5 6 5	sc. Div. 173 '9 171 '7 164 '4 166 '6 172 '7 177 '7	Sc. Div. 173 '9 175 '0 164 '9 170 '2 173 '3 180 '2	sc. Div. 172 '6 175 '0 161 '5 165 '0 172 '2 173 '7	Sc. Div. 166.7 173.3 162.6 167.4 171.7 176.2	Sc. Div. 164°8 171°0 162°0 167°1 171°7 176°2	Sc. Div. 167.0 171.2 165.7 165.5 171.7	Sc. Div. 169 '8 170 '8 166 '8 166 '2 171 '7 176 '2	sc. Div. 169 '8 169 '8 166 '8 167 '9 172 '1 175 '4	sc. Div. 171 '8 166 '9 170 '6 169 '6 173 '6	sc. Div. 171'8 166'5 169'3 169'4 171'6	Sc. Div. 172 '7 165 '1 167 '9 166 '6 172 '5 176 '9	Sc. Div. 181'3 165'5 167'9 166'3 172'7
<b>.</b> R.	7 8 9 10 11 12 13	179.9 172.6 173.5 180.2 180.8 180.5	179 '9 171 '6 175 '6 180 '2 184 '4 180 '5	178 1 171 5 175 5 184 0 184 4 180 3	177.4 171.5 175.3 182.5 179.0 180.3	177'9 171'2' 177'0 182'0 179'0 180'1	176.5 170.3 176.4 182.8 179.0 188.7	178°1 169°5 178°5 183°7 181°1 181°6	179°1 170°4 178°5 183°7 181°0 180°7	179.0 170.4 180.6 183.7 182.2 180.7	179°1 170°4 182°2 183°2 182°1 179°8	178°1 168°7 183°7 183°2 181°3 182°2	178.7 169.3 178.5 183.1 180.9 180.8
NOVEMBER.	14 15 16 17 18 19 20 °	184'8 179'8 176'5 172'8 172'7 188'6	184.7 181.1 176.6 173.7 172.8 168.8	185.0 181.6 176.8 173.9 178.9 181.1	183°1 180°9 176°6 173°9 178°9 184°9	180°9 183°7 175°7 172°8 178°9 186°0	180.4 182.7 174.7 171.9 180.8 187.3	181.7 182.7 174.5 171.9 181.5 187.3	182.6 184.4 174.9 173.3 183.5 188.3	182.6 185.3 174.9 173.6 184.4 190.5	182.9 187.7 174.9 173.6 188.3 185.5	182.6 184.9 174.7 175.6 216.6 188.5	181.7 184.9 174.6 174.8 194.6 189.8
	21 22 ° 23 24 25 ° 26 27	188:4 185:7 175:6 174:1 179:2 186:5	187.0 185.4 175.6 174.0 177.2 187.1	187.0 185.5 175.7 174.0 184.5 188.0	187.4 183.7 175.2 172.4 185.7 188.7	185.5 183.4 171.4 170.6 186.4 190.4	185.2 181.5 173.5 172.2 187.5 193.0	185 · 4 181 · 5 176 · 1 182 · 1 191 · 0 191 · 3	180.0 181.6 178.1 185.3 189.7 190.7	183.7 181.6 179.4 189.6 189.7 193.9	180°2 178°3 179°4 193°3 191°9 193°8	225 · 4 178 · 3 176 · 9 204 · 5 193 · 4 195 · 0	224.4 178.2 175.7 201.7 192.7 198.4
	$\begin{bmatrix} 28 \\ 29 \\ 30 \end{bmatrix}$	205 · 2 203 · 1	205.3	202.4 196.6	205·7 198·1	205°2 199°3	205·2 199·0	205°3 199°0	204'0 199'6	202 · 9 198 · 8	201.6 197.8	200°5 197°8	200°5 197°8
Hourl	y Means	178.97	179.67	179.25	178.89	178.61	179.18	179.59	179.90	180.67	180.62	181.23	180.78
		<u> </u>			<u> </u>	URE OF TH	E VERTICA		AGNET.				
	1 2 3 4 5 6 7	53.6 57.2 59.0 58.4 56.0 51.5	53.8 57.2 59.0 58.0 54.4 52.1	54.0 57.2 59.0 58.0 55.0 59.2	54.1 57.7 59.0 58.8 54.5 52.2	54.8 58.7 59.0 59.0 54.5 52.2	55°2 59°2 59°2 59°2 54°6 52°4	55.7 59.3 59.6 59.3 55.0 52.0	56.2 59.6 59.8 59.4 54.7 52.3	56.8 59.8 59.8 60.0 54.9 52.4	57·2 60·2 59·9 59·8 55·2 53·2	57°7 60°5 59°8 60°0 55°6 53°6	57.8 60.6 59.8 60.0 55.3 53.4
er.	8 9 10 11 12 13	49.2 55.5 53.8 51.2 49.8 49.8	49.4 55.9 53.1 50.8 49.4 49.9	49.4 56.0 53.0 50.6 49.6 50.2	49.7 56.0 53.0 50.5 50.6 50.0	50.0 56.1 53.0 50.2 50.5 50.1	50°5 56°7 53°0 50°4 50°2 50°6	51.0 57.2 53.0 50.8 50.7 50.8	51.4 57.4 53.0 51.2 51.0 51.2	52.1 58.0 52.8 51.2 51.2 51.2	52.3 58.5 52.5 51.1 51.2 51.8	53:1 59:0 52:4 51:2 50:9 51:7	53.5 58.5 53.0 51.2 51.0 51.8
NOVEMBER,	14 15 16 17 18 19 20°	47.5 47.5 53.0 54.3 52.7 43.7	47.6 47.4 53.0 54.2 52.4 43.6	47.8 47.4 52.9 54.1 51.2 44.0	48.0 47.8 52.7 53.3 50.5 44.2	48.4 48.0 52.7 53.6 49.8 44.6	49.0 48.2 53.4 53.9 49.8 44.9	49.2 48.6 53.8 54.0 49.2 46.2	49.3 49.4 54.0 54.0 49.0 46.0	49.4 49.6 54.5 53.8 48.8 46.4	49.4 50.2 54.4 54.2 48.6 46.6	49.4 50.4 54.6 54.2 48.4 47.0	49.2 50.4 55.1 54.4 49.4 46.4
	21 22 ° 23 24 25 ° 26 27	46.2 51.8 55.5 54.2 50.1 47.4	46.4 51.4 55.3 54.2 49.3 47.2	46.4 51.0 55.2 54.2 48.6 47.0	46.6 50.7 55.2 54.4 48.4 46.7	47.0 51.0 55.2 55.1 47.8 46.0	48.0 51.3 55.5 55.1 48.2 46.4	49°2 51°6 55°6 55°1 48°3 46°7	49.7 52.4 55.9 55.0 48.2 46.6	50°5 52°7 56°0 54°6 47°8 46°8	51.2 53.4 56.2 54.4 47.4 47.0	51.7 54.0 56.2 54.8 47.4 47.2	53.8 54.2 56.4 54.4 47.8 46.4
_	28 29 30	35.8 37.1	35.9 37.1	35.9 38.2	35.9 37.6	35°4 38°1	36·1 38·9	36.3 39.1	36.8 39.6	37.5 40.0	38·1 39·8	38.6 40.0	38.8 40.6
lourly	Means	51.50	51.03	51.33	51.00	51.05	51.39	51.60	51.84	52.05	52.24	52.43	52.55

<sup>&</sup>lt;sup>a</sup> Fifteen minutes late.

198.   188.   189.   189.   189.   189.   189.   189.   299.   219.   229.   229.   300		One Scale	Division =	·000066 pa	rts of the V		RTICAL I se, in Scale		orresponding	g to 1° decre	ease of Tem	perature, 1.6	64.
1897   211   2	12h.	13h.	14h.	15h.	16 <sup>h</sup> .	17h.	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Daily an Monthly Means
1687   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667   1667					Sc. Div.	Sc. Div.	Sc. Div.		Sc. Div.			Sc. Div.	Sc. Div.
168:1 166:0 166:0 166:3 166:3 164:5 164:5 164:5 149:5 163:1 160:8 162:4 166:2 166:3 166:3 166:3 166:4 167:6 167:9 170:3 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:2 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3 171:3													174 20
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173-6													164.01
1776   1782   1783   1783   1783   1783   1783   1783   1783   1789   1810   1799   1781   1799   1781   1799   1781   1799   1781   1799   1781   1799   1781   1799   1781   1793   1799   1783   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1793   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794   1794													167.95
174-2							174.4	174.3	174'4	175.8	165.3	174.8	172.76
174'8   175'9   175'8   175'8   175'8   175'8   175'8   175'8   175'8   175'8   175'8   175'8   175'8   175'8   175'8   175'9   174'8   172'8   177'0   177'0   173'6   173'8   173'8   175'0   175'9   174'8   172'8   177'1   179'4   179'4   179'8   179'8   179'1   179'1   179'1   179'4   179'4   179'8   179'8   180'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'1   181'	177'6	177.6	178 2	178 3	178-3	178.8					15040	] }	178.11
177-0   177-0   173-6   173-6   173-6   173-7   173-7   173-7   173-8   175-0   173-9   174-8   173-9   181-6   181-6   181-8   181-8   179-1   179-1   174-5   172-3   177-7   179-4   179-4   179-8   178-8   178-8   178-8   178-1   183-1   183-1   183-1   183-1   183-1   183-1   183-1   183-1   183-1   183-9   183-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-2   180-			175:0	175:0	777.0	17010							
1816													175.54
1831													172.58
1807 2   1807 2   1807 2   179 4   1777 3   1767 1   173 6   173 5   177 2   177 2   179 2   179 5   178 188 99   1816 6   1812 2   1812 2   1809 9   1816   1812 2   1812 2   1809 9   1816   1812 2   1812 2   1809 9   1816   1817   1827 8   1827 8   1827 8   1827 8   1827 8   1827 8   1827 8   1827 8   1827 8   1827 8   1827 8   1827 8   1827 8   1827 8   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   1828 3   182							174 5			179'4			178.3
													182.4
1817   182"   184"   184"   184"   184"   184"   187"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"   182"							173.6	173.2	177*2	177*2	179 2		179.5
1817   182*8   184*2   184*5   184*7   184*7   182*7   182*3   182*3   182*3   182*8   188*0   185*0   185*0   185*0   185*0   184*5   183*4   183*3   181*4   180*5   178*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*8   177*3   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2   173*2	18219	181 6	181 2	181 2	181 2	180 9	70414	1041	177.0		170.1	1,00.4}	181.1
183:0		100:0	104:0	104:0	104.5	104:7							ĺ
1730													183.0
17-2													182.0
1898   198°4   190°5   193°4   190°2   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0   191°0									172.0				174.30
189°S   199°S   191°2   191°2   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°4   191°												1/2 8	173.3
190°S   181°S   299°7   142°9   135°0   171°5   184°3   181°2   177°4   179°7   179°7   134°176°S   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1   173°1							191 0	191 0	Tai O	191 0	191 0	_ 1	188.3
190'8   189'0   181'8   209'7   142'9   135'0   171'5   184'3   181'2   177'4   179'7   179'7   179'7   179'0   179'2   178'9   179'2   178'9   179'2   178'9   179'2   178'9   179'2   178'9   179'2   178'9   179'2   178'9   179'1   175'1   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'4   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'8   176'	189 8	192 5	191 2	191 2	191 4	191 4	100:5	107:0	107:0	100:4	100:4	100:4	187.76
		100.0	101.0	200:7	149:0	125:0							Į.
1761   1751   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   175   17	190 0											175.0	184.2
204'8 216'9 222'3 177'8 164'5 178'8 177'7 177'7 177'7 179'9 179'9 179'2 184'8  1872 196'8 197'6 184'3 186'7 188'1 188'6 188'6 185'8 185'6 185'8 185'6 185'8 185'6  193'1 193'1 193'1 192'9 192'9 193'0  201'1 202'1 202'1 202'1 202'6 202'2 203'0 203'0 203'0 202'2 202'3 203'1 203'1 203'1 203'1 196'0 196'0 196'4 196'4 197'4 196'4 197'5 195'3 195'3 195'2 190'7 194'6 197'  180'43 182'41 181'50 179'56 179'13 179'28 179'66 178'80 178'45 179'51 178'55 179'27 179  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**  ***TEMPERATURE OF THE VERTICAL FORCE MAGNET.**													
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													176.43
196'7   193'1   193'1   192'9   192'9   193'0													184.5
Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Color   Colo							100 0	100 0	100 0	100 4	100 0	_	101 0
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		130 1	130 1	102 0	152 5	133 0	204.7	204.7	204.7	204:3	206:4	205:8	195.38
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	201:1	202:1	202:1	202:6	202.2	203:0							203.0
180*43   182*41   181*50   179*56   179*13   179*28   179*66   178*80   178*45   179*51   178*55   179*27   179*													197.4
58.2 58.2 58.2 58.0 58.5 58.8 58.8 58.8 58.0 57.4 57.3 57.2 57.0 56.0 59.8 59.8 59.8 60.0 60.0 60.0 59.9 59.8 59.7 61.0 60.0 59.4 59.0 58.9 58.4 58.0 57.3 57.1 56.8 56.5 56.2 58.2 58.2 58.0 58.4 58.0 57.3 57.1 56.8 56.5 56.2 58.2 58.2 58.0 58.4 58.0 57.3 57.1 56.8 56.5 56.2 58.2 59.2 59.2 59.2 59.2 59.2 59.2 59.2 59						10.1							101 10
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	180.43	182'41	181.20	179.56	179.13	179.28	179.66	178.80	178.45	179.51	178.55	179.27	179.76
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		Ī	I			ATURE OF	THE VERTI						, I
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	58°2	58.2	58°2	58°0	58°5	58°8	58°8	58°0	57°4	57°3	$5\overset{\circ}{7}$ ·2	57°0	56°77
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	60.2					1 1							59.34
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$													59.63
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													58.68
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				55.0									54.56
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$													
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			_			_					48.5	49.0}	51.7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		53.4	53.7	54.2		54.0						55.0	52.5
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	58.2												56.2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$													52.58
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	51.2												50.78
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		)											50.6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							_	—					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	_						47.3	47.2		47.5	47.5	47.5}	49.9
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		48.7	48.5	48.2					47.8			47.5	48*3'
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		50.8											50.3
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		55.7	55.7							55.2	55.0	54.7	54.50
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		54.7	55.6									52.7	54.16
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$							45.7		45.0	44'4	$44^{\circ}2$		48.1
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	45'8	45.4	45.4									_ ı	45.2
$\begin{array}{cccccccccccccccccccccccccccccccccccc$													
$\begin{array}{cccccccccccccccccccccccccccccccccccc$													51.5
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$													53.6
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													55.60
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													54.28
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							47.7	47.4	46.7	46.7	46.9		47.8
38.8     38.4     38.1     38.6     38.6     38.3     38.3     38.3     38.1     37.9     37.7     37.2     37.2       41.1     41.2     41.2     40.8     40.6     40.6     39.7     39.6     40.6     40.4     40.3     39.7	-	45.4	45.5	45.4	45'4	45.0						— \	43.6
41.1 41.2 41.2 41.2 40.8 40.6 40.6 39.7 39.6 40.6 40.4 40.3 59			,									35.6	
50100 TO TO TO TO TO TO TO TO TO TO TO TO TO													37.4
52.63 52.42 52.33 52.22 52.16 52.10 51.34 51.04 50.95 50.74 50.58 50.51 51	1 T	41 2	41'2	41.2	40.8	40.6	40.6	39.7	39.6	40.6	40.4	40.3	59.72
	52.63	52.42	52.33	52.22	52:16	52:10	51.34	51.04	50.95	50.74	50.58	50:51	51.6

	One	Scale Divis	ion = '0000	066 parts of	the V. F.	VERTIC	CAL FORC	EE. sions, corres	sponding to	1º decrease o	of Temperat	ure, 1 64.	
Iean Ge gen Tir	öttin- }	Oh.	1h.	2 <sup>h</sup> .	3 <sup>h</sup> .	4h.	5 <sup>h</sup> .	6h.	7h.	8h.	9h.	10h.	11h,
	1 2 3 4	Sc. Div. 195 7 185 9 184 5 189 2	Sc. Div. 195 7 184 8 184 5 189 2	sc. Div. 195°7 186°7 186°8 186°2	Sc. Div.   196 * 8   184 * 3   185 * 8   189 * 1	Sc. Div.   195°2   184°3   185°1   189°1	Sc. Div. 193 ° 2 184 ° 3 185 ° 1 190 ° 4	Sc. Div. 193 2 182 7 185 1 190 4	Sc. Div. 193 2 185 8 187 0 192 5	Sc. Div. 191 5 185 8 188 7 192 5	;Sc. Div. 189 5 187 5 189 7 192 5	sc. Div. 188°2 194°2 189°7 192°5	Sc. Div. 187 8 192 9 189 7 192 7
	5 6 7 8 9 10 11	194.6 190.6 174.5 176.6 171.2 167.9	194.6 190.6 179.1 176.6 171.0 169.0	194.6 189.9 182.2 178.5 172.4 169.2	194.6 189.7 183.3 178.5 173.2 171.8	191.6 189.4 183.3 179.6 172.8 170.7	191.6 188.7 184.7 180.1 172.8 173.6	190°6 188°2 183°7 180°4 171°8 175°5	190.6 186.0 183.7 181.3 172.1 176.5	190°2 184°5 184°4 183°0 170°3 180°3	189'4 183'3 183'9 181'9 176'7 179'4	189.4 182.4 182.2 179.8 176.7 179.4	187.7 182.2 182.2 179.3 178.9 180.2
DECEMBER.	12 13 14 15 16 17 18 <sup>b</sup>	182 · 3 180 · 8 183 · 1 191 · 1 183 · 7 196 · 5	182'3 181'9 182'4 189'7 181'5 194'9	181'4 184'1 182'5 191'6 193'0 194'5	181'3 184'4 183'5 192'8 188'7 195'4	179'9 183'5 181'7 193'1 190'7 197'1	180'4 183'5 a 180'7 191'4 186'5 196'2	181'3 182'5 181'8 191'4 194'9 197'1	181'2 182'5 183'1 191'4 207'9 197'7	181.6 182.5 183.6 191.4 216.2 200.1	181'0 184'5 183'8 191'4 203'1 201'6	180'9 183'8 183'6 191'9 206'4 197'6	179 '9 185 '8 183 '4 190 '8 195 '6 197 '6
I	19 20 <sup>b</sup> 21 22 23 24 25 <sup>d</sup>	85°0 214°1 203°9 192°9 197°9	76°3 213°5 204°1 193°3 197°9	160'9 212'0 203'0 194'4 201'1	156'4 211'6 200'7 198'6 200'5	209 '7 211 '8 201 '5 198 '3 198 '4	234.0 211.8 202.7 198.4 198.3	234.5 212.3 201.7 197.5 198.3	221.3 212.2 203.5 200.5 199.1	246.1 210.8 203.0 202.8 200.7	237.8 209.6 201.4 203.4 199.3	239·1 209·6 201·7 203·7 199·3	235 '7 209 '6 198 '5 200 '6 199 '0
	26 27 28 29 30 31	206°1 198°1 185°8 180°6 173°8	206 1 196 4 185 8 180 0 172 4	206.0 196.4 185.8 179.6 173.9	206.0 196.7 183.7 178.6 173.7	204.0 195.0 178.0 176.5 172.4	203°0 194°8 181°3 175°4 172°4	203 · 1 193 · 7 181 · 3 176 · 2 173 · 2	204'3 193'7 181'3 177'4 173'2	205.6 195.0 196.0 178.0 174.8	205.6 192.7 185.8 176.9 173.5	205 · 2 192 · 7 182 · 8 176 · 9 172 · 6	205°0 192°3 180°9 174°5 172°6
Hourly	y Means	187.71	187.60	188.62	188.66	187.75	187.71	187.95	189.17	190.55	189.41	189 40	188*4
	$\left( egin{array}{c} 1 \\ 2 \\ 3 \\ 4 \end{array} \right)$	40°4 46°8 47°3 45°0	40°2 47°0 47°2 44°6	40°4 46°5 46°4 44°3	40°9 46°4 46°4 44°3	41°5 46°4 46°4 43°9	42°2 46°4 46°5 44°3	42.6 46.8 46.6 44.3	42°7 47°4 46°5 44°2	43°2 47°6 46°4 44°1	44°0 48°2 46°3 44°4	44·2 48·2 46·2 44·6	45°0 48°1 45°7 44°4
	5 6 7 8 9 10	41.5 43.4 47.0 51.1 53.8 52.0	41.7 43.7 46.9 51.4 54.1 51.5	41.4 43.5 46.6 50.6 53.6 51.5	41.4 44.3 46.7 50.3 53.6 51.7	42.2 44.5 47.2 50.2 53.5 51.3	42.9 45.0 47.7 50.3 54.2 51.6	44.1 45.3 48.0 50.4 54.4 51.8	44.4 46.0 48.4 50.4 54.8 52.1	44.5 46.4 48.6 50.0 54.7 51.9	44.6 47.6 49.2 50.2 55.0 52.0	44.6 48.2 49.4 50.4 55.0 52.0	45°1 48°4 49°4 51°0 55°0 52°0
DECEMBER.	12 13 14 15 16 17 18 <sup>b</sup>	48.4 47.6 47.6 42.2 39.8 40.2	48.5 47.4 47.4 42.4 39.8 40.0	48.4 46.9 47.2 42.3 39.1 39.8	48'3 46'6 47'2 40'8 39'0 39'6	48:3 46:8 47:4 40:0 39:0 39:6	48.5 47.4 47.8 39.8 39.0 39.8	48.6 47.6 48.0 39.8 39.3 40.3	48.7 47.8 47.7 40.1 39.5 40.8	48.7 48.0 47.4 40.3 40.2 41.2	48.7 48.0 47.5 40.5 40.2 41.7	49.4 47.5 47.6 41.2 42.0 42.2	49°2 47°2 47°4 41°0 43°9 42°1
I	19 20 b 21 22 23 24 25 d	42°2 35°4 38°8 42°4 40°0	42·2 36·1 38·7 42·6 39·8	41.2 35.9 38.8 41.7 39.8	40.6 35.7 38.5 40.9 40.0	40°0 36°0 38°9 40°4 40°1	39'4 36'3 39'1 40'4 40'2	39'3 36'3 40'0 40'4 40'1	39.8 36.8 40.0 40.0 40.3	40°0 37°0 40°4 39°7 40°3	39.8 37.3 40.9 40.3 40.6	39.7 37.5 41.6 40.3 41.0	39°0 37°3 42°7 41°0 41°4
	26 27 28 29 30 31	33°1 38°0 44°5 49°4 52°4	33.5 38.1 44.5 49.4 52.4	33.6 38.3 44.4 50.0 53.0	33.4 38.8 44.9 50.0 53.0	33.4 39.1 45.9 50.1 52.8	33.8 39.3 46.5 50.9 52.7	34.0 39.6 47.2 50.8 52.5	34°1 40°0 47°6 51°0 52°5	34.2 40.4 47.9 51.2 52.5	34.3 41.0 48.4 51.2 53.0	34.0 41.4 48.4 51.3 53.2	34° 41° 48° 48° 51° 53° 53° 53° 53° 53° 53° 53° 53° 53° 53
Hourl	y Means	44.20	44.24	44.34	44.30	44.39	44.70	44.94	45.12	45.23	45.26	45.80	46

<sup>&</sup>lt;sup>2</sup> Two minutes late.

b Omitted in the Means, on account of disturbance.

	One Scale	Division =	: '000066 pa	erts of the V	VE	RTICAL I	FORCE. Divisions, c	orrespondin	g to 1° decr	ease of Tem	perature, 1·6	i4.
12h.	13h.	14 <sup>h</sup> .	15h.	16 <sup>h</sup> •	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 187 3 198 8 189 7	Sc. Div. 188'8 200'0 191'5	Sc. Div. 190'5 196'2 191'6	Sc. Div. 187 1 202 6 193 6	Sc. Div. 189 1 202 4 193 6	Sc. Div. 189 1 195 7 193 8	Sc. Div. 189'1 195'7 192'9	Sc. Div. 189'4 188'8 190'4	Sc. Div. 182 4 168 5 190 4	Sc. Div. 189'8 181'6 190'0	sc. Div. 189°2 184°8 189°6	Sc. Div. 185°9 185°0 190°1	Sc. Div. 190°56 189°14 189°12
192.8 	192.4 	192.4 	193'3 	191'8 — 187'8 185'3 183'4 177'6	191.8  187.8 185.3 180.8 177.6	195.4 185.1 183.5 181.1 176.5	192.8 188.7 187.8 175.7 174.7	194.4 189.4 187.7 178.6 169.5	196.7 189.4 183.7 178.0 170.0	195°3 189°2 180°7 177°8 172°1	194.6 189.5 179.1 174.8 171.2	192.09 189.89 185.51 181.00 177.37
178.9 179.4 	181.6 180.8 — 181.2	184.4 182.1 — 182.0	183.8 182.3 — 182.7	176°3 182°3 — 182°7	175.0 182.3 — 182.7	170°6 — 183°3 182°7	173 8 	176'4  183'3 182'9	177.7 — 183.3 180.7	172.9 	168·1 183·1 180·8	174·97 178·42 181·48
184·2 183·4 190·5 197·8 196·7	184.5 179.9 191.3 194.8 195.5	182.8 179.9 193.7 196.5 195.3	182.8 182.5 192.9 198.6 193.5	183 · 1 183 · 7 192 · 9 197 · 1 192 · 7	182.0 184.0 192.9 196.3 190.7	182.0 184.0 192.9 192.4	182.6 186.2 192.9 198.2	181.6 186.4 192.5 196.5	182 · 2 184 · 6 187 · 8 197 · 5	180 8 182 9 186 8 182 9 191 1	183°1 189°1 187°9 191°1	183.07 183.49 191.21 195.67
251.1 209.3 199.4 199.0 199.3	264·5 209·6 199·0 200·8 197·5	258 · 2 209 · 6 198 · 8 200 · 8 196 · 0	255°1 210°0 198°5 198°8 196°2	225.8 210.0 199.4 198.4 197.6	225.5 210.0 198.4 199.5 197.6	62.0 224.6 208.3 198.0 199.4	109.5 220.3 208.7 195.6 197.7	139.8 214.2 207.6 192.3 197.7	215.5 206.5 193.4 197.7	22°0 214°5 204°4 192°1 196°6	55.0 214.5 203.9 192.9 197.2	170°39 213°36 209°87 199°31 198°67
205 · 1 192 · 2 181 · 4 174 · 5 173 · 9	204'9 190'8 182'3 174'6 173'3	205.0 189.6 183.6 175.7 173.3	205°3 189°6 182°6 175°0 173°3	204.7 189.6 182.1 175.0 173.3	204.7 188.9 182.3 175.0 173.4	208.7 204.7 188.1 181.1 175.0 173.4	209.4 203.5 186.8 178.5 174.7 173.3	209.4 203.5 186.7 180.6 174.7 173.3	208 '7 201 '6 186 '7 180 '6 174 '4 173 '3	207 '9 199 '4 184 '9 180 '6 174 '4 171 '0	206.5 199.3 184.9 180.6 173.6 169.8	201.02 204.24 191.51 182.70 176.13 173.05
188'54	188.61	188.98	189.52	189.13	188.62	188.20	188.18	186.93	187.33	186.27	185.92	188:31
							ICAL FORC					
45.2 47.9 45.4 44.4	45.4 47.7 45.4 43.8	45.5 47.5 45.2 43.8	45°4 48°0 45°2 44°0	45°7 47°8 45°2 43°7	46.4 47.3 45.0 43.6	46°5 47°0 45°0	46°0 47°2 45°3	46°5 47°4 45°0	46°2 47°4 45°0	46°0 47°2 45°0	46.6 47.3 44.8	44°11 47°31 45°81
46'3 48'2 49'8 51'2 55'0 51'7	45.6 48.3 50.0 51.4 55.1 51.2	45.6 48.2 49.8 51.5 55.2	45.6 47.6 50.0 51.6 54.6	45°3 47°3 50°0 51°9 54°3	45.4 47.2 50.0 52.0 54.1	41.0 45.6 46.8 50.0 52.3 54.1	41.0 44.5 46.4 50.2 53.0 54.0	40.8 44.2 46.7 50.4 53.7 53.2	40.6 43.7 47.0 50.7 54.0 53.0	41.0 43.5 47.0 51.0 54.0 52.7		43.41 44.05 46.42 49.09 51.53 54.14
49°2 47°1 47°3 41°4 43°6	49.0 47.3 47.2 41.6 43.5	50.8 	50°2 48°2 47°4 47°4 42°2 41°8	50.0 48.0 47.3 46.5 41.7 41.4	49.5 47.6 47.6 45.9 41.6 41.3	47.4 47.5 47.6 45.0 42.0 41.2	47.4 46.7 47.6 44.0 41.6 40.4	47.4 46.5 47.4 44.3 40.8 40.4	47.5 47.4 47.6 44.0 40.3 40.3	47.6 47.6 47.6 43.4 40.2 40.0	7.9 47.4 47.6 42.8 40.0 39.8	50'42 48'22 47'43 46'48 41'06 40'72
42.2 38.1 37.0 43.4 41.6 41.8	42.3  38.0 36.6 43.3 41.2 41.6	38.4 36.4 42.4 41.2 41.4	42.7  38.0 36.6 42.2 41.0 40.8	42.8  38.0 36.3 42.2 40.8	43.0  37.1 36.1 42.2 40.8	39.8 36.6 35.7 42.2 40.5	40.6 35.9 36.1 42.2 40.5	42·3 35·7 36·9 42·5 40·3	35.0 37.7 42.4 40.3	42.6 34.3 38.1 42.7 40.0	42.6 34.6 38.4 42.2 39.7	41.35 38.45 36.65 41.18 40.75
34·2 41·7	34.0 41.9	33 · 9 42 · 5	34·1 43·3	40°3 — 34°1 43°6	40.0 — 34.0 44.0	31·1 34·0 44·3	31.4 34.3 44.5	31.6 34.9 44.6	32.0 36.1 44.6	32.6 37.1 44.8	$\begin{bmatrix} - \\ 33 \cdot 1 \\ 37 \cdot 3 \\ 44 \cdot 3 \end{bmatrix}$	38·39 34·32 41·65
49.0 52.0 53.2	49°3 52°3 53°2	49°3 52°2 52°7	49°2 52°2 52°8	49.0 52.2 52.8	48.7 52.2 52.6	48.6 52.2 52.6	48.9 52.2 53.2	48 8 52 4 53 1	49°1 52°6 53°0	49.0 52.7 53.2	49°1 52°7 54°2	47:78 51:45 52:91
46 15	46 08	45.95	45.89	45.72	45.63	45.01	44'94	44.99	45'10	45.17	45.19	45.22

		Oı	ne Scale Div	vision = •0	00066 parts	of the V. F.		ICAL FOI		esponding t	o 1º decreas	e of Temper	ature, 1 64.	
1   169'S   180'S   170'9   171'1   168'S   168'S   169'7   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4	Mean gen	Göttin-}	Oh.	1h.	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6h.	7 <sup>h</sup> .	8h.	9h.	10h.	11h.
3   185' 5   182' 8   174' 7   181' 1   178' 2   179' 4   181' 9   184' 0   184' 5   186' 5   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6   186' 6								Sc. Div. 168*8						
10		3 4 5 6 7 8	176.7 190.8 192.3 198.4	181.5 190.8 194.2 198.2	182.9 191.6 196.4 197.2	185°3 191°5 195°1 195°3	184.5 190.3 195.1 195.0	181.7 190.3 194.2 197.2	183.0 192.5 195.6 198.0	184.0 190.5 195.6 198.4	186.3 187.9 195.3 197.7	186.0 186.7 194.6 196.9	186.0 185.0 194.6 197.7	185.8 184.9 194.6 199.5
186   186   186   186   186   186   186   186   186   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187	ARY.	10 11 12 13 14 15	207:3 189:6 190:2 177:9	207.3 193.1 188.3 179.8	210.0 196.4 186.9 180.9	209°1 189°6 186°2 181°1	210.0 190.7 188.8 180.9	210.0 193.6 189.2 180.8	209'1 201'3 188'7 180'8	205 · 1 196 · 9 188 · 3 180 · 8	203 · 3 203 · 2 193 · 1 183 · 6	203 · 3 199 · 2 208 · 7 184 · 8	202.9 197.8 206.1 184.8	202.8 197.8 200.2 184.2
24	JANU	17 18 19 20 21 22	188.8 198.7 186.9 179.8	188.8 198.7 186.7 180.3	189.8 198.7 185.4 181.3	187.6 197.6 186.3 178.0	188.7 193.5 186.3 178.0	188.8 196.7 185.9 178.0	192.2 197.9 186.6 177.3	193.9 195.9 185.5 178.2	192.6 196.8 184.5 178.5	191.4 196.0 184.2 180.0	193°2 196°2 181°5 179°8	192°3 198°6 182°5 181°1
State		24 25 26 27 28 29	186.8 174.0 173.4 175.4	187.5 174.3 172.7 175.4	186.8 175.0 175.3 175.5	185°3 175°0 175°1 177°3	184.1 178.6 174.4 175.3	182.8 178.1 174.4 172.4	183.0 178.1 175.2 176.4	184.2 179.4 174.5 177.4	184.2 181.8 174.5 177.4	183.9 181.8 173.8 176.6	183.9 181.8 173.8 178.1	182.9 179.2 173.6 178.1
TEMPERATURE OF THE VERTICAL FORCE MAGNET.						187.1	184.4	183.2	185.4	185.4	184.2	182.4	179.7	179.7
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Hourly	Means	186.11	186.54	<u> </u>			<u> </u>		<u> </u>	187.90	188.11	187.58	187.10
2		( 1	54.4	55.0							~^°.~	1 -2	J 54.0	1 53.4
EV 15 16		2 3 4 5 6 7 8 9 10 11 12 13	45.8 47.6 42.2 39.9 36.9 39.9 28.1 25.6 35.0 41.6		46.5 46.5 42.0 39.0 37.1 39.8 	46.4 46.5 41.7 39.0 37.2 40.0 ——————————————————————————————————	46.4 46.4 41.6 39.1 37.1 40.0 	46.2 47.0 41.9 39.4 37.3 40.6 	46.4 46.4 42.1 39.7 37.8 41.0 	46.4 46.5 42.7 39.6 38.1 41.5 	46°3 46°4 43°7 39°6 38°1 41°5 ————————————————————————————————————	46.3 46.3 44.4 39.5 38.1 42.4 — 28.7 31.0 39.5 43.6		47.2 46.0 45.7 39.8 37.3 43.4 
$\begin{bmatrix} 24 & 37.9 & 38.1 & 38.3 & 38.0 & 38.8 & 40.0 & 40.4 & 40.6 & 41.0 & 42.4 & 43.0 & 43.3 \\ 25 & 43.4 & 43.6 & 43.5 & 43.8 & 44.3 & 45.0 & 45.2 & 45.7 & 46.2 & 46.6 & 47.3 & 47.4 \\ 26 & 49.4 & 49.5 & 48.8 & 48.3 & 47.7 & 48.3 & 48.6 & 48.5 & 48.4 & 48.5 & 49.2 \\ 27 & 50.2 & 50.0 & 50.0 & 50.2 & 49.8 & 50.0 & 50.9 & 51.2 & 51.2 & 51.7 & 51.7 & 51.8 \\ 28 & 48.0 & 48.0 & 48.0 & 48.4 & 48.8 & 49.5 & 49.6 & 49.7 & 49.5 & 49.5 & 49.5 \\ 29 & 47.4 & 47.4 & 46.7 & 46.4 & 46.6 & 46.6 & 46.7 & 47.2 & 47.3 & 47.2 & 47.4 & 47.5 \\ 31 & 43.4 & 43.5 & 43.5 & 43.6 & 43.7 & 44.6 & 44.6 & 44.7 & 45.2 & 46.0 & 46.9 & 47.2 \\ \end{bmatrix}$	JANUAR	15 16 17 18 19 20 21 22	49.6  43.8 43.1 36.2 42.9 46.7	49.7  43.8 42.9 36.1 43.5 46.5 42.6	49.7 45.0 42.6 36.1 43.0 46.5 41.9	49.6 44.4 42.4 37.2 43.1 47.2	50.0 	49.8 	50°2 	50.5 -43.5 40.9 38.5 44.8 48.7 42.2	50.9 	51.4 	52·1  44·4 41·4 39·1 47·2 49·2	52.2 45.0 40.4 39.1 47.3 48.4 43.3
42.65 42.65 40.60 40.00		24 25 26 27 28 29 30	43.4 49.4 50.2 48.0 47.4	38·1 43·6 49·5 50·0 48·0 47·4	38·3 43·5 48·8 50·0 48·0 46·7	43.8 48.3 50.2 48.4 46.4	44.3 47.7 49.8 48.8 46.6	45°0 48°3 50°0 49°5 46°6	45.2 48.6 50.9 49.6 46.7	40.6 45.7 48.5 51.2 49.7 47.2	46.2 48.4 51.2 49.5 47.3	46.6 48.5 51.7 49.5 47.2	47.3 49.2 51.7 49.5 47.4	43.3 47.4 49.2 51.8 49.2 47.5
Houriy Means $\begin{vmatrix} 42 & 65 \end{vmatrix} \begin{vmatrix} 42 & 65 \end{vmatrix} \begin{vmatrix} 42 & 62 \end{vmatrix} \begin{vmatrix} 42 & 61 \end{vmatrix} \begin{vmatrix} 42 & 66 \end{vmatrix} \begin{vmatrix} 43 & 08 \end{vmatrix} \begin{vmatrix} 43 & 35 \end{vmatrix} \begin{vmatrix} 43 & 60 \end{vmatrix} \begin{vmatrix} 43 & 77 \end{vmatrix} \begin{vmatrix} 44 & 15 \end{vmatrix} \begin{vmatrix} 44 & 55 \end{vmatrix} \begin{vmatrix} 44 & 61 \end{vmatrix}$			42.65	42.65	43.5	$\frac{43.6}{42.61}$	$\frac{43.7}{42.66}$	43.08	$\frac{44.6}{43.35}$	44.7	45.2		46.9	47.2

	One Scale	Division =	*000066 par	rts of the V.		RTICAL F se, in Scale		orresponding	g to 1° decre	ease of Tem	perature, 1°6	4.
12h.	13h.	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> •	17h.	18h.	19 <sup>h</sup> .	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 173°3	Sc. Div.	Sc. Div. 171 5	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
170°5	188.8 187.8 187.4 195.5 198.9	184'9 187'2 187'4 195'7 198'9 188'2	189°8 186°9 188°9 195°7 199°5 188°1	187.8 186.8 191.3 196.1 199.3 188.2	186.3 187.8 191.3 195.7 199.3 188.2	183.4 182.9 188.6 191.3 195.7 197.3	183.4 179.5 189.8 191.7 196.2 195.5	182.8 169.9 189.8 191.7 198.4 196.1	182.8 167.7 189.8 191.8 198.4 195.5	182.8 170.4 189.5 191.4 199.3 192.1	183.5 } 169.3 189.5 191.3 197.7 192.8	173.68 180.95 185.96 189.72 195.70 197.26
188.0 207.3 201.6 197.5 200.2 189.1 172.2	187.6 207.3 200.9 194.8 189.3 188.3 173.0	208.7 210.5 194.8 189.2 183.2 173.0	208.7 217.2 194.7 184.4 179.0 172.8	208·3 227·2 195·1 183·4 175·9 173·1	206.6 209.4 195.1 184.0 175.6 173.6	207.4 207.3 203.5 195.2 182.7 175.6	207.6 208.9 203.5 189.5 182.0 177.2	207.8 211.5 178.4 189.0 181.5 176.6	209°3 212°5 177°0 185°1 180°5 176°8	204.9 211.7 179.6 185.0 180.3 173.1	205·2 } 211·7 188·8 189·4 180·2 176·2	194.37 209.42 203.24 193.93 188.85 180.29 177.18
184.0 193.5 194.0 182.6 182.5 187.3	186.8 195.7 194.2 180.8 184.3 188.9	185.8 195.7 194.1 180.8 182.9 189.9	186.2 195.8 195.1 180.8 182.3 191.3	187.7 195.8 194.0 179.8 183.0 190.5	187.7 195.7 194.2 179.8 184.3 191.7	185.4 188.0 195.8 192.3 175.6 184.7	185 · 4 188 · 4 197 · 2 189 · 1 177 · 2 186 · 3	183.9 188.3 198.6 182.3 177.6 186.3	183°6 188°3 198°6 180°8 178°0 186°3	186.2 188.3 199.6 183.3 179.2 186.3	186.2 } 189.6 198.7 185.0 179.8 186.2	187.73 193.70 193.49 182.26 181.90
192.7 182.9 178.7 173.5 197.2 182.5	192°1 182°6 179°2 173°0 211°3 182°3	191 · 2 183 · 8 180 · 8 173 · 0 219 · 2 182 · 3	190°8 178°5 180°2 173°0 187°8 182°3	190.8 178.5 178.4 173.0 189.8 182.5	190°8 178°5 177°4 165°8 172°5 182°6	197.5 190.6 177.9 177.4 164.5 183.6	197.7 188.8 177.1 177.3 170.6 189.6	197.7 188.7 177.1 174.6 173.0 167.1	193 · 9 188 · 7 175 · 6 174 · 2 162 · 4 169 · 9	193 · 9 188 · 7 175 · 6 173 · 4 175 · 1 169 · 3	188:2 } 187:8 174:3 173:4 176:2 154:0	190°10 188°57 181°57 177°59 172°66 180°27
179.7	179.5	179.5	183.1	184°0	184.0	186°4 183°7	186.8 184.3	181 <b>·</b> 9 184 <b>·</b> 3	188 <b>'</b> 9 184 <b>'</b> 3	188.5 183.7	185.8 }	183.14 183.69
187.95	188.20	188.91	187.93	188.12	186.52	188.24	188.48	185.96	185.41	185.82	185.61	187.20
			errore and the contract	TEMPER	ATURE OF	THE VERT	ICAL FORC	E MAGNET.				
54.2	54.0	54.0	53.8	5å·7	53.6	°	0	°	<u> </u>	0	<u> </u>	52.25
47.4 45.3 45.0 39.5 37.2	47.9 45.0 44.4 39.0 38.0	47.4 44.6 43.2 38.2 37.8	47.8 44.6 42.4 38.0 38.1	47.8 44.2 41.5 37.8 37.0	48.0 44.2 41.1 37.8 37.1	46.0 48.2 43.3 41.1 37.6 37.3	46.0 48.0 42.6 41.0 37.1 38.1	46.0 48.1 42.1 40.5 36.4 39.0	46.2 48.3 42.1 40.5 36.0 39.2	46.4 48.6 42.2 40.4 36.2 39.7	46.4 } 48.4 42.3 40.0 36.6 39.8	47 · 19 45 · 07 42 · 36 38 · 49 37 · 85
43.6 	43.8 29.8 33.5 40.0 44.9 49.2	43.9 29.6 34.3 40.0 45.0 49.2	44.0 29.2 34.5 39.7 45.4 49.5	43.6 29.2 34.8 39.5 45.7 50.0	43.4 29.4 34.9 39.1 45.7 50.1	30°3 29°0 34°6 38°9 45°5 50°2	29.8 28.1 34.4 39.1 46.4 50.0	29·3 26·4 34·7 39·9 46·5 50·2	29°0 26°1 34°7 40°0 47°3 50°3	29.0 25.2 35.0 40.2 47.3 50.0	$\begin{bmatrix} - \\ 28 \cdot 8 \end{bmatrix}$ $\begin{bmatrix} 25 \cdot 3 \\ 35 \cdot 1 \\ 41 \cdot 2 \\ 47 \cdot 4 \\ 49 \cdot 6 \end{bmatrix}$	38.80 27.94 31.46 38.66 44.45 48.81
52·3 45·0 40·0 89·5 47·3 48·4 43·5	52'1 43'8 39'8 40'0 47'4 47'6 43'4	52·1 44·2 39·3 40·1 47·4 47·2 43·0	51.8 	51.4 	51.0 43.8 37.9 39.6 47.8 45.6 41.8	44.5 43.5 37.6 40.2 47.6 44.7	44.4 43.2 37.0 40.6 47.6 44.2	44.2 42.6 37.0 41.4 47.6 43.7	44.2 42.2 36.9 41.5 47.8 43.6	44.2 42.1 36.7 41.5 47.6 43.5		49 · 26 43 · 77 39 · 83 39 · 22 46 · 13 46 · 63 41 · 12
43·3 47·6 49·7 52·2 49·2 47·3	43°3 47°6 49°6 52°1 49°2 47°0	42.6 47.4 49.8 52.0 49.4 46.8	42.6 47.8 50.4 51.4 50.6 46.8	42.4 47.8 50.4 51.2 51.2 46.6	42.6 47.7 50.6 50.8 47.5 46.2	37.3 42.4 48.3 50.8 50.4 49.4	37·1 42·4 48·4 51·0 50·2 49·0	37.0 42.0 48.5 50.8 50.0 49.0	37.4 42.3 49.0 50.8 49.6 48.2	37.4 42.7 49.3 50.6 49.5 47.4	37.5 } 43.2 49.3 50.3 49.2 47.4	41 12 41 40 46 70 49 55 50 72 48 97 45 71
47.2	47.0	46.7	46.7	45.3	44.5	41.7 44.3	41.6 44.2	41.7 44.2	41.7 44.0	41.9 44.0	43.3 }	44.95
44.67	44.59	44.43	44.43	44.25	43.92	42.49	42.37	42.26	42.27	42.25	42.35	43.36

	O	ne Scale Div	rision = '00	00065 parts (	of the V. F.		ICAL FOR in Scale Div		esponding to	1° decrease	of Tempera	ture, 1°64.	
Mean G gen Ti	1	Oh.	1h.	2 <sup>h</sup> .	3h.	4 <sup>h</sup> .	5 <sup>h</sup> •	6 <sup>h</sup> •	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	10h.	11h.
	1 2 3 4 5	Sc. Div. 187 3 184 3 178 9 178 0 179 5	sc. Div. 186.0 184.3 178.9 178.2 179.5	sc. Div. 187 * 4 183 * 0 179 * 2 181 * 0 179 * 4	Sc. Div. 186'9 178'0 179'2 180'3 178'6	Sc. Div. 186.7 182.7 177.6 178.1 178.3	sc. Div. 185.8 183.4 177.0 177.8.2 176.1	sc. Div. 187.4 183.6 177.0 177.8 177.7	sc. Div. 187.4 183.4 176.9 177.3 177.7	Sc. Div. 187'4 182'9 176'9 177'5 179'4	Sc. Div. 184.4 180.5 175.7 178.2 178.8	sc. Div. 184.4 179.0 174.1 176.9 180.4	sc. Div. 184'4 178'0 173'1 176'9 180'9
Υ.	6 7 8 9 10 11 12	193 1 192 9 178 4 187 5 199 3 198 2	192.8 193.6 189.2 191.1 202.5 198.2	194.7 193.6 189.2 191.9 201.5 198.7	193.5 195.3 185.3 189.3 200.5 196.3	192·3 191·1 186·0 186·2 197·0 194·9	191.0 190.6 186.1 187.9 196.8 192.7	192.7 195.3 189.2 190.7 198.7 194.4	193 '9 194 '4 189 '2 193 '5 198 '9 192 '3	195.6 194.0 193.6 194.1 199.7 191.4	194.0 193.7 197.5 194.8 198.9 191.1	191 · 2 187 · 7 192 · 2 194 · 3 196 · 7 189 · 6	194.7 187.8 195.4 194.3 196.7 189.4
FEBRUARY.	13 14 15 16 17 18 19	191.7 183.7 185.2 182.4 178.7 173.3	194.3 183.9 187.1 182.3 180.0 178.0	198.7 188.6 185.9 182.1 178.9 179.5	181 1 180 0 178 6 179 4 178 1 176 5	182.6 180.9 175.3 177.3 176.0 176.5	182'9 181'9 175'3 175'9 175'3 176'3	183 · 1 185 · 1 176 · 5 176 · 4 173 · 4 173 · 3	183°3 185°5 177°5 177°8 173°4 175°3	181.8 185.5 178.1 177.8 173.3 175.2	181.8 185.5 178.1 177.1 173.1 173.8	184 '8 182 '2 176 '7 174 '6 170 '5 172 '2	187°1 180°9 176°7 174°9 171°7 173°4
	20 21 b 22 b 23 24 25 26	147.8 172.5 174.3 129.9 178.4 184.5	100°4 170°5 177°9 127°9 173°9 183°5	161.0 179.1 177.2 156.9 183.3 186.1	193°4 179°8 172°6 175°7 189°4 181°8	190°1 179°8 172°8 180°0 188°5 177°9	185.0 179.8 174.9 186.3 188.5 180.6	192.0 179.8 174.7 184.8 188.5 181.5	194.3 184.4 181.1 183.9 189.5 180.9	193 '9 176 '3 182 '4 188 '9 191 '5 183 '4	180.0 185.7 180.8 192.6 188.9 180.9	250°2 184°2 182°6 199°0 190°7 180°2	243 · 7 182 · 5 181 · 8 192 · 6 189 · 7 180 · 2
	27 28 29	181·2 179·8	179°8 182°6	181.7 182.6	181.7 182.0	184°1 180°2	184°1 178°6	181·2 178·6	183.1 180.1	180°4 180°9	180.6 181.7	181·4 182·6	180 · 4 · 182 · 9
Hourly	Means	181.76	182.85	185:27	183*48	182.74	182.86	183.55	184.19	184.86	184.46	183.65	183.65
		1				URE OF T	HE VERTICA						<del> </del>
	1 2 3 4 5	43.4 41.6 46.4 45.4 46.5	43.6 41.6 45.9 45.2 46.6	43.0 42.0 46.3 45.2 46.3	42.4 44.0 46.4 45.3 46.0	42.4 43.2 47.3 46.3 46.2	42.4 43.4 47.6 46.8 46.6	42.6 43.5 47.9 47.0 46.6	42.6 44.3 48.4 47.2 46.4	42.5 44.8 48.6 47.2 45.7	43·2 45·9 49·3 47·5 45·6	43.4 46.6 49.7 47.7 45.4	43:5 47:4 50:2 48:2 45:2
Υ.	6 7 8 9 10 11 12 13	39.0 39.9 41.3 40.8 33.1 36.1	39.0 39.5 41.3 40.6 32.8 35.6	38.8 39.3 43.0 40.1 33.3 35.2	38.2 38.2 42.4 41.0 34.9 35.5	38.1 38.8 42.4 40.0 34.3 36.2	38.2 39.3 42.3 39.8 34.6 37.0	38.2 40.0 42.0 39.8 34.6 37.0	38.6 40.3 42.0 39.8 34.4 37.8	39.1 40.6 42.3 39.8 35.1 38.3	39.6 41.3 42.4 39.9 36.0 39.4	40°2 42°0 43°0 39°9 36°8 40°0	41.4 42.2 43.0 39.9 37.4 40.6
FEBRUARY.	13 14 15 16 17 18 19 20	38.8 43.2 42.7 44.2 45.8 46.2	38.4 42.5 42.4 43.5 45.8 45.6	38.8 42.3 42.9 44.0 45.7 45.5	42 · 4 42 · 6 45 · 4 44 · 5 46 · 4 46 · 2	41.0 42.7 45.6 45.5 46.6 45.8	41.3 42.9 46.2 46.4 47.4 46.3	41 · 4 42 · 4 46 · 5 46 · 7 47 · 5 47 · 0	42.4 42.8 46.8 46.6 48.2 47.9	43.0 43.5 47.4 47.1 49.2 48.3	43.4 44.5 47.8 47.9 49.6 48.8	43.9 45.7 48.2 48.6 50.0 49.2	44.0 46.5 48.3 49.4 50.2 49.2
	21 b 22 b 23 24 25 26 27	45:3 50:2 49:4 46:2 43:2 46:4	45.4 50.0 49.0 46.2 41.5 44.3	46.0 49.5 49.0 44.9 41.3 44.0	47.0 49.4 49.4 44.7 42.0 46.3	47.0 49.3 49.5 44.1 42.0 46.2	47.4 49.4 49.5 44.3 42.3 46.5	47.7 49.6 49.3 44.4 42.4 46.3	48.1 49.9 48.8 45.0 42.8 46.4	48.5 49.9 48.4 44.4 42.8 46.4	49.0 50.0 48.7 45.5 43.3 47.1	49.5 50.2 48.8 45.8 43.8 47.4	50.6 50.4 48.8 46.1 44.3 47.4
	28 29	43.0 45.2	42.5 44.6	42°1 44°3	42.0 44.4	42.0 44.6	42.2 45.0	43.6 45.3	44.5 45.2	45°2 44°6	45°5 44°6	46'0 44'4	46.5 44.0
Hourly	Means	42.95	42.52	42.49	43.07	43.08	43.42	43.57	43.88	44.10	44.64	45.07	45.37

<sup>&</sup>lt;sup>a</sup> Three minutes late.

b Omitted in the Means, on account of disturbance.

Sc. Div. Sc. 184 9 184 176 9 176 172 8 172 8 172 180 9 180 9 192 190 3 190 194 3 196 4 196 4 189 1 175 9 175 172 7 175 9 172 7 173 4 174 174 175 9 175 9 175 182 9 185 186 188 186 189 1 188 2 190 189 189 1 183 184 185 185 185 185 185 185 185 185 185 185	13b.   Se. Div.   84 · 6   78 · 0   72 · 8   75 · 5   80 · 9   95 · 7   92 · 6   90 · 6   95 · 0   96 · 4   87 · 4   182 · 0   174 · 8   176 · 7   77 · 5 · 9   172 · 0   174 · 8   185 · 8   180 · 4   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 · 2   182 · 9   179 ·	185·1 178·0 174·6 175·5 180·9 ————————————————————————————————————	sc. Div.  184 '7 178 '5 174 '6 175 '5 184 '2  198 '8 192 '2 187 '7 196 '6 197 '4 188 '7 181 '5 183 '7 178 '0 173 '5 173 '6 178 '1 141 '8 184 '1 182 '6 186 '1 180 '6 178 '9 187 '2	Sc. Div.   184.7   179.1   178.2   176.9   184.6   186.9   196.8   197.4   188.0   — 185.8   184.5   178.0   173.5   173.2   179.4   — 210.0   184.3   170.1   161.0   178.4   182.2   — 178.8   178.7	Sc, Div.   184.7   179.0   178.2   176.9   184.3   195.5   190.9   189.2   196.8   197.4   186.9   184.2   185.3   181.4   174.5   173.7   179.8   179.2   172.8   168.7   163.8   180.6   183.4   179.0   181.1	Sc. Div.   183 '4   180 '1   177 '4   176 '7	19h.    Sc. Div.     183	20h.  Sc. Div.  184.2 180.0 177.9 179.7  172.6 192.6 179.7 187.2 197.3 197.3 197.3 195.0 171.1 184.1 177.5 175.9 177.2 166.4 176.8 143.9 124.9 149.1 181.4 184.4	sc. Div.  184'4 178'9 177'9 179'8  172'3 193'0 177'3 187'2 197'3 198'0 194'6 180'6 184'3 179'4 177'2 172'8 168'3 178'8 148'7 150'0 137'2 181'6 184'5	Sc. Div.  181 '5 178 '9 178 '2 178 '8  182 '5 192 '6 176 '3 187 '5 201 '5 198 '0 192 '3 183 '0 184 '1 181 '5 177 '9 172 '8 148 '4 179 '3 152 '4 147 '5 139 '2 181 '4 184 '0	23h.	Daily and Monthly Means.  Sc. Div.  185 25 180 39 176 82 177 85 180 12 193 72 189 25 188 88 194 39 198 09 192 53 183 55 183 80 179 10 176 90 174 38 174 35 184 95 174 05 168 23 170 15 184 27 182 15
184 '9	84.6 78.0 72.8 75.5 80.9 95.7 92.6 90.6 195.0 196.4 187.4 182.0 181.8 176.7 175.9 174.8 197.6 184.1 185.8 190.9 182.8 180.9	185·1 178·0 174·6 175·5 180·9 ————————————————————————————————————	184.7 178.5 174.6 175.5 184.2  198.8 192.2 187.7 196.6 197.4 188.7  181.5 178.0 173.5 173.6 178.1	184.7 179.1 178.2 176.9 184.2 — 198.8 194.6 186.9 196.8 197.4 188.0 — 185.8 184.5 178.0 173.5 173.2 179.4 — 210.0 184.3 170.1 161.0 178.4 182.2 — 178.8	184.7 179.0 178.2 176.9 184.3	183.4 180.1 177.4 176.7 180.1 190.8 178.3 187.7 196.8 197.3 — 196.8 181.6 184.2 181.6 184.2 159.5 159.9 182.1 — 184.0 178.9	183.9 180.0 177.7 178.7	184·2 180·0 177·9 179·7 172·6 192·6 179·7 187·2 197·3 197·3 — 195·0 171·1 184·1 177·5 175·9 177·2 — 166·4 176·8 143·9 144·9 149·1 181·4	184.4 178.9 177.9 179.8 — 172.3 193.0 177.3 187.2 197.3 198.0 — 194.6 180.6 184.3 179.4 177.2 172.8 — 168.3 178.8 148.7 150.0 137.2 181.6 —	181.5 178.9 178.2 178.8  182.5 192.6 176.3 187.5 201.5 198.0  192.3 183.0 184.1 181.5 177.9 172.8  148.4 179.3 152.4 147.5 139.2 181.4	184'3 178'9 179'0 179'5	185 25 180 39 176 82 177 85 180 12 193 72 189 25 188 88 194 39 192 53 183 55 183 55 183 80 179 10 176 90 174 38 174 35 184 95 174 05 168 23 170 15 184 27 182 15 179 94
176.9	78.0 72.8 75.5 80.9 95.7 92.6 99.6 99.6 99.6 182.0 181.8 176.7 175.9 172.0 174.8 197.6 184.1 185.8 190.9 182.8 180.4 179.2	178.0 174.6 174.6 175.5 180.9 	178.5 174.6 175.5 184.2 — 198.8 192.2 187.7 196.6 197.4 188.7 — 181.5 183.7 178.0 173.5 173.6 178.1 — 141.8 184.1 182.6 186.1 180.6 178.9	179°1   178°2   176°9   184°2   —   198°8   194°6   186°9   196°8   197°4   188°0   —   185°8   184°5   178°0   173°5   173°2   179°4   —   210°0   184°3   170°1   161°0   178°4   182°2   —   178°8	179.0 178.2 176.9 184.3 — 195.5 190.9 189.2 196.8 197.4 186.9 — 184.2 185.3 181.4 174.5 173.7 179.8 — 179.2 172.8 168.7 163.8 180.6 183.4 — 179.0	180°1 177°4 176°7 — 180°1 190°8 178°3 187°7 196°8 181°6 186°2 181°6 174°8 175°3 — 190°1 193°6 184°2 159°5 159°9 182°1 — 184°0 178°9	180.0 177.7 178.7 	180.0 177.9 179.7 — 172.6 192.6 179.7 187.2 197.3 197.3 — 195.0 171.1 184.1 177.5 175.9 177.2 — 166.4 176.8 143.9 124.9 149.1 181.4	178.9 177.9 179.8 — 172.3 193.0 177.3 187.2 197.3 198.0 — 194.6 180.6 184.3 179.4 177.2 172.8 — 168.3 178.8 148.7 150.0 137.2 181.6 —	178.9 178.2 178.8 — 182.5 192.6 176.3 187.5 201.5 198.0 — 192.3 183.0 184.1 181.5 177.9 172.8 — 148.4 179.3 152.4 147.5 139.2 181.4	178.9 179.0 179.5	180°39 176°82 177°85 180°12 193°72 189°25 188°88 194°39 198°09 192°53 183°55 183°55 183°50 179°10 176°90 174°38 174°05 168°23 170°15 184°27 182°15 179°94
176.9	78.0 72.8 75.5 80.9 95.7 92.6 99.6 99.6 99.6 182.0 181.8 176.7 175.9 172.0 174.8 197.6 184.1 185.8 190.9 182.8 180.4 179.2	178.0 174.6 174.6 175.5 180.9 	178.5 174.6 175.5 184.2 — 198.8 192.2 187.7 196.6 197.4 188.7 — 181.5 183.7 178.0 173.5 173.6 178.1 — 141.8 184.1 182.6 186.1 180.6 178.9	179°1   178°2   176°9   184°2   —   198°8   194°6   186°9   196°8   197°4   188°0   —   185°8   184°5   178°0   173°5   173°2   179°4   —   210°0   184°3   170°1   161°0   178°4   182°2   —   178°8	179.0 178.2 176.9 184.3 — 195.5 190.9 189.2 196.8 197.4 186.9 — 184.2 185.3 181.4 174.5 173.7 179.8 — 179.2 172.8 168.7 163.8 180.6 183.4 — 179.0	180°1 177°4 176°7 — 180°1 190°8 178°3 187°7 196°8 181°6 186°2 181°6 174°8 175°3 — 190°1 193°6 184°2 159°5 159°9 182°1 — 184°0 178°9	180.0 177.7 178.7 	180.0 177.9 179.7 — 172.6 192.6 179.7 187.2 197.3 197.3 — 195.0 171.1 184.1 177.5 175.9 177.2 — 166.4 176.8 143.9 124.9 149.1 181.4	178.9 177.9 179.8 — 172.3 193.0 177.3 187.2 197.3 198.0 — 194.6 180.6 184.3 179.4 177.2 172.8 — 168.3 178.8 148.7 150.0 137.2 181.6 —	178.9 178.2 178.8 — 182.5 192.6 176.3 187.5 201.5 198.0 — 192.3 183.0 184.1 181.5 177.9 172.8 — 148.4 179.3 152.4 147.5 139.2 181.4	178.9 179.0 179.5	180°39 176°82 177°85 180°12 193°72 189°25 188°88 194°39 198°09 192°53 183°55 183°55 183°50 179°10 176°90 174°38 174°05 168°23 170°15 184°27 182°15 179°94
172.8	72.8 75.5 80.9 95.7 92.6 90.6 195.0 196.4 187.4 182.0 181.8 176.7 175.9 172.0 174.8 197.6 184.1 185.8 190.9 188.8 190.9 188.8 179.2	174.6   175.5   180.9	174.6 175.5 184.2 — 198.8 192.2 187.7 196.6 197.4 188.7 — 181.5 183.7 178.0 173.5 173.6 178.1 — 141.8 184.1 182.6 186.1 180.6 178.6 178.9	178.2 176.9 184.2 — 198.8 194.6 186.9 196.8 197.4 188.0 — 185.8 184.5 178.0 173.5 173.2 179.4 — 210.0 184.3 170.1 161.0 178.4 182.2 — 178.8	178·2 176·9 184·3 — 195·5 190·9 189·2 196·8 197·4 186·9 — 184·2 185·3 181·4 174·5 179·2 179·2 172·8 168·7 163·8 180·6 183·4 — 179·0	177.4 176.7 — 180.1 190.8 178.3 187.7 196.8 181.6 186.2 181.6 174.8 175.3 — 190.1 193.6 184.2 159.5 159.9 182.1 — 184.0 178.9	177.7 178.7 	177.9 179.7 ———————————————————————————————————	177.9 179.8 — 172.3 193.0 177.3 187.2 197.3 198.0 — 194.6 180.6 184.3 179.4 177.2 172.8 — 168.3 178.8 148.7 150.0 137.2 181.6	178.2 178.8 — 182.5 192.6 176.3 187.5 201.5 192.3 183.0 184.1 181.5 177.9 172.8 — 148.4 179.3 152.4 147.5 139.2 181.4	179.0   179.5	176.82 177.85 180.12 193.72 189.25 188.88 194.39 198.09 192.53 183.55 183.80 179.10 176.90 174.38 174.35 184.95 174.05 168.23 170.15 184.27 182.15
176 · 9	75.5 80.9 	175.5 180.9 196.2 195.5 192.1 196.6 196.4 187.4 180.0 183.4 177.8 176.1 172.0 176.1 172.0 176.1 172.0 176.1 179.0 184.7 189.7 199.3 184.7 189.7 199.3 181.6 181.4 179.0 182.6	175.5 184.2	176.9 184.2  — 198.8 194.6 186.9 196.8 197.4 188.0  — 185.8 184.5 178.0 173.5 173.2 179.4  — 210.0 184.3 170.1 161.0 178.4 182.2  — 178.8	176.9 184.3 — 195.5 190.9 189.2 196.8 197.4 186.9 — 184.2 185.3 181.4 174.5 173.7 179.8 — 179.2 172.8 168.7 163.8 180.6 183.4 — 179.0	176.7	178.7	179.7  172.6 192.6 179.7 187.2 197.3 197.3 195.0 171.1 184.1 177.5 175.9 177.2 166.4 176.8 143.9 124.9 149.1 181.4	179.8	178.8   182.5 192.6 176.3 187.5 201.5 198.0 192.3 183.0 184.1 181.5 177.9 172.8 148.4 179.3 152.4 147.5 139.2 181.4	179.5	177.85 180.12 193.72 189.25 188.88 194.39 198.09 192.53 183.55 183.55 183.80 179.10 176.90 174.38 174.35 184.95 174.05 168.23 170.15 184.27 182.15 179.94
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190	92.6 90.6 195.0 196.4 187.4 182.0 181.8 176.7 175.9 172.0 174.8 197.6 184.1 185.8 190.9 182.8 180.4 179.2	195.5 192.1 196.6 196.4 187.4 187.4 180.0 183.4 177.8 176.1 172.0 176.1 172.0 176.1 179.0 184.7 169.7 193.3 181.6 181.4 179.0 182.6	192°2 187°7 196°6 197°4 188°7 — 181°5 183°7 178°0 173°5 173°6 178°1 — 141°8 184°1 182°6 186°1 180°6 178°6 — 178°9	194'6 186'9 196'8 197'4 188'0 — 185'8 184'5 178'0 173'5 173'2 179'4 — 210'0 184'3 170'1 161'0 178'4 182'2 — 178'8	190°9 189°2 196°8 197°4 186°9 — 184°2 185°3 181°4 174°5 173°7 179°8 — 179°2 172°8 168°7 163°8 180°6 183°4 — 179°0	190°8 178°3 187°7 196°8 197°3 — 196°8 181°6 186°2 181°6 174°8 175°3 — 190°1 193°6 184°2 159°5 159°9 182°1 — 184°0 178°9	191°2 185°9 187°9 197°3 196°9 ———————————————————————————————————	192.6 179.7 187.2 197.3 197.3  195.0 171.1 184.1 177.5 175.9 177.2  166.4 176.8 143.9 124.9 149.1 181.4	193.0 177.3 187.2 197.3 198.0 ————————————————————————————————————	192.6 176.3 187.5 201.5 198.0 — 192.3 183.0 184.1 181.5 177.9 172.8 — 148.4 179.3 152.4 147.5 139.2 181.4	189°2   177°8   187°5   203°5   198°0   —	189.25 188.88 194.39 198.09 192.53 183.55 183.80 179.10 176.90 174.38 174.35 184.95 174.05 168.23 170.15 184.27 182.15 179.94
190	92.6 90.6 195.0 196.4 187.4 182.0 181.8 176.7 175.9 172.0 174.8 197.6 184.1 185.8 190.9 182.8 180.4 179.2	195.5 192.1 196.6 196.4 187.4 187.4 180.0 183.4 177.8 176.1 172.0 176.1 172.0 176.1 179.0 184.7 169.7 193.3 181.6 181.4 179.0 182.6	192°2 187°7 196°6 197°4 188°7 — 181°5 183°7 178°0 173°5 173°6 178°1 — 141°8 184°1 182°6 186°1 180°6 178°6 — 178°9	194'6 186'9 196'8 197'4 188'0 — 185'8 184'5 178'0 173'5 173'2 179'4 — 210'0 184'3 170'1 161'0 178'4 182'2 — 178'8	190°9 189°2 196°8 197°4 186°9 — 184°2 185°3 181°4 174°5 173°7 179°8 — 179°2 172°8 168°7 163°8 180°6 183°4 — 179°0	178·3 187·7 196·8 197·3 — 196·8 181·6 186·2 181·6 174·8 175·3 — 190·1 193·6 184·2 159·5 159·9 182·1 — 184·0 178·9	185.9 187.9 197.3 196.9 ————————————————————————————————————	179.7 187.2 197.3 197.3  195.0 171.1 184.1 177.5 175.9 177.2  166.4 176.8 143.9 124.9 149.1 181.4	177.3 187.2 197.3 198.0 ————————————————————————————————————	176°3 187°5 201°5 198°0 — 192°3 183°0 184°1 181°5 177°9 172°8 — 148°4 179°3 152°4 147°5 139°2 181°4	177.8   187.5   203.5   198.0 	189.25 188.88 194.39 198.09 192.53 183.55 183.80 179.10 176.90 174.38 174.35 184.95 174.05 168.23 170.15 184.27 182.15 179.94
190°3	90.6 195.0 196.4 187.4 	192.1 196.6 196.4 187.4 187.4 187.6 180.0 183.4 177.8 176.1 172.0 176.1 172.0 176.1 184.7 169.7 193.3 184.7 169.7 193.3 181.6 181.4 179.0 182.6	187.7 196.6 197.4 188.7 ———————————————————————————————————	186.9 196.8 197.4 188.0 — 185.8 184.5 178.0 173.5 173.2 179.4 — 210.0 184.3 170.1 161.0 178.4 182.2 — 178.8	189.2 196.8 197.4 186.9 ————————————————————————————————————	187.7 196.8 197.3 ————————————————————————————————————	187.9 197.3 196.9 ———————————————————————————————————	187·2 197·3 197·3 	187 · 2 197 · 3 198 · 0 ———————————————————————————————————	187.5 201.5 198.0 ————————————————————————————————————	187.5 203.5 198.0 — } 191.7 182.7 183.0 182.4 177.7 172.8 — } 156.6 167.5 163.0 123.0 164.6 180.6 — }	188 *88 194 * 39 198 * 09 192 * 53 183 * 55 183 * 80 179 * 10 176 * 90 174 * 38 174 * 35 184 * 95 174 * 05 168 * 23 170 * 15 184 * 27 182 * 15 179 * 94
194'3	195.0 196.4 187.4 	196.6 196.4 187.4 187.4 180.0 183.4 177.8 176.1 172.0 176.1 224.3 184.7 169.7 193.3 181.6 181.4 179.0 182.6	196.6 197.4 188.7 ———————————————————————————————————	196.8 197.4 188.0 — 185.8 184.5 178.0 173.5 173.2 179.4 — 210.0 184.3 170.1 161.0 178.4 182.2 — 178.8	196.8 197.4 186.9 ————————————————————————————————————	196.8 197.3 ————————————————————————————————————	197.3 196.9 ———————————————————————————————————	197.3 197.3 	197'3 198'0 194'6 180'6 184'3 179'4 177'2 172'8 168'3 178'8 148'7 150'0 137'2 181'6	201.5 198.0 ————————————————————————————————————	203.5   198.0 	194 · 39 198 · 09 192 · 53 183 · 55 183 · 80 179 · 10 176 · 90 174 · 38 174 · 35 184 · 95 174 · 05 168 · 23 170 · 15 184 · 27 182 · 15 179 · 94
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182.0 182.0 182.180.9 183.176.7 176.7 176.7 176.173.4 174.2 197.173.4 174.2 197.183.8 183.2 189.1 182.9 182.9 183.09 183.4 44.4 44.4 44.4 44.4 44.4 44.4 44.4	182.0 181.8 176.7 175.9 172.0 174.8 197.6 184.1 185.8 180.9 182.8 180.4	180°0 180°0 183°4 177°8 176°1 172°0 176°1 224°3 184°7 169°7 193°3 181°6 181°4 179°0 182°6	181.5 183.7 178.0 173.5 173.6 178.1 141.8 184.1 182.6 186.1 180.6 178.6	185'8 184'5 178'0 173'5 173'2 179'4 — 210'0 184'3 170'1 161'0 178'4 182'2 — 178'8	184·2 185·3 181·4 174·5 173·7 179·8 	181.6 186.2 181.6 174.8 175.3 ————————————————————————————————————	177.6 186.1 176.5 174.8 174.7 	171.1 184.1 177.5 175.9 177.2 — 166.4 176.8 143.9 124.9 149.1 181.4	180.6 184.3 179.4 177.2 172.8 — 168.3 178.8 148.7 150.0 137.2 181.6	183.0 184.1 181.5 177.9 172.8 — 148.4 179.3 152.4 147.5 139.2 181.4	182.7 183.0 182.4 177.7 172.8 	183.55 183.80 179.10 176.90 174.38 174.35 184.95 168.23 170.15 184.27 182.15
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176 · 7   176 · 7   176 · 7   175 · 9   175 · 9   175 · 175 · 175 · 175 · 175 · 175 · 175 · 185 · 3   184 · 185 · 3   185 · 3   185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185 · 185	176.7 175.9 172.0 174.8 — 197.6 184.1 185.8 190.9 182.8 180.4 — 179.2	7 177.8 176.1 172.0 176.1 	178.0 173.5 173.6 178.1 — 141.8 184.1 182.6 186.1 180.6 178.6	178.0 173.5 173.2 179.4 ————————————————————————————————————	181.4 174.5 173.7 179.8 ————————————————————————————————————	181.6 174.8 175.3 ————————————————————————————————————	176.5 174.8 174.7 	177.5 175.9 177.2 ———————————————————————————————————	179'4 177'2 172'8 ————————————————————————————————————	181.5 177.9 172.8 ————————————————————————————————————	182.4 177.7 172.8 — } 156.6 167.5 163.0 123.0 164.6 180.6 — }	179·10 176·90 174·38 174·35 184·95 174·05 168·23 170·15 184·27 182·15 179·94
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172 '7	172.0 174.8 197.6 184.1 185.8 190.9 182.8 180.4	172.0 176.1 224.3 184.7 184.7 189.7 193.3 181.6 181.4 2179.0 182.6	173.6 178.1 ————————————————————————————————————	173.2 179.4 210.0 184.3 170.1 161.0 178.4 182.2 — 178.8	173.7 179.8 — 179.2 172.8 168.7 163.8 180.6 183.4 — 179.0	175.3 190.1 193.6 184.2 159.5 159.9 182.1 — 184.0 178.9	174.7 189.8 163.8 135.2 140.9 151.9 181.4 —	177.2 166.4 176.8 143.9 124.9 149.1 181.4	172°8  168°3 178°8 148°7 150°0 137°2 181°6	172.8 	172.8 	174.38 174.35 184.95 174.05 168.23 170.15 184.27 182.15 179.94
173 '4   174   174   174   174   175   182 '9   183 '09   183   184   184   184   185   186   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   187   18	174.8 197.6 184.1 185.8 190.9 182.8 180.4	3   176·1	178·1	179.4 210.0 184.3 170.1 161.0 178.4 182.2 — 178.8	179.8 	190°1 193°6 184°2 159°5 159°9 182°1 ————————————————————————————————————	189.8 163.8 135.2 140.9 151.9 181.4	166.4 176.8 143.9 124.9 149.1 181.4	168°3 178°8 148°7 150°0 137°2 181°6	148 · 4 179 · 3 152 · 4 147 · 5 139 · 2 181 · 4	156.6 167.5 163.0 123.0 164.6 180.6 	174.35 184.95 174.05 168.23 170.15 184.27 182.15 179.94
194 2 197 185 3 184 181 8 188 188 2 190 189 1 183 178 9 182 182 9 183 183 09 183  43 7 44 47 5 47 50 3 49 48 4 48 45 0 42 41 4 41 42 6 42 43 2 33 37 6 33 40 6 46 44 6 46		3 224·3 184·7 3 169·7 9 193·3 8 181·6 4 181·4 	141.8 184.1 182.6 186.1 180.6 178.6	210.0 184.3 170.1 161.0 178.4 182.2 — 178.8	179°2 172°8 168°7 163°8 180°6 183°4	193.6 184.2 159.5 159.9 182.1 — 184.0 178.9	163.8 135.2 140.9 151.9 181.4 ————————————————————————————————————	176.8 143.9 124.9 149.1 181.4	178 · 8 148 · 7 150 · 0 137 · 2 181 · 6	179°3 152°4 147°5 139°2 181°4	167.5 163.0 123.0 164.6 180.6 	184°95 174°05 168°23 170°15 184°27 182°15
185 3 184 181 8 188 188 2 190 189 1 182 178 9 180 179 9 173 182 9 182 183 09 183 183 09 183 43 7 44 47 5 44 47 5 44 45 0 44 45 0 44 42 6 42 43 9 2 33 37 6 34 40 6 46 46 6 46	184°1 185°8 190°9 182°8 180°4 —	184.7 169.7 193.3 181.6 181.4 	184'1 182'6 186'1 180'6 178'6 ————————————————————————————————————	184°3 170°1 161°0 178°4 182°2 — 178°8	172.8 168.7 163.8 180.6 183.4 ————————————————————————————————————	193.6 184.2 159.5 159.9 182.1 — 184.0 178.9	163.8 135.2 140.9 151.9 181.4 ————————————————————————————————————	176.8 143.9 124.9 149.1 181.4	178 · 8 148 · 7 150 · 0 137 · 2 181 · 6	179°3 152°4 147°5 139°2 181°4	167.5 163.0 123.0 164.6 180.6 	184°95 174°05 168°23 170°15 184°27 182°15 179°94
185 3 184 181 8 188 188 2 190 189 1 182 178 9 180 179 9 173 182 9 182 183 09 183 183 09 183 43 7 44 47 5 44 47 5 44 45 0 44 45 0 44 42 6 42 43 9 2 33 37 6 34 40 6 46 46 6 46	184°1 185°8 190°9 182°8 180°4 —	184.7 169.7 193.3 181.6 181.4 	184'1 182'6 186'1 180'6 178'6 ————————————————————————————————————	184°3 170°1 161°0 178°4 182°2 — 178°8	172.8 168.7 163.8 180.6 183.4 ————————————————————————————————————	184.2 159.5 159.9 182.1 — 184.0 178.9	135.2 140.9 151.9 181.4 — 184.0	143.9 124.9 149.1 181.4	148.7 150.0 137.2 181.6	152.4 147.5 139.2 181.4	163.0 123.0 164.6 180.6 	174.05 168.23 170.15 184.27 182.15 179.94
181 8 188 188 188 2 190 189 1 182 9 180 182 9 182 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 09 183 183 183 183 183 183 183 183 183 183	185.8 190.9 182.8 180.4 —	3 169.7 193.3 181.6 4 181.4 ————————————————————————————————————	182.6 186.1 180.6 178.6 — 178.9	170°1 161°0 178°4 182°2 — 178°8	168.7 163.8 180.6 183.4 ————————————————————————————————————	159.5 159.9 182.1 — 184.0 178.9	140.9 151.9 181.4 — 184.0	124.9 149.1 181.4	150°0 137°2 181°6	147.5 139.2 181.4	$egin{array}{c} 123.0 \\ 164.6 \\ 180.6 \\ \hline - \\ 184.2 \end{array} \}$	168 · 23 170 · 15 184 · 27 182 · 15 179 · 94
188 · 2	190'9 182'8 180'4 — 179'2	9 193°3 181°6 181°4 	186°1 180°6 178°6 ————————————————————————————————————	161.0 178.4 182.2 — 178.8	163.8 180.6 183.4 — 179.0	159.9 182.1 ————————————————————————————————————	151.9 181.4 ————————————————————————————————————	149°1 181°4	137°2 181°6	139 <b>·</b> 2 181 <b>·</b> 4	164.6 180.6 — 184.2	170°15 184°27 182°15 179°94
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178 '9	180°4 — 179°2	181.4 179.0 182.6	178.6  178.9	182.2  178.8	183.4 - 179.0	184.0 178.9	184.0					182 <b>·</b> 15
179 9 179 182 9 183 183 183 183 183 183 183 183 183 183	 179°2	179°0 182°6	178.9	178.8	179.0	178.9		 184·4	 184.5	 184°0	$\begin{bmatrix} -184.2 \\ 178.0 \end{bmatrix}$	179.94
182 9 182 183 09 183 183 09 183 43 7 44 47 5 42 50 3 43 48 4 43 45 0 44 42 6 42 43 2 43 39 2 33 37 6 34 40 6 40 44 6 46 46 6 46		182.6				178.9		184.4	184.5	184.0	184.2 } 178.0	179.94
182 9 182 183 09 183 183 09 183 43 7 44 47 5 42 50 3 43 48 4 43 45 0 44 42 6 42 43 2 43 39 2 33 37 6 34 40 6 40 44 6 46 46 6 46		182.6					177.8				178.0	
183 ° 09 183 ° 7 44 ° 47 ° 5 42 ° 6 42 ° 43 ° 2 33 ° 7 ° 6 34 ° 44 ° 6 46 ° 6 46 ° 6	182.9		187.2	178.7	181.1	185.1	11110	177.6	176.9	174.9	,	100.00
43 '7 44' 45' 0 44' 44' 44' 44' 44' 44' 44' 44' 44'		25 183.10			1	1	185.8	186.7	186.7	186.7	186.0	182.71
43.7 47.5 50.3 48.4 45.0 41.4 42.6 43.2 43.2 43.2 43.2 43.2 40.6 40.6 44.6 46.6 46.6	183*25	-	183.23	182.14	182.40	181.93	180.72	178.25	179.14	178.67	179.76	182.47
43.7 47.5 50.3 48.4 45.0 41.4 42.6 43.2 43.2 43.2 43.2 43.2 40.6 40.6 44.6 46.6 46.6				TEMPE	RATURE OF	THE VERT	CICAL FORC	E MAGNET			l Ji	g and the second second second
47.5 42.50.3 44.45.0 44.45.0 44.45.2 45.2 39.2 37.6 40.6 40.6 46.6 46.6	44.0	12.4	44:0	0	4440	44.0	0	40.0	0	40.0	40.4	40.01
50°3 44°4 44°6 46°6 46°6			44.0	44.0	44.0	44.0	43.4	43.2	43.1	42.8	42.4	43.21
48'4 44'6 46'6 46'6	47.3		47.0	46.6	46.4	46.3	46.3	46.2	46.2	46.3	46:2	45.33
45'0 44'6 46'6 46'6	49.8		48'9	47.7	47.6	46.6	46.2	46.0	45.7	45.4	45.9	47.65
41'4 41'4 42'6 42'6 42'39'2 33'7'6 33'40'6 46'6 46'6 46'6	48.3		48.1	47.2	47.0	46.8	46.6	46.4	46'4	46'3	46.4	46.88
41.4 4.4.4.2.6 42.6 42.2 42.39.2 33.7.6 33.40.6 44.6 44.6 44.6.6 44.6.6	44.0	43.6	43.0	42.5	42.3			00.0		-	$\{ \frac{-}{38.9} \}$	$43^{\circ}65$
42.6 42 43.2 44 39.2 39 37.6 33 40.6 40 	41		4110		4140	38.8	39.0	39.0	39.1	39.3		
43 · 2	41.4		41.6	41.4	41.0	40.6	40.2	40.0	39.8	39.7	40.0	39.87
39·2 37·6 40·6 44·6 46·6 46·6	42.6		42.8	42.9	42.8	42.6	42.6	42.5	42.3	42'1	41.9	41.32
37.6 33 40.6 46 44.6 46 46.6 46	43'3		43.3	43 1	43.2	42.7	42.4	42 4	42.4	42.5	41.8	42.54
40.6 46 44.6 46 46.6 46	39.0		37.9	37.7	36.8	36.4	36.0	35.1	34.1	34.0	33.7	38.32
44.6 46.6 46.6	37.3		37.0	37.0	36.4	36.2	36.6	36.4	36.2	36.2	36.1	35.75
44.6 46 46.6 46	40'9	41.3	41.2	41'2	41.2	_			_		38.7}	38.32
46.6			<u>-</u> -	-	<del>-</del>	36.9	36.9	37.1	37.2	37.7		
	45.0		45*4	45.0	44.9	44.9	45.2	44.6	44'4	44.5	44.2	43.20
47*77	46.0		45°4	45.0	44.4	43.8	43.4	43.7	43.7	43.6	43.2	44.00
	47.7	47.2	45.8	45.9	45.6	45.2	44.8	44.7	44.4	44.0	44.2	45.72
49.6 49	49.8	3 49.4	49.0	49.0	48.7	48.2	47.5	47.0	47.0	46.7	46.1	47 20
49.6   49	49'4		49.3	49.3	49.3	49.3	48.3	47.6	47.4	47.0	46.6	48.12
	49.3		49.1	48.6	48.5							
-	_	1		U	10 U	44.7	44.6	44.2	44.6	44.2	44.6}	46.98
51.8   53		53.8	54.2	54.4	55.0	54.8	54.8	54.3	53.4	51.0	50.5	50.51
49.8	53.0		49.0	48.7	48.5	48.4	49.0	51.5	51.9	49.2	49.3	49.67
3	53.0 49.6	107	47.9	49.6	49.6	49'4	48.6	48.6	47.5	47.3	46.5	48.69
4 **	49.6			44.5	44.7		44.4	44.4	45.0	46.6	46.4	45.13
	49.6 48.2	48.0	44.0			44.5		45.4	ı		46.4	
45.0	49.6 48.2 45.4	48°0 45°0	44.8	48.0	46.7	46.6	46.6	1	45.4	45.5	1	44.54
- 7	49.6 48.2 45.4 46.4	48 0 45 0 47 6	48.2	1 12.5	45.5	43.3	43.2	42.8	42.6	43.0	$\{\frac{1}{43\cdot 4}\}$	45.48
40	49.6 48.2 45.4	48 0 45 0 47 6		45.7								
4045	49.6 48.2 45.4 46.4 47.0	48.0 45.0 47.6 46.8	48°2 46°4 —		40.0		10.0	45.4	45.0	44.9	45.0 42.5	44.81 43.79
45.34 45	49.6 48.2 45.4 46.4	48.0 45.0 47.6 46.8 46.4	48.2	ſI	46°3 43°2	46°2 43°2	46°2 42°6	$\begin{array}{c} 45.4 \\ 42.6 \end{array}$	42.6	42.4		

	On	e Scale Div	ision = '00	0066 parts o	of the V.F.	Increase, i	n Scale Div	isions, corre	sponding to	1º decrease	of Tempera	ure, 1.64.	
Iean G gen Ti	öttin-}	Oh.	1h.	$2^{\mathrm{h}}.$	3 <sup>h</sup> .	4 <sup>h</sup> •	5 <sup>h</sup> .	6h.	7h.	8h.	9h.	10h.	1,1h.
. (	1 2 3 4	Sc. Div. 184'9 186'3 188'7 186'4	Sc. Div. 186 ° 0 187 ° 2 188 ° 7 188 ° 0	Sc. Div. 184 5 188 5 190 1 188 0	sc. Div. 182 ° 0 188 ° 9 189 ° 8 183 ° 8	Sc. Div. 182 ° 0 188 ° 9 188 ° 0 179 ° 5	Sc. Div. 179'1 187'8 186'0 178'9	sc. Div.   179 0   187 3   185 7   178 9	sc. Div. 179 2 187 0 183 8 179 4	Sc. Div. 179 4 186 8 182 8 179 7	sc. Div. 179'3 186'2 181'6 181'4	Sc. Div. 180'4 186'2 180'8 183'2	Sc. Div 182 4 186 1 180 8 184 6
	5 6 7 8 9 10	192 · 2 184 · 6 174 · 8 178 · 7 186 · 8 181 · 0	193.5 185.2 172.4 180.4 187.0 182.2	192.4 183.3 171.2 179.5 186.4 180.4	189'9 181'8 171'2 178'8 183'8 176'3	187.2 180.5 169.5 177.8 180.3 172.9	186.5 180.1 169.3 176.0 177.6 166.4	184.5 179.8 169.9 177.4 177.6 172.7	184.5 178.3 170.6 177.7 178.3 173.2	186.3 177.0 170.2 177.0 178.3 174.2	186.7 175.7 170.2 176.4 176.2 174.2	185.6 175.0 174.5 176.3 175.0 174.2	185.6 175.8 170.3 175.9 175.8
MARCH.	12 13 14 15 16 17 18	178.6 184.3 189.4 194.3 157.6 188.8	181'3 184'3 186'0 195'8 163'7 187'9	182 1 184 3 187 3 195 0 175 4 189 3	177.8 177.8 188.5 193.4 180.8 185.2	177.6 181.5 187.3 193.4 188.3 183.8	176.4 181.8 192.0 192.1 197.7 182.6	177.0 182.8 196.1 190.8 205.1 182.6	179'3 183'8 199'8 191'8 204'8 182'7	179.8 185.7 203.3 190.9 216.0 185.4	180°3 185°5 203°3 189°3 203°0 186°6	180°1 185°3 205°1 188°5 197°9 184°6	181.0 185.3 202.5 188.6 197.9 186.7
	19 20 21 22 23 24 25	136°8 170°8 176°3 165°0 166°3	146.4 176.2 176.1 170.3 169.0 173.1	167.0 173.9 174.9 171.1 168.3 170.4	172.7 169.5 173.3 172.0 166.8 170.3	180.6 169.4 172.6 173.0 166.5 172.8	186.5 169.1 172.6 171.0 168.1 170.2	188.8 169.1 173.5 169.5 169.2 171.6	209 9 169 4 174 8 170 6 171 8 174 4	225.5 169.4 174.8 171.4 171.6 177.4	224.9 168.4 174.2 168.5 168.6 180.7	209.5 168.4 175.2 168.9 168.1 179.0	207 17 168 4 175 6 169 0 168 3 179 0
,	26 27 28 29 30 31	173.0 176.4 168.4 163.8 155.9	173.4 176.8 168.4 165.1 162.9	176°3 176°7 167°7 164°2 160°9	176.8 174.9 164.5 162.2 163.9	176°9 173°1 163°1 161°3 164°2	176.9 172.0 163.4 161.3 161.1	175°3 173°3 165°3 161°3 163°7	175.5 173.4 164.3 162.1 161.8	175°5 171°2 163°9 163°2 160°7	175 ° 0 170 ° 6 162 ° 5 163 ° 9 164 ° 2	174.3 170.5 160.8 163.7 164.2	175°8 168°1 159°8 163°9
[ourl	y Means	176.15	178.05	178.86	177.66	177:48	177.13	178.07	179°34	180.64	179 90	179.09	179
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \end{pmatrix}$	42°4 42°2 39°7 40°6	41°6 40°7 39°7 40°3	42°4 40°0 39°6 40°4	42.7 40.0 39.0 41.4	43°0 40°0 39°4 43°7	43.7 40.0 40.6 44.4	44.3 40.3 41.3 44.4	44°1 41°1 41°9 44°6	45°0 41°3 42°7 44°2	44°9 41°9 43°4 43°8	45°3 41°7 44°0 43°2	45°8 41°4 44°0 42°4
	5 6 7 8 9 10	38·7 43·6 48·5 47·1 42·4 44·4	38.5 43.6 48.3 46.5 42.1 44.0	38.7 43.8 48.6 46.4 41.7 45.0	38·2 44·5 48·4 46·0 42·2 46·0	39·2 44·4 48·9 46·3 43·2 46·8	39.9 44.5 49.8 46.6 44.3 47.4	41.0 45.4 50.2 46.7 45.0 47.6	41.0 45.9 51.2 47.0 45.0 47.6	41.8 47.1 51.4 47.3 45.4 48.0	42.8 48.1 52.0 48.2 45.8 48.3	44.1 48.2 52.2 48.5 47.0 48.8	44.2 48.2 52.1 48.6 47.8 48.4
MARCH.	12 13 14 15 16 17 18 19	45.4 40.8 35.3 35.1 40.5 41.0	44.4 40.5 35.1 35.3 40.5 41.2	44.4 40.8 35.3 35.9 40.8 41.2	44.8 42.6 36.0 36.4 40.6 42.6	44.4 41.2 36.1 37.0 40.6 43.9	44.5 41.0 36.3 37.8 41.2 44.9	44.4 41.3 36.4 38.3 41.6 45.4	43.9 41.4 36.4 39.1 41.8 45.6	43.7 41.3 37.2 39.2 42.4 45.9	44.1 41.2 37.2 39.8 42.5 46.4	44·3 41·2 38·0 39·8 42·6 46·4	44: 41: 38: 40: 43: 46:
	20 21 22 23 24 25 26	45.7 49.0 49.0 54.4 48.4 51.2	46.3 48.8 48.7 53.4 48.6 50.8	44.7 49.4 48.9 52.2 49.4 51.1	44·4 50·6 49·2 51·5 50·2 51·3	44·3 51·3 49·3 51·8 50·3 51·1	44.5 52.1 50.2 52.2 50.6 51.2	45.4 52.5 50.2 52.8 50.9 51.0	45·4 53·2 50·4 52·8 51·2 51·4	45.5 53.4 50.6 52.4 51.6 51.6	46.3 54.2 50.6 52.2 52.4 52.1	46.3 55.0 50.8 53.0 53.0 52.5	46° 55° 51° 53° 53° 52°
	26 27 28 29 30 31	47.3 47.5 52.2 52.5 53.0	47.1 47.6 52.4 53.0 52.3	47.2 48.0 53.2 53.0 52.3	47 · 1 48 · 5 54 · 0 54 · 2 52 · 2	47 3 49 2 54 8 54 4 52 9	48.2 50.3 55.0 54.4 54.0	49.2 51.1 55.0 54.3 54.7	50.2 51.5 55.2 54.4 55.2	50°4 51°8 55°6 54°4 55°4	51.2 52.3 56.4 54.6 56.2	51.4 52.6 57.3 54.9 57.2	51° 53° 58° 55° 57°
	y Means	45.11	44.86	44.98	45.36	45.73	46.28	46.69	46.98	47.28	47.74	48.12	48

12h.   Sc. Div.	13 <sup>h</sup> .	14 <sup>b</sup> .	g1.			127						
83.4 86.1 81.6			15h.	16h.	17h.	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
186°1	Sc. Div. 184'3	Sc. Div. 182.8	Sc. Div. 182.7	Sc. Div. 181 6	Sc. Div. 183.0	Sc. Div. 182.8	Sc. Div.	Sc. Div. 182.5	Sc. Div. 182.7	Sc. Div.	Sc. Div.	Sc. Div. 182 00
181.6	186.3	186.3	187.7	186.9	187.2	189.1	188.7	188.7	190.3	188.5	188.2	187.54
	184'1	184.7	184.8	185.2	185.2	186.2	186.4	186.6	186.7	186.6	185.4	185.44
.03 0	186.5	186.9	187.2	187.2	187.2	100 0	100 4	. 100 0	100	100 0	1	
		_			10, 2	197.5	197.0	194.5	191.8	192.8	$ \frac{-}{192\cdot 4}\}$	186.55
85.8	185.7	185.6	185.6	188.0	187.1	182.9	185.0	185.0	186.0	183.6	181.0	186.21
75.7	175.4	175°3	176.9	175.9	175.7	175.7	173.9	175.6	175.7	175.9	174.0	177.62
70.9	173.6	177.5	178.1	177.0	174.5	174.5	172.3	173.6	175.8	178.3	178.7	173.29
76.9	177.4	179.0	178'3	179.3	179.3	180.7	180.8	180.8	180.8	182.4	182.6	178.76
75.8	177.4	179.0	177'9	177.9	177.9	179.1	180.4	180.4	180.4	181.0	181.0	179.64
74.7	174.5	174.5	175.6	175.6	176.3		_	<u> </u>	_		7	175.66
	_	<u> </u>		<b></b>	! —	176.4	176.4	177.5	176.7	176.7	178.7	
81.0	181.9	181'9	182.4	182.4	183.2	183.0	182.5	183.4	184'1	184.3	184'3	181.08
88.2	189.5	190.6	194.2	195.9	199.7	189.5	182.4	188.0	181.5	195.1	197.6	187.27
98'9	197.4	195.0	195.5	196.6	197.8	191.1	196.4	196.6	196.2	196.2	192.4	195.45
88.6	190.4	189.8	189.8	189.8	174.6	169.5	172.7	169.3	175.8	159.2	160.2	184.75
97.9	191.2	191.7	190.0	188.4	187.8	187.8	189.5	189.2	189.2	189.0	188.2	190.36
86.1	193.2	185.4	182.3	179.4	178.2						$\left\{\begin{array}{c} - \\ 138 \cdot 1 \\ 177 \cdot 2 \end{array}\right\}$	177.78
_			00512			187.2	141'8	153.4	150.7	163.6	138.1	
02.9	206.4	208.6	205.5	164.7	177.2	176.2	168.3	159.8	166.4	177'1		185.2
70.2	169.0	167.8	169.2	169 2	169.2	169.7	169.8	170.3	170.3	171.0	173.8	170.00
74.7	173.8	173.3	173.1	173.2	171.7	166.9	166.2	164.7	165.0	164.9	164.4	171.90
69'1	169.1	170.0	170.0	171.9	172.5	171.9	169 9	157.7	156.6	162.8	164.9	168.6
68.5	169 <b>.</b> 6	172.1	176.7	176.7	169.0	168.2	172.4	174.4	175.3	168.8	157.0	169.62
75.8	119 9	172.4	169.8	169.7	169'4	170.7	160.5	160:6	160.9	166.0	166.1	171.72
74'1	175°3	173.5	173.5	174.3	168.3	172°7 173°9	169.7	169.6		169 1	175.4	174.14
68.7	168.7	168.7	168.2	168.5	168.6		174.1	174'1	169.0 169.5	169 1	175 4	174.14 $171.16$
59.8	159.8	159.7	160.7	167.3	161.8	168.6 161.8	171.0 161.0	171.0 159.4	169 5	169 5	161.9	162.79
68.9	174.0	170.1	164.7	162.9	159.2	155.7	153.9	159.4	157.4	148.8	148.8	161.57
65.0	160.4	166.1	164.3	154.4	155.1	160.3	163.5	161.9	148.2	1591	159.5	161.05
79*03	179.59	179.57	179.46	177.77	176.94	177.01	175:11	175.01	174.21	175.03	174.14	177.68
45°0	44.4	44.3	44.4	44.4	ATURE OF	THE VERT	1CAL FORC	E MAGNET.	43.4	•	43.5	43.87
41.6				44 4						40.0	39.7	43 87
43.8	42.0 43.0	42.0 43.0	41.7	41.7	40°8 41°4	40.0	40°0 40°6	40°0 40°7	40°0 40°9		40.9	41.49
41.6			42.3			41.0	40 0	40 /	40 9	41.1		
	40.8	40.5	40.3	40.1	40.0	34.7	35.1	35.5	36.3	37.0	38.3	40.57
44.2	44.0	44.0	43.4	43.4	43.4	43.3	43.5	43.4	43.2	44.0	44.2	42.17
48.6	49.0	48.7	48.7	48.8	48.8	49.0	49.0	49.0	48.8	48.8	48.7	$\frac{12}{47} \cdot 22$
52.0	51.7	51.3	51.5	50.6	50.4	20.0	49.9	49.3	48.3	47.5	47.4	50.08
48.4	47.8	46.8	46.3	46.3	45.6	45.3	45.0	44.6	44.2	44.1	43.0	46.3
47.4	46.2	46.0	45.8	45.4	45.0	44.8	44.4	44.4	44.4	44.4	44.4	44.7
48.2	48.4	48.2	47.4	47.3	47.1	<u> </u>				_		46.79
		_	<u> </u>			45.9	45.7	45.5	45.6	45.7	$\{45.6\}$	
44°4	44.0	43.4	43.3	43.3	42.5	42.3	42.4	42.0	41.7	41.3	41.3	43.53
10.3	40.0	39.4	38.0	37.5	37.6	39.2	40.0	39.3	37.1	36.2	35.8	39.78
38.2	37.8	37.5	37.1	36.1	35.3	35.2	34.9	35.0	35.0	35.0	34.9	36.2
10.0	39.2	39.3	39.6	39.3	39.1	39.1	39.4	39.2	40.0	40.8	40.6	38.78
43.2	43.5	43.4	43.0	42.9	42.9	42.5	42.0	41.4	41.6	41.7	41'4	42.0
47.0	47.1	47.3	48.0	48.0	47.8			<del>-</del>			$\left\{ \frac{-}{45\cdot 7} \right\}$	45.50
17:0						44.8	45.0	46.6	47.4	47.6	45.75	
17:3	48.0	48.4	48.4	48'2	48.4	48.9	48.8	48.6	48.5	48.6	48.8	46.9
55.2	54.5	54.0	53.3	53.0	52.4	52.0	51.3	50.7	50.2	50.2	49.2	52.1
51.1	52.0	51.6	52.2	52.2	51.9	52.0	53.0	54.2	54.2	54.2	54.4	51.34
53.0 53.2	52.8	52.9	52.2	51.6	51.3	51.1	51.0	50.7	50.0	50.0	49.4	52.00
3.0	53.0	52.8	52.7	54.0	55.0	54.8	53.9	52.8	51.6	51.3	51.3	51.92
	53.4	53.4	53.2	53.2	53°5	40:0	40:0	10.2	40.0	40.1	47.8}	51.2
51.2	50.8	<u> </u>	<u></u>	40:0	<u> </u>	49.3	48.8	48.5	48.3	48.1	4/8)	
3.2	53.0	50°4 52°5	50.2 $52.6$	49.9	49.6	49.4	48.6	48'4	48'4	48.2	48.0 52.2	49°21 51°30
58.4	58.2			52·4	52.4	52.4	51.9	51.8 55.4	51.8	51.6	54.1	55.25
54.8	54.4	58°0 54°5	56°8 54°4	56.2 54.4	55.8	55°7	55.7	53.3	55°0 53°1	54.1 $53.2$	53.1	54°0
8.0	58.1	54 5 58 1	54 4 57.6	54 4 59 4	54.2 59.6	54.0 57.0	53°7 56°1	55°1	54.3	54°3	54.1	55°60
18.24	48.06	47.84	47.57	47.46	47.26	46.58	46.41	46.26	46.06	46.12	45.84	46.4

Vol. III.

. (	lime.		1h.	$2^{\mathrm{h}}$ .	3h.	4 <sup>h</sup> .	5h.	6 <sup>b</sup> •	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	10h.	11h.
	, I	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	164°8 —	164.8	169.4	169.7	169.8	167.6	— —	170.8	170'9	171.0	171.7	171.9
	$\begin{array}{c c} 3 \\ 4 \end{array}$	151.6 169.5	163.7 168.0	168.4 167.5	171 <b>.</b> 9	175.6 165.6	177°3 165°0	168.3 180.6	186'8 167'9	183.6 168.9	181°3 170°4	187°1 171°1	178°5
	5	172.2	171.8	169'3	168.0	166.6	166.5	166.5	166 5	167.7	171.4	171.7	173.5
i	6ª 7	171.7 149.4	174.5 151.9	168.5 150.8	166°1 149°7	165°8	164.6 170.4	164.6 174.8	164.7 180.4	168 <b>·</b> 9	168.0 182.8	165.5 186.6	163°1
	8	172.2	171.2	172.0	170.0	168.3	168.3	166.2	166.1	165'9	165.1	162.6	161.6
İ	9 10	166.2	164.9	164.9	161.8	158.8	157:1	155 <b>·</b> 7	155.7	155.7	154.9	154.1	152.7
	$\begin{array}{c} 11 \\ 12 \end{array}$	155.7 164.0	155°9 162°7	157°2 161°3	157°2 160°6	157°2 157°4	155°9	155°9 158°0	157'5 159'4	$158.5 \\ 159.4$	159.4 159.0	159'4 157'6	158°7
	13	163.0	163.3	163.0	164.8	164.0	163.9	163.6	163.0	163.6	163.6	164.4	164.4
ij	14 15	173.4 169.6	171.7 166.9	172.0 166.0	170°0 163°0	168 9 161 9	167.4 161.8	167.4 162.4	166.6 162.2	167°2 166°8	167.0 169.4	166°2 170°2	164°9
APRIL.	16 17	169.3		 165`7	163.4	159.8	161.2	 161 <b>·</b> 5	162.8	 165.7		— 177 1	182.6
'	18	174.5	174.2	174.2	174.2	172.0	167.9	167.9	171.7	175.7	177.3	176.4	178.9
	19 20	181 4 175 4	181 <b>·</b> 3	177°5 171°3	175.7 169.9	175°5 170°1	174°8 169°0	174.0 169.5	171.7 169.9	172.9 169.5	172°3 169°6	172°1 169°6	172°6
	21 b 22	171.3	169.4	164.6	 164 6	165.5	165.2	165.0	162.9	165.4	 165 <b>`</b> 4	 165 <b>°</b> 4	164.5
	$\begin{array}{c} 23 \\ 24 \end{array}$	171 <b>·</b> 8	171.8	171.9	171.8	171.9	168.3	166.1	169°7	169.7	169.3	171.6	170.6
- 1	25 26	174°9 170°4	174.4	170.5	170.5	170.5	169 4	169'4	167.5	167.5	167.5	167.5	167 %
	27	170 4	168 <b>'</b> 9	166°5	$166^{\circ}2$ $165^{\circ}4$	165.6 164.3	166.5 163.0	167°7 163°0	166.7 163.0	167°0 163°0	166°8 162°7	166.8 162.2	166 6 161 6
	28	165.5	165.5	166.6	165.7	164.9	163.7	163.7	166.3	164.9	164.9	165'6	165'2
(	29 \30	159°8 —	159.0	159·7 —	165°5	157°7 —	160.0	— 160.0	166.8	165 <b>·</b> 2	171·2 —	173.1	174°8
ourly	Means	167.71	167.48	166.87	166:37	166.00	165.59	165.90	167.04	167.97	168.50	169.13	168.5
	11				TEMPERAT	URE OF TH	HE VERTICA	L FORCE M	AGNET.			-	
. 1	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	52.7	52.7	52°6	5 <b>1°</b> 5	5°1 3	5Î 6	51°5	<b>51°2</b>	50°8	50°8	50°8	50°4
İ	3	45.2	46.0	46.9	47.4	48.5	49.4	50.5	50.8	51.0	51.2	51.6	52.0
	4 5	$53^{\circ}2$ $51^{\circ}2$	53°1 51°8	53°0 52°2	53°2 52°3	53.3 $52.4$	53°4 52°6	53°4 53°2	53°5 53°4	53°4 54°0	53.6 54.2	53.7 54.2	53.6
	6 a	50.8	51.2	52.0	54.2	53.1	53.8	54.2	54'2	54.7	55.2	56.0	54°4 56°2
	7 8	54.0 51.2	54.2 51.5	55.0 52.3	55°3 53°6	$\begin{array}{c} 55.7 \\ 54.2 \end{array}$	56°0 54°7	56°1	$56^{\circ}2$ $55^{\circ}4$	56°2 56°0	56°3	56°8 57°4	56°8 57°9
	9	. —			_			<u> </u>		-		_	
- }	10 11	55.0 59.8	55°5	56.2 59.2	57.4 59.2	58°6 58°7	59°0 59°0	59°2 59°2	59°5	60.0 59.0	60°6 59°0	61 <b>.</b> 2 59 <b>.</b> 0	60°6
	12	$\begin{array}{c} 55.2 \\ 55.3 \end{array}$	56.2	56.2	56.4	57.1	57.4	57.5	57.8	58'1	58.5	59.2	59 2
,	13 14	50 2	55°3 50°4	55°1 50°5	54.5 51.0	$54\cdot2 \\ 51\cdot2$	54.2 51.4	54.2 52.0	54.2 52.3	54°2 52°8	54°2 53°2	54·2 53·8	54°2 54°2
APRIL.	15 16	51'4	53.0	54.0	<b>54.</b> 3	54.8	55.4	55.4	55.6	56.5	56.2	57.2	57
AF	17	53°2 50°8	53.8 50.3	54.4	54.5	54.5	54.5	54.4	54.7	55.2	55.4	55.2	55.8
	18 19	44.4	45.0	50°3 45°8	50°1 46°8	50°0 47°2	50°1 48°0	50°1 48°4	49.8 48.8	49°2 49°1	49°2 49°6	49°1 50°2	48°8 50°8
	20 21 b	48.5	48.6	49.8	50.2	50.4	50.7	51.0	51.4	51.8	52.3	53.0	53
	22 23	54°0	53.4	53.2	53.2	53.2	53.4	53.9	54.7	55.1	55.2	56.2	56
	24	47.7	47.5	48.0	48.0	48.0	49.0	49.4	49.6	50.3	50.4	50.4	50.
	25 26	46.8 $50.2$	47.4 51.0	48'4 52'1	49°2 52°2	49.5 52.3	49.8 52.5	50°1 52°2	50.2 $52.1$	50°8 52°2	51.4 52.4	51.6 52.6	51'0 53'0
	27	49.4	50.0	50.4	51.9	52.2	52.6	53.2	53.3	53.7	54.4	55.0	55 .
	28 29	52°3 53°3	52°1 53°1	51.2 53.3	51.4 53.3	51.4 53.6	51.9 54.2	52.0 54.4	52°2 55°2	52°2 55°2	52.8 55.4	53°2 56°2	53°4
(	30		_	_	_	_					-		-

a Omitted in the Means, on account of disturbance.

1879   1873   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   173   17	12 <sup>h</sup> •	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17h.	18h.	19 <sup>h</sup> .	20h.	21 <sup>h</sup> .	22h.	23h.	Daily an Monthly Means.
804 1770 1779 1747 1680 1670 1670 1673 1611 1619 1570 1625 5 172 8371 17112 17712 17712 1708 16699 1670 16096 15577 1603 1682 2 1693 1695 5 172 8371 1712 17112 1708 16899 1671 1671 16714 16574 16578 1596 16714 1695 172 8371 17112 17112 1708 16899 16714 16714 16714 16578 1596 16714 1695 172 8371 17112 17112 1709 1830 17319 12415 1109 1410 16100 16006 16817 1696 8366 1654 17719 1830 17319 12415 1109 18018 1693 1695 1697 1695 1698 1699 1655 1686 8367 16006 16006 1600 1603 1603 1608 1608 1609 9611 19310 70.77 1265 11616 16817 1696 8367 16006 16006 1600 1603 1603 1608 1609 1609 1609 1605 1608 1609 1600 1600 1603 1608 1609 1609 1600 1600 1600 1600 1600 1600		Sc. Div.					Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
171   171   171   171   171   171   170   181   167   167   167   167   167   167   167   167   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168   168	12 3	_	_				167.0	167.3	161.1	161.9	157.0	162.5	108.01
171   171   2	80.4	177.0	177'9	174.7	168.6	167.0							172:34
1897   1898   1898   1898   1898   1899   1899   1897   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899   1899	73.1		171.2	170.8	169.9	167.4			165.8		167.4		168.4
63°6   66°4   171°9   185°0   178°9   124°5   119°0   96°1   193°0   70°7   126°5   116°6   166°6   66°6   166°6   166°6   166°5   166°8   160°8   160°8   160°9   169°8   160°9   166°6   168°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   160°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150°6   150	69.9		168.4			91.8	124.5				160.6	168.7	160.97
160   160   160   160   163   163   163   163   163   163   163   165   163   165   163   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165   165													154.59
28'6   152'6   152'6   151'8   152'7   152'7   147'0   151'2   154'5   155'3   155'3   155'3   155'6   155'8   155'6   155'8   155'7   158'6   158'7   158'6   158'4   158'4   158'4   158'9   159'1   159'4   160'0   162'1   158   157'1   156'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   155'6   1	69.7						160.8	169.9	169.8	169.8	160.9		168.08
2827 1887 1887 6 1884 1884 1884 1884 1881 1889 1897 1897 1890 1890 1890 1890 1890 1890 1890 1890	60.6	160.6	160.6	163.5	163.2	163.8	100.1	10017	1	1.50.0	104:4	104:7	164.97
28-7 158-7 158-6 158-4 158-4 158-4 158-4 158-9 159-1 159-4 160-0 162-1 158-1 158-8 158-8 158-8 160-0 160-0 162-1 158-1 158-8 158-8 158-8 160-0 160-0 162-1 158-1 158-8 158-8 158-8 160-0 160-0 160-0 158-1 158-1 158-8 158-8 158-8 160-0 160-0 160-0 158-1 158-1 158-8 158-8 158-8 160-0 160-0 160-0 158-1 158-1 158-8 158-8 158-8 160-0 160-0 160-0 158-1 158-1 158-1 158-8 158-8 158-8 160-0 160-0 160-0 158-1 158-1 158-1 158-1 158-8 158-8 158-9 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 160-0 1		170.6	152.6	151.8	159.7	159.7						155.6	155.69
157   156   156   157   157   157   157   158   158   158   158   160   160   160   160   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164   164	52.6											100 0	158 2
164' 2	158 7												158.8
16576													165.84
1875   1757 3													167.50
188'   5   186'   173'   188'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166'   166								_	_	_		.	
188:5   186'8   173'7   168'0   166'0   164'2   145'4   160'7   167'0   168'9   169'4   171'9   168'177'5   176'9   179'4   173'4   177'1   176'7   176'0   176'0   176'0   178'7   180'2   182'1   175'171'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   176'5   168'6   168'6   168'6   168'6   173'0   173'0   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''   173''		_		_			163.0	161.0	163.3	165.3	165.3	167.2}	
132   174   5   170   4   169   2   168   8   169   6   169   8   169   7   171   3   171   9   171   3   172   5   173   168   168   0   168   1   168   0   168   1   168   0   168   1   168   0   168   1   168   0   168   0   168   0   168   0   168   0   168   0   168   0   168   0   168   0   168   0   168   0   168   0   168   0   168   0   168   0   168   0   168   0   168   0   168   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169   0   169	188.2	186.8										171.9	168.3
168'72   170'7   170'7   168'0   168'1   168'1   168'0   168'1   168'0   168'1   168'0   168'0   168'0   169'6   169'6   169'9   169'7   167'5   167'5   168'5   168'6   168'0   168'0   168'0   169'6   169'6   169'9   167'5   167'5   168'6   168'6   168'0   168'0   168'0   168'0   169'6   169'6   169'9   167'5   167'5   168'6   168'6   168'2   169'4   170'2   170'2   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   170'4   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168'5   168	177.5								176.0			182.1	175 6
162'7   163'0   163'1   163'0   162'7							169.8	169.7	171.3	171.9	171 3	172.5	173.09
162:7 163:0 163:1 163:0 162:9 162:7	169.2	170.7	170.7	168.0	168.0	168.1	— 166°3	120.4	112.2	125.1	149.2	$\frac{-}{152 \cdot 2}$	161.9
189'9   170'0   169'8   172'3   168'6   173'0   173'0   173'0   173'7   173'7   173'3   173'2   171'1   167'5   167'5   168'6   168'6   168'6   169'2   169'4   170'2   170'2   170'4   170'4   170'4   169'6   166'5   167'4   167'4   166'5   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'1   167'	162.7	163'0	163.1	163.0	162.9	162.7	_					— 1 l	165.89
167'5   167'5   167'5   168'6   168'6   168'6   169'2   169'2   170'2   170'2   170'4   170'4   170'4   169'6   166'0   167'4   167'4   166'5   167'1   167'1   167'5   168'5   168'5   168'9   168'6   167'1   167'5   168'5   168'5   168'9   168'6   167'1   167'5   168'5   168'5   168'9   168'6   167'1   167'5   168'5   168'5   168'9   168'6   167'1   167'5   168'5   168'5   168'9   168'6   167'1   167'5   168'5   168'5   168'9   168'6   167'1   167'5   168'5   168'5   168'9   168'6   165'1   168'5   163'5   162'7   161'6   163'1   149'3   142'9   148'2   144'2   141'5   153'8   154'0   159'8   159'9   164'7   170'7   169'6   166'4   150'0				_									
168'73   168'0   167'4   167'4   166'5   167'1   167'5   168'5   168'5   168'8   168'6   168'1   161'5   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161	169.9												171 1
161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   162'9   163'8   163'8   164'0   164'1   165'5   163'5   163'5   163'5   163'5   162'7   161'6   163'1   149'3   142'9   148'2   144'2   141'5   153'8   154'0   159'4   162'1   165'5   163'1   149'3   143'2   145'4   159'4   159'4   159'4   164'4   162'1   162'1   168'73   167'91   167'82   166'97   165'68   160'33   160'52   160'73   161'02   162'99   164'93   166'46   165'5   163'3   160'52   160'73   161'02   162'99   164'93   166'46   165'5   163'3   160'52   160'73   161'02   162'99   164'93   166'46   165'5   163'3   160'52   160'73   161'02   162'99   164'93   166'46   165'5   163'3   160'52   160'73   161'02   162'99   164'93   166'46   165'5   163'3   160'52   160'73   161'02   162'99   164'93   166'46   165'5   163'3   160'52   160'73   161'02   162'99   164'93   166'46   165'5   163'3   160'52   160'73   161'02   162'99   164'93   166'46   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5   165'5													169 46
165 2 163 5 162 7 161 6 163 1 149 3 142 9 148 2 144 2 141 5 153 8 154 0 159 162 7 169 6 166 4 150 0 — — 143 2 145 4 159 4 159 4 164 4 162 1 162 1 168 7 167 9 1 167 8 2 166 9 7 165 6 8 160 3 3 160 5 2 160 7 3 161 0 2 162 9 164 9 3 166 4 165 168 7 167 9 1 167 8 2 166 9 7 165 6 8 160 3 160 5 2 160 7 3 161 0 2 162 9 164 9 3 166 4 6 165 168 7 167 9 1 167 8 2 166 9 7 165 6 8 160 3 160 5 2 160 7 3 161 0 2 162 9 164 9 3 166 4 165 165 168 169 3 160 6 2 160 7 3 161 0 2 162 9 164 9 3 166 4 165 165 168 169 3 160 169 169 169 169 169 169 169 169 169 169													
180'8													
168'73   167'91   167'82   166'97   165'68   160'33   160'52   160'73   161'02   162'99   164'93   166'46   165							142 9	148 2	144 2	141 5	153 8	154 0	
50°3 50°0 49°6 49°6 49°6 49°4 49°3		164 /	170 7 —	109 0	100 4	- 150 0	143.2	145.4	159.4	159.4	164.4	$162 \ 1$	162.8
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	168.73	167.91	167.82	166.97	165.68	160.33	160.2	160.73	161.02	162.99	164.93	166.46	165.88
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			'		ТЕМРЕК	ATURE OF	THE VERT	ICAL FORC	E MAGNET.		Wing of the Administration of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Co		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	50.5	20.0	40°6	40.6	4°°4	40.3	0	0	0	0	0		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		30.0	15 0	-50			46.7	46.4	46.2	46.0	45.9	45.9	49.7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	52.0	52.0	52.0	52.2	52.0	52.2			ا مدمد			53.4	50.7
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$					l		55.7	55.3	54.6			53.4	55.5
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	56.1		55.5	55.7			55.0	54.2	54.0	53.7		51.6	54.6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		48*3	48'3	48.4	48.2	48.2	48.2						48.6
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$							50.5	50.0		49.5	49.5	49.3	49.2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	54.0	23.6	53.5	53.2	23.0	52.7	54.2	54.2		56.2	56.6	55.2}	52.6
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	56.7	57.0	56.2	56.0	55.8			_	<u> </u>				53.5
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	50.4	F0.0		40:0	40.7							48 0 5	
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55.0     55.0     54.7     54.6     54.4     54.2     54.1     53.8     53.5     53.2     52.8     52.6     53.5       54.0     54.4     54.7     54.5     54.5     54.4     54.4     54.4     54.1     53.8     53.9     54.0     53.6       56.0     56.2     55.4     55.1     54.3     53.6     —     —     —     —     —     —     —     —					1 -								50
54.0     54.4     54.7     54.5     54.5     54.4     54.4     54.4     54.4     54.1     53.8     53.9     54.0     56.0       56.0     56.2     55.4     55.1     54.3     53.6     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     -     - <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>53</td>													53
56.0   56.5   55.4   55.1   54.3   53.6   -   -   -   -   -   -   -													53
							J4 4	— T	JT 1	1		1 _	li .
			-		~~		52.8	52.4	52.2		51.2	51.6	53.9

	0	e Scale Divi	nion — : 000	1066 parts of	f the W. F.	VERTIC	CAL FOR	CE.	snonding to	1° decrease	of Tempera	fure 1'64	
Mean G gen Ti	öttin- }	Oh.	1h.	2h.	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6h.	7h.	8h.	9h.	10h.	11h.
	1 2 3 4 5 6 F	Sc. Div. 169 0 166 8 158 1 155 4 154 3 148 5	Sc. Div. 168°6 167°5 158°2 155°4 152°1 146°5	Sc. Div. 168 6 167 9 155 5 155 4 149 7 144 5	sc. Div. 166 ' 5 165 ' 7 154 ' 7 153 ' 9 147 ' 9 143 ' 1	sc. Div. 165 4 162 4 153 6 151 2 145 8 143 1	sc. Div. 164 '9 159 '5 151 '9 148 '2 146 '0 139 '1	sc. Div. 164 ' 3 160 ' 5 151 ' 3 149 ' 2 143 ' 4 139 ' 4	Sc. Div. 166 6 159 7 154 1 149 2 141 7 139 0	sc. Div. 169 7 160 2 155 0 152 3 141 2 139 0	Sc. Div.   170 '7   158 '3   155 '7   151 '8   141 '2   139 '7	sc. Div. 173'9 157'8 155'3 153'3 140'7 140'2	Sc. Div. 169 ° 0 157 ° 8 156 ° 4 153 ° 4 140 ° 5 138 ° 0
	7 8 9 10 11 12 13	130 · 4 155 · 6 126 · 6 154 · 3 163 · 3 165 · 0	130'8 153'8 128'3 154'3 162'0 164'3	137.5 150.8 134.2 158.4 160.9 163.0	141.2 150.8 135.7 160.0 159.3 163.1	149 2 150 8 148 3 160 0 156 9 162 9	149'7 150'7 152'4 159'9 155'0 160'8	153.8 150.7 150.4 159.0 155.0 163.4	157.8 153.2 152.8 157.7 156.3 164.7	165.8 162.6 153.3 159.4 158.0 164.9	171.5 161.2 155.5 159.4 160.9 165.3	166.2 153.9 159.5 158.5 161.7 162.7	164.4 152.9 163.4 158.7 160.1 163.0
MAY.	14 15 16 17 18 19 20	165.3 156.2 155.4 131.3 151.0 130.9	163 · 1 159 · 8 152 · 6 137 · 3 151 · 3 134 · 2	160°5 152°2 152°6 149°2 149°7 137°9	158.5 145.8 151.6 149.8 145.2 137.9	157 · 2 149 · 7 149 · 6 148 · 9 140 · 4 139 · 0	155.7 150.5 147.9 151.2 139.4 139.0	155 · 2 149 · 7 149 · 1 150 · 6 144 · 1 137 · 2	155.2 149.7 152.5 160.8 141.6 137.2	155°2 153°3 157°9 154°9 142°6 133°8	155.2 155.4 153.3 148.5 141.1 137.9	157.6 156.9 152.2 146.4 143.8 137.5	155.8 156.4 150.9 143.7 143.5 138.6
	21 22 23 24 25 26 27	147.0 147.9 149.2 144.9 143.4 142.8	146°3 147°9 148°8 144°2 142°8 140°2	146°3 146°5 148°8 144°3 145°2 137°1	145.6 147.1 144.1 143.9 140.2 138.0	142.9 147.1 142.0 142.6 138.0 143.1	141.5 145.9 140.5 140.8 137.7 140.0	140°5 145°4 139°3 140°1 137°1 142°7	143°3 145°9 140°4 140°1 137°3 147°2	143°3 147°2 143°1 142°2 138°0 149°5	144.9 147.9 140.1 142.5 138.0 148.2	144.6 147.9 140.1 140.7 138.0 148.4	144.9 147.7 139.0 141.8 138.2 152.7
	28 29 30 31	140°0 138°7 148°6	140°0 138°1 147°5	140°0 135°8 146°4	135 8 135 2 142 4	135°8 133°9 142°1	135 · 2 133 · 9 145 · 0	137°2 134°3 143°9	137.0 135.4 144.4	137.6 133.1 146.1	137.6 136.2 150.5	135.7 136.9 152.1	135.7 137.6 154.5
Hourl	y <b>M</b> eans	149.63	149'48	149.59	148.26	148.22	147.49	147.66	148.92	150.34	150.69	150.46	150.32
	$\left(\begin{array}{c}1\\2\\3\\4\\5\\6\end{array}\right)$	51.0 52.2 56.3 58.1 59.6 63.2	50°.7 52°.2 57°.0 58°.3 60°.8 63°.7	50°7 52°4 57°3 58°4 61°8 64°1	51°2 53°0 58°2 58°8 61°5 64°3	51.7 54.0 59.2 59.2 62.5 65.0	52.6 54.8 59.7 59.5 63.5 65.5	53.0 55.2 60.0 60.0 64.0 65.8	53.2 56.1 60.0 59.4 64.5 66.5	53.2 56.8 60.0 60.2 65.4 67.0	53.4 57.5 60.5 60.2 66.0 67.7	53.8 58.2 61.0 60.0 66.4 68.3	54·1 58·2 61·4 59·6 66·3 69·2
	7 8 9 10 11 12 13	60.0 58.8 59.3 57.2 54.3 54.2	60.0 59.1 60.0 57.0 54.4 54.1	60.0 59.2 60.3 57.0 55.0 54.0	60.4 60.4 60.3 57.0 55.6 54.5	60.0 60.7 60.9 57.1 56.4 54.5	60°5 61°0 60°7 57°4 57°1 53°7	60.6 61.2 61.0 57.5 57.2 53.4	61.3 61.0 61.5 57.5 57.6 53.5	60.4 61.2 61.9 57.2 58.0 54.1	61.7 61.0 62.0 57.2 58.6 54.5	62·2 61·0 62·2 57·4 59·2 55·2	62:0 61:5 61:4 57:5 59:4 54:6
MAY.	14 15 16 17 18 19 20 21	53.2 56.6 57.2 60.2 62.4 64.7	53.8 57.0 57.4 60.3 62.4 64.5	54.7 57.2 58.2 61.0 62.5 64.7	55°2 57°4 58°2 61°0 63°7 65°4	55.6 58.0 59.2 61.5 64.8 65.7	56.2 58.4 60.2 62.0 65.7 66.5	57.1 58.8 60.4 62.4 66.7 67.3	57.2 59.2 60.2 63.1 68.1 67.7	57.7 59.4 60.5 63.5 68.6	57.7 59.8 61.5 64.1 69.3 68.5	57.9 60.0 62.0 65.0 69.3 68.5	58.0 60.0 62.3 66.2 69.0 68.3
	21 22 23 24 25 26 27 28	63:0 62:0 60:3 63:5 64:7 63:5	62.9 62.0 60.5 63.5 64.8 63.5	62.7 62.2 60.7 63.5 65.5 63.6	63.4 61.8 61.2 63.5 65.4 64.4	63.6 61.7 61.8 63.9 65.6 64.5	64.0 61.8 62.5 64.8 65.7 64.9	64.5 61.7 63.0 65.3 65.7 65.3	64.3 61.6 63.8 66.0 65.9 65.5	64·4 61·5 64·7 66·5 66·5 65·5	64.6 61.7 65.5 67.2 67.0 66.5	64.8 62.4 66.3 68.5 67.3 67.0	65.0 62.6 67.3 68.8 67.6 67.4
	29 30 31	65.5 65.7 60.0	65.8 60.0	66.0 67.0 60.0	65°8 67°0 60°0	66.3 67.5 60.3	66.5 67.5 60.1	67.0 67.5 60.1	67.6 67.7 60.0	68.0 67.9 60.0	68.6 67.9 60.4	69.4 68.5 60.5	69.5 67.5 60.7
Hourl	y Means	59.21	59.71	59.99	60.32	60.79	61.21	61.24	61.85	62.15	62.61	63.05	63.16

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	One Scale	Division =	.000066 pa	rts of the V	.F. Increa	se, in Scale	Divisions, c	orrespondin	g to 1° decr	ease of Tem	perature, 1	64.
12h.	13 <sup>h</sup> .	14հ.	15 <sup>h</sup> .	16 <sup>h</sup> .	17h.	18 <sup>h</sup> .	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 170'0 157'8 154'7 153'6 143'2	Sc. Div. 169 7 159 7 152 8 152 8 144 3 136 8	Sc. Div. 161'1 161'4 153'4 153'5 142'2 138'6	Sc. Div. 161'1 155'3 148'3 152'3 145'4 138'8	Sc. Div. 161'2 158'9 151'1 153'3 144'6 138'8	sc. Div. 157.6 158.5 151.1 154.4 144.6 139.3	sc. Div. 157.8 157.9 152.8 154.3 142.2	Sc. Div. 157.8 160.2 152.3 154.3 140.5	sc. Div. 157°5 157°7 153°1 154°4 140°5	Sc. Div. 161 4 149 3 154 1 154 8 140 6	sc. Div. 158 9 147 9 141 4 154 3 145 8	sc. Div. 166°1 156°3 151°0 154°3 147°5	sc. Div. 164*89 159*38 153*16 153*12 144*41
138.0 164.4 150.9 161.4 158.0 160.1 163.0	161.5 150.6 157.9 157.5 157.8 163.2	159.6 150.7 155.2 158.3 157.8 166.2	159°3 150°2 159°0 157°3 157°8 166°2	155.9 150.2 140.9 157.3 158.0 166.2	151 · 3 150 · 2 152 · 7 157 · 3 154 · 4 164 · 2	154.5 149.3 150.2 151.2 159.4 154.7	137 · 5 144 · 9 149 · 9 140 · 6 159 · 6 158 · 8	134.0 149.4 150.9 142.2 159.6 159.8	131.0 151.6 151.1 141.6 159.8 161.8	134.5 154.6 151.1 153.4 161.0 161.5	132·3 } 155·2 140·8 153·4 163·0 163·9	139'76 153'14 151'82 148'75 158'65 158'99
155 · 4 153 · 9 150 · 3 151 · 9 140 · 2 137 · 6	156·1 150·5 150·3 208·2 140·3 137·6	155.8 149.9 153.3 190.1 139.4 137.6	156.2 151.5 158.7 151.8 139.4 138.6	156.2 151.5 161.1 166.8 137.4 137.9	155.4 153.2 164.1 154.7 137.7 138.5	162.3 155.4 153.2 150.3 153.2 132.9	163.9 156.5 153.8 133.6 148.2 125.0	164.5 155.9 154.7 129.5 148.2 134.1	164.4 155.9 156.2 122.3 149.2 130.3	165.8 157.1 157.4 144.2 150.7 133.5	166.5 157.1 157.5 144.5 151.0 130.9 — }	164 · 15 156 · 98 153 · 29 149 · 49 154 · 02 139 · 78 137 · 97
143.6 147.3 142.7 141.8 138.0 147.6	143.5 146.7 147.4 140.2 138.0 143.7	143°1 148°0 144°6 140°2 135°3 141°5	143.4 148.8 144.2 140.0 133.7 140.8	143.4 148.8 144.2 145.0 137.6 139.8	143.7 148.8 144.2 136.4 139.3 138.8	140.7 143.5 148.8 144.7 128.4 122.4	130.0 144.6 149.0 140.2 138.3 119.0	139 · 9 145 · 2 149 · 0 134 · 6 141 · 5 117 · 1	141.0 145.2 149.3 135.6 143.5 133.5	144.2 145.2 149.5 143.9 144.6 143.7	145.5 148.5 143.9 144.8 140.6	144 21 147 79 142 73 141 37 136 34 141 90
133 '9 138 '2 154 '5	133.5 138.9 153.7	133°3 140°2 155°8	133 8 140 0 172 3	133.8 140.0 159.9	131.6 140.4 131.8	141 0 132 6 142 9 135 9	138.4 133.7 140.6 132.1	133.9 133.7 141.0 151.1	132.7 133.7 141.0 154.3	138.7 133.9 148.5 156.1	138.7 } 139.3 149.9 157.8	135.60 138.78 149.12
150.07	151.60	150.60	149.79	149.62	147.93	147.13	144.57	145.67	146.12	148.94	149.89	148.87
				ТЕМРЕН	RATURE OF	THE VERT	ICAL FORCE	E MAGNET.				-
54.3 58.0 61.5 59.6 66.0 69.1	54.2 58.0 61.4 59.2 65.6	54.2 57.8 61.2 59.0 65.5	54.5 57.6 61.3 59.0 65.5 68.3	54.3 57.4 60.7 59.0 65.2 68.1	53.8 57.2 60.5 59.0 64.7 68.0	53.4 56.6 60.0 59.0 64.5	52.8 56.8 59.7 58.8 64.3	52·2 57·0 59·2 58·9 64·0	52·3 57·0 58·9 59·0 63·7	52.4 56.8 58.6 59.0 63.2	52°4 56°2 57°6 59°2 63°2	52.89 56.13 59.63 59.18 64.07
61.5 61.4 61.2 58.1 59.4	68.7 61.3 61.2 61.1 57.8 59.0	68.4 61.3 61.0 60.6 57.6 58.9	61.5 60.5 60.3 57.4 58.9	61.2 60.3 60.0 57.2 58.7	61.0 60.3 59.6 56.7 57.8	63.0 60.5 60.3 59.2 56.3 57.4	62.5 60.2 60.0 59.2 56.0 56.2	61.9 60.0 59.8 59.0 55.7 55.4	61 · 2 59 · 5 59 · 7 58 · 5 55 · 5 55 · 2	61.8 59.2 59.2 58.2 55.0 55.0	61.0 58.2 59.2 58.0 54.4 54.6	65:51 60:60 60:37 60:27 56:86 57:05
54.2 57.9 60.0 62.4 66.4 69.0 68.3	53.4 57.8 60.0 62.3 66.5 68.8	53.2  57.5 60.2 62.3 67.3 68.0	53.0  57.4 59.8 62.2 67.4 67.5	53.0  57.5 59.2 62.0 67.2 67.0	52.8 	53.6 57.3 58.5 61.1 65.4 66.5	53°2 57°2 58°1 61°2 64°7 66°5	53.0 57.0 57.5 62.0 63.5 66.1	52.8 57.0 57.2 62.2 63.0 65.7	52.7 57.0 56.7 60.2 62.6 65.4	52.8 57.0 56.5 59.7 62.5 65.2	53.67 56.75 58.52 60.68 63.86 66.47
65°0 62°4 67°6 68°8 67°7	68.2 65.0 62.3 67.6 68.8 67.5	68.0 65.0 62.0 67.3 68.1 68.5	68°0 64°6 61°5 66°8 67°6 69°0	67.5 	67.3 64.0 60.7 66.5 66.6 67.4	63.3 63.5 60.6 66.3 66.4 67.0	63.3 63.0 60.4 65.5 66.0 66.1	63:3 62:5 60:5 64:8 65:5 65:5	63.2 62.5 60.5 64.5 65.0 64.6	63.4 62.3 60.5 64.0 64.5 64.0	63·5 } 62·1 60·4 63·5 64·4 63·5	66.13 63.80 61.48 64.53 66.00 66.29
67.5 69.9 66.8 60.6	67.5 69.9 66.4 60.4	67.4 70.1 66.5 61.0	67:3 70:0 66:4 60:5	67.0 69.6 66.0 60.3	66.6 	65 · 9 68 · 5 63 · 8 61 · 5	65°5 68°3 62°1 60°0	65:5 68:0 61:2 59:2	65.0 67.0 60.6 59.0	64.8 66.5 60.0 58.5		65.67 67.86 65.53 60.11
63.13	62.96	62.89	62.73	62.44	62.10	61.46	61.02	60.67	60.38	60.06	59.74	61.48

	On	e Scale Div	ísion = •000	0066 parts o	f the V.F.		CAL FOR a Scale Divi		ponding to	I° decrease	of Temperat	ure, 1 64.	
Mean Göt gen Tim	il.	O <sub>p</sub> .	1h.	2 <sup>h</sup> •	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6h.	7 <sup>h</sup> •	8 <sup>h</sup> .	9h.	10 <sup>h</sup> .	11 <sup>h</sup> .
	1 2 3	sc. Div. 156 4 152 7 142 9	sc. Div. 154'9 149'7 143'1	Sc. Div. 152 6 147 9 143 0	Sc. Div. 150°2 147°6 139°6	Sc. Div. 148.7 144.8 137.6	Sc. Div. 145 7 143 5 136 3	sc. Div. 144.6 141.0 135.8	sc. Div. 146°6 142°2 136°2	sc. Div. 146 6 142 5 135 1	Sc. Div. 146 6 141 9 135 0	sc. Div. 146.6 141.4 135.0	sc. Div. 146 5 141 4 135 0
	4 5 6 7 8 9	136.8 145.9 150.6 146.9 144.2 138.5	136.8 144.4 150.9 146.1 142.9 138.7	134 · 3 145 · 2 146 · 7 143 · 1 142 · 9 137 · 1	133.6 145.4 144.7 143.1 141.2 135.0	134'1 146'4 145'8 141'9 141'0 132'2	134.2 146.4 145.8 140.4 138.0 131.2	135.7 146.4 144.6 138.0 135.0 131.2	136 '9 147 '7 144 '3 138 '0 132 '9 132 '3	137°3 147°7 144°3 139°8 132°9 134°2	140'4 148'5 145'3 141'3 131'6 133'7	143.8 148.5 144.0 141.1 132.5 137.2	143 °8 148 °5 143 °8 140 °7 132 °7 140 °3
JUNE.	11 12 13 14 15 16 17	143.5 148.5 152.8 146.4 123.3 122.0	143°9 151°0 152°4 144°7 122°6 121°0	143°1 147°7 151°3 138°8 120°4 120°5	141.7 144.8 151.3 136.7 118.7	141'8 143'0 150'9 132'6 117'7 117'4	140°5 143°8 148°6 130°1 115°2 115°3	140.7 144.7 148.6 125.3 114.9 115.1	141'1 144'9 148'1 123'3 113'4 114'0	143.6 144.9 149.2 123.3 111.5 115.3	145.7 144.9 152.9 123.6 112.8 116.1	145.7 144.9 153.8 119.2 113.0 116.0	145 7 144 9 160 4 119 2 114 0 117 0
	18 19 20 21 22 23 24	126°3 123°7 130°8 128°4 144°1 138°5	125.5 123.7 132.8 131.8 147.8 138.5	122.9 125.0 133.1 136.7 137.1 138.0	116.4 124.9 131.5 134.5 137.1 129.3	119.5 124.1 132.4 131.5 136.4 129.5	118'3 124'1 129'8 132'6 136'4 136'3	119.0 123.5 125.0 136.0 132.1 135.7	117.6 123.1 125.0 139.2 131.8 133.2	119.0 125.7 129.4 141.2 128.7 134.6	118.8 125.7 135.9 146.1 129.3 132.7	118'8 128'2 138'1 150'8 129'3 130'9	121 1 129 4 137 2 145 1 133 5 131 5
	25 26 27 28 29 30	129.6 132.0 126.3 132.2 131.9	128°3 131°8 125°4 130°2 131°9	126.7 129.3 125.4 127.0 129.3	121.5 126.4 123.3 124.4 128.1	121 · 0 125 · 7 121 · 0 123 · 4 126 · 8	120.0 122.6 119.9 121.9 126.6	121.0 120.3 117.8 123.8 126.4	119.8 120.3 117.8 123.8 124.2	119.8 121.6 119.0 123.8 124.1	119.8 120.5 121.7 121.6 124.2	121 8 120 9 123 3 121 6 125 4	121 · 3 122 · 7 124 · 4 121 · 8 125 · 4
Hourly N	Means	138.28	138.11	136.35	134.52	133.35	132.44	131.62	131.45	132.12	132.95	133.23	134.1
			 I	1	i	TURE OF T	HE VERTIC	AL FORCE	MAGNET.	<u> </u>			
	1 2 3	58.4 59.3 64.0	59.0 59.7 64.8	59.6 60.3 65.0	59.6 61.0 65.5	59.6 62.0 66.0	60°1 62°7 66°8	60°4 63°1 67°8	60°5 63°5 68°5	61°0 64°0 68°5	61°5 64°5 69°0	61 9 65 0 69 5	62°4 65°5 69°7
	4 5 6 7 8 9	66.5 62.0 59.8 60.5 62.5 65.9	66.4 62.0 59.7 60.4 63.2 66.2	66.5 62.0 59.8 60.8 63.5 66.5	66.7 62.1 60.3 61.2 63.8 67.1	67.3 61.5 60.5 62.2 64.6 68.0	67.4 61.5 60.5 63.0 65.5 68.3	67.5 61.5 60.6 63.3 66.0 68.5	67.5 61.8 61.0 63.5 66.5 68.7	67.4 62.0 61.5 64.1 67.1 69.0	67.3 62.4 62.1 64.6 68.0 69.3	67.3 62.7 62.8 65.4 68.4 69.7	67.4 62.7 63.1 65.5 68.5 69.7
JUNE.	11 12 13 14 15 16 17	62.0 59.4 58.8 61.0 74.3 74.7	62.0 59.5 58.8 62.0 74.4 74.9	62·2 59·6 58·4 63·0 75·4 75·1	62·3 59·7 58·2 63·5 76·2 75·3	62.5 59.8 58.5 65.6 77.0 77.2	62.4 60.2 59.2 67.5 78.0 77.1	61.9 60.4 59.4 70.0 78.5 77.6	61.7 60.3 59.4 71.6 79.5 78.4	61.9 60.3 59.7 73.4 79.8 78.0	61.8 61.0 60.2 75.0 80.7 78.4	62.6 61.5 60.8 76.4 81.0 78.9	62.8 62.0 61.0 76.7 80.5 78.5
	18 19 20 21 22 23 24	72·5 72·0 69·8 67·3 67·5 67·0	72·5 72·0 69·5 67·3 67·5 67·6	73.0 72.5 69.0 67.7 67.5 67.6	73.5 72.8 69.2 68.5 68.4 68.0	73.5 73.0 69.5 68.8 67.6 68.5	74·1 73·1 69·5 69·3 68·4 69·0	74.5 73.5 69.5 69.5 69.5 69.0	75·1 73·5 69·5 70·1 70·3 69·3	75.5 73.7 69.7 70.4 71.5 69.5	75°4 73°8 70°0 70°8 71°6 69°7	75.5 74.0 70.6 71.0 71.5 70.5	75.5 74.0 71.3 70.6 71.3 70.5
	25 26 27 28 29 30	69.6 70.7 72.6 69.1 68.6	70.0 70.5 72.5 69.5 68.8	70.9 71.1 72.5 70.5 69.8	72.0 72.0 72.7 71.0 70.3	72.5 72.1 72.9 71.5 70.5	73·3 72·7 72·9 72·0 71·3	74.0 73.1 72.9 71.6 71.6	75.5 73.5 72.9 72.0 72.3	75 9 74 5 72 9 72 5 72 5	76·3 75·0 73·0 73·1 73·2	76.7 75.5 73.5 73.5 73.5	76.7 75.5 73.5 73.6 73.5
Hourly N	Means	65.99	66.18	66.23	66.96	67.41	67:92	68.28	68.71	69.09	69.23	69.99	70.0

	One Scale	Division ==	·000066 pa	rts of the V		RTICAL I		orresponding	r to 1° decre	ease of Tem	perature, 1·6	4.
12h.	13h.	14h.	15h.	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19h.	20h.	21h.	22h.	23h.	Daily and Monthly Means.
Sc. Div. 146 6 141 4	Sc. Div. 146 7 141 1	Sc. Div. 146 7 140 6	Sc. Div. 147.4 138.8	Sc. Div. 147 8 140 3	Sc. Div. 148 4 140 3	Sc. Div. 148 4 141 3	Sc. Div. 148 4 141 3	Sc. Div. 149 3 141 3	Sc. Div. 150 5 142 6	Sc. Div. 151'8 142'6	Sc. Div. 153 3 142 6	Sc. Div. 148 80 142 95
134 1  142 8	140.4	139.9	135.4	135.9	121.7 — 140.0	138.6 138.4	138.6 140.2	137·5 141·9	137·5 141·9	139°1 147°5	$\begin{bmatrix} -139.3 \\ 148.0 \end{bmatrix}$	137.03 139.49
148.5 143.6 140.7	148.6 143.6 140.7	146.8 143.7 141.5	146.8 144.6 140.0	147.4 145.7 141.3	147.4 147.2 138.4	150°3 146°5 139°2	148.5 148.7 140.2	149.3 149.6 142.4	150°6 150°5 144°1	151.6 150.5 144.7	153.5 151.5 144.9	147 93 146 52 141 60
132.8	133 6 136 0 — 145 8	134°1 136°0 — 145°7	134°1 136°0 — 145°8	134.3 136.0 — 146.5	136.3	140.6	140.6	137.9	136.3 — 143.6	136.3	$\begin{vmatrix} 136.3 \\ - \\ 142.1 \\ 152.0 \end{vmatrix}$	136.41 137.37 145.53
145 8 145 4 154 2 118 8	145.4 149.0 118.8	145.4 147.2 118.7	145.6 145.8 118.1	145.6 144.4 118.1	146.5 146.0 145.7 119.5	146.8 142.5 144.3 119.5	149 3 139 4 141 4 120 8	150°5 147°1 141°4 120°8	150.5 149.2 140.9 120.8	150°5 150°7 149°5 125°0	150.7 149.7 123.3	$145.88 \\ 148.91 \\ 125.22$
113 ° 0 117 ° 0 — 121 ° 1	113.0 117.0 — 126.5	111.8 121.8 — 122.3	113.4 122.0 — 123.2	113.6 122.0 — 124.6	113.8 122.0 — 124.6	116.0 — 121.5 124.0	117.3  121.5 123.0	117.8 — 120.8 122.4	118.5 122.8 122.1	119.7 — 123.8 120.9	120.7 $ 126.3$ $119.7$	116.09 119.45 121.57
131.7 130.7 142.0 133.5	131.5 132.1 141.3 133.7	124.9 133.2 134.6 133.7	128.9 131.5 133.5 131.8	128.6 127.4 130.8 131.8	130.3 127.9 130.0 132.3	130.3 119.8 130.0 132.3	130.6 124.0 124.3 125.6	130°3 123°6 117°5 126°5	130·3 114·8 127·8 131·4	132.7 105.4 134.6 133.9	134 1 111 7 144 1 133 9	127 · 72 127 · 63 135 · 18 133 · 50
132.2	132.2	134.3	131.6	129°3 — 123°0	129.3	127°5 123°5	124.8 123.5	121.6 124.4	127.5 124.4	128 <b>·</b> 9 128 <b>·</b> 5	$\frac{-}{129.0}$	131·54 123·27
122.7 124.4 121.9 123.5	123°2 124°0 122°0 123°5	122.6 124.3 121.5 127.5	122.6 125.9 123.9 123.4	122.6 127.8 123.9 124.0	122.0 127.8 124.8 123.4	122.6 127.8 125.5 123.4	123°8 124°0 123°5 123°8	123 · 8 125 · 3 119 · 7 123 · 8	124 1 128 4 121 1 121 4	126.8 130.1 125.5 122.1	126.3 131.8 125.4 123.7	124.05 124.45 123.92 125.32
133 46	133.60	132.96	132.73	132.78	132:51	132.98	132 47	132.69	133.60	135.28	136.27	133.74
				ТЕМРЕІ	RATURE OF	THE VERT	ICAL FORC	E MAGNET.				
62°5 65°5 69°5	62°5 65°6 69°6	62°4 65°7 68°9	62°2 65°2 68°7	61°9 65°2 68°5	61°5 68°3	61°2 65°1	61°0 65°0	60°4 64°7	60°0 64°6	59°8 64°5	58.8 64.2 — )	60°76 63°80 67°25
67.0 62.5 63.3	66.7 62.2 63.0	66.4 62.3 62.7	66.0 62.1 62.5	65.8 62.0 62.0	65.5 61.8 61.4	66.2 64.8 61.6 60.5	66.0 63.7 60.5 60.2	66.0 63.1 60.3	66.0 62.5 60.0 59.6	65.7 62.0 59.5 59.4		65.85 61.58 61.05
65.5 68.7 69.7	65.5 68.7 69.9	65°1 68°6 69°7	64.7 68.5 69.6	64.5 68.0 69.2	64.5 67.6 68.6	64°1 67°4	63.6 67.2	63°4 66°7	62:9 66:2 —	62.6 66.0	62:4 66:0 	63 · 47 66 · 55 67 · 10
62.6 62.3 61.5 77.3	62 9 62 0 61 6 77 5	63.0 61.6 62.0 77.5	61.5 61.5 62.4	61°2 61°4 61°7	60°5 61°0 61°5	64.0 60.2 60.6 61.5	63.6 60.0 60.3 61.5	62.7 59.6 60.1 60.9 74.6	62.5 59.2 59.7 60.4 74.4	62.1 59.0 59.4 60.1 74.0	58 8 59 1 60 3 74 0	61.44 60.53 60.32 72.26
80°8 78°3	81 · 0 77 · 5	81.0 76.0	77°0 79°8 76°5	76.6 79.3 76.5	75.7 78.6 76.4	75.0 77.7 — 75.0	74.7 77.5 — 74.5	77·1  74·3	76.6	76.1	$\frac{75.3}{73.0}$	78·17 76·22
75.0 73.4 71.3 70.2 71.1	74.7 73.0 71.3 70.5 70.8	74.7 72.5 70.5 70.0 70.5	74.5 72.4 70.8 69.8 70.5	74.3 71.6 70.8 69.6 70.2	73.7 71.3 70.5 69.5 69.7	73·7 70·9 70·5 69·3 69·5	73·5 70·0 70·5 69·1 68·7	73·3 69·6 70·0 69·0 68·2	73.0 69.2 69.5 68.5 67.9	72.6 69.0 69.4 68.5 67.5	72.4 69.5 68.3 68.2 67.2	74.00 72.10 70.02 69.31 69.35
70.6  76.7 75.0	70.5  76.0 74.8	69°6  75°6	69.8  75.0	70°0  74°3	69.4  73.7	71.7 73.3	71.5 73.0	71.2 $72.7$	70·7 72·5	70°5 72°0 72°7	-70.4	69.67 73.74 73.55
73·2 73·5 74·0	73.0 73.5 74.0	74.8 73.0 73.3 73.5	75.0 72.5 73.3 73.7	75.0 72.3 72.6 73.8	74.6 71.6 72.3 73.6	74.4 71.3 71.5 73.5	73.7 71.5 71.1 73.3	73.4 71.0 70.8 72.7	72.7 70.6 70.5 72.5	70.0 69.6 72.0	69°3 69°4 71°0	73 55 72 25 71 72 72 23
70.05	69.93	69.65	69.44	69.15	68.77	68.25	67.89	67.53	67.15	66.83	66.21	68.24

January 21st and	22 <sub>nd</sub> .			MAGNET	ICAL O	BSERVATIO	ONS.		<u></u> .			
Mean Göttingen	Angul	ar Value of	one Scale D	Division =	0''721.				DECLINAT	ION.		
Time.	10h.	11h.	12h.	13h.	14h.	15h.	16h.	17 <sup>h</sup> .	18h.	19h.	20h.	
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	. Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	
0 0	113.0	114.4	114.2	115.8 116.0	116.2 116.2		117.8 116.0	113.8 114.0	$\begin{vmatrix} 115.0 \\ 115.2 \end{vmatrix}$	115.7 115.7	116.5	
5 0	113.0	114'1	114.8	116.0	116.1	116.0	115.3	114.0	115.0	115.6	116.3	
10 0	113.1	114.2	114.8 115.0	116.0	116.1	116.3	114.2	114.0	115.0	115.6	116.3	
15 0	113.3	114°3 114°2	115.1	116.5	116.1	118.0	114.2	114.0	115.5	116.0	114.4 116.4	
20 0	113.7	114 2	115.0	116.0	116.0		114.0	114.5	115.2	116.0	116.5	
25 0	113'8 114'0	114.1	115.0	116.1	116.0		114.5	114.5	115.2	115.9	116.2	
30 0 35 0	113.9	114.7	115.0	116.2	116.0		113.8	114.4	115.5	116.0	116.2	
$\begin{array}{ccc} 35 & 0 \\ 40 & 0 \end{array}$	113.8	114.8	115.0	116.9	116.0		113.2	114.4	115.5	116.1	116.0	
45 0	113.9	114.2	115.0	116.7	116.1	121 0	114.0	114.2	115.3	116.5	115.8	
50 0	114.0	114.1	115.0	116.2	116.0		113'8	114.5	115.2	116.5	115.8	
55 0	114.1	114.5	115.3	116.3	115.8	118.8	114.0	114.7	115.4	116.5	119.0	
M 6	One S	scale Divisio	$_{\rm on} = .0000$	)87 parts o	f the H. F	7.			Horizont	AL FORCE.		
м. s. 2 0	625.0	621.3	622.0	621.0	620.0	618.0	621.2	621.2	620.7	620.4	620.8	
$egin{array}{ccc} 2 & 0 \ 7 & 0 \end{array}$	625.3	621.8	622.2	620.2	620.0		620.0	619.4	620.6	620.4	621.0	
12 0	625.1	622.0	621.0	620.0	620.0		620.0	619.8	620.2	620.6	621.0	
17 0	625.0	622.0	621.4	620.0	620.0	616.0	619.2	619.7	620.6	620.8	620.8	
22 0	625.0	621'8	622.0	620.0	619.0	617.4	620.0	620.5	620.6	621.8		
27 0	625.0	621.8   622.0   620.0   619.0   614.0   618.2   620.2   620.8   620.9									622.1	
32 0	624.2	621.8	622.0	619.0	619.0		618.2	620.0	620.4	620.4	622.8	
37 0	624.2	621.5	622.0	619.0	618.8	615.5	619.4	$620^{\circ}2$	620.0	620.0	620.5	
42 0	624.0	622.0	622.0	620.0	619.0	617.0	619'2	620.4	620.4	620.6	621.5	
47 0	623.2	622.0	622.0	620.0	619.0		619.0	620.0	620.6	620.6	622.8	
52 0	623.0	622.2	621.0	620.0	619.0		620.0	621.2	620.4	620.4	623.4	
57 0	622.1	622 2	620.6	620.0	618.0	622.0	621.4	620.8	620.6	620.4	622.7	
Thermometer	43 8	43.9	44.2	45.0	45.0	44.5	43°5	42°0	41.6	41°3	39°6	
M. S.	One S	cale Divisio	u = .0000	63 parts of	the V. F		· · · · · · · · · · · · · · · · · · ·	7	VERTICAL	Force.		
3 0	176.2	175.9	171.9	170.1	173.2	171.9	172.9	174.2	174.5	175.5	178.0	
8 0	176.5	175.7	171.9	170 1	173.8	171.9	173.1	174.2	174.5	175 3	178 0	
13 0	176.2	175.7	171.4	170.2	173.8	171.9	173.6	$174 \cdot 2$	174:5	176.8	177.8	
18 0	176.2	175.7	171.4	171.1	173.8	172.0	173.6	174.0	174.5	176.8	177.8	
$\begin{array}{ccc} 10 & 0 \\ 23 & 0 \end{array}$	176.2	174.9	171.4	171.1	173.8	172.0	173.6	174.1	174.5	176.8	177.8	
$\frac{28}{28}  0$	176.5	174.9	171.4	171.8	173.0		173.8	174.1	174.3	177.8	177.8	
33 0	176.5	174.9	171 4	171.8	172.6		173.6	174.1	174.3	177.9	177.8	
38 0	176.5	173.1	171.1	171.8	172.6	172.0	173.9	174.1	174.3	178.0	178.0	
43 0	176.5	173.1	171.1	171.8	172.6		173.8	174.6	175.2	178.0	178.3	
48 0	176.5	173.1	171.1	172.5	172.6	172.6	173.6	174.4	175.2	178.0	178.3	
<b>5</b> 3 0	176.5	172.5	170.6	172.5	172.6	172.6	173.6	174.4	175.4	178.0	178.3	
58 0	176.2	172.5	170.6	172.5	171.9	172.9	174.3	174.4	175.4	178.0	178.3	
Thermometer	42°6	42°8	44.6	45°6	44.6	44.8	44.1	42°·8	41.8	41°2	40.2	
<u>-</u>			<del></del>				In	creasing N	umbers deno	te decreasin	z Declinatio	
			ME'	TEOROLO	GICAL	OBSERVAT	IONS.	<del></del>				
Mean Göttingen	Barometer	Ther	mometers.			Wind.			w	eather.		
Time.	at 32°.	Dry.	Wet.	Direc	tion.	For	ce.	-				
р. н. м.	In.	0	0									
21 10 0	29.545	25.6	24.9	N. by		$\operatorname{Lig}$		Clear; o	eircum. and	l haze.		
11 0	29.554	25.5	24.2	N. by	v W.	Mode			ircum. and			
12 0	29.598	24.2	22.6	N. by		$\mathbf{Ligl}$	ht.	1	ircum. and			
13 0	29.616	23.0	21.1	N	.	$\widetilde{\text{Lig}}$			circum.			
14 0	29.653	20.6	18.9	N		Free	sh.		with haze.			
15 0	29.690	17.1	16.9	N. by		Brisk, wi		Clear; o				
16 0   29'712   15'5   13'4   N. by W.   Fresh.   Clear; circum.   17'0   29'755   11'6   11'8   N.N.W.   Brisk, with gusts.   Clear; circum.												
	18 0   29 812   8 8   9 2   N.N.W.   Brisk.   Cloudy, with haze.											
18 0												
18 0 19 0	29.839	6.0	6.2	N. by	7 W.			Cloudy,	with haze.			
18 0					W.	Brisk, wir Moderate, w Brisk, wir	vith gusts.	Cloudy,		ir.		

 $<sup>^</sup>a$  At 22  $^d$  10  $^h$  , Thermometer of H. F., 39  $^\circ$  . 5 ; of V. F., 39  $^\circ$  . 0.

				1	MAGNET	ICAL (	BSERVATIO	ons.		Jai	nuary 21st	and 22nd.
		DECLINATIO	ON.					$\Lambda$ ngul	ar Value o	f one Scale	Division=	) <sup></sup> 721.
21h	22h.	23h.	Oh.	1 <sup>h</sup> .	2h.	3h.	4h.	5h.	6h.	7 <sup>h</sup> .	8h.	9h.
Sc. Di 116 '0 115 '1 116 '1 116 '1 116 '1 116 '1 116 '1 117 '1 116 '1	116.6 116.9 117.0 116.9 116.8 116.4 116.5 6 116.5 8 116.5 8 116.9 0 117.0 8 117.0	Sc. Div. 117.0 116.7 116.2 116.4 116.1 116.2 116.8 117.2 117.4 117.8 117.8 117.9	Sc. Div. 118 '3 118 '4 118 '8 119 '0 119 '0 119 '2 119 '0 119 '4 119 '3 119 '8 120 '1 119 '9	Sc. Div. 119.6 119.2 119.9 119.8 120.0 120.0 120.2 120.2 120.2 120.3 120.7 120.3 120.3	Sc. Div. 120 '2 120 '8 120 '8 120 '8 120 '4 121 '0 121 '0 120 '6 120 '8 120 '8 120 '8 120 '8	Sc. Di 120°8 120°6 120°4 120°4 120°2 120°3 120°1 120°1 120°0	3   119°1 119°0 118°1 118°2 1   118°2 1   117°9 117°5 117°2 117°0 117°0 116°8	Sc. Div. 116 2 116 0 116 0 116 4 115 2 115 0 115 2 114 7 114 2 114 0 113 2 112 7	Sc. Div. 112.7 112.0 111.7 111.0 111.0 110.7 110.2 110.0 109.7 109.4 109.2	Sc. Div. 108 '8 108 '8 108 '6 108 '4 108 '0 108 '1 108 '0 108 '0 108 '0 107 '9 108 '2	sc. Div. 108.0 108.2 108.7 108.9 109.0 109.1 109.3 109.5 109.8 110.0 110.2 110.3	sc. Div. 110'4 110'8 111'0 111'2 111'7 111'8 112'0 112'1 112'2 112'3 112'8 113'0
116	7   117.0	HORIZONTA		120 3		119.5	in Scale Division		109°0		was allow of both	
622: 621: 621: 622: 622: 622: 621: 622: 621: 622: 622	8   622 · 4 8   622 · 0 6   622 · 4 2   622 · 5 8   622 · 4 2   622 · 0 2   623 · 4 4   623 · 6 4   623 · 6 4   623 · 6 4   623 · 5 4   38 · 0 1   623 · 5 4   180 · 2 4   180 · 2 4   180 · 2 4   180 · 5 4   180 · 5 8   179 · 9	624 1   624 4   624 9   624 6   625 0   625 7   625 7   625 7   625 8   626 4   625 3   624 9	624 '9 625 '0 624 '7 625 '2 625 '6 625 '7 625 '4 625 '5 626 '0 626 '0 625 '7 625 '5	624.0 625.0 625.0 625.0 625.0 625.0 625.0 625.0 624.8 624.8 624.8 624.5 37.1 180.2 180.2 180.3 180.3 180.3 180.7 180.7 183.2	624.0 623.2 623.2 623.0 622.4 621.1 621.0 620.0 620.8 620.0 620.0 618.5	618.5 616.2 617.5 616.5 617.5 615.5 614.5 613.9 613.0	613·1 613·5 612·0 611·5 611·4 610·9 610·7 610·3 608·5 609·5 608·4 608·5  182·8 182·8 182·8 182·8 183·4 183·4 183·8 183·8 183·8 183·8	608 2 607 2 607 6 607 4 607 0 607 2 606 5 607 0 606 7 607 2 608 0 608 2	608 '4 609 '2 610 '0 609 '7 610 '3 610 '3 614 '0 615 '1 614 '0 613 '2 614 '5 615 '6	616.0 616.8 617.0 618.7 619.7 620.1 621.2 621.2 621.9 622.0 622.8 623.1	624.8 625.8 625.9 626.7 627.9 628.5 630.0 630.8 631.3 631.6 632.8 633.9	634·5 636·0 635·1 635·0 635·4 636·3 637·2 637·7 638·0 637·7 638·7
178		181.7 181.7	180.4 180.3		182°3 182°3	182'8 182'8		186°8 187°0	187°3 188°1	187.4 186.3	186°0 186°2	184.7 184.7
39°	7 39.3	38.8	38°3	3 <b>7·7</b>	39°1	38.6	39°1	38.1	3 <sup>°</sup> .6	37.7	37.9	38 <sup>°</sup> 6ª
and in	creasing Horizo	ontal and Vert	ical Force.		······································			- Dittin'in December 2			- Part Control Construction (Assessment	
		· · · · · · · · · · · · · · · · · · ·	· , · · · · · · · · · · · · · · · · · ·	MET	EOROLO	GICAL	OBSERVATI	IONS.				
Mean	n Göttingen Time.	mometers. Wet.	Direc	etion.	Wind.	ce.	-	W	eather.			
D. 21 22	21 22 0 29·993 1 23 0 30·039 -1			0.6 -0.7 -1.1 -1.9 -1.1 2.8 5.7 9.1 12.4 15.8 16.2 16.7	N.N N.N N.N N.N N.N N.N N.W. N.W.	f	Moderate, w Mode Moderate, w Brisk, wi Brisk, wi Brisk, wi Brisk, wi Brisk, wi Brisk, wi	vith gusts. rate. rate. vith gusts. th gusts. th gusts. th gusts. th gusts. vith gusts.	Clear, w Clear, w Clear; c Clear; c Clear; c Clear; c Cloudy, Cloudy, Clear; c Clear; c	eircum and eircum. umstrat. ircum. with haze. with haze. ircum.		

Vol. III.

February 27th a	nd 28th.			MAGNE	CICAL OB	SERVATI(	ONS.				
Mean Göttingen	Angu	lar Value of	one Scale D	oivision =	0′′721.				DECLINAT	ION.	
Time.	10h.	11 <sup>h</sup> .	12h.	13 <sup>h</sup> .	14h.	15h.	16 <sup>h</sup> .	17h.	18h.	19h.	20h.
M. s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 113'8	Sc. Div. 114.0	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 112 0
0 0	111.0	112.8	113.0	113.4 113.8	117.0	113.8	114.0	114.9	114.6	112.9	112.0
5 0 10 0	111.0	112.8	113.2	114.0	116.6	113.8	114.2	115.1	114.8	113.0	112.4
$ \begin{array}{ccc} 10 & 0 \\ 15 & 0 \end{array} $	111.0	113.0	113.4	112.0	115.0	114.0	115.0	115.8	114.0	113.9	112.4
20 0	111.2	113.0	113.7	114.8	113.4	113.2	115.3	116.1	114.0	114.2	113.1
$\begin{array}{ccc} 20 & 0 \\ 25 & 0 \end{array}$	111.2	113.5	113.8	114.4	115.2	114.5	115.2	116.1	114.0	113.0	113.5
30 0	111.2	112.8	114.0	114.6	115.4	113.8	116.9	115.7	114.0	112.2	114.3
35 0	111.7	113.0	113.8	114.4	115.0	113.4	115.8	115.9	113.7	112.2	114.8
40 0	111.8	113.2	113.7	114.4	115.6	113.6	115.0	116.0	113.0	111.9	114.7
45 0	112.2	113:4	113.5	118.6	115.4	113.8	114.2	115.8	111.0	111.2	114.7
50 O	112.3	113.8	114.0	122.0	115.0	113.4	114.3	114.2	110.8	111.2	114.2
55 0	112.8	113.4	114.2	119.9	114.0	113.9	114.3	113.1	111.5	111.8	114.8
M. S.	One S	Scale Divisio	on = '0000	87 parts of	the H.F.				Horizon	TAL FORCE	•
2 0	622.0	623.2	623.0	623.4	624.2	625.4	619.8	619.6	618.4	622.4	622'1
7 0	622.4	623.4	623.2	624.2	625.0	625.2	620.4	619.0	619.0	622.2	622.8
$12  \overset{\circ}{0}$	622.0	623.0	623°4	623.4	626.0	624.0	620.3	618°4	619.8	623.0	622.8
17 0	623.2	622.6	623.4	622.6	625.8	625.4	620.6	618.2	621.0	623.0	623.0
22  0	623.6	623.0	623.6	622.6	625.4	625.2	620.1	618.0	621.8	623.0	623.0
27 0	622.2	622.8	623.8	622.5	623.8	623.8	619.0	618.8	621.3	622.7	623.2
32 0	621.8	623°0	624.0	624.0	624.2	623.0	619'9	617.0	621.9	622.9	623.0
37 0	622.0	623 2	621.0	623.2	624.2	622.2	620.8	616.4	622.4 622.4	621.9	623.0 622.0
$\frac{42}{47}$ 0	621.2	623.2	$\begin{vmatrix} 621.8 \\ 622.0 \end{vmatrix}$	$623.2 \\ 625.0$	625.8 626.0	621.4	620.6	617.4	621.4	621.2	621.8
$\begin{array}{cc} 47 & 0 \\ 52 & 0 \end{array}$	$\begin{vmatrix} 621 & 2 \\ 622 & 0 \end{vmatrix}$	623.8	624.0	627.4	625.8	620.2	620.0	618.6	621.0	622.0	621.0
57 O	621.8	623.8	625.2	627.2	625.2	619.0	619.0	618.7	621.2	622.2	621.0
Thermometer	38°8	38.2	3 <sup>7</sup> ·8	38.8	40°0	40°2	40.0	40°1	40°1	39°8	38.9
M. S.	One	Scale Divisi	on= '0000	63 parts of	the V.F.		-		VERTICAL	Force.	
	185.9	185.2	185.0	182.7	180.2	179.7	181.4	180.2	180.3	179.4	179.0
$egin{array}{ccc} 3 & 0 \ 8 & 0 \end{array}$	185 9	185.3	183.9	182.7	180.2	179.7	181.4	179.7	181.3	179 4	178.9
13 0	186.0	185.1	183.9	182.7	180.2	179.7	180.8	179.7	181.1	179.3	178.9
18 0	185.6	185.0	183.7	182.7	180.2	179.7	181.6	180.3	180.9	179.3	178.9
23 0	185.7	184.9	183.6	182.2	180.5	179.7	181.3	180.3	180.8	178'8	178.9
28  0	185.6	185.0	184'6	182.2	180.5	179.7	180.7	180.2	180.8	178.6	178.9
33 0	185.2	185.0	183.6	182.2	180.5	179.9	181.2	180.3	180.4	178.7	179.0
38 0	185.3	185.0	182.8	181.9	180.7	179.4	181.2	179.4	180 0	178.9	179.0
43 0	185.5	185.0	182.7	181.9	180.7	180.4	180.3	179.7	180'4	178.9	179.4
48 0	185.0	185.0	182.7	181.9	180.4	180.5	180.3	180.8	179.8	179.1	179.5
$ \begin{array}{ccc} 53 & 0 \\ 58 & 0 \end{array} $	185.0 185.0	185°0 185°0	$ \begin{array}{c c} 182.7 \\ 182.7 \\  \end{array}$	181°9 181°4	180°4 180°4	180.4	180.5	180.8	179.8	179.1	179.7 179.7
	185 0	100 0			100 4	100 4	180.2	180.3	179.4	179.1	1/9 /
Thermometer	38.3	38.1	38.3	38.0	40.0	40.0	40.0	40°2	40°·3	40.4	40.0
	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s				and the second second		Increasing	Numbers de	note decreas	ing Westerl	y Declinatio
w	11			TEOROLO	GICAL O	BSERVAT	IONS.				
Mean Göttingen	Baromete	The	rmometers.	_	Wind	l <b>.</b>			Weath	or.	
Time.	at 32°.	Dry.	Wet.	Direc	tion.	Force.			vy eatn	er. 	
р. н. м.	In.										
27 10 0	30.009	14.5	13.7	s.v	v	ery light.	(1)				
11 0	30.008			S.V	$\mathbf{v} = \mathbf{v}$	ery light.		; circum.			
12  0	29.997		11.7	s.v		ery light.		; circum.; ; slight sno			
13 0	29.971			N.V		ery light.		; siight sho ; circum.	***		
14 0	29.909	11.1	10.7	N. by	· W. ] V	ery light.		with haze.			
15 0	29.903	11.0	10.7	N. by	· W.   V	ery light.		; circum.	and haze.		
	29.883		10.5	N.N	.E.   V	ery light.		; haze and			
16 0	29.851			N.N	.E.   V	ery light.	Cloudy	; circum.			
$\begin{array}{cc} 16 & 0 \\ 17 & 0 \end{array}$	11 00.00-			1 TAT TO 2	TAT I TO	1:I. /		occasional s			
16 0 17 0 18 0	29.827			N.E. b		ery light.					
16 0 17 0 18 0 19 0	29.801	11.0	10.2	N.N	.E.   V	ery light.	Hazy;	occasional s			
16 0 17 0 18 0		11.1	10.2 10.8		E. V		Hazy; Hazy;		now.		

<sup>&</sup>lt;sup>a</sup> At 28<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 41° 4; of V. F., 40° 8.

					MAGNET	ICAL O	BSERVATIO	NS.		Feb	ruary 27th	and 28th.
		Declinatio	N.					Angu	lar Value	of one Scale	Division =	0'.721.
21h.	22h.	23h.	Oh.	1 h.	2 <sup>h</sup> .	3h.	4h.	5h.	6h.	7 <sup>h</sup> .	8h.	9h.
sc. Div. 115 '4 115 '8 115 '0 114 '2 114 '0 113 '8 113 '6 113 '4 113 '0 113 '1 114 '0 114 '1	Sc. Div. 114'2 114'6 114'7 114'8 115'0 114'8 115'0 116'0 116'0 116'0 116'0	Sc. Div. 116 ° 0 115 ° 5 115 ° 9 116 ° 0 115 ° 6 115 ° 4 115 ° 9 116 ° 0 116 ° 0 116 ° 0 116 ° 0 116 ° 2	Sc. Div. 116 '6 116 '6 117 '0 117 '0 117 '0 117 '1 117 '8 118 '0 118 '3 118 '8 118 '8 119 '0	Sc. Div. 119 0 119 0 119 2 119 3 119 7 119 2 119 8 119 7 120 0 120 2 120 4 121 0	Sc. Div. 121 ° 0 121 ° 0 121 ° 0 121 ° 0 120 ° 8 120 ° 6 121 ° 0 121 ° 2 121 ° 0 121 ° 0 121 ° 0 120 ° 6	Sc. Div   120 ° 6   120 ° 6   120 ° 6   120 ° 0   120 ° 0   120 ° 0   119 ° 8   119 ° 8   119 ° 2   119 ° 2   118 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117 ° 6   117	3     117.2       2     117.0       0     116.8       0     116.4       3     115.9       3     115.1       2     114.2       2     114.4       2     113.5       3     113.0	Sc. Div. 111'2 111'0 110'9 110'3 109'8 110'0 110'0 110'0 109'2 108'4 108'0 108'0 107'8	sc. Div. 108 ° 0 108 ° 0 108 ° 1 107 ° 9 108 ° 0 107 ° 4 107 ° 7 108 ° 0 107 ° 3 107 ° 0 107 ° 2 107 ° 1	Sc. Div. 107 ° 0 107 ° 0 107 ° 4 107 ° 1 106 ° 9 107 ° 0 107 ° 0 107 ° 0 107 ° 1 107 ° 2 107 ° 2 107 ° 2 107 ° 3	Sc. Div. 107 5 107 8 108 0 107 9 108 2 108 6 108 8 108 3 108 7 109 0 109 0 109 2	Sc. Div. 109'3 109'7 109'8 110'0 110'5 111'0 111'0 111'1 111'8 112'0
		Horizonta	· · · · · · · · · · · · · · · · · · ·		<del></del>		in Scale Division	)				- The NOTE A THE PROPERTY OF THE PARTY OF
621 '0 621 '0 621 '4 621 '8 621 '5 621 '5 621 '0 620 '8 620 '9 620 '1 620 '1 621 '0	621 · 3 621 · 0 621 · 0 621 · 5 622 · 0 622 · 0 622 · 0 621 · 2 622 · 0 621 · 4 622 · 0 622 · 0	622 ° 0 622 ° 0 621 ° 2 621 ° 6 622 ° 2 622 ° 0 622 ° 5 622 ° 2 622 ° 8 622 ° 2 622 ° 0 622 ° 0	622 1 623 0 623 0 623 0 623 0 623 0 622 0 622 0 622 0 622 0 621 0 621 0	620.0 620.0 619.6 619.4 620.3 620.6 619.4 619.6 618.8 618.0 618.2 616.4	616.6 616.4 616.4 616.3 615.6 615.0 615.2 614.4 614.3 613.8 613.4	613.2 612.2 612.0 611.2 610.4 610.8 610.2 610.0 609.8 609.8 608.8	607.6 607.1 607.0 606.4 605.0 605.4 605.0 604.0 604.3 604.2	604.8 603.0 605.0 606.0 605.8 604.6 604.6 605.0 606.7 607.0 606.4 606.6	606 '3 606 '4 607 '0 608 '1 608 '0 607 '8 609 '0 608 '4 608 '8 608 '2 609 '2 609 '6	610.0 610.8 610.6 610.2 610.0 611.9 611.8 612.0 613.7 613.6 613.4	613.8 614.0 614.4 612.0 613.0 613.6 615.0 617.2 617.0 617.0 617.0 618.0	618.0 618.0 617.0 617.5 617.0 616.8 617.0 617.0 617.0 617.5 617.0
39°2	<b>3</b> 9°·5	39.2	39°0	39°0	38.0	37.8	38.0	39.0	40°0	40.4	40°8	41°0 a
	· · · · · · · · · · · · · · · · · · ·	VERTICAL I	Force.		I	ncrease, i	n Scale Divisio	ons, correspon	ding to 1°	decrease of	Temperatur	e, 1°80.
179.7 179.7 179.7 181.0 181.1 181.2 181.2 181.2 181.5 181.5	181.5 181.7 181.4 181.4 181.6 181.4 181.6 181.4 181.3 181.3 181.3	182 1 182 1 182 1 182 1 182 1 182 1 182 1 182 1 182 1 182 1 182 1 182 5 182 5	183.0 183.0 183.0 183.0 183.6 183.6 183.6 183.6 183.6 183.6 183.6	184.7 184.8 184.6 184.8 184.7 184.7 184.7 184.9 184.9 185.0 185.2	185.2 185.1 184.9 185.2 185.1 185.5 185.6 185.6 185.6 185.6	185.6 185.2 185.4 185.4 185.4 185.5 185.5 184.9 185.0 185.2	185.5 184.9 184.9 184.6 184.4 185.0 185.0 184.5 184.2 184.6	184.7 184.3 184.3 184.5 184.5 184.5 184.5 184.7 184.3 184.3 184.3	183.7 183.7 183.7 183.7 183.7 183.5 183.5 183.5 183.5 183.5 183.3	183°3 183°0 183°0 183°0 183°0 183°0 183°0 182°8 182°8 182°8 182°8 182°4	182.4 182.7 182.7 182.2 182.2 182.2 182.2 182.2 182.2 182.5 182.5	182.7 182.7 182.7 182.3 182.3 182.3 182.3 182.3 182.3 182.3 182.3
40.0	40°0	40°0	40.0	39°5	38.4	38°3	38.2	39°4	40.0	40.0	40°·1	40°6 a
and increas	sing Horizo	ntal and Vert	ical Force.									
				MET	reorolo	GICAL	OBSERVAT	IONS.				
Mean Go		Barometer at 32°.	The Dry.	mometers.	37.		Wind.	100		V	Teather.	
D. H 27 22 28 (	27 22 0 29·757 11·8 11 23 0 29·731 11·6 10					by N. E. by N. by N. E. by E. E. by E. E. L. L. L. L. L. L. L.	Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Moderate, Modera	erate. erate. with gusts. erate. with gusts. with gusts. with gusts. with gusts. with gusts. with gusts. with gusts. with gusts.	Cloudy, Cloudy; Cloudy; Fair, wi Fair, wi Cloudy, Cloudy, Cloudy, Cloudy; Cloudy;		nd haze. um.	

March 18th and	19th.			MAGNET	CICAL OB	SERVATIO	NS.					
Mone C''ttin non	Angu	ılar Value o	f one Scale	Division =	0'.721.				Declinati	ON.		
Mean Göttingen Time.	10h.	11h.	12h.	13h.	14h.	15h.	16h	.   17 <sup>h</sup> .	18h.	19h.	20h.	
M. S. O O O O O O O O O O O O O O O O O O	sc. Div. 108'9 109'0 109'8 110'2 111'6 111'0 110'4 110'8 111'4 111'0 111'2 111'2	Sc. Div. 111 '2 111 '4 111 '8 112 '0 112 '0 112 '0 112 '0 111 '6 111 '4 112 '2 112 '0 112 '6	Sc. Div. 112.2 112.4 113.8 118.8 125.4 125.6 124.8 126.4 128.6 128.8 128.9 128.6	Sc. Div. 126.6 124.0 120.3 116.8 115.0 114.6 113.7 112.0 111.2 110.7 110.2 110.2	Sc. Div. 110 1 110 8 111 2 111 6 112 0 112 0 112 2 112 1 112 3 112 2 112 7 112 6	Sc. Div. 112 '8 112 '9 113 '0 113 '0 112 '9 112 '9 112 '9 112 '8 113 '0 113 '0 113 '0 113 '0 113 '0 113 '0	sc. D 113 113 113 113 113 113 113 113 113 11	0   113°2 0   113°2 0   113°5 0   113°9 1   13°8 1   13°8 1   13°8 1   13°5 2   113°5 2   113°9 2   113°8	sc. Div. 113'9 114'0 114'0 114'0 114'0 114'0 114'0 114'0 114'0 114'0 114'0 114'0 114'0	Sc. Div. 114'0 113'9 114'9 114'1 114'1 114'2 114'3 114'5 113'0 113'8	Sc. Div. 114·0 114·2 114·6 115·1 113·1 113·2 113·9 114·1 114·6 115·3 115·3	
	One S	Scale Divisio	on = .0000	087 parts o	f the H.F.			F	Iorizonta	Force.		
M. s. 2 0 7 0 12 0 17 0 22 0 27 6 32 0 37 0 42 0 47 0 52 0 57 0	600'9 601'8 601'6 603'2 606'6 607'0 605'4 607'4 606'8 607'2 605'4	607.0 607.2 608.8 607.2 606.8 607.5 606.8 606.8 602.7 601.8 602.0	600°8 599°6 600°0 597°6 597°6 597°8 595°2 590°7 592°0 593°0 592°8 594°2	595.0 595.0 594.2 593.1 593.0 595.6 597.2 599.6 601.8 602.0 601.9 603.0	602.8 603.0 602.8 602.4 603.0 603.0 603.0 603.6 603.0 603.2 603.4	603.4 603.0 603.7 604.0 603.8 603.4 603.0 603.0 603.2 603.2 603.4 604.0	603 · 603 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 · 602 ·	602.0 602.0 602.2 8 602.7 4 602.7 5 601.8 0 601.4 1 601.4 0 601.6	602.0 602.0 602.0 602.2 601.4 601.2 601.0 600.9 600.8 600.8	602.0 602.0 601.5 601.0 601.0 601.2 601.0 602.0 601.0 601.0 601.0	600°0 601°5 601°2 601°2 601°0 601°2 601°0 602°0 602°0 602°0 601°0	
Thermometer	52°4	52°2	52.0	52.7	5å°0	53.3	5å·9	54.0	, 1			
M. S.	One S	Scale Divisio	on = '0000	6.				<u> </u>	TERTCAL F	orce.		
3 0 8 0 13 0 18 0 23 0 28 0 33 0 33 0 43 0 48 0 53 0 58 0	163 · 4 164 · 2 164 · 2 164 · 3 164 · 8 164 · 8 164 · 1 164 · 1 164 · 1 164 · 1 164 · 1	164.4 164.6 164.6 164.7 164.7 164.7 165.2 165.2 165.2 164.8	164.7 165.1 165.1 165.5 164.2 163.3 161.9 161.7 161.9 160.9 161.2	161.2 159.1 158.1 158.3 158.7 158.6 158.0 158.0 158.0 157.5 157.5	156.5 156.5 156.0 156.0 156.0 156.4 156.3 156.1 156.1 156.4 156.0 155.9	155.9 156.4 156.2 156.2 155.6 155.6 156.2 156.2 156.2 155.7 155.7	156 2 158 1 158 8 155 8 156 9 156 9 156 9 156 9 156 9	1   156°2 3   155°1 3   155°1 6   155°1 155°1 155°5 155°5 2   155°5 2   155°6 2   155°9	156°2			
Thermometer	51.1	5η1	5η1	53*5	54.1	54.0	54.	3 5 <b>4</b> ·1	53.9	54.4	54.3	
A CANADA							Increasi	ng Numbers de	note decreas	ing Westerl	y Declination	
		METEOROLOGICAL OBSERVATIONS.									<del>-</del>	
Mean Göttingen Time.	Barometer at 32°.	Ther	wet.	Dire	etion.	Wind. Force.		Weather.				
D. H. M.  18 10 0  11 0  12 0  13 0  14 0  15 0  16 0  17 0  18 0  19 0  20 0  21 0	1n. 29.752 29.754 29.750 29.735 29.736 29.716 29.715 29.720 29.715 29.690 29.681	37.6 35.1 33.6 32.4	35·3 34·0 32·1 30·4 29·3 30·1 29·4 29·2 31·2 30·7 31·7	E. b E. k E.N N. N.	E. by N. i.E. E. E. by N. by N.	Very lig Very lig Very lig Very lig Very lig Very lig Very lig Very lig Very lig Calm.	ht. ht. ht. ht. ht. ht. ht. ht. ht. ht.	Cloudy; cir Cloudy; cir Cloudy; cir Generally clo Cloudy; cir Cloudy; cir Cloudy; cir Cloudy; cir Cloudy; cir Cloudy; cir Cloudy; cir Cloudy; cir Cloudy; cir Cloudy; cir Cloudy; cir	cum. and cur cum. and str cum. and haz udy, with st cum. and cir cum. and str strat. and ha strat. and ha cum. and str cum. and str	nstrat. at. ze. ratstrat. at. ze. ze. at. at.		

 $<sup>^</sup>a$  At  $19^d$   $10^h,$  Thermometer of H.F.,  $56^{\circ} \cdot 3$  ; of V.F.,  $56^{\circ} \cdot 2.$ 

						CALL AND	, METEO						
						MAGNET	ICAL OB	SERVATI	ONS.		M	Tarch 18th a	and 19th.
			DECLINATI	on.					Ang	gular Value	of one Scale	Division =	0''721.
	21h.	22հ.	23h.	0 <sup>h</sup> .	1 <sup>h</sup> .	2h.	3 <sup>հ</sup> .	4h.	ٽ <sup>ار</sup> .	Gh.	7h.	8h.	9 <sup>հ</sup> .
	sc. Div. 114 '8 114 '6 114 '1 114 '1 115 '0 114 '8 115 '0 114 '8 115 '0 115 '0 114 '7	Sc. Div. 115 0 114 8 114 2 114 3 114 8 114 2 114 2 114 2 114 5 114 6 114 5 114 8	sc. Div. 114'2 114'2 114'6 114'7 114'3 114'4 114'6 114'4 114'6 114'6 114'6 114'6	Sc. Div. 115 '0 115 '2 115 '3 115 '4 116 '0 116 '0 117 '2 116 '8 117 '2 118 '0 117 '8 118 '5	Sc. Div. 117 '6 117 '8 118 '6 118 '2 118 '4 119 '6 119 '6 119 '4 119 '0 119 '8 119 '8 120 '0	Sc. Div. 120 ° 2 121 ° 3 120 ° 2 120 ° 0 120 ° 2 120 ° 4 120 ° 4 120 ° 4 119 ° 2 119 ° 2 118 ° 4 117 ° 6	Sc. Div. 118 · 2 118 · 2 118 · 2 119 · 9 119 · 7 119 · 6 119 · 8 119 · 2 118 · 9 119 · 0 118 · 2 118 · 2	Sc. Div. 118.1 117.7 117.2 116.5 116.3 115.9 116.2 116.0 116.6 116.0 116.1 115.0	Sc. Div. 114.0 114.1 115.6 114.3 114.0 114.0 112.9 112.0 111.8 111.4 110.8	Sc. Div. 110'4 110'2 110'0 109'8 109'5 109'0 108'2 108'0 108'1 108'0 108'0 108'0	Sc. Div. 108.2 108.0 109.0 108.0 107.0 107.0 107.2 107.2 106.8 107.0 107.2	Sc. Div. 107 ° 0 107 ° 0 107 ° 2 107 ° 2 107 ° 0 107 ° 4 107 ° 0 107 ° 4 107 ° 8 107 ° 6 107 ° 8 108 ° 0	Sc. Div. 107 · 3 107 · 2 107 · 4 107 · 8 107 · 0 107 · 8 107 · 8 107 · 8 107 · 8 108 · 8 109 · 2 109 · 2
. :			HORIZONTA	L Force.		In	crease, in	Scale Divisio	ons, correspo	onding to 1°	decrease of	Temperatur	e, 1.63.
	600.0 600.0 600.0 600.8 601.0 601.0 600.0 600.0 600.2 601.0 600.0	600°0 601°5 601°7 601°4 601°4 600°6 600°4 601°6 601°6 601°6 601°6 601°8	601.0 601.4 600.6 600.8 600.4 600.8 600.6 601.0 600.2 599.8 600.0 600.3	600 0 600 3 600 4 600 6 601 6 601 8 600 0 600 6 599 2 601 0 597 7 598 8	598.0 597.0 597.4 597.2 597.0 598.2 595.4 596.0 595.4 595.2 594.2 593.4	592 · 8 592 · 0 593 · 7 593 · 2 592 · 0 592 · 0 592 · 0 592 · 0 590 · 8 587 · 8 590 · 0 589 · 4 586 · 6	585.0 583.8 585.6 584.5 586.4 585.6 584.0 584.0 582.0 583.8 583.8 585.0	583·4 585·2 585·0 585·0 584·0 582·1 581·5 582·0 582·4 582·2 579·9 580·5	581 '8 581 '8 581 '0 578 '2 579 '0 578 '0 578 '0 578 '0 577 '0 578 '2 577 '8	578.0 577.0 577.2 574.5 573.6 575.5 574.5 575.5 576.0 578.3 577.0 577.0	578.5 579.5 580.0 581.0 582.0 582.5 583.0 583.0 581.3 580.5 581.4 581.6	583·4 583·4 584·7 585·0 585·4 587·0 584·8 587·4 587·2 585·7 587·4 588·2	589.8 591.3 592.4 593.2 599.2 596.8 595.8 596.0 594.7 590.0 590.7
	53°2	53.0	53.5	53°5	53.0	52°6	53°4	54.0	5а0	55°2	56°0	56.4	56°5ª
			VERTICAL	Force.		Inc	rease, in Sc	eale Division	s, correspon	ding to 1° d	ecrease of T	Cemperature,	1.80.
	156·2 156·9 156·9 156·9 156·9 156·9 156·9 156·9 156·9 156·9 156·9	156.5 156.5 156.5 156.5 156.4 156.4 156.6 156.6 156.5 156.5	155.2 155.3 155.4 155.4 155.4 155.7 155.5 156.5 156.5 156.7	156.7 156.6 156.5 156.5 156.5 156.5 156.5 156.0 156.0 156.1 154.8 155.5	155 5 156 1 156 1 157 6 157 6 158 3 158 8 158 8 159 3 159 3 159 3 159 3	159.7 159.6 159.9 159.9 159.9 159.7 159.7 159.7 159.4 159.6 159.6 159.3	159'8 158'7 159'2 159'2 159'6 159'3 159'3 158'8 158'7 158'7 158'6 158'6	158.6 158.6 158.3 158.3 157.3 157.1 157.1 157.1 156.3 156.3 156.3	156.3 156.5 156.5 155.8 156.0 156.0 155.6 156.0 155.2 155.2 155.5 155.5	155.0 155.0 154.5 154.5 154.5 154.8 154.8 154.8 154.8 154.8 154.8 154.9 154.9	154'9 154'9 154'9 154'9 154'9 154'9 154'6 153'7 153'8 153'8	153.9 153.9 154.0 154.5 154.2 154.2 154.2 154.2 154.2 154.3 154.3	154.3 154.4 154.3 154.5 156.0 156.0 155.1 155.2 154.9 154.9 156.0 154.7
	53°8 .	5å·5	53.5	53°3	5å°3	53.1	53.4	5 <sup>4</sup> ·1	54°3	54°9	55.5	55.6	56.1ª
	and increasi	ing Horizo	ntal and Vert	ical Force.									
-					MET	reorolog	GICAL O	BSERVAT	IONS.				
	Mean Gö Tim		Barometer at 32°.		wet.	Directio	Wind.	Force.	-	•	Weath	er.	
	18 22 23	Time. at 32°. Dry. Wet.    D. H. M.   In.			31.7 32.5 32.9 33.6 33.2 37.0 36.7 39.4 39.4 41.9	N.E. E. N.E. E. by N. E. by S. E	Ver Ver Ver Ver Ver	Calm. Calm. Calm. Calm. ry light. ry light. ry light. ry light. ry light. ry light. Calm. Calm.	Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy;	circum. an circum. ar circum. ar strat. and h strat. and h cirstrat. a cirstrat. a circum. ar circum. ar circum. ar circum. ar circum. ar	nd haze, ad strat. aze. aze. aze. aze. ad haze. ad haze. ad strat. ad strat. ad cirstrat		

April 22nd and 23	Brd.	- <u>.</u>		MAGN	ETICAL	OBSERVA'	rions.				
Mean Göttingen	Angula	r Value of c	ne Scale Di	ivision = (	oʻ·721.				DECLINAT	YON.	
Time.	10h.	11h.	12h.	13 <sup>h</sup> .	14h.	15h.	16h.	17h.	18h.	19h.	20h.
M. s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 112.6	Sc. Div. 112.8	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
$egin{array}{ccc} 0 & 0 \ 5 & 0 \end{array}$	108.9	111.9 115.0	111.8 111.8	113.8	110.9	112.0	112.8	111.3	113.0	113.6	114.0 114.2
10 0	110.0	112.0	112.2	114.7	110.4	112.1	112.7	111.8	113.0	113.8	114.8
15 0	110.0	112.6	112.0	114.4	109.2	112.0	112.9	112.0	113.0	113.8	114.8
20 0	109.8	112.8	112.0	113.8	111.0	112.2	112.9	111.7	113.0	114.0	114.7
25   0	110.3	112.6	111.5	112.2	111.9	112.4	112.8	112.2	112.3	113.6	114.3
30 0	110.7	112.4	110.8	111.8	112.0	112.6	112.1	112.2	113.0	113.4	114.2
35 0	110.9	112.5	110.3	111.8	111.8	112.8	112'1	112.0	113.0	113.8	114.3
40 0	111.0	112.2	111.5	112.2	112.0	113.0	112.0	112.0	112.8	114.0	114.3
$ \begin{array}{ccc} 45 & 0 \\ 50 & 0 \end{array} $	111.0	112.3	114.0 115.9	112.1 115.1	112.8 112.3	113.0	112.1 112.2	112.0	113.0	114·2 114·0	114.3
$ \begin{array}{ccc} 50 & 0 \\ 55 & 0 \end{array} $	111.8	112.2 111.8	113.8	111.1	112.3	113.0	112.1	112.7	113.3	114.0	114°7 114°8
44.4.4.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.	One S	cale Division	a = .0000	)87 parts o	f the H. F	 		I	Horizoni	AL FORCE	·
M. S.	- <del></del>				1		505.0	E00:0	1	1	<del></del>
7 0	588.2 589.0	593°2 596°0	592.0	566°8 567°9	587.0 587.4	585°8 585°6	585°9 586°0	586 <b>.</b> 9 585 <b>.</b> 5	585°2 585°0	586.0	587.0
12  0	589.8	599.8	588.2	570°5	583.0	586.0	286.0	585.8	585.0	585 <b>.</b> 9	587°2 588°0
17 0	587.0	600.8	588.6	575.0	583.0	586.0	586.2	586.0	585.0	586.4	588.2
$\frac{1}{22}$ 0	590.2	601.0	585.6	578.0	582.0	586.0	587.0	585.0	586.0	586.6	588.5
27  0	590.3	600.0	585.8	379.2	581.2	585.9	587.0	586.0	585.9	586.6	588.0
32 0	592.9	598.8	584.8	579.2	584.4	586.0	587°0	586.0	586.0	586*8	587.6
37 0	595.5	599.4	585.0	579.0	584.0	586.1	586.0	586.0	586.8	586.2	587.5
$\frac{42}{47}$ 0	595.0	596.0	584.8	581.2	584.2	586.2	586.5	586.0	586.0	586'2	587.5
$egin{array}{ccc} 47 & 0 \ 52 & 0 \end{array}$	595.0 593.2	594.2 591.0	580°0 581°2	585°8 588°5	585°0 585°8	586°2 586°2	586.1	586.0	585.0	586.3	588.0
57 O	591.2	591.2	573.8	289.0	585.8	586.0	586.5 586.5	586°0 585°5	585°3 585°3	586.4 587.0	587°8 588°3
Thermometer	60.2	60°.3	60°.0	60°1	60°3	60°4	59.0	59°5	59°4	59°1	59°4
Tr. G	One S	cale Division	a = .0000	)63 parts o	f the V. F		I		Vertical	Force.	
м. s. 3 0	206.4	207.6	209.4	209.1	202.5	200.3	200.6	203.1	203 3	203.7	204.5
8 0	206.6	208.1	209 6	209.1	202.5	200.3	201.4	203 1	203.1	203.7	204.0
13 0	206.6	208.9	210.3	207.5	202°1	200.4	201.4	203.1	203 1	204.3	204.0
18 0	206.4	208.6	210.3	207.0	201.9	200.2	201.4	203.1	203.4	204.2	204.1
23 0	206.4	208.6	210.7	205.7	200.9	200.3	202.4	203.3	203.4	204.4	204.1
28 0	206.7	209.3	210.7	205.7	200.9	200.1	202.4	203.3	203.4	204.4	204.2
$ \begin{array}{ccc} 33 & 0 \\ 38 & 0 \end{array} $	207.6	209 3 209 5	210.7 211.1	205°1 205°1	201.3	199.9	202.4	203.3	203.4	204.3	204.2
$\begin{array}{ccc} 33 & 0 \\ 43 & 0 \end{array}$	207.5	209.3	211.0	204.4	200.5	200 1	202 4	203.3	203.5	204.2	204°2 204°2
48 0	208.6	210.2	211.0	204.4	200.0	200.1	203.0	203.3	203.7	204.2	204.4
53 0	207.5	210.4	210.7	203.6	200.0	200.2	203.0	203.3	203.7	204.2	204.4
58 0	207.4	209.4	210.7	203.6	200.3	200.5	203.1	203.3	203.7	204.2	204.4
		59°.6				- 0		·			
Thermometer	59.4	59.6	60.0	60°.0	61.1	61.1	60.6	60.2	60.0	60°0	59° <b>2</b>
	· <del>·····</del>	<del></del>	~	Mary or the	0070:-			Numbers de	note decreas	ing Westerl	Declination
	1 _	Ther	ME mometers.		OGICAL Wir	OBSERVAT	TONS.				
Mean Göttingen Time.	Barometer at 32°.	Dry.	Wet.	Dire	ection.	Force.			Weathe	r.	
D. H. M.	In.	0	0					_			
22 10 0	29.704	52.0	48.2	E. F	y S.	Very light	. Cloud	· oin	, cirstrat.,	and have	
11 0	29.700	48.7	45.9			Calm.		; circum.	, cirstrat., a , cirstrat., a	ing pase	
12 0	29.672	46.8	44.3	-	_	$\operatorname{Calm}$ .		; circum.			
13 0	29.668	44.8	43.0		_	Calm.	Cloudy	; circum.	and haze.		
$egin{array}{ccc} 14 & 0 \ 15 & 0 \end{array}$	29.680 29.668	43.8	42.1	S.	w.	Very light	· Cloudy	; circum.	, cirstrat.,	and haze.	
16 0	29 668	44.2	42.7	-	-	Calm.	Cloudy	; circum.	·		
17 0	29.644	43.6	42.8	-	-	Calm.		; circum.			
18 0	29.645	46.3	45.1	-	_	Calm. Calm.		; circum.			
19 0	29.645	46.5	45.5			Calm. Calm.			, strat., and	naze.	
20 0	29.652	46.6	44.6		_	Calm.	Cloudy Cloudy				
20 U			1 -~ 0	1	1		Loronay	, 1au.			
$\begin{array}{ccc} 20 & 0 \\ 21 & 0 \end{array}$	29.648	46.3	44.6	-	_	Calm.	Cloudy	: rain.			

<sup>&</sup>lt;sup>a</sup> At 23<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 61° 3; of V. F., 61° 0.

<u> </u>			, , , , , , , , , , , , , , , , , , , ,	· 100	1	MAGNETI	CAL OB	SERVATIO	NS.	*****		<del></del>	April 22nd	and 23rd.
			DECLINATI	ON.				:	•	Angu	lar Value	of one Scale	e Division =	- 0' 721.
-	21 <sup>h</sup> .	22 <sup>h</sup> .	23h.	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .		6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
	Sc. Div. 115 0 115 2 115 2 115 2 115 0 115 3 115 0 115 2 115 2 115 2 115 2 115 2 115 2	Sc. Div. 115 '2 115 '6 115 '4 115 '4 116 '2 116 '4 116 '2 116 '0 116 '2 116 '0 116 '0 116 '0	sc. Div. 116·2 116·4 117·8 118·0 118·2 118·0 118·2 118·6 118·2 119·0	sc. Div. 118 '8 119 '0 119 '0 118 '8 118 '8 119 '2 119 '2 119 '2 119 '0 118 '3 119 '0	Sc. Div. 119 '4 120 '2 121 '0 121 '1 120 '4 120 '7 120 '5 121 '0 122 '0 122 '4 121 '0 120 '7	Sc. Div. 120'8 120'0 119'8 119'0 118'8 119'2 118'8 118'3 118'2 118'0 117'0	Sc. Div. 116'8 116'7 116'1 116'0 115'8 115'4 115'2 114'8 114'2 113'1 112'7 112'8	Sc. Div. 111 '7 111 '2 111 '0 110 '9 109 '8 109 '0 108 '5 108 '0 107 '7 107 '1 107 '2 106 '6	Sc. D 105 105 105 104 104 103 103 103 102 102 102	8 5 0 0 0 8 4 1 0 5 7	Sc. Div. 102'3 102'0 102'0 102'0 102'0 102'0 102'0 102'0 102'0 101'6 101'2 101'0 101'2	Sc. Div. 101 '2 101 '2 101 '4 101 '4 101 '6 102 '0 102 '0 102 '0 102 '0 102 '0 102 '3 102 '3 102 '8	Sc. Div. 103 · 2 103 · 4 103 · 4 103 · 6 103 · 8 104 · 2 104 · 2 104 · 4 104 · 4 104 · 4 104 · 8 104 · 4	Sc. Div. 104'9 105'0 105'4 104'3 104'2 104'8 105'0 105'8 106'3 106'8 107'0
		· · · · · · · · · · · · · · · · · · ·	Horizonta	L Force.		I	ncrease, in	Scale Divisio	ns, corr	espon	ding to 1°	decrease of	Temperatui	re, 1.63.
	588 · 2 588 · 3 588 · 2 588 · 5 588 · 6 588 · 6 588 · 3 588 · 6 588 · 5 588 · 5	589'4 590'2 590'0 589'2 589'0 588'4 588'2 588'4 590'5 591'0 592'2	592.2 592.8 593.2 593.2 593.2 593.2 592.0 592.2 592.2 592.4 590.0	593.8 594.0 595.4 593.6 593.8 594.2 594.0 593.4 593.6 593.0 594.7	592.6 592.8 591.2 591.8 590.4 592.0 590.8 591.8 591.8 591.0 589.0	588.0 585.8 586.0 584.7 582.2 581.0 578.8 577.2 576.8 575.8 575.0	574·2 573·4 573·4 573·5 572·0 571·6 571·3 571·0 571·0 571·4 571·2 570·3	570°5 569°8 569°0 568°7 569°2 569°6 569°4 570°0 570°0 570°8 571°0	571 · 6 572 · 6 572 · 6 571 · 6 571 · 6 571 · 6 572 · 6 573 · 6 574 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 · 6 575 ·		576·1 576·0 577·0 578·0 578·0 578·6 578·8 578·8 579·0 579·7 580·6 580·3	580°8 580°6 581°0 581°4 581°6 582°2 583°2 584°0 583°6 586°0 583°0 582°8	585.0 586.2 588.2 589.0 589.4 589.0 588.2 588.2 591.8 598.4 600.0 598.2	597.8 596.4 595.2 605.6 610.2 611.8 612.2 608.4 604.8 597.4 595.5 593.8
	59.6	593.4	593.4 59.8	593°3 59°6	59.5	59°7	60.0	60°.8	60°	]-	990.9	61.5	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	61.3°
,			VERTICAL	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	***************************************		crease, in	Scale Division	ns, corre	spond	ling to 1°	decrease of	Temperatur	e, 1°64.
	204·4 204·4 204·4 204·7 204·7 204·7 204·7 204·8 204·8 204·8 204·7	204·5 205·2 205·2 205·2 205·2 205·4 203·4 202·6 201·0 201·2 201·2 201·7	201.7 202.1 202.3 202.3 202.3 202.3 202.0 202.0 202.0 202.0 202.0 202.8	202 · 8 202 · 8 202 · 8 202 · 5 202 · 5 202 · 5 202 · 5 202 · 1 202 · 1 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 5 202 · 8	202·7 204·2 203·4 203·6 204·1 204·1 203·8 204·1 204·1 204·2 204·2	203 · 8 203 · 8 204 · 6 203 · 3 203 · 5 203 · 3 203 · 3 202 · 7 202 · 7 202 · 7 202 · 7	202°7 202°8 202°8 203°4 203°4 202°7 202°7 201°9 202°7 202°6 202°1 202°1	202·1 201·7 201·7 201·3 201·1 201·1 201·0 200·3 200·5 200·5 200·5	200 ° 6 200 ° 3 199 ° 1 199 ° 1 199 ° 6 199 ° 6 199 ° 6 199 ° 6	777766666666666666666666666666666666666	199.6 199.6 199.6 199.6 199.6 199.6 199.1 199.2 198.8 198.8 199.4	199°4 199°4 199°1 199°2 199°2 199°8 199°8 199°7 200°3 200°2 200°1 200°7	200.6 200.6 200.6 201.1 201.2 201.4 201.4 201.4 201.4 202.2 202.7 202.7	202·7 202·7 202·0 204·4 204·9 205·1 205·1 204·7 204·4 202·6 202·6 202·0
Ą	59°4	60.6	60°.6	60°1	59°7	59.0	59°2	60°.0	60°0	)	60°4	60°4	60°3	60.2 a
	and increa	sing Horizo	ontal and Ver	tical Force.										
			(1)	1	ME'	reorolo		OBSERVAT	IONS.					
		öttingen ne.	Barometer at 32°.		wet.	Direc	1	Vind. Force.				Wea	ther.	
	6	2 0 3 0 0 0 1 0 2 0 3 0 4 0 5 0 6 0 7 0	In. 29.653 29.651 29.639 29.650 29.646 29.654 29.635 29.635 29.605 29.565	6 47.5 48.1 49.5 51.3 51.2 47.7 50.7 52.2 54.2 55.0 55.8 55.5	0 47.0 46.2 47.7 49.8 51.1 47.0 48.7 49.2 50.1 50.8 50.7 50.8	N. by N.E. l E.S E.N N.E. l E.N E.N	.E. .E. .E. .E. .E. .E.	Very lig Calm. Very lig Calm. Very lig Very lig Wery lig Moderat Moderat Moderat	ht. ht. ht. e. e.	Clou Clou Clou Hazy Hazy Hazy Hazy Hazy	y; eircu y; eircu y; eircu y; eircu y; eircu	m. and cirs m. and cir m. m. and cir	strat. strat.	

May 29th and 3	Oth,			MAGNET	CICAL O	BSERVATIO	NS.				
Mean Göttingen	Angula	r Value of	one Scale D	ivision =0	721.		<del></del> -		DECLINAT	TION.	
Time.	10h.	11h.	12h.	13h.	14h.	15h.	16h.	17h.	18 <sup>h</sup> .	19 <sup>h</sup> .	20h.
M. s. 0 0 5 0 10 0	sc. Div. 106*8 107*0 107*2	sc. Div. 109°2 109°0 109°0	Sc. Div. 108 2 108 0 106 8	Sc. Div. 110°0 109°8 109°3	Sc. Div 109 8 109 8 109 6	110.4	sc. Div. 125 6 127 8 128 0	sc. Div. 126°0 124°5 123°6	Sc. Div. 117'0 118'2 119'1	Sc. Div. 115°2 114°8 114°8	sc. Div 115 4 116 2 115 8
15 0 20 0 25 0 30 0	107.8 108.2 109.0 109.1	109.3 109.1 109.3	106.0 106.3 107.0 107.6	108.8 109.0 109.2 109.0	109.7 109.8 110.2 110.4	110.6 112.2 114.4 118.0	126.6 124.8 125.0 127.8	123 · 2 123 · 4 123 · 6 123 · 6 121 · 4	119.6 119.2 119.0 119.8	114.9 115.0 114.7 114.8 115.3	115.0 114.3 114.2 114.4 115.0
35 0 40 0 45 0 50 0 55 0	110.0 110.0 110.0 110.0	108.8 108.3 108.2 108.6	108.0 108.2 109.0 109.7 110.0	109.0 109.2 109.0 109.2 109.2	110°0 109°4 109°8 109°4 109°7	128.0 125.8 124.6	129.6 127.6 124.8 124.2 125.0	121 · 2 120 · 1 118 · 8 118 · 0	117 · 0 117 · 0 117 · 0 116 · 2	115.8 115.0 115.1 115.0	112.4 112.2 112.0 111.1
м. s.	One Sc	ale Divisio	m = .0000	87 parts of	the H. F.		1		Horizon	AL FORCE	
2 0 7 0 12 0 17 0 22 0 27 0 32 0 37 0 42 0 47 0 52 0	582 · 5 583 · 8 583 · 8 589 · 5 595 · 0 597 · 0 597 · 5 598 · 5 599 · 0 598 · 0	588.0 590.0 591.0 591.0 589.0 588.0 588.0 586.0 582.0 580.0	576.5 574.0 572.5 572.0 572.0 573.4 569.8 570.4 571.0 571.8 573.0	575·2 575·0 575·4 575·7 576·2 576·3 577·0 577·2 577·4 578·0 578·2	578.0 579.2 577.3 578.0 577.2 577.0 578.2 578.4 578.0	578.4 578.0 578.2 580.2 581.0 581.4 584.2 584.0 582.0	580.0 581.6 581.0 581.6 577.2 572.8 572.2 572.8 571.2 566.8 565.4	569°2 571°2 570°0 570°0 569°0 567°4 567°2 565°4 567°2 568°8 570°0	569.4 570.8 572.2 573.2 572.8 570.6 568.4 567.5 568.0 569.0	570.4 571.5 573.2 573.0 573.5 575.0 574.0 573.4 573.4 572.0 572.0	571.0 572.2 574.0 573.8 576.2 577.0 578.2 575.8 575.0 574.4 573.6
57 0	591.0 73.2	576°5 73°5	576·2 72·1	578·4 72°0	577.0 577.4 71.4	584.5 584.0 71.4	71.0	570.4 70.8	570°0	571.8 70.4	70.2
Thermometer	1 1		= .00006		1	71.4	71.0		VERTICAL	 	10 Z
M. s. 3 0 8 0 13 0 18 0 23 0 28 0 33 0 38 0 43 0 48 0 53 0 58 0	179 1 179 1 179 1 181 1 181 8 181 8 182 7 182 7 182 8 182 8 181 8	181'4 183'0 183'1 183'1 183'1 183'1 183'1 183'1 183'1 183'1 183'1	182.5 183.0 182.5 182.5 182.5 182.5 182.5 182.5 182.5 182.5 182.5 182.5	182 '7 182 '7 182 '7 182 '8 182 '8 182 '8 182 '9 182 '9 182 '6 182 '6 182 '6	182.9 182.4 182.2 181.8 180.6 180.4 179.9 179.9 179.9 179.9	179'9 179'9 179'9 179'9 179'9 179'9 179'6 179'5 175'5 175'5 175'5	174'3 174'3 174'1 173'0 171'3 171'3 171'5 171'5 172'0 174'2 174'6 177'1	177 · 1 176 · 7 174 · 6 174 · 6 174 · 3 172 · 9 172 · 9 172 · 1 174 · 4 174 · 4 174 · 4	174.4 174.7 175.4 175.4 174.7 175.0 175.0 173.4 173.4 173.4 175.0 177.1	179·2 177·7 178·6 177·8 177·8 179·4 179·4 179·4 179·9 181·4 181·4 182·1	182°1 182°1 182°3 182°6 182°7 182°7 182°2 181°8 181°5 181°5 181°3 181°2
Thermometer	71.9	7i°5	71.3	70°·8	70°.5	70.9	72°3	72°·3	72.3	72.3	70°8
*** *** · · · · · · · · · · · · · · · ·		······································	Мт	PEODOT 0	OTO AT			Numbers der	note decreas	ing Westerly	/ Declination
Mean Gottingen Time.	Barometer at 32°.	Ther Dry.	mometers.	Direc	Win	OBSERVAT	IONS.		Weath	er.	
D. H. M.  29 10 0  11 0  12 0  13 0  14 0  15 0  16 0  17 0  18 0  19 0  20 0  21 0	In. 29 '275 29 '263 29 '255 29 '262 29 '252 29 '258 29 '240 29 '247 29 '227 29 '241 29 '203 29 '199	69·2 64·8 65·0 64·0 61·7 61·7 62·1 62·6 61·8 59·9 60·5	63·1 60·2 60·2 60·0 58·2 57·3 57·4 57·5 58·2 59·2 58·8	E. by E. by E. by E. by N.N.	y S. y S. y S. y S. y S. y S. y S. y S.	Very light Very light Calm. Calm. Very light Calm. Calm. Calm. Calm. Very light Very light Very light	Cloud Cloud Cloud Cloud Cloud Cloud Cverc Overc Overc Overc	y; circum y; circum y; circum y; circum y; circum y; circum ast; rain, li ast; rain, li ast; lightni ast; lightni ast; lightni ast; rain, w	and cums. and cums. , cumstrat. , cumstrat. , cumstrat ghtning, and ghtning, and ghtning, and ghtning, and thun ng, thunder,	strat, and haze, and haze, and haze, and haze. l thunder. l thunder. l thunder. der; occasio and occasio	nal rain.

<sup>&</sup>lt;sup>a</sup> At 30<sup>d</sup> 10<sup>h</sup> Thermometer of H. F., 73° · 5; of V. F., 72° · 0.

{				1	MAGNET	ICAL (	OBSEI	RVATIO	NS.			May 29th	and 30th
		DECLINAT	ION.					.,		noular Value	e of one Sca	le Division :	
21b.	22h.	23h.	Oh.	1 <sup>b</sup> .	2h,	3h.	.	4h.	5 <sup>h</sup> .	6h.	7 <sup>h</sup> .	8h.	9h.
sc. Div. 110 '2 109 '6 108 '8 107 '8 107 '5	sc. Div.   109°2   109°1   110°2   111°7   112°6	Sc. Div. 115 '9 117 '0 118 '5 120 '0 120 '9	sc. Div. 125 ° 0 124 ° 8 126 ° 0 126 ° 8 127 ° 0	Sc. Div. 130 ° 0 131 ° 0 130 ° 0 127 ° 5 127 ° 0	sc. Div. 126 ° 0 126 ° 0 126 ° 0 127 ° 0 127 ° 4	Sc. Di 120 119 118 117 118	$ \begin{array}{c cccc} 2 & 1 \\ 0 & 1 \\ 2 & 1 \\ 6 & 1 \end{array} $	Sc. Div. 17.0 17.0 16.2 14.4	Sc. Div. 109°2 108°4 108°3 110°0 111°2	Sc. Div. 106°2 105°8 105°8 105°0 104°6	Sc. Div. 97.6 98.7 99.8 100.2 100.3	Sc. Div. 100°6 101°0 101°8 103°3 103°4	Sc. Div. 104'2 104'1 104'3 104'7 105'0
106.8 106.0 107.2 106.2 106.5 107.0 108.3	113.8 115.0 114.7 114.8 115.9 117.0 116.9	121 · 2 121 · 9 122 · 6 121 · 7 122 · 0 123 · 0 124 · 0	127.0 126.2 126.0 126.8 127.8 128.7 129.7	127.8 128.0 128.0 128.0 127.0 127.0 126.0	128'8 129'4 129'0 129'4 125'7 123'0 121'3	117 117 117 117 116 117 117	4   1   0   1   2   1   4   1   6   1   1   0   1   1	14.8 14.8 15.0 17.2 13.6 12.0 109.6	111.4 111.2 110.8 109.4 107.0 105.4 106.0	102.8 98.6 98.7 97.7 97.4 96.5 96.8	100 '8 100 '8 100 '2 100 '0 100 '8 100 '6 100 '3	104.0 103.9 104.0 104.4 104.0 103.4	105·3 105·4 105·8 105·8 105·0 106·2 106·4
	1	Horizont	AL FORCE.		]	Increase	, in Sc	ale Divisi	ons, corresp	onding to 1	° decrease c	of temperatur	e, 1.63.
572.6 573.7 571.6 571.0 567.4 566.2 568.2 567.4 566.2 565.0 565.2	567.0 566.0 565.9 568.8 572.0 569.0 570.9 571.0 571.0 574.8 574.7	573.0 573.4 578.0 578.0 578.0 579.4 578.5 578.0 578.8 579.0 578.8 578.0	578.0 579.0 576.5 579.4 580.9 581.0 580.0 578.0 577.0 574.0 572.0 569.9	567.2 568.0 568.5 571.0 572.0 569.0 567.5 568.0 567.0 567.0	566.0 565.0 562.5 561.0 562.2 566.0 560.6 560.4 557.2 557.6 554.0 554.0	554° 555° 556° 556° 553° 554° 554° 557° 560° 557° 557°	0   8   8   8   8   8   8   8   8   8	560°2 559°0 558°2 556°0 554°8 555°0 556°2 556°2 551°4 551°6 554°4	555·2 546·8 554·6 556·2 551·4 550·0 547·6 552·5 546·4 543·4 551·8 554·6	551 · 2 550 · 6 556 · 6 556 · 4 557 · 4 554 · 8 550 · 6 546 · 2 541 · 5 543 · 0 546 · 8 551 · 5	551·2 553·5 560·0 567·0 568·4 569·0 567·8 565·0 564·0 564·0 564·0 562·0	562.2 560.8 564.1 573.0 578.8 578.0 580.0 570.6 571.0 571.1 571.0	575.0 577.0 578.0 581.2 580.0 579.8 580.0 577.0 576.2 583.0 584.0 584.0
70.0	70°0	69°5	69.0	69°0	69°0	68°	7	69°4	70°2	70°8	71.7	72°4	73°0°
		VERTICAL	Force.			Increas	se, in S	cale Divis	sions, corres	ponding to	l° decrease	of temperatu	re, 1.64.
180.6 180.0 179.2 178.3 177.8 176.1 176.0 176.0 175.4 174.7 174.3	Vertical Force.  6   174.3   176.1   181.5   183.0   0   173.9   176.1   181.5   183.3   2   173.9   176.0   182.1   183.3   3   174.0   176.1   182.1   183.8   8   174.0   176.1   182.2   183.8   1   176.3   176.4   183.7   183.1   0   177.3   176.4   183.7   183.1   0   177.3   178.6   183.1   183.3   4   176.8   178.6   183.1   183.3   7   176.8   178.6   182.8   183.3   3   176.4   180.3   182.8   183.3			183.0 183.3 183.3 183.8 183.8 183.1 183.1 183.1 183.1 183.1 183.1	184.5 184.3 184.3 183.8 183.8 183.8 183.1 183.1 183.1 183.2 184.3	184* 183* 183* 183* 183* 183* 183* 183* 183	3 9 9 8 4 4 4 4 3 6	182 6 181 9 181 9 181 9 181 9 181 6 180 9 180 9 179 9 179 9 179 1	179°1 178°6 178°2 177°2 177°9 177°9 176°6 176°6 176°6 176°6 176°5	177.2 177.2 177.2 178.7 178.4 177.7 179.2 177.4 178.2 177.3 177.4	177.7 177.9 178.8 179.1 179.2 180.0 179.0 179.0 179.1 179.1 179.1 180.3	179.6 179.9 180.4 182.2 182.2 182.8 183.0 183.0 183.0 183.0 183.0	183 · 2 183 · 7 183 · 8 183 · 8 184 · 7 184 · 7 184 · 7 184 · 7 186 · 0 186 · 0 186 · 0
°7.5	71°5	71.2	70°0	69°0	68.5	68.	7	68°9	69°5	69.9	70°.7	71.3	71°5 a
and increa	sing Horizo	ontal and Ver	tical Force.							-			1
-	-	II		ME	TEOROLO			SERVAT	TIONS.		·		
Mean G Ti	löttingen me.	Baromete at 32°.	Ther	mometers.	Direc		ind. Fo	orce.	<u> </u> -   -		Weather	<b>:.</b>	
29 <u>2</u> 30	H. M. 22 0 23 0 0 0 1 0 2 0 3 0 4 0 5 0 6 0 7 0 8 0 9 0	In. 29 201 29 192 29 207 29 213 29 215 29 225 29 221 29 210 29 207 29 201 29 195	60°4 60°4 60°2 58°7 61°5 63°7 70°3 71°9 72°5 73°5 72°1	59°2 59°3 58°8 57°8 60°2 68°0 69°0 69°7 69°9 68°7	N.N	.E.	Very Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca Ca	light. ulm. ulm. ulm. ulm. ulm. ulm. ulm. ulm	Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy;	circum. cirstrat. circum. an circum and circum. an	ng, and thum d strat. l strat. d strat. l cirstrat. d cirstrat.		,

Vol. III. •

June 24th and 25t	h.			AGNET	CAL OB	SERVATIO	NS.				
Mean Göttingen	Angu	ılar Value o	f one Scale	Division =	0'.721.				DECLINAT	ion.	
Time.	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.
м. s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div	sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
$\begin{array}{ccc} 0 & 0 \\ 5 & 0 \end{array}$	110.5	113.5	114.4	114.4 114.3	112.7	113.4	112.8		112.0	112.1	111.5
10 0	110°2	113°6 114°7	114.2 114.0	114.5	113.0	113.5	112.6		112.0	112.0	112.0
15 0	111.5	115.0	114 2	114.0	114.4	113.9	112.7		111.9	112 1	111.9
20 0	111.5	115.2	114.4	114.2	114.8	113.8	112.6		112.0	112.1	111.8
25 0	111.0	115.4	114.8	114.4	114.2	113.8	112.7		112.2	112.1	111.0
30 0	111.4	115.4	115.0	114.0	113.8	113.8	112.0		112.0	112.0	111.6
35 0	112.0	115.0	115.4	113.8	113.5	112.8	112.0		112.0	112.0	112.0
40 0	112.0	115.2	115.0	113.9	113.0	112.2	112.1		111.8	112.3	112.0
45 0	112.6	114'8	114.8	113.2	113.2	112.2	112.1		111.9	111.9	112.0
50 0 55 0	112.8 113.4	114'8 114'6	115.0 114.2	113°0	113.2	112.0 111.7	112.2		111.9	111'9	113°1 112°1
99 V	1	 			1		112	1	!	<u> </u>	
M. S.	One	Scale Divisi	on = .000		of the H. E	<u> </u>	· I		Horizont		
2 0	587.2	584.6	571.0	575.6	575.8	575.2	577.6		577.8	579.0	581.0
7 0	585.6	585.4	571.2	576.0	575.6	576.8	577.2		577.8	578.0	582.0
12 0	584.2	585.0	575.0	575.0	576.8	576.7	577.0		578.0	581.2	581.3
17 0	583.8	584.6	575.4	575.0	577.0	576.0	578.5		578.1	578.8	581.1
$egin{array}{ccc} 22 & 0 \ 27 & 0 \end{array}$	582.4 580.2	584°8 585°0	575 0 574 8	574.8 574.0	577°2 575°2	575 2 576 0	578°C		578°8 579°0	579°0 579°5	582.0 581.4
32 0	579.6	58919	574.2	573.0	576.4	576.6	577.2		577.9	579.5	280.0
37 O	578.8	576.0	574.0	574.4	575.5	575.8	576.9		577.3	579 1	582.0
42 0	577.0	574.8	577.2	574.0	575.0	576.0	576.6		578.0	581 0	582.0
47 0	580.0	573.6	577.4	574.5	575.0	576.0	576.4	579.0	578.0	580.0	581.0
52 0	582.2	573.8	575.8	$574^{\circ}2$	574.8	576. 8	577.7		578.0	581.0	581.0
57 0	582.8	5,70, 5	575.2	575.8	575.2	577.6	577:7	577.7	578.4	581.0	581.0
Thermometer	78.3	73°8	73°9	73.8	73°0	72°5	72°1	71°9	7°4.	70°6	70°4
M. S.	One Scale Divi			063 parts	of the V. H	· .		·	VERTICAL	Force.	
3 0	184.5	182.6	180.6	182.0	179.1	176.3	177.0	174.8	174.5	176.4	178.7
8 0	183 2	181.9	180.6	181.7	178.4	176.3	177.0		174.5	176.4	178.7
13 0	183.3	182.8	180.6	181.9	178.4	175.9	177.0		174.8	176.4	178.7
18 0	183.3	182.3	180.8	181.9	177'7	175.9	177.0	174°3	174.8	177.2	178.7
23 0	183 3	182.3	181.8	181.6	177.7	176.2	177.1	174.2	174°8	178 4	178.7
28 0	181.7	182.6	180.9	181.6	177.3	176.2	177.1		174.8	178.4	178.7
33 0	181.8	182.4	180.9	181.9	177.2	176.5	177.1		174.8	178.7	178.7
38 0	181.6	181.1	180.9	181.0	177.0	176.2	177.6		174.8	-178.7	178.2
$\begin{array}{ccc} 43 & 0 \\ 48 & 0 \end{array}$	181.6	181.1 181.5	181 2 181 1	181 <b>°</b> 9 181 <b>°</b> 7	176°3 176°3	176°2 176°5	177.6		174'9 174'9	178.7 178.7	178°2 177°4
53 0	181 6	181.2	182.2	181.0	176.3	177.0	177.1		175.1	178.7	177.4
<b>5</b> 8 0	181.4	180.6	182.0	180.4	176.3	177.0	177.1	174.3	175.7	178.7	177.4
Thermometer	71.3	7 <sup>°</sup> 19	72.3	72°•4	72°.7	78.5	73.3	72°9	7å°0	72°5	71.5
	1					<u> </u>	<u> </u>		<u> </u>	<u> </u>	
- Splington			3	mpopoz	2010/-			g Numbers der	note decreas	ing Westerl	y Declination
		rm.	ME mometers.	TEOROL(	OGICAL ( Wi	OBSERVAT	TONS.	-			
Mean Göttingen Time.	Barometer at 32°.	Dry.	Wet.	Direc	1	Force.			Weatl	ier.	
D. H. M.	In.		6					1			
24 10 0	29.739	80.1	59.4	NT YAT	by N.	Tiche		1.6			
11 0	29.719	79.5	61 9	N.N		Light. Moderate		ear and fine.			,
12 0	29.713	77.8	62.1	N.N		Moderate		ear and fine.			
13 0	29.721	74.0	63.5	N.N		Moderate		ear and cloudle	ess.		
	29.719	68.7	58.4	N.N		Light.		ear and cloud			
14 0	29.735	67.3	56.2	-	-	$\operatorname{Calm}$ .	C	ear; fine.			
15 0		65.3	55.7	-	-	Calm.		lear; very fine			
15 0 16 0	29.731			1	1	Calm.	l C	lear; very fine	_		
15 0 16 0 17 0	29.722	66.2	55.3	-	-						
15 0 16 0 17 0 18 0	29 722 29 726	66°2 65°5	54.2	-	_	Calm.	C	lear; very fine			
15 0 16 0 17 0 18 0 19 0	29.722 29.726 29.720	66 2 65 5 65 3	54.5 54.6	-	_	Calm. Calm.	C	lear; very fine lear.			
15 0 16 0 17 0 18 0	29 722 29 726	66°2 65°5	54.2	- N W	by N.	Calm.	C	lear; very fine			

<sup>&</sup>lt;sup>a</sup> At 25<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 76° · 5; of V. F., 74° · 7.

				MAG	NETICAL	OBSERV	ATIONS.				J	une $24 ext{th}$ ar	nd 25th.
,		DECLINA	TION.					A	Angulai	r Value o	of one Scale	Division =	0':721.
21 <sup>h</sup> .	22h.	23 <sup>h</sup> .	O <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	.	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
sc. Div. 111'6 111'4 111'3 111'3 111'4 111'9 111'9 110'3 109'8 107'9 106'9 103'0	Sc. Div. 101 '6 102 '0 103 '0 103 '8 104 '0 113 '0 115 '2 116 '3 117 '2 119 '0 119 '0 119 '7	Sc. Div. 118 '8 118 '0 124 '8 122 '0 121 '7 122 '2 122 '0 121 '7 121 '7 122 '0 121 '2 121 '0	sc. Div. 121 ° 0 121 ° 6 121 ° 4 121 ° 3 121 ° 0 120 ° 4 120 ° 4 121 ° 2 122 ° 2 123 ° 0 123 ° 2 123 ° 0	Sc. Div. 121'3 121'6 121'0 120'8 120'6 120'6 120'6 120'8 121'8 121'8 122'0 122'2 120'2	Sc. Div. 120 ° 0 120 ° 0 119 ° 8 118 ° 2 118 ° 0 117 ° 6 116 ° 8 117 ° 8 118 ° 6 118 ° 8 119 ° 2 117 ° 8	Sc. Div. 118 '4 118 '3 119 '7 119 '9 119 '7 119 '6 119 '4 -118 '5 117 '0 116 '2 116 '3 116 '0	sc. Div. 116 ° 0 116 ° 0 115 ° 2 115 ° 3 115 ° 8 115 ° 2 115 ° 0 113 ° 8 112 ° 9 113 ° 4 114 ° 7	Sc. D 114' 113' 112' 111' 110' 109' 109' 108' 108'	2   1   1   1   1   1   1   1   1   1	Sc. Div. 107. 4 107. 4 107. 3 107. 0 106. 3 106. 0 105. 1 104. 8 105. 0 105. 3	Sc. Div. 105 0 104 0 103 0 101 9 101 5 102 0 102 1 102 4 102 0 102 6	8c. Div. 102 2 102 2 102 0 102 6 103 0 103 6 102 2 105 0 104 3 104 0 104 2	Sc. Div. 103 · 0 103 · 2 103 · 7 103 · 2 103 · 7 104 · 0 103 · 8 104 · 2 105 · 2 105 · 0 105 · 1
100 0	110 /	l [	TAL FORC			·	Scale Division	108		105°3	102.2	103.0	105.2
579.0 579.0 578.5 579.0 578.5 577.0 577.0 577.5 578.8 583.5 583.3	584.0 586.0 589.2 589.4 587.0 586.2 585.0 582.2 581.6 580.4 583.0 585.3	585.6 584.7 584.0 582.6 580.5 580.3 580.3 580.3 580.8 581.0 582.8	578.6 579.0 579.4 582.0 582.2 581.6 582.0 579.2 579.5 578.3 577.2 576.3	576.0 577.2 576.2 573.6 571.8 571.0 568.4 567.2 566.8 567.2 567.2 567.2	566.6 565.8 568.2 567.0 566.8 567.0 568.8 566.6 566.5 567.2 568.2	569:0 570:0 567:4 567:2 568:8 571:0 572:8 572:2 572:0 574:2 573:4 573:0	575.0 574.8 573.4 572.8 574.0 572.0 571.0 571.5 572.5 574.3 572.5 571.5	569° 572° 573° 573° 573° 573° 574° 576° 576° 577° 578° 78°	88   55   55   55   55   55   55   55	578.0 578.0 577.0 577.0 577.5 577.0 577.5 577.0 576.5 578.0 578.0 578.0 578.0 578.0 578.0 578.0 578.0	583.2 579.5 575.4 575.0 577.0 577.4 578.0 580.0 578.6 576.6 579.2 578.0	580 · 2   581 · 0   583 · 2   588 · 2   589 · 0   597 · 2   577 · 8   595 · 4   594 · 2   590 · 8   588 · 8   585 · 3   75 · 7	579 · 2 576 · 8 576 · 2 574 · 0 574 · 2 573 · 0 572 · 2 574 · 6 577 · 4 578 · 2 577 · 4 577 · 2
	1,	VERTICA		,			Scale Divisio	]		,		ļ	
176.6 176.6 176.6 176.7 176.5 176.2 176.3 176.8 176.9 175.2 173.8	172.8 172.0 170.9 170.8 170.7 170.0 171.2 171.3 171.8 173.5 174.2 175.4	175.3 175.5 177.3 177.7 177.7 177.2 177.4 177.9 178.0 177.7 178.7	179 8 180 2 181 5 181 9 181 9 182 3 181 9 182 2 182 2 182 2 182 0 182 3	182.5 182.6 182.6 183.1 182.8 181.4 181.2 181.1 181.1 181.1 182.2 182.6	181 8 181 8 181 8 181 2 180 7 180 6 181 5 180 6 179 8 181 0 178 3	178.3 180.0 178.8 181.2 179.1 179.1 181.7 179.3 179.2 179.2 179.9 179.7	179.4 179.6 179.2 178.9 178.5 177.7 177.7 178.0 177.6 176.9 176.3	175° 175° 175° 175° 175° 174° 175° 174° 174° 175° 175°	3   1 3   1 9   1 7   1 3   1 2   1 2   1 6   1 6   1	175 · 2 175 · 2 175 · 5 175 · 5 176 · 5 176 · 6 176 · 5 176 · 5 176 · 5 176 · 5 176 · 8 176 · 8	176·5 175·7 174·8 174·8 175·3 175·3 175·3 175·0 173·8 174·2 174·4	174.8 175.2 175.0 175.6 176.4 176.9 176.3 175.6 176.1 176.1 175.4 175.0	173.5 173.5 173.5 174.0 174.0 174.0 174.3 174.2 174.7 174.8 174.8
7°11	70°7	69°9	69°6	69°2	69°5	70°3	70°9	7i°	5	72°3	73.3	73.9	74'7a
and increa	sing Horizo	ntal and Ver	tical Force.			****							
		***		ME	TEOROLO	GICAL (	OBSERVAT	ions.					,
	öttingen me.	Barometer at 32°.	Ther	mometers.	Direc		Force.				Weat	her.	
	2 0	In. 29.699 29.725 29.723 29.730 29.722 29.710 29.704 29.693 29.674 29.658 29.647 29.643	63.9 64.4 66.7 69.0 72.5 76.4 79.3 81.7 82.7 84.1 82.0 80.7	52·9 53·4 55·7 56·9 60·5 63·0 62·4 64·1 64·3 66·1 69·7 68·7	N.W. N.W. N.N N.N N.N N.N S. by	by N. by NWWWWWWWW.	Very lig Very lig Calm. Calm. Very lig Moderat Moderat Moderat Very lig Very lig	ht. te. te. te. te. te. ht.	Clear Fine Fine Fine Fine Fine Fine Fine	; cir. ; cir. and	n. m. m. l circum. l circum.		

July 22nd and 23	rd.	* <u></u>		MAGNET	ICAL OI	BSERVATIO	NS.				
Mean Göttingen	Angi	ula <b>r V</b> alue (	of one Scale	Division =	0''721.				DECLINAT	ion.	
Time.	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.
м. s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0 0	108.2	109.2	110.5	110.4	111'4 112'0	111.6	112.4 112.8	112.0	113 2 113 8	116.0	118.0
5 0	107.8	109'0	109.4	111.0	111.8	111.6	113.5	112.6	114.0	116°2 117°0	117.3
10 0	107.8	109.0	109.0	110.8	111.0	111.5	113.0	112.8			116.0
15 0	107.8	109.2	110.5	111.5	112.4	111.4	112.2	112.8	114·1 115·2	116.3 114.9	115.8
20 0	107.8	109.4	110.0	110.8 111.0	112.4	111.8	112.8	112.8	119.0	114.0	115.8 115.7
25 0	108.0	109.7	109.6 110.2	110.8	111.4	112.0	112.4	112.4	117.2	113.8	116.0
30 0	108.2	$109.2 \\ 109.2$	109.2	111.5	111.8	113.5	112.5	112.4	118.2	114.0	115.3
$ \begin{array}{ccc} 35 & 0 \\ 40 & 0 \end{array} $	108.8	109 2	109.6	111.0	111.6	113.6	113.0	113.7	117.0	114.3	115.0
$\begin{array}{ccc} 40 & 0 \\ 45 & 0 \end{array}$	109.0	109.2	109.2	111.0	111.0	113.5	112.9	113.5	116.3	116.0	115.0
50 0	109.2	109.4	110.5	111.5	110.8	112.8	112.4	113.0	116.0	117.0	114.1
55 0	109.0	110.0	110.0	111.4	111.4	112.4	112.0	113.5	116.4	118.0	114.0
M. S.	One	Scale Divis	sion = '00	0087 parts	of the H.	F.			Horizont	AL FORCE.	<u> </u>
	584.8	581.2	579.8	577.8	579.6	578.8	581.8	580.9	582.0	581.0	582.0
$egin{array}{ccc} 2 & 0 \ 7 & 0 \end{array}$	582.0	581.4	577.7	578.4	579.8	578.2	581.4	581.0	582.0	579.2	579.8
$\begin{array}{ccc} 7 & 0 \\ 12 & 0 \end{array}$	578.8	581.2	578 3	579.2	580.8	578.4	581.6	581.0	582.2	580.7	579.8
17 - 0	579.2	581.0	578.0	579.4	581.4	578.6	581.8	581.4	582.0	580.0	579.4
22 0	578.6	580.6	577.4	578.8	579.8	576.8	579.8	581.6	583.9	578.6	579.9
27 0	579.3	583.2	577.0	577.2	578.8	579.2	580.0	581.6	584.1	582.0	578.6
$\vec{32}$ 0	580.6	582.6	577.4	$577 \cdot 2$	578.0	579.2	580.0	581.6	584 0	586.0	578.0
37 0	581.2	582.7	578.0	578.8	580.2	579.8	580.4	581.6	584.0	588 7	577.8
42 0	581.4	582.2	578.2	580.0	578.5	580.4	581.0	582.0	582.0	587.0	577.8
47 0	581.6	580.8	578*4	579.8	576.6	580.6	581.2	583.2	581.4	585.0	577'1
52 0	581.0	580.6	579.2	580.0	577.5	580.4	580.4	583.6	581.0	582.8	577.5
57 0	581.0	580.6	579.4	581.4	578.8	580.2	580.2	582.0	581.0	581.2	577.5
Thermometer	7 <b>Š</b> °5	75°6	75°5	75°2	74.8	74.5	73.6	73.0	73.0	73.0	72°5
M. S.	One	Scale Divis	ion = '000	0063 parts	of the V.	F.			VERTICAL	Force.	
	168.3	172.7	172.7	172.8	172.2	170.4	173.5	175.1	175.4	173.0	168.2
3 0 8 0	167.9	172.7	172.9	172.8	172.0	170.4	174.5	175.1	175.4	173.1	168.5
13 0	168.8	172.8	173.0	172.9	172.0	170.4	173.4	175.6	175.4	172.7	169.1
18 0	170.0	173.2	173.0	172.9	171.3	170.4	174.1	175 6	175.4	172.7	169.1
23 0	172.4	173.2	173.1	172.7	171.3	170.1	174.1	175.6	175.1	172.7	169.1
28 0	173.2	173.2	173.1	172.7	171.0	170.5	174.1	175.6	175.1	171.8	169.1
33 0	173.2	173.3	173.0	172.7	170.6	170.5	173.9	175.6	173.2	171.8	169'4
38 0	173.5	173.3	172.7	173'1	170.7	170.3	173.9	175.6	173.0	170 2	169'4
43 0	173'4	173.1	172.7	173.3	170.7	170.3	173.9	175.6	173.2	169.5	170.1
48 0	173.3	173.2	172.6	173.3	170.7	170.1	173.9	175.4	173.2	168.0	170.5
53 0	173.3	173.3	172.7	173.3	170.7	170.2	173.9	175.4	173.2	168.0	170.6
58 0	172.8	173.3	172.8	173.5	170.4	170.3	173.9	175'4	173.2	168.0	170 6
Thermometer	74.5	74.7	74.7	7 <b>4°</b> 5	74.7	74°1	73.7.	73.0	72.9	73.0	7å·1
						Ir	nereasing N	Numbers den	ote decreasi	ng Westerly	Declination
			ME	TEOROLO	GICAL (	OBSERVATIO	ons.	<del></del>			
Mean Göttingen	Barometer	Ther	mometers.		Wind	d.	-		Weathe	r	
Time.	at 32°.	Dry.	Wet.	Direc	etion.	Force.	- - <u>-</u>				
р. н. м.	In.	0	0								
22 10 0	29.534	74.1	67.4	_	_	Calm.	Cloudy .	cirstrat	and circum	1_	
11 0	29.533	73.1	67.3	-	_	Calm.	Cloudy	cumstrat	and circui	n.	
12 0	29.505	73.1	66.9	-	-	Calm.	Cloudy;	cumstrat.			
13 0	29 506	69.1	64.7	_	-	Calm.	Cloudy;	cumstrat.			
14 0	29.515	63.3	60.7	-	-	Calm.	Cloudy;	cirstrat. a	and circum		
15 0	29.508	61.9	60.1	-	-	Calm.	Cloudy;	cirstrat. a	nd circum		
	29.518	59.9	58.6	-	<b>→</b>	Calm.	Cloudy;	cirstrat. a	ınd circum		
16 0	29.511	59.5	57.1	-	-	Calm. Calm.		cumstrat		,	
17 0	00.00	L ~~ -				t :olm	1 Clauder	cumstrat.			
17 0 18 0	29.509	59.1	57:1	_	-						
17 0 18 0 19 0	29.486	58.2	57.1	-	_	Calm.	Cloudy;	circum. a	nd cirstrat		
17 0 18 0				E.N	_		Cloudy ;	circum. a			

 $<sup>^{\</sup>text{a}}$  At 23  $^{\text{d}}$  10  $^{\text{b}},$  Thermometer of H. F., 77  $^{\circ}$  '3; of V. F., 76  $^{\circ}$  '1.

				У	IAGNET	ICAL OB	SERVATIO	NS.			July 22nd	and $23\mathrm{rd}$ .
		DECLINA	TION.					Ang	ular Value	of one Scale	Division =	0' • 721.
21 <sup>h</sup>	$22^{\rm h}$	23 <sup>h</sup>	Oh	1 <sup>h</sup>	$2^{\mathrm{h}}$	3 <sup>h</sup>	$4^{\rm h}$	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8h	9 <sup>h</sup>
Sc. D'v.	sc. Div. 107 6	Sc. Div.	Sc. Div. 120 2	Sc. Div. 124 4	Sc. Div. 123 5	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 105 2	Sc. Div. 104.0	Sc. Div. 105 5
115.0	104.8	115.0	119.8		124.0	114.6	112.2	107.0	106.1	104.9	104.0	105.5
115.0	103.8	114.2	119.0		124.0	113.8	111.5	107.4	106.6	104.4	104.0	106.0
116'5 117'0	101.0	114.6	121.5		124.5	113.8	111.2	107.6	107.0	104.2	104.5	106.0
117.0	102.0	114.0	120 8		124.4	113.5	110.3	108.0	106.2	104.0	103.0	106.3
117.2	104.8	114.7	120.7		124.6	112.0	110.3	108.0	106.2	104.5	105.0	108.2
116.8	108.0	114.7	121.2		124.4	112.5	109.0	107.0	106.0	104.7	105.0	109.2
116.2	111.4	114.0	122.0		123.0	112.4	108.3	106.0	105.8	104.8	105.0	109.2
116.5	114.8	114.8	122.0		122.4	111.8	108.0	105.6	106.0	105.0	105.8	111.0
117.0	114'4	115.0	121.8		121.2	112.5	107.8	106.2	105.4	104.8	106.0	110.2
115.5	116.0	117.0	122 2		119.0	112:8	107.9	107.0	105.4	104.5	106.0	109.6
109.3	116.3	117.8	124.0	123.6	117.8	113.0	107.2	107.0	105.4	104.3	105.2	109.3
		Houizon	TAL FORC	E.	I	ncrease, in	Scale Divisio	ons, correspo	onding to 1°	decrease of	Temperatui	e, 1.63.
578.0	559.7	577.0	585.4	587.2	580.4	559.5	564.2	565.5	574.0	572.0	571.5	572.0
577·5	561.0	577.0	584.8	588.2	577.0	560.0	566.8	565.0	573.0	571.0	572.0	573.2
576.9	565.4	578.6	584.5	590.2	576'4	560.0	564.3	564.7	574.0	571.0	571.0	575.0
577.5	566.2	579.0	586.0	588.8	574.2	557.6	564.0	565.0	571.5	572.0	573.7	577.5
577.0	570.0	579.4	586.6	587.8	573.4	561.8	564.0	565.0	571.9	572.0	579.0	584.5
576 1	571.4	579.2	587.0	587.2	573.4	559.0	565.0	567.2	573.0	572.6	579.3	584.0
575.5	573.0	579.0	587.2	586.0	573'4	560.5	564.0	569.8	571.5	572.2	578.0	597.0
573.5	573.2	579.2	587.3	584.2	572.0	561.8	564.8	570.0	571.0	571.3	574.5	594.0
573.0	573.6	579.4	587.6	584.0	571.2	562.8	563.1	568.8	571.0	573.2	576.5	588.0
570.5	574.5	580.8	587'4	585.4	570.8	562.0	563.0	571.0	572.0	572.0	577.2	587.5
569.0	575.0	581.3	586.8	586.8	567.2	461.6	564.5	571.4	572.0	572.5	576.5	581.5
566 4	575.4	581.4	588.4	585.4	566.2	561.8	566.0	573.0	571.2	571.5	574.6	578.0
72°3	72.0	71°5	71°5	72.2	7å°0	73.8	7 <b>å</b> 6	75.0	75°5	76°0	76°5	77°0 a
	,	VERTICA	L FORCE.		I	ncrease, in	Scale Divisio	ons, corresp	onding to $1^\circ$	decrease of	Temperatur	e, 1.64.
170'6	162.4	166.1	170.2	172.9	173.0	171.0	169.7	169.8	168.9	167.9	169.9	173.1
170.6	163 6	166.3	170.3	173.2	173.3	170.7	169.7	168.9	168.9	167.9	170.3	173.1
170.0	164.9	166.3	170.3	173.2	172.9	170.7	169.5	168.9	168.9	167.9	170.9	173.3
170 0	163.6	166.3	172.0	173.2	173.2	170.2	169.7	168*3	168.9	168.7	171.3	173.9
169.6	162.9	166.4	171.5	174.3	173.2	171.0	169.7	168.3	168.9	168.7	172.2	174.9
169'6	161.8	166.2	172.5	174.3	173.3	169.6	169.7	168.1	168.9	168.7	172.2	174.5
169'6	161.8	166.4	172.4	174.5	173.3	168.6	169.7	169.8	168.9	169.6	172.8	176.3
168.9	162.2	166.5	172.4	174.5	173.3	168.4	170.1	169.8	168.9	169.6	172.8	175.0
168.0	162.0	166.2	172.3	173.6	173.3	168.4	170.1	169.3	168.2	169.6	172.8	174.2
166.2	163.2	166.4	171.9	173.6	173.3	168.4	169.8	169.3	168.2	169.9	173.1	174.2
166.2	163.3	166.3	172.7	173.6	173.4	168.3	169.8	169'3	168.2	169.9	173.1	174.2
164.2	163 2	167.5	172.9	173.8	172.8	168.9	169.8	169.3	167.9	169.9	173.1	173.1
72:7	72.5	71.5	72°1	72°1	72°5	73.2	73.7	74°0	74°3	7 <b>4</b> °5	75°·4	75 8 a
and increa	sing Horizo	ntal and Ver	tical Force.			·	<del></del>	<u> </u>		<del></del>		
				МЕ	TEOROL	OGIAL (	OBSERVAT:	IONS.				
Mean G	löttingen	Barometer	Ther	mometers.		Win	d.			W eath	ur	
	me.	at 32°.	Dry.	Wet.	Dire	ction.	Force.			vy call		
D. F	I. M.	In.		0								
$22  \overset{\cdot}{2}$		29.445	56.7	55.9			Calm.	010-3	; circum.	and strot		
	3. 0		57.9	56.9	-	_	Calm.		; circum. : ; circum. :			
	0 0	29.465 29.492	61.5	59.7	_	<b>-</b>	Calm.	Cloudy		mu sual.		
	1 0	29 492	66.7	63.7	-	_	Calm.	Cloudy		'		
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	29 492	70.8	64.2	-	_	Calm.	Cloudy				
	3 0	29 492	74.6	65.2	-		Calm.		; nne. circum. an	d strat.		
	4 0	29 460	79.1	69.3		_	Calm.		circum. an			
	5 0	29 456	76.7	69.4	-		Calm.		circum. an			
	6 0	29 438	78.8	70.4		_	Calm.		; fine, with			
	7 0	29 430	79.9	70.7	-		Calm.	Cloudy				
	8 0	29.425	80.9	68.2	-	_	Calm.		; circum.	and strat.		
!	9 0	29.406	79.2	67.8	-	_ 1	Calm.			and cirstra	t.	
	-		,,,,,	", "			J					
		11	1	1	- 1	1		r				

August 28th and	29th.		]	MAGNET	ICAL OB	SERVATIO	NS.				
	Angular	· Value of o	one Scale D	ivision = 0	7.721.				Declinat:	ION.	
Mean Göttingen Time.	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15.	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20h.
M. s. 0 0 5 0 10 0 0 15 0 0 0 0 0 0 0 0 0 0 0	119.6 128.2 132.8 128.1 127.2 123.0 119.0 119.9 117.2 113.1	Sc. Div. 118'3 119'1 114'0 110'2 113'5 108'0 106'2 104'8 104'8 104'2 103'0 103'6 104'2	sc. Div. 105 2 106 0 106 7 106 9 107 0 107 2 106 0 106 0 106 2 106 5 107 0	sc. Div. 107 0 107 5 107 4 107 0 107 2 106 7 107 8 107 3 107 0 107 2 106 5 108 5	Sc. Div. 109'9 111'0 113'2 114'2 123'8 129'0 131'5 144'0 137'8 131'0 126'8 125'4	Sc. Div. 120.0 124.5 126.7 133.8 138.0 142.0 148.4 147.9 139.7 142.8 147.0 141.8	Sc. Div. 135 '4 128 '0 120 '5 119 '0 119 '7 115 '5 116 '0 119 '6 120 '3 116 '0 113 '5 112 '5	112.2 114.0 113.3 114.0 115.2 115.0 115.0 115.0 113.7 112.0 111.2 111.0	Sc. Div. 111 0 110 3 109 5 109 7 108 2 108 3 109 3 107 0 104 6 104 1 105 0 107 5	Sc. Div. 108 '9 108 '0 108 '7 109 '0 109 '0 109 '6 111 '2 109 '2 114 '0 113 '8 113 '2 112 '6	Sc. Div. 106 6 107 0 106 2 107 0 106 4 108 2 108 0 106 2 108 2 108 2 108 7 108 3
	One Sc	ale Division	= ,00008	37.					Horizont	AL FORCE	
M. S. O O O O O O O O O O O O O O O O O O	612°2 621°4 621°2 614°2 603°8	577.8 575.3 572.0 570.6 566.2 571.0 562.2 566.0 561.4 563.4 564.0 561.5	560°4 554°0 561°0 561°4 566°2 576°7 573°0 569°5 570°0 569°0 566°0 570°0	574.0 574.0 574.0 575.9 576.0 575.8 574.5 574.0 571.5 571.0 572.0 577.5	578°0 578°0 570°0 568°0 570°8 578°0 586°5 588°4 591°6 589°9 590°0 594°5	587.5 580.5 580.9 586.6 586.5 589.0 586.5 585.8 577.0 569.4 569.0 573.0	561.0 547.0 540.0 547.0 541.0 543.5 552.5 559.0 564.0 564.0	564.0 566.5 568.0 567.5 564.6 565.5 569.0 565.5 567.0 569.0 569.0	571.0 574.0 576.7 577.5 573.5 572.5 576.5 576.5 571.0 571.5 573.5	575.0 572.2 564.0 562.2 561.4 561.2 566.6 567.0 567.4 567.2 567.6 568.4	567.4 567.2 566.8 572.2 575.0 575.4 576.2 574.4 575.0 573.6 577.0 576.2
Thermometer	76°0	75°8	75°8	7 <b>š</b> °6	75°6	75.4	75°C	74.5	74.1	.74°0	73.7
	One Sc	ale Division	= :00000	63.					VERTICAL	Force.	
M. S. O O O O O O O O O O O O O O O O O O	188.6 189.0 184.6 182.9 182.9 184.0	188 · 8 187 · 0 185 · 7 185 · 3 183 · 1 182 · 5 179 · 5 179 · 3 178 · 4 177 · 8 178 · 0 176 · 9	176°2 174°5 174°4 174°3 175°4 175°1 173°8 173°4 172°9 171°9 171°0 171°1	171 1 1 171 1 171 1 171 1 6 171 6 171 6 171 6 171 5 171 5 171 5 171 5 171 5 171 5 171 5 171 5	170.0 170.0 169.6 169.6 164.8 160.2 162.2 159.1 153.1 151.4 151.4	155.7 155.6 149.5 147.6 147.2 148.7 148.7 148.0 149.3 149.7	155.6 153.3 156.4 158.0 158.0 162.2 165.8 166.8 166.8	3   167.9 168.4 168.7 168.7 167.3 167.3 167.3 168.7 165.5 168.9 170.8	169.7 168.4 167.2 165.3 164.0 164.4 165.1 164.1 163.3 162.2 162.2	162.5 158.2 160.2 158.1 157.9 158.6 157.0 158.1 157.8 159.5 1.9.7 162.2	162 9 162 0 162 2 164 2 164 7 163 4 165 1 166 7 166 6 166 2 166 7 167 9
Thermometer	74.5	74°5	74°.7	74.8	76°1	76°0	75° 8	75°2	75°0	74.9	74.7
	11	<u></u>			<u>'</u>	1	Increas	ing Numbers de	enote decrea	sing westerl	y Declination,
			ME	TEOROL	OGICAL	OBSERVAT	IONS.				
Mean Göttingen Time.	Barometer at 32°.	Ther.	mometers.	Direc	W etion.	ind.		-	Wea	ther.	
D. H. M.  28 10 0  28 11 0  28 12 0  28 13 0  28 14 0  28 15 0  28 16 0  28 17 0  28 18 0  28 19 0  28 20 0  28 21 0	In. 29 '709 29 '705 29 '713 29 '709 29 '703 29 '697 29 '694 29 '686 29 '694 29 '702 29 '689	74.6 72.1 71.7 69.3 67.9 65.9 65.6 65.5 63.9 62.9 61.7 60.9	70°11 69°77 68°3 67°3 66°3 64°7 64°1 64°2 62°9 62°0 60°9 60°1	E.S N.I	S.E. N.E.	Very lig Very lig Calm Calm Calm Calm Calm Calm Calm Calm	ght.	Cloudy; cum. Cloudy; cum. Cloudy; cum. Clear, with str Clear; circu Clear; circu Cloudy; shee Cloudy; fine. Cloudy; fine. Clear; cir. an Clear; cir. an	-strat. and cir-strat. and cir-strat. and cir-strat. and cir-strat. and cir-strat. and cir-strat. and cir-cum. d cir-cum.	circum. -cum. -cum. -cum.	a visible.

<sup>&</sup>lt;sup>a</sup> At 29<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 75° · 3; of V. F., 74° · 4.

								وبسيسا	<del>• • • • • • • • • • • • • • • • • • • </del>				
					MAGNEΊ	TICAL O	BSERVATIO	ONS.		<u> </u>	1	August 28th	and $29$ th.
		DECLI	NATION.	,	· · · · · · · · · · · · · · · · · · ·				An	gular Value	of one Scale	Division =	0' 721.
21h.	22h.	23h.	Oh.	1h.	2h.	3h.	4 <sup>h</sup> .		5h.	6 <sup>h</sup> .	7h.	8h.	9h.
Sc. Div. 110 '2 110 '2 111 '2 110 '0 108 '8 109 '2 109 '4 108 '0 106 '2 103 '8 103 '0 103 '2	sc. Div. 104 2 103 0 101 2 101 2 101 4 102 8 103 2 104 0 105 0 107 8 108 3 108 0	Sc. Div. 110 0 111 2 112 0 113 0 114 4 113 2 114 4 115 4 115 5 113 4 114 0	Sc. Div. 117 '2 118 '8 120 '0 120 '6 121 '0 122 '0 122 '0 122 '6 121 '5 122 '8 124 '0 123 '2	Sc. Div. 124 · 2 124 · 3 123 · 2 124 · 8 122 · 0 122 · 0 122 · 4 122 · 0 122 · 0 122 · 6 121 · 9	Sc. Div. 121 '4 121 '8 121 '0 118 '4 117 '0 117 '8 118 '0 118 '7 119 '0 118 '8 117 '7 116 '1	Sc. Div 116 '0 116 '4 112 '0 113 '0 113 '2 112 '0 113 '1 113 '8 115 '2 115 '8 114 '8 114 '0	116.0 115.5 116.0 114.5 114.5 115.5 115.1 114.0 116.5 115.3 116.0	11 11 11 11 11 11 11 11 11	3.5 3.0 1.8 1.5 1.8 2.0 1.0 2.5 0.0	Sc. Div. 113 '3 113 '0 112 '3 110 '0 107 '5 108 '6 106 '2 107 '8 109 '2 108 '6 108 '8 108 '4	sc. Div. 107 '0 107 '2 106 '6 105 '2 104 '2 104 '0 103 '2 103 '0 103 '2 102 '4 103 '0 102 '2	Sc. Div. 102 '8   103 '2   102 '8   103 '0   102 '6   101 '8   102 '8   103 '0   103 '8   103 '5   104 '0	sc. Div. 104 · 0 103 · 5 104 · 2 103 · 4 104 · 5 105 · 2 105 · 8 106 · 6 106 · 6 106 · 5 106 · 8 106 · 8
	1	HORIZONT.	AL FORCE.	!	)		in Scale Divisi		- Philippe	C. ARTHUR SHOULD INCOME.			
579.6 578.0 579.2 577.0 574.8 575.2 576.0 570.2 567.4 567.3 570.2 567.2	567.4 566.7 563.6 564.2 565.4 568.0 571.2 569.4 568.8 570.0 570.8 565.8	567.8 568.2 568.4 571.2 572.8 571.6 570.4 570.8 571.0 573.4 575.0 574.4	576·2 577·4 579·2 579·2 581·4 581·4 580·6 576·8 575·6 575·2 577·6	573 · 2 572 · 3 571 · 4 575 · 6 576 · 6 576 · 0 575 · 5 577 · 3 571 · 0 568 · 2 563 · 8	561.0 561.6 566.1 567.8 566.2 565.0 558.4 555.6 557.0 557.2 559.0 554.5	554.5 556.5 560.0 562.2 564.8 563.5 566.7 566.0 567.5 565.5 566.9	568.5 568.2	57 57 57 57 57 57 57 56 56 56	4.0 5.0 3.8 1.6 0.0 4.0 0.0 8.5 7.0 7.5 5.5	570.0 568.0 566.5 567.5 568.0 566.4 560.8 563.2 565.3 564.2 563.6 562.4	568·2 568·6 568·4 566·0 560·2 554·4 556·6 562·4 562·0 570·0 566·2 569·5	578·1 573·4 571·2 569·0 570·5 568·6 571·0 572·6 571·4 569·6 571·8 580·6	589.6 590.2 590.0 591.2 589.2 590.5 588.8 581.4 581.5 584.2 581.9 577.8
73°2	73.0	72.6	7 <u>1</u> °9	72.0	72°5	7å·2	74.0	7	ŝ·0	76.2	76°2	75.7	75.8*
		VERTICAL	Force.		1	ncrease, i	n Scale Divisi	ons, c	orresp	onding to 1°	decrease of	Temperatur	e, 1°64.
168 6 168 8 168 6 169 2 169 4 169 3 168 8 167 8 168 4 170 1 169 1 168 1	6         167.7         166.8         175.0         171.7           8         166.3         166.7         175.0         172.0           6         165.3         168.3         175.4         173.0           2         165.4         168.3         175.9         173.0           4         165.4         170.0         175.9         172.4           3         166.1         170.0         175.9         171.5           8         167.9         170.3         175.9         171.5           8         167.9         170.5         175.9         170.9           4         167.9         172.8         175.6         170.8           1         167.8         173.9         175.6         170.4           1         167.5         173.6         175.6         170.1				170°5 170°4 171°3 171°5 170°9 169°5 169°4 169°3 168°7 168°7 170°5 170°5	169 · 2 169 · 7 169 · 7 170 · 4 170 · 4 169 · 7 169 · 4 169 · 2 168 · 4 168 · 4 168 · 1	169.0 169.0 167.0 167.8 167.5 165.5 167.1 166.5 165.4 167.2 164.8	16' 16' 16' 16' 16' 16' 16' 16' 16' 16'	7.0 7.0 7.5 6.1 5.4 5.4 7.2 7.1 7.6	168.6 168.6 169.1 168.7 168.7 168.3 168.7 168.3 168.7 169.3 169.6 170.2	170°9 170°9 171°2 171°4 168°4 168°5 170°0 167°4 167°3 169°1 170°2 169°5	170.6 170.2 169.7 169.7 169.7 169.6 169.8 168.8 169.8 169.8 170.0 170.6	172 · 2 172 · 2 172 · 2 172 · 5 172 · 8 172 · 9 173 · 1 173 · 1 173 · 1 173 · 5 173 · 5 173 · 4
73°·9	7å·8	73.1	71°7	71.9	72°3	72°.7	7å*5	7.	°4	75°1	75°2	74°8	74.7 a
and increas	sing Horizo	ntal and Ver	tical Force										
		***	-	ME	reorolo	GICAL	OBSERVAT	ION	S.				
Mean Go Tim	ittingen ie.	Barometer at 32°.	·	nometers.	Direc		ind. Force.			zN.	Weath	er.	
D. H 28 22 23 29 0 1 2 3 4 4 5 6 7 8	Time. at 32°. Dry. Wet.  D. H. M. In. ° 28 22 0 29 697 60 7 59 9 23 0 29 684 60 6 59 3 29 0 0 29 691 61 7 61 0 1 0 29 695 66 4 64 9 2 0 29 687 71 5 69 1 3 0 29 687 74 1 70 9 4 0 29 668 75 8 71 0 5 0 29 668 77 4 72 3 6 0 29 668 77 1 72 3 7 0 29 657 73 7 71 4 8 0 29 658 66 9 74 5			<del> </del>	E. by E.S. S.I W. N.V	y S. y S. E. E.	Calm. Calm. Calm. Calm. Calm. Calm. Very ligh Very ligh Very ligh Very ligh Very ligh Moderate Moderate	t. t. t.	Clear Cloud Cloud Cloud Cloud Cloud Cloud Overc Overc	; cir. and ci ; cir. and ci ; cir., cir., y; cir., cir., y; cirstrat y; cirstrat y; cirstrat y; cirstrat east; thunde east; thunde	rcumstrat., and l -strat., and l -strat., and haze and haze and haze and rain and rain.		

September 23rd an	d 24th.		·	MAGNET	ICAL OB	SERVATIO:	NS.				
Maan Göttingen	Angu	ılar Value o	f one Scale	Division =	0' '721.				DECLINAT	ion.	
Mean Göttingen Time.	10h.	11h.	12h.	լ13և.	14h.	15h.	16 <sup>h</sup> •	17h.	18h.	19հ.	20h.
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0 0	103.2	104.6	99.3	107.0	108.2	107.8	118.8	112.7	109.0	112.0	117.1
5 0	103.0	104.0	101.0	107.0	108.6	107.7	118.3	108.8	107.7	113.3	116.2
10 0	103.8	104.0	106'8	106.6	108.2	107.2	124.0		108.5	114.1	115.6
15 0	104.0	103.0	116.0	106.4	108.4	106.8	$129.8 \\ 126.2$	108.8	106.4	113.3	116.8
20 0	104.2	102.0	120.0	105.7	109.0	$\frac{100.2}{107.2}$	118.6	109.0	105.3	114.0	115.2
25 0	104.8	101.6	119.2	106.0		107.2	111.6	109.2	107.0	112.0	118.2
30 0	104.8	102.0	116.0	106.2	108.0	1109.2	109.4	109.3	108.5	114.8	118.9
35 0	105.0	102.0	112'1	$105.8 \\ 108.0$	106.2	110.0	107.5	109.8	108.8	114.2	118.3
40 0	105.0	102.0	108 <b>.</b> 2 105.0	108.2	106.3	117.0	109.8	110.4	110.0	115.0	118.6
45 0	105.0	104.0 104.1	103 0	109.0	106.2	118.8	113.0	109.8	110.2	115.3	117.8
50 0 55 0	105.0	104.1	104.8	109.2	106.2	118.5	111 9	109.8	111.8	115.4	117.6
33 0	100 0	102 6	,	100 1	100 0	110 -					
M. S.	One	Scale Divisi	on = '000	0087 parts	of the H. I	ř.			Horizon	TAL FORCE	
0 0	590.4	612.4	587.6	590.0	591.2	593.4	571.4	584.4	586.0	593.2	587.8
5 0		612.4	580.4	590.4	592.8	594.2	574.0	588.2	588 2	591.6	588.6
10 0		611.4	577.4	589.3	593'1	593.8	584.4	587.4	589.6	590.6	590.6
15 0		615.4	578.4	590.4	593.4	594.2	588 8	586.6	591.9	592 3	595'4
20 0		612.2	584.4	588.6	594.8	593.8	590.9	590.2	595.4	590.4	593.8
25  0		611.6	588.4	588.7	597.4	593.6	590.2	589.7	595.2	590.3	587.4
30 0		610.9	586.9	589.0	597.0	593.6	589.4	592.2	594.7	590.6	583.4
<b>3</b> 5 0	-	604.4	584.4	587.6	598.6	597.1	589.2	590.7	596.2	589'2	584.4
40 0		594.9	584.4	586 8	596.4	593.4	583*8	590.4	597.6	588.6	582.6
45 0		`594'9	585.0	585 6	596.6	585.4	583.0	590.9	595.2	591.7	585.2
50 0	610.9	594.1	584.8	588.4	594.0	581.8	586.9	591 4	595.2	591.4	586.0
55 0	614.6	593.9	586.6	590.4	593.4	578.4	586.4	589.2	596.9	589.6	584.6
Thermometer	69°4	, 70°2	70°2	70.2	70°0	69°7	69°5	69°6	69.6	69°4	69.0
M. S.	One	Scale Divisi	on = '000	0063 parts	of the V.	F.			VERTICA	L FORCE.	
_	184.4	185.0	190.2	184.2	182.1	180.8	185.7	180.6	179'1	178.8	177.2
$egin{array}{ccc} 0 & 0 \\ 5 & 0 \end{array}$	182.6	184.9	190.3	184.2	181.4	180.8	185.3	181.0	178.4	176.0	176.8
10 0	182.6	184.9	190.2	184.2	180.2	182.5	186.3	181.0	180.2	176.0	176.7
15 0	182.6	186.3	190.0	184.6	180.3	182.4	185.8	182.2	179.3	177.3	176.4
20 0	182.6	186.0	188.8	184.8	180.8	184.4	183.7	181.4	179.1	176.5	176.9
25  0	182.6	186.7	187.4	184.6	180.7	184'3	181.8	180.3	178.4	177.0	177.2
30 0	183.1	187.6	186.6	184.8	180.7	185.8	183.4	180.3	178.4	177.5	180.2
35 0	183.1	186.8	185.4	184.8	180.6	188.2	182.4	179.4	179.6	177.1	179.8
40 0	183.1	186'3	185.4	184.1	180.7	188.2	181.8	179.4	179.4	176.9	178.7
45  0	183.8	187.0	185.4	184.3	180.6	185.8	181.5	179.4	179.4	177.4	180'4
50 0	183.8	187.9	183.9	182'8	180.6	186.4	182.5	179 4	179.2	176.8	178.6
55 0	185.0	189.1	183.9	182.3	180.8	184.2	180.6	179'1	178.8	177.2	178.4
Thermometer	67°9	68°5	68°6	70.0	70°3	70.5	70°0	70°5	70.0	69°7	7°01
·							Increasing	Numbers de	note decreas	sing Westerl	y Declinatio
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		erostast statut sign o	ME	TEOROLO	GICAL	OBSERVAT	IONS.				
	Barometer	Ther	mometers.		Win	d.			Weathe		
Mean Göttingen			Wet.	Direc	etion.	Force.			vy eatne		
Mean Göttingen Time.	at 32°.	Dıy.									
Time.  D. H. M.		0	0								
Time.	at 32°.  In. 29.543	_	66.8	_	_	Calm.	General	ly clear.			
D. H. M. 23 10 0 11 0	In. 29.543 29.528	0		_	_	Calm.		ly clear. ly clear.			
D. H. M. 23 10 0 11 0 12 0	In. 29 543 29 528 29 527	72·2 69·9 67·3	66°8 65°8 64°2	-	_	Calm. Calm.	General General	ly clear. ly clear.			
D. H. M. 23 10 0 11 0 12 0 13 0	In. 29.543 29.528 29.527 29.555	72·2 69·9 67·3 66·7	66.8 65.8 64.2 64.7	-		Calm. Calm. Calm.	General General General	ly clear. ly clear. ly clear; sh		g nearly roun	
D. H. M. 23 10 0 11 0 12 0 13 0 14 0	In. 29.543 29.528 29.527 29.555 29.562	72.2 69.9 67.3 66.7 65.9	66.8 65.8 64.2 64.7 64.3	-		Calm. Calm. Calm. Calm.	General General General	ly clear. ly clear. ly clear; sh ly clear; sh	eet lightning	g nearly roun	d the horiz
D. H. M. 23 10 0 11 0 12 0 13 0 14 0 15 0	In. 29.543 29.528 29.527 29.555 29.562 29.543	72·2 69·9 67·3 66·7 65·9 65·7	66.8 65.8 64.2 64.7 64.3 63.7	-		Calm. Calm. Calm. Calm. Calm.	General General General General	ly clear. ly clear. ly clear; sh ly clear; sh ly clear; sh	eet lightning eet lightning		d the horiz
D. H. M. 23 10 0 11 0 12 0 13 0 14 0 15 0 16 0	at 32°.  In. 29°543 29°528 29°555 29°562 29°543 29°552	72·2 69·9 67·3 66·7 65·9 65·7 64·8	66.8 65.8 64.2 64.7 64.3 63.7 63.5	-	-	Calm. Calm. Calm. Calm. Calm. Calm. Calm.	General General General General General Clear;	ly clear. ly clear. ly clear; she ly clear; she ly clear; she sheet lightni	eet lightning eet lightning ing.	g nearly roun	d the horiz
D. H. M. 23 10 0 11 0 12 0 13 0 14 0 15 0 16 0 17 0	at 32°.  In. 29 · 543 29 · 528 29 · 555 29 · 562 29 · 543 29 · 552 29 · 554	69 · 9 67 · 3 66 · 7 65 · 9 65 · 7 64 · 8 62 · 6	66.8 65.8 64.2 64.7 64.3 63.7 63.5 61.7	-	-	Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm.	General General General General General Clear; Clear;	ly clear. ly clear; ly clear; she ly clear; she ly clear; she ly clear; she sheet lightne sheet lightne	eet lightning eet lightning ing. ing.	g nearly roun	d the horiz
D. H. M. 23 10 0 11 0 12 0 13 0 14 0 15 0 16 0 17 0 18 0	at 32°.  In. 29 '543 29 '528 29 '555 29 '562 29 '543 29 '554 29 '554 29 '562	69 · 9 67 · 3 66 · 7 65 · 9 65 · 7 64 · 8 62 · 6 63 · 1	66.8 65.8 64.2 64.7 64.3 63.7 63.5 61.7 62.3	-	-	Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm.	General General General General General Clear; Clear;	ly clear. ly clear. ly clear; she ly clear; she ly clear; she sheet lightne sheet lightne sheet lightne	eet lightning eet lightning ing. ing. ing.	g nearly roun	d the horiz
Time.  D. H. M.  23 10 0  11 0  12 0  13 0  14 0  15 0  16 0  17 0  18 0  19 0	at 32°.  In. 29 '543 29 '528 29 '555 29 '562 29 '543 29 '554 29 '554 29 '554 29 '562	69 9 67 3 66 7 65 9 65 7 64 8 62 6 63 1 64 1	66.8 65.8 64.2 64.7 64.3 63.7 63.5 61.7 62.3 63.1	-		Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm.	General General General General Clear; Clear; Clear; Clear;	ly clear. ly clear; ly clear; sh ly clear; sh ly clear; sh sheet lightni sheet lightni sheet lightni sheet lightni	eet lightning eet lightning ing. ing. ing.	g nearly roun	d the horiz
D. H. M. 23 10 0 11 0 12 0 13 0 14 0 15 0 16 0 17 0 18 0	at 32°.  In. 29 '543 29 '528 29 '555 29 '562 29 '543 29 '554 29 '554 29 '562	69 · 9 67 · 3 66 · 7 65 · 9 65 · 7 64 · 8 62 · 6 63 · 1	66.8 65.8 64.2 64.7 64.3 63.7 63.5 61.7 62.3	-		Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm.	General General General General General Clear; Clear; Clear; Clear; General	ly clear. ly clear. ly clear; she ly clear; she ly clear; she sheet lightne sheet lightne sheet lightne	eet lightning eet lightning ing. ing. ing.	g nearly roun	d the horiz

<sup>&</sup>lt;sup>a</sup> At 24<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 68° · 0; of V. F., 67° · 6.

				]	MAGNET	ICAL OF	SERVATIO	NS.	the second second	Sep	tember 23rd	and $24  m{th}$ .	
		DECLINATI	ON.					An	gular Value	of one Scale	e Division =	0'.721.	
21 <sup>h</sup> .	22h.	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>th</sup> .	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .	
Sc. Div. 117'8 120'6 118'4 118'0 117'5 117'8 118'7 117'2 115'3 116'0 116'0 117'8	sc. Div 116.8 117.3 117.5 117.7 117.6 117.2 117.2 117.0 116.6 116.7 116.9 116.8	Se. Div. 117 '7 117 '2 116 '2 115 '8 116 '0 116 '2 115 '8 116 '2 116 '2 116 '8 116 '5 116 '1	Sc. Div. 116'8 116'2 116'4 116'5 116'1 117'2 118'0 118'0 118'3 118'0 115'6	Sc. Div. 121 ° 0 119 ° 2 118 ° 8 120 ° 2 120 ° 0 119 ° 0 120 ° 0 119 ° 2 117 ° 9 119 ° 0 120 ° 0 117 ° 0	Sc. Div. 119°0 118°1 119°4 117°8 117°8 118°0 117°8 119°3 118°0 118°2 117°6 117°0	Sc. Div. 116'3 118'0 116'4 117'0 118'0 117'2 113'8 112'2 111'8 111'3 111'0 112'0	Sc. Div. 111'0 110'0 111'2 110'0 108'6 110'0 109'2 109'4 107'8 108'7 107'1 106'9	sc. Div. 106 · 2 106 · 0 105 · 3 105 · 7 105 · 5 105 · 3 105 · 4 105 · 2 104 · 8 104 · 0 103 · 8 104 · 7	sc. Div. 103 8 103 8 103 2 103 2 103 0 102 9 102 6 102 6 102 2 102 4 102 5 102 6	Sc. Div. 101 · 5 100 · 8 99 · 5 99 · 6 99 · 8 99 · 4 100 · 0 101 · 8 100 · 7 101 · 2 101 · 8 102 · 0	Sc. Div. 101'2 101'1 102'0 103'2 105'0 105'0 105'1 105'0 105'0 105'0 105'0 106'0	sc. Div. 106 · 5 106 · 2 105 · 8 105 · 0 104 · 7 104 · 3 104 · 8 104 · 2 105 · 0 104 · 0 105 · 0 104 · 0	
		Horizonta	L FORCE.			 	n Scale Division	(		!	<u> </u>	 	
581 4 580 8 580 0 580 8 584 6 584 4 581 8 589 2 587 4 586 7 585 0 585 0	587 · 4 588 · 6 591 · 4 591 · 5 590 · 4 590 · 4 590 · 2 589 · 8 589 · 2 589 · 4 69 · 0	590°4 589°4 588°4 583°6 584°8 585°4 588°0 588°4 589°4 589°5 588°9 68°4  Vertical 175°6 175°6 175°6 175°8	588.9 589.4 588.9 586.9 587.4 585.4 585.4 585.4 585.4 68.0 Force.	585 · 8 582 · 9 580 · 9 577 · 9 577 · 4 577 · 9 578 · 4 577 · 9 575 · 4 576 · 9 68 · 0 178 · 9 178 · 9 178 · 9 178 · 9 178 · 9 178 · 9 178 · 9	573.9 571.4 575.9 574.4 574.9 571.4 570.9 565.4 566.4 567.9 568.2 68.0	566 2 566 7 565 0 563 4 564 8 564 8 561 8 561 8 562 4 562 6 68 0	564.4 565.2 566.4 564.2 565.4 565.9 562.2 563.9 565.6 565.1 564.1 566.4 68.0 Scale Divisio	563.8 563.6 565.2 566.4 564.3 563.6 564.7 564.0 564.9 565.6 567.5 568.8 68.1	568.5 571.4 571.6 573.4 574.2 575.2 575.0 574.2 573.8 575.2 574.4 574.6 68.3 onding to 1°	574·4 573·6 571·6 573·6 576·4 575·4 581·2 582·6 582·8 585·6 586·8 587·4 decrease of	586.4 589.4 590.8 591.4 591.8 592.4 594.6 595.4 596.2 596.2 597.2 601.4 68.2 Temperatur	603.4 608.2 609.4 605.6 607.4 604.8 601.2 601.0 598.4 597.2 599.8 595.4 68.2 a e, 1.64.	
179.9 179.2 177.3 177.0 177.7 177.4 174.2 174.2 174.2	175.5 175.4 175.4 175.6 175.6 175.6 175.6 175.6 175.4	175.8 175.8 175.8 175.8 175.8 175.8 175.8 175.6 175.6	175.8 176.8 176.8 176.9 177.1 177.1 178.9 178.9 178.9	177 '9 178 '6 178 '6 178 '7 178 '4 178 '4 178 '8 178 '8 178 '8	177'9 177'0 177'2 177'8 177'0 177'0 177'4 177'7 177'4	176.8 176.9 177.8 177.8 177.6 177.6 177.6 177.1 177.2	177.4 177.8 177.1 177.4 178.7 178.7 178.3 178.1	177.5 179.1 179.1 179.4 179.4 178.0 177.9 179.7 179.2	181 3 181 3 181 0 181 2 181 1 180 7 181 0 181 5 181 7	181.8 181.2 181.3 182.6 183.1 183.0 183.6 184.4 183.8 68.0	184.0 184.0 184.0 183.9 183.9 183.6 183.6 183.7	184.7 185.0 185.0 184.8 184.8 184.8 184.8 184.8 184.1	
and increas	sing Horizon	ntal and Vert	ical Force.						datapata				
		1		ME	reorolo	GICAL	OBSERVAT	ions.					
Mean G Tir	ottingen ne.	Barometer at 32°.	Ther Dry.	mometers.	Direc	Wintion.	Force.			Weath	ner.		
- - - - - - - - - - - - - - - - - - -	2 0 3 0 0 0 1 0 2 0 3 0 4 0 5 0 6 0	In.  29.557 29.577 29.599 29.641 29.609 29.646 29.648 29.611 29.627 29.629	59 · 9 59 · 8 59 · 9 63 · 9 64 · 8 64 · 6 64 · 8 66 · 1 65 · 6 61 · 7 62 · 1	59.3 59.0 58.8 62.4 62.4 63.5 63.9 64.0 65.1 64.5 59.9 59.4	N.W. I N.W. I W.S. W. b W. b N. by N. by	by N. W. y S. y S. W. W.	Calm. Calm. Very light Very light Very light Very light Very light Calm. Light. Moderate. Very light	Gend Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Cloude Clou	dy; occasion dy; circum dy; circum dy; occasion dy; occasion dy; occasion dy and rainy dy with rain.	n. and cirstrat. n. and cirstrat. nal rain. nal rain. y. n. and cirstrat.			

October 21st and	22 <sub>nd</sub> .			MAGNET	ICAL OB	SERVATI	ONS.				
Mean Göttingen	Ang	gular Value	of One Scale	e Division :	= 0' · 721.				DECLINAT	CION.	
Time.	10h.	11h.	12h.	13h.	14h.	15h.	16 <sup>h</sup> .	17h.	18h.	19h·	20h.
м. s 0 0 5 0 10 0	Sc. Div. 108'9 108'0 109'2	Sc. Div. 114'0 113'1 112'0	sc. Div. 113 9 114 0 114 2	sc. Div. 112 0 112 0 112 3	Sc. Div. 113 '9 113 '2 113 '1	Sc. Div. 113 3 115 0 115 0	Sc. Div. 133 6 131 0 128 0	Sc. Div. 124 2 123 0 120 2	Sc. Div. 111 0 112 7 113 0	Sc. Div. 111 2 111 3 111 2	Sc. Div. 113 2 · 111 2 111 2
15 0 20 0 25 0 30 0 35 0	109.8 109.8 110.5 111.0 111.0	111.0 110.3 109.9 112.0 106.0	113.1 111.0 110.2 111.0 111.2	112.0 112.2 112.7 113.1 113.2	113.5 113.9 114.0 113.1 112.2	116.3 117.2 117.1 119.0 119.7	124°1 122°0 121°4 121°0 120°0	119°2 117°4 115°6 115°8 116°2	113.4 112.8 112.2 112.7 113.0	111.8 112.0 112.8 113.2 113.2	111.0 111.4 111.8 113.0 113.4
40 0 45 0 50 0 55 0	111.0 111.7 112.8 114.1	103'8 104'2 109'8 112'4	111.2 111.3 111.1 111.4	113.9 113.0 113.6	111.4 111.0 110.9	123 *8 124 *8 128 *0 131 *0	123 · 2 124 · 6 125 · 0 125 · 7	117.0 116.0 113.3 112.0	113·2 112·7 112·4 112·0	113°2 113°4 113°4 113°2	114.2 114.5 113.8 114.5
м. s.	One	Scale Divi	sion = '000	087.					Horizon	TAL FORCE	
0 0 5 0 10 0 15 0 20 0 25 0 30 0 35 0 40 0 45 0 50 0 55 0	629.0 626.0 625.0 618.0 614.8 613.0 614.5 617.8 620.0 616.0 618.4 616.5	613.0 615.0 617.0 614.0 614.0 611.0 611.8 612.0 606.0 606.0 601.8 601.2	605.0 607.0 611.0 614.4 616.6 616.8 616.8 617.8 617.7 618.8 620.0 620.1	619.0 619.0 619.0 619.0 618.0 617.0 618.0 617.1 616.1 616.9 618.0	619 0 618 0 618 0 619 0 619 0 620 0 618 0 615 0 612 3 610 0 608 0	604.5 601.0 597.5 594.0 591.0 589.0 588.2 591.0 595.0 592.0 593.0 592.0	590.0 599.5 598.0 598.0 597.0 596.2 593.3 587.6 585.8 588.0 591.2 591.6	591.4 596.0 598.8 602.0 602.6 602.8 603.0 602.8 607.2 610.0 612.0 612.4	611.0 611.7 610.2 610.4 611.2 611.7 612.3 610.2 612.0 612.4 611.0 611.4	610.0 610.3 609.4 610.0 608.0 607.4 607.4 610.2 612.2 612.8 610.5	614·2 616·2 614·4 612·0 612·4 611·8 612·2 612·2 612·2
Thermometer	53.5	5å·7	54.0	54°1	54°5	55.0	54.7	54.3	54.0	53.7	54°0
76	One	Scale Divis	ion = '000	063.	<u>'                                      </u>	,	! 		VERTICAL	Force.	<u>'</u>
M. s.  0 0  5 0  10 0  15 0  20 0  25 0  30 0  35 0  40 0  45 0  50 0  55 0	206.2 205.9 205.7 205.0 205.0 204.3 204.3 204.7 204.7 204.7 206.5 206.5	207'0 207'6 207'6 207'6 207'6 206'7 206'7 206'7 206'7 206'7 207'7	206°3 206°8 206°8 206°8 205°5 205°5 205°3 205°3 204°7 204°7 204°7	204·4 204·5 204·7 204·7 204·2 204·2 204·2 204·2 204·2 204·2 204·2 204·2	204 · 2 204 · 2 204 · 2 204 · 2 204 · 2 204 · 2 204 · 8 204 · 8 204 · 8 204 · 8 204 · 8	203 '9 204 '7 204 '7 205 '5 205 '5 206 '2 206 '2 206 '2 206 '5 204 '6 205 '4	204·3 204·3 202·4 201·7 201·7 201·6 201·3 201·3 201·6 203·9 203·8 205·0	205·1 205·0 205·3 206·1 205·4 205·5 203·1 202·3 201·7 201·4 201·5	201 · 4 201 · 5 202 · 1 202 · 2 204 · 6 204 · 1 204 · 0 205 · 1 205 · 0 205 · 0 204 · 8 204 · 7	204 · 8 204 · 7 205 · 7 205 · 1 204 · 1 203 · 2 203 · 4 203 · 4 203 · 4 203 · 4 203 · 6	203 · 6 203 · 6 203 · 6 203 · 6 303 · 3 203 · 3 203 · 1 203 · 1 203 · 9 203 · 9 203 · 9
Thermometer	53.2	53°2	54.2	54.4	54.4	55 2	55.2	55.0	54.2	54.2	54.6
							Increasing	Numbers de	enote decreas	sing westerly	Declination,
		1		TEOROLO		DBSERVAT	rions.	, ==			
Mean Göttingen Time.	Barometer at 32°.	Dry.	Wet.	Directi	Wind.	Force.		4. ·	Weather.		
D. H. M. 21 10 0 11 0 12 0 13 0 14 0 15 0 16 0 17 0 18 0 19 0 20 0 21 0	In. 29.756 29.754 29.770 29.772 29.772 29.765 29.783 29.760 29.752 29.712 29.676	40.2 39.7 38.9 38.1 35.5 36.1 36.9 36.5 36.5 36.9 37.3	37·2 37·0 36·5 35·3 33·4 33·9 34·6 34·0 34·0 34·4 35·0	W. by W. by W. by W. S.Y W.S.Y W.S.Y W.S.Y W.S.Y	Ve   Ve   Ve   Ve   Ve   Ve   Ve   Ve	Light. Calm. ry light, ry light. ry light. ry light. ry light. ry light. ry light. ry light. ry light. ry light. ry light. ry light.	Generally of Clouded; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy; of Cloudy;	clouded; circircum. and rcum. and ne. rcum. and	strat. strat. strat. 1. and haze. cirstrat. cirstrat. strat.		

	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	and the second second second		1	MAGNET	ICAL OF	SERVATIO	NS.	and the second second	Oc	tober 21st a	$_{ m nd}~22_{ m nd}$ .	
		DECLIN	NATION.					Ang	ular Value	of one Scale	Division =	:0'`721.	
21h.	22 <sup>h</sup> .	23 <sup>h</sup> .	O <sup>h</sup> .	1 <sup>h</sup> .	2h.	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .	
Sc. Div. 115 '2 116 '0 118 '2 119 '4 118 '8 119 '0 119 '0 118 '8 116 '5 112 '4 109 '8 106 '8	Sc. Div. 106 '2 105 '6 105 '8 105 '0 105 '2 103 '5 103 '8 102 '1 103 '4 106 '0 107 '4 108 '7	Sc. Div. 110'2 110'8 113'7 113'9 115'3 115'9 115'0 117'1 121'3 119'4 119'1 118'7	Sc. Div. 116'3 117'4 119'1 117'4 118'8 117'9 120'3 116'8 119'0 118'1 117'8 118'3	Sc. Div. 119'1 117'7 117'7 117'0 117'8 117'9 115'0 113'8 113'9 114'7 114'2 114'0	Sc. Div. 114 '0 113 '0 114 '2 113 '8 113 '6 112 '0 112 '2 113 '9 112 '7 112 '0 110 '5 110 '5	Sc. Div. 108 '7 108 '0 110 '0 110 '6 109 '7 115 '0 114 '2 110 '0 112 '0 113 '0 113 '3	sc. Div. 114 0 111 4 111 2 112 0 110 0 110 2 110 2 108 8 109 2 107 6 109 3 111 0	Sc. Div. 110 '2 109 '4 110 '4 111 '0 109 '4 108 '8 108 '8 107 '7 109 '0 110 '2 110 '8 111 '8	Sc. Div. 108 8 107 2 107 0 108 0 110 2 107 2 106 0 108 4 107 5 105 5 103 2 103 5	Sc. Div.   103 ° 0   102 ° 8   103 ° 5   106 ° 2   107 ° 0   107 ° 5   102 ° 2   105 ° 4   104 ° 0   104 ° 8   105 ° 0   103 ° 0	sc. Div. 103 5 103 0 104 2 104 1 104 8 104 2 104 4 104 0 106 1 106 5 107 1 108 5	c. Div. 107 6 109 0 108 0 109 0 108 7 108 8 111 8 112 0 114 3 114 1 114 9 114 4	
	(	Horize	ONTAL I	ORCE.	-	-	ı Scale Divisio						
610'4 610'0 607'2 604'8 606'0 606'6 606'8 604'2 600'8 594'6 600'0 599'2 54'0 203'4 201'9 200'9 200'9 200'5 200'1 200'1 198'5 196'9 194'0 189'7 189'7	594.6 595.8 593.4 596.8 596.2 601.0 597.5 611.2 613.4 616.1 619.8 620.2 54.2 186.7 184.9 184.2 185.1 184.2 187.7 191.5 190.9 193.0 193.0	193.0 193.9 194.8 194.1 195.4 196.2 196.2 197.0 197.3 196.6 197.5	620 2 618 0 619 4 616 2 618 0 616 8 619 1 619 8 618 8 618 7 619 1 617 5 54 0 CAL FORC 197 7 198 0 198 5 197 7 198 9 199 5 200 9 200 5 201 9 200 6	200'4 200'6 199'0 199'0 199'0 201'1 201'3 201'3 201'3 201'4 201'4	599.0 597.1 595.8 600.0 602.0 603.0 603.4 600.0 595.0 595.0 596.0 52.7 I 200.9 200.9 200.7 201.1 203.5 204.0 203.5 204.2 203.2 204.1	591.0 588.0 587.5 590.0 585.5 577.5 583.0 581.2 585.6 591.5 593.6 591.5 593.6 592.2 202.5 202.5 203.2 202.4 201.0 202.9 204.0 203.9 204.8 203.1 202.7	584.0 579.0 584.0 590.4 590.2 589.2 592.0 591.0 593.8 589.4 587.4 53.0 202.7 202.7 202.7 203.4 204.6 204.4 203.2 202.7 202.6 203.1 202.6 202.6 202.0	584·3 581·3 581·3 581·3 581·0 582·2 580·3 576·8 572·0 569·2 571·0 573·2 575·8 577·4  53·0  Date of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contrac	587 0 580 2 578 0 576 8 574 0 578 2 578 0 580 5 583 8 586 0 585 6 583 4 211 4 211 6 212 4 211 0 210 3 211 3 210 1 200 5 209 1 207 5	585.6 591.2 591.2 603.8 601.2 611.8 599.6 598.2 596.5 594.7 599.5 597.2  202.6 202.6 202.6 202.6 205.2 208.9 208.8 209.8 209.8 209.8 207.5 207.5 207.5 208.3 208.3	595.3 598.0 599.2 601.5 603.0 608.8 604.8 605.0 608.2 611.2 616.2 618.8  52.4  Temperatur  207.2 208.5 207.4 208.3 207.5 209.1 207.8 208.4 208.0 208.8 208.7 210.0	618'8 619'1 621'4 611'5 611'8 607'1 610'2 614'2 614'0 611'8 616'4 616'5  52'1a  e, 1'64.  208'7 209'7 209'7 209'0 208'7 210'2 211'7 210'8 209'9 210'5 210'1	
	54.6	54.7	5 <b>Š</b> 7	55.0	53.3	53 4	53.3	53.8	53.2	53.0	52°6	52°4a	
out merea	sing Horizo	ntal and Vert	ical Force.		LEOBOT (	GICAT	OBSERVAT	TONS	a objection to	····			
Mean G	öttingen me.	Barometer at 32°.		mometers.	Direc		Wind. For			w	eather.		
	2 0	In. 29.644 29.617 29.587 29.581 29.557 29.538 29.538 29.609 29.638 29.726	38·1 38·1 37·9 37·7 37·9 38·1 38·1 37·3 38·1 37·3	Wet.  35.7 35.9 36.1 35.9 36.3 36.8 36.2 35.5 34.6 33.8 32.6	S.V. S. S. S. S. S. S. S. S. S. S. S. S. S.	W	Mode Mode Nearly Nearly Nearly Mode Brisk, wit Brisk, wit Brisk, wit Brisk, wit	rate. rate. calm. calm. calm. calm. rate. ch gusts. ch gusts. ch gusts.	Cloudy; Generally Cloudy, I Cloudy; Cloudy; Generally Cloudy, Cloudy, Cloudy;	Weather.  7; fine, with haze. 7; fine, with haze. 8illy cloudy. 8; but fine. 9; fine; circum. and haze. 17; fine; circum. and haze. 18illy clouded. 17; with haze. 17; circum. and haze. 17; circum. and haze. 18; circum. and haze. 19; circum. and haze. 19; circum. and haze. 19; circum. and haze. 19; circum. and haze.			

November 27th a	nd 28th.			MAGNET	CICAL O	BSERVATIO	NS.							
Mean Göttingen	Ang	ular Value	of one Scale	Division =	0' '721				DECLINAT	TION.				
Time.	10h.	11h.	12h.	13h.	14 <sup>b</sup> .	15h.	16h.	17h.	18h.	19h.	20h.			
M. s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div 118 2		Sc. Div. 120.0	Sc. Div.	Sc. Div.	Sc. Div. 110°1	Sc. Di-			
$egin{array}{ccc} 0 & 0 \\ 5 & 0 \end{array}$	112.0	110.0	111.5	140.3	117.0		120.3	116.5	114.6	110.8	109.0			
10 0	112.2	108.8	110.3	135.6	116.0		118.4	115.3	115.0	112.0	109.8			
15 0	111.4	110.5	113.3	132.4	117.1		115.9	115.0	114.1	113.8	111.			
20 0	110.0	109.8	112.6	132.0	116.7		115.3	114.7	113.9	114.0	110.8			
25 0	111.2	110.0	113.0	126.8	115.2		115.4	114.1	113.6	113.2	108			
30 0	110.3	110.0	111.3	124.8	113.8		115.2	113.9	113.2	113.8	108			
<b>35</b> 0	111.0	110.0	112.0	125.4	113.2		115.7	114.6	112.8	112.7	109 (			
40 0	111.2	111.7	115.0 117.2	126°2 127°0	113.3		115;1 114.9	114.4 115.0	110.0	112.5	109'6			
$\begin{array}{cc} 45 & 0 \\ 50 & 0 \end{array}$	111.0	112.4 112.2	121.2	124.3	115.0		112.0	115.2	109.6	112.1	108.			
55 O	110.0	110.7	127.2	122.0	116.3		115.3	115.9	110.4	111.5	109.0			
M. S.	One	Scale Divis	ion = '000	0087 parts	of the H.	F.			HORIZONTAL FORCE.					
0 0	637.0	636.0	.619 0	622.2	628.4	620.1	641.4	622.2	626.2	624.0	628.0			
5 0	637.2	636.2	619.8	634.2	625.8		643.4	623.2	625.2	623.2	627.5			
10 0	637.0	632.0	619.7	638.4	622.2	622.3	646.0	625.2	625.0 623.0 62					
15 0	641.2	631.2	617.0	637.0	624.0		641.0	625.2	626.6	622.0				
20 0	642.0	631.6	618.3	637.2	622.2		640.8	626.2	626 1	620.0				
25 0	641.2	629.2	616.4	636.2	624.8	632.6	635.0	627.8	625.2	618.0				
30 0	638.6	627.4	615.3	635.0	625.7	642.8 645.8	632.2	$626.0 \\ 625.2$	626.0	625.0	618.2			
$\begin{array}{cc} 35 & 0 \\ 40 & 0 \end{array}$	638.3	624.8 623.0	615.0	635 <b>.</b> 4 632 <b>.</b> 2	625.6	640.5	628.5	625 2	627 2	625.0	624.8			
40 0 45 0	639.4	622.2	618.2	630.8	620.2	640.8	624.0	623.2	625.2	628.8	625°0			
50 0	637.0	622.2	616.2	631.1	620'8	638.2	621.6	623.2	624.2	630.0	622.0			
<b>5</b> 5 0	635.5	620.8	616.0	630.0	620.0	634.2	620.8	623.5	624.0	631.2	621.8			
Thermometer	42°·7 43°·0 44°·0 44°·2 44°·4 44°·8 45°·6				45.6	46.4	46.8	46.2	46.2					
M. s.	One Scale Division =				of the V.	F.			VERTICAL	Force.				
0 0	221.1	218.0	216.2	218.2	215.4	212.8	201.4	205.4	207.4	205.7	204.6			
5 0	220.6	218.4	216.2	217.4	215.4	212.0	202.7	205.8	207.4	204.9	204.6			
10 0	220.4	218.6	214.2	216.7	215.6	210.8	202.3	206.8	207.5	204.7	204.6			
15 0	220.3	216.4	215.1	216.7	215.7	209.6	201.2	206.7	208.2	204.6	204.6			
20 0	220.4	216°3 216°3	215 <b>.</b> 4 216.6	218'1 215'3	215.7 215.3	208.2	$\begin{bmatrix} 201.2 \\ 200.7 \end{bmatrix}$	206.6	206.7	204.6	204.6			
25 0 30 0	220.4	216.3	216.4	215 3	215.3	205.0	201.1	206.6 206.2	206.7 208.0	204.6 204.6	203°1 203°1			
35 O	220.8	215.7	218 1	215.0	215.3	205.3	201.8	206.5	208.9	204.9	203 3			
40 0	220.2	215.6	218.3	215.0	214.6	200.9	202.2	206.0	206.9	204.9	203.2			
45 0	221.4	216.2	218.7	215.0	214.6	200.8	202.9	206.0	207.1	204.9	202.6			
50 0	221.1	216.2	218.0	215.4	214.1	200.8	204.0	205.6	206.2	205.6	202.6			
55 O	218.1	217.4	218'0	215.4	213.3	198.5	204.8	206.4	206.4	205.5	202.6			
Thermometer	42.0	43°1	43.6	44.0	44.7	45.2	46°4	47°3	47.2	47.3	47.5			
							Increasing 1	Numbers dei	note decreas	ing Westerl	y Declinati			
\				TEOROLO	OGICAL	OBSERVAT	IONS.							
Mean Göttingen Time.	Barometer at 32°.	Ther Dry.	Wet.	Direc	tion	Wind.		-	w	eather.				
		-		Direc		FOR	Force.							
D. н. м. 27 10 0	In. 29.429	33.7	30.7	S.E.	hw S	Ligl	n#	G: -						
11 0	29.395	34.7	31.7	S.E.		Moderate, w				and circun	1.			
12 0	29.367	36.1	31.8	S.S.	w.	Bris			cumstrat.					
13 0	29.373	36.1	32.7	S.S.	w.	Fres		Cloudy;						
14 0	29.364	35.2	32.9	S.S.	w.	Brisk, wit		Cloudy;						
15 0	29.359	35.2	33.0	S.V	V.	Bris	sk.		with haze.					
16 0	29.356	34.1	32.9	S.V	<i>V</i> .	Moderate, w			mist and ra	in.				
17 0	29.334	34.9	34.0	S.V	V.	$\mathbf{Ligl}$	n <b>t.</b>	Cloudy, v	with rain.					
	29.337	35.7	34.7	S.V	٧.	Veryl		Cloudy;	mist and ra	in.				
18 0			0.4-0	1										
18 0 19 0	29.326	35.6	34.4	-	-	Calı			l occasional					
18 0			34.6 34.4 34.5	-	-	Cab Cab Cab	n.		with showers					

<sup>&</sup>lt;sup>2</sup> At 284 10h, Thermometer of H. F., 51° · 5; of V. F., 51° 2.

_		·		V	Ŋ	AGNET.	ICAL OI	BSERVATIO	NS.	South association and the sec	Nov	ember 27th	and 28th.
ŀ		]	DECLINATI	on.			., <u></u>		Angu	ılar Value	of one Scale	Division =	:0'.721.
-	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	O <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7h.	8 <sup>h</sup> .	9 <sup>h</sup> .
	Sc. Div. 110.5 112.0 112.8 113.0 111.1 111.5 111.3 111.7	Sc. Div. 107'8 106'2 105'8 107'0 107'0 106'0 106'0 106'8	Sc. Div. 106'1 106'8 108'0 108'2 109'3 110'0 109'0 109'8	Sc. Div. 111'0 113'0 112'0 112'8 112'0 111'0 111'7 109'0	Sc. Div. 113 1 113 2 114 2 114 5 116 0 114 4 114 0 114 6	Sc. Div. 114'4 115'0 115'0 115'2 115'0 113'8 116'0 112'4	Sc. Div. 118 8 118 0 118 4 118 0 117 6 118 8 118 8 118 8	117'1 117'2 118'8 117'8 116'2 117'8 118'0 115'3	sc. Div. 115 ' 5 113 ' 9 112 ' 6 112 ' 6 112 ' 0 111 ' 0 112 ' 8 113 ' 5	Sc. Div. 109 1 110 1 111 2 112 0 112 2 112 2 110 9 112 8	Sc. Div. 111 '9 111 '0 110 '0 109 '9 108 '9 108 '4 107 '4 108 '9	sc. Div. 105 ° 2 105 ° 0 106 ° 0 106 ° 0 107 ° 0 107 ° 0 107 ° 5 107 ° 6	Sc. Div. 108 ° 0 108 ° 0 108 ° 2 108 ° 8 108 ° 4 108 ° 0 109 ° 0 108 ° 8
	111.7 111.1 109.8 110.0	107.2 108.0 107.5 106.3	109.0 108.8 111.1	113.0 114.0 114.8 114.0	114.0 113.2 114.0 113.8	116.0 116.0 117.2 118.6	118.0 118.7 117.6 118.4	116.4 117.2 114.2 115.1	111.8 110.0 109.4 109.5	114.1 112.8 113.0 112.0	107 · 2 105 · 0 106 · 0 105 · 2	107.9 107.8 108.0 107.8	108.2 108.8 108.7 109.7
		·	Horizonta	L FORCE.		]	Increase, i	n Scale Divisio	ons, correspor	nding to $1^{\circ}$	decrease of	'Temperatur	е, 1.63.
	621 '5 625 '0 629 '2 630 '0 631 '0 631 '0 630 '8 630 '8 630 '8 630 '8 632 '8 625 '8	620.0 614.0 616.8 620.4 623.0 624.0 621.0 620.0 623.0 626.0 628.0 630.0	631 1 629 5 631 0 629 5 628 2 631 0 634 2 633 0 634 0 634 0 635 0 637 0	634.5 637.0 633.0 634.2 634.5 632.5 634.0 638.5 630.0 630.0 630.5 631.0	631.0 632.5 631.6 632.0 632.6 631.3 628.2 628.7 628.0 626.2 623.0 623.6	626.0 623.2 623.4 622.2 621.4 620.3 624.2 620.2 625.0 623.2 622.3 623.0	621·2 623·3 622·0 621·5 620·2 621·2 621·4 620·3 620·0 620·4 620·8 618·5	617.9 617.4 619.6 618.8 613.5 617.2 619.3 615.4 620.7 614.2 613.8 615.2	614 0 611 5 609 0 610 2 603 2 606 2 608 2 604 0 607 0 606 2 603 5 606 2	604.0 604.2 605.0 608.0 607.2 606.3 603.0 603.5 608.2 609.2 610.0 608.0	611.5 614.0 610.8 611.0 609.0 609.4 609.0 612.0 611.4 608.2 611.0	614.0 610.4 607.5 606.0 609.8 612.0 611.0 609.2 608.0 607.3 610.3	607:5 612:0 613:0 614:0 612:0 612:5 616:1 614:5 615:0 615:5 618:0 620:0
	46°8	48.4	48.9	49°4	49°4	49°4	49°6	49°6	49°6	49.8	49.9	50°5	51°2°
			VERTICAL	Force.			Increase,	in Scale Divisi	ons, correspo	nding to 1	decrease o	f Temperatu	re 1°64.
	200°3 199°7 199°7 199°6 200°2 200°2 200°6 200°6 200°7 200°2 200°2	198.8 198.1 197.3 197.3 197.3 196.6 196.5 196.5 195.4 196.5 198.2 198.4	198 '4 198 '4 198 '4 199 '4 199 '8 200 '3 200 '3 200 '2 200 '3 200 '1 201 '0 201 '0	201 0 201 0 201 0 201 0 201 0 201 0 201 0 201 6 200 4 201 8 201 8 202 4 202 4	202'4 203'0 203'0 201'5 201'6 201'5 200'2 200'7 200'8 201'2 200'2 200'9	200.5 200.4 200.4 201.1 200.7 200.2 200.1 200.6 200.1 200.3 200.7 200.0	200°0 201°5 201°5 201°5 201°5 201°2 201°2 201°9 201°9 201°9 201°9	203.0 203.0 203.0 201.5 201.5 201.5 202.5 203.3 203.4 202.5	202 · 8 203 · 4 202 · 2 202 · 2 202 · 0 202 · 7 203 · 1 203 · 5 203 · 7 202 · 8 202 · 8 202 · 8	203·1 203·4 203·1 203·5 204·8 204·4 204·5 205·1 205·5 205·5	205 · 5 206 · 9 206 · 9 205 · 9 205 · 9 205 · 1 205 · 1 205 · 1 204 · 5 203 · 9 203 · 9	204'1 204'1 203'7 203'7 203'7 204'8 204'8 203'7 203'7 203'7 203'7	203.7 203.7 204.7 204.7 204.7 204.4 205.1 205.1 205.1 204.5 204.5 204.5
	48°4.	49.0	49.2	49°3	49.2	50°5	50°5	49.5	49°4	49°8	49.4	50.0	50°6°
	and increa	sing Horizo	ntal and Ve	rtical Force.							***************************************		
			11	1	ME	TEOROL	OGICAL	OBSERVAT	rions.	1			
		öttingen me.	Baromete at 32°	Ther	wet.	Dire	ection.	Wind.	rce.		7	Weather.	
	27 2 28	H. M. 122 0 133 0 0 0 1 1 0 1 2 0 0 1 1 0 1 1 0 1 1 1 1	In. 29.327 29.329 29.350 29.366 29.394 29.475 29.483 29.498 29.506 29.514	36.7 37.3 37.3 36.9 38.3 38.0 38.5 40.3 41.9 43.0 43.7	36.2 36.2 35.7 36.0 35.8 36.5 37.7 37.9 38.6 39.1	S.W. S.W. S.W. W. W.	W. by W. by W. by W. by S. S. W. S. W. S. W.	Ca Ca Ca Lig Very Very Lig Lig Br	lm. lm. lm. lm. ght. light. light. ght. ght. ght. ght. ght with gusts	Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Clear; Clear;	; cumstra, , with haze. ; circum.; ; cirstrat. ; cirstrat. , with baze. ; circum.; , with circirstrat. cirstrat. ; cirstrat.	and strat.  and haze.  and strat.	em.

December 23rd and	d $24$ th.			MAGNE	TICAL C	BSERVAT	ions.					
75 074	Angular	Value of or	ne Scale div	ision = 0'	721.			-	Declinati	ON.		
Mean Göttingen Time.	10h.	11 <sup>h</sup> .	12h.	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	, 17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.	
M. s. 0 0 5 0 10 0 15 0 20 0 25 0 30 0 35 0	113.8 117.6	Sc. Div. 107 5 109 2 108 4 107 0 104 7 105 3 105 8 105 3	sc. Div. 110°1 110°3 111°1 113°8 115°2 115°7 116°1 115°4	Sc. Div. 134'0 138'0 132'0 131'2 134'5 140'9 144'1 138'7	sc. Div. 123 9 123 8 126 8 127 1 125 8 124 8 124 0 124 0	Sc Div. 123 *8 122 *0 122 *2 123 *6 128 *0 130 *0 128 *8 129 *4	Sc. Div. 122 '7 121 '7 120 '0 120 '2 123 '0 123 '0 121 '2 119 '0	Sc. Div. 118 2 118 0 119 0 117 3 115 0 115 4 115 2 115 0	Sc. Div. 114'0 113'2 113'4 113'9 113'9 113'5 114'0 113'9	Sc. Div. 113 · 2 113 · 3 114 · 0 114 · 2 114 · 3 114 · 4 115 · 2 115 · 2	sc. Div. 116 '7 116 '4 116 '6 116 '0 116 '2 116 '4 116 '4	
40 0 45 0 50 0 55 0	123.0 119.8 112.9 110.0	107.1 109.0 108.8	114·2 116·3 119·9 127·0	131·3 126·2 123·7 122·0	125'8 126'0 126'1 126'3	131 · 2 131 · 8 131 · 0 125 · 0	123 '8 123 '2 120 '3 120 '3	114.3 114.8 114.0 113.9	113.8 114.1 113.9 113.2	115.2 115.8 115.4 116.2	116.0 116.2 116.2 115.8	
м. s.	One Scale Division = *000087. HORIZONTAL FORCE.											
0 0 0 5 0 10 0 15 0 20 0 25 0 30 0 35 0 40 0 45 0 55 0	623°0 620°8 620°0	631·1 629·7 635·0 635·1 634·0 634·8 633·6 631·6 631·5 631·7 630·0	629.0 627.6 628.0 627.9 627.8 627.0 626.9 626.8 621.6 610.2 601.0 591.0	587.0 592.0 588.0 585.5 593.7 604.9 619.0 620.0 618.4 616.0 617.2 615.0	611.0 611.0 614.1 615.0 618.4 620.0 625.0 627.2 623.0 622.5 621.8 618.2	617.5 615.2 615.0 616.0 614.8 617.0 618.0 619.0 621.0 621.4 623.0 625.0	623.0 619.5 616.0 620.0 626.0 634.0 636.5 631.0 636.0 640.0 637.5 641.0	635.0 631.5 633.0 637.0 638.0 637.0 636.0 637.0 638.0 637.0 636.5	636.5 636.0 634.0 636.5 638.0 637.0 638.0 637.0 637.0 637.0	636.5 636.1 626.2 636.0 635.2 634.6 634.4 635.0 635.2 635.0 635.0 634.7	633.0 633.4 633.6 633.8 633.7 635.0 634.6 635.0 633.2 633.0 634.2	
Thermometer	4 <b>î</b> '3	4 <b>1</b> °3	42°0	41.8	4η4	4 <b>1</b> °6	42.0	42.1	42.0	42.0	42.3	
M. S,	One Sca	le Division	= 0.0000	063.					VERTICAL	Force.		
0 0 5 0 10 0 15 0 20 0 25 0 30 0 35 0 40 0 45 0 50 0	219.6 220.2 219.8 219.8 219.1 219.9 219.0 218.4 218.6 218.6 218.5 218.5	218·4 218·2 218·0 218·0 218·3 217·4 218·6 218·3 217·7 218·0 217·3	217 ' 4 217 ' 2 216 ' 9 216 ' 6 216 ' 5 216 ' 0 216 ' 0 216 ' 0 216 ' 3 217 ' 4 220 ' 1 221 ' 0	222.9 222.7 219.1 218.6 219.0 219.3 220.8 219.4 215.9 215.8 215.8	215.8 215.6 219.7 219.7 220.6 220.9 219.9 219.9 216.2 215.5 215.5	215·2 215·3 215·5 215·5 215·3 215·3 214·0 214·1 214·0 214·0 214·0 214·1	213.0 211.4 210.2 208.0 204.8 204.6 201.8 203.4 202.7 201.1 200.2 200.2	198°9 200°1 200°8 201°3 202°1 302°8 203°0 205°3 206°0 206°8 206°8 208°0	208.0 208.0 208.2 209.2 209.2 209.2 209.2 209.2 209.2 209.4 209.2	209·1 209·1 207·8 207·7 207·6 207·8 207·7 207·4 207·5 207·6 207·5 207·3	206.9 207.1 207.3 207.2 207.3 207.3 207.4 207.4 207.0 207.0 207.1 207.0	
Thermometer	40.0	41.0	4Î.6	41.5	40.8	41°4	42.0	42.4	42.2	42.2	42°9	
							Increasing	numbers de	note decreas	ing Westerl	y Declination,	
			ME	TEOROL	GICAL	OBSERVAT	TONS.					
Mean Göttingen Time.	Barometer at 32°.	Ther	rmometers.	Dire	Win	d. Force.	_		Weathe	er.		
D. H. M.  23 10 0  11 0  12 0  13 0  14 0  15 0  16 0  17 0  18 0  19 0  20 0  21 0	30°184 30°148 30°155 30°157 30°146 30°097 30°069 30°035 30°021 30°011 29°992	23.9 15.8 13.7 17.6 16.7 19.5 16.2 12.6 13.7 15.6 15.5	21:4 15:7 13:4 16:9 16:4 18:8 15:6 12:6 13:6 15:0 15:2	-		Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm.	Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy	; circum. ; circum. ; circum. ; circum. ; circum. ; circum.	n. ce. n. and haze. ce. m.; aurora. n. and haze; aurora visible. n. and haze. ce.			

<sup>&</sup>lt;sup>a</sup> At 24<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 44° 8; of V. F., 44° 5.

			and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s		·				The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s			
					MAGNET	ICAL O	BSERVATIO	NS.		Dec	ember 23rd	and $24$ th.
		DECLINAT	ION.					Ang	ular Value o	of One Scale	Division =	0'`721.
21h.	22h.	23h.	Oh.	1h.	2h.	3h.	4 <sup>h</sup> .	5h.	6 <sup>h</sup> .	7h.	8h.	9h.
ScDiv.	Sc. Div.	Sc. Div. 109°2	Sc. Div. 111°2	Sc. Div. 116°5	Sc. Div. 1181	Sc. Div	sc. Div. 120'0	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 109 2	Sc. Div.
115.2	110.0	109.4	111'8	116.8	115.4	117.8		113.9	111.8	110.3	110.5	111.5
115.0	109.2	111.0	111.9	116.0	117.1	118.7	7   118.0	113.7	111.2	109.4	109.7	112.0
115.0	110.0	110.7	111.8	115.1	117.0	116.0	)   116.8	113.6	110.4	111.0	108.6	111.8
115.4	110.8	110.2	115.0	114.7	118.2	118.3		113.8	110.8	109.4	108.2	112.0
115'6	110.8	110.5	112.0	114.2	118.1	119.7		113.0	109.2	108.0	108.0	112.0
116.0	111.0	109'1	111.8	114.8	116.2	119.4		113.4	108.6	108.0	107.4	111.2
113.7	111.5	109.0	112.0	117.0	117.8	119.0		114.3	108.8	110.5	107.2	112.4
112.0	111.2	111.0	111.2	117.0	118.7	119.0		112.6	109.0	109.8	107.0	112.8
110.8	110.8	111.8	113.1	117.4	119.1	118.1		113.0	110.6	110.0	108.0	113.5
110.0	110.5	110.5	113.6	117.8	118.3	117.0		113.0	111.5	109.1	110.0	113.0
110.3	110.0	110.5	115.5	118.0	118.0	115.1		112.4	111.0	109.7	110.0	113.5
<b>}</b>		Hopegore	Topon	<u> </u>	•		-	, , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				ļ
	1 222.2	HORIZONT.					in Scale Divis	<u> </u>	1	J	<u> </u>	
634.0	632.6	632 3	640.0	642.5	640.2	635.0		620.0	622.2	616.6	632.2	633'4
634.0	633.0	630.5	640.8	644.3	639.0	635.2		622.0	618.5	617.2	632.3	635.0
631.4	634.0	634.0	641.6	643.1	638.0	633.0		625.0	615.5	620.0	630.0	634.2
630.0	631.2	637.5	640'2	643.7	639.5	628.2		622.5	616.0	623.2	631.5	634.9
630.6	632.0	638.6	642.0	638.0	641.2	627.5		619.5	613.5	623.0	638.0	637.5
631.0	632.5	636.5	642.0	641.5	638.1	630.0		620.0	613.0	622.4	635 6	634.8
631 4	633.0	636.8	641.0	640.0	633.0	630.0		620.0	613.0	622.8	631.2	638.5
631.0	631.5	636.5	643.2	641.6	636.0	630.0		621.2	613.0	624.0	632.5	638.8
630.2	631.8	637.2	640.4	640.5	638'4	630.0	619.4	621.5	612.5	630.0	633°0	637.5
629'4	632.3	638.0	639.8	641.0	640.5	630.0	624.0	620.5	617.0	633.2	630.0	639.8
633.2	632.2	638.8	643.2	640.2	634.2	628.0		623.0	617.4	629.8	628.6	642.0
633.0	632.5	639.2	642.8	641.0	636.8	626.0		625.0	617.2	630.6	626.5	641.2
42°·3	42.2	42.2	41°8	4i°7	41°6	4 <u>1</u> °·4	42.0	43.0	44.0	44.5	44.6	44.8 a
		VERTICAL	Force.		-	Increase,	in Scale Divisi	ons, corresp	onding to 1	decrease of	f Temperatui	re, 1°64.
207.0	205.3	205.4	208.3	208.3	207.5	208.5		209.5	208.6	207.8	206.6	206.3
207.1	205.0	205.4	$\frac{209}{209} \cdot \frac{3}{2}$	208.3	207.4	208.5		309.5	207.2	207.7	206.5	206.3
207.3	205.2	205.4	208.9	208.9	207.4	208.8		209.1	207.2	208.4	208.1	206.0
207.3	205.2	207.1	208.9	208.2	207.4	208.8		208.9	207.2	208 4	207.7	206.0
207.2	205.2	207 1	208.9	208.2	207.9	208.8		208.9	207.2	208.1	207.7	206.0
207.3	205.2	207 1	208.9	208.5	207.9	209.7		208.9	207.2	207.9	208.1	206.0
207 6	205.2									207.9	207.4	
207.3	205.8	207:3	208.5	208.5	208.0	209.6		208.6	207.2	207.9	206.2	206.1
207.4	1	207:3	208.5	208.2	208.1	209.6		208.3	207.2		,	206 1
	205.8	207.3	208.5	208.1	208.1	209.7		207.6	207.2	208.1	206.2	206.1
207.5	205.8	208.3	208.1	207.5	208.5	209.7		207.6	208.2	208.1	205.5	206.1
205.9	205.6	208.3	208.3	206.4	208.5	209.7		207.6	208.1	207.1	205.0	206.1
205 4	205 2	208.3	208.2	208.0	208.5	209.7	209.5	208.6	207.8	207.1	205.0	206.1
42.6	43.0	43.0	42.2	42°2	42.9	<b>42</b> °2	41°7	42.4	43.4	43.7	44.2	44.4 =
and increa	asing Horizo	ontal and Ver	tical Force.									
		THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE COLUMN STATE OF THE CO		ME	TEOROLO	GICAL	OBSERVAT	IOŅS.	s ( ) ( ) ( )			
Mean G	öttingen	Barometer	Therr	nometers.		Win	ad.					
Tir	me.	at 30°.	Dry.	Wet.	Direc	tion.	Force.			Weathe	r.	
D. H	і, м.	In.	0	0								
23 2		29.978					Calm.	C7 7				
20 2			16.6	16.2	_	-			circum.			·
1 ~.	0 0	29.897	21.7	20.5			Calm.	Cloudy	; circum.			i
ŀ .	1 0	29.873	27.5	25.6	S.S		Very light.			eirstrat., a	ии паzе.	j
T.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	29'841	28.1	27.1	S.S		Very light.		, with haze.			
		29.811	28.8	27.1	S. by		Very light.		,	um. and haz		į
II.		29.800	29.9	28.3	S. by	7 E.	Very light.			cirstrat., ar	nd haze.	Į.
	4 0	29.759	31.2	28.8	S. by		Very light.		with haze.			i
	5 0	29.711	33.9	31.1	S. by		Very light.		; circum. a			i
	6 0	29.660	34'1	31.4	S.W.		Very light.	Cloudy;		nd cirstrat		Į.
	7 0	29.654	33.9	31.3	S.W. 1	y W.	Very light.	Cloudy	cir. cum. a	nd cirstrat	·.	l
	8 0	29 596	34.4	31.5	S.W. 1	y W.	Very light.	Cloudy,	with strat.			I
١	9 0	29.584	34.6	31.9	S.W. I		Very light.	Cloudy,	with strat.			i
						-						

January 20th and	21st.			MAGN	ETICAL	OBSERVAT	TIONS.				
Many Cittan	Angular	Value of on	e Seale Div	ision $=0''$	721.				DECLINAT	TION.	
Mean Göttengen Time.	10h.	11 <sup>h</sup> .	12h.	13 <sup>h</sup> .	14 <sup>h</sup> .	15h.	16 <sup>h</sup> .	17 <sup>t</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>b</sup> .
M. s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0 0	113.7	113.0	117.1	116.0	126.3	114.1	114.0	115.6	106.8	115.1	118.0
5 0	114.6		115.0	115.3	125.0	114.0	114.0	115.8	108.8	115.0	119.2
10 0	112.5		114.9	115.0	123.3	113.9		116.0	107.0	114.7	120.0
15 0	112.1		115.0	114.5	121.5	114.1		116.9	108.8	115.9	120.6
20 0	112.2		114.8	116.0	119.0	114.3		117.3	111.0	116.0	120.4
20 0			115.2	117.0	117.0	114.4		115'1	113.2	112.0	120.7
25 0	113.1			119.8	115.8	114.8		114.6	114.7	110.5	120.2
30 0	113.2		115.2			114.1		114 1	114.0	117.4	120.7
35 0	112.9		115.7	126.2	114.8			114.1	112.8	116.7	120.6
40 0	112.2		116.0	129'6	114.6	114.2		115.0	114.7	117.3	120.8
45 0	112.0	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7								121.0	
<b>5</b> 0 0	110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 110 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1										
55 O	112.8	117.0	115.9	129.0	114.0	114 0	115 0	108 0	115 5	117.8	121.8
M. S.	One Scale Division = '000087 parts of the H. F. HORIZONTAL										
2 0	642.0	640.0	646.5	643'1	645.0	646:4	645.0	642.0	645.0	647.0	647.0
7 0	641.5	642.0	646.0	643 9	644.8	646.2		642.0	644.5	647.8	647.4
	643.0	646.0	644.2	644.5	647.2	646.2		642.0	645.0	645.9	648.0
$\begin{array}{ccc} 12 & 0 \\ 17 & 0 \end{array}$	637.0	646 1	643.0	643'8	648.0	646.0	646.0	640.0	645.9	647.0	648.2
17 0		646.0			648.0	646.0	645.0	638.0	646.8	648.2	649.0
22 0	638.0		644.0	641.0		_	645.0	637.5	637.5	647.0	649.3
27 0	636.3	644.6	644.8	639.2	649'2	646.2	644.0	637.0	650.0	647.4	649.3
32 O	637.0	646'1	645.1	638.6	649.2	648.0	643.5	637.5	649.0	647.4	649.0
37 0	634.2	645.9	645.0	640.0	647.0			635.0	648.0	647.2	648.7
42 0	632.3	650.0	644.6	641.0	646.8	648.0	643.0	640.0	647.9	649.3	648.9
47 0	634.0	650.1	644.7	642.8	647.0	647.5	642.0		648.0		649.2
52 0	637.1	649.1	643'9	644'0	647.0	647.3	643.0	641.5		649.7	649.3
57 0	638.2	648.0	643.1	643.5	647.2	646.4	643.0	645.0	647.5	648.2	049 3
Thermometer	ermometer 37.0 38.0 38				38°5	38.2	38.4	38.0	38.4	39.0	38.6
м. s.	One S	Scale Division	u = .0000	63 parts o	f the V.F.				VERTICAL	FORCE.	
	01410	01010	21212		1 00010	1 000:0	210.2	000:4	00014	1 007:0	207.5
3 0	214.9	213.9	212.3	210.1	209.0	208.8		209.4 209.1	208.4	207.6	207.6
8 0	214.2	213.3	212.2	210.4	209.1	208.8	210.3			207.6	208.0
13 0	214.2	213.6	212.6	210.5	209'1	208.8	210.3	209.1	208.4	207.6	
18 0	213.6	213'4	212.1	210.5	209'1	208.8	210.4	208.9	208.4	207.6	208.3
23 0	213.6	212.4	210.7	210.2	208.8	208.8	210.4	208.9	208.0	206.5	0-6-0
28 0	213.6	212.0	211.5	210.3	208.8	209.0	210'4	208.9	208.0	207.4	208.3
33 0	213.6	212.1	210.8	210.0	208.8		210.4		208.0	207.2	
38 0	213.4	212.1	210.7	210.6	208.8	209.4	209.4	209.6	208.0	209.5	208.4
43 0	213.3	212.1	210.7	210.8	208.7	209.4	209.4	209.6	207.6	209.3	208.6
48 0	213.7	211.4	210.3	210.4	208.7	210.2	209.4	209.6	207.6	209.3	208.4
53 0	214.3	211.8	210.3	210.4	208.7	210.2	209.4	208.4	207.6	209.5	208.7
58 0	213.2	211.8	210.3	210.4	208.7	210.5	209.4	208.4	207.6	209.6	207.7
Thermometer	36.8	38.1	39°2	40.0	39.9	3 <b>9</b> .9	39.7	39°4	39°6	40.0	40.0
							Increasing 1	Vumbers d	enote decrea	sing Westerl	y Declinati
	and the second	<u> </u>	ME	TEOROL	OGICAL	OBSERVA		<del> </del>		· · · · · · · · · · · · · · · · · · ·	
Mean Göttingen	Baromet	Ther	mometers.			Wind.			-		
Time.	dean Gottingen   Barometer					Fo	rce.			Weather.	
D. H. M.	In.	•	۰								
20 10 0	29.948	3 21.3	17.8	W.	s.w.	$\mathbf{Li}$	ght.	Clear;	cir.		
11 0	29.922			w	S.W.		ght.	Clear;			
$12  \overset{\circ}{0}$	29.919				$\tilde{\mathbf{s}}.\tilde{\mathbf{w}}.$		erate.		halo round	the moon	
13 0	29.91				s.w.		with gusts.		halo round		
14 0	29.90				š.w.		erate.	Clear,			
15 0	29.90				S.W.		erate.	Clear;	cir.		
16 0	29.88				s.w.		ght.		scattered c	ir.	
17 0	29.86				s.w.		ght.	Clear ;		***	
	29.849				S.W.		ght.	Clear;	Ç11.		
18 O				377	S.W.		ght.	Clear.			
18 0	11 50.65	1 1 2 2	1 7 1								
19 0	29.83								, oir		
	29.836 29.836 29.816	)   14.2	13.3	3   W.	S.W.	Very light	onearly calm). (nearly calm).	Cloudy			

<sup>&</sup>lt;sup>a</sup> At 21<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 35° '4; of V. F., 36° '2.

,,,,,,,,						MAGNET	ICAL (	BSERVATIO	ONS.			anuary 20tl	and 21st
			DECLINAT	ION.			<del>,</del> ,			ılar Value		Division =	
	21h.	22h.	23h.	Oh.	1h.	2h.	3h.	4 <sup>h</sup> .	5h.	6h.	7 <sup>h</sup> .	8h.	9h.
	Sc. Div. 118 '4 117 '5 116 '2 116 '2 116 '4 116 '8 116 '6 117 '0 117 '4 117 '4 117 '4 117 '0 117 '4	Sc. Div. 117.6 117.2 117.4 117.2 117.4 117.6 114.0 114.0 113.4 113.2 112.4 111.2	Sc. Div. 110'8 112'4 112'0 112'8 113'8 115'0 115'6 115'4 116'5 116'4 116'4	Sc. Div. 117'0 117'0 117'2 116'8 116'4 115'6 115'4 115'6 116'0 117'4 118'6	Sc. Div. 118 '8 119 '0 119 '6 120 '6 120 '0 119 '9 119 '8 118 '9 118 '4 117 '8 118 '2 118 '1	Sc. Div. 118°1 119°2 120°0 119°2 118°0 117°0 118°8 118°1 116°3 115°8 117°8	sc. Di 115 °C 114 °C 114 °C 111 °C 111 °C 111 °C 111 °C 111 °C	3	Sc. Div. 110 ° 0 110 ° 0 108 ° 6 108 ° 1 108 ° 3 108 ° 0 108 ° 2 108 ° 0 106 ° 0 107 ° 0 107 ° 1	Sc. Div. 107 '0 107 '7 106 '4 107 '0 107 '3 107 '0 107 '4 108 '0 108 '2 108 '2 108 '8 108 '6	Sc. Div. 109 ° 0 109 ° 2 109 ° 0 109 ° 2 109 ° 4 109 ° 8 110 ° 0 109 ° 7 110 ° 8 111 ° 0 111 ° 1 112 ° 0	Sc. Div. 112 '0 112 '0 112 '0 112 '0 111 '3 112 '0 111 '6 112 '0 111 '5 112 '0 112 '2 113 '0	Sc. Div. 113 '0 113 '0 114 '0 114 '8 116 '2 117 '8 118 '8 119 '0 118 '8 118 '4 118 '4 117 '8
			Horizonta	L Force.	· <b>-</b>	I	ncrease, i	n Scale Divisio	ons, correspo	nding to 1°	decrease of	Temperatur	e, 1°63.
	647'4 647'6 648'0 648'4 647'2 647'0 644'8 645'0 645'4 645'4 645'6 645'0	645.8 645.7 645.7 645.8 645.6 645.4 645.0 645.6 644.4 640.5 641.8 639.2	642.6 643.0 644.4 646.4 647.8 647.5 650.4 650.0 648.0 650.0 651.2 650.4	650'4 650'2 648'8 649'2 649'8 649'2 650'2 650'0 651'2 650'8 652'0 652'4	649.5 650.0 650.0 650.4 649.2 648.9 647.6 647.6 647.6 646.2 644.8 644.5	642.5 641.0 640.8 640.2 637.0 634.1 634.0 632.2 632.5 630.0 628.0 631.1	628.0 626.4 624.0 628.0 627.2 625.5 624.0 623.0 624.0 623.0	618.0 615.9 617.2 622.5 624.1 626.6 625.0 626.5 627.8 632.0	629.8 628.0 628.0 626.0 628.2 627.5 627.6 630.0 632.0 632.2 632.5 633.0	631.0 631.0 628.3 629.7 629.8 630.8 630.6 630.7 631.4 630.8 630.6 630.4	630.6 630.6 631.0 631.4 631.6 633.0 632.6 633.7 630.0 632.0 632.5 635.5	635.0 635.2 639.2 640.0 639.8 640.2 638.5 637.2 637.8 636.2 635.0 633.2	634·5 632·7 632·5 631·4 634·5 638·4 639·0 642·2 642·3 642·8 642·5 644·4
	38.0	3 <b>7</b> .6	37°6	3 <sup>°</sup> .4	38.0	37.4	37°0	36°2	36.4	3 <b>Š</b> °5	35.7	36.0	35.0 a
			Vertical :	Force.		1	ncrease, i	in Scale Divisio	ons, correspo	nding to $1^\circ$	decrease of	Temperatur	e, 1 °64.
	209·2 209·7 210·2 210·1 210·2 210·5 210·0 212·3 212·4 212·5 212·8	212.8 212.5 212.5 212.0 212.3 212.1 212.2 212.4 212.3 212.4 212.7 209.9	210·1 210·0 210·0 210·0 209·8 209·6 209·6 209·1 209·1 209·1 208·9	208 · 9 208 · 9 208 · 7 208 · 8 208 · 9 209 · 2 209 · 6 209 · 8 210 · 0 210 · 3 210 · 5 210 · 5	210°5 210°4 210°4 209°7 210°3 209°5 209°5 209°5 209°8 209°7 210°4 210°1	210·1 210·1 209·0 209·0 209·0 204·7 206·2 206·8 207·9 208·4 208·8 209·5	210·0 210·2 210·2 210·2 211·5 211·7 211·7 212·4 213·3 213·3 213·3	213.7 214.3 214.3 215.0 215.0 215.4 215.2 215.2 215.2 215.6	215.6 215.6 215.6 215.6 215.6 215.6 215.0 215.0 215.0 215.0 215.0 215.0	215.0 215.0 215.0 214.3 214.3 214.7 214.7 214.7 214.7 214.7 214.7 214.7	214.5 214.5 214.5 214.5 214.7 214.7 214.6 215.6 215.6 216.4 216.4	216.4 216.4 216.8 216.8 216.8 216.8 216.8 216.8 216.8 216.8 216.8 216.8 216.8	217 '4 217 '4 217 '6 217 '7 217 '7 218 '1 219 '2 219 '2 219 '2 219 '3 219 '3
	39.2	39°3	39°1	39°1	39°1	39°1	38°4	37°4	3 <sup>°</sup> .1	36°9	36°6	36°9	36.6ª
	and increas	ing Horizo	ntal and Ver	tical Force.	· · · · · · · · · · · · · · · · · · ·								,
				-,	ME.	reorolo	GICAL	OBSERVAT	IONS.				
	Mean Gö Tim		Barometer at 32°.	Thern Dry.	Wet.	Direct	tion.	Wind.	e. 		W	eather.	
	D. H. 20 22 23 21 0 1 2 3 4 5 6 7 8 9	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	In. 29.820 29.822 29.824 29.822 29.836 29.840 29.820 29.816 29.816 29.818 29.854	14.4 14.2 14.0 13.5 12.9 13.3 13.8 13.8 9.8 9.8 8.7 6.5	3.0 13.2 12.8 12.4 11.3 11.6 11.6 10.9 8.9 8.9 7.8 5.6	W. by W. by W. by W. by W. by W. by N. V N.W. b	7 N. 7 N. 7 N. 7 N. 7 N. 7 N. V. V. Dy N.	Very light (no Very light (no Very light (no Ligh Moder Fres Brisk, wit Moderate, w Moder Moderate, w Moderate	early calm). early calm). early calm). early calm). h. h. h. h gusts. rith gusts. eate. rith gusts.	Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy;	ir. circum. an circum. an circum., ci circum. an circum., ci circum. an	d cirstrat. r-strat., and d cirstrat. rstrat., and d cirstrat. d cirstrat. irstrat., and d cirstrat.	haze.

February 26th and	d $27$ th.			MAGNET	CAL OB	SERVATIO	NS.							
M C''W	Angul	ar Value of	one Scale I	Division =	0′′721.				DECLINAT	ion.				
Mean Göttingen Time.	10h.	11h.	12h.	13h.	14h.	15h.	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19h.	20h.			
м. s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 109.8	Sc. Div. 107 ° 0			
0 0	110.0	116.0	117.0	110.8 110.8	112.0	113.5 112.2	114.0	109.8	110.2	110.3	107.9			
5 0	110.9	117.0	116.0 114.2	111.5	112.5	112.2	114.2	110.4	111.0	110.8	108.2			
$\begin{array}{ccc} 10 & 0 \\ 15 & 0 \end{array}$	111.0	118.0	112.9	111.8	116.7	113.0	114.8	110.8	111.4	110.8	109.2			
20 0	111.0	119.2	112.0	112.7	118.8	113.2	114.2	110.8	111.0	110.0	110.0			
$\begin{array}{ccc} 20 & 0 \\ 25 & 0 \end{array}$	110.9	118.0	111.2	113.0	118.2	112.7	114.5	111.0	110.8	109.2	110.8			
30 0	110.4	118.8	111.1	113.8	115.2	111.9	114.8	111.6	110.4	109.0	110.4			
35  0	110.2	119.0	111.6	113.7	116.0	112.8	114.4	111.5	110.5	108.6	110.6			
40 0	110.5	121.0	111.7	113.0	119.2	113.0	113.2	111.8	110.0	109.0	111.0			
45 0	111.0	119.2	111.1	$112.2 \\ 112.2$	124.0 124.2	113 0 113 8	114.0 113.2	110.7 110.8	110.0	108.4 107.2	112.1 112.3			
50 0 55 0	112.0 114.2	118°2 117°2	111.2	$\frac{112}{112}.5$	117.2	113.7	112.0	111.0	110.6	107.1	112.0			
	One S	cale Division	r = .0000	087 parts of	the H. F.	1	<u> </u>		Horizont.	AL FORCE.				
м. s.	20210	00415	c20:0	COC: 4	697:0	646.6	620.0	694.0						
$\begin{array}{ccc} 2 & 0 \\ 7 & 0 \end{array}$	636.0	624.5 619.5	630°0 629°0	626°4 626°7	627.0	646.6 645.0	632.8 632.2	634'8 634'0	634.5 634.0	634°2 633°8	632 <b>·</b> 1			
$egin{array}{ccc} 7 & 0 \ 12 & 0 \end{array}$	638.0 640.0	617.5	630.0	624.8	625.2	643.8	632.8	635.0	634.2	634.2	633.0			
$egin{array}{ccc} 12 & 0 \ 17 & 0 \end{array}$	641.0	618.0	630.2	623.7	627.8	639.0	632.0	634.8	634.8	634.0	633.9			
22 0	641.0	620.0	629.0	624.3	631.0	638.4	633.5	635.0	634.8	633.2	633.8			
$\begin{array}{ccc} 22 & 0 \\ 27 & 0 \end{array}$	641.0	616.2	628.0	622.2	634.4	635.2	633.5	634.8	636.8	633.2	634.4			
32 0	638.0	614.5	627.5	622.6	632.2	633.0	633.9	634.0	637.0	634.0	633.2			
37 O	637.5	617.5	626.0	622.7	632.2	631.2	634.8	633*8	636.4	633.8	633.0			
42 0	635.0	620.5	625.5	623.0	635.0	631.2	635.0	634.2	635.8	633.8	633.0			
47 0	633.0	626.5	624.0	624.7	635°2 645°4	633.0	635.0	$634.4 \\ 635.2$	634°2 634°4	633.9	633 <b>'</b> 1 632 <b>'</b> 9			
52 0 57 0	631.0	628.0 631.0	625.5 626.2	$\begin{array}{c} \textbf{625.2} \\ \textbf{625.2} \end{array}$	646.7	633.2	635.0	635.0	635.8	632.6	631.4			
Thermometer							43.4	43.6						
	00e Scale Division = :00							· · · · · · · · · · · · · · · · · · ·	Vertical.	Force.				
M. S.	II				1	1,00.5	1,0040	100.0	1 000.0	1 00140	00110			
3 0 8 0	204.5 205.5	207.9 208.1	205 9 205 9	202·3 201·6	$\begin{vmatrix} 202.1 \\ 202.2 \end{vmatrix}$	198.7	198.2 198.2	199.9	200.3	201.6	201.0			
8 0 13 0	205.5	208.1	205.2	201.4	202.2	197.9	198.8	199.9	200.3	201.5	201.0			
18 0	207.1	208.0	$205 \cdot 2$	200.6	201.8	197.2	198.8	199.9	200.8	201.5	200.6			
23 0	206.9	208.0	205°2	200.5	201.8	196.6	198.8	199.9	201.1	201.5	201.2			
28 0	206.9	208.0	204 0	200.2	201.3	196.4	199.2	200.1	201.1	201.1	200.9			
33 0	206.9	208.0	204.0	200.9	200.9	196.4	199.7	200.1	201.1	201.1	200.9			
38 0	206.9	207.2	203.2	200.9	200.9	197°1 197°4	199.7	200°1 200°1	201.1	201.1	200.3			
$\begin{array}{cc} 43 & 0 \\ 48 & 0 \end{array}$	206.9	207°2 208°1	$203.2 \\ 202.9$	201 1	200 4	198.0	199 9	200.1	201.6	201.1	201.0			
53 0	206.9	208.1	202 9	201.6	201.4	198.2	199.9	200.5	201.6	202.2	201.1			
58 0	206.9	207.3	202.8	201.4	200.6	198.0	199.7	200.3	201.6	200.9	200.9			
		<del></del>					0		-  <u>-</u> -					
Thermometer	42.9	42.7	43°4	45.0	44.9	44.6	44.6	45.0	44.8	44.0	44.4			
	· · · · · · · · · · · · · · · · · · ·	- Landon Managara	M	TETEOROI	OGICAT	L OBSERVA	Increasing I	Numbers de	enote decrea	sing Westerl	y Declinatio			
		Ther	mometers.			Wind.			·					
Mean Gottingen Time.	ean Göttingen Barometer					Fo	rce.		· .	Weather.				
D. H. M.	In.	٥	0						-					
26 10 0	29.837			E-1	by N.	Moderate,	with gusts		; circum.					
11 0	29.813				oy N.		ith gusts.		; circum.					
12 0	29.774				by N.	Brisk, w	ith gusts.		; circum.					
13 0	29.742				E.		ith gusts.	Cloudy	; circum.	and haze.				
7 / ^	29.741 29.700				ь. Е.		esn. esh.		; circum.					
14 0	29 700				E.		$\operatorname{esh.}$		; circum. ;					
15 0	40 010				E.		$\operatorname{esh.}$			haze, and sn	ow.			
$\begin{array}{cc} 15 & 0 \\ 16 & 0 \end{array}$		27.7	, 200					1						
15 0 16 0 17 0	29.600 29.584				E.	$\mathbf{Fre}$	$\operatorname{esh.}$	Cloudv	Cloudy; circum., haze, and snow.					
$\begin{array}{cc} 15 & 0 \\ 16 & 0 \end{array}$	29.600	28.0	27°1 27°3		E. E.	$\mathbf{Fr}$	$\operatorname{esh}$ .	Cloudy	; circum.,	haze, and sn haze, and sn	ow.			
15 0 16 0 17 0 18 0	29.600 29.584	28.0 27.9 27.6	27 · 1 27 · 3 27 · 1	3	E.	Fro Fro		Cloudy Cloudy	; circum., ; circum.,	haze, and sn	0W. 0W.			

<sup>&</sup>lt;sup>a</sup> At 27<sup>d</sup> 10<sup>h</sup>, Thermometer of H.F., 45° '4; of V.F., 44° '6.

					MAGNET	TICAL O	BSERVATIO	ONS.		Feb	ruary 26th	and $27$ th.
		DECLINATI	ON.					Ang	ular Value	of one Scale	Division =	0' 721.
21h.	22h.	23h.	Oh.	1h.	2h.	3h.	4h.	5 <sup>h</sup> .	6h.	7h.	8h.	9h.
bc. Div. 112'0 112'2 112'1 111'6 111'5 111'1 110'8 111'3 111'4 111'3 112'0	Sc. Div. 112 '4 113 '0 113 '2 113 '9 114 '0 113 '2 113 '2 114 '0 114 '2 114 '0 114 '2	Sc. Div. 113 0 112 2 112 5 113 0 113 0 113 0 113 0 113 0 113 0 113 2 113 2	Sc. Div. 112 '9 112 '5 112 '4 113 '0 113 '0 113 '0 113 '0 112 '8 112 '7 112 '9 113 '1 113 '8	Sc. Div. 113 1 113 4 113 8 113 4 114 0 115 0 115 2 116 0 115 3 115 3 116 0 115 6	Sc. Div. 116.0 116.0 115.9 115.2 116.2 117.0 117.3 117.0 116.8 116.2 116.0	sc. Div 116 0 115 7 116 2 114 6 114 2 114 7 115 0 115 0 114 5 114 2 113 4 114 2	115.4 113.0 112.2 111.2 111.0 110.8 111.2 110.2 110.2 110.3 110.8	Sc. Div. 108 4 107 8 107 0 107 0 106 2 105 1 104 8 104 2 104 0 103 4 103 4	sc. Div. 102 '8 102 '2 103 '0 103 '2 102 '6 103 '0 103 '2 102 '4 102 '2 101 '8 102 '0 101 '8	Sc. Div. 102 '5 101 '4 101 '2 101 '2 101 '8 102 '1 102 '5 102 '6 103 '2 103 '8 103 '8	Sc. Div. 104 1 104 1 104 2 105 1 105 6 105 7 105 5 105 7 106 0 106 4 106 8 106 2	Sc. Div. 106·7 107·0 107·7 107·6 108·0 108·1 108·2 108·8 110·0 109·4 110·0 110·5
		Horizonta	L Force.		I	Increase, i	n Scale Divisio	ons, correspo		decrease of	Temperatur	e, 1°63.
631 '4 632 '8 633 '1 633 '8 633 '0 633 '9 634 '0 633 '2 634 '8 634 '8 633 '1 634 '3	633 · 8 634 · 0 633 · 2 633 · 5 633 · 7 633 · 8 633 · 9 634 · 0 634 · 0 633 · 9 634 · 6 635 · 0	634.6 634.7 633.0 632.6 633.0 631.2 631.0 630.0 629.5 629.4 629.7 630.0	628 ° 0 628 ° 4 627 ° 8 628 ° 0 628 ° 0 627 ° 0 624 ° 0 622 ° 8 624 ° 4 624 ° 8 625 ° 8	626 · 2 626 · 2 627 · 5 626 · 5 625 · 5 625 · 0 626 · 5 627 · 5 626 · 0 626 · 0 626 · 5 626 · 0	626.0 626.0 625.0 625.0 624.0 623.0 624.0 622.2 621.4 621.0 620.3	620 · 2 620 · 3 620 · 2 620 · 2 620 · 0 621 · 2 620 · 0 618 · 2 617 · 4 615 · 2 613 · 6	612.0 610.2 610.0 610.2 609.2 611.0 610.4 610.0 610.4 611.5 613.4	616.5 616.2 616.8 617.0 617.8 616.5 616.5 616.6 613.2 614.2 615.4	613.8 612.2 613.5 614.2 616.0 616.5 618.8 618.2 618.7 618.8 621.2 621.0	622.5 621.8 621.2 621.9 621.8 621.6 621.4 623.0 623.0 624.0 623.0 623.1	623·1 624·0 625·8 626·2 625·1 626·9 629·0 630·0 630·6 629·0 629·0	629 9 630 0 628 8 629 0 628 1 631 5 630 9 631 5 632 0 632 0 631 0 631 5
43.3	42.8	4η6	42.0	42°:0	42.0	42.2	42.9	44.4	44.4	44.8	45°4	45°2°
	1	VERTICAL ]	Force.	,	]	Increase, i	n Scale Divisi	ons, correspon	nding to 1°	decrease of	Temperatur	e, 1 °64.
201'3 201'9 201'6 201'1 201'5 202'0 203'0 202'8 203'1 202'4 202'0 201'8	202°1 201°7 201°7 201°9 201°9 201°9 202°0 202°0 202°0 202°0 201°0 201°0	200.6 200.6 200.5 200.6 200.5 200.5 201.0 201.0 201.0 201.0 201.0	201 · 1 201 · 1 201 · 0 201 · 0 201 · 0 201 · 5 201 · 6 203 · 1 203 · 3 203 · 1 203 · 1 203 · 1	203.6 203.8 203.8 204.7 204.7 204.7 204.7 204.7 204.7 204.7 204.7 204.7	204.7 204.7 204.7 204.7 204.2 204.2 204.2 204.4 204.2 204.2 204.2 204.2	204 · 2 203 · 8 203 · 8 203 · 8 203 · 8 203 · 8 204 · 3 203 · 5 203 · 3 203 · 5 203 · 5	203.4 203.8 204.3 204.1 204.1 204.2 203.7 203.9 203.9 203.9 203.8 204.5	204.5 204.5 204.8 204.6 204.6 203.1 203.6 203.6 203.3 203.3	203:3 202:5 202:3 202:3 202:3 202:2 202:2 202:2 201:8 201:9 202:2 202:1	201.9 201.6 201.6 201.4 201.1 201.1 201.1 201.1 201.1 201.1 200.9 200.9	200°8 200°8 200°8 200°7 200°7 200°9 200°9 200°9 200°9 200°9 200°9 201°0	201 · 0 201 · 0 201 · 0 201 · 1 201 · 1 201 · 7 201 · 0 201 · 3 201 · 3 201 · 5 201 · 5 201 · 4
44.2	43.9	43.8	42°7	42.2	42°0	42.1	42.6	43.7	44.2	44.4	4 <b>4°8</b> .	44 4 a
and increa	sing Horizo	ntal and Vert	ical Force.	200						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
				ME'	TEOROLO	GICAL	OBSERVAT	IONS.				
Mean Go Tir		Barometer at 32°.	There Dry.	mometers. Wet.	Direc	etion.	Wind.	ce.	-	W	eather.	
	$2  ext{ 0}$	In. 29 · 448 29 · 392 29 · 355 29 · 301 29 · 229 29 · 217 29 · 167 29 · 073 28 · 954 28 · 925 28 · 866 28 · 838	27·5 27·5 26·3 26·5 27·9 27·7 28·9 29·3 29·9 30·7 30·8	27·2 27·2 26·0 26·2 27·6 26·9 27·7 28·7 29·2 29·3 30·4 30·4	E E E E E E E E E E E E E E E E E E E		Fresh, wit Fresh, wit Fresh, wit Fresh, wit Fresh, wit Fresh, wit Fresh, wit Fresh, wit Fresh, wit Fresh, wit	sh. sh. sh. h squalls. h squalls. h squalls. h squalls. h squalls. h squalls.	Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy; Cloudy;	circum., h circum., h circum., h circum., h circum., h circum., h circum., h circum., h circum., h	ow.  ow.  ow.  ow.  ow.  ow.  ow.  ow.	

March 24th and	25th.			MAGNET	CICAL C	BSERVATIO	NS.				
Mean Göttingen	Angula	ar Value of	one Scale D	ivision =	0′ 721.				DECLINAT	rion.	
Time.	10h.	11h.	12 <sup>h</sup> .	13 <sup>h</sup> .	14h	15h.	16h.	17h.	18h.	19h.	20h.
M. s. 0 0	Sc. Div.	Sc. Div.	Sc. Div. 117.0	Sc. Div. 108 0	Sc. Div		Sc. Div. 109 2	Sc. Div.	Sc. Div. 94 4	Sc. Div. 104 2	Sc. Div. 113'8
5 0	104.2	103.0	112.2	107.1	110.0		109.4	108.0	93.8	107.8	113.8
10 0	102.7	103.6	109.5	106.3	110.6	109.2	110.0	107.5	95.3	112.0	114.0
15 0	102.0	106.5	107.8	106.5	111.0		111.0	105.0	99.0	114.8	113.2
20   0	102.0	111.5	108.8	106.2	110.9		11111	104.8	101.2	117.3	112.2
25 0	102.0	120.7	108.4	106.2	112.4	110.9	110.6	106.8	101.0	119.1	112.0
$ \begin{array}{ccc} 30 & 0 \\ 35 & 0 \end{array} $	102.2	125.4	109.2	107°0 107°4	112.3		110°2 108°2	107.0	99.1	118.7	113.0
$ \begin{array}{ccc} 35 & 0 \\ 40 & 0 \end{array} $	102.2 102.8	124.8 123.6	109.2 109.0	107 4	107.9		108.3	102.5	96.2	116.2	113.8
45 0	102.6	122.5	109.0	107.2	106.9		108.3	101.0	94.5	114.1	114.1
50 O	103.1	120.2	108.8	107.3	107.9		108.0	100.0	95.8	113.0	114.0
55 0	103.1	119.5	107.5	107.8	108.9	109.2	106.7	97.8	99.2	113.8	113.6
M. S.	One S	Scale Divisio	n = .0000	)87 parts o	f the H.	F.			Horizona	AL FORC	Е.
2 0	628.7	630.2	617.5	622.8	615.8		619.1	621.9	607.0	607.5	619.0
7 0	626.0	622.8	619.6	622.5	616.0	618.0	617.8	622.0	604.0	605.0	620.0
$\frac{12}{17}$ 0	626.0	612.7	617.5	620.5	616.3		618.2	622.0	606.0	608.0	620.0
$\begin{array}{cc} 17 & 0 \\ 22 & 0 \end{array}$	626.5	604.2	614.2	617.8	617.3		$617.0 \\ 618.0$	622°0 622°0	607.2	610.2	621.2
$\begin{array}{ccc} 22 & 0 \\ 27 & 0 \end{array}$	626.2	609.3	613.0 612.5	617°1 618°6	617.0		618.0	618.6	607.9	617.5	621.9
32  0	628.8	$612 \cdot 2$	614.2	620.0	618.0		622.0	625.2	615.0	621.5	622.0
37  0	629.0	615.8	617.4	619.4	621.0		621.0	622.5	614.0	622.0	622.0
42  0	631.2	619.0	621.8	617.6	619.0		621.0	619.0	610.0	623.0	620.5
47 0	630.6	618.5	619.8	616.0	618.0		620.9	616.0	605.0	622.0	620.5
$ \begin{array}{ccc} 52 & 0 \\ 57 & 0 \end{array} $	631.2	618.0	621.2 622.8	614°7 615°6	616.9		620°9	613.2	603°9 604°3	620.0	621.5 623.0
Thermometer	5 <u>1</u> .8	52°6	52.8	52°2	5 <u>1</u> °5	<u></u>	50°4	50°1	50.0	49°8	49.6
	11	Scale Divisio	]			F * 1	00 1	00 1	VERTICAL		
M. S.		1		-		1 1			1		1
3 0	195.8	195.7	194.7	191.1	191.2		191.4	190.7	175.8	174.0	187.2
$\begin{array}{cc} 8 & 0 \\ 13 & 0 \end{array}$	195°2	195°7 195°5	194°1 193°4	191'1 190'9	191.2		191.1 191.1	190.7 190.7	175.7 172.0	$  \begin{array}{c} 174.0 \\ 174.2 \end{array}  $	187.8 188.7
18 0	195.0	195.5	192.9	190.1	190.9		191.2	190.7	172.0	175'6	188.7
23 0	195.0	196.4	192.9	190 1	190.5		191.2	187.0	167.8	178.2	189.7
28 0	194.9	196.7	192.8	190.3	190.5	192.0	191.1	186.0	167.5	178.5	189.7
33 0	194.8	196.7	192.8	190.4	190.5		191.2	184.3	167.8	180.4	189.7
$ \begin{array}{ccc} 38 & 0 \\ 43 & 0 \end{array} $	194.8	196.2	192.9	190.5	191.6		190.8	184.0	167.8	182.0	189.7
48 0	195°2 195°2	196°2 195°5	191.9 191.9	190°5 190°5	191.6		191.1	183°2 179°7	167.8 170.5	183.6 184.9	190.6
53 0	195.6	195.2	191.9	190.2	191.6		191.1	179.6	170.5	185.4	190.6
58 0	195.7	194.7	191.7	190.2	191.8		190.9	177.1	172.5	186.3	190.6
(T)	51.2	5η8	 51.8	52°4	52°9		5i°3		5 <sup>°</sup> 1.2	5 <u>1</u> .4	
Thermometer	91 2	91.8	51.8	52 4	52 9	52.0	51.3	51.5	51 2	51 4	50.8
			3.57	TO DOT	007017		· · · · · · · · · · · · · · · · · · ·	Numbers de	note decreas	ing Westerl	y Declinatio
M. C.	1 -	Ther	mometers.		OGICAL Wi	observat	IONO.				
Mean Göttingen Time.	Baromete at 32°.	Dry.	Wet.	Dire	ction.	Force.	_		Weather	r.	
D. H. M.	ln.	0	0								
24 10 0	29.583		32.9	w.s	S.W.	Light.	Cloudy	; circum.,	cirstrat a	nd haze.	
11 0	29.576		31.4	s.w.		$\mathbf{L}_{\mathbf{ight}}.$	Cloudy	; circum.,	eirstrat., a	nd haze.	
$\begin{array}{cc} 12 & 0 \\ 13 & 0 \end{array}$	29.561	35.0	30.8		y W.	Light.	Cloudy	; circum.,	cirstrat., a	nd haze.	
14 0	29.561 29.565	33°1 32°8	29.5		S.	Very light.		; circam.,			
15 0	29.551	$\begin{vmatrix} 32 & 6 \\ 32 & 2 \end{vmatrix}$	1	i		Very light.	6.01	; circum., y; circum.			Halo rou
	il		28.8	S.S		Very light.	the	moon, diam	eter about 40	)°.	
16 0 17 0	29.520 29.500	0- 0	29.3		.W.	Very light.		; circum.,			
18 0	29 500	,	27.8	S.E.		Very light.		; circum.,			
19 0	29.412		27.8	S. E. b		Light. Very light.		; circum., ; circum.,			
20 0	29.357	32.9	29.7	E. D		Very light.		; circum.,			
21 0	29.284		30.7	Ē							
21 0	29.284	34.1	30.7	E	E.	Very light.		; circum.,			

<sup>&</sup>lt;sup>a</sup> At 25<sup>d</sup> 10<sup>h</sup>, Thermometer of H.F., 52° '6; of V.F., 52° '5.

]			<del></del>		MAGNETIC	CAL OBS	SERVATIO	NS.		Ŋ	March 24th	and $25 \mathrm{th}$ .
		DECLINATI	ON.					An	gular Value	of one Scale	Division =	: 0' 721.
21h.	22h.	23h.	0h.	1h.	2h.	3h.	4 <sup>h</sup> .	5հ.	6h.	7h.	8h.	9h.
Sc. Div. 112 '2 113 '7 115 '2 113 '0 112 '2 113 '0 112 '3 112 '0 112 '0 111 '9 112 '0	Sc. Div. 112.6 111.7 111.0 110.2 110.3 110.8 110.5 110.2 110.0 110.2 111.0 111.0	Sc. Div. 111 '2 111 '0 110 '2 110 '0 109 '4 110 '0 110 '4 109 '8 110 '2 110 '0 109 '8 109 '8	Sc. Div. 110'4 111'2 110'4 110'4 111'2 111'0 111'3 111'3 111'7 111'2 111'3 111'8	Sc. Div. 111 2 110 0 110 1 110 8 111 4 112 2 112 2 112 0 112 6 113 6 113 2 113 8	113.4 113.4 113.4 113.0 113.0 114.2 115.0 115.2 116.4 115.8	Sc. Div. 115 1 115 9 115 9 115 0 114 0 114 2 116 0 116 2 115 0 114 0 114 0 113 7	Sc. Div. 113'9 113'4 113'0 112'4 111'9 111'0 111'0 110'9 110'7 110'0 110'0 110'0	Sc. Div. 109 '2 108 '2 108 '0 108 '0 107 '9 107 '0 106 '6 106 '1 105 '8 105 '6 105 '0	Sc. Div. 105 '4 104 '0 103 '0 105 '0 102 '1 102 '2 102 '2 102 '2 102 '2 102 '0 102 '0 102 '0	Sc. Div. 101'9 102'0 101'8 101'6 101'4 101'2 101'0 101'3 101'6 101'8 101'0	Sc. Div. 101 ° 0 101 ° 0 101 ° 6 102 ° 0 102 ° 8 103 ° 0 103 ° 0 103 ° 0 103 ° 0 103 ° 0 102 ° 7 102 ° 6	Sc. Div. 102 ' 4 103 ' 0 102 ' 4 103 ' 2 104 ' 0 103 ' 0 103 ' 0 103 ' 0 103 ' 2 103 ' 0 103 ' 2 103 ' 0 103 ' 8
		Horizont	AL FORCE.		Inc	crease, in	Scale Divisio	ons, correspo	onding to 1°	decrease of	Temperatur	e, 1.63.
622 ° 0 622 ° 9 626 ° 4 623 ° 9 622 ° 0 622 ° 0 623 ° 0 621 ° 9 622 ° 0 622 ° 0 622 ° 0 621 ° 0	621.6 623.2 623.0 623.9 624.0 624.2 624.3 625.0 624.2 623.8 623.7	624 · 2 624 · 8 625 · 6 624 · 8 623 · 2 623 · 6 624 · 2 623 · 8 623 · 7 623 · 6 623 · 8 622 · 0	621:3 622:8 622:2 621:0 621:0 620:4 619:8 619:0 618:2 618:8 618:6 616:3	616.0 612.4 616.0 616.2 616.8 617.0 616.6 619.2 617.8 616.5 616.8 617.8	618.6 618.2 619.0 620.4 617.8 619.0 616.2 615.0 616.4 615.0	612.6 612.1 613.0 613.8 612.1 609.8 607.4 606.5 608.0 608.0 606.2 605.8	606.0 606.0 604.6 601.0 602.2 600.7 600.0 601.1 600.8 600.0 599.0	596.0 596.0 596.0 599.0 598.0 599.8 600.0 600.0 601.9 602.5 604.8 605.0	603 · 2 604 · 0 604 · 0 604 · 0 604 · 0 605 · 0 605 · 0 606 · 0 607 · 0 607 · 5 607 · 0	607 · 5 607 · 2 608 · 0 608 · 5 608 · 0 606 · 2 606 · 8 608 · 0 610 · 0 608 · 2 609 · 8	610°0 609°2 609°6 610°0 613°8 614°2 616°6 616°0 615°7 615°8 615°4 614°6	615.2 614.8 614.8 615.0 614.2 610.0 609.6 610.0 609.8 609.7 612.7
49°3	49.4	50°0	50°0	48.7	50°·5	51°·4	52°0	52°·4	52°4	52°1	52°2	52.6°
		VERTICAL	Force.		Inc	rease, in S	Scale Divisio	ns, correspo	nding to 1°	decrease of	Temperature	e, 1·64.
189.4 189.4 189.4 189.1 188.9 188.9 188.9 188.9 188.9 188.9 188.9	188 '9 188 '9 188 '9 188 '9 188 '9 188 '9 188 '9 188 '7 188 '0 187 '8 188 '6	188 9     188 9     190 0     191 4       188 9     188 9     190 0     192 5       188 9     188 8     191 1     192 5       188 9     188 5     191 1     192 5       188 9     188 9     191 1     192 5       188 9     188 5     191 1     192 5       188 9     188 5     191 1     192 2       188 9     188 6     191 3     192 2       188 7     188 5     191 6     192 2       188 0     189 0     191 7     191 7       187 8     188 7     191 7     191 7		191'4 192'5 192'5 192'5 192'5 192'2 192'2 192'2 191'7	190'7 190'5 190'2 190'2 190'2 189'5 189'5 189'5 189'0	188.0 188.0 188.0 188.0 187.9 187.3 186.7 186.7 186.7 186.7	186.7 186.8 187.1 186.5 186.0 186.0 186.0 186.0 186.0 186.0 186.0	185.6 185.6 185.6 186.3 186.3 186.5 186.5 186.7 186.7 186.9 186.9	187 1 187 1 187 1 187 1 187 1 187 1 187 1 187 1 187 1 187 7 187 8 187 8	188.0 188.0 188.0 188.0 188.5 188.5 188.5 188.8 188.8 188.8	188'8 188'8 190'0 190'0 190'0 190'6 190'6 190'5 190'5 190'3 190'4	190.4 190.6 190.6 190.4 190.3 189.8 190.1 189.8 189.8 189.7 189.7
50°3	51.0	51°·4	50°6	49°8	5Î.0	52.0	52°2	52°1	52°0	$5\overset{\circ}{2}$ $\cdot$ $2$	52°4	52°5°a
and increa	using Horizo	ontal and Ver	tical Force.									
				ME'	TEOROLOG	ICAL O	BSERVATI	ions.				
	löttingen me.	Barometer at 32°.	Therm Dry.	wet.	Direction	Wind	Force.	_		Weathe	er.	
24 2. 25 (	3 0 0 0 1 0 2 0 3 0 4 0 5 0 7 0	In. 29.272 29.278 29.299 29.331 29.318 29.352 29.352 29.445 29.445 29.481	34·1 33·7 34·5 33·5 38·6 44·2 44·1 42·5 42·1 41·2 42·5 42·4	30.6 30.4 30.4 30.1 35.0 38.4 37.9 38.0 37.7 35.1 35.5 35.5	E. N.N.E. W.N.W W.N.W W.S.W. W. W. W. W. W. W. W. Dy N W. W. W. W. W. W. W.	Brisk	ery light. Light. Light. Light. Light. Brisk. Brisk. Brisk. Brisk. Moderate. Moderate.	Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy Cloudy	y; circum. y; circum. y; circum. y; circum. y; circum. y; circum. y; circum. y; circum. y; circum. y; circum.	, cirstrat., , cirstrat., , cumstrat. , cumstrat. , cumstrat. , cumstrat. , cumstrat. , cumstrat. , cumstrat. , cumstrat. , cumstrat. , cumstrat.	and haze. , and haze. , and haze. , and haze. , and haze. , and haze. , and haze. , and haze. , and haze. , and haze. , and haze. , and haze.	

April 21st and 22	nd.			MAGNETIC	CAL OBS	ERVATI	ONS.				
Moon Clüttin	Angular	· Value of o	one Scale Di	ivision = 0'	721.			]	Declinati	ON.	
Mean Göttingen Time.	10h.	11h.	12h.	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .
M. s. 0 0 5 0 10 0 15 0 20 0 25 0 30 0 35 0 40 0 45 0 50 0 55 0	sc. Div. 101 '6 102 '2 102 '4 102 '4 102 '4 103 '0 104 '4 104 '2 103 '6 108 '4 116 '0 124 '2	Sc. Div.  128 '4 119 '6 114 '5 112 '6 125 '4 126 '2 122 '2 123 '0 134 '8 136 '8 134 '6 132 '6	sc. Div. 126 '4 121 '6 115 '4 112 '4 110 '8 110 '2 109 '2 108 '2 108 '4 108 '6 108 '4 109 '9	107.5 108.4 111.4 113.3 116.6 128.8 127.8 124.2 120.8 117.4	Sc. Div. 113 *4 113 *8 111 *6 112 *4 113 *9 112 *9 112 *3 111 *6 113 *5 113 *4 110 *8 111 *4	Sc. Div. 111 3 111 5 113 3 112 3 110 3 107 1 106 0 106 6 107 3 107 4 105 3 107 0	Sc. Div. 109 '6 108 '2 106 '1 104 '5 102 '6 100 '8 101 '6 103 '6 107 '7 107 '0 105 '9 106 '0	Sc. Div. 107 ° 0 109 ° 3 109 ° 7 107 ° 9 106 ° 5 106 ° 4 107 ° 4 108 ° 9 107 ° 6 107 ° 4 107 ° 8	sc. Div. 106'9 106'5 106'7 107'5 108'4 108'6 108'0 108'4 109'2 109'0 109'0	Sc. Div. 108 '4 109 '2 109 '4 109 '3 110 '0 110 '0 110 '0 110 '2 110 '2 110 '2 110 '0 110 '0	Sc. Div. 109 8 109 9 109 8 109 6 109 8 110 0 109 2 109 1 109 6 110 2 110 4
				87 parts of tl	he H. F.	······································	\	1	Horizont	AL FORCE.	
M. s.  2 0  7 0  12 0  17 0  22 0  27 0  32 0  37 0  42 0  47 0  52 0  57 0	607.4 610.5 613.5 618.6 621.5 620.0 615.8 619.7 618.2 607.5 607.5	640.5 645.4 631.5 631.5 626.8 631.0 623.5 607.5 613.0 621.7 617.8 617.1	619.5 611.0 614.0 607.0 606.5 606.2 600.3 598.4 597.4 597.5 596.2	596.8 595.3 591.8 595.0 593.7 581.8 598.2 605.1	599 0 601 6 600 2 600 4 599 1 598 1 596 5 593 0 594 0 594 0 591 3 590 3	590 '9 592 '2 594 '1 595 '0 596 '2 596 '8 597 '6 597 '2 597 '8 599 '0 596 '2 596 '8	601°1 600°0 598°8 598°0 598°5 597°0 597°9 594°5 600°0 603°0 607°0 606°2	604.2 606.1 605.2 602.7 598.4 596.9 597.2 598.0 598.9 599.0 597.5 597.0	598.0 598.2 598.9 599.0 599.0 599.0 599.2 599.0 598.9 598.9 598.5 598.4	600°5 600°0 600°0 600°0 599°5 599°0 598°8 598°5 599°0 597°5 599°2	597.1 597.9 598.1 598.5 597.0 598.0 598.9 598.2 598.0 597.8 599.0 600.0
Thermometer	59.4	59°9	60°.6	61°4	62°1	62°5	62°5	62.0	62.0	6i°9	6Î.2
76	One Sc	ale Division	= .0000	63 parts of th	ne V. F.				VERTICAL	Force.	
M. s.  3 0 8 0 13 0 18 0 23 0 28 0 33 0 38 0 43 0 48 0 53 0 58 0	184.7 186.0 187.5 188.2 189.5 189.5 188.9 191.7 191.8 192.0 192.8 197.8	195.7 191.6 186.5 189.1 189.1 187.2 184.1 184.1 185.7 186.4 185.2 185.2	184 · 2 183 · 6 182 · 8 184 · 7 184 · 7 184 · 7 182 · 1 182 · 2 181 · 2 181 · 2 179 · 8	178 '9 177 '4 176 '7 175 '4 175 '0 173 '2 172 '7 171 '3 169 '6 168 '7 168 '5 166 '5	166'4 166'4 166'4 166'4 166'7 166'7 167'2 167'0 167'0 167'0	167.5 166.4 165.0 163.8 164.6 165.4 165.1 164.1 163.7 163.9 164.6	161.3 161.3 161.3 161.3	159°3 159°8 159°8 159°8 160°6 160°6 160°8 160°8 160°8 160°8 164°9 164°9	164.7 164.7 164.7 164.8 164.8 164.8 165.0 165.0 165.0 165.3 165.6	167.0 167.0 167.0 168.7 168.7 168.7 169.5 169.8 169.8 170.5 170.5	171'0 171'2 170'8 170'8 170'8 170'8 170'8 170'8 170'8 170'8 170'8 170'8
Thermometer	58.2	58°·8	59°3	60°0	62°5	63.6	63°7	62°7	62°7	62°6	6°1.7
						udanuda, combilla des	Increasing	Numbers de	note decreas	sing Westerl	y Declination,
			Mi	ETEOROLO	GICAL O	BSERVA	ATIONS.	<u>.</u>			
Mean Göttingen Time.	Barometer at 32°.	Therr	wet.	Direction.	Wind.	ce.			Weather.		: :
D. H. M. 21 10 0 11 0 12 0 13 0 14 0 15 0 16 0 17 0 18 0 19 0 20 0 21 0	In. 29.478 29.481 29.492 29.509 29.510 29.522 29.524 29.544 29.544 29.540 29.518	65.0 62.7 59.8 58.5 60.5 59.7 59.5 58.1 55.6 52.0 53.8 55.6		W.S.W. W.S.W. W.S.W. W. by S. N. N. S.S.E. E.N.E. E.N.E. E.S.E.	Very Very Very Very Very Very Very Very		Cloudy; cirCloudy; cirCloudy; cirCloudy; cir	cum, cirsi cum, cirsi cum, cirsi cum, cirsi cum, cirsi cum, cirsi cum, cirsi cum, cirsi	rat., and has rat., and has rat., and has rat., and has rat., and has rat., and has rat., and has rat., and has rat., and has rat., and has	ze. ze. ze. ze. ze, light thu ze; light thu ze; light thu ze; light thu	nder and rain. nder and rain. nder and rain. nder and rain. nder and rain.

<sup>&</sup>lt;sup>a</sup> At 22<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 59° · 5; of V. F., 59° · 6.

21 <sup>h</sup> .   Sc. Div.   109°3   109°5	22 <sup>h</sup> .	DECLINATION 23 <sup>h</sup> .							Angular Value	of one Seel	T)::::	00:701
Sc. Div. 109'3	22 <sup>h</sup> .	23h	- L					_	anguar varue	or one sear	Division —	0 721.
109.2 109.3		1 20.	O <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	. 4h.•	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
109.2	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Di		Sc. Div.	Sc. Div.	Sc. Div.
	109.6	110.0	112.7	113.2	113.9	110.2	110.2	107.0		100.6	106.5	102.4
	110.3	111.2	113.2	113.2	113.6	109.6	109.5	107.4		100.0	107.4	102.0
110.5	109°6	112.5	113.4	114.0	112.2	110°4	109.4	107.0		100.4	106.4	102.0
109 6	108.7	112.6	113.6	114.4	109.8	110'4	109.0	108.2		99.5	105.4	102.0
109.5	109 2	112.6	113.8	114.8	109.7	110.7	110.3	108.8		99.6	105°3	102.3
109.6	108.8	112.6	113 7	115.2	110°4	111.0	108.6	108'(	102.6	100.6	104.0	102.2
108'6	109.2	112.2	113.7	115.4	110.4	114.2	108.3	107.0	)   102.1	100.2	104°0	102.2
108.6	109.2	112.0	112.8	114.6	110.6	113.4	108.4	106.6	6 102.4	100.4	103.8	102.2
108'4	110.0	112.2	113.6	114.4	110.4	112.5	107.3	105.0		99.4	103.5	102.8
109.5	110.4	112.7	113.9	115.0	110.0	111.0	106.8	105.6		98.8	103.2	102.2
109.3	110'3	112.6	114.4	115.4	110.8	110.8	105.8	105.4	100.4	97.4	102.6	103.2
109.7	110.4	113.4	114.6	114.8	110.2	110.6	106.9	104.7		104.4	102.4	103.0
	<u> </u>	Horizonta	L Force.	<u>'</u>	I	ncrease, in	Scale Divisio	ons, corre	esponding to 1°	decrease of	Temperatui	e, 1.63.
599.0	599.0	601.2	600.7	598.0	584.0	585.6	582.8	575.5		587.0	602.0	604.0
599.5	600.5	601.8	600.0	598.4	583.8	584.6	579.0	575.2		588.2	610.0	603.8
900.0	599.0	602.2	599.3	597.8	584.2	585.0	581.2	576.0		589.0	604.0	603.0
600.0	597.2	602.0	598.0	596.0	585.0	586.1	578.0	574.6		590.0	601.2	603.4
600.0	598.0	602.2	598.0	596.0	585.3	585.9	576.2	574.0		592.2	601.0	602.0
600.6				594.7	585.4	585.1	579.0	577.0		593.5	600.0	601.6
600.0	598.2 601.8 600.0 59 598.3 601.6 599.2 59		594 7 594°0	585°0	584.7	576.1	576.0		290.3	606.0	601.6	
	598.2 601.8 600.0 59 598.3 601.6 599.2 59		593.2	583.2	585.4	580.0	575.4		590.3	1		
600.0		601.4	$\frac{599 \cdot 2}{598 \cdot 2}$	592.3	583.2	584.0					604.7	601°0 602°0
600.5	598.4						578.5	576.0		584.0		
601.0	598.6	602.8	598.4	590.1	583.2	581.8	577.0	577.7		584.4	603.0	600.7
600°2 601°5	601.4	602.6 602.0	598°0 598°2	588°2 587°8	584°8 584°7	581.8 579.0	576°0 578°0	581.5		583°0 590°2	604.2	598.3
<del>;                                      </del>		-			<del></del>		-	ļ				
61°5	6Î.2	6j.6	61°5	61°5	6j.0	60°.8	60°5	60°4	60.2	60.0	59.5	59°5°
•		VERTICAL.	Force.		Ir	icrea <sub>se</sub> , in S	Scale Divisio	ns, corre	sponding to 1°	decrease of	Temperatur	e, 1.64.
170.0	170.4	170.3	170.6	170.6	171.0	172.8	173.3	175°3	179.2	178.6	186.9	179.6
170.0	170.4	170.7	170.6	170.5	171.0	172.8	173.3	175 2		179.1	186.0	179.6
170.3	170.4	171.2	170.2	169.8	171.2	172.8	173.5	175.2		179 1	184.2	179.6
170.6	170.4	171.3	169.7	170.3	171.8	172.6	173.5	175 2		179.1	183.3	179.7
170.6	170.6	171 3	169.8	170.3	171.8	172.9	173.5	175.2		180.0	183.3	179.5
170.6	( - L	1 1		l	171.8	172.9	173.9	175.2		180.0	182.5	179 5
170.6	171.0	171.5	169.7	170.8	171.8	172.6	173.9	175.2		180.0	182.1	179.5
170.6	171.0	171.1	170.4	171.1		172.6	174.6	175.2		180.0	181.2	179.5
170.4	170.4	171.2	170.3	171.1	171.8	173.4	175.3	178.1		179.7	180.9	179.4
170 4	169.9	171.3	169.8	171.8	171.9	173.2	175.5	178.1		179.8	180.6	178.7
	170.1	171.1	169.8	172.0	172.9							
170°5 171°2	170°1 170°1	171.1	169.8 169.8	171.6 171.9	173.0 $172.8$	173°0 172°6	175°5	178°6		181°6 184°5	180°5 179°6	178°5 178°5
		170 6					-	.				
61°7	61.7	61.8	61°7	61°7	6 <u>1</u> .0	60°6	60°·4	60°8	9 60.0	60°0	60°0	59.6°
and increa	sing Horizo	ontal and Ver	tical Force.								و در در از از از از از از از از از از از از از	· pone Citinat Distance of
		u		ME	TEOROLO	GICAL (	BSERVAT	IONS.				
Mean G	öttingen	Barometer	Ther	mometers.	_	- W	ind.			Wea	ther.	
Tin	ne.	at 32°.	Dry.	Wet.	Direc	etion.	Force.		<u> </u>			
р. н.		In.	۰	0	1.							
21 22		29°534	54.4	_	E.S		Very lig		Cloudy; circ			
28		29.542	52.2	-	S.I	E.	Very lig		Cloudy; cir			
	0 0	29.574	49.3	_	S.J	E.	Very lig	ght.	Cloudy; cirs			
	1 0	29.592	49.9	-	S.J		Very lig		Cloudy; cirs			
	2 0	29.603	52.4	_	N.E.	by N.	Very lig		Cloudy; cir,-			
{	3 0	29.632	51.2		N		Very lig	ght.	Cloudy; cirs			
	4 0	29.641	51.0	_	N. b		Very lig		Cloudy; cir			
4	50	29.653	49.3	_	N		Very lig		Cloudy; cir	strat., cir., a	nd circum.	; rain.
	• • •			1	N.N		Very lig		Cloudy; cir			
4		29.667	47.9	·	1 10 11							
4 8	6 0	29.667 29.684	47.9						Cloudy; cir			
4 6 6	6 0 7 0	29.684	46.9		N.N	I.E.	Very lig	ght.		strat., cir., a	nd circum.	; rain.
4 6 7	6 0 7 0 8 0			1		I.E.		ght.	Cloudy; cir	strat., cir., a strat., cir., a	nd circum. and circum	; rain. .; rain.

May 28th and 29	)th.			MAGNE	TICAL OB	SERVATIO	ONS.		•		· · · · · · · · · · · · · · · · · · ·
Mean Göttingen	Angul	ar Value o	of one Scale	Division =	:0'`721.				DECLINAT	ION.	
Time.	10h.	11 <sup>b</sup> .	12h.	13h.	14h.	15 <sup>h</sup> .	16h.	17h.	18h.	19h.	20h.
M. s. 0 0 0 5 0 10 0 15 0 20 0 25 0 30 0 40 0 45 0 50 0 55 0	sc. Div. 105 ' 9 106 ' 1 106 ' 1 105 ' 5 105 ' 9 105 ' 9 105 ' 6 106 ' 1 106 ' 3 106 ' 9 107 ' 4 107 ' 5	Sc. Div. 108.0 108.1 108.6 108.4 108.4 108.4 108.4 108.4 108.9 108.4 110.2 110.4	Sc. Div. 111'9 112'7 114'6 113'4 112'9 112'7 110'4 112'1 114'0 113'0 110'0 108'4	Sc. Div. 112 '2 112 '9 113 '1 116 '9 117 '8 115 '8 115 '6 115 '4 114 '5 113 '4 112 '9 112 '9	Sc. Div. 113 '4 114 '4 115 '2 115 '0 115 '6 114 '9 114 '4 113 '5 113 '4 112 '0 111 '9 113 '0	Sc. Div. 115 '4 119 '9 122 '6 127 '2 126 '9 126 '4 125 '0 114 '6 112 '3 112 '9 113 '3 112 '6	Sc. Div. 111 2 108 6 109 8 112 2 115 2 115 7 115 5 114 2 113 8 113 4 112 4 111 6	Sc. Div. 111'4 111'2 110'8 110'6 111'4 112'0 111'2 111'0 112'3 112'8 112'4 112'4	Sc. Div. 111 '4 111 '0 111 '7 112 '2 112 '4 114 '2 114 '2 113 '0 115 '0 115 '4 117 '2	sc. Div. 124 ' 0 123 ' 6 122 ' 2 123 ' 2 126 ' 2 129 ' 8 132 ' 4 134 ' 8 129 ' 9 109 ' 6 97 ' 6 82 ' 4	Sc. Div. 81 '8 80 '2 81 '2 88 '4 100 '0 104 '4 108 '5 108 '8 114 '4 112 '2 108 '5 108 '4
M. S.	One S	cale Divisi	on = .0000	987 parts of	the H.F.				Horizon	TAL FORCE	
2 0 7 0 12 0 17 0 22 0 27 0 32 0 37 0 42 0 47 0 52 0 57 0	608.0 608.0 608.6 608.0 607.5 606.2 606.0 606.0 604.8 606.0 608.0 608.2	608 · 2 607 · 2 608 · 0 609 · 0 610 · 0 607 · 5 608 · 2 609 · 0 607 · 2 607 · 0 608 · 0 608 · 2	612·2 613·0 613·0 613·0 614·0 614·2 614·0 614·2 617·0 620·0 620·0 616·0	611.5 614.4 608.0 611.0 613.8 613.7 613.1 611.8 611.0 607.0 605.0	604.0 604.0 604.0 604.2 604.2 603.5 603.0 604.1 604.0 603.0 601.0 598.0	601.0 597.0 597.0 598.0 600.0 602.5 605.0 601.0 598.5 603.0 602.6 604.0	604 · 2 598 · 4 596 · 0 593 · 2 596 · 2 601 · 4 603 · 2 603 · 8 617 · 0 604 · 0 605 · 2 605 · 4	611.0 614.6 625.4 620.0 622.2 623.2 623.4 616.2 614.8 614.2 616.6	616.0 612.4 612.6 606.2 606.6 609.2 609.4 603.0 602.2 602.6 594.6 590.2	602.0 604.2 604.3 623.0 626.0 625.2 620.3 608.8 597.5 563.4 557.6 549.2	553.5 537.8 529.0 535.7 551.6 562.7 575.5 587.3 592.8 592.0 590.8 588.7
Thermometer	65.6	66.0	66°4	66.4	66.2	66°2	66°0	65°8	65°6	65.4	65.4
M. s.  3 0 8 0 13 0 18 0 23 0 28 0 33 0 38 0 43 0 48 0 53 0 58 0	One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   One Science   On	ale Divisio  169 ' 5 169 ' 5 169 ' 7 169 ' 7 169 ' 7 169 ' 7 169 ' 7 169 ' 7 169 ' 7 169 ' 7	170.4 170.4 170.5 170.5 170.5 170.6 170.6 167.4 167.3 167.1 167.1	63 parts of 164.6 164.2 164.2 163.9 163.9 163.5 161.9 162.0 162.3 162.3	the V. F.    162'3   162'6   162'6   162'6   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   161'8   1	161'8 161'8 159'6 157'4 155'2 153'2 149'0 149'1 149'1 150'0 150'0 150'4	150°2 151°4 154°2 157°7 158°8 161°7 161°8 164°2 160°7 160°4 161°1 160°2	161 1 161 5 160 9 159 5 159 6 159 4 159 4 158 4 158 8 159 5 159 8	Vertical  159 '7 159 '7 159 '1 159 '3 156 '7 157 '0 157 '4 155 '0 152 '7 152 '9 152 '8 153 '1	Force.  141'2 134'1 134'1 133'9 133'9 131'5 129'7 124'9 121'5 108'5 104'2 102'4	98°8 96°4 98°5 104°5 112°2 116°2 115°5 115°3 121°7 123°5 128°0 130°0
Thermometer	63°7	64°3	64.5	64.5	66°5	66°5	66°7	66°7	66°7	66°7	66°3
			ME.	reorolo	GICAL OF	I SSERVATI		Tumbers den	ote decreasi	ng Westerly	Declination,
Mean Göttingen	Barometer	Ther	mometers.		Wind.						
D. H. M.  28 10 0  11 0  12 0  13 0  14 0  15 0  16 0  17 0  18 0  19 0  20 0  21 0  22 0	In. 29 · 632 29 · 624 29 · 624 29 · 638 29 · 664 29 · 682 29 · 688 29 · 624 29 · 638 29 · 624 29 · 639 29 · 621	Dry.  67 '8 66 '9 66 '9 63 '1 60 '3 64 '1 63 '7 62 '7 61 '1 60 '9 57 '2 58 '5 57 '5	Wet.  60 2 61 0 61 0 57 2 56 5 57 3 57 6 56 3 56 1 56 1 54 6 54 9 54 9	E.S.J E.S.J E.S.J N.N. N.N. N. by E. by R.E. by N.E. b N.E. b	E. Ve E. Ve E. Ve Ve Ve Ve Ve Ve Ve Ve Ve Ve Ve Ve Ve	Force.  ry light. Calm. ry light. ry light. ry light. ry light. ty light. Light. Light. Light. Light. Light. Light. Light. Light. Light. Light. Light. Light. Light. Light.	Partially Partially Partially Cloudy, Cloudy, Cloudy, Cloudy, Cloudy, Cloudy, Cloudy, Cloudy, Cloudy, Cloudy,	clouded, w	ith cir., cir., ith cir., cir., ith cir., cir., cir., cir., cir., strat., and r., strat., and r., strat., and r., strat., and r., strat., and r., strat., and r., strat., and r., strat., and r., strat., and r., strat., and r., strat., and	-strat., and c strat., and c strat., and c strat., and c c:rcum. circum. circum. circum. circum. circum.	ircum. ircum.

					MAGNET	ICAL OBS	SERVAT	IONS.			May 28th	and 29th.
		DECLINATION	ON.					Ang	ular Value	of one Scale	Division =	0'.721.
21h.	. 22h.	23h.	Oh.	1 <sup>h</sup> .	2h.	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6h.	7h.	8h.	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div		Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
110.6	115'4	125.5	124.7	121.9	122.5	119'4	105.6		102.8	103.0	104.8	106.0
113.7	113.4	124.7	124.4	121.8	123.0	119.6	106.2		103.0	101.8	105.4	105.9
117'2	111.2	124.0	125.0	121.7	121.6	119.2	105.9		102.7	102.6	1.05 4	106.2
121'4	119.4	123.6	124.4	121'4	123.1	118.0	104.4	102°2	101.6	102.6	105.2	106.3
127.5	124.8	123.4	125.5	121.0	122.0	116.6	102.4	103.2	101.4	103.2	104.6	106.4
129.2	132.4	127.5	124.4	121.0	123.6	113.2	102.6		101.2	101.4	105.2	106.5
130.4	133.3	129'4	125.3	121.9	123.8	114.5	103.4		101.8	102.4	106.4	106.2
134.8	133.2	130.8	126.8	122.4	122.4	117.2	104.4		102.2	102.6	105.9	106.3
137.5	132.1	130.3	122.6	123.6	121.5	115.6	104.4		101.8	103.6	106.0	106.4
138.8	129.7	127.7	123.8	122.7	121.5	114.4	104.9		101.2	104.2	105.6	106.2
130.4	127.4	128.3	124.5	123.4	119.0	109.6	104.4		102.8	104.0	106.0	105.6
121.2	126.6	126.6	122.3	123.6	118.6	107.9	104.4		102.6	105.2	106.4	106.0
121 2				120 0	110 0	107 9	104 4	103.6	102 0	105 2	100 4	100 0
		HORIZONTA	Force.		I	ncrease, in	Scale Div	isions, correspo	onding to 1°	decrease of	f Temperatur	re, 1.63.
583.7	576.5	604'1	599.8	593.9	592.0	570.0	568.5	596.2	608.4	605.8	612.4	597.8
583.5	577.6	603.0	600.9	597.0	591.8	566.5	570.0	595.3	608.8	604.2	604.2	599.2
585.5	587.1	599.6	602.1	598.0	591.9	562.0	575.0		608.2	604.8	603.2	601.0
588.4	593.8	599.6	604.4	598.2	590.0	559.0	577.5		605.6	606.0	600.2	598.7
584.8	593.1	596.6	601.0	598.8	587.0	557.0	583.0		605.8	603.2	601.0	599.0
581.0	596.2	595.1	602.0	599.0	585.4	559.0	584.0		608.0	595.8	598.2	599.1
577.5	594.7	594.2	602.0	598.8	585.0	557.0	589.0		608.8	598.3	599.0	600.3
563.7	596.0	591.0	606.8	599.0	581.9	551.1	590.0		609.2	601.0	599.2	599.6
560.8	597.2	591.0								603.3		
			601.1	597.2	581.0	556.0	592.5		608.0		600.1	600.2
566.5	600.8	591.1	600.9	597.0	578.2	558.5	594.5		607.8	602.6	601.0	601.0
575.0	600.1	594.0	594.4	594.0	577.8	559.0	594.5		604.8	604.0	601.0	601.9
576.4	603.2	599.9	592.9	593.4	575.8	564.2	596.0	608.8	605.0	604.2	600.8	604.2
$6\overset{\circ}{5}$ . $2$	65°0	64.5	6 <b>4°</b> 5	64.1	63°6	64.0	64.5	65.3	65.3	65.4	65.2	65.6 a
		VERTICAL	Force.		Ι	ncrease, in	Scale Div	isions, correspo	onding to 1	decrease of	f Temperatu	e, 1 64.
10010	70010	1,41.0	100.0		20111	1.07.0	1.00.5	1 70414	1,0140	1,0040	1.00.5	1 2001
130.0	132.0	151.8	162.6	165.7	164.4	161.0	163.5		161.9	162.3	163.5	162.1
129'9	134.2	153.0	163.3	166.2	164'4	161.0	163.5		162.0	162.3	162.6	163.2
129.2	139.8	153.2	164.1	166.3	164.3	161.0	163.5		161.3	162.7	162.3	163.8
121.0	137.2	154.0	163.7	166.3	164.2	160.5	163.5	164.1	161.4	162.2	162.9	162.5
117.8	137.6	154.0	163.6	166.3	163.8	161.0	163.5		161.1	162.3	162.6	163.6
116.2	143'3	154.0	163.2	166.3	163.8	161.9	164.3	164.4	161.2	161.9	162.7	163.6
114.7	145.4	154.6	163.5	165.9	163.8	161.1	164.3		161.2	162. 3	162.4	162.9
109.6	148.7	154.6	164.7	165.9	163.8	160.4	164.9		162.3	162.6	162.4	162.9
109.6	151.8	155.7	164.2	165.9	163.0	161.8	164.9		162.2	163.0	163.5	163.6
115.7	155.1	156.6	164.8	165.9	163.0	163.0	164.9		162.3	163.3	163.0	163.8
116.5							164.9		162.3	162.7	162.3	163.4
	154.0	158.8	164.6	165.3	163.0	163.2						
121.9	151.0	161.9	165.5	165.3	161.8	163.5	164.9	162.8	162.2	162.7	162.3	163.4
65°7	65.2	64.9	6 <b>4</b> 5	64.2	63.4	63.8	64°5	64.7	64.8	64.7	64.8	65.1 a
and increas	sing Horizo	ntal and Ver	tical Force.									
				ME.	reorolo	GICAL O	BSERVA	ATIONS.	<del></del>	. To the state the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the		
Mean G	öttingen	Baromete	The	rmometers.		Wind.				Weather.		
Tin		at 32°.	Dry.	Wet.	Direct	tion. 1	Force.			weather.		
k∜ D. H		In.	20.0	54.6	37 72 1	T T	: a.Ta 4	Cloudy, with	oir oir-str	at and air.	eum	
28 23		29.613	56°6		N.E. b		ight.	Cloudy, with				werv
	0 0	29.591	57.5	54.1	E. by		ight.	Cloudy, with o				
	1 0	#   ·			-		Calm.	Cloudy, with				
	$\begin{bmatrix} 2 & 0 \\ 2 & 0 \end{bmatrix}$	29.580	56.8	53.1			alm.	Cloudy, with	circum.,			ınder and ligh
	3 0	29.548	62.9					1.1.				
4	4 0 29.524 60.9 56.4				E.N.		y light.					
	5 0	29.210	61.5	56.9	E.N.		y light.	Cloudy, with				
			59.3	55.3		.   0	alm.	Cloudy, with				
					N.E. b		y light.	Cloudy, with	circum., ci	rstrat., and	haze; thund	er and lightnir
6	70 1				1 - 10 - 4 - 6 N		J 0/					don and Hal
•	7 0	1	i	1		٠ ١	w liah+	Cloudy, witl		cirstrat., a	nd haze; th	inder and ngr
•	7 0 8 0	29 583	62.1	58.3	N.E. b	y E. Ver	y light. lalm.	ning; sho	wery.			inder and ligh under and ligh

June 23rd and 24	th.			MAGNE	TICAL C	BSERVATIO	ONS.				
Mean Göttingen	Angula	r Value of	one Scale D	ivision = 0	721.				DECLINA	rion.	
Time.	10h.	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>t</sup> .	19 <sup>h</sup> .	· 20h.
м. s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div		Sc. Div. 108 0	Sc. Div.	Sc. Div. 108.8	Sc. Div. 109.4	Sc. Div. 110°0
0 0	105.5	106.9	109.4	109.3	109.4	108.4	108.4	108.6	108.8	109.6	109.8
5 0	105.6	107.6 107.6	109 4	109.5	109.4	108.4	108.3	108.6	108.8	109.9	109.4
$\begin{array}{cc} 10 & 0 \\ 15 & 0 \end{array}$	104°1 105°4	107.8	109.3	110.0	109.4		108.3	108.6	108.8	109.6	108.8
20 0	105.3	107.5	109.2	110.5	109.6	109.0	108.3	108.6	108.8	109.6	108.8
25 O	105.2	108.3	109.3	109.6	109.6	108.4	108.4	108.6	108.8	109.6	108.8
30 0	106.2	108.7	109.4	109.6	109.3	108.2	108.4	108.6	108.8	109.2	109.4
<b>35</b> 0	105'6	108.2	109.4	109.4	109.3	108.4	108.4	108.6	109.2	110.0	109'4
40 O	106.1	109.2	109'4	109.6	109.4		108.5	108.6	109.2	110.0	109.4
45 0	106.4	109.2	109.4	109.6 109.4	109.0	108.2	108.7	108.6	109.4	110.0	109.4
50 0 55 0	106.4	109.3	109.1 109.2	109.5	109.0		108.2	108.6	109.4	110.5	110.5
	One S	cale Divisio	n = '0000	987 parts of	the H. F.		<u>'</u>	<u>'</u>	Horizon	TAL FORCE	
M. S.	00413	cocii	604:0	604.0	600:5	600.0	602.0	601.5	601.5	600.0	601:0
$egin{array}{ccc} 2 & 0 \\ 7 & 0 \end{array}$	604.0	606°1	604.0 604.1	604.0	603.0	602.0 602.3	602 0	601.5	601.0	601.0	601.8
$egin{array}{ccc} 7 & 0 \ 12 & 0 \end{array}$	604.0	605.0	604.0	604.0	603.0	602.0	602.0	601.5	601.0	601.0	602.4
12 0 17 0	605.0	607.4	604.2	604.0	603.2	602.0	601.0	601.5	601.0	601.0	602.2
22 0	604.3	607.1	603.7	604.0	603.2	602.2	601.0	601.5	601.0	600.2	602.0
27 0	606.0	608.0	604.0	604 1	602.8	601.7	601.2	601.5	600.8	600.8	602.0
<b>32</b> 0	605.2	606.3	604.2	603.9	602.0	601.5	601.5	601.5	600.2	601.0	602.2
37 0	606'1	605.4	604.5	603.0	602.0	601.6	601.8	601.5	600.2	601.0	602.4
42 0	606.3	603.7	604.1	603.9	602.2	601.7	601.8	601.5	600.2	601.0	602.5 602.5
$\begin{array}{cc} 47 & 0 \\ 52 & 0 \end{array}$	606 <b>.</b> 2	602.9 603.1	604°2 604°3	604.0	602.4	601.5	601.2	601.5	600.0	601.0	602.8
$\begin{array}{ccc} 52 & 0 \\ 57 & 0 \end{array}$	606.8	603.9	605.3	604.0	602.4	601.3	601.2	601.2	600.5	601.5	603.8
Thermometer	69°6	69°8	70°0	69.9	69°4	69°3	69.0	68.6	68.2	6 <sup>7</sup> ·6	6 <sup>7</sup> · 1
м. s.	One S	cale Divisio	n = .0000	)63 parts of	the V.F.		1		VERTICAL	FORCE.	.l <u>.</u>
	155.3	154.3	153.1	153.1	153.1	148.6	148.6	151.0	152.2	153.2	154.4
$egin{array}{ccc} 3 & 0 \ 8 & 0 \end{array}$	155.9	154.3	153.1	153.1	151.9	148.4	147.6	151.0	152.2	153.2	154.6
13 0	155.2	154.3	153.1	153.2	151.9	148.2	147.6	151.0	152.2	153.2	154.6
18 0	155.0	154 3	153'1	153.1	151.9	148.5	147.6	151'0	152.2	152.9	154.6
23 0	155.6	153.8	153.5	153'1	152.0	148.3	148.2	151 4	152.2	153 3	154'6
28 0	154.7	153.8	153.5	153.1	152.0	148.3	148.2	151.4	152.2	153.3	154.6
33 0 38 0	154°7 ·   154°7	153°8 153°7	153.5	153*1	151.9	148°3 148°3	148 <b>·2</b> 149 <b>·</b> 4	151.4 151.4	152.7 152.7	153°3	154°4 154°4
$\begin{array}{ccc} 38 & 0 \\ 43 & 0 \end{array}$	154.4	153 6	153°5 153°5	153°1 153°1	151.9	148.3	149 4	151.4	152.7	153.3	154.3
48 0	154.4	153 1	153.3	153°1	150.9	148.3	150.5	151.9	152.7	153.5	154.3
53 0	154.4	153.1	153.1	153.1	151.1	148.1	150.2	152.2	152.7	153.5	154.3
58 0	154.4	153.1	153.1	153.1	151.1	148.1	151.0	152.2	153.2	153.2	154.4
Thermometer	68.3	68°5	 68·7	68°6	68.6	7°0	70.0	69°4	68.2	68.0	67.3
	00 0		00 1	00 0	00 0		1	<u> </u>	1	ļ	!
	···-		ME.	TEOROLO	GICAL	OBSERVAT		Numbers de	note decreas	ing Westerl	y Declination
Mean Göttingen	Barometer	Ther	mometers.			Wind.					<del></del>
Time.	at 32°.	Dry.	Wet.	Direc	tion.	Fore	ce.	_	W	eather.	
D. H. M.	In.		0								
23 10 0	29.722	70.7	64.1	S.W.		Very l		Clear.			
11 0	29.723	67.6	62.1	S.W.	by S.	Very l		Clear.			
$\begin{array}{ccc} 12 & 0 \\ 13 & 0 \end{array}$	29.722	67.5	62.2		W.	Very l	ight.	Clear.			
$\begin{array}{ccc} 13 & 0 \\ 14 & 0 \end{array}$	29.736 29.733	61.1	60°0 58°3	۵.	**.	Very l Cal		Clear. Clear.			
	29.753	59.1	57.1			Cal		Clear.			
	29.765	58.3	56.4	_	_	Cal		Clear.			
15 0			56.3	1 _	_ 1	Cal		Clear.			
15 0	29.777	58.1	1 00 0								
15 0 16 0 17 0 18 0		55.8	53.7	_	_	Cal		Clear.			
15 0 16 0 17 0 18 0 19 0	29.777 29.775 29.776	55°8 55°8	53.7 52.9	1 –	- 1	Cal	m.	Clear. Clear.			
15 0 16 0 17 0 18 0	29.777 29.775	55.8	53.7	N.W.	- 1		m. light.	i i			

<sup>\*</sup> At 24d 10h, Thermometer of H. F., 71° 6; of V. F., 70° 3.

				Л	1AGNET	ICAL OB	SERVATIO	NS.			June 23rd	and 24th.
		DECLINATION	ON.					Ang	ular Value	of one Scale	Division =	:0' 721.
21 <sup>h</sup> .	22h.	23h.	O <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .
Sc. Div. 110'0 110'0 110'0 110'2 110'2 110'0 110'2 109'4	sc. Div. 110 '4 110 '8 110 '8 111 '2 111 '2 111 '2 111 '4 111 '4	Sc. Div. 112 '3 112 '4 112 '6 113 '3 113 '4 113 '8 114 '2 114 '6	Sc. Div. 115 '5 115 '9 116 '2 116 '3 116 '4 116 '4 116 '5 116 '8	Sc. Div. 117 '4 117 '0 118 '2 118 '4 118 '4 118 '4 118 '0 118 '2	Sc. Div. 117.8 117.4 117.5 117.5 117.4 117.4 117.4 116.8	Sc. Div. 115.5 115.4 115.4 115.1 114.6 114.4 113.5	Sc. Div. 111 '4 111 '3 110 '9 110 '0 110 '0 109 '7 109 '4 109 '2	Sc. Div. 106 '4 106 '2 105 '6 105 '4 105 '0 104 '5 104 '4 104 '0	Sc. Div. 102 · 5 102 · 5 102 · 2 102 · 4 102 · 4 102 · 2 102 · 2 102 · 2	Sc. Div. 102 '4 102 '5 102 '9 102 '9 102 '9 103 '2 103 '2 103 '4	sc. Div. 103 '4 103 '4 103 '6 103 '2 103 '8 104 '0 104 '2	Sc. Div. 105 ' 4 105 ' 6 105 ' 8 106 ' 0 105 ' 8 105 ' 8 106 ' 0 106 ' 4
109.2 110.0 110.4 110.4	111.7 112.0 111.8 111.7	114.5 114.6 115.2 115.4	116.8 117.2 117.3 117.4	118.4 118.2 118.0 118.0	116.6 116.4 116.3 116.2	113.2 112.4 112.3 111.7	108.4 108.2 107.5 107.2	103.4 103.4 103.3 103.0	102.2 102.2 102.2 102.4	103 · 4 103 · 4 103 · 2 103 · 4	104.8 105.2 105.4 105.4	106.6 106.8 107.0 107.4
	605.8	HORIZONTA	612.8	611.0		1	Scale Divisio	-		1 .		
603 2 603 4 604 2 605 0 604 4 603 8 604 5 604 8 604 8 605 0 605 8	3.4       606.0       609.5       612.8       610.0         4.2       606.2       610.1       613.0       609.6         5.0       606.4       611.1       613.0       609.6         4.4       606.8       611.2       613.5       608.6         3.8       607.4       611.1       613.0       608.6         4.5       607.6       611.6       613.1       607.2         4.8       607.2       611.2       612.2       607.2         4.8       607.3       612.0       611.8       607.6         5.0       607.4       612.1       611.3       606.4         5.8       607.9       612.1       610.7       606.6         6.8       66.2       65.5       65.3       66.1				604.6 604.0 604.0 603.0 603.0 601.8 601.0 601.2 600.2 600.0 598.9	598.0 598.0 597.4 596.6 596.0 595.0 594.5 594.1 593.8 593.5 593.5	593.0 593.0 593.0 593.0 593.0 593.0 593.0 593.0 593.0 593.5 593.8	593.5 593.0 593.0 593.8 594.8 593.8 593.1 593.1 593.0 593.5 594.0	595.0 595.7 596.0 597.2 598.0 599.0 599.2 599.8 600.0 601.0 601.9	602.0 602.8 603.0 604.2 604.2 605.0 604.2 607.8 606.2 607.0 607.4 608.0	607.8 608.2 609.8 610.8 610.4 610.2 610.8 611.2 611.4 613.0 613.2	613.8 613.5 614.4 615.2 613.2 613.5 614.0 614.2 614.2 614.5 614.2 614.8
66.6	66°2	65°5	65°3	66°1	67°2	6 <sup>°</sup> 7 9	68.5	69°2	69°4	70.0	70°3	7 <sup>°</sup> 1.1°
	1.	VERTICAL 3	Force.	<u>-</u> <u>!</u>		1	Scale Division	<u> </u>		<u> </u>	1	e 1 64.
155'1 154'8 154'8 154'8 154'8 154'9 154'6 154'6 154'6 155'1	155.5 155.5 155.5 155.5 155.5 156.9 157.2 156.6 156.6 156.6	157 1 157 1 157 1 157 6 157 6 157 6 157 6 157 6 157 6 158 4 158 4 158 4 158 9	158 '9 158 '9 158 '9 158 '9 158 '9 158 '9 158 '9 158 '9 158 '9 158 '7 158 '4	157.5 157.4 157.4 157.4 157.4 157.4 157.4 157.4	156.3 156.3 156.2 156.2 156.2 156.2 156.2 156.2 156.2 155.9 155.6	155.6 155.6 155.6 155.6 155.7 155.1 155.1 155.1 154.9 154.9 154.9	154.9 154.6 154.6 154.6 154.6 153.9 153.9 153.9 153.1 153.1 153.1	152'3 151'9 151'6 151'8 151'3 151'3 151'3 151'3 151'3 151'3 151'3 151'5	151.8 151.8 151.8 151.8 151.5 151.3 151.3 150.8 150.8 150.8	150°3 150°0 150°0 150°0 150°0 150°0 149°1 149°1 150°0 149°8 149°6 149°6	149.6 149.6 149.9 149.9 149.9 149.9 149.4 149.4 151.1 150.2 150.2	150°5 150°5 149°9 150°6 150°1 150°1 150°1 150°1 150°1 150°1 150°1
67.0	66.7	66.1	6а5	65°7	66.3	66.6	67°5	68°2	68°5	68.7	69.3	70°0°
and increa	asing Horizo	ntal and Vert	ical Force.									
				мет	EOROLO	GICAL (	)BSERVAT)	ions.				
	löttingen me.	Barometer at 32°	Ther.	wet.	Direc	etion.	Wind.	ee.	-	, <b>w</b>	eather.	
23 2 2 24	H. M. 22 0 23 0 0 0 1 0 2 0 3 0 4 0 5 0 6 0 7 0 8 0 9 0	In. 29.809 29.824 29.844 29.862 29.869 29.862 29.849 29.844 29.831 29.827 29.817 29.804	51·4 51·4 57·4 64·1 66·7 69·1 71·7 72·7 72·3 72·3 73·4 73·7	49·2 49·4 54·9 59·9 62·1 63·8 65·7 67·8 65·2 63·1 64·3 66·6	S.V. S.V. S.W. S.W. S.W. S.W.	W. W. V. by S. by S.	Call Call Call Call Nearly Very l Very l Very l Very l	m. m. calm. ight. ight. ight. ight. ight.	Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear.			

nd.		•	MAGNET	ICAL OBS	ERVATIO	NS.					
Angr	ular Value	of one Scale	division =	= 0' .721.				DECLINAT	ion.		
10h.	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16h.	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20h.	
Sc. Div. 106.8 106.8 107.2 107.4 107.4 107.8 108.2 108.6 109.2 109.5 109.8 110.1	Sc. Div. 110'3 110'4 110'6 110'8 110'8 111'4 110'9 110'2 111'0 111'2 111'3 111'4	Sc. Div. 111.8 111.9 111.7 111.4 111.1 110.6 110.5 110.4 110.4 110.4 110.4	Sc. Div. 110.0 109.7 109.4 109.4 109.4 109.2 109.4 109.2 109.4 109.2 108.6 108.6	Sc. Div. 108 '4 108 '4 108 '5 107 '6 107 '7 108 '0 108 '2 109 '0 109 '6 109 '7 108 '4 108 '2	Sc. Div. 108 '0 108 '0 108 '4 107 '9 108 '0 108 '0 108 '4 108 '6 108 '4 108 '9 109 '0	Sc. Div. 108 '9 109 '0 108 '6 109 '4 110 '0 109 '6 109 '8 109 '6 109 '6 109 '9 110 '0 110 '0	Sc. Div. 110 '7 111 '4 114 '0 119 '5 123 '4 127 '7 130 '0 128 '4 128 '4 130 '2 127 '6 127 '0	Sc. Div. 127.6 127.4 124.2 120.4 116.4 113.6 113.6 115.4 117.4 118.4	Sc. Div. 117.6 116.4 115.7 114.4 114.2 113.4 113.2 112.6 112.4 114.2	Sc. Div. 116'4 116'2 115'4 115'8 115'4 114'0 113'5 112'8 111'6 112'2 112'6 112'8	
One	Scale Divis	ion = '00	0087 parts	of the H. F	`.			Horizon	TAL FORCE		
593.8 592.0 592.0 592.0 591.9 593.5 594.2 596.1 596.4 596.4 596.6 595.0	593 · 2 593 · 9 593 · 2 593 · 6 593 · 8 595 · 0 593 · 2 593 · 0 592 · 2 591 · 8 589 · 0 589 · 1	589.7 589.5 588.0 586.0 584.0 585.0 586.0 583.2 583.0 582.4 584.6 584.1	583.0 584.0 584.2 583.2 583.0 582.8 586.0 585.8 586.5 587.0 587.2	587.5 587.6 587.0 587.0 588.0 589.0 589.5 589.0 593.0 593.2 593.4 592.1	590°8 590°4 590°2 591°0 591°0 590°8 591°0 589°8 589°4 591°0 591°4 591°0	594.5 588.5 588.0 592.0 594.0 597.0 597.8 598.5 599.0 597.0 597.0	597.0 597.0 600.0 595.8 598.0 597.0 594.0 586.5 583.0 581.5 582.0 583.0	586.5 589.0 591.0 592.0 587.0 584.0 577.5 577.5 579.0 581.5 584.0	585.0 585.1 585.0 584.2 585.0 585.4 586.0 587.5 588.2 588.4 588.0 592.0	594.0 595.2 592.8 588.8 587.6 590.2 588.2 587.2 586.2 586.0 585.8 584.2	
79°7	79°2	79.0	78°5	78.0	77.5	77.4	77.3	7 <b>6</b> ·9	76°6	76°4	
One	Scale Divis	ion = '00	0063 parts	of the V. F	•	· · · · · · · · · · · · · · · · · · ·		VERTICAL	Force.	<u></u>	
134.6 134.3 134.3 134.3 134.9 134.9 135.4 135.4 135.4 135.4	135.0 134.5 134.2 134.2 134.6 134.6 134.6 134.6 134.6 134.6 134.6	134.2 134.4 134.4 134.4 134.4 134.4 134.4 134.4 134.4 134.4 134.4	134.4 134.4 134.4 134.4 134.4 134.4 134.4 134.6 134.6 134.6 134.6	134.4 133.7 133.7 133.7 133.7 134.0 134.0 134.2 133.4 133.4 133.4 133.4	133 · 3 133 · 3 133 · 3 133 · 3 123 · 3 133 · 5 133 · 5 133 · 5 132 · 5 132 · 5 132 · 5	132.5 132.5 132.5 132.5 132.5 133.7 133.7 133.7 133.7 133.7 133.7 133.7	133.7 132.7 130.4 129.0 129.0 126.7 124.8 123.6 123.6 125.3 124.4 122.1	120.9 120.6 119.3 119.3 119.3 120.4 122.8 124.3 125.6 127.8 128.1 128.1	128·1 128·1 128·1 129·2 129·2 129·5 129·5 129·7 129·7 130·1 130·1	129.5 129.5 128.6 128.6 128.7 129.5 129.5 130.7 131.0 131.0 131.4	
78.4	78°4	78.0	77.7	78.0	78°1	77.9	78.0	78.0	77.5	7 <sup>7</sup> °3	1
				·	<u>.</u>	Increasing	numbers de	note decreas	ing Westerly	Declination,	=
		ME	TEOROLO	GICAL O	BSERVAT	CIONS.					
Barometer at 32°.	Ther	mometers.	Direct	Wind.	Force.			Weather.			
In. 29 '406 29 '426 29 '419 29 '427 29 '422 29 '424 29 '440 29 '432 29 '438 29 '438 29 '453	80°3 78°2 75°1 73°3 70°9 68°9 67°7 65°7 66°3 66°3 66°3	60 72 8 72 0 69 6 68 2 66 8 64 9 63 9 64 5 64 6 64 3 65 4	S.W	7.	Light. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm.	Partially of Partially of Partially of Cloudy, win Cloudy, win Partially of Cloudy, win Cloudy, win Cloudy, win Cloudy, win Cloudy, win Cloudy, win Cloudy, win Partially of Cloudy, win Cloudy, win Partially of Cloudy, win Cloudy, win Partially of Cloudy, win Cloudy, win Partially of Cloudy, win Partially of Cloudy, win Partially of Cloudy, win Partially of Cloudy, win Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially of Partially o	louded, with louded, with louded, with ith circum. th circum. louded, with th circum. th circum.	cir.cum. a cir.cum. a cir.cum. a cir.cum. a and strat. and strat. and strat. cir.cum. a and strat.; and strat; and strat;	nd strat. nd strat. nd strat. constant ligl constant ligl	ntning. ntning.	
	10 <sup>h</sup> .    Ssc. Div.     106	Sc. Div.   Sc. Div.   106	10h.	10h.	Sc. Div.   Sc. Div.   Sc. Div.   Sc. Div.   106   110   3   111   8   110   0   108   4   106   8   110   4   111   9   109   7   108   4   107   2   110   6   111   7   109   4   108   5   107   4   110   8   111   1   109   4   107   6   107   4   110   8   111   1   109   4   107   7   107   8   111   4   110   6   109   4   108   0   108   2   110   9   110   5   109   2   108   0   108   2   110   9   110   5   109   2   108   0   109   2   111   0   110   4   109   4   109   0   109   2   111   0   110   4   108   4   109   0   109   2   111   0   110   4   108   6   108   4   110   1   111   4   110   4   108   6   108   4   110   1   111   4   110   4   108   6   108   4   110   1   111   4   110   4   108   6   108   4   110   1   111   4   110   4   108   6   108   4   110   1   111   4   110   4   108   6   108   2   109   5   592   0   593   2   588   0   583   2   587   0   591   593   5   584   0   583   0   588   0   591   9   593   6   586   0   583   2   587   0   591   596   596   589   5   586   0   583   2   587   0   596   4   591   8   582   4   586   5   593   2   596   4   591   8   582   4   586   5   593   2   596   4   591   8   582   4   586   5   593   2   596   4   591   8   582   4   586   5   593   2   596   4   591   8   582   4   586   5   593   2   596   6   589   0   584   6   587   0   593   2   596   584   6   587   0   593   2   596   584   6   587   0   593   2   596   584   6   587   0   593   2   596   6   589   0   584   6   587   0   593   1   584   1   587   2   592   1   734   3   134   6   134   4   134   4   134   4   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   134   13	10	10 <sup>h</sup>	10°   11°   12°   13°   14°   15°   16°   17°   17°	10\  11\  12\  12\  13\  14\  15\  16\  16\  17\  18\  18\  10\  10\  11\  11\  10\  11\  10\  10	100.	10°,   11°,   12°,   13°,   14°,   15°,   16°,   17°,   18°,   19°,   20°,

<sup>&</sup>lt;sup>a</sup> At 22<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 79° · 0; of V. F., 77° · 7.

				<u> </u>	MAGNET	ICAL (	BSERVATIO	ONS.	***************************************		July 21st a	and 22nd.
		DECLINATION	ON.					Ang	ular Value	of one Scale	e Division =	
21 <sup>h</sup> .	22h.	23 <sup>h</sup> .	0 <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .
Sc. Div. 112 '8 112 '4 111 '6 111 '8 112 '0 111 '4	Sc. Div. 110 '2 110 '4 110 '7 111 '9 113 '2 113 '5 114 '2	Sc. Div. 119.0 118.9 118.4 117.9 118.9 117.9 117.2	sc. Div. 124 2 123 6 125 5 125 5 124 7 123 8 123 4	Sc. Div. 124'4 122'8 123'5 124'7 125'8 126'4 125'4	sc. Div. 122 * 5 123 * 4 123 * 4 124 * 5 125 * 0 124 * 4 123 * 3	Sc. Div 117 '8 116 '9 115 '4 115 '2 114 '5	3   113.7 112.4 4   112.3 111.3 110.4 111.4	sc. Div. 107 '8 107 '2 105 '4 103 '5 103 '4	Sc. Div. 101 2 101 4 102 4 103 4 104 6 101 4	Sc. Div. 97 · 2 97 · 0 97 · 4 97 · 8 98 · 4 98 · 8	Sc. Div. 101 '2 101 '4 101 '8 101 '8 102 '0 102 '4	sc. Div. 104 '2 104 '8 105 '2 105 '4 106 '4
111.2 111.4 111.2 111.0 111.0 110.8	114 2 114 9 115 5 116 3 116 4 117 9	117 2 118 5 120 4 122 4 123 2 123 5	123 · 5 123 · 5 123 · 6 123 · 6 124 · 6	123 4 124 4 122 4 121 2 121 4 122 3	121 · 9 121 · 5 121 · 2 120 · 8 119 · 9	114.4 114.6 115.6 115.6 114.6	111.4 5 112.4 112.4 111.4	104.5 105.2 104.2 103.3 102.3 101.6	100.4 98.8 98.4 97.7 97.4 97.4	99'4 100'2 100'2 100'6 100'8 100'8	102'4 102'8 103'2 103'4 103'4 104'0	106'4 106'6 106'6 106'6 107'2 107'4
		HORIZONTA	L FORCE		3	Increase,	in Scale Divisi	ons, correspo	nding to 1°	decrease of	f Temperatui	re, 1.63.
584 2 584 0 583 2 582 0 583 4 583 2 585 5 584 2 585 8 585 8 585 8	585 8 586 2 586 6 588 1 589 2 590 0 590 0 590 0 590 0 589 9 589 9 587 1	589.0 590.9 590.0 588.1 588.0 590.0 589.3 590.0 591.8 593.0 592.0	592'1 592'1 593'0 592'9 592'8 592'4 593'0 593'0 593'0 593'8 591'2 593'0	592.0 589.8 590.9 590.8 591.4 592.0 592.0 593.9 594.1 586.0 582.0 582.0	583.4 586.0 585.8 582.0 582.0 577.4 573.2 576.0 575.8 575.4 579.0 584.6	589.0 591.2 593.0 592.0 588.6 588.9 587.2 586.8 588.9 589.0	5 591.1 590.0 591.5 587.0 586.8 586.8 586.5 585.0 584.0 587.0 588.7	590.0 590.0 589.0 587.0 586.7 587.2 588.8 587.5 586.0 586.0 587.5 585.5	589.5 588.6 590.0 591.0 595.0 593.0 590.8 591.0 590.0 590.0 590.0	589.0 591.2 591.2 593.2 591.4 595.5 596.0 594.0 593.8 593.8 594.8	595.8 596.2 597.0 597.2 597.8 596.8 596.2 599.8 598.8 596.4 599.2 600.0	598.8 601.2 601.4 594.2 595.4 600.0 598.4 597.0 596.8 595.4 596.8 594.6
76°3	76.0	76.0	76°2	76.6	7 <b>6</b> ·8	76·6	5 77°2	77.5	78°0	78°0	78°5	78°8*
		VERTICAL	Force.		I	ncrease,	in Scale Divisio	ons, correspo	nding to 1°	decrease of	Temperatur	e, 1°64.
132.6 132.9 132.9 134.2 134.5 134.5 135.6 135.9 135.9 135.9	134.8 134.8 134.1 134.6 134.6 134.6 136.7 135.8 135.6 136.6 137.6 135.6	135.6 135.6 135.5 133.9 133.9 133.9 133.9 133.9 133.9 133.9	133.5 133.5 135.2 135.4 135.4 135.4 135.0 135.0 135.0 135.5 135.3	135°3 135°3 135°3 135°3 135°3 135°1 135°1 135°1 134°6 134°6 134°6	134'8 134'8 134'6 134'6 134'6 134'4 134'4 135'2 135'2 135'2	136.4 136.4 136.4 136.4 136.4 136.9 136.9 137.1 137.7 137.7 138.5	138.8 138.4 138.9 138.0 138.0 138.0 138.0 138.0 138.0	137.8 137.8 137.8 137.8 137.0 136.5 136.5 136.5 135.7 135.7 135.9	135'9 135'9 135'9 135'7 135'7 135'7 135'0 135'0 135'0 135'0 136'0 134'2	134·2 134·2 134·2 134·2 134·2 134·2 134·2 134·2 134·1 134·6 135·3	135·1 135·7 135·4 135·4 135·4 135·4 135·4 135·4 135·4 134·7 134·7	134.7 134.7 134.3 135.0 136.2 136.2 136.0 136.0 136.0 135.6
76.7	76°4	76°6	76°7	76°5	76°5	76.2	76°3	76°5	76°7	77.2	77.3	77°4ª
and increas	sing Horizo	ontal and Ver	tical Force.									
		1	1		FEOROLO	GICAL	OBSERVAT	ions.	1			<del></del>
Mean G Tir	öttingen ne.	Barometer at 32°.	Dry.	Wet.	Direc	tion.	Wind. For	ce.		w	eather.	
21 25		In. 29:469	68.7	66.0		-	Calı	(	lightni	ing; heavy	rain.	rat.; constant
22 (	23 0 29·495 68·5 66·8 22 0 0 29·507 69·7 67·6 1 0 29·526 72·0 65·7 2 0 29·550 71·7 65·7 3 0 29·572 72·9 64·0 4 0 29·576 74·7 64·1 5 0 29·594 75·7 64·1 6 0 29·599 77·8 65·8 7 0 29·600 78·2 67·4 8 0 29·600 78·9 65·3		N. by N.N. N.N. N.N. N.N. N.N. N.N. N.N. N.	.W	Cali Very I Very I Ligi Ligi Ligi Moderate w Mode Ligi	m. ight. ight. ht. ht. ht. ht. rith gusts.	lightni Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear.	ng; rain.		, Conducti		

August 27th and 2	28th.		Ŋ	IAGNETI	CAL OBSI	ERVATIO	NS.				
	Angular	Value of C	ne Scale Di	vision = 0	·721.			I	DECLINATIO	on.	
Mean Göttingen Time.	10h.	11 <sup>h</sup> .	12h.	13h.	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17h.	18 <sup>h</sup> .	19h•	20h.
M. s. 0 0 0 5 0 0 10 0 0 0 0 0 0 0 0 0 0 0 0	Sc. Div. 107 '5 107 '9 108 '4 109 '5 108 '9 108 '9 109 '0 108 '9 109 '2 109 '0	Sc. Div. 108 '9 109 '6 110 '1 110 '2 110 '3 110 '4 110 '2 110 '2 110 '1 110 '2 110 '1	Sc. Div. 110 ' 4 110 ' 4 110 ' 4 110 ' 4 110 ' 3 110 ' 3 110 ' 3 110 ' 4 110 ' 0 108 ' 9 108 ' 5 107 ' 9 107 ' 9	Sc. Div. 107'9 108'4 109'3 109'4 109'6 109'4 109'4 109'0 109'4 109'2 109'2	Sc. Div. 109 5 109 4 109 8 110 4 109 8 110 2 110 4 110 6 113 7 118 4 117 8	Sc. Div. 117'4 116'2 115'9 115'8 117'4 118'4 118'3 116'4 113'0 111'4 111'4 111'4	Sc. Div. 111 '6 110 '5 110 '3 110 '4 109 '2 109 '6 109 '6 109 '6 109 '6 109 '5 109 '6	Sc. Div. 109'4 109'4 110'4 109'8 108'8 109'4 109'4 109'6 109'4 109'0 108'4	Sc. Div. 108 4 108 4 108 8 108 8 108 6 109 6 109 2 108 8 110 0 110 4 111 4 111 4	sc. Div. 110'4 110'4 110'4 110'3 109'9 109'6 110'2 110'6 111'0 111'4 112'0 111'8	Sc. Div. 111.5 109.3 106.4 103.4 104.3 106.4 108.3 110.4 111.6 114.4 116.2 117.4
M. S.	One Sca	ale Division	= .00008	7 parts of	he H. F.				HORIZONT	AL FORCE.	
2 0 7 0 12 0 17 0 22 0 27 0 32 0 37 0 42 0 47 0 52 0 57 0	615.0 612.0 611.0 610.5 609.2 609.2 610.0 609.8 611.4 611.0 613.0 614.2	617.0 615.0 615.0 615.0 614.5 611.0 609.8 608.5 608.4 605.0 602.0 599.0	599 0 598 2 597 2 598 0 601 0 600 0 602 0 601 5 600 0 600 0 600 0 599 0	599.0 598.5 604.0 606.0 608.0 607.0 605.0 603.0 603.8 603.0 602.9 603.0	603 0 601 2 602 0 600 2 598 0 596 0 593 9 593 0 593 0 598 0 599 0	598.5 596.0 594.0 589.5 587.0 587.5 587.0 584.0 582.0 583.0 584.0	587 · 2 583 · 1 589 · 2 590 · 8 591 · 8 592 · 8 595 · 8 595 · 0 596 · 0 597 · 8 598 · 8 599 · 8	600.0 598.8 599.6 601.8 602.8 602.4 602.8 601.2 599.8 600.2 600.2	601 6 601 8 602 2 602 2 600 0 602 0 600 8 599 4 600 0 599 8 600 8	600°0 601°5 601°0 601°7 600°0 599°0 600°0 600°0 599°0 599°1	598.0 596.0 594.0 593.9 596.9 598.1 598.4 600.0 600.2 600.0 598.0 594.0
Thermometer	70°5	70.4	70°7	7i°0	7°°0	70°-5	70°2	7°°0	69°4	69°0	68°5
M. S.	One So	cale Division	n='0000	63 parts of	the V. F.				VERTICAL	Force.	
3 0 8 0 13 0 18 0 23 0 28 0 33 0 38 0 43 0 48 0 53 0	149 9 149 9 149 8 149 8 149 8 149 8 149 6 149 6 149 3 149 3 149 3	149.5 149.5 149.5 149.5 149.5 148.9 148.6 148.6 148.4 147.9 147.9	147.8 147.8 147.7 147.7 147.7 147.7 147.7 146.9 146.5 144.1 144.1	143 0 143 0 143 4 143 8 143 8 143 8 143 8 143 8 143 8 143 8 143 8	143 · 8 143 · 8 143 · 8 144 · 4 144 · 4 145 · 0 145 · 6 145 · 8 145 · 8 145 · 8 145 · 8	145.2 144.6 144.6 144.6 144.6 144.6 145.0 146.3 147.2 147.2	148.0 148.0 148.0 148.0 148.0 148.0 148.0 147.3 147.3 147.3	146.6 146.6 146.6 146.6 145.9 145.9 145.9 145.9 145.9 146.3	146.7 146.7 146.7 146.7 146.7 146.7 146.7 147.4 147.4 147.4	147.4 147.8 147.9 147.5 147.5 147.5 147.5 147.4 146.2 146.2	145 8 144 7 144 5 142 4 139 2 139 0 138 7 136 9 137 3 136 2 135 4 135 0
Thermometer	69°4	69°5	72.2	72.2	71.4	70°8	70°7	70°5	7ő·0	69°7	69°7
							Increasing	Numbers d	enote decrea	sing Westerl	y Declination,
			M	ETEOROL	OGICAL (	OBSERVA'	rions.				
Mean Göttingen Time.	Baromete at 32°.	The Dry.	rmometers.	Direc	Wind.	Force.	-		Weather	·	
D. H. M. 27 10 0 11 0 12 0 13 0 14 0 15 0 16 0 17 0 18 0 19 0 20 0 21 0	In. 29 613 29 610 29 618 29 612 29 626 29 628 29 643 29 652 29 644 29 655	6 64.6 65.6 65.6 65.6 65.6 65.6 65.6 65.6	50 58.6 59.6 59.6 55.1 56.5 56.5 56.5 57.6 51.7 51.7 50.2 57.6 47.8	S. S. S. S. S. S. S. S. S. S. S. S. S. S	W. V W. V W. V	ery light, ery light. ery light. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm.	Clear, wi Nearly cl Nearly cl Clear, wi Clear, wi Clear, wi Clear, wi Clear, wi Clear, wi	th light cir ear, with cir ear, with cir th light cir th light cir th light cir th light cir th light cir th light cir th light cir th light cir	rcum. and ci cum. and ci rcum. and ci -cum. and ci cum. and ci -cum. and ci -cum. and ci -cum. and ci -cum. and ci -cum. and ci -cum. and ci -cum. and ci	rstrat. cirstrat. cirstrat. rstrat. rstrat. rstrat. rstrat. rstrat. rstrat. rstrat. rstrat.	

•At 28<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 71° '0; of V. F., 70° '2.

		s gaunti ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) and ( ) a		M	AGNETI	CAL OB	SERVATIO	NS.			August 27th	and 28th.
		DECLINATI	ON.	·				Angu	lar Value o	f One Scale	Division =	0'`721.
21h.	22h.	23h.	Oh.	1h.	2h.	3 <sup>h</sup> .	4 <sup>h</sup> .	5h.	6h.	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .
Sc. Div. 118*4 119*8 119*9 118*3 116*4 115*5 114*7 112*3 111*3 111*2 111*6	Sc. Div. 115 '2 116 '4 116 '4 118 '0 118 '8 118 '4 118 '3 119 '5 119 '5 119 '5 119 '2 118 '6 118 '7	sc. Div. 119'3 119'2 117'8 117'2 117'0 116'4 116'0 114'4 115'1 115'5 116'4 116'2	Sc. Div. 118 5 5 118 7 120 4 120 6 121 2 123 2 124 4 124 4 124 9 125 4	125.0 126.0 126.0 126.6 127.0 127.0 126.4 126.6 126.9 125.4	Sc. Div. 124 '6 124 '6 124 '5 124 '4 124 '9 122 '9 122 '9 122 '5 121 '7 120 '6 119 '6 119 '2	Sc. Div. 118 '8 118 '2 118 '2 117 '4 117 '4 116 '4 116 '4 116 '7 116 '4 114 '8 113 '6 112 '4	Sc. Div. 111 '4 110 '2 107 '8 106 '6 105 '4 106 '2 106 '4 105 '5 105 '6 105 '6 105 '6	Sc. Div. 104'6 103'8 103'0 102'4 101'6 100'5 100'0 99'6 99'4 99'0 97'8	Sc. Div.   95.4   94.2   95.4   95.2   95.4   95.4   95.4   95.4   96.4   97.3   98.4	sc. Div. 97.4 97.4 96.9 97.0 96.8 96.7 96.9 97.0 97.2 97.8 97.3	Sc. Div. 98.2 97.6 97.6 97.8 97.9 98.0 98.4 98.8 99.0 100.0 100.3 100.9	Sc. Div. 101'4 102'0 102'8 103'0 102'8 104'3 105'0 105'2 105'5 105'9 106'4 106'4
		Horizonta	L FORCE.			Increase, in	n Scale Divisi	ons, corresp	onding to 1	° decrease o	f Temperatu	re, 1 63.
590°0 587°0 587°8 584°2 583°6 582°0 585°0 585°0 589°0 587°9 591°1	7.0    595.0    599.0    596.8    594.2    598.8    600.2    598.0    598.0    598.0    592.0    3.6    599.0    601.4    598.2    593.0    (2.0				586.0 585.0 583.0 580.2 580.0 579.8 578.0 578.8 578.5 578.5 578.5	580.0 578.2 580.0 579.0 580.0 576.0 573.5 571.0 571.0 570.0 571.5 569.6	570.0 572.0 573.0 574.5 573.5 574.1 572.0 570.0 568.6 570.0 570.0	571.8 570.2 571.8 572.0 571.2 571.2 569.6 572.8 572.0 572.8 571.0 571.8	571·2 569·2 576·2 575·8 576·0 579·2 578·2 577·2 577·0 580·0 584·2 581·2	582.8 583.2 584.1 585.9 585.0 585.0 594.0 594.0 593.5 593.9 593.0 591.4	591.5 593.0 595.0 593.0 593.8 596.0 597.0 596.0 595.5 594.2 596.0 598.0	598 '8 600 '0 600 '0 601 '0 604 '0 605 '0 605 '2 606 '0 604 '0 604 '0 606 '0
68.0				66.9	68.2	68.8	69°5	69°7	69.8	- 69°7	70.0	70°7 a
		VERTICAL	Force.			Increase, in	n Scale Divisi	ons, corresp	onding to $1$	° decrease o	f Temperatu	re, 1 ° 64.
135.0 135.0 135.0 135.0 135.8 135.8 137.2 136.1 136.1 134.2 134.2	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		148.8 148.8 148.9 148.9 148.9 148.7 148.7 148.7 148.7 148.5 148.5	148.5 148.5 148.5 148.5 148.5 148.5 148.6 148.6 148.6 148.6 148.6	148 · 2 148 · 2 148 · 2 148 · 2 148 · 2 147 · 1 146 · 6 146 · 2 146 · 2 146 · 2 146 · 2 145 · 9	145 9 146 4 146 8 146 8 146 6 146 6 146 0 145 7 145 7 145 7	145.7 145.7 145.7 145.7 146.6 146.3 146.3 146.3 146.3 146.3 146.3	148.6 147.7 147.7 148.1 148.1 149.3 148.7 148.7 148.0 148.0 149.0 148.2	148 2 148 2 148 2 148 2 148 2 148 2 148 3 149 4 149 4 149 5 149 5	149·1 149·7 149·7 149·7 149·7 149·7 149·7 149·7 149·7 149·0 148·7 149·0	149.0 149.0 149.0 149.0 149.0 149.0 149.0 149.0 149.5 149.5	
70°·1	69°7	69°7	67°3	67.2	6 <sup>7</sup> · 5	67.0	69.0	69.0	69.3	69.0	69.3	69°5 a
and increa	asing Horizo	ontal and Ver	rtical Force.				100000			<u> </u>		
Mean G	Mean Göttingen Barometer Thermometers.					OGICAL Wine	OBSERVAT	CIONS.		Weath	O.P.	
	me.	at 32°.	Dry.	Wet.	Dire	ction.	Force.	-		yy eath	···	
27 2 28	1. M. 22 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	In. 29.653 29.658 29.666 29.665 29.667 29.663 29.653 29.647 29.630 29.618	48 0 48 8 47 5 54 0 62 0 63 8 66 1 67 8 68 1 68 3 69 0 68 1	60.1 60.1 60.1 60.1 60.7 59.3 60.2 59.3			Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm.	Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear.				

September 22nd as	nd 23 <sub>rd</sub> .			MAGNET	ICAL OI	BSERVATIO	NS.				
Mean Göttingen	Angu	lar Value of	one Scale 1	Division =	0' • 721.				DECLINATI	ON.	
Time.	10 <sup>h</sup> .	11h.	12h.	13 <sup>h</sup> .	14 <sup>n</sup> .	15h.	16h.	17h.	18h.	19h.	20h.
M. s. 0 0 0 5 0 10 0 0 15 0 0 0 0 0 0 0 0 0 0	Sc. Div. 112.4 112.6 113.2 113.4 113.6 113.6 113.8 114.2 114.2 114.6 113.4	Sc. Div. 113 '4 113 '4 113 '4 113 '4 113 '4 113 '4 113 '4 112 '8 112 '6 112 '4 112 '0	Sc. Div. 112 '8 112 '5 112 '6 112 '4 112 '8 112 '8 112 '8 112 '8 112 '8 112 '8 112 '8 112 '8 112 '4 112 '4	Sc. Div. 112 '4 112 '4 112 '7 112 '5 113 '4 112 '5 112 '4 112 '2 111 '4 111 '1 111 '4	Sc. Div. 111'4 111'5 111'6 111'5 111'4 109'6 110'0 110'4 110'5 110'6 110'6	sc. Div. 110 6 110 5 110 6 110 4 110 4 110 4 109 9 109 7 109 7 110 2 110 4 110 2	Sc. Di 109 ' 108 'S 109 'G 109 'S 108 'S 109 'A 110 'A 111 'G 106 'G 108 'A	4   110·1 8   110·0 0   110·2 5   111·5 9   111·5 8   112·6 4   113·0 113·8 0   115·4 2   116·2 0   116·2	Sc. Div. 114.6 114.3 113.8 114.4 114.6 115.4 115.2 118.4 119.4 119.5 120.0	Sc. Div. 120.0 119.3 117.9 117.8 117.0 114.9 114.3 113.6 112.6 111.9 111.7 113.5	Sc. Div. 112.0 119.0 119.3 117.9 117.5 119.6 119.6 118.4 117.9 117.3 116.8 117.4
M. S.	One S	Scale Divisio	on = .000	087 parts o	of the H. I	₹.			Horizont	AL FORCE.	
2 0 7 0 12 0 17 0 22 0 27 0 32 0 37 0 42 0 47 0 52 0 57 0	607.4 606.8 607.0 609.2 611.2 612.2 612.6 612.8 612.8 615.0	613 *8 613 *8 613 *0 613 *8 615 *0 615 *5 616 *5 616 *0 616 *2 618 *0 617 *8 617 *0	615.0 615.0 614.2 614.8 613.0 612.5 613.2 613.0 613.5 612.2 612.2 610.0	610 · 2 610 · 0 609 · 0 608 · 9 607 · 6 609 · 0 608 · 2 607 · 8 608 · 2 608 · 4 608 · 7 609 · 0	608'9 610'0 610'2 610'2 611'0 610'1 609'4 610'5 611'3 612'0 613'1	613.6 613.6 614.0 614.1 615.7 616.4 616.7 616.0 617.0 617.0 617.8	616 16 16 16 16 16 16 16 16 16 16 16 16	5 611 2 612 0 1 609 8 9 609 0 0 609 0 7 609 8 0 609 6 4 609 4 8 609 4 2 609 4	611.0 611.4 611.0 610.0 610.0 611.2 611.4 610.8 610.4 610.0 610.0	608.0 608.0 608.0 606.5 607.2 604.0 603.0 603.0 607.1 609.5 610.2 612.5	611.5 609.0 606.0 603.0 603.0 605.0 604.5 604.7 606.5 606.0 607.5
Thermometer	64.2	6 <b>4</b> °8	64°8	6 <b>4</b> °8	64.3	63°5	63.0	o 62.8	62.4	62°2	6j.8
M. S.	One	Scale Divisi	on = .000	0063 parts	of the V.	F.	_	***	VERTICAL	Force.	
3 0 8 0 13 0 18 0 23 0 28 0 33 0 38 0 43 0 43 0 53 0 58 0	163°1 162°5 162°5 162°5 162°5 163°3 162°5 163°0 163°0 163°0	162.0 161.4 161.6 161.6 161.6 161.6 161.6 161.8 161.3 161.3 161.3	160°2 160°2 159°2 157°9 157°8 157°8 157°8 157°4 157°4 157°2 157°2 157°2	156.2 156.7 156.7 156.7 156.7 156.9 157.1 157.1 157.7 157.4	157.8 157.8 157.7 157.7 157.7 157.7 157.7 157.7 157.7 158.5 158.4 158.2	158·1 158·1 158·0 157·5 157·5 157·7 157·7 157·7 157·7 157·7	157.7 157.5 158.3 158.3 158.3 158.4 158.7 158.7 158.7 158.5 157.9	9   157.5 157.5 157.7 157.7 157.7 157.7 157.7 157.9 157.9 157.9 157.9	157.8 157.8 158.1 158.0 158.0 158.0 157.8 157.8 157.4 157.2 154.9 154.9	154.9 154.9 154.4 154.2 154.1 154.0 154.0 153.8 159.2 159.2 159.1 158.9	158 · 8 155 · 9 156 · 1 156 · 1 154 · 4 154 · 3 154 · 2 154 · 5 154 · 6 156 · 2 156 · 2 156 · 3
Thermometer	62°6	63.1	64.0	64.5	64°5	63°7	63°4	4 62°.7	62°5	62°5	62.7
							Increasi	ng Numbers de	note decreas	ing Westerl	y Declination,
			ME	TEOROLO	GICAL	OBSERVAT	IONS.				
Mean Göttingen Time.	Barometer at 32°.	There	wet.	Direc		ind. Force.			Weat	her.	قـ
D. H. M.  22 10 0  11 0  12 0  13 0  14 0  15 0  16 0  17 0  18 0  19 0  20 0  21 0	In. 29.765 29.745 29.746 29.748 29.745 29.745 29.745 29.734 29.732 29.732 29.732	60°1 58°7 53°8 51°9 50°1 49°2 50°6 48°9 47°3 46°1 45°9 45°5	54.9 54.7 51.7 50.3 48.6 47.8 49.3 47.3 46.3 44.8 44.4	S.S. b.	y E.	Light. Calm. Very lig Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm. Calm.	ht.	Partially cloud Partially cloud Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear.	led; circu	m. and cirs	strat.

<sup>\*</sup> At 23d 10k, Thermometer of H. F., 67° '0; of V. F., 65° '8

2 C

<u>_</u>						IAGNETI	CAL OB	SERVATIO	NS.			Septe:	mber 22nd a	and 23rd.
-		I	)ECLINATIO	on.		<del></del> -				Ang	ular Value o	of one Scale	Division =	0' 721.
-	21 <sup>h</sup> .	22h.	23 <sup>h</sup> .	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup>	•	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .
	Sc. Div. 17'0 16'6 13'6	sc. Div. 114.0 114.4 115.4	Sc. Div. 116'4 115'4 114'4	Sc. Div. 110°4 111°4 111°6	Sc. Div. 114 4 115 4 115 6	Sc. Div. 104'8 101'0 96'4	Sc. Div. 96'9 97'4 95'4	Sc. Div. 97.6 95.8 96.4	sc. I 96 96	8	Sc. Div. 94°4 94°6 95°8	Sc. Div. 98'9 100'4 101'5	Sc. Div. 103.6 104.3 105.9	Sc. Div. 109 3 109 8 109 5
	115'4 113'2 113'4	114.5 114.4 114.3 114.5	114.0 112.4 112.5 112.5	113.0 113.6 114.2 114.3	115.2 115.4 114.8 114.4	94·0 92·2 93·4 97·4	94·4 93·6 93·2 96·2	98.4 99.2 99.3	93 92 91 90	4 8 4	95.8 96.0 95.6 95.9	102.6 102.3 100.6 99.0	105.6 106.4 106.6 106.5	110.4 109.9 110.7 110.5
	113.9 113.9 113.9 113.9	115.4 115.7 116.5 117.0	111.4 110.4 109.4 109.4	114.0 115.4 118.3 114.3	114.2 112.9 110.4 109.2	97.8 98.0 98.0 99.2	96 2 96 5 97 4 97 6 95 3	99'4 98'3 95'6 96'4 95'4	90° 90° 89°	5 2 0	96.6 96.6 97.3 97.6	100 0 100 4 101 5 102 4	106 5 107 5 108 0 108 0	110.5 111.1 110.7 112.0 112.3
	113.9	117.2	108.8	114.4	106.8	98.6	95.4	96.0	92		93.3	103.5	108.4	112.4
-			HORIZONTA		20010		1	Scale Divisio	Τ		1	1	1	
	608.8 610.0 612.0 613.0 613.5 613.5 613.0 613.5 613.0 613.0 613.0	613.5 614.0 616.0 616.0 618.0 618.0 618.0 618.0 620.0 620.0 621.0 619.0	616.5 615.0 615.0 615.5 615.2 614.1 614.0 613.0 613.0 613.0	611 ° 0 612 ° 0 612 ° 5 611 ° 0 608 ° 9 608 ° 5 607 ° 1 607 ° 5 605 ° 0 604 ° 0 606 ° 0	608 0 609 0 609 8 611 5 611 5 610 0 610 5 612 2 610 4 608 5 606 2 604 0	603.4 603.8 600.2 601.8 598.2 598.2 598.0 600.0 596.0 600.0 597.8 602.2	602·2 602·0 604·4 605·5 609·2 607·0 604·8 604·0 609·0 608·3	605.0 607.4 607.2 605.1 606.1 606.4 603.6 602.0 604.0 603.6 603.0 601.2	602 602 601 601 602 604 604 607 605 605	· 0 · 9 · 4 · 4 · 0 · 4 · 2 · 9 · 4	611.0 611.2 611.0 611.0 612.0 612.0 612.5 615.0 615.2 616.0 616.0 615.8	619.0 620.2 627.0 627.0 628.0 620.0 605.8 605.1 602.5 602.2 603.0 603.5	605.0 607.2 613.5 614.0 612.0 613.2 614.0 609.8 608.8 614.5 615.0 616.0	612.5 613.4 610.0 617.0 625.0 617.0 621.0 620.0 620.0 614.0 614.0 608.2
	61.2	61.0	6 <u>1</u> .0	60°5	60°5	6Î.3	62°2	63°0	63 <sup>°</sup>	.8	64.0	64.5	65°3	66°5°
The second second			VERTICAL	Force.		]	Increase, i	n Scale Divisio	ons, co	rresp	onding to 1°	decrease of	Temperatur	e, 1.64.
The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	158°2 158°2 158°2 158°2 158°2 158°2 158°5 158°5 158°6 158°6 158°8 158°8	158.9 158.9 158.9 158.9 158.9 158.9 158.9 158.9 158.9 158.9 158.9	157.8 157.8 157.8 157.8 157.8 157.8 157.8 157.4 157.4 155.8 155.6	155°3 155°3 156°1 156°1 156°8 157°3 157°8 158°3 158°3 158°4 158°9 158°9	158 '9 158 '9 158 '9 160 '5 161 '2 161 '2 160 '3 160 '3 160 '4 160 '4	160°3 160°3 159°7 159°7 157°6 155°8 154°8 154°8 154°2 155°6 154°7 155°6	155.6 155.6 156.0 156.1 155.8 155.7 156.1 156.1 156.1 156.1	156°1 156°1 156°1 156°1 156°1 156°1 156°1 158°0 156°9 156°9	156 156 156 157 157 157 157 156 156	4 4 2 2 2 9 5	157.6 157.6 157.6 157.6 159.6 159.6 159.9 159.9 160.3 160.5	160°6 161°9 162°7 162°6 163°3 163°3 161°7 162°0 161°7 161°7 161°7	161.7 161.2 161.2 160.7 159.6 159.6 159.4 157.9 157.9 157.9 157.9	157'0 157'0 156'2 157'5 156'7 156'7 156'1 156'1 156'1 155'3 154'8
	62°4	62° 0	62°3	62.5	6j.3	61°7	62°5	62°6	63	.0	63.4	63.7	64.5	65°5°
	and increa	sing Horizo	ntal and Ver	tical Force.										
	·		11		MI	ETEOROL		OBSERVAT	rions		·····			
,	Mean G Ti	löttingen me.	Barometer at 32°.	The Dry.	rmometers.	Dire	ection.	Force.		_		Weat	ther.	
	22 2	H. M. 22 0 23 0 0 0 1 0 2 0 3 0 4 0 5 0 6 0 7 0 8 0 9 0	In. 29.721 29.719 29.720 29.720 29.723 29.729 29.709 29.695 29.654 29.636	45.5 45.7 49.9 52.8 58.7 61.5 62.9 65.0 65.5 66.1	6 44.2 44.4 48.8 51.7 56.3 59.0 60.9 60.8 61.5 62.1	S.S.S.S.W S.S.S.S.S.S.S.S.S.S.S.S.S.S.S.	S.W. S.W. S.W. S.W. S.W. S.W. S.W.	Calm. Calm. Calm. Calm. Very ligl Very ligl Very ligl Very ligl Very ligl Very ligl Very ligl Very ligl	ht. ht. ht. ht. ht. ht.	Clou Clou Clou Clou Clou Clou	ar.  ady, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cindy, with cin	r. cum. and crcum. and crcum. and crcum. and crcum. and crcum. and crcum. and crcum. and crcum. and crcum. and	cirstrat. cirstrat. cirstrat. cirstrat. cirstrat. cirstrat. cirstrat. cirstrat.	

Vol. III.

October 20th and	21st.		<del></del>	MAGNETI	CAL OB	SERVATIO:	NS.			-		<del></del>
Mean Göttingen	Ang	ılar Value	of one Scale	Division =	0''721.					DECLINATI	ON.	
Time.	10h.	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	10	6 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20h.
M. s. 0 0 0 10 0 15 0 20 0 25 0 30 0 35 0 40 0 45 0 55 0	sc. Div. 109 '4 109 '6 110 '2 110 '5 111 '0 111 '4 112 '2 112 '4 112 '6 113 '1 113 '4 113 '4	sc. Div. 113 '5 113 '7 113 '7 113 '6 113 '6 113 '4 113 '2 112 '9 112 '5 112 '4 112 '4 112 '3	Sc. Div. 112.0 112.0 112.8 113.9 113.5 112.2 115.9 118.4 116.5 114.4 111.3 107.9	Sc. Div. 107'4 108'6 109'5 110'6 110'6 109'8 109'8 109'6 110'4 111'2 111'4 110'6	Sc. Div. 110 '4 110 '8 112 '0 112 '5 111 '2 110 '0 109 '2 108 '4 108 '4 108 '8 108 '8	Sc. Div. 108 '4 108 '8 108 '6 108 '8 108 '6 105 '4 104 '6 104 '4 105 '2 108 '2 107 '6 107 '4	sc.   108   108   107   108   109   111   110   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109   109	3°2 7°4 3°2 9°6 1°0 1°0 9°3 9°0	Sc. Div. 109'7 110'0 110'2 109'6 110'2 109'4 110'1 111'9 115'9 118'1 117'4 115'4	Sc. Div. 112.5 110.4 108.5 108.4 109.3 110.2 110.4 110.4 110.4 110.5 109.6 107.4	Sc. Div. 107.3 107.5 108.6 109.4 111.2 111.2 112.4 113.8 114.0 112.2 111.7 111.5	Sc. Div. 111 '9 112 '4 113 '3 113 '0 113 '0 111 '8 111 '4 111 '2 111 '6 111 '8 111 '6 111 '4
M. S.	One	Scale Divis	ion = '000	0087 parts	of the H.	F.		,	<u>.</u>	Horizont	AL FORCE	
2 0 7 0 12 0 17 0 22 0 27 0 32 0 37 0 42 0 47 0 52 0 57 0	619.0 619.0 620.8 622.0 622.8 623.0 623.8 624.0 624.0 624.0 624.1 623.2	621.6 621.0 621.2 621.5 621.1 620.5 620.1 620.0 620.0 619.0 619.0 618.0	618.0 614.1 613.2 614.0 614.0 615.0 615.2 620.0 624.0 625.0 624.0 619.0	618.0 617.8 618.2 618.8 618.0 618.2 617.6 617.0 616.8 617.2 617.4	617.2 616.0 616.8 617.2 616.8 616.2 615.0 615.2 615.0 614.2 613.2 612.2	611'8 612'0 612'8 613'8 614'0 613'2 610'8 607'8 608'0 610'2 612'0 610'0	611 611 608 607 609 611 611 610 609	·9 ·7 ·1 ·1 ·1 ·1 ·1 ·1 ·1 ·1 ·1 ·1 ·1 ·1 ·1	610.8 609.5 609.6 610.0 610.0 609.6 609.0 610.0 610.0 610.0 610.0 610.0 610.0	611.0 610.8 609.9 609.5 609.0 609.4 609.2 609.2 608.1 607.6 606.6 608.0	609.0 610.3 610.2 612.0 611.8 611.6 611.9 611.0 612.9 613.2	615.3 615.2 615.5 615.7 615.3 615.0 617.2 617.8 616.9 617.0 616.7 616.6
Thermometer	59°5	59°5	59°5	59°5	59.2	59°2	58	8.8	58°2	5 <sup>°</sup> 7.5	57.3	57.0
<b>M.</b> S.	Опе	Scale Divis	ion = '000	0063 parts	of the V.	F				VERTICAL	Force.	
3 0 8 0 13 0 18 0 23 0 28 0 33 0 38 0 43 0 48 0 53 0 58 0	168.7 168.7 169.1 168.8 168.8 168.8 168.8 168.8 168.8 168.8	168 · 8 168 · 8 168 · 8 168 · 8 168 · 8 168 · 8 168 · 8 168 · 3 168 · 3 167 · 5	166.8 166.7 166.5 166.5 166.5 166.5 166.7 167.7 167.7 167.7 167.3 166.5	166.5 166.5 166.5 166.6 166.9 166.9 166.9 166.9 166.9 167.1 167.0	166.7 166.5 166.5 166.5 166.5 166.5 167.0 167.0 167.0	167.5 167.5 167.5 167.5 167.5 167.5 167.5 167.7 168.3 168.1 168.4	169 169 168 168 168 168 168 168 168	0°1 5°5 5°5 5°5 5°5 5°5 5°5 5°5 5°5 5°5	168.5 168.5 167.5 167.5 167.5 167.0 167.0 167.0 165.1 166.1 165.2 165.3	164.1 163.8 163.8 163.6 163.5 163.5 163.5 162.9 162.9 162.9 162.9 161.0	159.0 158.2 158.2 158.1 158.1 158.1 159.1 159.5 159.5 159.5 159.6	164.2 164.4 165.5 165.5 165.5 165.3 165.3 165.6 165.6
Thermometer	58°7	58°·8	59°0	59°5	59.2	59°4	59	3.5	59.0	59°2	<b>5</b> 9°2	58.9
							Increa	asing	Numbers de	note decreas	ing Westerly	7 Declination,
			M]	ETEOROL	OGICAL	OBSERVAT	CIONS	8.	<del> </del>	· · · · · · · · · · · · · · · · · · ·		
<b>M</b> ean Göttingen Time.	Baromete at 32°.	The Dry.	rmometers. Wet.	Dire	ction.	ind. Force.				Weath	ier.	
D. H. M.  20 10 0  11 0  12 0  13 0  14 0  15 0  16 0  17 0  18 0  19 0  20 0  21 0	In. 29.785 29.797 29.821 29.837 29.860 29.879 29.887 29.898 29.902 29.909 29.916	52.8 48.5 45.3 43.4 43.0 40.6 39.9 36.6 32.9 31.4 30.6 31.2	38.6 36.6 35.0 35.6 35.3 34.2 32.0 29.4 27.5	W. 1 W. 1 W. 1 N. W.	by S. by S. by S. by W. y W.	Light. Very light Very light Very light Calm. Very light Calm. Calm. Calm. Very light Calm. Calm.	nt. nt. nt. nt.		r. r. r. r. r. r.			

<sup>a</sup> At 21<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 55° · 5; of V. F., 55° · 5.

111-5   114-6   114-6   114-6   114-6   114-6   118-5   118-2   118-2   118-2   118-2   118-4   118-2   106-2   107-6   1   111-5   114-6   114-6   114-6   116-8   119-3   118-8   117-2   113-4   105-2   106-2   107-6   1   111-6   114-3   114-2   115-0   116-7   116-8   119-3   118-8   117-2   113-4   105-2   106-5   107-6   1   111-4   115-6   114-6   115-0   116-7   121-5   117-2   110-3   107-1   106-9   107-6   1   111-4   115-5   114-6   115-0   116-7   121-5   117-2   110-3   107-0   106-9   107-6   1   111-4   114-8   114-6   115-0   117-6   120-2   118-6   114-2   110-2   106-5   107-4   107-6   1   111-4   114-8   114-6   115-0   117-6   120-2   118-6   114-2   110-2   106-5   107-4   107-6   1   111-7   114-4   114-6   115-0   117-6   120-2   118-6   114-2   110-2   106-5   107-4   107-9   1   111-7   114-4   114-6   115-0   117-6   120-2   118-6   114-2   110-2   106-5   107-4   107-9   1   113-8   114-6   114-6   115-7   118-4   118-1   118-6   113-8   109-4   106-5   107-4   107-9   1   113-8   114-6   114-6   115-7   118-4   118-6   113-8   109-4   106-5   107-4   107-9   1   113-8   114-6   114-6   116-1   118-0   120-3   118-4   118-6   113-8   109-4   106-5   107-4   107-9   1   113-8   114-6   114-6   116-1   118-0   120-4   118-4   118-6   113-8   109-4   106-5   107-6   107-9   1   113-8   114-6   114-6   116-1   118-0   120-4   118-4   118-6   113-8   109-4   106-5   107-6   107-9   1   113-8   114-6   114-6   116-1   118-0   120-4   118-4   118-6   113-8   109-4   106-5   107-6   107-9   1   113-8   114-6   114-6   116-1   118-0   120-4   118-4   118-6   113-8   109-4   106-5   107-6   107-9   1   113-8   114-5   114-6   116-1   118-0   120-4   118-4   118-6   113-8   109-4   106-5   107-6   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-9   107-					M.	AGNETI	CAL OBS	ERVATION	NS.	· · · · · · · · · · · · · · · · · · ·	C	october 20th	and 21st.
2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5   2.5		]	DECLINATIO	N.					A	ngular Value o	f one Scale	Division =	0'.721.
111:5   114:6   115:0   114:6   116:4   116:0   119:4   117:6   113:4   108:2   106:2   107:4   107:6   1112:0   114:3   114:2   115:0   116:3   118:3   118:4   118:3   117:2   106:4   107:5   106:5   107:6   1112:4   114:3   114:2   115:0   116:9   120:2   118:3   118:4   113:4   112:3   107:4   106:5   107:6   1112:4   114:3   114:4   115:0   116:9   120:4   118:2   116:4   113:3   107:4   106:5   107:6   1112:4   114:4   115:0   116:0   116:0   120:2   118:3   117:4   113:3   107:4   106:5   107:6   1112:4   115:4   115:0   115:0   117:6   120:2   118:5   114:2   110:2   106:5   107:4   107:6   1112:4   113:3   114:5   114:5   115:0   117:6   120:2   118:5   114:2   110:2   106:5   107:4   107:6   1111:4   114:3   114:6   115:0   117:6   120:2   118:6   114:2   110:2   106:5   107:4   107:9   1111:7   114:4   114:6   115:0   117:6   120:2   118:6   114:2   110:0   106:5   107:4   107:9   1112:0   114:4   114:6   115:4   118:0   120:3   117:4   113:8   109:4   106:5   107:4   107:9   1113:2   116:6   114:6   115:8   118:7   120:3   117:8   113:8   109:4   106:5   107:4   107:9   113:2   116:6   114:6   115:8   118:7   120:3   117:8   113:8   109:0   106:0   107:6   107:9   113:3   113:5   114:5   114:6   114:5   114:6   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   114:5   11	21h.	22 <sup>h</sup> .	23 <sup>h</sup> .	O <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
111-5			Sc. Div.			Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
112'4   114'3   114'2   115'0   116'8   119'3   118'8   116'4   113'6   107'5   106'5   107'6   1   112'4   114'4   115'0   116'9   120'4   118'2   116'4   112'3   107'4   106'5   107'6   1   112'4   114'4   115'0   116'7   121'5   117'4   115'2   110'6   107'1   106'5   107'6   1   112'4   114'4   115'0   116'7   121'5   117'4   115'2   110'6   107'1   106'9   107'6   1   111'4   114'5   114'6   115'0   117'6   120'2   118'6   114'2   110'3   107'1   106'9   107'4   107'6   1   111'4   114'8   114'6   115'1   117'6   120'2   118'6   114'2   110'3   100'1   106'5   107'4   107'6   1   111'1   114'4   114'6   115'7   118'4   118'4   118'6   114'2   110'0   106'5   107'4   107'6   1   111'1   114'4   114'6   115'7   118'4   118'4   118'6   114'2   110'0   106'5   107'4   107'6   1   113'2   114'6   114'6   115'7   118'4   118'4   118'6   114'2   110'0   106'5   107'4   107'9   1   113'2   114'6   114'6   115'7   118'4   118'4   118'4   118'4   109'0   100'0   107'6   107'9   1   113'2   114'6   114'6   116'1   118'0   120'4   118'4   118'4   108'4   106'0   107'4   107'9   1   HORIZONTAL FORCE.			114.6							100.2			107.9
1124   1144   1144   1157   1167   1267   1291   1174   1151   1106   1071   1067   1076   1116   1166   1146   1157   1167   1167   1176   1167   1174   1151   1106   1071   1067   1076   1076   11174   1155   1146   1157   1179   1203   1174   1151   1106   1071   1067   1076   1076   11174   1155   1146   1150   1176   1202   1186   1142   1102   1065   1074   1076   11174   1148   1146   1150   1176   1202   1186   1142   1102   1065   1074   1076   11174   1148   1146   1157   1157   1157   1184   1184   1184   1136   1142   1100   1065   1074   1079   11132   1144   1148   1146   1157   1184   1184   1184   1136   11438   1094   1060   1076   1079   11372   1144   1146   1167   1167   1203   1178   1138   1094   1060   1076   1079   1138   1145   1146   1167   1167   1204   1184   1184   1184   1084   1060   1076   1079   1138   1145   1146   1167   1167   1204   1184   1184   1184   1084   1060   1076   1079   1138   1145   1146   1167   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067   1067			114 0					116.4					107.8
112-4   116-4   114-4   115-0   116-7   121-5   117-4   115-2   110-6   107-1   106-9   107-6   111-1   111-1   116-5   114-6   115-2   117-6   102-2   118-6   114-2   110-2   106-5   107-0   106-9   107-6   111-1   114-4   114-6   115-0   117-6   102-2   118-6   114-2   110-2   106-5   107-4   107-9   111-7   114-4   114-8   114-6   115-0   117-6   102-2   118-6   114-2   110-2   106-5   107-4   107-9   111-7   114-4   114-8   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-7   114-6   115-			114 2										108.2
111-6				115.0		120 4							108.4
1114   116'5   114'6   115'0   117'6   20'2   118'6   114'2   110'2   106'5   107'4   107'9   1   111'7   114'4   114'5   115'0   117'6   20'2   118'6   114'2   110'2   106'5   107'4   107'9   1   111'7   114'4   114'5   115'0   118'0   118'4   118'6   118'6   118'6   118'0   106'5   107'4   107'9   1   111'7   114'4   114'6   115'7   118'0   118'4   118'6   118'8   109'3   106'3   107'4   107'9   1   113'2   114'6   114'6   115'7   118'1   118'1   118'6   118'8   109'3   106'0   107'6   107'9   1   113'2   114'6   114'6   115'7   118'7   120'3   117'8   113'8   109'3   106'0   107'6   107'9   1   113'2   114'5   114'6   114'6   118'0   120'4   118'4   113'4   108'4   106'0   107'6   107'9   1   113'8   114'5   114'6   114'6   118'0   120'4   118'4   113'4   108'4   106'0   107'6   107'9   1   113'2   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5   114'5												107 6	108.8
111-7													109.1
11170								114.2			107 4		109.1
113'2													109.1
Horizontal Force	111.7			115.4									109.2
Ha'6	112.0							113.8					109.4
Hohizontal Force   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Ilea   Il	113'2	114.6											109.0
	113 8	114.5	114.6	116.1	118.0	120.4	118.4	113.4	108.4	106.0	107.4	107.9	109.2
Si5-8   615-5   620-5   621-0   617-7   615-0   611-0   603-4   593-7   601-1   604-0   611-0   616-6   620-6   620-6   620-6   620-6   620-6   620-6   620-6   620-6   620-6   620-6   621-0   621-2   617-0   614-0   608-2   602-4   599-0   601-0   606-0   613-0   606-2   617-5   621-0   621-2   617-0   614-0   608-2   602-4   599-0   601-0   606-0   613-0   606-2   617-5   621-0   621-2   617-0   614-0   608-2   602-4   599-0   601-0   606-0   613-0   606-2   618-5   619-0   621-0   621-7   617-0   613-0   607-4   601-2   598-1   602-1   608-0   614-0   606-1   619-0   621-5   617-0   613-0   605-2   605-4   600-2   598-1   602-1   608-0   614-0   606-1   619-0   621-5   619-2   616-0   613-0   604-8   607-2   608-2   608-2   608-2   616-0   619-0   619-2   616-0   613-0   604-8   607-2   608-2   608-1   609-2   616-0   616-0   619-3   619-2   616-0   619-3   604-8   609-2   608-0   609-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-2   608-			Horizonta	L Force.		]	Increase, in	Scale Division	ons, corre	esponding to $1^{\circ}$	decrease of	Temperatur	е, 1 63.
615°8 616'5 620'5 620'5 621'0 617'7 615'0 611'0 603'4 593'7 601'1 604'0 611'0 616'6 616'0 620'7 620'8 618'5 613'0 609'8 603'4 599'0 601'1 604'0 612'0 616'0 616'0 621'2 611'0 614'0 608'2 609'4 599'0 601'0 606'0 618'0 616'1 619'0 621'0 621'5 617'0 614'0 608'2 609'4 599'0 601'0 606'0 618'0 616'1 619'0 621'0 621'5 617'0 614'0 608'2 605'4 600'2 598'4 603'3 609'1 615'0 616'1 619'0 621'0 621'5 617'0 613'0 609'2 605'4 600'0 597'7 602'2 609'1 615'0 616'1 619'0 621'5 619'5 617'0 615'0 605'2 605'4 600'0 597'7 602'2 609'1 615'0 616'0 619'0 621'5 619'2 616'0 619'0 601'2 605'4 600'0 597'2 597'1 604'3 609'1 615'0 616'0 619'0 621'5 619'2 616'0 619'0 619'3 620'5 619'2 616'0 619'0 619'3 620'5 619'2 616'0 619'0 610'0 603'8 597'0 591'1 604'3 610'5 610'5 610'0 610'0 610'0 610'0 610'0 610'0 610'5 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0 610'0	616.0				617.5								619.5
616° 616° 06° 620° 7 620° 8 618° 5 613° 2 611° 0 604° 2 594° 2 601° 8 604° 0 612° 0 6 616° 0616° 0621° 0 621° 1 620° 7 618° 5 613° 0 609° 8 602° 4 599° 0 601° 0 606° 0 613° 0 6 616° 1 619° 0 621° 0 621° 2 61° 0 614° 0 608° 8 602° 1 598° 1 602° 1 608° 0 618° 0 6 616° 1 619° 0 621° 0 621° 1 61° 0 610° 0 61° 0 607° 4 600° 1 598° 1 602° 1 608° 0 614° 0 6 616° 1 619° 0 621° 0 621° 1 61° 0 61° 0 610° 0 600° 1 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 610° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 600° 0 6	615.8												618.2
616'0   616'0   621'0   621'7   618'5   613'0   609'8   600'4   599'0   601'0   601'0   601'3   601'1   613'5   616'1   619'0   621'0   621'5   617'0   614'0   608'2   602'0   598'4   603'3   607'1   613'5   616'1   619'0   621'0   621'5   617'0   613'2   605'4   600'0   597'7   602'2   609'1   615'0   616'0   616'0   619'3   609'2   619'5   617'0   613'2   605'0   605'0   599'8   597'1   603'1   609'2   610'0   616'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'5   610'5   610'5   610'5   610'0   610'0   603'8   597'1   503'7   600'0   610'5   610'5   610'0   610'0   603'8   597'1   503'1   600'0   610'5   610'5   610'0   610'0   603'8   597'1   503'1   600'0   610'0   617'5   610'0   600'0   610'0   610'0   610'5   610'0   610'0   610'0   610'0   610'5   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'5   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'0   610'					618.5	613.2						612.0	619.0
Si61-2   617-5   621-0   621-2   617-0   614-0   608-2   602-0   598-4   603-3   607-1   618-5   616-1   619-0   621-0   621-7   617-0   618-2   600-4   601-2   598-1   602-1   608-0   616-0   619-0   621-0   621-7   617-0   618-2   600-4   600-0   597-7   602-2   609-1   615-0   616-0   619-0   621-5   619-5   617-0   615-0   605-5   699-8   597-1   603-1   609-2   616-0   616-0   619-3   620-5   619-2   616-0   613-0   604-8   597-2   597-1   603-3   610-5   617-5   616-0   619-2   616-0   613-0   604-8   597-2   597-1   604-3   610-5   617-5   616-1   618-8   615-4   619-8   620-5   619-0   616-0   610-0   603-8   619-5   619-0   617-5   616-1   619-2   616-0   619-2   616-0   619-2   616-0   619-5   617-5   616-1   619-2   616-0   619-2   616-0   619-2   616-0   619-2   616-0   619-2   616-0   619-2   616-0   619-2   616-0   619-2   616-0   619-2   616-0   619-2   616-0   619-2   616-0   619-2   616-0   619-2   616-0   619-2   619-2   618-8   616-2   620-5   619-0   615-8   611-2   605-0   598-8   599-1   604-0   611-0   618-8   616-2   620-5   620-5   619-0   615-8   611-2   605-0   598-8   599-1   604-0   611-0   618-8   618-8   618-9   619-9   170-8   174-1   174-4   173-2   171-2   170-8   172-4   172-5   176-1   167-9   168-9   169-9   170-8   174-1   174-4   173-2   171-2   170-8   172-2   172-5   176-1   167-1   167-9   168-9   169-9   171-8   174-1   174-4   173-0   171-0   170-8   172-2   172-5   176-1   166-1   167-9   168-9   170-5   172-3   174-1   174-4   172-8   171-9   170-8   172-2   172-5   176-1   172-5   172-5   172-5   170-7   172-7   174-9   173-8   172-1   171-7   171-5   172-6   172-7   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172-5   172		616.0		620.7	618.5	613.0						613.0	618.8
Si61			621.0	621.2	617.0	614.0						613.2	619.5
Si6   619							607.4	601.2	5981	602.1	608.0		619.0
Signo   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gip   Gi		619.0		621.7	617.0			600.0		602 2		615.0	620.0
Cist								599 8					621.0
Color				619.2	616.0	613.0		597.2	597			617.5	619.8
Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ   Californ													620.0
									598	603.0			621.0
Vertical Force   Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, I													620.2
166'1   167'8   168'9   169'9   170'8   174'1   174'4   173'2   171'2   170'8   172'4   172'5   166'1   167'9   168'9   169'9   170'8   174'1   174'4   173'2   171'2   170'8   172'2   172'5   166'1   167'9   168'9   169'9   171'8   174'1   174'4   173'0   171'0   170'8   172'2   172'5   166'1   167'9   169'0   169'9   171'8   174'1   174'4   173'0   171'9   170'8   172'2   172'5   166'1   168'0   169'0   170'3   171'8   174'1   174'4   173'0   171'9   170'8   172'2   172'5   166'3   168'5   169'0   170'3   171'8   174'1   174'4   172'8   171'9   170'8   172'3   172'5   166'3   168'5   169'0   170'5   172'3   174'1   174'4   172'8   171'9   170'8   172'3   172'5   166'3   168'5   169'0   170'5   172'3   174'1   174'4   172'8   171'9   170'8   172'4   172'5   166'3   168'5   169'8   170'8   172'7   174'9   173'8   172'1   171'7   170'8   172'4   172'5   166'3   168'5   169'9   170'8   172'7   174'9   173'8   172'1   171'7   171'5   172'6   172'7   176'4   168'9   169'9   170'8   173'7   174'9   173'8   171'6   171'2   171'5   172'6   172'7   166'3   168'9   169'9   170'8   173'7   174'4   173'8   171'1   170'9   172'2   172'5   172'8   172'8   168'1   168'9   169'9   170'8   173'7   174'4   173'8   171'1   170'9   172'2   172'5   172'8   172'8   172'8   172'8   172'8   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'	56°5	56·4	55.7	55.4	54.3	54°0	54.4	54.6	55	55.1	55.5	55.5	55°9°
166'1   167'8   168'9   169'9   170'8   174'1   174'4   173'2   171'2   170'8   172'4   172'5   166'1   167'9   168'9   169'9   170'8   174'1   174'4   173'2   171'2   170'8   172'2   172'5   166'1   167'9   168'9   169'9   171'5   174'1   174'4   173'0   171'0   170'8   172'2   172'5   166'1   167'9   169'0   169'9   171'8   174'1   174'4   173'0   171'9   170'8   172'2   172'5   166'1   168'0   169'0   170'3   171'8   174'1   174'4   173'0   171'9   170'8   172'2   172'5   166'3   168'5   169'0   170'3   171'8   174'1   174'4   172'8   171'9   170'8   172'3   172'5   166'3   168'5   169'0   170'5   172'3   174'1   174'4   172'8   171'9   170'8   172'3   172'5   166'3   168'5   169'0   170'5   172'7   174'9   173'8   172'8   171'7   170'8   172'4   172'5   166'3   168'5   169'8   170'8   172'7   174'9   173'8   172'1   171'7   170'8   172'4   172'5   166'3   168'6   169'9   170'8   173'7   174'9   173'8   172'1   171'7   171'5   172'6   172'7   166'4   168'9   169'9   170'8   173'7   174'9   173'8   171'6   171'2   171'5   172'6   172'7   166'1   168'9   169'9   170'8   173'7   174'4   173'8   171'1   170'9   172'2   172'5   172'8   172'8   168'1   168'9   169'9   170'8   173'7   174'4   173'8   171'1   170'9   172'2   172'5   172'8   172'8   172'8   172'3   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'	<u> </u>	<u> </u>	VERTICAL	Force.		I	ncrease, in	Scale Division	ons, corre	esponding to 1	decrease of	f Temperatu	re, 1.64.
166'1   167'9   168'9   169'9   170'8   174'1   174'4   173'2   171'2   170'8   172'2   172'5   166'1   167'9   168'0   169'9   171'5   174'1   174'4   173'0   171'0   170'8   172'2   172'5   166'1   167'9   168'0   169'9   171'8   174'1   174'4   173'0   171'9   170'8   172'2   172'5   176'1   166'1   168'0   169'0   170'3   171'8   174'1   174'4   173'0   171'9   170'8   172'2   172'5   176'1   166'3   168'5   169'0   170'5   172'3   174'1   174'4   172'8   171'9   170'8   172'3   172'5   176'3   168'5   169'0   170'7   172'7   174'9   173'8   172'8   171'9   170'8   172'4   172'5   176'3   168'5   169'8   170'8   172'7   174'9   173'8   172'1   171'7   170'8   172'4   172'5   166'3   168'5   169'9   170'8   172'7   174'9   173'8   172'1   171'7   170'8   172'4   172'7   174'9   173'8   171'6   171'2   171'5   172'6   172'7   166'3   168'6   169'9   170'8   173'7   174'9   173'8   171'6   171'2   171'5   172'6   172'7   166'3   168'9   169'9   170'8   173'7   174'4   173'8   171'6   171'2   171'5   172'6   172'8   178'8   168'9   169'9   170'8   173'7   174'4   173'8   171'1   170'9   172'2   172'5   172'5   172'8   168'1   168'9   169'9   170'8   173'7   174'4   173'8   171'2   170'9   172'3   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'			1.00.0	10010	150.0		1		<del></del>		<del></del>	1	172.6
166'1   167'9   168'9   169'9   171'5   174'1   174'4   173'0   171'0   170'8   172'2   172'5   166'1   167'9   169'0   169'9   171'8   174'1   174'4   173'0   171'9   170'8   172'2   172'5   166'1   168'0   169'0   170'3   171'8   174'1   174'4   172'8   171'9   170'8   172'2   172'5   166'3   168'5   169'0   170'5   172'3   174'1   174'4   172'8   171'9   170'8   172'4   172'5   166'3   168'5   169'0   170'5   172'3   174'1   174'4   172'8   171'9   170'8   172'4   172'5   166'3   168'5   170'2   170'7   172'7   174'9   173'8   172'8   171'17   170'8   172'4   172'5   166'3   168'5   169'8   170'8   172'7   174'9   173'8   172'1   171'7   171'5   172'6   172'7   174'9   173'8   171'0   171'2   171'5   172'6   172'7   174'9   173'8   171'0   171'2   171'5   172'6   172'7   174'9   173'8   171'0   171'2   171'5   172'6   172'7   174'9   173'8   171'0   171'2   171'5   172'6   172'7   174'9   173'8   171'0   171'2   171'5   172'6   172'7   174'9   173'8   171'0   171'2   171'5   172'6   172'7   174'9   173'8   171'0   171'2   171'5   172'6   172'7   174'4   173'8   171'1   170'9   172'2   172'5   172'8   172'8   171'1   170'9   172'2   172'5   172'8   172'8   171'1   170'9   172'2   172'5   172'8   172'8   171'1   170'9   172'2   172'5   172'8   172'5   172'8   171'1   170'9   172'3   172'5   172'5   172'5   172'5   172'8   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172							174 4	173.0	171.6	170.0	170.0	170.5	172.3
166'1   167'9   169'0   169'9   171'8   174'1   174'4   173'0   171'9   170'8   172'2   172'5   166'1   168'0   169'0   170'3   171'8   174'1   174'4   172'8   171'9   170'8   172'3   172'5   166'3   168'5   169'0   170'5   172'3   174'1   174'4   172'8   171'9   170'8   172'4   172'5   166'3   168'5   169'0   170'7   172'7   174'9   173'8   172'8   171'7   170'8   172'4   172'5   166'3   168'5   169'9   170'8   172'7   174'9   173'8   172'1   171'7   170'8   172'4   172'5   166'3   168'5   169'9   170'8   172'7   174'9   173'8   171'17   171'5   172'6   172'7   176'8   172'7   174'9   173'8   171'6   171'2   171'5   172'6   172'7   176'8   168'9   169'9   170'8   173'7   174'4   173'8   171'6   171'2   171'5   172'6   172'8   178'1   168'1   168'9   169'9   170'8   173'7   174'4   173'8   171'1   170'9   172'2   172'5   172'8   172'8   168'9   169'9   170'8   173'7   174'4   173'8   171'2   170'9   172'3   172'5   172'5   172'8   172'5   172'8   171'9   173'8   171'1   170'9   172'3   172'5   172'5   172'8   172'5   172'8   171'9   173'8   171'1   170'9   172'3   172'5   172'5   172'8   171'9   173'8   171'1   170'9   172'3   172'5   172'5   172'8   171'9   173'8   171'1   170'9   172'3   172'5   172'5   172'8   171'9   173'8   171'1   170'9   172'3   172'5   172'5   172'5   172'8   171'9   173'8   171'1   170'9   172'3   172'5   172'5   172'5   172'8   171'9   173'8   171'1   170'9   172'3   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172'5   172													
166													172.3
166						174 1					170.2		172.3
166 3			169.0				I	75040	يم وسودا	1 1 2000		1	172.2
166°3							174 4				172 4		172.2
166°3													172.3
166											172 6		172.3
168.8					172.7	174 9							172.3
Thermometers.   Thermometers.   Wind.   Weather.	166'4	168.9	169 9	170.8									172.2
168'1	166.8	168.9		170.8				171.1			172.5		173.1
Mean Göttingen   Barometer   Thermometers.   Wind.   Weather.	168 1		169.9			174.4	173.8	171.2	170 '	9   172.3	172.5	172.2	172.5
Mean Göttingen Time.   Barometer at 32°.   Thermometers.   Wind.   Weather.	58°4	57°4	57.2	5 <b>?</b> · 2	56.5	55°2	55.2	55.4	5а	5 55.4	55.2	55°5	56.0 ª
Mean Göttingen   Barometer at 32°.	and increas	sing Horizo	ontal and Ver	tical Force.									
Decision   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direc	<del></del>					reorol	OGICAL	OBSERVAT	rions.	· · · · · · ·			
Time.    Direction   Direction   Force	Mean G	Iean Göttingen   Barometer					v	Vind.			We	ather.	
20 22 0 29 943 31 0 27 6 — Calm. Coloudy.  21 0 0 29 966 34 5 30 9 N. by E. Very light.  2 0 29 984 38 1 34 2 N. by E. Very light.  3 0 29 961 41 5 37 0 — Calm.  4 0 29 939 44 0 38 2 E. by S. Very light.  5 0 29 938 44 7 39 7 N.E. by E. Very light.  6 0 29 988 44 1 38 9 E.N.E. Very light.  7 0 29 898 44 1 38 9 E.N.E. Very light.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.					Wet.	Dire	ction.	Force.	•				
20 22 0 29 943 31 0 27 6 — Calm. Coloudy.  21 0 0 29 966 34 5 30 9 N. by E. Very light.  2 0 29 984 38 1 34 2 N. by E. Very light.  3 0 29 961 41 5 37 0 — Calm.  4 0 29 939 44 0 38 2 E. by S. Very light.  5 0 29 938 44 7 39 7 N.E. by E. Very light.  6 0 29 988 44 1 38 9 E.N.E. Very light.  7 0 29 898 44 1 38 9 E.N.E. Very light.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.  Cloudy, with cir., cirstrat., and haze.	р, н	. м.	In.		0								
23 0 29 959 33 9 30 5 — Calm. 21 0 0 29 956 34 5 30 9 N. by E. 1 0 29 962 35 9 31 7 N. by E. 2 0 29 984 38 1 34 2 N. by E. 3 0 29 961 41 5 37 0 — Calm. 4 0 29 939 44 0 38 2 E. by S. 5 0 29 950 44 9 40 0 E.S.E. 6 0 29 938 44 7 39 7 N.E. by E. 7 0 29 898 44 1 38 9 E.N.E.  Calm. Very light. Very light. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy.			II	31.0	27.6	1 -		Calm		Light clouds.			
21 0 0 29 956 34 5 30 9 N. by E. Very light.  1 0 29 962 35 9 31 7 N. by E. Very light. 2 0 29 984 38 1 34 2 N. by E. Very light. 3 0 29 961 41 5 37 0 — Calm. 4 0 29 939 44 0 38 2 E. by S. Very light. 5 0 29 950 44 9 40 0 E.S.E. Very light. 6 0 29 938 44 7 39 7 N.E. by E. Very light. 7 0 29 898 44 1 38 9 E.N.E. Very light. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze.						_	_						*.
1 0 29 962 35 9 31 7 N. by E. Very light. Cloudy, with cir., cirstrat., and haze. 2 0 29 984 38 1 34 2 N. by E. Very light. Cloudy, with cir., cirstrat., and haze. 3 0 29 961 41 5 37 0 — Calm. Cloudy, with cir., cirstrat., and haze. 4 0 29 939 44 0 38 2 E. by S. Very light. Cloudy, with cir., cirstrat., and haze. 5 0 29 950 44 9 40 0 E.S.E. Very light. Cloudy, with cir., cirstrat., and haze. 6 0 29 938 44 7 39 7 N.E. by E. Very light. Cloudy, with cir., cirstrat., and haze. 7 0 29 898 44 1 38 9 E.N.E. Very light. Cloudy, with cir., cirstrat., and haze.						N. 1	ov E				cir., cirstr	at., and haze	•
2 0 29 984 38 1 34 2 N. by E. Cloudy, with cir., cirstrat., and haze. 3 0 29 961 41 5 37 0 — Calm. 4 0 29 939 44 0 38 2 E. by S. 5 0 29 950 44 9 40 0 E.S.E. Very light. 6 0 29 938 44 7 39 7 N.E. by E. 7 0 29 898 44 1 38 9 E.N.E. Very light. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze.													
3 0 29.961 41.5 37.0 — Calm. 4 0 29.939 44.0 38.2 E. by S. 5 0 29.950 44.9 40.0 E.S.E. 6 0 29.938 44.7 39.7 N.E. by E. 7 0 29.898 44.1 38.9 E.N.E. Very light. Cloudy, with cir., cirstrat., and haze. Very light. Very light. Very light. Very light. Very light. Very light. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze.		0											
4 0 29 939 44 0 38 2 E. by S. Very light. Cloudy, with cir., cirstrat., and haze. 5 0 29 950 44 9 40 0 E.S.E. Very light. Cloudy, with cir., cirstrat., and haze. 6 0 29 938 44 7 39 7 N.E. by E. Very light. Cloudy, with cir., cirstrat., and haze. 7 0 29 898 44 1 38 9 E.N.E. Very light. Cloudy, with cir., cirstrat., and haze.						\		Calm					
5 0 29 950 44 9 40 0 E.S.E. Very light. Cloudy, with cir., cirstrat., and haze. Yery light. Very light. Very light. Cloudy, with cir., cirstrat., and haze. Very light. Cloudy, with cir., cirstrat., and haze. Cloudy, with cir., cirstrat., and haze.						ा का	ov S						
6 0 29 938 44 7 39 7 N.E. by E. Very light. Cloudy, with cir., cirstrat., and haze. Very light. Cloudy, with cir., cirstrat., and haze.													
7 0 29 898 44 1 38 9 E.N.E. Very light. Cloudy, with cir., cirstrat., and haze.				44 9									
1 0   20 000   22 7   22   23   24   25   25   25   25   25   25   25										Cloudy, with	cir., cir -str	at, and haze	
								Wery H	apt.				
Tight on sin street and have													
9 0 29.863 43.9 38.9 N.E. by E. Light. Cloudy, with cir., cirstrat., and haze.		9 0	29.863	43 9	38.8	IN.E.	by E.	· Tugir	V.	Dioduy, with	Jan 19 111 - 1111	,	-

November 26th a	nd $27$ th.			MAGNET	CICAL O	BSERVATIO	ONS.				
Mean Göttingen	Ang	ular Value	of one Scale	Division =	0'.721.				DECLINAT	ion.	
Time.	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 110.4	Sc. Div. 109 2
$egin{array}{ccc} 0 & 0 \ 5 & 0 \end{array}$	106.1	103°8 104°4	116.0	116'6 117'4	111.9	100 0	110.9	111.9	111.5	110.5	109 2
10 0	106.6	104.4	98.3	116.4	112.6	113.0	109.2	111.4	110.4	110.5	109.8
15 0	106.5	104.9	106.2	114.0	113.6	111.5	110.2	110.4	110.6	109.6	109.0
20 0	106.6	105.4	109.4	114.6	115.0	110.0	112.2	109.4	111.0	109.4	108.2
$\begin{array}{ccc} 20 & 0 \\ 25 & 0 \end{array}$	105.7	106.0	110.4	115.0	117.4	112.4	113'1	109.4	111.3	108.9	108.4
30 0	105.0	110.4	110.5	116.0	117.6	116.4	113'4	109.4	110.8	109.2	106.6
35 O	104.2	111.9	118'4	114'0	119.8	116.6	113'4	109.9	110.4	108.9	105.6
40 0	104.9	110.0	110.4	112.4	114.4	116.0	113.2	110.4	110.5	109.3	105.6
45 0	104.7	112'4	107.5	110.4	119.7	115.9	113'9	110.6	110.5	109.5	104.8
<b>5</b> 0 0	104.4	136.2	111'3	110.8	119.3	116.0	113.4	110.9	110.4	109.6	104.3
55 0	104.1	130.0	113.2	110.4	111.6	117.9	112.8	111.2	110.3	108.8	104.4
M. S.	One	Scale Divi	sion = '000	0087 parts	of the H.	F.			Horizont	AL FORCE.	
2 0	623.9	610.0	624.3	607.0	614.1	629.0	629.0	622.0	620.0	621.5	621.5
$\tilde{7}$ $\tilde{0}$	624.6	608.7	618.7	611.8	614.0	621.5	626.0	622.5	620.2	621.5	624.0
12  0	619 2	609.1	604.9	614.0	615.0	620.8	622.0	622.0	622.0	621.5	624.5
17 0	616.2	607.9	602.8	613.0	615.2	629.0	619.5	622.5	621.0	622.5	620.0
22 0	613.8	607.7	608.0	609.0	615.8	628.2	620.5	623.0	621'0	622.0	619.0
$\frac{27}{20}$ 0	612.0	610°0 605°0	613.0	$611.2 \\ 612.4$	615.0	622.0 626.2	620.0	624.5	620.6	622°0 622°2	619 <b>.</b> 0
$\begin{array}{ccc} 32 & 0 \\ 37 & 0 \end{array}$	612.9	619.8	619.0	614.8	622.2	630.0	622.0	619.0	621.0	621.2	617.0
42 0	612.3	621.2	612.1	614.0	625.0	627.2	622.0	618.0	621.0	621.2	618.8
47 0	610.0	611.0	604.1	614.2	625.0	628.0	622.0	618.2	621.2	620.0	618.0
$52  \overset{\circ}{0}$	610.3	617.0	604.0	615.0	635.5	626.5	622.2	619.0	621.5	620.2	620.0
57 0	610.0	623.6	603.3	615.0	637.0	627.0	623.0	619.0	621.4	621.5	619.0
Thermometer	46°9	46°9	47.0	46°6	46°8	46.8	46.7	46.5	46.2	46.0	45°0
M. S.	One	Scale Divis	ion = '000	063 parts	of the V. I	F.			VERTICAL	Force.	
3 0	193.4	192.7	187.2	196.8	197.6	184.3	186.7	188.1	188.8	188.6	185.8
8 0	194.4	192.2	189.0	197.6	197.6	184.3	186.7	188.2	188.8	188.2	185.8
13 0	193.8	192.7	193.1	197.9	197.6	184.3	187.3	189.0	188.7	188.2	185.8
18 0	192.5	192.5	194.8	197.9	197.6	184.5	187.9	189.0	188.7	188.3	184.6
23 0	192.3	192.7	194.8	197.7	196.8	184.5	188.3	189.0	188.7	188*3	184.6
28 0	193.2	192.7	197.2	197.7	195.9	185.7	188.3	189.0	188.7	188'3	184.6
33 0	193.2	193'1	197.8	197.7	195.9	186.1	188.6	189.0	188.6	188.3	184.6
38 0	193.2	191.9	193.3	197.5	195.9	187.2	188.7	188.8	188.6	188.3	185.0
43 0	193.5	190.7	191.7	197.5	192.6	187.2	188.7	188.8	188.6	188.0	185.0
48 0 53 0	193.5 194.0	192.6 191.4	192.5 193.9	197 <b>.</b> 5	192.8 185.7	187·2 187·2	188 <b>.</b> 6	188.8 188.8	188.6 188.6	187°1 186°7	185'0 185'0
58 0	193.1	187.2	195.2	197.5	185.7	187.2	188.7	188.8	188.6	186.2	185.8
						-			ļ	<b></b>	
Thermometer	47.4	47°8	48.4	47°8	4 <sup>5</sup> '9	47.4	47.8	48.2	47.7	47.4	46.7
**************************************	··		· · · · · · · · · · · · · · · · · · ·			· I	ncreasing N	Numbers den	ote decreasi	ng Westerly	Declination,
	<u> </u>			reorolo	GICAL (	OBSERVATI	ONS.		· · · · ·		
Mean Göttingen	Barometer at 32°.		mometers.	_	Wind		_		Weathe	r.	
Time.	at 32°.	Dry.	Wet.	Direc	tion.	Force.					
D. H. M.	In.	05:0	0	*****	***	T 1 7 4					
26 10 0	29.817	25.9	23.8	N.W. I	by W.	Light.		circum. a		t.	
11 0	29.823	24.4	22.6	N.V	W.	Very light.	1	ircum. and			
$\begin{array}{ccc} 12 & 0 \\ 13 & 0 \end{array}$	29.837 29.844	$\begin{vmatrix} 23.7 \\ 22.6 \end{vmatrix}$	$\begin{array}{c c} 22.3 \\ 21.7 \end{array}$	N.N.	. ** .	Very light. Calm.		ircum. and			
	29 845	$\frac{22.6}{22.5}$	21.9		_	Calm.		ircum. and		0117070	
	29.845	21.7	20.9	_	_	Calm.		ircum. and ircum. and		aurora.	
14 0	1	21.3	20.7	_	_	Calm.	1 .	ircum. and ircum. and			
14 0 15 0	29.847			1	1	Calm.		ircum. and			
14 0 15 0	29.847 29.835	20.4	20.0	·	- 1	Outilit.	T. 11116				
14 0 15 0 16 0			19.3	=	-	Calm.				-strat.	
14 0 15 0 16 0 17 0 18 0 19 0	29.835 29.816 29.808	20.4 19.6 20.5	19°3 20°0	-	- -	Calm. Calm.	Light cl	ouds; circ circum. a	um, and cir.		
14 0 15 0 16 0 17 0 18 0	29.835 29.816	20.4	19.3	W. b		Calm.	Light cl Clouds; Cloudy	ouds; circ	um. and cir. nd cirstrat. and cirstrat		

<sup>&</sup>lt;sup>2</sup> At 27<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 47° '0; of V. F., 47° '2.

					MAGNET	ICAL OI	BSERVATIO	NS.		No	vember 26th	and 27th.
		Declination	on.					Angu	lar Value	of one Scale	Division =	0'.721.
21 <sup>h</sup> .	22h.	23h.	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 113 2	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
104.3	104.4	111.4	112.6	$113.4 \\ 113.8$	114.8	108.5	113.0	113.1	109.6	105.2	107.4	107.4
104.4	103.8	111.0	112.4		112.7	109.7	114.4	112.4	108.6	105.0	105.8	107.2
103.9	103.6	110.4	112.4	114.0 114.0	111.4	109.7	115.9	111.6	109.3	105.2	106.8	106'4
104'0	104.2 106.4	109.4	111.5	113.5	111'3 111'4	109.4	116.4	112.5	108.9	104.6	107.6	106.6
104.3	106.8	108.2	111.0	114.3	112.1	109.4	116.4	111.3	107.8	104.6	108.4	106.2
105.4	108.6	108.6	113.4	114.5	1112 1	109.6	116.4	110.6	106.6	105.4	110.4	105.8
106*2	108.6	109.4	112.4	114.3	110.4	111.0	116.4	111 4 109 2	106.6 106.2	105°3 104°7	110.5	106.4
107°3 108°2	110.5	110.4	112.8	114.3	109.8	111.4	115.4 114.4	110.4	106 2	104 4	111.0	106.5 105.4
108 4	111.4	110.4	113.2	115.4	110.5	109.2	114.5	108 6	105.4	104.4	110.4	105.0
108.4	111.8	112.2	113.8	114.6	109.6	109.8	114.3	109.4	105 4	105.4	108.4	105.8
106.4	111.4	113*4	114.0	115.5	109.4	110.8	112.6	108.8	105.4	105.4	106.8	106.3
		Horizonta	L Force.	<del></del>	I	ncrease, ir	n Scale Divisio	ons, correspon	iding to 1°	decrease of	Temperatur	e, 1.63.
210.0	621.9	627.5	631.4	630.2	627.0	1	615.0	1		1	1	1
619 <b>·</b> 9 619·8	621.0	629.8	630.0	628.8	624.3	615.8	615.2	619.0 619.0	615.3 617.0	616.0	624.0 622.5	628.8 627.6
919.0	619.0	631.4	630.2	629.8	621.9	918.0	618.2	619.0	618.8	617.0	620.0	628.0
616 <b>.</b> 9	620.5	633.2	630.8	628.8	619.1	619.1	623.0	618.5	620.0	618.0	619.8	625.2
617 <b>.</b> 0	622.2	631.0	629.8	628.0	618.4	621.0	619.0	618.5	619.5	620.0	621.2	625.4
316 <b>'</b> 0	619.8	634.3	629.2	628.2	617.9	621.0	619.0	617.8	622.0	623.5	622.2	628.6
318.0	620.0	634.0	631.4	628.7	626.2	621.2	619.4	618.2	624.5	623.0	624.8	627.8
619 <b>.</b> 0	622.5	632.2	630.0	628.1	615.8	619.4	620.4	617.0	625.0	624.0	622.2	626.2
323.0	622.2	634.0	629.0	628.0	614.0	620.0	618.0	616.5	619.5	622.0	627.0	628.0
325 °O	622 0	633.2	629.2	628.0	615.0	619.2	616.0	618.2	624.0	625.0	626.2	630.0
527:0	626.2	632.4	631.0	628.2	616.0	618.0	617.0	617.0	613.0	619.8	629.4	628.8
326.0	629.8	631.5	632.5	627.1	616.0	615.8	616.0	616.0	614.2	617.0	630.5	629.5
45°3	45°5	45°6	45°6	45°5	44.9	44.7	45.2	46.0	46°2	46.2	46.6	47°2 a
	.1	VERTICAL 1	Force.	<u></u>	]	Increase, in	a Scale Divisi	ons, correspon	nding to 1°	decrease of	f Temperatui	re, 1 ° 64.
185.4	185.3	185.8	186.2	187'1	188.0	187.7	190.4	193.0	191.3	190.7	193.9	193.8
185'4	185.3	185.8	186.2	188.0	188.0	187.7	190.4	193.0	191.3	190.7	193.9	193.8
184'1	185.3	185.6	186.4	187.9	188.0	187.7	191.5	193.0	191.1	191.5	193.7	193.1
184 1	185.4	187.4	187.8	187.9	187.7	187.7	191.2	193.0	191.2	191.2	193.7	193.1
184.1	185'4	187.6	187.8	187.9	187.7	187.7	191.2	192.5	191.2	191.5	193.7	193.5
184.1	185.4	187.6	187.2	188.0	187.7	187.8	192.2	192.2	192.5	191.5	193.7	193.2
184°1	186.2	187.6	187.2	188.0	187.7	187.8	192.2	192.4	192.5	191.2	194.3	192.8
185.1	186.5	187.3	187.1	188.0	187.7	189.8	192.2	192.5	192.5	192.1	193.8	192.8
185 <b>'</b> 9	186.2	187.1	186.8	188.0	187.7	189.8	193.0	191'3	192.1	192.1	193.8	192.6
185.9	185.3	187 1	186.8	188.0	187.7	189.8	193.1	192.0	190.7	193.1	193.6	193.6
l86 <b>'</b> 4	186.1	186.9	186.6	188.0	187.7	190.4	192.9	191.6	190.7	193.1	193.6	192.4
186°4	186.1	186.5	187.6	188.0	187.7	190.4	192.9	191.2	190.7	192.8	194.0	192.6
46°7	46°9	46.8	47.4	47.2	47.0	46.7	46°0	46°4	46.7	46°6	46°8	47°0 a
ad increas	sing Horizo	ntal and Vert	tical Force.			<u>'</u>		<u> </u>			· <del>!</del>	
<del></del>			· · · · · · · · · · · · · · · · · · ·	М	ETEOROL	OGICAL	OBSERVAT	TIONS.				2.00
Mean G	löttingen	Barometer	Ther	mometers.			Wind.					
Tir	me.	at 32°.	Dry.	Wet.	Dire	ction.	Fo	rce.	-	Y	Veather.	
D. H	н. м.	In.		_								
26 2		29.758	22.5	01:0	1117	2 1007	Lig	.ht	(10.3.	ain ares	and cirstrat	
	3 0		22.5	21.2		S.W. S.W.	Lig				ind cirstrat .nd cirstrat.	
	0 0	29.724 29.677	25 0	23.2		by S.	Lig				.na eirstrat. circum., an	
	1 0	29.660	25.4			by S.		light.	,		circum., an	
27		29.645	26.5	24.5		W.		light.			circum., ar	
27	2 0	29.624	27.5	25.3		by W.	Verv	light.			circum., ar	
27	$\begin{array}{cccc} 2 & 0 \\ 3 & 0 \end{array}$		1 4 3			S.W.		erate.	Cloudy	; cirstrat.,	cir enm a	ad house
27	3 0			0= -								
27	3 0 4 0	29.622	26.7	25.5								
27	3 0 4 0 5 0	29.622 29.594	26.7 27.8	25.8	S.W.	by W.	Lig	ght.	Cloudy	; cirstrat.,	circum., a	nd haze.
27	3 0 4 0 5 0 6 0	29.622 29.594 29.556	26.7 27.8 27.8	25°9 25°9	S.W. W.S	by W.	Lig Lig	ght. ght.	Cloudy Cloudy	; cirstrat., ; cirstrat.,	circum., a	nd haze. nd haze.
27	3 0 4 0 5 0	29.622 29.594	26.7 27.8	25 9 25 9 28 2	S.W. W.S W.S	by W.	Lig Lig <b>M</b> ode	ght.	Cloudy Cloudy Cloudy	; cirstrat., ; cirstrat., ; cirstrat.,	circum., a	nd haze. nd haze. nd haze; sno

Mean Göttingen						BSERVATIO					
	Angu	ılar Value o	f one Scale	Division =	0' 721	•			DECLINATI	ion.	
Time.	10h.	11h.	12հ.	13 <sup>h</sup> .	14h.	15h.	16h.	17 <sup>h</sup> .	18b.	19h.	20h.
M. s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0 0	106 9	106.6	134 2	107.6	110.2		114.0	114.4	121.6	105.6	116.4
5 0	108.3	106.6	132.4	104.5	111.1	113.4	113.6	116.8	121.6	107.2	116.9
10 0	107.5	107.4	138.4	106.4	112.3	113.4	113.2	117.6	117.8	109.0	116.2
15 0	106.9	108.2	142.0	107.1	111.4		112.4	117.0	116.5	110.6	114.8
20 0	105.5	108.4	132.6	107.3	112.3		112.4	117.4	108.4	110.7	114.3
25 0	104.2	109.4	123.6	106.8	112.8	113.6	112.8	120.2	107.0	112.1	110.9
30 0	104.4	109.4	123 4	108.6	112.4		113.4	121.4	104.4	111.5	111.3
35 0		112.3	119.4	110.2	112.2		113.4	120.6	105.0	113.0	111.2
	104.8 105.5	115.9	114.0	110.4	112.6		113.6	120.0	105.8	112.4	110.9
		120.9	109.4	110.8	112.9		112.8	121.4	105'2	112.3	112.6
45 0	106.6		109 4	110.9	113.2		112.6	121.6	105.2	114.6	113.6
50 0 55 0	106.9 107.0	121 9 125 4	107 4	110.9	113.4		112.4	120.4	105.4	116.3	112.4
	One	Scale Divisi	on = .000	087 parts	of the H.	F.		. <u> </u>	Horizoni	AL FORCE	
M. S.					1 000.0	101010	000.5	C04:0	C04:4	622.0	696.1
2 0	635.8	641.0	655.0	642.0	638.0		636.2	624.2	624'4	633.2	636.1
7 0	640.0	642.5	651.0	636.0	638.5		636.0	623.4	622.2	633.6	637.5
12 0	640.2	644'0	640.0	636.5	636.5		636.0	624.8	618.8	634'0	637.0
17 0	643'2	641.0	647.0	635.9	641.0		636.2	626.5	619.2	636.0	639:4
22 0	647.8	641.2	647.0	636.9	641.0		635.4	625.5	617.0	636.2	640.2
27 0	646.0	643 1	649.0	636.0	639 5	639.0	635.0	624.8	619.2	637.8	640.0
32 0	637.5	643.8	654.0	635.0	639.0		634.8	624.0	622.8	636.0	638.3
<b>37</b> 0	636.2	637.5	651.5	636.0	637.5		634.0	623.2	621.8	640.1	640.2
42 0	639.5	638.5	649.0	638.5	638.0		633.2	620.0	626.8	639.2	635.8
47 0	637.0	634.5	643.0	641.0	637.3		632.0	620.8	628.8	635.5	636.7
52 0	640.1	642.0	638.8	640.2	638.0	637.5	631.8	621.5	630.8	635.5	634.0
57 0	641.0	643.0	638.2	639.2	639.0	636.8	631.2	622.2	633.8	635.3	638.2
Thermometer	42° 5	43.0	43.0	42°5	4ΰ5	41.1	41.4	4i°8	41.2	41°5	4 <sup>1</sup> .5
M S	One	Scale Divisi	on = '000	063 parts	of the V.	F.			VERTICA	L FORCE.	
M. S.			T		1	1.00.7	1 1		10010	1 20740	10010
3 0	201.7	198.5	199.4	199.0	198 8		199.4	198.4	198.0	195.6	192.3
8 0	201.0	198.6	198'4	199.1	198'8		199.4	198.4	198.0	195.2	193'1
13 0	200.8	198.7	198.2	199 <b>.1</b>	198.8		199 4	199.5	198.0	195.2	193.4
18 0	201.1	198.7	197:3	199.1	198.8		199.4	199.5	197.9	195.2	194.3
23 0	202.2	198.8	196.2	199.1	198.8	198.9	199.4	199.5	197.4	194 9	194.3
28 0	201.6	199'4	197.0	199.1	198.5		198.2	198.6	196.4	194.9	193.8
33 0	200.5	199'4	197.4	199.1	198.5		198.5	198 1	196.3	194.9	193.8
38., 0	199.0	198'3	197.2	199.1	198.5		198.5	198.3	197 1	195.9	193.8
43 0	199.0	199.0	197.2	199.1	198.5	198.9	198.5	198.0	197.9	195.7	193.8
48 0	198.8	198.7	197.6	199.1	198.5	199.4	198.6	197.3	197.8	193.7	193.8
53 0	198.6	199.3	197.8	199'1	198.5	199.4	198 1	198.0	197.8	192.8	193.8
58 0	198.6	200.4	198.5	199.1	198.5		199.4	198.0	196.4	192 8	194.4
Thermometer	41.6	42.7	43.4	43.3	42.4	42.2	42.2	42°2	42.2	42.2	42.5
·							Increasing N	umbers dei	ote decreas	ing Westerly	Declinatio
	Thomassore					OBSERVAT	IONS.	<u> </u>			
Mean Göttingen Time.	Barometer at 32°.	Dry.	Wet.	Direc	etion.	Wind. For	rce	-	W	Teather.	
D	_	_	_				- 24	-			
D. н. м. 22 10 0	In. 29°221	25.0	22.9	\ \n	w.	<b>T7</b> ~~~ ·	limb+	-			
11 0	29.255	24.4	$\frac{22.9}{21.6}$		w.	Very : Moderate,			circum. a		*
12 0	29.291	21.3	19.5	N.		Moderate,			circum. a		
13 0	29:317	19.6	17.5		$\dot{\mathbf{w}}$ .	Moderate,		,	circum. a		
14 0	29.345	19.6	16.8		w.	Moderate, w			circum. a	na naze.	
15 0	29.349	18.4	16.4		νν. ; V.	Lig		Cloudy;	circum. a	nd naze.	
	29 349	18.6			v. v.				circum. a		
16 (1 "	29 382		17.0			Lig			circum. a		
16 0 17 0	∠9 00Z	19.0	17.5		y N.		light.		circum. a		
17 0		77				Lia	nt	1 (3)			
17 0 18 0	29.358	17.7	16.1	W. b	) y 11.	$\mathcal{L}_{ig}$	11.0.		circum. a		
17 0 18 0 19 0	29°358 29°358	17.3	15.8	W.S	S.W.	Very	light.	Cloudy;	circum. a	nd haze.	
17 0 18 0	29.358			W.S	S.W. S.W. S.W.	Very Very Very	light. light.	Cloudy;		nd haze. nd haze.	

<sup>&</sup>lt;sup>a</sup> At 23<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 40° · 5; of V. F., 40° · 3.

		·	<del></del>		MAGNET	ICAL OI	BSERVATIO	NS.		Dece	mber 22nd a	and 23rd.
		DECLINATI	ion.			· · ·		An	gular Value	of one Scale	Division =	0'.721.
21h.	22h.	23h.	<b>0</b> <sup>h</sup> .	, 1h.	2 <sup>h</sup> •	3h.	4 <sup>h</sup> .	5h.	6h.	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .
Sc. Div.	Sc. Div.	Sc. Div. 110.4	Sc. Div. 110.9	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 109 4	Sc. Div. 107.5	Sc. Div. 107 2	sc. Div. 104'6
111.4	115.0	110.4	109'4	112.4	109.6	113.6	112.7	112.0	109.2	106.9	105.9	103.4
111.1	114.3	110.5	109.4	113.4	112.6	113.2	111.5	111.4	108.4	108.3	104.9	104.4
111.6	113.6	108.4	108.2	112.6	112.4	114.5	113.2	111.8	108.3	108.4	106.3	103.0
113.4	111.2	109.4	108.0	112.9	113.4	113.8	113.2	110.4	107.4	107.2	106.4	100.8
111.2	112.0	112.4	109.2	112.0	114.4	116.6	114 4	110.5	106.6	106.4	109.4	102.2
112.4	111.9	112.8	109.8	111.4	115.4	116.6	112.7	108.8	106.6	106.2	109.4	103.4
113.4	113.3	113.0	109.0	111.6	114.0	116.2	113.5	110.0	107.4	106.5	107.4	105.5
113 4	114.0	113.0	110.0	111.6	115.0	115.0	112.8	111.5	106.4	106.0	105.5	109.0
113 7	114.4	113.2	109.7	112.8	115.4	112.8	112.3	109.0	106.9	105.8	105.4	110.0
113.1	113.4	115.4	110.0	113.4	112.4	113.0	112.0	110.5	107.3	107.0	105.4	112.0
113 8	112.6	111.7	108.8	112.4	115.4	113.4	111.8	111.9	106.2	108.6	106.0	110.6
		HORIZONTA	AL FORCE.	- Stockers	.1	ncrease, in	n Scale Divisio	ons, corresp	onding to 1°	decrease of	Temperatur	e, 1 63.
000:0	642.0	639.0	643.5	640.0	640.0	637.0	630.0	621.2	692.0	696:0	697.9	627:0
636.0	641.3	638.2	643 0	644.0	637.5	639.0	628.0	$631.3 \\ 631.2$	623.8	626.0	637°3	637°0 634°4
638.0	642.0	638.0	645.0	638.2	635.5	636.0	626.0	631.2	624 2	627.8	638.6	633.0
636. 4	642.0	634.2	640.0	643.0	638.5	636.5	626.0	632.8	624 0	627.8	638.0	632.0
638.9	641.0	630.0	639.8	645.0	640.0	630.0	628.0	633.0	624.2	633.0	639.0	631.8
639 0	640.8	632.0	638.0	637.5	637.0	637.5	626.0	628.2	623.2	631.0	638 2	632.0
642 2	638.2	632.4	638.8	639.5	639.0	637.0	626.5	625.2	618.8	630.2	636 0	633.0
638.0	637.8	633.0	640.0	642.0	637.0	626.0	627.0	622.2	623.0	639.0	637.0	630.0
640.0	637.0	633.0	641.8	639.0	635.0	631.0	628.8	633.0	620.6	633.7	640.5	629.8
641.3	635.0	633.2	637.0	639.5	639'0	630.0	628.5	630.8	624.0	637.0	640.0	636.0
641 0	637.8	640.0	644.0	641.0	637.5	630.0	629.2	629.6	628.9	629.8	639.0	641.0
641 0	641.0	640.0	640.2	640.0	634.5	630.0	630.2	622 4	624.7	633.0	640.0	643.0
4 <b>1</b> °5	42.0	41.8	4î·6	4°14	40°5	40.0	39°6	39.9	39.2	39.0	39°4	39.8ª
		VERTICAL					n Scale Divisio	1				1
		VERTICAL	TORCE.	· · · · · · · · · · · · · · · · · · ·		increase, ii	n Scale Divisio			1	f.	e, 1 04.
193 4	192.1	192'9	192°9	193.3	194.4	198.6	198.3	198'4	197.5	200.5	202.8	203.4
193.6	192.3	192.9	191'1	193.7	194.9	198.6	198.3	198.7	198.4	200.5	202.8	203.4
193 4	192.1	192.9	191.2	195.3	194.8	199.3	197.9	198.4	198.4	200 5	202.8	203.4
193 4	192.1	192.9	191'2	195.3	195.0	199.3	197.9	198 4	198.6	200.5	202.8	203.4
193.4	192*3	192.9	191.2	195.1	195.8	198.2	197.9	198.4	199.3	200.2	202.1	203.4
193.4	192.4	192 9	191 2	194.0	195.5	199.3	198.6	197.8	199.9	202.2	202.1	203.4
193.4	192.4	192.9	191.2	195.7	196.9	199.3	198.6	197.8	199.4	202.2	202.1	203.4
192.3	192.4	192.7	191.2	195.7	196.9	198.0	198.6	197.2	199.4	200.7	202.1	205.1
192.3	192.5	192.9	193.2	195.7	196.9	198.5	198.6	199.4	199.4	202.9	202.1	205 1
193.0	192.5	192 9	193.5	195.7	197.9	198.4	198.1	199.0	199.5	202.7	202.1	205.1
193.0	192.5	192.9	193.8	195.7	197.9	198.4	198.1	197.9	201.1	201.1	202.1	205 1
193.0	192.2	192.9	193.8	195.2	197.4	198.4	198.1	197.5	200.7	201.9	203.4	203.9
42.4	42.7	42.2	42.4	42°6	41°7	40.9	40°4	40.4	40°6	40.0	39°7	40°3ª
and incre	asing Horizo	ontal and Ver	rtical Force.									
		·		ME'	reorol(	GICAL	OBSERVAT	IONS.				
Mean (	Göttingen	Baromete	Thern	nometers.			Wind.	i		137.	eather.	
Ti	me.	at 32°.	Dry.	Wet.	Dire	ction.	Force	e		***	whici.	·
D.	и м	٧.		0								
· I	н. м. 22 О	In. 29.336	1		w.s	w l	Very li	o'ht	Clondre -	rcum. and	haze	ĺ
	22 0		17.5	16.3	w.s		Very li			rcum. and		
	0 0	29.328 29.324	17.5 17.7	16.8	s.w.s		Very li		Cloudy; cl	r.orm oi-	naze. -strat., and h	970
1 -	1 0	29 324	17.7	16.9	S.W.		Light		Cloudy; Cl	r-oum, oir.	-strat., and h -strat., and h	370
l	$\begin{array}{cccccccccccccccccccccccccccccccccccc$						Light		Cloudy; Cl	r coum oi	-strat., and h -strat., and h	270
1	3 0	29·272 29·246	19.9	18.7 18.5	S.Y		Very light				-strat., and h -strat., and h	
1	4 0	29 246	20.2	18.5	S. 5		Modera				-strat., and h -strat., and h	
ţ	5 0	29 201	21.9		S.V		Light					ze; slight snow.
	6 0			20.9			Fresh, with					ze; slight snow. ze; slight snow.
	7 0	29.074 29.057	23.6 24.0	$\begin{array}{c c} 22.2 \\ 22.6 \end{array}$	S.W.	, ,	Brisk					ze; slight snow. ze; slight snow.
	8 0		24.0	-	S.		Brisk					ze; slight snow. ze; slight snow.
	9 0	29.025	24.4	23.1	$\int_{S} \frac{S}{W}$		Modera					ze; slight snow.
1		29.014	2 t t	20 0	S.W. 1	oy 11.	TITOROL		O.Out.y, OII	· carring Offic-		,
1		ŀ	1	ı	1							

January 19th and	20th.			MAGNET	CICAL OB	SERVATIO	ONS.				
Mean Göttingen	Augula	ar Value of	one Scale D	oivision = C	o'·721.				DECLINAT	ion.	
Time.	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15h.	16°.	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20h.
M. s. O O	Sc. Div. 106 8	Sc. Div. 107.5	Sc. Div. 107.6	Sc. Div. 109 7 110 0	Sc. Div. 114.0 117.6	Sc. Div. 116 1 115 3	Sc. Div 113'3 113'0	113.4	Sc. Div. 111 3 111 4	Sc. Div. 112.6 112.3	Sc. Div. 104°4 102°0
$\begin{array}{ccc} 5 & 0 \\ 10 & 0 \end{array}$	107.4 107.1	107.6 107.8	107.4 107.5	110.1	119.0	114.4	112.4		111.7	109.6	102.0
15 0	106.7	107.4	107.6	111.3	118.4	113.2	112.0	112.6	112.2	110.4	101.4
20 0	106.0	107.0	109'0	111.8	119.0	113.0	112.4		112.7	111.4	102.2
25 0	105.4	107.8	108.6 108.5	113'4 115'4	118'0 117'4	112.6	112.3		113.5	110.4 110.4	104.4 103.2
30 0 35 0	104.4	108.0 108.4	108.3	115.4	116.9	112.4	112.5		111.6	110.5	105.8
40 0	105.7	108.9	109'4	114.0	117.4	112.3	112.4	111.3	112.4	110.5	106.6
45 0	107.0	109.0	109.6	113.3	117.4	112.9	112.5		112.3	111.4	105.4
50 0 55 0	107'8 107'5	109.8	109.2 110.0	112°3 112°3	118'0 117'4	113.4 113.4	112.9		113.5	113°2 107°4	107°2 107°4
	One S	cale Division	= .00008	37 parts of	the H.F.				Horizont	AL FORCE	
M. S.	645.0	648.0	649.0	649.0	645.0	649.2	647.5	650.2	648.0	643.0	639.8
$egin{array}{ccc} 2 & 0 \ 7 & 0 \end{array}$	645°0 648°0	646.5	649 2	648.0	646.0	648.5	647 5		646.0	643.5	640.0
12 0	645.8	646.8	646.0	646'0	646.0	647.0	647.0	648.5	645.0	643.0	635.0
17 0	650.0	649'0	645.8	645.2	644.6	648.8	647.2		644.8	641.4	634.2
22 0	649.2	648'8	648.0	645.3	645.0	648.0	647.5		643.9	643.2	630.0
$\begin{array}{ccc} 27 & 0 \\ 32 & 0 \end{array}$	648.0	649 2 651 0	648.0 646.8	644'8 646'9	645.5	648.5	646.5		645.0	643°2 645°0	631.0
37 0	647.8	650.2	647.0	648.8	645.2	646.0	648.5		645.0	642.0	636.4
42 0	648.0	648.2	645.8	651 1	645.5	646.2	649.0		644.0	642.0	638.0
47 0	650.0	651.0 651.0	648.0 648.4	$650.2 \\ 649.9$	649.0	646.0 646.5	649.0		645.0	644.4	641.6
52 0 57 0	648.2	651.0	650.0	647.1	649.0	646.0	649		643 ° 9 643 ° 0	639.7	645°5 645°8
Thermometer	39.2	39°4	39°·2	39.4	38.9	38°5	38.6	39.0	39°5	40°0	4ΰ4
	One S	cale Division	□=.00000	63 parts of	the V.F.				VERTICAL	Force.	
M. S. 3 0	196.2	198.6	194.0	194.2	194.1	195.1	194.0	194.2	192.3	189.1	182.3
8 0	196.6	198.6	194.1	194.2	194.1	194.7	194 0		192.3	188.5	181.7
13 0 18 0	196.8 198.7	198.6 196.9	194.4 194.4	194°5 194°5	194.8 194.8	194.7 194.7	194.0		192°3	186°3 185°2	180.3
23 0	198.7	196.9	194.4	196.0	194.6	194.0	193.8		192.0	184.7	179.5
28  0	198.7	196.9	194.4	196.0	194.6	194.0	193 9	194.2	192.0	183.2	179.3
33 0	196.9	196.9	194.2	195.3	194.8	193.8	193.5		192.0	183.2	179'3
$ \begin{array}{ccc} 38 & 0 \\ 43 & 0 \end{array} $	196.9 198.2	196.6 194.3	194°2 194°2	$195.3 \\ 194.7$	194.8 194.8	193.8	195.0		191.1	183.5 183.5	181°1 181°3
$\frac{43}{48}$ 0	198.2	194.3	194.2	194.1	195.1	194.0	195		191 1	183.3	181.2
53 0	198.2	194.3	194.5	194'1	195.1	194.0	195	194.2	190.1	183.3	181.2
58 0	198.6	194.3	194.2	194.1	195.1	194.0	194.2	194.2	190.1	182.6	181.5
Thermometer	39°1	39°1	39°5	40.0	40°·1	39.9	40°4	39°6	40.2	40°6	4î·4
					0.01			ng Numbers de	enote decreas	sing Westerl	y Declination
			mometers.	TEOROL		OBSERVAT	TIONS.			<del> </del>	
Mean Göttingen Time.	Baromete at 32°.	Dry.	Wet.	Dire	ction.	Force.	,		Wea	ther.	
р. н. м.	ln.	۰	۰								
19 10 0	30.144				S.E.	Very lig	ght.	Mostly clear.			
$\begin{array}{ccc} 11 & 0 \\ 12 & 0 \end{array}$	30.106 30.076		20.5		by S.	Very lig	ght.	Cireum. and			
13 0	30.020				S.E.	Very lig <b>M</b> odera		Cirstrat. and Circum. and			
14 0	30.026	23.8	21.9	,	š.	Modera		Circum. and			
15 0	29.996	24.6	22.9	S. b	y E.	$\mathbf{M}$ odera	ıte.	Clear and und	clouded.		
16 . O	29.952 29.896				y E.	Modera		Clear and und			
				ا و	S.   S.W.	$egin{array}{c} egin{array}{c}	Clear and und Clear.	ciouaea.			
17 0	1 29 862	1 20 0									
17 0 18 0 19 0	29.862 29.858	25.5	23.4	S.S	s.W.	Light	t.	Clear.			
$\begin{array}{cc} 17 & 0 \\ 18 & 0 \end{array}$	11	25°5 25°5	23.4 23.4	S.S S.S		Light Very lig Very lig	t. ght.				

<sup>&</sup>lt;sup>a</sup> At 20<sub>d</sub> 10<sup>h</sup>, Thermometer of H. F., 48° ·4; of V. F., 47° ·2.

					MAGNET	ICAL	OBS	SERVATION	ONS.		J:	anuary 19th	and 20th.
		DECLINAT	ion.						Aı	ngular <b>V</b> alu	e of one Sca	le Division	= 0'·721.
21h.	22h.	23h.	Oh.	1h.	2h.	3	3h.	4h.	5h.	6h.	7h.	8h.	9h.
sc. Div. 107.6 108.5 108.8 109.6 111.8 113.8 114.5 115.4 115.8	Sc. Div.   117'4   117'5   116'6   115'5   115'4   113'7   113'5   113'4	Sc. Div. 112 2 112 4 111 8 111 9 111 5 111 5 111 4 111 4	Sc. Div. 112.5 113.4 113.6 112.5 112.4 112.8 111.4 111.2 110.6	Sc. Div.   112'4   112'6   113'4   113'3   112'8   114'8   116'0   115'5   115'8	Sc. Div. 118.2 118.2 118.4 116.8 116.1 116.0 117.8 119.4	Sc. 1 118 119 117 121 121 119 124 122 123	3 4 6 4 6 4 0	Sc. Div. 117.6 116.0 115.6 114.0 113.4 113.0 113.4 113.3 114.0	Sc. Div. 110'6 109'4 111'1 111'4 110'8 112'2 111'5 111'2 111'4	Sc. Div. 111'0 110'4 109'5 109'6 110'2 109'4 109'4 109'6 108'6	Sc. Div. 107.6 107.8 107.4 107.4 106.4 105.8 105.4 105.4 105.0	Sc. Div.   103 *8   104 *1   104 *3   105 *2   105 *3   105 *3   105 *8   105 *4	sc. Div. 103 · 2 103 · 0 102 · 7 102 · 9 103 · 3 103 · 4 104 · 3 104 · 2 104 · 4
116.8 119.9 119.9	113.4 112.2 112.2	110.7 111.4 113.5	111.6 110.7 112.2	115.8 115.4 117.0	119·2 119·0 117·3	121 120 118	0	112.1 115.1	111.2 111.2	108.6 107.8 107.4	104.6 103.8 103.4	104.0 103.4 103.3	104.6 104.2 104.6
		HORIZONT.	AL FORCE	•	I	ncrease	e, in S	Scale Divisi	ons, correspo	nding to 1°	decrease of	Temperatu	re, 1.63.
646°8 651°8 650°6 650°2 650°2 650°2 650°0 650°0 646°8 647°2 647°8	649 8 650 2 649 8 650 4 649 0 650 0 648 7 650 0 647 3 646 0 647 4 646 0	646.0 643.5 645.8 648.0 646.9 646.8 645.5 644.2 645.0 646.2 643.2 643.1	643'3 641'0 641'2 643'1 644'0 643'2 643'2 640'0 643'1 639'8 645'0 645'0	640.0 645.0 644.0 644.0 643.0 645.0 646.8 646.8 647.0 646.2 645.0 645.0	646.0 645.8 646.0 647.5 648.0 645.0 645.4 643.0 646.0 646.4 644.0 641.2	642 641 639 641 644 645 647 643 642 645 641 639	· 2 · 5 · 7 · 5 · 2 · 0 · 5 · 5 · 5 · 0	639.0 638.0 636.5 637.0 635.5 634.0 631.2 629.0 631.0 630.0 627.5 628.0	627.0 623.0 622.0 619.5 618.5 620.0 621.0 622.0 623.0 623.5 625.0 627.0	628.5 630.0 628.0 629.0 632.0 631.0 632.8 632.8 633.0 634.2 635.0 636.2	633.2 635.8 637.4 634.8 636.2 636.8 636.6 637.8 637.0 638.2 639.0 638.0	638·2 635·0 636·0 634·0 634·1 633·7 632·9 633·0 640·2 642·0 644·1	642.0 640.0 639.0 637.6 639.1 634.0 633.9 634.9 631.4 634.0 630.1 628.0
41°6	4i°6	42°5	43°0	43°1	42.8	$4\mathring{2}$	•7	43°5	44.9	45°1	45.6	46.4	47°5°
		VERTICAL :	Force.		J	Increas	se, in S	Scale Divisi	ions, correspo	onding to 1°	decrease of	Temperatur	re, 1°64.
180°8 181°5 181°5 181°5 181°2 180°9 180°9 180°9 180°8 180°8 181°2 181°2	183.3 184.8 185.0 185.6 185.6 185.6 185.6 185.6 185.6 185.4 185.6	185.0 184.0 184.4 185.0 185.0 185.0 185.0 185.0 185.5 185.6	186.9 186.7 186.5 186.5 186.5 186.5 187.0 187.0 187.0 187.0	186'7 185'0 185'0 185'0 185'0 185'0 185'2 185'2 185'2 185'4	185.4 185.4 185.4 185.5 185.5 185.5 185.5 185.5 185.5 185.6 186.3	186 187 187 187 187 187 187 187 186 186	·1 ·6 ·6 ·6 ·6 ·6 ·3 ·3	186.3 186.3 186.3 186.3 186.3 186.3 186.3 186.3 185.9 185.9 185.9	185.9 185.9 185.9 185.9 185.9 186.0 186.0 186.6 186.6	186.6 186.6 186.6 186.6 186.3 186.3 185.9 185.5 185.5 185.5	185.5 185.5 185.5 185.2 185.2 185.2 185.2 185.2 185.2 184.8 184.9 184.8	184.5 184.3 184.1 183.3 183.3 183.3 182.4 182.4 183.2 184.2 184.2	184.2 184.2 183.9 184.0 183.1 182.4 182.4 182.4 182.4 182.2 181.5
41°5	4ΰ5	42.3	42.9	43°5	43.0	43	·1	43°4	44.4	44.7	44.8	45.3	46°5°
and increa	sing Horizo	ntal and Vert	ical Force.										
				ME	TEOROLO	GICA	T OI	BSERVAT	IONS.				
Mean G Tir	öttingen ne.	Barometer at 32°.	Ther Dry.	mometers. Wet.	Direct		ind.	Force.			Weather.		
19 2 2 20 4		24.9 26.1 26.6 27.1 27.3 29.5 31.9 32.2 32.9 33.6 35.5 37.0	S.W. h S.W. h S.W. b S.S.V S. by S. by S. by S. by S. by S. by S. by	by S. by S. by S. W. W. W. W. W. W. W. W. W. W. W. W. W.	Ver Ver Ver Ver L L L Ver Ver	y light. y light. y light. y light. y light. ight. ight. ight. ight. y light. y light. y light. y light.	Mostly clear Clear and o Clear and o Cirstrat. a	nd cirstrat r. inclouded. inclouded. ind haze. ind circum inclouded.					

Vol. III.

February 25th an	d 26th.		M	IAGNETI	CAL OBS	ERVATION	vs.				
	Angula	r Value of	one Scale D	ivision =	0' . 721.			]	DECLINATI	ON.	
Mean Göttingen Time.	10h.	11h.	12h.	13h.	14h.	15h.	16 <sup>h</sup> .	17h.	18h.	19h.	20h.
M. S. 0 0 5 0 10 0 15 0 20 0 25 0 30 0 35 0 40 0 45 0 50 0 55 0	113.6 114.2 114.2 114.6 114.4 114.4 114.2 114.7 116.4 116.5	sc. Div. 117·3 117·2 117·2 117·4 118·6 119·4 119·4 119·2 119·4 119·1 119·1 119·4	Sc. Div. 121 ° 0 125 ° 6 137 ° 6 143 ° 7 139 ° 2 127 ° 0 121 ° 0 118 ° 6 117 ° 4 115 ° 6 112 ° 8	Sc. Div. 112 4 112 6 112 6 112 6 113 0 112 4 113 4 114 0 114 4 114 8 115 4	Sc. Div. 115 '4 115 '8 116 '2 115 '6 115 '5 115 '4 115 '8 118 '4 119 '2 120 '4 118 '6 118 '8	Sc. Div. 120'8 127'4 129'5 133'4 132'4 127'2 119'8 118'2 119'2 120'4 121'2 119'4	Sc. Div. 119 8 120 4 121 0 120 4 117 4 115 5 114 8 114 8 115 4 116 8 117 2 116 6	Sc. Div. 116.5 116.7 117.3 117.5 117.4 116.7 116.8 116.6 116.5 116.4 116.6	Sc. Div. 115.6 115.4 115.3 115.4 116.3 117.1 117.3 116.7 117.5 118.9 117.3 116.7	Sc. Div. 116'4 116'3 116'3 116'4 116'3 115'9 115'9 115'9 115'8 116'0 115'9 115'4	Sc. Div. 115 '8 116 '0 116 '0 117 '4 116 '0 116 '2 116 '4 116 '2 116 '8 117 '0 117 '2 117 '2
	One Sc	ale Division	= .0000	87 parts of	the H. F.			]	Horizonta	L FORCE.	
M. s. 2 0 7 0 12 0 17 0 22 0 27 0 32 0 37 0 42 0 47 0 52 0 57 0	635.0 631.5 631.5 634.0	631 ° 0 631 ° 0 630 ° 0 629 ° 0 629 ° 5 630 ° 0 628 ° 0 628 ° 0 626 ° 0 625 ° 0 623 ° 0	619 ° 0 619 ° 0 626 ° 5 638 ° 0 641 ° 0 642 ° 2 639 ° 0 633 ° 0 634 ° 2 636 ° 9 633 ° 2	632'0 631'4 631'8 632'0 631'8 631'8 632'0 631'8 632'8 632'8 633'8 634'8	636 2 637 8 637 5 638 0 634 2 633 8 628 8 626 2 626 0 628 2 628 8 628 8	626.2 629.3 630.8 636.6 641.2 641.2 641.2 634.2 632.2 630.8 635.0 632.8	631 '4 631 '0 633 '0 636 '2 637 '3 636 '0 634 '0 632 '8 634 '0 635 '2 635 '0	634·2 635·0 636·0 635·6 635·0 634·3 634·0 633·9 634·0 635·9 636·8	636.3 634.0 634.2 633.8 635.0 634.0 633.8 633.0 632.0 634.1 634.2 633.8	633 1 632 1 633 0 635 0 634 0 634 0 635 0 634 8 635 0 636 8 635 0 635 0	635 ° 0 635 ° 0 634 ° 0 636 ° 0 635 ° 8 636 ° 0 636 ° 4 636 ° 5 637 ° 0 637 ° 2 637 ° 2 637 ° 0
Thermometer	45.0	45.2	45.0	$4\mathring{5}^{ullet}5$	46.6	46.6	46°3	45°5	45.7	45°7	45°6
M. S. 3 O S O S O S O S O S O S O S O S O S O	190.7 190.7 189.3 189.3 189.3 188.0 188.0	189.7 189.5 189.5 188.8 188.8 188.8 188.8	189 1 189 8 189 2 187 3 185 3 183 8 184 4	182.8 182.8 183.1 183.1 182.7 182.7 182.7	181.6 181.3 181.1 180.9 180.8 180.7 180.5	180.6 180.6 180.3 180.3 179.9 179.7	178*4 178*4 178*9 179*3 179*3 179*3	180.6 180.6 180.6 180.6 181.6 181.6 181.7	VERTICAL    182°1   181°4   181°4   181°4   181°4   181°4   181°4   181°4	181.4 181.4 181.4 181.4 181.4 181.4 181.5 181.5	181 4 181 4 181 4 181 4 181 4 181 4 181 4
38 0 43 0 48 0 53 0 58 0	188.6 189.7 189.7 189.7 189.7	188.8 188.8 189.1 189.1	183.7 183.7 185.0 184.0 184.2	181.2 181.3 181.4 181.3	180.6 180.3 180.3 180.5 180.6	179.7 177.8 177.8 179.1 178.4	179 3 179 3 179 3 179 3 180 6	181.7 182.4 182.4 182.4	181 · 4 181 · 4 181 · 4 181 · 4	181 · 5 181 · 5 181 · 5 181 · 5	181.4 181.6 181.6 181.6
Thermometer	43.8	44.3	44.4	46°4	47.6	48.2	48.0	46.7	46.6	46.6	45.4
:				0°-0°-0°-0			Increasing	Numbers de	enote decrea	sing Westerl	y Declination,
:			М	ETEOROL	OGICAL	OBSERVA	TIONS.		_		
Mean Göttingen Time.	Barometer at 32%	Ther Dry.	wet.	Dire	ection.	Wind.	rce.		,	Weather.	
D. H. M.  25 10 0 11 0 12 0 13 0 14 0 15 0 16 0 17 0 18 0 19 0 20 0 21 0	In.  30.051 30.040 30.029 30.030 30.028 30.017 30.015 30.002 29.991 29.985 29.977 29.962	23.4 21.5 19.2 19.1 17.6 16.0 15.5 16.0 18.1 15.1 14.5	20°0 19°3 18°1 17°9 16°8 15°7 15°3 15°7 16°2 14°8	S.	S.E.	Very	light.	Genera Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear. Clear.	ily clear.		-4

<sup>&</sup>lt;sup>a</sup> At 26d 10h, Thermometer of H.F., 47° '6; of V.F., 47° '4.

				.4	]	MAGNET	ICAL OBS	ERVATIO	NS.	are to a chappe		$\mathbf{F}$ eb	ruary 25th a	and $26$ th.
			DECLINATION	N.		<del></del>		11.		Ang	gular Value	of one Scale	Division =	0'.721.
	21h.	22h.	23h.	Oh.	1h.	2h.	3h.	4 <sup>h</sup> .	5	h.	6h.	7h.	8h.	9h.
A CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR	Sc. Div. 116 8 117 2 117 0 117 0 116 8 116 8 117 4 117 4 118 4 118 0 117 4	Sc. Div. 116.8 117.4 116.6 116.4 117.4 116.6 116.6 116.6 117.0 117.2 116.0	Sc. Div. 117 ' 4 117 ' 4 117 ' 5 117 ' 6 117 ' 4 117 ' 4 117 ' 4 117 ' 0 116 ' 0 115 ' 4 117 ' 6	Sc. Div. 118 ' 5 118 ' 4 118 ' 3 118 ' 2 118 ' 0 118 ' 2 118 ' 4 117 ' 8 118 ' 6 117 ' 0 119 ' 0	Sc. Div. 119 ° 0 119 ° 0 120 ° 3 120 ° 7 120 ° 4 121 ° 4 121 ° 5 121 ° 6 121 ° 4 122 ° 5	sc. Div. 122 3 124 2 125 2 125 1 124 4 125 4 124 9 126 2 127 4 126 6 127 9	Sc. Div. 125 · 4 126 · 4 126 · 2 126 · 2 126 · 0 127 · 5 127 · 6 127 · 2 127 · 5 127 · 4 126 · 2	Sc. Div. 126 4 126 4 127 4 129 4 129 8 128 6 125 2 123 4 122 6 122 4 122 4	121 122 122 122 123 124 123 123 121 121	·8 ·4 ·9 ·6 ·6 ·4 ·1 ·4	Sc. Div. 120'0 118'6 118'4 118'9 118'7 117'4 117'2 116'4 116'5 116'4 116'0	Sc. Div. 115.4 115.0 115.4 115.8 114.5 114.4 115.4 115.0 114.6 114.3	Sc. Div. 114.0 113.4 113.0 113.0 112.3 112.2 112.4 112.0 111.6 111.4	Sc. Div. 111'2 111'0 111'0 111'0 111'4 111'9 111'6 111'9 111'6 111'9
	117.2	116.4	118.0	120.4	122.2	126.4	126.4	122.2	120	• 4	115 8	113.9	111.3	112.2
1			HORIZONTA	L FORCE.		I	ncrease, in	Scale Divisio	ns, con	respo	onding to 1°	decrease of	Temperatur	e, 1 63.
	636.0 636.0 636.4 637.0 636.9 635.0 634.8 636.0 635.8 639.0 639.2 639.0	637.5 637.0 638.0 638.0 638.0 638.0 639.0 639.0 642.0 640.0 641.0	640.0 640.0 640.0 640.0 642.2 642.0 642.5 643.0 644.0 642.5 642.5	645.5 644.0 641.0 641.5 643.5 644.0 642.5 641.5 640.0 641.5 641.5	647 ° 0 647 ° 0 644 ° 0 644 ° 0 645 ° 0 644 ° 0 642 ° 8 644 ° 0 645 ° 0 644 ° 0 646 ° 0	643.0 645.5 645.0 645.0 645.0 646.0 644.3 641.0 643.5 644.0 641.0	639.5 640.4 638.8 638.8 637.8 636.0 635.5 634.4 635.2 634.0 631.2	630.0 630.0 626.4 623.0 620.3 617.8 619.5 617.8 619.6 620.2 621.6 621.8	624 620 620 618 617 615 616 616 613 614 613	· 8 · 5 · 4 · 8 · 0 · 2 · 7 · 1	611.3 608.0 611.8 610.0 612.2 612.0 612.0 610.0 607.0 611.0 612.2	614.0 611.0 611.0 610.0 611.0 613.8 614.0 613.0 614.5 618.0 616.5 615.0	618.0 618.0 618.0 620.0 620.5 622.0 620.0 620.5 622.0 623.0 625.0	623 ° 0 628 ° 0 628 ° 0 626 ° 5 627 ° 0 626 ° 5 626 ° 5 630 ° 0 626 ° 0 626 ° 0
	44.2	43.8	43°5	43.3	42.7	43°5	45°2	46°1	46	. 1	45°9	46.0	46°3	46.7 a
			VERTICAL :	Force.	· · · · · · · · · · · · · · · · · · ·	. I	ncrease, in	Scale Divisio	ons, coi	rrespo	onding to 1°	decrease of	Temperatur	e, 1.64.
	181.6 181.6 181.6 181.6 181.6 181.6 181.6 181.6 181.6 181.6 181.6	181 4 181 4 181 4 182 5 182 5 182 5 182 5 182 5 182 5 182 3 182 3 181 0	180.6 180.6 180.6 179.5 179.5 179.5 179.5 179.5 178.7 178.5 178.5	184.5 184.5 184.5 184.5 185.5 185.5 185.5 184.8 179.5 182.0 182.0	183 · 5 183 · 5 184 · 9 184 · 9 184 · 9 185 · 5 186 · 1 186 · 2 186 · 2 186 · 2 186 · 2	186'1 186'1 186'1 186'1 184'9 184'8 184'4 184'5 184'5 185'0 184'4 183'3	181.8 181.8 181.8 180.7 180.4 180.3 180.3 179.7 179.3 179.2 179.2 177.9	177.9 177.8 177.8 177.8 177.8 177.7 179.7 180.6 180.6 180.6	180 179 179 179 179 179 180 181 181 181	· 5 · 3 · 3 · 3 · 5 · 5 · 5 · 5	181.5 181.5 181.5 181.0 181.0 181.0 181.1 181.1 181.0 181.0 181.0 181.0	180.9 181.1 181.1 181.1 181.1 181.1 181.1 181.1 182.6 183.4 183.4 183.4	183 '4 183 '4 183 '4 183 '4 183 '4 183 '4 183 '4 183 '4 181 '8 181 '8 181 '8	180'9 180'9 180'9 180'9 180'9 180'9 180'9 180'9 180'9 180'9
	45°·4	45°5	46.4	46°4	44.3	44.0	46.3	46.2		• 5	46°3	46.4	46.4	47.1ª
	and increase		ontal and Ver			<del>- ::::</del>	4	<u></u>	<u>!</u>	<del></del>	1	1		<u> </u>
	-	-0	alla Y CI	TOUL TOICE.		TEOROLO	OGICAL O	BSERVAT	IONS	,				
	Mean G	öttingen	Barometer	Therr	nometers.		Wind			·		<b>777</b> 17		
	Tir	ne.	at 32°.	Dry.	Wet.	Direct	ion.	Force.				Weatl	ier.	
	D. H 25 22 26 (	2 0 3 0 0 0 1 0 2 0 3 0 4 0 5 0 6 0	In. 29 949 29 926 29 918 29 920 29 883 29 852 29 827 29 789 29 744 29 656	13.4 12.4 12.1 12.2 19.2 26.3 30.3 31.1 31.8 33.5 34.3 34.3	3.5 12.7 12.4 12.3 18.1 24.1 27.0 26.7 27.0 27.7 29.3 29.6	S.E. by S.E. by S.E. by S.E. by S.W. by S.W. by S.S.V. S.S.V. S.W. by	y E. V y E. V y E. V y S. V y S. V w. V	Tery light. Tery light. Tery light. Tery light. Tery light. Light. Light. Light. Light. Tery light.		Gene Gene Gene	rally clear. rally clear. rally clear. rally clear. rally clear. rally clear			

March 22nd and 2	?3rd.			MAGNE'	CICAL O	BSERVATIO	ONS.				
Mean Göttingen	Angula	r Value of	one Scale Di	ivision =	oʻ 721.				DECLINAT	TION.	
Time.	10h.	11h.	12h.	13h.	14h.	15h.	16 <sup>b</sup> .	17h.	18h.	19h.	20h.
M. s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0 0 5 0	107.8	109'0 107'8	110.4	$109.3 \\ 108.5$	115.4	115.4	115.8	114.7	117.6	117.4	116.6
10 0	108.4	107.4	109.8	110.4	115.8	116.3	117.0	116.4	117.5	117.2	116.4
15 0	108.3	107.2	110.0	110.4	116.0	116.5	118.0	117.6	118.3	117.6	116.3
20 0	108:8	108.3	109'4	111.8	117.7	116.6	117.7	117.6	118*4	117.2	116.3
25   0	108.4	108.7	109.4	113.4	116.2	117.8	115.7	117.2	119.0	116.9	116.0
30 0	108.3	109.4	110.1	114.4	115.4	119.7	114.0	116.0	119'4	116'9	116.0
35 0	107.7	108.8	111.3	116.0	115.8	119.0	115.0	117.6	119.4	116.6	115.4
40 0	107.6	109.4	111.3	117.4	116.4 115.9	116.4	115.8 115.4	117.4	118.4 117.4	116.6	117°2 116°4
$\begin{array}{cc} 45 & 0 \\ 50 & 0 \end{array}$	109.2	108°7 108°6	110.6	117°5 117°5	114.8	114.4	115.6	116.4	117.6	116.6	116.3
55 0	109.5	108.9	109.2	114.2	114.0		115.9	116.4	117.8	116.2	116.3
Tuf C	One S	scale Divisio	on = .0000	087 parts o	f the H. F			<u>'</u>	Horizon	TAL FORCE	ε.
M. S.	622:0	620.0	695.0	699 • 4	617.0	621.8	628.0	625.0	633.6	630.3	632.0
$\begin{array}{ccc} 2 & 0 \\ 7 & 0 \end{array}$	633.8	638'8 640'8	625 0 626 0	$622.4 \\ 620.8$	617.0	621.8	626.2	624.5	633.0	630.0	632.1
12 0	636.2	642.9	626.0	620.5	618.0	625.0	626.0	623.5	632.8	632.2	632.0
17 0	635.6	642 0	622.1	620.0	614.8	626.4	627.8	626.0	632.0	634.0	633.0
22 - 0	636.2	638.2	620.1	620.5	613.0	626.8	631.0	635.2	632.0	633.8	633.9
27 0	638.9	637.0	618.8	620.4	612.8	627.0	630.0	637.0	628.5	633.0	634.0
32 0	641.7	633.0	616.0	620.0	615.4	627.2	626.8	633.5	629.1	633.0	636.0
$\begin{array}{ccc} 37 & 0 \\ 42 & 0 \end{array}$	641.3	631.4	617:0	620.0	617.0	630.0	625.0	635.4	631.0	633.0	633.0
42 0 47 0	640.0	$629.7 \\ 629.1$	617.0	$620.0 \\ 620.2$	618.8	630.8	626.0 627.0	634.8 635.0	632°0 631°6	633.2	633.1
52 0	635.1	624.3	620.0	622.4	621.4	626.4	626.6	633.8	630.0	632.8	633.1
57 0	636.1	621.0	621.0	623.0	621.2	626.5	626.0	634.8	630.0	632.0	633.0
Thermometer	5 <u>1</u> .6	5 <u>1</u> .9	5η6	5 <u>1</u> °1	50°6	50.5	50.5	50°6	50°7	5 <u>1</u> 5	52.4
M. S.	One S	cale Divisio	on = .0000	063 parts o	f the V. F.		·····		VERTICAL	Force.	·
3 0	175.2	175.5	174.7	173.8	173.3	173.1	173.2	171.7	166.9	166.5	164.7
$\begin{bmatrix} 8 & 0 \\ 8 & 0 \end{bmatrix}$	175.7	175.5	174.7	173.8	173.3	173.1	173.0	171.9	166.9	166.2	164.7
13 0	175.8	175.5	175.5	173.8	173.2	173.1	170.5	171.9	166.9	166.3	164.0
18 0	175.7	175.5	175.5	173.7	173.2	173.0	170.5	172.7	166.9	166.3	164.1
23 0	176.0	175.5	175.2	173.7	173.5	173.0	170.5	172.9	166.9	166.3	164.1
$\begin{array}{ccc} 28 & 0 \\ 33 & 0 \end{array}$	176'0 176'0	174°8 174°6	175°2 174°5	173.7	173.5	173.2	170.4	169.4	166.9	165.5	164.1
38 0	176.0	174.6	174.5	173.7 173.5	173°5	173 · 2 172 · 5	170°2 170°2	169.4 166.9	166.9	165°8 165°8	164.0 164.0
43 0	175.3	174.6	174.2	173.3	173.3	172.3	171.7	166.9	166.2	165.6	165.0
48 0	174.5	174.6	174.5	173.3	173.8	172.3	171.7	166.9	166.5	165.4	165:0
53 0	174.5	174.6	174.5	173.3	173.8	172.3	171.7	166.9	166.5	164.6	165.0
58 0	174.2	173.8	174.5	173.3	173.8	172.3	171.7	166.9	166.2	164.6	165.0
Thermometer	50°8	5 <u>1</u> .3	5 <u>1</u> .1	52°0	51°.6	52.2	52.2	5 <u>1</u> .9	52°0	53.0	54.2
	1				<u> </u>	1	<u></u>	<u> </u>		1	
			ME	TEOROLO	)GICAL	OBSERVAT		numbers der	iote decreasi	ng Westerly	Десппацо
Mean Göttingen	Barometer	The	rmometers.		Wine						
Time.	at 32°.	Dry.	Wet.	Dire	ction.	Force.			Weathe	r,	
D. H. M.	In.					,-					
22 10 0	29.653	37.1	33.6	_	_		Clouded	; circum.	and cumst	trat.	
11 0	29.641	36.1	32.2	-	_		Clouded	•			
12 0	29.619	34.9	32.1	-	-		Clouded				
	29.617	33.8	-	-	-	-	Clouded				
13 0	29.616	32.8 32.9	31.1	· · ·	-			a. and cum			
14 0	1 90.644	1 52 9		-	-	_		a. and cirst			
14 0 15 0	29.654		20.1				UITcun	n. and cirst	rat.		
14 0 15 0 16 0	29.664	32.4		-			Cin ann	and air at	rat		
14 0 15 0 16 0		32.4 32.7	30.2	_	-			n. and cirst			,
14 0 15 0 16 0 17 0 18 0 19 0	29.664 29.666 29.666 29.670	32.4 32.7 32.7 33.1	30°5 30°3 30°4				Circur	n. and cirst n. and cirst n. and cirs	rat.		,
14 0 15 0 16 0 17 0 18 0	29.664 29.666 29.666	32·4 32·7 32·7	30.5 30.3 30.4 30.5				Circur Circur	n. and cirst	trat. trat.		,

<sup>&</sup>lt;sup>2</sup> At 23<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 53° · 6; of V. F., 53° · 0.

			A		·									
		, <u></u>	<del> </del>		MAGNET	TICAL .	OBSI	ERVATIO	NS.				March 22nd	and 23rd.
		DECLINAT	ion.	·						An	gular Value	of one Scal	e Division =	=0'721.
21 <sup>h</sup> .	22h.	23 <sup>h</sup> .	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	.	4 <sup>h</sup> .	6	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9h.
Sc. Div. 115 *8 115 *9 116 *4 116 *4 116 *4 116 *4 116 *6 117 *0 117 *2 117 *2	Sc. Div. 117 '2 117 '3 117 '3 117 '3 117 '4 117 '6 117 '2 117 '4 117 '7 118 '0 117 '6 116 '4	Sc. Div. 117'4 118'4 119'2 119'0 118'6 118'2 118'4 118'4 118'8 118'8 118'8	Sc. Div. 119'4 119'6 120'2 120'4 120'6 121'0 121'8 121'2 121'6 121'8 122'2	Sc. Div. 122 '4 123 '2 123 '1 123 '3 123 '5 123 '6 124 '3 125 '3 125 '4 125 '5 126 '1	Sc. Div. 125 ' 5 125 ' 4 123 ' 7 124 ' 4 126 ' 3 126 ' 0 126 ' 6 126 ' 7 126 ' 4 126 ' 4 124 ' 7 123 ' 4	sc. D 123° 123° 122° 122° 123° 123° 123° 123°	6 4 4 5 4 4 4 8 0 0 4	Sc. Div. 121 ' 5 121 ' 4 121 ' 5 121 ' 5 121 ' 5 121 ' 4 120 ' 8 120 ' 0 120 ' 2 118 ' 5 118 ' 4 117 ' 7		5.2 5.8 5.0 5.5 1.0 1.0 1.9	Sc. Div. 112'4 111'6 110'6 110'4 110'0 109'0 108'6 108'2 107'8 107'6 106'6	Sc. Div. 106 '4 105 '7 105 '6 105 '4 105 '4 105 '0 105 '5 105 '5 105 '0 104 '3 104 '3 103 '7	Sc. Div. 103 ° 6 103 ° 0 102 ° 4 102 ° 2 102 ° 2 102 ° 0 102 ° 6 103 ° 6 103 ° 6 104 ° 0 104 ° 0	Sc. Div. 104 6 105 2 105 6 106 0 106 4 106 4 106 8 107 2 107 6 108 2 108 4
		Horizont.	AL FORCE.		I	ncrease,	in Sc	ale Divisio	ns, co	rrespo	nding to 1°	decrease of	Temperatur	e, 1.63.
633 '0 632 '2 631 '5 632 '0 631 '9 632 '0 632 '0 633 '0 633 '0 633 '0 632 '8	633 ° 0 633 ° 0 633 ° 0 632 ° 2 632 ° 4 632 ° 4 632 ° 0 633 ° 2 634 ° 0 636 ° 0 634 ° 2	633.0 632.8 631.8 632.0 632.4 633.0 633.4 634.2 634.2 634.0 634.0 634.5	635.5 634.8 633.4 632.8 633.2 632.5 632.2 632.0 632.2 632.4 632.0 631.8	631'4 631'2 630'9 631'0 630'6 630'3 630'0 630'1 629'2 628'3 627'4 625'0	626.8 626.4 628.3 626.2 625.0 623.5 622.3 621.6 620.2 620.0 622.0 622.0	623 °C 623 °C 622 °C 622 °C 618 °C 615 °C 615 °C 615 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 614 °C 61	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	613.0 612.0 611.8 611.0 610.0 610.8 611.5 611.0 610.0 610.5 613.0	610 610 609 609 608 608 607 607 607	0 2 5 0 0 5 8 8 5	609.6 609.0 609.0 608.5 608.4 608.7 609.0 609.6 610.0 611.6 612.0	612.6 615.0 617.0 616.2 619.9 623.0 625.0 622.1 619.1 618.0 617.3	619.0 619.2 624.4 623.2 622.2 619.8 618.2 616.8 617.0 617.2 617.2 616.5	615.8 617.4 615.8 618.8 621.2 624.4 624.8 624.4 626.8 629.0 631.0 631.2
52.9	53.1	53.5	5å <b>·</b> 6	52°.8	52°0	51°5	5	52°1	$5\mathring{2}$	•7	52°9	53°0	52°5	52°6°
		VERTICAL	Force.		In	crease, ir	n Sca	le Division	s, cor	respon	iding to 1°	decrease of	Temperature	, 1.64.
165.0 165.0 165.0 165.0 165.4 165.4 165.4 165.4 165.4 165.4 164.9	164.9 164.9 164.9 164.8 164.8 164.8 164.8 164.6 164.6 164.6	164.4 164.3 164.4 165.0 165.0 165.0 165.0 165.0 165.0 165.0 165.0	165 0 165 4 165 3 165 3 165 6 167 0 167 0 167 5 168 4 168 4 168 7	170·3 170·3 169·3 169·3 169·3 170·3 170·3 170·3 170·3 170·3 170·3	171 1 171 1 171 1 171 1 171 1 171 1 171 1 171 1 171 1 172 3 172 0 172 0 172 0	172.0 172.0 172.0 173.0 173.0 173.0 173.0 173.0 173.0 173.0		173.0 172.5 172.5 172.5 172.5 172.0 172.0 172.0 171.0 171.0 171.0 171.0	171 171 170 170 170 170 169 169 169 169	0 0 4 4 4 4 5 5 5 5	169 '5 169 '5 169 '5 169 '5 169 '5 169 '5 169 '6 169 '6 169 '6 170 '1	170.6 170.6 170.6 171.4 171.4 171.4 171.4 171.4 171.4 171.4 171.4	171°4 171°4 171°7 171°1 170°9 170°9 170°9 170°3 169°6 169°6 169°6	168 · 5 168 · 5 169 · 4 170 · 3 170 · 3 170 · 3 168 · 2 167 · 7 168 · 7 169 · 3 168 · 9
54.2	- 54°2	54.4	54°4	53.4	52.2	5 <b>1</b> °5		51.8	52°	2	52°·8	52°8	52°4	52°2°a
and increas	sing Horizo	ontal and Ver	tical Force.			·	<u>-,l</u>							
				ME	reorolo	GICAL	OBS	ERVATI	ons.					
Mean Gö Tim		Barometer at 32°.	Therm Dry.	Wet.	Direct		Wind	Force.				Weath	er.	
D. H. 22 22 23 23 0 1 2 3 4 5 6 6 7 8 9		In. 29.691 29.708 29.734 29.756 29.778 29.782 29.802 29.827 29.827 29.828 29.808	33·4 33·7 33·7 33·9 34·7 35·1 37·8 39·4 40·2 41·2 39·5 40·2	30.7 30.6 30.7 30.7 30.7 31.3 33.1 33.4 36.1 36.9 35.5 36.1	N. by N. by N. by N. by N. by N. N. E. S. S. I	E. E. E. E. V.	7	Very ligh Very ligh Very ligh Very ligh Very ligh Very ligh Light. Light.	t. t. t. t. t.	Mos Clou Clou Clou Clou Clea Clea Clea	and circur tly clouded ided. ided. ided. ided.	till 7 <sup>h</sup> ; rem uded. uded. uded.	ainder clear.	

April 19th and 20	th.		I	MAGNETI	CAL OBS	SERVATIO	NS.		· · · · · · · · · · · · · · · · · · ·		
Mean Göttingen	Angul	ar Value of	one Scale D	ivision = (	oʻ 721 <b>.</b>				DECLINAT	ON.	
Time.	10h.	11 <sup>h</sup> .	12h.	13h.	14 <sup>h</sup> .	15h.	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19h.	20h.
м. s.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 115°6	Sc. Div.	Sc. Div. 116 6	Sc. Div.	Sc. Div. 119 0	Sc. Div. 119'9	Sc. Div.
0 0 5 0	111.5 111.4	113 <b>·</b> 2	113.8 113.8	114.4 114.5	115.2	115.7	116.7	117.4	119.2	119 6	118·2 117·8
5 0 10 0	111.8	114.5	113 4	114.3	115.6	116.0	117.3	117.4	119.8	119.8	118.2
15 0	112.2	114.4	113.4	114.7	116.3	116 4	116.7	117.6	120.2	119.8	118 2
20 0	112.4	114.0	113.4	115.3	116.4	116.4	117.0	117.6	120.0	119.2	118.5
25 0	112.4	114.4	113.4	115.2	116.4	115.7	117.0	117.6	120.2	119.7	118.4
30 0	112.6	115.0	113.2	115.5	115.5	115.6	117.4	117.7	120.0	118.6	118.0
35 0	112.8	113.4	113.4	115.7	115.5	115°5 116°4	117°4 117°4	117.8	119.4 119.2	118.4	118'2
40 0	113.2	113.4	113 <b>.</b> 4	115.7 115.7	115°5 115°5	116.4	117.3	118.0	120.6	118.4 118.2	117.9 118.0
45 0	112.8 112.8	$114^{\circ}2$ $113^{\circ}4$	114.2	116.2	115.8	116.2	117.3	118.4	119.6	118.4	118.4
50 0 55 0	113.4	113.4	114.4	115.8	116.0	116.8	117.4	118:4	119.4	118.5	118.2
74 C	One S	cale Divisio	on = .0000	87 parts of	the H.F.				Horizon	AL FORCE	•
M. S.	642.4	645.0	640.2	631.9	636.0	636.0	636.1	636.9	637.0	639.0	638.5
$egin{array}{ccc} 2 & 0 \ 7 & 0 \end{array}$	642 4	643.2	639.8	632.5	636.0	635.0	636.3	637.0	637.1	638.2	638.5
12 0	646.4	642.1	640.0	632.0	636.0	635.0	637.0	637.0	638.0	638 0	638.0
17 0	647.1	642.0	639.8	633.0	636.0	636.0	637.0	637.0	639*2	637.8	638.0
22 0	649.8	643'0	638.8	633'1	636.0	637.0	636.0	636.0	639.6	638'0	638.0
27 0	649.5	642.8	639.2	634.0	636.8	636.5	636.0	635.9	639.6	637.8	638.0
32 0	650.0	642.0	638.6	633.4	636.2	636.0	636.0	636.0	639.4	637.8	637.8
37 0	650.0	641.8	637.8	634.0	636.0	636.3	636.2	636.0	640.0	638.0	638.0
42 0	647°8 646°8	$641.4 \\ 641.2$	634°4 635°0	634°0 634°1	636°0	636.8	635°8 635°6	636.0	640.6	638°2 638°3	638.0
47 0 52 0	645.0	642.2	633.2	635.0	635.0	636.8	635.5	636.4	641.0	638.0	638.0 638.0
57 0	644.8	641.0	632.8	636.0	636.0	637.2	635.2	636.2	640.5	638.2	640.0
Thermometer	51°.7	5 <b>1°</b> 9	52.2	52°·0	5η5	5ΰ0	50°·5	49.9	49°0	48.9	48.3
M. S.	One S	cale Divisio	n='00006	3 parts of	the V. F.				VERTICAL	FORCE.	
3 0	172.1	172.5	173.5	174.5	170.4	169.2	168.8	169.6	169.8	169.7	171.3
8 0	171.8	172.8	173.7	173.9	170.4	169 2	168.8	169.6	169.8	169.7	171.3
13 0	171.7	172.8	174.6	173.7	170.4	169°2	168.8	169.6	169.4	169.7	171.3
18 0	171.7	173.0	173.8	173.4	170.4	169.2	168.8	169.6	169.4	169.7	171.3
23  0	171.7	173.0	173.9	172.8	170.4	169.2	168.8	169.6	169.4	170.5	171.3
28 0	171.7	172.9	173.9	172.3	170.4	169.2	168.8	169.6	169'4	170.5	171.3
33 0	172.8 172.8	$172.9 \\ 173.3$	173.8 173.6	172.0 $172.0$	170°4 169°6	168.6 168.6	168.8 168.8	169'6	169.4	170.5	171.5
38 0 43 0	171.6	173 3	173.4	172.0	169.6	168.6	168.8	169.6 169.8	169°1	170.6 170.7	171.9 171.9
48 0	171.6	173.7	173.2	171.8	169.6	168.6	168.8	169 8	169.1	170.9	171.9
53 0	$172 \cdot 3$	173.7	173.2	171.0	169.6	168.6	168.8	169.8	169.1	171.3	171.9
58 0	172.7	173.0	173.8	171.0	169'6	168.6	168.8	169.8	169.1	171.3	171.9
Thermometer	50°2	50.8	51.0	5η2	52°2	52.2	51°7	51.0	50°2	50.0	49.5
							Increasing	Numbers der	note decreas	ing Westerly	Declination
			ME	reorolo	GICAL C	BSERVAT	IONS.				··
Mean Göttingen Time.	Barometer	·	rmometers.		Win		_		Weath	er.	
Time.	at 52 .	Dry.	Wet.	Direc	tion.	Force.	`-		·		·
D. н. м. 19 10 0	In. 30.028	90.0	0	903	W T	7					
19 10 0	30.028			S.S. S.S.		ery light. ery light.		lear all day.			
12 0	30.013	38.6		S.V		ery light.	Quite	lear all day. lear all day.			
13 0	30.011	35.9			.   '	~, <u>~</u>	Calm.	car an day.			
14 0	30.011	33.0	29.4		.		Calm.				
15 0	30.012	34.2	30.4	_		_	Calm.				
	30.011	31.2					Calm.				
16 0	30.002						Calm.				
16 0 17 0	001001			I	1		Calm.				
16 0 17 0 18 0	30.004				•						
16 0 17 0 18 0 19 0	29.990	25.9	24.7	_		_	Calm.				
16 0 17 0 18 0		25°9 25°0	24.7			Ξ					

<sup>&</sup>lt;sup>a</sup> At 20<sup>d</sup> 10<sup>h</sup>, Thermometer of H. F., 54° · 0; of V. F., 53° · 0.

					MAGNET	ICAL C	BSERVATIO	NS.				April 19th a	and 20th.
		DECLINATI	ON.						Ang	ular Value	of one Scale	Division =	0' 721.
21h.	22h.	23h.	, Oh.	1h.	2h.	3h.	4 <sup>h</sup> .	5 <sup>1</sup>	ı.	6h.	7 <sup>h</sup> .	8h.	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div. 121 4	Sc. Div. 122.6	Sc. Div. 122 4	Sc. Div 122 7	Sc. Div.	Sc. E		Sc. Div.	Sc. Div.	Sc. Div. 107 2	Sc. Div. 108'3
118.4	119.2	118.4	121.4	122.4	123.2	122.4	120.4	116		113.5	109.2	107.4	108.5
118.2	119.4	119.0	121.2	122.4	123.4	122.4		116		112.9	108.6	107.2	108.4
118.2	118.7	119.3	121.6	122.4	123.6	121.7		116		113.7	108.6	107.0	108.6
118.4	117.6	119.2	121.6	122.4	123.4	121.7		115		112.4	108.2	107.2	108.4
118.4	117.0	120.4	121.6	122.4	123.4	121.8		114		112.5	107.6	107.0	108.4
118.4	116.4	120.6	121.6	122.4	123 4	122.1		114		112.0	107.4	107.4	108.4
118.6	116.4	121.5	121.6	122.4	123.4	121.6		114		111.6	107.6	107.4	108.6
119.2	116.9	121.5	122.4	122.4	123.5	121.5		113		110.6	107.6	107.4	109.6
118.8	117.4	121.4	122.2	122.2	123.4	121.4		113		110.5	107.4	107.6	108.8
118 6	117.6	121.6	122.5	122.2	123.4	121.4		114		110.4	107.4	107.7	109.4
118 6	117.6	121.6	122.6	122.0	123.0	121.0		114		110.5	107.4	108.0	109.4
	<del>!</del>	Horizonta	L Force.	· · · · · · · · · · · · · · · · · · ·	I	ncrease, i	n Scale Divisio	ons, cor	respo	onding to 1°	decrease of	Temperatur	e, 1.63.
69010	637.0	642.0	643.0	641.5	638.2	630.0		618		624.0	622.0	628.0	634.0
639.0	638.0	643.0	643.0	641.2	636.8	628.4		618		623.0	622.6	627.0	636.0
	638.0	642.0	643.7	642 2	636 8	628.0		620		624.0	623.0	630.0	635.0
639.0	639.4	643.0	643.5	641.2	636.2	627 1		620		625.0	623.2	631.5	635.0
	639.0	642.5	642.5	641.2	635.0	627 8		622		626.0	622.0	631.8	636.0
639.0	637.5	642.2	643.5	640.8	634.4	627.7		621		625 0	623.0	628.1	639.0
638 9 638 5	637.5	642.2	642.0	640.2	633.8	626.0		620		625 0	626.8	628.5	642.5
	638.0	644.0	642.5	640.0	633 2	625.9		620		626.0	627.7	630.0	644.0
638.0	638.2	642.0	643.0	639.2	632.8	625		621		626.0	627.7	628.7	643.2
638.0	639.2	643.0		639.2	631.4	625 0		623		625.0	625.0	628.5	641.0
638.0			643.0		631.2			623		626.5	627.0	629.0	638.2
638°1 638°1	641.0	643.2	642.0 642.0	639°2 639°2	629.8	624.8		626		625.5	629.0	631.9	639.0
48.1	47.8	4 <sup>°</sup> 7.5	47°4	48.0	49°2	49°8	50.3	5Î	.0	5 <b>1</b> °4	5 <u>1</u> .8	52°4	53°0°
		VERTICAL	Force.		1	ncrease,	in Scale Divisio	ons, cor	respo	onding to 1°	decrease of	Temperatur	e, 1°64.
171 9,	171 3	172.5	175.4	173.9	171.3	169.9	170°1	169	0	169.5	169.9	169.5	169.6
171 9	171.9	172.9	175.4	173.8	171.5	169.9		169		169.4	169.9	169.5	169'6
171 9	171 9	172.9	175.4	173.8	171.5	169.9	169*5	169		169.4	169.9	169.5	169.6
171.9	171'9	172.9	175.4	173.4	170.6	170.8		169	.0	169.4	169.9	169.5	169.6
171.9	171.9	172.9	175.4	173.4	170.4	170.1	169.8	169	•2	169.4	169.7	169.5	169.5
171 4	171.9	172.9	175.4	173.4	170.6	170.1		169		169.4	169.7	168.9	169.5
171.4	172.5	173.3	174.8	173.4	170.6	170.1		169		169.7	169.9	168.9	169.5
171.4	172.5	173.3	174.8	173.4	170.6	170.1		169		169.7	169.9	168.9	170.1
171 3	172.5	173.3	174.8	171.9	170.4	170.1		169		169.7	169'5	168.9	170.1
171 3	172.5	173.5	174.5	171.9	170.6	170'1		169		169.7	169.5	168.9	169.6
171.3	172.5	175.0	174.5	171.9	169.9	170.1		169		170.2	169.5	168.9	169.6
171.3	172.5	175.4	174.2	172'1	169.9	170.1	169.8	169	5	170.2	169.5	169.6	169.6
49.5	49°5	49.3	48.5	48°6	49°8	50°2	50°4	50°	.7	5 <b>1°</b> 0	5 <b>1°</b> ·4	51.8	52°3°a
and increa	sing Horizo	ntal and Ver	tical Force.										
		······································		ME'.	reorolo	GICAL	OBSERVAT	ions.					
Mean C	öttingen	Barometer	Ther	nometers.		w	ind.				Weat	ha <del>r</del> .	
	me.	at 32°.	Dry.	Wet.	Direc	etion.	Force.				w eac	1011	
D. E	T W	7		-									
1		In.	0010	0		ł			~ •		Ł		
19 2		29.980	26.3	24.1	-				Calm		*		
20		29.966	25.0	23.6	-	[	_	,	Calm.				
	0 0	29.976	27.6	25.4	-	-	_		Calm.				i
	$\begin{bmatrix} 1 & 0 \\ 0 & 0 \end{bmatrix}$	29.974	31.8	28.2	-	-			Calm.				
ľ	$\begin{array}{c c} 2 & 0 \\ \end{array}$	29.973	39.1	31.9	-	-		1	Calm.				
1 '	3 0	29.955	41.0	35'1	$\frac{1}{s}$	- 1		. [ ]	Calm.				
	4 0	29.935	42.5	36.7		.	Very light	ī. (		all day.			
	5 0	29.904	43.8	38.1	S		Very light	t. (		all day.			
	6 0	29.848	46.9	41.5	S. b.		Very light	t.   (		all day.			
	7 0	29.812	47'9	40.9	S.S	.E.	Very light			all day.			
	8 0	29.776	49.1	43 8	S.S		Very light			all day.			
	9 0	29.730	50.4	44.7	S	.	Moderate	. [	Clear	•			
L.						1							

May 26th and 2'	7th.			MAGNETIC	CAL OBS	ERVAT	TIONS.				
Mean Göttingen	Angula	ar Value of	one Scale I	Division = 0'	·721.			n	DECLINAT	YON.	
Time.	10h.	11b.	12h.	13h.	14h.	15h.	. 16h.	17 <sup>h</sup> .	18h.	19 <sup>h</sup> .	20 <sup>h</sup> .
M. s. 0 0 0 5 0 10 0 15 0 20 0 25 0 30 0 35 0 40 0 45 0 55 0	sc. Div. 111'4 111'5 111'6 112'2 112'4 112'5 112'8 112'9 113'2 113'2 113'3 113'4	sc. Div. 113.4 113.4 113.4 113.4 113.5 113.5 113.4 113.5 113.6 113.6 114.3	Sc. Div. 114'4 114'4 114'4 114'4 114'4 114'0 114'2 114'4 114'4 114'4 114'4	114.5 114.6 114.4 114.2 113.5 113.4 113.2 112.4	Sc. Div. 112 '4 112 '4 112 '4 112 '4 112 '4 112 '4 112 '4 112 '6 112 '6 112 '2 112 '4 113 '4 113 '4	Sc. Di 112 7 112 6 112 6 113 4 114 4 113 8 112 6 114 4 115 6 116 4	7   118'4 4   120'3 5   120'3 6   119'6 4   119'4 4   118'4 4   118'0 8   116'2 5   115'4 4   115'2 6   115'4	Sc. Div. 114'2 114'2 114'2 114'4 114'4 114'4 114'5 114'5 114'4 112'6	sc. Div. 115 2 112 4 111 2 107 8 107 2 109 8 112 2 113 2 113 2 113 2 115 3	sc. Div. 117 *8 120 *2 122 *0 121 *8 121 *4 120 *6 122 *5 124 *9 126 *5 126 *2 125 *5 126 *2	sc. Div. 122 '3 125 '5 128 '7 130 '6 129 '4 133 '5 130 '3 127 '5 127 '1 125 '4 126 '1 127 '6
м. s.	One So	ale Divisio	n = .0000	087 parts of the	he H. F.				Horizon	TAL FORCE	•
2 0 7 0 12 0 17 0 22 0 27 0 32 0 37 0 42 0 47 0 52 0 57 0	621.0 621.0 619.0 620.0 619.0 619.0 618.5 618.0 617.0 617.0 616.5	619.0 620.0 620.5 620.5 619.5 618.5 618.8 619.0 618.4 619.0 618.0 619.0	619.0 618.8 618.8 618.3 618.0 619.0 619.5 620.0 620.0 620.0 617.0	615.0 615.0 614.0 614.0 614.0 615.0 616.0 616.0	617.2 619.0 619.5 619.0 617.5 616.0 616.0 618.0 619.8 623.0 622.0 620.0	619 0 620 2 620 9 621 0 621 0 623 8 621 8 619 9 617 8 614 0 611 0	607.2 608.0 607.2 607.2 607.0 607.2 607.0 608.2 610.2 612.4	613·2 614·0 615·0 614·8 617·6 619·0 619·2 620·4 629·7 632·2 632·0 632·4	634·5 629·3 626·8 625·4 617·2 612·8 609·5 605·4 601·2 597·5 597·2 598·2	597.8 598.2 598.4 600.0 598.2 597.1 596.3 594.8 596.0 593.0 591.1 587.0	585.0 587.0 585.0 580.0 582.6 577.0 578.8 582.1 590.0 594.0 599.2 602.6
Thermometer	70°4	70°3	70°3	69.0	68°1	6 <b>7</b> .8	67°2	66°6	65.7	65.2	64.5
M. s.	One Sc	ale Division	= .0000	063 parts of th	e V. F.				VERTICAL	Force.	
3 0 8 0 13 0 18 0 23 0 28 0 33 0 38 0 43 0 48 0 53 0 58 0	138.0 138.2 138.2 138.0 138.0 138.0 138.0 138.2 138.2 138.2 138.2 138.2	138.2 138.2 138.2 138.2 138.0 138.0 138.0 138.0 138.0 138.0 138.0	138.0 138.0 137.8 137.8 137.8 137.8 137.8 138.0 138.0 138.0 138.0	138.0 138.0 138.0 138.0 138.0 136.9 136.9 136.9 135.9	135:3 135:3 135:3 134:3 134:3 134:0 134:0 134:0 134:0 134:0 134:0 134:0	133.7 133.7 133.7 133.7 133.7 134.9 135.5 135.5 136.1 136.1	138.0 138.0 138.0 138.0 137.4 137.1 137.1 137.1 138.0 138.0	139.3 139.3 139.6 139.6 139.1 138.7 136.5 131.9 131.4 130.8 129.4 129.1	122.4 121.8 121.8 121.6 121.2 121.0 120.0 120.0 119.4 119.4 119.5	119.0 119.0 119.2 119.0 118.9 118.8 118.4 118.0 118.0 117.8 117.8 117.8	117.1 116.8 117.8 119.5 120.6 118.4 119.8 123.3 127.4 129.6 133.0 134.3
Thermometer	67°3	67°6	67.7	67.5	68°5	69°0	68°5	6 <sup>°</sup> .4	67.0	66°1	65°5
							Increasing 1	Numbers de	note decreas	ing Westerl	y Declination
			МІ	ETEOROLOG	ICAL O	BSERV	ATIONS.				
Mean Göttingen Time.	Barometer at 32°.	Therr	wet.	Direction.	Vind.	ce.			Weather.		
D. H. M.  26 10 0  11 0  12 0  13 0  14 0  15 0  16 0  17 0  18 0  19 0  20 0  21 0	In. 29.660 29.674 29.678 29.694 29.706 29.725 29.737 29.767 29.768 29.782	63 · 9 64 · 6 64 · 4 60 · 3 55 · 0 53 · 4 52 · 0 49 · 9 49 · 1 48 · 7 47 · 1 47 · 8	53.0 53.6 53.0 51.3 48.5 46.6 45.5 44.6 44.3 44.1 43.3 43.2	N. N. by E. N. by W. N. by W. N.N.W. N.N.W. N. by W. N.N.W. N. by W. N.N.W. N. by W. N.N.W. N. by E.	Mode Lig Lig Very Very Very Very Very Very Very Very	ht. ht. light. light. light. light. light. light. light.	Mostly clear; Mostly clear. Mostly clear. Mostly clear. Mostly clear. Clear. Clear. Clear. Clear. Clear. Clear.	auroral lig	ht in N, fron	m 18h to 21 <sup>h</sup>	•

<sup>&</sup>lt;sup>a</sup> At 27a 10h, Thermometer of H. F., 68° '5; of V. F., 67° '0.

1					I	MAGNET	ICAL C	BSERVATIO	NS.			May 26th	and 27th.
-			DECLINATI	ON.				,	Ang	ular Value o	f one Scale	Division =	0'.721.
-	21h.	22h.	23h.	Oh.	1h.	2h.	3h.	4h.	5 <sup>h</sup> .	6h.	7 <sup>h</sup> .	8h.	9h.
	Sc. Div. 128 '4 129 '2 129 '5 131 '0 131 '2 128 '4	Sc. Div. 121 '9 122 '8 122 '5 121 '5 120 '6 119 '4	sc. Div. 125 '8 125 '8 126 '0 124 '0 124 '2 124 '8	sc. Div. 129 2 130 0 130 4 131 0 130 0 129 4	125 <b>'</b> 9 129 <b>'</b> 4 128 <b>'</b> 5	Sc. Div. 111'6 111'0 114'4 110'4 110'2 114'2	Sc. Div 115 2 115 4 115 4 116 4 114 2 111 5	2   109°9 4   106°4 4   109°2 4   111°5 2   113°5	sc. Div. 109 2 108 4 109 8 109 6 111 4 111 8	sc. Div. 107 3 107 4 108 8 107 6 108 2 107 2	sc. Div. 105 '3 105 '4 106 '5 105 '4 105 '2 103 '3	Sc. Div. 103 2 103 3 103 7 103 4 103 4 105 4	Sc. Div. 106 8 106 7 107 2 107 0 107 2 108 0
	126 4 126 5 127 3 126 3 123 3 125 2 122 6	120 · 4 120 · 4 121 · 2 123 · 4 123 · 6 124 · 2	123 · 4 125 · 4 126 · 4 127 · 4 128 · 2 129 · 2	128 · 2 128 · 4 127 · 7 127 · 8 127 · 6 126 · 5	117.6 118.2 117.4 117.4 115.6	115.4 117.4 117.4 116.6 115.8 115.1	111 · 4 113 · 4 113 · 4 114 · 5 115 · 4 114 · 2	111.3 107.0 106.4 107.4 105.2	112 · 2 111 · 4 109 · 3 108 · 4 106 · 8 106 · 4	108 · 2 107 · 4 106 · 0 105 · 8 106 · 3 105 · 3	102 · 2 102 · 2 103 · 0 103 · 4 102 · 4 102 · 4	106.1 106.5 107.0 107.9 107.0 106.8	108 0 107 5 108 4 108 7 109 0 109 8 109 4
		]	Horizonta	L Force.		Iı	ncrease, i	in Scale Divisio	ns, correspo	onding to 1°	decrease of	Temperatui	re, 1.63.
	603.7 603.4 601.0 601.1 604.0 604.2 606.0 609.0 609.0 611.0 615.0 618.0	616.8 615.6 617.0 612.0 615.0 614.0 614.4 615.0 615.0 618.2 620.4 620.8	616.0 615.0 615.0 616.0 616.2 616.0 614.0 613.8 620.0 620.0 620.0 618.0	617.0 616.0 615.0 615.0 611.6 610.0 613.0 610.0 609.0 606.2 606.8 607.0	604.0 601.2 600.5 600.5 598.5 590.0 591.0	588 5 597 0 600 0 599 5 600 0 597 5 594 0 594 5 593 5 594 5 594 0 594 0	597.0 593.0 593.0 595.2 598.0 591.0 594.0 596.0 591.0 588.2 585.0 586.0	587.2 584.0 588.0 587.2 588.5 590.0 594.0 597.0 603.4 603.2	598.5 602.2 604.2 601.6 605.5 602.2 601.2 604.0 598.8 600.2 599.0 601.2	602.0 598.2 605.8 612.6 612.5 613.1 612.8 610.0 617.2 616.7 618.0 616.0	616.9 617.0 622.5 622.1 620.8 622.4 613.1 612.0 611.8 609.0 609.0 608.8	614'0 615'0 616'0 616'5 616'0 624'0 626'0 620'0 621'0 624'0 625'0	627·2 630·0 636·0 635·0 630·0 622·0 628·8 632·0 634·0 634·0
	63.9	63.2	63°0	62.2	62°·8	63°5	64.2	65°1	65.8	66.1	66°5	67.0	68.0 a
	<del>1 - 1 - 1 - 1 - 1</del>		VERTICAL	Force.		I	ncrease,	in Scale Divisio	ons, correspo	onding to 1°	decrease of	Temperatur	e, 1°64.
	133 · 5 132 · 4 132 · 4 133 · 7 134 · 7 136 · 2 137 · 6 138 · 2 139 · 0 140 · 8 141 · 5 143 · 0	143.7 143.4 143.4 143.4 143.4 143.4 143.6 143.6 143.6 143.1 143.1	143°1 143°1 143°2 145°5 145°5 145°7 145°7 145°7 145°9 145°9 145°9 142°8	142 · 8 142 · 8 142 · 8 142 · 8 142 · 8 142 · 8 143 · 5 143 · 5 143 · 5 143 · 5	140 2 140 2 140 2 140 2 139 2 136 4 136 4 136 5 136 5	137 1 137 1 137 1 137 1 137 1 136 8 136 8 136 8 136 8 136 8 136 8 136 8	138.6 138.3 139.3 140.6 139.3 139.3 139.3 138.8 138.8	3	140.0 141.7 141.7 141.7 142.3 142.3 141.5 141.4 140.9 141.6 142.2 142.2	142.7 142.2 143.1 143.7 144.6 145.2 145.2 145.2 146.0 146.0 146.0	147.2 147.2 148.5 148.5 149.3 149.3 148.7 148.7 148.8 148.8 148.8	149.5 149.2 149.2 149.2 149.7 149.9 149.9 149.9 149.9 148.2 148.2 148.2	148·2 148·2 148·2 148·2 148·4 147·3 147·1 146·9 146·9 146·9
	6 <b>4</b> .6	64.0	63.2	63°5	63.2	63°6	64.4	4 64.5	64.9	65.3	65.5	65.5	66°5 a
	and increa	sing Horizo	ontal and Ver	tical Force.						w.u.z			
					ME	reorolo		OBSERVAT	ions.				
	Mean G		Barometer at 32°.	Therr	wet.	Direc		ind. Force.	_		Weathe	er.	
e de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la constante de la consta	26 22 27 (1	3 0 0 0 1 0 0 1 0 0 0 0 1 0 0 0 0 0 0 0	In. 29.795 29.829 29.850 29.850 29.857 29.831 29.822 29.795 29.773 29.757	47.0 47.0 50.8 52.8 58.2 61.5 62.3 62.4 62.2 64.9 66.3 66.0	\$\\\ 42.8\$\\\ 42.9\$\\\ 47.1\$\\\ 48.7\$\\\ 52.8\$\\\ 55.4\$\\\ 55.8\$\\\ 56.5\$\\\ 56.3\$\\\ 57.6\$\\\ 58.0\$\\\ 56.2\$\\	N. b N. b N. S. S. S. by S. by E. by	y E.	Very light. Very light.  Very light. Very light. Very light. Very light. Very light.	Clear. Calm. Calm. Calm. Calm. Calm. Clear. Clear. Clear. Clear. Clear.				

June 21st and 22nd	d.		Λ	/AGNETI	CAL OF	SERVATION	NS.		<del></del>	A Marie Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of th	:
1		. Value of	one Scale I						Declinati	ON.	
Mean Göttingen Time.	10h.	11h.	12h.	13h.	14h.	15h.	16 <sup>h</sup> .	17h.	18h.	19 <sup>h</sup> .	20h.
M. s. 0 0 5 0 10 0 15 0 20 0 25 0 30 0 35 0 40 0 45 0 50 0 55 0	112.2 117.4 117.4 115.5 114.4 113.2 113.0 110.8 109.4 109.4	Sc. Div.   109 2   112 6   112 5   113 5   113 5   113 6   113 6   113 4   113 4   113 6	Sc. Div. 113 '4 113 '4 114 '0 113 '8 114 '4 114 '0 114 '4 115 '0 115 '4 115 '0 113 '8	sc. Div. 113 '2 113 '4 113 '6 115 '4 115 '7 116 '0 116 '0 112 '4 111 '5 111 '4 112 '4 112 '0	Sc. Div. 111 ' 4 111 ' 8 110 ' 4 113 ' 2 113 ' 5 112 ' 4 112 ' 4 112 ' 4 112 ' 6 113 ' 3 115 ' 4	Sc. Div. 116 '0 115 '5 116 '0 115 '5 116 '0 116 '7 117 '0 114 '2 114 '4 116 '0 117 '8 118 '4 118 '0 116 '7	15c. Div. 116·0 119·4 121·6 121·4 120·2 119·3 117·6 117·4 116·6 117·4 117·0 117·4	Sc. Div. 117.4 117.6 118.4 118.6 117.0 118.4 119.6 119.6 118.4 119.6 118.5 119.2	Sc. Div. 121'4 122'4 124'9 126'5 124'0 118'6 118'4 121'4 125'5 127'0 126'4 122'2	Sc. Div. 122 ' 4 121 ' 6 123 ' 0 123 ' 4 126 ' 4 127 ' 4 139 ' 9 130 ' 4 134 ' 0 135 ' 2 134 ' 2 131 ' 7	Sc. Div. 126 5 124 6 124 4 119 9 119 3 118 4 118 2 119 5 118 8 119 4 119 2 120 1
			on = .0000		1		<u> </u>	1	<u> </u>	AL FORCE.	
M. s.  2 0  7 0  12 0  17 0  22 0  27 0  32 0  37 0  42 0  47 0  52 0  57 0	625.4 614.4	624·2 623·2 614·2 599·2 598·0 597·0 593·2 596·4 597·4 595·0 601·2 602·2	601·2 600·2 599·0 597·0 605·0 610·5 614·0 616·0 615·0 618·2 621·2 613·4	613 0 617 0 616 0 618 0 618 2 611 5 613 0 618 2 614 8 613 0 611 0	607°0 612°0 610°0 609°2 610°0 610°2 610°2 606°0 605°8 606°4 602°0 602°0	602·2 603·2 604·0 607·0 607·4 609·0 608·8 605·0 603·2 607·0 607·2	602.0 602.0 600.0 600.0 599.0 599.0 599.0 599.0 599.0 599.0 601.0	599.4 601.0 601.0 600.5 599.0 599.0 600.0 601.2 601.0 599.0 600.5	602'0 601'5 603'5 602'0 602'8 604'0 602'0 602'0 600'5 601'0 603'0 603'0	604·2 607·5 608·0 606·0 600·0 605·5 608·7 602·0 600·0 599·0 599·0 604·0	609.9 603.0 600.0 596.0 594.0 590.0 592.0 597.1 599.5 601.0 601.0 602.0
Thermometer	71.8	72.4	72°6	72°·2	71.5	7η3	70°4	69.6	69°5	69.8	68.6
	One S	Scale Divisi	on = '000	063 parts	of the V.	F.	<del></del>		VERTICAL	Force.	
M. s.  3 0 8 0 13 0 18 0 23 0 28 0 33 0 38 0 43 0 48 0 53 0 58 0	138 1 138 1 138 1 137 1 135 1 135 9 133 9 133 6 133 2 133 8 136 3	137·2 135·9 133·4 133·4 133·5 133·1 133·1 133·1 133·1 133·1 133·1 133·1	130·7 130·7 129·4 129·4 129·0 132·1 132·1 132·1 132·7 132·7 131·7	132·1 132·7 132·7 132·7 132·7 132·7 132·7 133·0 133·0 133·0 133·2	133.2 133.7 133.7 133.7 133.7 133.7 133.2 133.2 132.9 132.9	131.3 131.3 131.4	127·4 127·7 127·8 127·8 128·6 128·6 128·9 128·9 129·6 129·6 129·6	127 '9 127 '9 127 '9 127 '7 127 '7 127 '7 127 '9 127 '9 127 '8 127 '8 127 '8 127 '8	119 8 119 8 119 8 119 8 119 8 123 0 123 3 125 0 125 0 125 0 125 0 124 0	124.0 124.0 124.0 122.7 122.7 121.5 119.6 119.6 119.0 118.5 119.0 121.5	123.6 124.0 124.2 124.2 122.6 120.5 121.3 121.3 121.3 121.2 119.0 118.2
Thermometer	70°6	71°3	71°3	71°3	70°5	70°8	70°8	70°5	70°5	70°5	7°00
	<u> </u>						Increasing	Numbers de	enote decreas	sing Westerl	y Declination,
			ME	TEOROL	OGICAL	OBSERVAT	TIONS.		· · · · · · · · · · · · · · · · · · ·		
Mean Göttingen Time.	Barometer at 32°.	Ther	mometers.	Dire	Winection.	Force.			Weath	er.	
D. H. M. 21 10 0 11 0 12 0 13 0 14 0 15 0 16 0 17 0 18 0 19 0 20 0 21 0	In. 29 '400 29 '401 29 '423 29 '457 29 '460 29 '470 29 '463 29 '442 29 '449 29 '445 29 '475 29 '482	71.5 70.6 69.8 67.3 63.1 62.5 57.3 55.2 52.8 53.2 53.4	61.1 58.9 58.2 55.6 55.0 53.6 52.5 50.8 50.8	W.1 W.1 W.3	N.W. N.W. N.W. N.W. N.W.	Very light Very light Light Light Very light — — — — — —	Mostly Mostly Cloude	clouded; a clouded; a l. d. d. d. d. d. d. d. d. d. d. d. d. d.	-cum, and cu few clear sp few clear sp	aces.	ew clear space

 $<sup>^</sup>a$  At 22d 10b, Thermometer of H. F., 72° '3; of V. F., 71° '0.

				Λ	MAGNET	ICAL	OBS	ERVATIO	NS.			June 21st a	nd 22nd.
		DECLINATIO	n.						Ang	gular Value	of one Scale	Division =	:0'.721.
21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	O <sup>h</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	31	h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .
Sc. Div. 121 '3 124 '0 125 '4 127 '4 126 '6 125 '4 122 '4 117 '3 109 '8 104 '5 102 '3	Sc. Div. 108 '8 114 '4 118 '4 122 '4 126 '4 126 '6 125 '4 125 '5 122 '4 120 '0 120 '0 121 '8	135.0 133.4 131.4 122.4 120.4 118.8	Sc. Div. 117 '4 121 '8 118 '8 123 '0 122 '2 125 '0 128 '4 126 '4 125 '0 124 '6 126 '4	124.9 124.8 123.4 123.4 127.0 125.6 124.0 122.0 124.6 123.0	sc. Div. 126 '4 127 '6 127 '4 128 '4 126 '4 123 '4 124 '7 121 '4 122 '4 120 '0 123 '4	sc. 1 125 124 124 121 117 116 115 118 120 122 123	· 0 · 7 · 0 · 6 · 4 · 2 · 3 · 9 · 5 · 8 · 2 · 6	sc. Div. 123 ° 0 122 ° 6 121 ° 4 119 ° 3 114 ° 4 115 ° 0 112 ° 6 114 ° 8 114 ° 4 113 ° 4 112 ° 2 111 ° 6	Sc. Div. 112.6 115.6 116.6 117.4 117.8 117.5 118.2 120.0 119.4 119.0 117.4 116.6	Sc. Div. 114.9 115.2 115.6 114.4 112.4 107.4 104.8 104.5 105.4 105.2 104.6 105.4	Sc. Div. 106 · 2 106 · 4 106 · 7 106 · 5 106 · 5 107 · 6 107 · 6 107 · 6 107 · 3 106 · 4 105 · 8 106 · 4	Sc. Div. 106.4 107.0 107.4 107.4 107.7 108.4 108.9 109.5 110.3 110.5 111.3	sc. Div. 111.5 112.6 114.6 114.6 115.6 117.4 118.4 118.4 115.5 115.5
·		<del></del>		·		T	1		ons, correspo	1		1	
600 ' 9 595 ' 0 590 ' 0 588 ' 9 585 ' 0 587 ' 5 590 ' 0 591 ' 0 609 ' 0 612 ' 2	609.0 610.0 614.0 615.4 609.0 606.0 599.8 591.4 593.5 595.0 599.5 603.4	603 · 2 608 · 7 602 · 2 596 · 4 598 · 0 597 · 5 596 · 0 593 · 8 598 · 8 601 · 2 603 · 0 603 · 2	605 5 608 4 604 5 599 2 598 8 594 3 594 0 592 8 591 0 588 7 588 8 589 0	592'2 590'0 596'8 602'0 605'0 608'5 610'0	604.5 601.0 598.0 598.8 597.0 596.8 604.2 605.4 602.0 604.2 601.0 603.0	598 598 599 597 594 594 594 595 593 587 585	· 8 · 0 · 2 · 5 · 0 · 2 · 0 · 0 · 0 · 0 · 0 · 0 · 0 · 0 · 0 · 0	580.0 579.0 579.5 577.5 586.0 582.0 574.0 581.0 585.0 585.0 583.0 583.5	585.0 584.5 579.0 580.0 583.0 584.0 579.0 571.0 571.0 571.0	587.0 586.0 580.0 571.0 570.0 575.0 565.0 569.0 574.0 581.5 588.0 594.0	602·1 606·5 605·1 607·2 611·1 606·0 607·0 601·0 601·0 601·0	604'0 611'0 616'0 623'0 626'0 628'1 630'6 632'0 635'0 638'0 638'1 641'1	643.0 640.0 645.0 645.0 642.0 652.0 650.0 661.2 660.0 655.0
68°5	68.0	67.8	67.4	67°0	67.5	68		69°4	70°0	70.5	71°4	7η7	72.2 *
		VERTICAL ]							ons, correspo		· · · · · · · · · · · · · · · · · · ·		
114'8 112'8 111'8 111'8 111'8 113'6 112'6 112'0 111'0 108'9 108'9	105.4 105.4 105.4 107.0 106.1 106.1 109.0 108.5 108.5 109.0 110.0	116.4 118.3 118.9 118.9 120.0 121.0 122.9 123.7 124.0	128 ' 4 129 ' 2 129 ' 2 128 ' 9 130 ' 7 128 ' 4 128 ' 4 131 ' 9 132 ' 0 131 ' 9 131 ' 9 132 ' 7	133'3 133'3 133'3 135'1 135'1 135'1 134'8 134'8 136'6 136'6	136 ' 7 136 ' 7 136 ' 5 136 ' 5 136 ' 5 136 ' 5 136 ' 7 136 ' 7 136 ' 7 136 ' 1 136 ' 1 136 ' 1	134' 134' 134' 132' 134' 133' 132' 132' 132' 131'	5 5 5 2 8 6 0 9 0	131.5 131.5 133.0 133.0 133.5 132.5 132.5 132.5 132.5 132.5 132.5	132.6 132.6 132.9 132.9 132.9 133.2 133.2 133.2 133.2 134.1 136.0	136.0 136.0 136.0 136.0 136.8 137.3 137.3 137.3 137.3 137.3	139 · 2 139 · 2 139 · 2 139 · 2 140 · 5 140 · 5 140 · 5 140 · 5 140 · 8 140 · 8 141 · 2	141 · 2 141 · 2 140 · 8 142 · 4 142 · 4 142 · 4 142 · 4 143 · 8 143 · 8 145 · 0 145 · 0	146 1 146 9 148 8 148 8 150 2 151 5 151 0 150 6 150 9 150 9 150 9
69°5	69°4	68.3	67°3	67°3	6 <b>7</b> °7	68°	5	68°8	69°3	69°5	70°1	70°4	70°8 ª
and increas	sing Horizo	ntal and Vert	ical Force.	<del></del>			·····'						
	· · · · · · · · · · · · · · · · · · ·			MET	reorolo	GICA	L OF	SERVAT	IONS.				
Mean G	ottingen	Barometer	Ther	mometers.		Wi	ind.				Weather.		
D. H 21 2: 22 22 4	. м. 2 О	In. 29'496 29'489 29'498 29'510 29'496 29'505 29'495 29'494 29'494 29'494	Dry.  52.6 53.7 57.2 59.7 67.3 68.9 66.5 67.7 69.9 70.1	Wet.  51.0 52.1 54.8 56.4 62.2 64.0 62.7 62.9 63.7 64.9 63.6 63.4	S.S.1 S.E. by E. by E. E.	E. E. y E.	Ver Ver Ver Ver Ver	orce.  y light. y light. y light. y light. y light. y light. y light.	Mostly clou	ided; cum ided; cum ided. ided.	trat. and cir strat. and c	strat.; faint	auroral light.

July 19th and	20th.			MAGNETI	CAL OBSI	ERVATION			<u>-</u>		
Mean Göttingen	Ang	gular Value	of one Scale	division =	0′′721.			-	Declinati	on.	
Time.	10h.	11 <sup>h</sup> .	12h.	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div 112'4
0 0	109.4	112.2	115.8	114.4	114.5	118.2	127.5	120.6	117.6 116.4	114.6	112.4
5 0	108.6	114.4	116.0	114.4	114.5	118.7	126.4	120.4	115.4	114.4	112.4
10 0	108.8	113.4	116.4	113.6	115.0	118'4	125.4	121.0	114.4	114.4	113.3
15 0	109.4	114.0	116.6	113.6	114.8	118.0	124.4	120.4	113.8	114.2	113.4
20 0	109.8	114.5	116.4	113.4	115.2	118.2	122.6 121.4	120.4	114.3	114.3	113.4
25 O	110.6	115.0	116.4	113'8	115.2	119.6	120.0	120.4	114.9	113.4	113.2
30 O	111.8	115.4	116.2	113.8	115.4	124.8	119.4	120 4	115.4	113.3	113.5
35 0	112.2	113.8	116.0	113.9	115.4	125°0 129°4	119.6	121.6	115.4	112.5	112.7
40 0	112.2	113.4	115.4	114.5	115.4		119.6	122.6	115.4	112.1	112.7
45 0	112.4	113.8	115.4	114.8	115.4	129.4	119.4	$\frac{122}{122} \cdot \frac{0}{2}$	114.0	112.4	112.5
50 0	112.4	115.2	115.4	115.0	116.0	129.0 128.5	119.8	119.6	113.8	112.4	112.5
55 0	112.4	115.4	115.2	114.6	117.2	128 9	119 6	119 0	110 0	112 1	112
	One	e Scale Divis	sion = '00	0087 parts	of the H. F				Horizont	AL FORCE	•
M. S.		1		1	1	<u> </u>	T	1 20110		0010	500.1
2 0	601.8	609.8	594.2	596.8	598.0	600.0	599.0	594.0	590.2	602.0	598.1
7 0	605.4	607.2	593.8	596.0	598.5	598.0	597.5	594.5	589.0	603.1	597.8
12 0	609.2	602.2	593.8	596.2	599.0	597.8	596.0	595.0	591.0	601.8	597°0
17 O	609*8	601.4	594.6	596.2	599.0	598.0	596.8	595.0	592.2	601.0	598.0
22 0	607.8	603.2	597 8	597.8	599.2	598.2	596.5	593.5	593.0	600.0	598.0
27 0	612.2	602.8	596.2	598.0	599.4	596.8	595.1	591.5	595.0	600.0 600.8	597.5
32 O	613.5	601.4	595.0	598.0	599'4	598.0	593.3	589.5	596.2	599.2	597.2
37 O	610.5	600.2	595.0	598.1	600.0	599.0	592.0	588.0	598.0		597.1
42 0	609.8	597.6	593.2	596.8	600.1	599 2	591.8	587.0	597.5	599.0	598.0
47 0	610.0	597.4	592.4	596.6	600.2	601.0	592.2	588.2	598.9	598.8	598.5
52 0	610.2	598.4	594.2	596.0	596.8	601.2	592.6	589.0	600.0	599.0	598.2
57 0	609.8	597.2	594.2	598.0	596.2	600.0	593.0	589.0	601.0		<del></del>
Thermometer	76.2	76.2	76°2	75°5	75°2	74.4	7å°9	74.0	7å·8	73.7	73°5
м. s.	On	e Scale Divi	sion = '00	0063 parts	s of the V. F				VERTICAL	Force.	
3 0	126.9	128.0	123.8	124.0	122.5	121.4	118.7	119.6	120.0	120.8	121.7
8 0	126.9	128.0	$\frac{123.6}{123.6}$	123.4	122.5	121.7	117.7	119.6	120.0	120.8	121.7
13 0	127.4	126.7	123.4	123.5	122.5	121.7	117.3	119.7	120.0	120.4	121.7
18 0	127.7	126.6	123.4	123.5	122.5	121.7	117.3	119.6	120.0	120.4	121.7
23 0	127.7	126.6	123.4	123.5	122.5	121.8	117.2	119.6	120.0	120.4	121.7
28 0	129.7	126.6	123.4	123.2	122.5	121.8	117.7	119.3	120.0	121 5	122.8
33 0	129.7	126.7	124.8	123.5	122.5	121.8	117.9	119.3	119.9	121.5	122.8
38 0	128.9	126.5	124.8	123.2	121.4	121.8	119.3	118.6	120.0	121 5	122.8
43 0	128.0	126.2	124.8	123.2	121.4	121.8	119.3	118.4	120.5	121.5	122.8
48 0	128.0	125.7	124.8	123.3	121.4	119.0	119.3	118.4	120.5	121.7	122.8
53 0	128.0	125.6	124.0	123.3	121.4	118.7	119.5	118.4	120.5	121.7	122.8
58 0	128.0	125.6	124.0	122.8	121°4	118.7	119.6	118.4	120.8	121.7	122.4
Thermomete	74.5	75°1	75°0	74.6	74.5	74.7	75.0	74.6	74.5	74.5	74.5

					MAGNET	ICAL OBS	SERVATIO	NS.			July 19th	and 20th,
		DECLINAT	ion.					Ang	gular Value	of one Scale	e Division =	0' 721.
21 <sup>h</sup> .	22h.	23h.	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5h.	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div
12.5	115.6	119.2	120.0	120.8	123.4	Sc. Div. 120°2	117.9	112.0	107.4	105.4	106.4	Sc. Div. 108 2
12.4	116.2	119.2	120.0	121.8	124.0	120.0	117.0	111'5	107.2	105.4	106.7	108.4
113.3	116'2	119.4	120.2	122.8	123.2	118.6	117.3	110.8	107.0	105.4	107.3	108.4
113.4	116.4	119.4	120.2	122.4	122.4	118.8	117.2	110.4	105.4	105.6	107.4	108.8
113.6	116.8	119.4	120.4	122.4	122.4	118.4	116.2	110.3	105.0	105.3	107.4	108.6
114.3	117.0	119.5	120.4	121.5	121.6	118.6	114.8	109.4	105.6	105.4	107.3	109.3
114.3	117.2	119.8	120.6	122.4	121.6	118.9	114.4	109.3	106.4	105.6	107.4	108.8
114.4	117.4	119.8	120.2	122.4	121 5	119.4	114.2	109.2	106.5	105.7	107.4	109.0
114'8	117.6	120.0	119.8	122.4	121 6	117.8	114.2	108.8	105.8	105.7	107.5	109.0
115.4	118.0	120.2	119.8	122.0	121.4	118.4	113.6	108.4	105.4	105.8	107.5	109.3
115.4	118.4	120.4	119.8	122.4	120.9							
115.2		120 4	120.0	123.2		117.4	113.6	107.4	105.2	105.9	107.6	109'4
115°4	119.0	120 4	120 0	125 2	120.4	117.4	112.4	107.6	105.3	106.4	107.8	109.4
		Horizont	AL FORCE	•	]	Increase, in	Scale Divisi	ons, correspo	onding to 1°	decrease of	Temperatur	e, 1°63.
599.0	601.0	602.2	592.8	591.2	592.0	588.8	588.2	580.0	583.8	593.0	596.0	601.0
599.5	602.0	601.4	593.6	590.2	588.4	589.0	586.0	578.5	581.8			
					500.0	509 0				594.0	595.0	601.0
599'8	601.2	601.2	593.8	590.0	588.0	588.7	585.0	578.6	583.0	594.0	597.0	600.0
599'0	601.4	600.8	591.2	591.0	588.2	588.5	585.0	578.5	582.2	592.5	598.0	598.2
598.5	602.3	597.6	591.6	590.0	591.0	589.0	584.0	578.4	588.0	592.8	598.0	597.0
599'2	602.0	598.8	593.0	589.0	591.0	590.2	583.2	579.0	586.0	592.5	598.1	597.8
599.8	601.9	600.0	591.2	589.8	591.0	590.0	583 4	581.0	589 0	592.0	599.0	597.2
600.0	602.0	600.2	592.2	590.0	589.0	590.4	581.0	581.2	589.0	593.5	600.0	597.4
600.0	601.5	599.7	592.0	590.2	588.0	590.0	579.1	583.0	588.6	594.0	599.0	598.2
600'6	600.8	599.8	592.4	590.0	588.2	588.0	579.2	583.8	590.7	594.2	599.0	599.0
601'0	601.0	597.8	592.3	592.0	587.0	587.0	580.2	581.5	591.8	595.0	600.0	599.0
600.0	601.2	592.6	591.2	593.0	589.0	588.0	579.5	582.0	593.7	596.0	600.0	599.0
73.0	72.5	72.2	71.8	72.2	72.5	73.2	74.5	75.7	77°0	77.0	77.8	78.2
		VERTICAL	Force.		· I	ncrease, in	Scale Divisio	ons, correspo	onding to $1^\circ$	decrease of	Temperatur	e, 1°64.
123.1	123.9	123.9	125.0	125.1	124.2	124.2	124.1	121.6	119.7	117.9	117.5	118.8
123 1	125 9				124 2	124.2	123.6	121.6	119.7		117.5	
123.1	124 7	125.0	124.8	124.8 124.8	$  \begin{array}{c c} 124 & 2 \\ 124 & 2 \end{array}  $	124.2	123.6	121.4	119.7	117.9	117.8	118.8
123°1		126.7	124.8									118.8
123 1	124.7	126.4	126.1	124.8	124.2	124.2	123.6	121.4	119.7	116.4	117.8	118.8
	123.8	126.4	126.1	124.8	124.2	124.2	123.6	121.0	119.7	116.4	117.6	118.8
123'6	123.8	126.7	126.1	124.8	124.2	124.2	123.6	120.8	119.0	117.6	117.6	118.8
123.6	124.2	126.7	125.7	124.8	124.2	124.2	123.6	120'6	119.0	117.6	118.1	118.3
23'6	124.5	126.8	125.7	125.0	123.8	124'2	123.4	120.6	119.0	116.8	118.1	118.3
23.6	123.6	126.8	125.7	125.0	123.8	124.6	122.6	120.6	119.0	116.6	118.1	118.3
23.9	123.8	126.8	125.7	124.8	123.8	124.6	122.6	120.6	118.7	116.8	118.1	118.3
23.9	123.8	126'1	125.5	125.0	123.8	124.0	122.6	120.4	118.7	116.6	118.1	118.2
23'9	123.8	126.1	125.1	124.8	123.8	124.1	122.6	119.7	117.9	116.5	118.8	118.2
7 <b>å</b> °3	78.7	72.3	72° 0	72.1	72°3	72°5	73.4	74.6	75°5	75.7	76·5	76°5

August 25th and	26th.			MAGNET	ICAL OBS	ERVATIO	NS.				
Mean Göttingen	Angul	ar Value of	one Scale D	$i_{vision} = 0$	··721.	_			DECLINATI	ion.	
Time.	10h.	11 <sup>h</sup> .	12h.	13h.	14h.	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18h.	19h·	20h.
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0 0	111.4	116.4	116.4	114.6	113.6	113.7	113.5	115.2	113.2	113 <b>.</b> 4 111.6	108°2
5 0	111'4	116.4	116.4	114.3	113.6	113.6	113.4	116.4	113.2	110.4	110.2
10 0	111.8	116.8	116.4	114.2	114.0	113.6	113.4 113.4	116.2	113.4	110.4	113.8
15 0	111°4	117.0	116.2	113.8	114.0	113.7	113 3	115.4	113.4	106.6	114.4
20 0	113.0	116.8	116.2	113.9	113.8	113.7	113.3	115.4	113.4	107.8	1111
25 0	113.4	116.4	115'4	114.8	113.6	113.7	114.1	114.4	113.4	106.6	115.4
30 0	114.2	116'4	115.4	114.4		113.8	113.2	114.3	112.4	106.4	112.0
35 O	114.6	116.8	115.0	114'6 114'4	113.6 113.6	113.4	113.4	114.3	111.7	106.8	114.4
40 0	115.0	116.8	114.8		113.7	113.4	113.4	113.7	112.3	107.2	114.4
45 0	115.4	116.8	114.8	114.6	113.6	113.4	114.2	113.4	113.1	107.6	112.0
50 0	115.7	117.0	115.0	114.0 115.0	113.6	113.2	114.2	113.4	113.4	107.8	115.0
55 0	115.9	116.8	114.7	113 0	113 0	110 2	114 0	110 1	110 1	101 0	110 0
M. S.	One S	cale Division	= .0000	87 parts of	the H. F.				Horizont	AL FORCE	•
	<del></del>	<u> </u>	1		1 00010	00010	00010	COTIO	00015	00010	cocso
<b>2</b> 0	601.2	593.0	604'0	600.0	603 2	606.0	608.0	607.0	606.5	606.0	606.0
7 0	598.5	593 0	602.0	600.0	603.9	606.0	608.0	608.1	607.0	606.9	605.8
12 0	597.8	597.0	602.2	600.0	604.0	607.0	608.0	609.9	606.9	607.9	605.2
17 0	598.0	599.8	600.0	600.0	605.5	608.0	607.0	609.0	607:0	607.9	605.0
22  0	596.0	602.0	600.2	601.2	605.8	608.0	607.0	609.0	607.0	607.8	606.2
27 0	595.0	603.2	600.0	602.0	605.8	608.0	607.0	608.2	606.1	608.2	COC! O
32  0	595.2	603.4	601.0	603.0	605.5	607.0	607.1	607.1	606.3	607.8	606.0
37 0	596.0	603.2	600.0	603.0	605.5	607.0	606.9	606.2	606.9	608.0	605.0
42  0	596.2	604.0	600.0	605.0	605.8	608.0	604.1	606.0	606.0	607:2	604.8
47 0	595.0	604.2	599.0	604 0	606:2	607.0	607.0	606.5	605 2	607.8	605.0
52 0	593.8	604.4	600.0	603.0	606.2	608.5	607.0	607.0	605.1	607.6	604.8 605.0
57 0	594.0	604.0	600.0	603.0	000 2	008.3	000 3	000 2	003 1	607 4	000 0
Thermometer	76°2	75°4	75.2	75.0	75.1	75.1	75.0	74.6	74.5	74.3	74.1
	One S	cale Division	m = .0000	63 parts of	the V. F.				VERTICAL	Force.	
M. S.		T	<u> </u>	I	l	T	T	T	T	1	<u> </u>
3 0	116.5	118.3	118.6	117.2	115.9	114.0	114.5	115.3	114.7	115.2	116.0
8 0	116.2	118.3	118.6	117.0	115.9	114.0	114.5	115.3	114.7	115.2	116.0
13 0	116.2	118.3	118.8	117.0	114.9	114.0	114.5	115.3	115.1	115.5	116.0
18 0	116.2	118.5	118.8	116.0	114.6	114.0	114.5	115.0	115.1	115.5	116.0
23 0	116.2	118.2	118.8	116.0	114.6	114.0	114.5	114.7	115.1	115.5	116.2
28 0	116.5	118.5	118.8	116.0	114.0	114.0	115.3	114.7	115.1	115.5	11010
33 0	116.3	118.6	118.8	116.0	114.4	114.0	115.3	114.7	115.1	115.2	116.2
38 0	116.5	118.6	118.8	116.0	114 4	114 0	115.3		115.5	116.0	116.2
43 0	116.2 113.9	118.6	118.9	116.0	114 4	114 0	115.3	114'7 114'7	115.5	116.0	116.2
$\begin{array}{cc}48&0\\53&0\end{array}$	113.9	118.6	117.9	116.0	114.0	114.0	115.3	114 7	115.5	116.0	116.2
53 0 58 0	113.7	118.6	117.9	115.9	114.0	114.0	115.3	114.7	115.2 115.2	115.7	116°2
	74.0	74.2	74.2	74.0	74.2	74.0	75.0	75.0	74.5	74.5	
Thermometer	7 <b>4 °</b> 0	142	142	74.0	1 74.2	140	75.0	1 75.0	74.5	I 74°5	74.3

		DECLINAT	ION.					Ang	gular Value	of one Scale	Division =	0'.721.
21h.	22h.	23h.	Öh.	1b.	2h.	3h.	4h.	5h.	6h.	7 <sup>h</sup> .	8h.	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div,	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div
115.0	115.5	118.0	122.6	129.6	128.3	122.0	114.5	108.4	104.7	104.2	106.0	110.0
115.8	115.4	119.6	122.8	129.4	127.0	121.0	114.0	108.2	105.2	104.0	106.4	110.5
115.0	114.8	119.8	123.8	128.6	126.6	120.6	113.4	108.3	104.6	104.0	106.4	110°4
114.4	115.4	120.4	124.0	128.0	126.0	120.4	112.4	108.2	104.6	104.2	106.8	111.0
115.0	117.6	121.4	125.0	127.4	125.6	119.4	112.4	107.4	104.6	104.8	107.4	111.2
114.2	117.8	121.6	126.6	127.6	125.0	118.6	111.6	106.8	104.6	104.6	107.4	111.8
114.0	117.0	120.8	127.0	128.0	124 6	118.2	111.3	106.4	105.0	104.8	108.2	111.8
113.8	117.4	121.5	127.4	128.4	124.2	117.7		N .	1			
114.2	117.4	122.2	127.4	128.3	123.6	117.0	110.4	106.6	105.0	104.8	108.4	112.0
	117.6	122.4	129.2	128.2	123.6		110.5	105.4	105.0	105.0	108.4	112'4
114.0		122.3				116.4	109.6	105.0	104.8	105.0	108.8	112.6
114 4	118.0		128.8	127.6	121.8	116.0	109.6	105.0	104.4	105.4	109.0	113.0
114.4	118.0	122.4	129.3	127.6	122.0	115.4	109.2	104.6	104.6	105.6	109.4	113.2
		Horizont	AL FORCE	•		Increase, in	Scale Divis	ions, corresp	onding to 1	° decrease o	f Temperatu	re, 1.63.
606 5	604.8	606.0	602.0	598.0	589.0	582.1	579.0	576.0	581.2	590.2	600.0	604.0
606.2	605.0	606.4	602.2	597.0	589.0	582 1	579.0				600.0	
605.8	604 2	607.0	602.0	598.0	588.0	582.2		577.0	581.4	591.0		604.4
	1		1				578.5	578.0	582.2	591.3	600 8	605.0
605 0	605.0	604.0	602.0	596.0	588.0	582.0	578.0	578.2	583`4	591.8	601.2	605.2
604'8	605.0	604.8	601.2	594.5	587.1	582.0	577.5	579.0	584.0	592.8	602.0	605.2
604*2	605.0	604.8	600.0	594.5	586.5	582.0	577.5	580.0	585.0	593.2	602.2	608.8
604.0	605.2	605.0	600.0	595.2	586.0	581.0	577.0	581.0	586.0	594.2	602.8	609.2
604.0	605.0	602.2	600.4	593.2	585.0	581.0	577.0	581.0	587.0	594.5	601.8	608.0
603.8	606.0	602.2	600.2	591.8	584.0	580.0	578.0	581.0	587.8	597.0	601.2	608.4
603 5	606.4	602.2	598.6	591.0	584.4	580.0	577.0	581.0	588.2	597.8	601.5	608.2
603.0	606.0	602.0	598.0	591.2	583.1	580.0	576.0	581.5	588.0	599.0	602.2	609.4
603.0	606.0	601.8	597.0	591.2	583.0	579.0	576.5	581.5	588.8	598.0	603.2	608.2
7å°6	75°5	72.7	72°·8	73.0	73.1	73.8	74.8	75°3	75.4	75°4	75°5	75.8
		VERTICAL	Force.	·	-	Increase, in	Scale Divisi	ons, corresp	onding to 1	° decrease o	f <b>T</b> emperatu	re, 1.64.
11017	1,1010	1	1	11010	1.15.5	1 1150	1	1 1 1 1 1 0	1 77 400	1	1	1
116.7	118.0	117.7	117.9	118.0	117.7	117.3	116.8	114.0	114.0	115.0	116.6	116.5
117.0	118.0	117.7	117.9	118.0	117.7	117.3	116.7	114.0	114.0	115.0	116.6	116.5
117.1	117.5	117.7	117.9	118.0	117.7	117:3	116.2	114.0	114.0	115.1	116.6	116'4
117.1	117.5	117.7	117.9	118.0	117.5	117.3	116.0	114.0	114.0	116.0	116.6	116.4
117.1	117.5	117.7	117.9	117.7	117.5	117.3	116.0	114.2	114.0	116.0	116'6	116.4
117.2	117.5	117.7	117.9	117.7	117.5	117.3	116.0	114.5	114.0	116.0	116.6	116'6
117.5	117.7	117.7	117.9	117.6	117.4	117.3	115.2	114.2	114.0	116.3	116.2	117.0
117.5	117.7	117.7	117.9	117.6	117.4	117.3	115.2	114.5	114.0	116.3	115.8	117.0
117.5	117.7	117.7	117.9	117.6	117.4	117.3	115.0	114.2	114'3	116.6	115.8	116.6
117.8	117.7	117.7	117.9	117.6	117.4	116.8	115.0	114.2	115.0	116.7	115.8	116.6
118.0	117.7	117.7	118.0	117.6	117.3	116.8	115.0	114.5	115.0	116.7	115 8	117.0
18.0	117.7	117.9	118.0	117.6	117 3	116.8	115.0	114.2	115.0	116.7	116.0	117.0
7å·8	73.5	73.3	73.1	73.0	72.8	73.0	73.7	74°5	74.0	74.5	74.0	7å·(

Mean Göttingen	Angul	ar Value of	one Scale D	oivision = 0	7.721.				DECLINA	rion.	
Time.	10h.	11 <sup>h</sup> .	12h.	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20h.
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
0 0	109.4	113.3	113.6	112.8	111.8	114.4	114.7 114.4	115.7	114.5	114.4	114.6 114.4
5 0	108.6	113.3	113.6 114.2	112.4	112.8	113.4	113.8	115.3	114.4	113.6	114.6
$egin{array}{ccc} 10 & 0 \ 15 & 0 \end{array}$	110.4	112.6 112.4	114.4	112.4	113.4	113.4	113 8	115.8	114.4	114.6	114.6
20 0	110.4	112.4	114.2	112.4	113.4	114.8	115.0	116.0	114.4	115.0	114.4
$\begin{array}{ccc} 20 & 0 \\ 25 & 0 \end{array}$	111.3	113.4	113.6	111.8	113.8	114.8	115.2	116.2	114.4	115.0	114.4
30 0	111.2	113.2	114.4	112.4	114.0	117.4	115.4	115.4	114.5	114.6	114.8
35 0	112.3	113.4	114.8	112.5	113.4	118.8	115.4	115.0	114.4	114.4	114'6
40 0	112.3	113.4	114.4	113.0	114.0	119.4	114.4	115.4	114.8	114.4	114.7
45 0	112.4	113.4	113.4	112.2	114.9	115.4	114.0	115.4	114.6	114.4	115.5
50 O	112.4	113.4	113.4	111.4	116.8	114.6	114.5	115.2	114.4	114.2	114.4
55 0	113.2	113.4	113.5	111.4	115.4	114.4	114.4	115.4	114.5	114.6	114.6
M. s.	One S	Scale Divisio	on = .0000	087 parts of	the H. F.				Horizon	TAL FORCE	• ,
	610:0	626.0	624.7	624.0	623.8	637.2	624.0	622.5	623.0	623.2	624.0
$\begin{array}{ccc} 2 & 0 \\ 7 & 0 \end{array}$	618.0	626.5	625.0	624 0	624.4	637.8	622.4	622.4	622.8	624.2	623.9
$egin{array}{ccc} 7 & 0 \ 12 & 0 \end{array}$	617.2	625.0	622.9	625.0	623.2	631.2	620.2	621.4	623.0	625.2	625.0
12 0 17 0	616.0	623.2	622.5	626.0	622.2	628.2	619.4	621.2	623.2	624.5	625'3
$\begin{array}{ccc} 17 & 0 \\ 22 & 0 \end{array}$	617.0	622.0	623.1	625.2	622.2	628.8	618.2	621.2	623.0	625.0	625.0
$\begin{array}{ccc} 22 & 0 \\ 27 & 0 \end{array}$	616.2	622.0	622.1	625.0	622.0	628.5	618.0	621.0	623.0	624.0	625.5
32  0	618.6	622.9	622.0	624.2	622.4	623.2	620.6	621.0	622.0	624.0	625.0
37 0	620.9	624.0	622.4	624.4	622.2	627.4	621.0	620.8	622.0	624.0	625.1
42 0	622.0	623.5	623.2	624.2	622.8	629.5	621.4	619.4	622.0	624.3	625.1
47 0	623.2	624.0	624.2	623.8	622.0	627.0	621.2	619.2	622.2	624.0	625.5
52 0	624.0	625.0	624.0	623.6	635.4	626.8	621.4	619.0	622.3	624.0	625.0
57 0	623.5	624.8	624.2	623.8	639.8	625.8	621.6	622.0	622.0	624.0	625.0
Thermometer	63.8	63.8	63.8	63.9	63.8	63°6	63.4	63.0	62.6	62.4	6ì.8
м. s.	One	Scale Divisio	on = .000	063 parts of	f the V.F.				VERTICAL	FORCE.	
3 0	137.3	138:4	138.4	136.4	135.6	130 1	132.7	133.0	133.8	134.8	134.8
8 0	137.4	138 4	138.4	136.0	135.6	130.1	132.8	133.0	134.0	•134.8	134.8
13 0	137.4	138.4	137.6	136.5	135.6	130.1	132.8	133.0	134.0	134.8	135'4
18 0	137.4	138.4	137.6	136.2	135.5	129.6	132.8	133.2	134.0	134.8	135'4
23 - 0	137.4	138.4	137.6	136.2	135.5	129.6	132.8	133.2	134'9	134.8	135.3
28 <b>0</b>	137.4	138.4	137.6	136.0	135.2	129.6	133.0	133.5	134.9	134.8	135.0
33 O	138.1	138.4	136.6	136.0	135.2	129.5	133.0	133.2	134.9	134.8	134.7
38 0	138.0	138.4	136.2	135.7	135.5	129.5	133.0	133.2	134.9	134.8	134.7
43 0	138.4	138.4	136.5	135.7	135.5	129.5	133.0	133.2	134.8	134.8	134.7
48 0	138.4	138'4	136.2	135.7	135.8	132.7	133.0	133.2	134.8	134.8	134.7
53 0	138.4	138.4	136.4	135.6	131.9	132.7	133.0	133.2	134.8	134.8	134°7   134°7
58 0	138.4	138.4	136.4	135.6	131.3	132.7	133.0	133*8	134.8	134.8	134 /
	62.8	63.0	63.0	63.6	63.7	63.5	63.4	63.2	63.1	62.9	62.7

				****	MAGNET	TICAL OB	SERVATIO	ONS.		Sept	tember 20th	and 21st.
		DECLINAT	ION.					Ang	gular Value	of one Scale	Division =	0′ 721.
21h.	22h.	23h.	Oh.	1h.	2h.	3h.	4h.	5h.	6h.	7 <sup>h</sup> .	8h.	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div
114°4	113.0	116.7	120.4	122.6	122.8	120.0	116.6	113.8	109.3	107.6	109.0	110.8
13.4	113.0	116.2	120.4	122.2	122.4	119.4	116.4	113.4	109.0	107.7	109.0	111.0
12.4	113.8	116.9	120.6	122.0	122.5	119.4	116'4	112.2	108.9	107.8	109.2	111.5
13.0	115.4	117.4	121.4	122.2	122.8	119.4	116.0	111.9	108.8	107.8	109.2	111.6
12.4	115.4	117.7	121.4	122.6	123.0	119"3	115.6	111'4	108.4	107.8	109.6	112.0
10.6	115.8	118.5	121.4	122.4	124.0	119.4	115.0	110.2	108.3	108.0	110.0	112.6
110.0	116.0	118.4	121.5	123.2	123.5	119.4	115.2	110.4	108.1	108.0	109.5	112.4
109.0	116.2	119.3	121.6	124.0	123.0	119.4	115.4	110.4	108.2	108.4	110.0	112.4
108.9	116.4	120.1	121.5	124.8	122.8	119.4	115.0	110.8	107.8	108.6	110.4	112.4
109°4	115.9	120.4	121.7	123.4	122.4	118.9	114.5	110.4	108.0	108.6	110.4	112.6
110.4	116.4	120.4	122.4	123.6	120.4	118.4	114.0	109.7	108.0	108.8	110.6	112.6
11'6	116.6	120.4	123.1	123.4	120.5	117.6	114.0	109.2	107.7	108.8	111.0	112.8
		Horizont	AL FORCE		I	ncrease, in	Scale Divisi	ons, correspo	onding to 1°	decrease of	Temperatur	e, 1 °63.
00410	000.5	00010	00710	1 01010	01140		1	T		1	1	<del></del>
624'0	626.5	629'2	625.0	619.0	611.8	601.2	595.7	597.0	602.2	609.0	621.0	628.0
623.5	626.0	628.0	626.0	618.7	610.4	600.4	595.4	597.5	602.8	609.4	622.5	627.8
522.6	625.5	627.9	625.1	617.2	610.2	600.5	595.5	598.0	604.0	611.8	623.0	625.0
323.5	626.5	628.0	624.0	616.2	609.4	599.0	596.0	598.2	604.0	613.0	621.5	623.0
320.2	626'8	629.0	623.5	615.4	608.2	597.4	596.2	598.9	605.0	613.0	621.0	622.5
320.0	626.8	629 0	623.7	614.0	608.0	596.2	596.0	599.0	606.0	614.0	621.5	623.0
319.5	627.0	629.0	623.2	612.5	608.2	595.0	595.8	599.2	606.0	614.0	623.0	623.0
320.0	628.0	628.2	623.1	611.5	605.7	595.2	596.0	600.0	606.2	614.5	623.0	623.0
620'0	628.0	627.1	622.0	611.2	603.8	595.0	596.0	600.2	606.8	616.0	623.2	624.5
620'0	628.0	627.0	621.0	611.2	601.2	595 0	596.1	601.2	607.0	617.5	622.0	625.0
623 0	628.2	627.5	620.0	611.0	601.2	595.0	596.5	602.0	607.8	619.2	623.0	625.0
525.5	629.7	626.9	619.8	611.2	601.5	595.0	596.6	602.0	608.0	620.5	625.3	625.0
6 <u>1</u> .6	61.3	61.0	6ΰ1	60°6	60.2	60.6	61.2	61.6	62.0	62.0	6 <b>1°</b> 5	62.0
		VERTICAL	Force.		I	ncrease, in S	Scale Divisio	ons, correspo	onding to 1°	decrease of	Temperatur	e, 1 °64.
134.7	134.1	136.7	137.5	138.8	140.8	139.5	139.1	139.1	139.2	140.7	141.5	141.9
134.7	134.1	136.7	137.5	139.2	141.5	139.0	139.1	139.1	139.2	140.7	141.5	141.9
34.7	134.1	137.1	137.5	139.2	141.2	139.0	139.1	139.1	139.5	140.7	142.0	141.9
34.7	134.1	137.1	137.5	139.3	141.2	139.0	139.1	139.1	139.2	140.7	142.0	141.9
34.4	134.5	137.1	137.5	140.0	141.2	139.0	139.1	139.3	139.2	140.7	142.0	141.9
34.0	134.9	137.5	137.5	140.0	141.2	139.0	139.1	139.3	139.2	140.7	142.0	141.3
34.1	134.9	137.5	138.2	140.0	141.2	138.6	139.1	139.7	139.2	140.7	142.4	141.3
34.1	135.6	137.5	138.2	140.0	140.7	138.6	139.1	139.7	139.2	140.7	142.4	141.3
34'1	135.6	137.5	138.2	140.0	140.7	138.6	139.1	139.7	139.2	141.2	142.4	141.3
134.1	135.6	137.5	138.8	140.0	139.9	138.6	139.1	139.7	139.2	141.5	142.4	140.9
34'1	136.7	137.5	138.8	140.8	139.9	138.6	139.1	139.7	139.4	141.2	141.9	140.9
34.1	136.7	137.5	138 8	140.8	139.9	138.6	139.1	139.7	139 4	141.2	141.9	140.9
62°5				<u> </u>			61.3	61.2		00.7	ļ	
UZ 5	62°4	62°5	62°0	6Î.3	60°7	6 <u>1</u> .3	61.3	61.2	61.2	61°5	61.2	6 <u>1</u> .2
nd increa	sing Horizo	ntal and Ve	rtical Force									
							A					<del></del>

M. S. Sc O O O O O O O O O O O O O O O O O O	10h.  Sc. Div. 93.4 104.3 93.7 106.4 101.6 95.4 98.4 106.6 120.4 123.4 115.4 118.4  One S 579.0 770.0 732.8 790.0 770.0 770.0 770.0 770.0 770.0	Sc. Div. 115.8 120.4 109.4 101.8 110.6 103.5 94.4 95.9 98.9 105.4 94.2 101.4  Scale Division 719.4 665.0 664.5 658.4 646.4 679.8 703.5 708.0 726.1	12h.   Sc. Div.   98 2 113 8 121 5 118 4 110 4 108 4 103 5 105 2 105 6 104 3 106 4   San = '0000 787 0 782 0 725 0 730 0 686 0 709 0 700 0	13h.   Sc. Div.   92.5   104.8   109.4   125.8   136.4   161.8   108.4   126.4   125.2     676.5   758.8   808.4   758.5   827.4   938.4   722.0   655.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   665.4   6	625'4 623'4 621'8 618'5 606'2 620'8 617'6 614'4	15h.    Sc. Div.     122'0     119'8     114'8     120'4     111'2     111'0     111'8     15'4     126'0     129'5      648'4     629'2     614'2     594'0     593'2     596'0     596'2     596'0	16 <sup>h</sup> .    Sc. Div.   127 * 4   123 * 6   121 * 8   117 * 7   116 * 4   116 * 4   116 * 8   115 * 7   107 * 6   121 * 8   118 * 8     593 * 4   598 * 3   601 * 0   599 * 0   599 * 0   590 * 0   590 * 0	565.0 573.0 597.0 624.4 624.6 585.0	18h.   Sc. Div.   105 0   107 8   98 4   109 4   110 8   115 0   114 4   113 4   107 9   97 4   85 4   78 4      HORIZONT	560°0 500°5 502°7 443°0 393°0 388°3	20h.  Sc. Div 65:0 78:0 92:0 107:0 137:0 130:8 123:2 130:0 139:0 141:8 147:0  529:8 478:8 525:0 531:5 548:0 520:0 517:5
0 0 9 5 0 10 10 0 15 20 0 10 25 0 9 30 0 10 40 0 12 45 0 11 55 0 11  M. s.  2 0 67 7 0 70 12 0 68 17 0 69 22 0 73 27 0 70 32 0 70 32 0 70 32 0 70 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	93.4 104.3 93.7 106.4 101.6 95.4 98.4 106.6 120.4 1123.4 1115.4 1115.4 1115.4 770.0 770.0 733.0 742.8 790.0 770.0	115.8 120.4 109.4 101.8 110.6 103.5 94.4 95.9 98.9 105.4 94.2 101.4 Scale Division 719.4 665.0 664.5 658.4 646.4 679.8 703.5 708.0	98.2 113.8 121.5 118.4 113.4 110.4 108.4 105.2 105.6 104.3 106.4 830.0 879.0 787.0 782.0 725.0 730.0 686.0 709.0	92.5 104.8 109.4 125.8 136.4 161.8 108.4 78.6 101.8 108.4 126.4 125.2 087 parts of 676.5 758.8 808.4 758.5 827.4 938.4 722.0 655.4	118 '8 124 '2 125 '4 118 '6 102 '8 99 '2 101 '4 106 '8 104 '5 105 '8 109 '4 119 '2 1the H.F. 625 '4 623 '4 621 '8 618 '5 606 '2 620 '8 617 '6 614 '4	122.0 119.8 114.8 122.2 124.8 120.4 111.2 111.0 111.8 115.4 126.0 129.5	127.4   123.6   121.8   117.7   116.4   118.4   116.8   115.7   107.6   121.8   118.8   118.8   118.8	100°5 90°4 119°8 123°4 124°4 100°4 87°4 100°4 98°4 98°4 102°4  565°0 573°0 597°0 624°4 624°6 585°0	105.0   107.8   98.4   109.4   110.8   115.0   114.4   113.4   107.9   97.4   85.4   78.4   78.4   HORIZONT   552.0   572.2   538.6   537.2   530.0   542.4	82.0 83.4 89.4 87.4 91.0 91.2 102.4 121.6 139.0 120.4 83.4 65.0 560.0 500.5 502.7 443.0 393.0 388.3	529 *8 478 *0 92 *0 107 *0 137 *0 130 *8 123 *2 130 *0 139 *6 141 *8 147 *0 529 *8 478 *8 525 *0 531 *5 548 *0 520 *0
0 0 9 5 0 10 10 0 15 20 0 10 25 0 9 30 0 9 35 0 10 40 0 12 45 0 15 50 0 11 55 0 11  M. s.  2 0 67 7 0 70 12 0 68 17 0 69 22 0 73 27 0 70 32 0 70 32 0 70 32 0 70 32 0 70 37 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	93.4 104.3 93.7 106.4 101.6 95.4 98.4 106.6 120.4 1123.4 1115.4 1115.4 1115.4 770.0 770.0 733.0 742.8 790.0 770.0	115.8 120.4 109.4 101.8 110.6 103.5 94.4 95.9 98.9 105.4 94.2 101.4 Scale Division 719.4 665.0 664.5 658.4 646.4 679.8 703.5 708.0	98.2 113.8 121.5 118.4 113.4 110.4 108.4 105.2 105.6 104.3 106.4 830.0 879.0 787.0 782.0 725.0 730.0 686.0 709.0	92.5 104.8 109.4 125.8 136.4 161.8 108.4 78.6 101.8 108.4 126.4 125.2 087 parts of 676.5 758.8 808.4 758.5 827.4 938.4 722.0 655.4	118 '8 124 '2 125 '4 118 '6 102 '8 99 '2 101 '4 106 '8 104 '5 105 '8 109 '4 119 '2 1the H.F. 625 '4 623 '4 621 '8 618 '5 606 '2 620 '8 617 '6 614 '4	122.0 119.8 114.8 122.2 124.8 120.4 111.2 111.0 111.8 115.4 126.0 129.5	127.4   123.6   121.8   117.7   116.4   118.4   116.8   115.7   107.6   121.8   118.8   118.8   118.8	100°5 90°4 119°8 123°4 124°4 100°4 87°4 100°4 98°4 98°4 102°4  565°0 573°0 597°0 624°4 624°6 585°0	105.0   107.8   98.4   109.4   110.8   115.0   114.4   113.4   107.9   97.4   85.4   78.4   78.4   HORIZONT   552.0   572.2   538.6   537.2   530.0   542.4	82.0 83.4 89.4 87.4 91.0 91.2 102.4 121.6 139.0 120.4 83.4 65.0 560.0 500.5 502.7 443.0 393.0 388.3	529 *8 478 *0 92 *0 107 *0 137 *0 130 *8 123 *2 130 *0 139 *6 141 *8 147 *0 529 *8 478 *8 525 *0 531 *5 548 *0 520 *0
5 0 10 10 0 9 15 0 10 20 0 10 25 0 9 30 0 12 45 0 12 50 0 11 55 0 11  M. s.  2 0 67 7 0 68 17 0 68 17 0 68 17 0 69 22 0 73 27 0 70 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	104'3 93'7 106'4 101'6 95'4 98'4 106'6 120'4 1123'4 115'4  One S 579'0 700'0 733'0 742'8 790'0 770'0	120.4 109.4 101.8 110.6 103.5 94.4 95.9 98.9 105.4 94.2 101.4 665.0 664.5 658.4 646.4 679.8 703.5 708.0	113 8   121 5   118 4   113 4   110 4   108 4   105 5 2   105 6   104 3   106 4	104 '8 109 '4 125 '8 136 '4 161 '8 108 '4 78 '6 101 '8 108 '4 126 '4 125 '2 087 parts of 676 '5 758 '8 808 '4 758 '5 827 '4 938 '4 722 '0 655 '4	124 2 125 4 118 6 102 8 99 2 101 4 106 8 104 5 105 8 109 4 119 2 the H.F. 625 4 623 4 621 8 618 5 606 2 620 8 617 6 614 4	119.8 114.8 122.2 124.8 120.4 111.2 111.0 111.8 115.4 126.0 129.5 648.4 629.2 614.2 594.0 593.2 594.0 596.2	121.8 117.7 116.4 116.4 118.4 116.8 115.7 107.6 121.8 118.8	119 8 123 4 124 4 100 4 87 4 100 4 95 4 94 4 98 4 102 4 565 0 573 0 597 0 624 4 624 6 585 0	98.4 109.4 110.8 115.0 114.4 113.4 107.9 97.4 85.4 78.4 HORIZONT	89.4 87.4 91.0 91.2 102.4 121.6 139.0 120.4 83.4 65.0 AL FORCE	92.0 107.0 137.0 130.8 123.2 130.0 139.0 141.8 147.0 529.8 478.8 525.0 531.5 548.0 520.0
10 0 10 10 20 10 20 0 10 25 0 25 0 25 0	93.7 106.4 101.6 95.4 98.4 106.6 120.4 1123.4 1115.4 One S 579.0 700.0 700.0 733.0 742.8 790.0 770.0	719.4 665.0 646.4 679.8 708.0	121.5   118.4   113.4   110.4   108.4   103.5   105.2   105.6   104.3   106.4   830.0   879.0   787.0   782.0   725.0   730.0   686.0   709.0	109 '4 125 '8 136 '4 161 '8 108 '4 78 '6 101 '8 108 '4 126 '4 125 '2 087 parts of 676 '5 758 '8 808 '4 758 '5 827 '4 938 '4 722 '0 655 '4	125 '4 118 '6 102 '8 99 '2 101 '4 106 '8 104 '5 105 '8 109 '4 119 '2 the H.F. 625 '4 623 '4 621 '8 618 '5 606 '2 620 '8 617 '6 614 '4	114.8 122.2 124.8 120.4 111.2 111.0 111.8 115.4 126.0 129.5 648.4 629.2 614.2 594.0 593.2 594.0 596.2	121.8 117.7 116.4 116.4 118.4 116.8 115.7 107.6 121.8 118.8	119 8 123 4 124 4 100 4 87 4 100 4 95 4 94 4 98 4 102 4 565 0 573 0 597 0 624 4 624 6 585 0	98.4 109.4 110.8 115.0 114.4 113.4 107.9 97.4 85.4 78.4 HORIZONT	89.4 87.4 91.0 91.2 102.4 121.6 139.0 120.4 83.4 65.0 AL FORCE	92.0 107.0 137.0 130.8 123.2 130.0 139.0 141.8 147.0 529.8 478.8 525.0 531.5 548.0 520.0
15 0 10 20 0 10 25 0 9 30 0 9 35 0 10 40 0 12 45 0 12 50 0 11 55 0 11  M. s. 2 0 67 7 0 68 17 0 68 17 0 68 17 0 68 17 0 70 12 0 73 27 0 74 32 0 79 37 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	106 4 101 6 95 4 98 4 106 6 120 4 123 4 115 4 118 4 One S 579 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0 700 0	719.4 664.5 664.5 664.4 679.8 708.0	118 4 113 4 110 4 108 4 103 5 105 2 105 6 104 3 106 4 830 0 879 0 787 0 782 0 782 0 730 0 686 0 709 0	125 8 136 4 161 8 108 4 78 6 101 8 108 4 126 4 125 2 087 parts of 676 5 758 8 808 4 758 5 827 4 938 4 722 0 655 4	118.6 102.8 99.2 101.4 106.8 104.5 105.8 109.4 119.2 the H.F. 625.4 623.4 621.8 618.5 606.2 620.8 617.6 614.4	122.2 124.8 120.4 111.2 111.0 111.8 115.4 126.0 129.5 648.4 629.2 614.2 594.0 593.2 594.0 596.2	117.7 116.4 116.4 116.8 115.7 107.6 121.8 118.8 118.8	123.4 124.4 100.4 87.4 100.4 95.4 94.4 98.4 102.4 565.0 573.0 597.0 624.4 624.6 585.0	109'4 110'8 115'0 114'4 113'4 107'9 97'4 85'4 78'4  HORIZONT  552'0 572'2 538'6 537'2 530'0 542'4	87.4 91.0 91.2 102.4 121.6 139.0 120.4 83.4 65.0 AL FORCE 560.0 500.5 502.7 443.0 393.0 388.3	107.0 137.0 130.8 123.2 130.0 139.6 141.8 147.0 529.8 478.8 525.0 531.5 548.0 520.0
20 0 10 25 0 9 30 0 10 40 0 12 45 0 12 50 0 11 55 0 11  M. s.  2 0 67 7 0 70 12 0 68 17 0 69 22 0 73 27 0 74 32 0 79 37 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	101.6 95.4 98.4 106.6 120.4 123.4 1115.4 1118.4 One S 579.0 700.0 7387.5 5992.0 733.0 742.8 790.0 770.0	719.4 665.0 664.5 658.4 667.8 708.0	113 4   110 4   108 4   103 5   105 2   105 6   104 3   106 4   830 0   879 0   787 0   782 0   730 0   686 0   709 0	136 4 161 8 108 4 78 6 101 8 108 4 126 4 125 2 087 parts of 676 5 758 8 808 4 758 5 827 4 938 4 722 0 655 4	102 '8 99 '2 101 '4 106 '8 104 '5 105 '8 109 '4 119 '2 the H.F. 625 '4 623 '4 621 '8 618 '5 606 '2 620 '8 617 '6 614 '4	124.8 120.4 111.2 111.0 111.8 115.4 126.0 129.5 648.4 629.2 614.2 594.0 593.2 594.0 596.2	116.4   116.4   118.4   116.8   115.7   107.6   121.8   118.8   118.8   593.4   598.3   601.0   599.0   599.0   592.0	124 '4   100 '4   87 '4   100 '4   95 '4   94 '4   98 '4   102 '4   565 '0   573 '0   597 '0   624 '4   624 '6   585 '0	110°8   115°0   114°4   113°4   107°9   97°4   85°4   78°4   HORIZONT   552°0   572°2   538°6   537°2   530°0   542°4	91.0 91.2 102.4 121.6 139.0 120.4 83.4 65.0 AL FORCE 560.0 500.5 502.7 443.0 393.0 388.3	137.0 130.8 123.2 130.0 139.6 141.8 147.0 529.8 478.8 525.0 531.5 548.0 520.0
25 0 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	95.4 98.4 106.6 120.4 123.4 115.4 118.4 One S 579.0 700.0 700.0 733.0 742.8 790.0 770.0	719.4 665.0 664.5 679.8 703.5 708.0	110'4 108'4 103'5 105'2 105'6 104'3 106'4 = '0000 879'0 787'0 782'0 782'0 730'0 686'0 709'0	161 8 108 4 78 6 101 8 108 4 126 4 125 2 087 parts of 676 5 758 8 808 4 758 5 827 4 938 4 722 0 655 4	99'2 101'4 106'8 104'5 105'8 109'4 119'2 the H.F. 625'4 623'4 621'8 618'5 606'2 620'8 617'6 614'4	120.4 111.2 111.0 111.8 115.4 126.0 129.5 648.4 629.2 614.2 594.0 593.2 594.0 596.2	116.4   118.4   116.8   115.7   107.6   121.8   118.8   118.8   593.4   598.3   601.0   599.0   599.0   592.0	100 · 4   87 · 4   100 · 4   95 · 4   94 · 4   98 · 4   102 · 4   565 · 0   573 · 0   597 · 0   624 · 4   624 · 6   585 · 0	115.0   114.4   113.4   107.9   97.4   85.4   78.4   78.4   HORIZONT   552.0   572.2   538.6   537.2   530.0   542.4	91.2 102.4 121.6 139.0 120.4 83.4 65.0 AL FORCE 560.0 500.5 502.7 443.0 393.0 388.3	130.8 123.2 130.0 139.6 141.8 147.0 529.8 478.8 525.0 531.5 548.0 520.0
30 0 35 0 10 40 0 12 45 0 12 50 0 11 55 0 11 11 11 11 11 11 11 11 11 11 11 11 1	98 4 106 6 120 4 123 4 115 4 118 4 One S 579 0 700 0 687 5 592 0 733 0 742 8 790 0 770 0	94.4 95.9 98.9 105.4 94.2 101.4 Scale Division 719.4 665.0 664.5 658.4 646.4 679.8 703.5 708.0	108 '4   103 '5   105 '2   105 '6   104 '3   106 '4   830 '0   879 '0   787 '0   782 '0   725 '0   730 '0   686 '0   709 '0	108 4 78 6 101 8 108 4 126 4 125 2 087 parts of 676 5 758 8 808 4 758 5 827 4 938 4 722 0 655 4	101'4 106'8 104'5 105'8 109'4 119'2 the H.F. 625'4 623'4 621'8 618'5 606'2 620'8 617'6 614'4	111.2   111.0   111.8   115.4   126.0   129.5   648.4   629.2   614.2   594.0   593.2   594.0   596.2	118 '4   116 '8   115 '7   107 '6   121 '8   118 '8   118 '8   593 '4   598 '3   601 '0   599 '0   598 '0   592 '0	87.4 100.4 95.4 94.4 98.4 102.4 565.0 573.0 597.0 624.4 624.6 585.0	114'4   113'4   107'9   97'4   85'4   78'4   HORIZONT   552'0   572'2   538'6   537'2   530'0   542'4	102.4 121.6 139.0 120.4 83.4 65.0 AL FORCE 560.0 500.5 502.7 443.0 393.0 388.3	123.2 130.0 139.0 139.6 141.8 147.0 529.8 478.8 525.0 531.5 548.0 520.0
35 0 10 40 0 12 45 0 12 50 0 11 55 0 11  M. S. 2 0 67 7 0 70 12 0 68 17 0 69 22 0 73 27 0 70 32 0 74 32 0 76 37 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	106.6 120.4 123.4 115.4 118.4 One S 579.0 700.0 687.5 599.0 733.0 742.8 790.0 770.0	95.9 98.9 105.4 94.2 101.4 Scale Division 719.4 665.0 664.5 658.4 646.4 679.8 703.5 708.0	103.5 105.2 105.6 104.3 106.4 30.0 879.0 787.0 782.0 725.0 730.0 686.0 709.0	78.6 101.8 108.4 126.4 125.2 087 parts of 676.5 758.8 808.4 758.5 827.4 938.4 722.0 655.4	106'8 104'5 105'8 109'4 119'2 the H.F. 625'4 623'4 621'8 618'5 606'2 620'8 617'6 614'4	111.0 111.8 115.4 126.0 129.5 129.5	116.8   115.7   107.6   121.8   118.8   118.8   593.4   598.3   601.0   599.0   598.0   592.0	100 4   95 4   94 4   98 4   102 4   565 0   573 0   597 0   624 4   624 6   585 0	113.4   107.9   97.4   85.4   78.4   HORIZONT   552.0   572.2   538.6   537.2   530.0   542.4	121.6   139.0   120.4   83.4   65.0   AL FORCE   560.0   500.5   502.7   443.0   393.0   388.3	130.0 139.0 139.6 141.8 147.0 529.8 478.8 525.0 531.5 548.0 520.0
M. S.  2 0 67 7 0 70 12 0 68 17 0 69 22 0 73 27 0 70 32 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	120.4 123.4 115.4 118.4 One S 679.0 700.0 687.5 692.0 733.0 742.8 790.0 770.0	98.9 105.4 94.2 101.4 Scale Divisio 719.4 665.0 664.5 658.4 646.4 679.8 703.5 708.0	105 2 105 6 104 3 106 4 30 0 879 0 787 0 782 0 725 0 730 0 686 0 709 0	101 8 108 4 126 4 125 2 087 parts of 676 5 758 8 808 4 758 5 827 4 938 4 722 0 655 4	104.5 105.8 109.4 119.2 the H. F. 625.4 623.4 621.8 618.5 606.2 620.8 617.6 614.4	111'8 115'4 126'0 129'5 129'5 648'4 629'2 614'2 594'0 593'2 594'0 596'2	115.7   107.6   121.8   118.8   118.8   593.4   598.3   601.0   599.0   598.0   592.0	95.4   94.4   98.4   102.4   565.0   573.0   597.0   624.4   624.6   585.0	HORIZONT    552.0     572.2     530.0     542.4	139.0 120.4 83.4 65.0 AL FORCE 560.0 500.5 502.7 443.0 393.0 388.3	139.6 139.6 141.8 147.0 529.8 478.8 525.0 531.5 548.0 520.0
M. S.  2 0 67 7 0 70 12 0 68 17 0 69 22 0 73 27 0 74 32 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5  M. S.  3 0 27	123'4 115'4 118'4  One S  679'0 700'0 687'5 692'0 733'0 742'8 790'0 770'0	719.4 665.0 664.5 658.4 646.4 679.8 703.5 708.0	105.6 104.3 106.4 30.0 879.0 787.0 782.0 725.0 730.0 686.0 709.0	108.4 126.4 125.2 087 parts of 676.5 758.8 808.4 758.5 827.4 938.4 722.0 655.4	105.8 109.4 119.2 the H. F. 625.4 623.4 621.8 618.5 606.2 620.8 617.6 614.4	115 '4 126 '0 129 '5 129 '5 648 '4 629 '2 614 '2 594 '0 593 '2 594 '0 596 '2	107.6   121.8   118.8   118.8   593.4   598.3   601.0   599.0   598.0   592.0	94.4   98.4   102.4   565.0   573.0   597.0   624.4   624.6   585.0	97.4 85.4 78.4 HORIZONT 552.0 572.2 538.6 537.2 530.0 542.4	120.4   83.4   65.0   AL FORCE   560.0   500.5   502.7   443.0   393.0   388.3	529°8 478°8 525°0 531°5 548°0 520°0
M. S.  2 0 67 7 0 70 12 0 68 17 0 69 22 0 73 27 0 74 32 0 79 37 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	One S 679.0 700.0 687.5 692.0 733.0 742.8 790.0 770.0	94.2 101.4 Scale Divisio 719.4 665.0 664.5 658.4 646.4 679.8 703.5 708.0	104'3 106'4 30'0 879'0 787'0 782'0 725'0 730'0 686'0 709'0	126.4 125.2 087 parts of 676.5 758.8 808.4 758.5 827.4 938.4 722.0 655.4	109.4 119.2 the H. F. 625.4 623.4 621.8 618.5 606.2 620.8 617.6 614.4	126.0   129.5   648.4   629.2   614.2   594.0   593.2   594.0   596.2	593.4 598.3 601.0 599.0 598.0 592.0	98.4   102.4   565.0   573.0   597.0   624.4   624.6   585.0	85:4   78:4   HORIZONT   552:0   572:2   538:6   537:2   530:0   542:4	83.4 65.0 AL FORCE 560.0 500.5 502.7 443.0 393.0 388.3	529°8 478°8 525°0 531°5 548°0 520°0
M. S.  2 0 67 7 0 70 12 0 68 17 0 69 22 0 73 27 0 74 32 0 79 37 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	One S 679.0 700.0 687.5 692.0 733.0 742.8 790.0 770.0	719.4 665.0 664.5 658.4 646.4 679.8 703.5 708.0	106.4 30.0 879.0 787.0 782.0 725.0 730.0 686.0 709.0	087 parts of  676.5 758.8 808.4 758.5 827.4 938.4 722.0 655.4	the H.F.  625.4 623.4 621.8 618.5 606.2 620.8 617.6 614.4	648.4 629.2 614.2 594.0 593.2 594.0 596.2	593.4 598.3 601.0 599.0 598.0 592.0	565.0 573.0 597.0 624.4 624.6 585.0	78.4  HORIZONT  552.0 572.2 538.6 537.2 530.0 542.4	560.0 500.5 502.7 443.0 393.0 388.3	529°8 478°8 525°0 531°5 548°0 520°0
M. S.  2 0 67 7 0 70 12 0 68 17 0 69 22 0 73 27 0 74 32 0 79 37 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	One S 579 ° 0 700 ° 0 587 ° 5 592 ° 0 733 ° 0 742 ° 8 790 ° 0 770 ° 0	719.4 665.0 664.5 658.4 646.4 679.8 703.5 708.0	830 ° 0 879 ° 0 787 ° 0 782 ° 0 725 ° 0 730 ° 0 686 ° 0 709 ° 0	087 parts of  676.5 758.8 808.4 758.5 827.4 938.4 722.0 655.4	the H. F.  625 '4 623 '4 621 '8 618 '5 606 '2 620 '8 617 '6 614 '4	648.4 629.2 614.2 594.0 593.2 594.0 596.2	593.4 598.3 601.0 599.0 598.0 592.0	565.0 573.0 597.0 624.4 624.6 585.0	HORIZONT    552.0   572.2   538.6   537.2   530.0   542.4	560.0 500.5 502.7 443.0 393.0 388.3	529°8 478°8 525°0 531°5 548°0 520°0
2 0 77 70 12 0 68 17 0 69 22 0 73 27 0 77 42 0 80 47 0 52 0 77 77 Thermometer 5	579.0 700.0 587.5 692.0 733.0 742.8 790.0 770.0	719.4 665.0 664.5 658.4 646.4 679.8 703.5 708.0	830 ° 0 879 ° 0 787 ° 0 782 ° 0 725 ° 0 730 ° 0 686 ° 0 709 ° 0	676°5 758°8 808°4 758°5 827°4 938°4 722°0 655°4	625'4 623'4 621'8 618'5 606'2 620'8 617'6 614'4	629 · 2 614 · 2 594 · 0 593 · 2 594 · 0 596 · 2	598.3 601.0 599.0 598.0 592.0	565.0 573.0 597.0 624.4 624.6 585.0	552.0 572.2 538.6 537.2 530.0 542.4	560°0 500°5 502°7 443°0 393°0 388°3	529.8 478.8 525.0 531.5 548.0 520.0
7 0 70 12 0 68 17 0 69 22 0 73 27 0 74 32 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	700°0 587°5 592°0 733°0 742°8 790°0	665.0 664.5 658.4 646.4 679.8 703.5 708.0	879°0 787°0 782°0 725°0 730°0 686°0 709°0	758 8 808 4 758 5 827 4 938 4 722 0 655 4	623.4 621.8 618.5 606.2 620.8 617.6 614.4	629 · 2 614 · 2 594 · 0 593 · 2 594 · 0 596 · 2	598.3 601.0 599.0 598.0 592.0	573.0 597.0 624.4 624.6 585.0	572.2 538.6 537.2 530.0 542.4	500.5 502.7 443.0 393.0 388.3	478.8 525.0 531.5 548.0 520.0
7 0 70 12 0 68 17 0 69 22 0 73 27 0 74 32 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	700°0 587°5 592°0 733°0 742°8 790°0	665.0 664.5 658.4 646.4 679.8 703.5 708.0	879°0 787°0 782°0 725°0 730°0 686°0 709°0	758 8 808 4 758 5 827 4 938 4 722 0 655 4	623.4 621.8 618.5 606.2 620.8 617.6 614.4	629 · 2 614 · 2 594 · 0 593 · 2 594 · 0 596 · 2	598.3 601.0 599.0 598.0 592.0	573.0 597.0 624.4 624.6 585.0	572.2 538.6 537.2 530.0 542.4	500.5 502.7 443.0 393.0 388.3	478 8 525 0 531 5 548 0 520 0
12 0 68 17 0 69 22 0 73 27 0 74 32 0 77 42 0 80 47 0 76 52 0 77  Thermometer 5  M. S. 27	587 · 5 692 · 0 733 · 0 742 · 8 790 · 0 770 · 0	664.5 658.4 646.4 679.8 703.5 708.0	787.0 782.0 725.0 730.0 686.0 709.0	808.4 758.5 827.4 938.4 722.0 655.4	621.8 618.5 606.2 620.8 617.6 614.4	614.2 594.0 593.2 594.0 596.2	601.0 599.0 598.0 592.0	597.0 624.4 624.6 585.0	538.6 537.2 530.0 542.4	502.7 443.0 393.0 388.3	525.0 531.5 548.0 520.0
17 0 69 22 0 73 27 0 74 32 0 79 37 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	692.0 733.0 742.8 790.0 770.0	658.4 646.4 679.8 703.5 708.0	782.0 725.0 730.0 686.0 709.0	758.5 827.4 938.4 722.0 655.4	618.5 606.2 620.8 617.6 614.4	594.0 593.2 594.0 596.2	599.0 598.0 592.0	624.4 624.6 585.0	537.2 530.0 542.4	443.0 393.0 388.3	531 5 548 0 520 0
22 0 73 27 0 74 32 0 79 37 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5	733 0 742 8 790 0 770 0	646.4 679.8 703.5 708.0	725.0 730.0 686.0 709.0	827.4 938.4 722.0 655.4	606.2 620.8 617.6 614.4	593 · 2 594 · 0 596 · 2	598°0 592°0	624.6 585.0	530°0 542°4	393°0 388°3	548 °0 520 °0
27 0 74 32 0 79 37 0 77 42 0 80 47 0 76 52 0 77  Thermometer 5  M. S. 27	742.8 790.0 770.0	679.8 703.5 708.0	730°0 686°0 709°0	938·4 722·0 655·4	620°8 617°6 614°4	594°0 596°2	592.0	585.0	542.4	388 3	520.0
32 0 79 37 0 77 42 0 80 47 0 76 52 0 77  Thermometer 5  M. S. 27	790°0 770°0	703°5 708°0	686°0 709°0	722°0 655°4	617.6 614.4	596.2					52U U
37 0 77 42 0 80 47 0 76 52 0 81 57 0 77  Thermometer 5  M. S. 27	770.0	708.0	709.0	655.4	614.4			FF1 • A			L 21.7. 2
42 0 80 47 0 76 52 0 81 57 0 77 Thermometer 5		708.0				1 506 0		551.0	564.0	422.5	
47 0 76 81 52 0 77 77 Thermometer 5 47 8. 47 8. 47 47 47 47 47 47 47 47 47 47 47 47 47	300.0	726.1	700.0				590.0	552.0	568.2	455 3	547.5
52 0 81 57 0 77 Thermometer 5 M. s. 27				694.4	621.5	587.8	560*4	544.0	525.0	437 8	535.0
57 0 77 Thermometer 5  M. s. 27	767°5	683.0	701.2	720.2	621.7	590.3	535.0	546.2	550.0	505.0	524.0
M. s.         27           3 0         27	313.0	680.0	680.0	668.8	630.2	597.2	571.0	543.8	540 0	515.0	496.5
м. s. 27	770.0	692.0	691.0	652.4	635'4	594.2	573.5	543.8	510.5	492.0	478 5
$\frac{1}{27}$	52°9	52°9	52.9	53.0	53.2	53.4	53°6	53°5	53°·2	53.4	53.2
$\frac{1}{27}$	One S	Scale Divisio	on='0000	063 parts of	the V.F.	<u> </u>			VERTICAL	Force.	
	276.1	200.2	226.5	960:2	970.1	276:0	950:6	002:0	910:1	001:0	104.0
Q /1 11 90	276.1	299 5	336.5	269.3	270.1	276.9	259.6	223.0	219.1	201.0	184.0
	295.3	292.7	327.3	281.8	269.5	264.4	259.6	226.4	219.7	207.3	193.0
	288.2	287.8	317.1	277.8	261.4	268.5	259 1	237.5	228.2	190.2	191.8
	284.2	292.5	321.6	264.2	255.2	261.5	258:1	233 2	228.2	165.0	184.0
	303.1	280.0	317.0	251.5	259.6	259.0	258.1	232.7	223.1	163.9	149'8
	312.0	292.1	318.6	216.4	268 1	256.3	257.6	204.8	223.1	170.0	141'1
	312.0	305.0	305.7	202.2	268.3	257.2	257.6	216.2	219.3	181.3	154.6
38 0 31	315.0	305.0	312.0	248.4	262.1	258.3	251.9	216.5	219.3	169.5	168.5
	330.2	314.5	306.8	256.1	269.8	257.5	237.6	211.2	203.2	141.7	157.0
	312.2	304.1	304.7	268.0	269.8	266.3	236.4	211.6	204.3	167.0	157.2
- 1		304.9	294.2	276.3	274.6	266.4	234.6	211.6	201.0	161.6	159.3
	335.5		294.2	279.4	269.4	263.0	234.6	211.6	287.7	184.4	163.0
Thermometer 5	335°5 334°5	317.2	2010								

Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc. Dir.   Sc	•	. 1	Declinati	ON.					Ang	ular Value o	of one Scale	Division =	0′ 721.
1860	21 <sup>h</sup> .	22 <sup>h</sup> .	23 <sup>h</sup> .	O <sup>th</sup> .	1 <sup>h</sup> .	2 <sup>h</sup> .	3h.	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8h.	9 <sup>h</sup> .
133 4 120 4 83 2 108 8 115 6 76 0 112 8 113 4 120 4 119 0 109 4 109 9 113 4 109 0 109 0 109 0 109 0 109 0 109 1 11 1 4 123 4 117 4 17 6 112 1 117 6 112 3 111 0 106 10 109 8 109 4 107 0 109 1 11 4 12 1 117 6 112 3 111 0 106 10 110 4 108 1 108 1 107 0 107 0 120 0 111 4 78 4 116 0 116 4 117 6 112 3 111 0 106 10 109 8 109 4 107 0 109 0 109 1 11 4 127 2 114 4 89 4 121 2 17 6 114 4 113 8 103 8 111 2 108 0 110 9 106 1 100 1 107 0 100 1 12 4 127 1 118 4 112 8 103 4 110 4 108 8 111 2 108 0 110 9 106 6 1 110 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 110 1 109 1 109 1 106 6 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 108 1 110 1 109 1 109 1 10 1 10	Div.					Sc. Div.	Sc. Div.		Sc. Div.	Sc. Div.			
3:8   1998   118*6   76*0   112*8   115*5   118*4   112*5   111*2   110*0   108*4   108*0   108*0   7:0   120*0   111*4   78*0   105*4   117*6   112*3   111*0   106*0   109*8   109*4   107*0   7:0   120*0   111*4   78*4   116*0   116*4   111*4   112*3   110*0   106*0   109*8   109*4   107*0   7:0   120*0   111*4   78*4   116*0   116*4   111*4   112*3   108*3   111*2   108*4   110*3   107*7   7:1   125*9   113*3   90*5   117*4   118*4   116*6   110*8   108*5   109*4   108*0   109*0   106*6   7:4   124*4   113*0   91*6   118*8   118*8   118*4   110*9   109*4   107*0   109*5   110*4   107*6   7:0   107*0   114*4   98*0   120*4   119*6   121*4   111*4   114*4   108*0   109*5   100*4   107*6   7:0   105*5   104*4   98*0   120*4   119*6   121*4   111*2   110*6   108*1   109*0   109*4   109*6   107*6   7:5   114*9   101*5   97*0   115*4   117*4   118*9   113*4   111*2   110*8   109*0   100*0   107*6   7:5   114*9   92*5   103*5   115*4   118*4   120*1   112*6   110*4   110*2   110*3   109*6   109*7    HORIZONTAL FORCE.  Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1*63.  ***Divisions** of Saron   58*0   58*0   58*10   58*0   58*10   59*20   59*10   609*0   59*72   613*0   8**9   671*6   604*0   545*0   588*8   598*8   579*4   579*0   599*0   599*0   609*0   597*2   613*0   8**9   671*6   58*70   516*0   591*2   591*2   576*0   581*0   590*0   609*0   597*2   613*0   8**9   671*6   58*70   58*10   58*10   58*10   590*0   600*0   699*0   597*2   613*0   8**9   671*6   58*70   58*10   58*13   58*13   58*10   590*0   600*0   699*5   598*2   600*0   8**9   671*6   58*10   58*13   608*3   58*13   58*10   590*0   600*0   609*0   597*2   613*0   8**9   671*6   58*10   58*13   608*3   58*13   58*10   590*0   600*0   609*0   597*0   622*0   8**9   671*6   58*10   58*13   68*13   58*13   58*10   590*0   600*0   609*0   597*0   602*0   8**9   671*6   58*10   58*13   68*13   58*13   58*10   590*0   600*0   609*0   597*0   602*0   8**9   671*6   58*10   58*13   58*13   58*10   590*0   600*0   609*0   5													
94   123'4   117'4   78'0   105'4   117'4   117'6   112'3   111'0   106'0   109'8   107'7   120'0   111'4   78'4   116'0   116'4   111'4   112'8   109'4   110'4   108'4   110'8   107'7   127'2   114'4   89'4   121'2   117'6   114'4   113'8   108'8   111'2   108'0   110'9   106'6   104'14   113'8   113'8   108'8   111'2   108'0   110'9   106'6   111'0   106'14   113'8   113'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   118'8   11		129.8				115.2							
120	9.4		117.4	78.0									
0-4   125-9   113-3   90-5   117-4   118-4   116-6   110-8   100-5   109-4   108-0   111-0   106-6   17-4   124-4   113-0   91-6   118-8   118-8   118-8   118-8   118-8   118-4   110-9   109-4   107-0   109-5   110-4   107-6   17-7   107-5   104-4   98-0   120-4   119-6   121-4   111-4   114-4   108-0   109-5   110-4   107-6   107-6   17-7   104-4   98-7   115-4   114-8   119-8   118-4   112-8   110-6   108-4   109-0   110-0   107-6   17-7   114-9   101-5   97-0   115-4   118-4   118-9   113-4   111-2   110-8   110-4   109-8   108-3   17-0   112-4   92-5   103-5   115-4   118-4   112-8   113-4   111-2   110-8   110-4   109-8   108-3   109-7   112-4   92-5   103-5   115-4   118-4   112-1   112-6   110-4   110-2   110-3   109-6   109-7   112-4   92-5   103-5   115-4   118-4   120-1   112-6   110-4   110-2   110-3   109-6   109-7   112-4   92-5   103-5   115-4   118-4   120-1   112-6   110-4   110-2   110-3   109-6   109-7   109-7   112-4   110-3   109-6   109-7   109-7   112-4   110-3   109-6   109-7   109-7   112-4   110-3   109-6   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7   109-7	7'0					116.4		112.8					
7:4   124'4   118'0   91'6   118'8   118'8   118'4   110'9   100'4   107'0   100'5   100'4   100'6   107'4   107'6   105'5   104'4   98'4   114'8   119'8   118'4   112'8   110'6   108'4   109'0   110'0   107'6   107'6   107'5   114'9   101'5   97'0   115'4   117'4   118'9   118'4   111'2   110'8   110'4   109'8   108'3   108'3   108'3   108'3   112'4   92'5   103'5   115'4   118'4   118'9   113'4   111'2   110'8   110'4   109'8   109'6   109'7   112'4   120'1   112'6   110'4   110'2   110'3   109'6   109'7   112'4   118'4   118'4   118'9   113'4   111'2   110'8   110'4   109'8   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'3   108'	7.4												
100   107   0				90.9	117 4	118 4				109 4			
To   105   5   104   4   98   4   114   8   119   8   118   4   112   8   110   6   108   4   109   0   110   107   6   107   5   114   92   101   5   97   0   115   4   117   4   118   9   113   4   111   2   110   3   109   8   108   3   70   112   4   92   5   103   5   115   4   118   4   120   1   112   6   110   4   110   2   110   3   109   6   108   3   70   112   4   92   5   103   5   115   4   118   4   120   1   112   6   110   4   110   2   110   3   109   6   108   7   70   112   4   112   4   110   2   110   3   109   6   108   7   70   112   4   112   4   110   2   110   3   109   6   108   7   70   112   4   110   4   110   2   110   3   109   6   108   7   70   109   7   70   70   70   70   70   70   7										108.0			
To   112'4   92'5   103'5   115'4   117'4   118'9   113'4   111'2   110'8   110'4   109'8   108'3   109'6   109'7													
HORIZONTAL FORCE.  Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1 '63.  100   535.5   586.0   548.5   587.0   588.8   593.8   579.4   579.0   597.0   591.0   607.0   597.2   613.0    155   560.4   589.5   519.0   575.5   591.5   574.5   577.5   590.0   591.0   607.0   597.0   622.0    159   571.5   589.7   589.1   589.1   589.1   589.2   574.5   577.5   590.0   591.0   609.0   597.0   622.0    150   567.5   584.2   521.5   594.5   589.4   572.0   589.0   590.0   600.2   605.4   598.2   620.5    150   567.5   584.2   521.5   594.5   589.4   572.0   589.0   590.0   600.0   597.5   589.0   625.0    150   565.0   583.0   521.5   604.2   588.8   570.0   590.0   590.0   600.0   597.5   589.0   625.0    150   565.0   583.0   583.3   658.3   603.5   588.8   570.0   591.0   590.2   600.0   603.5   600.0   624.0    170   565.0   583.0   557.5   601.8   583.8   570.5   591.0   590.2   600.0   603.5   609.0   616.5    160   573.5   585.0   579.0   601.4   584.6   578.5   592.2   604.2   588.0   589.0   612.0   609.0    160   577.5   567.5   575.0   598.6   583.8   580.5   591.5   602.0   589.0   589.0   612.0   609.0    160   591.0   559.5   570.0   601.2   581.4   586.0   586.0   586.0   594.4   598.2   587.5   610.0   609.8    160   52.8   52.6   52.9   52.9   52.8   52.9   52.9   53.5   53.5   53.5   53.5   53.5   53.5   54.3   54.5    VERTICAL FORCE.  Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.64.	37.5	114.9		97.0	115.4	117.4	118.9				110.4		108'3
0.0 535.5 586.0 548.5 587.0 589.6 581.2 578.0 597.0 593.2 608.4 595.5 611.5 58.0 561.6 604.0 548.5 588.8 598.8 579.4 579.0 592.0 591.0 607.0 597.2 613.0 555.5 560.4 589.5 519.0 575.5 591.5 574.5 577.5 590.0 591.0 609.0 597.0 622.0 81.9 571.5 587.0 516.0 591.2 591.2 576.0 581.0 590.0 602.0 605.4 598.2 620.5 11.0 567.5 584.2 521.5 594.5 589.4 572.0 590.0 590.0 602.0 605.4 598.2 620.5 11.0 567.5 584.5 591.5 547.5 589.4 572.0 590.0 590.0 602.0 605.4 598.2 620.5 11.0 567.5 584.5 591.5 547.5 589.4 572.0 590.0 590.0 590.0 602.0 605.4 598.2 620.5 11.0 567.5 584.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 581.5 58	37'0	112.4	92.5	103.5	115.4	118.4	120.1	112.6	110.4	110.2	110:3	109.6	109.7
\$\begin{array}{c c c c c c c c c c c c c c c c c c c	X.		Horizont	al Force.		1	ncrease, in	Scale Divisi	ons, correspo	onding to 1°	decrease of	'Temperatur	e, 1.63.
\$\begin{array}{c c c c c c c c c c c c c c c c c c c	00.0							578.0					
879   571	48'0												
10   667.5   584.2   521.5   594.5   589.4   572.0   590.0   590.0   600.0   597.5   598.0   625.0     19   589.5   585.0   521.5   604.2   588.8   570.0   591.0   590.0   593.8   615.0   605.0   624.0     7.0   565.0   583.0   558.3   608.5   588.2   569.0   591.0   590.2   600.0   603.5   609.0   616.5     10   608.0   587.0   557.5   601.8   583.8   570.5   595.0   593.0   599.2   597.0   612.0   609.0     16   60.0   573.5   585.0   579.0   601.4   584.6   578.5   592.2   604.2   598.0   591.0   612.2   609.0     13   677.5   567.5   575.0   598.6   583.8   580.5   591.5   602.0   598.0   591.0   612.2   609.0     16   691.0   559.5   570.0   601.2   581.4   586.0   586.0   594.4   598.2   587.5   611.0   609.8     13   60.0   52.8   52.6   52.9   52.9   52.8   52.9   52.9   53.5   53.5   53.5   53.5   54.3   54.5      Verital Force.													
19													
770	11 9			521.5		588.8	570.0		590.0			605.0	624.0
1870   573.5   585.0   579.0   601.4   558.46   578.5   592.2   604.2   598.0   591.0   612.2   609.0     1870   577.5   567.5   575.0   598.6   583.8   580.5   591.5   602.0   598.0   589.5   611.0   609.0     183.0   586.0   554.5   590.0   600.7   580.2   577.7   592.0   590.2   599.2   591.6   610.5   611.3     183.0   52.8   52.6   52.9   52.9   52.8   52.9   52.9   52.9   53.5   53.5   53.5   53.5   54.3   54.5      Vertical Force.	17.0												
13						583.8				599.2			
Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Seco													
Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Secondary   Seco													
Vertical Force.  Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1 '64.    1009   196   223   8   214   3   218   4   232   7   238   4   248   0   238   0   237   8   245   3   242   4   240   8   87   210   9   232   2   219   5   219   0   232   9   237   9   248   0   238   0   237   8   245   3   242   4   240   8   213   0   224   3   209   3   225   2   235   2   239   7   248   0   238   0   237   8   248   1   242   4   242   6   238   0   224   3   210   8   228   4   235   2   238   1   248   0   238   0   238   5   243   6   242   4   242   6   239   244   9   224   3   210   4   227   9   235   2   238   1   248   0   238   2   239   4   244   6   240   8   243   1   242   4   242   6   242   9   224   3   202   2   227   9   234   3   240   0   240   7   238   2   239   4   244   6   240   8   243   1   242   0   232   5   225   6   208   7   228   4   234   1   339   5   240   7   238   2   239   4   248   8   240   8   243   3   240   0   232   5   235   6   208   7   228   4   234   1   339   5   240   7   238   5   239   7   245   8   241   1   242   0   231   1   230   7   214   3   229   9   226   0   239   5   240   7   238   5   239   7   243   7   241   1   242   0   231   230   227   0   228   5   212   4   230   1   236   3   239   9   241   7   240   1   239   7   243   7   241   1   242   0   238   5   228   4   219   6   214   2   231   4   238   5   241   6   241   5   240   1   243   1   243   2   241   1   242   0   243   243   244   244   244   8   238   244   247   248   238   244   7   242   4   240   8   243   244   240   8   243   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244   244	23.0												
196.9	53.0	5 <b>2</b> 8	52°6	52°9	52.9	52.8	5 <b>2</b> ·9	52.9	53°5	53.5	53.5	54.3	$5\overset{\circ}{4}$ $\overset{\circ}{5}$
18.7       210.9       232.2       219.5       219.0       232.9       237.9       248.0       238.0       237.8       245.3       242.4       240.8         17.8       213.0       224.3       209.3       225.2       235.2       239.7       248.0       238.0       237.8       243.1       242.4       242.6         19.8       228.0       224.3       210.8       228.4       235.2       238.1       248.0       238.0       238.5       243.6       242.4       242.6         19.9       224.9       224.3       210.4       227.9       235.2       238.1       248.0       238.2       239.4       244.6       240.8       243.1         19.9       224.9       224.3       202.2       227.9       234.3       240.0       240.7       238.2       239.4       244.6       240.8       243.1         19.9       224.9       224.3       202.2       227.9       234.3       240.0       240.7       238.2       239.4       244.6       240.8       243.3         19.0       231.1       230.7       214.3       229.9       226.0       239.5       240.7       238.5       239.7       243.7       241.1       242.0 <td></td> <td></td> <td>VERTICAL</td> <td>Force.</td> <td></td> <td>r</td> <td>ncrease, in S</td> <td>Scale Divisio</td> <td>ons, correspo</td> <td>onding to 1°</td> <td>decrease of</td> <td>Temperatur</td> <td>e, 1°64.</td>			VERTICAL	Force.		r	ncrease, in S	Scale Divisio	ons, correspo	onding to 1°	decrease of	Temperatur	e, 1°64.
17.8       213.0       224.3       209.3       225.2       235.2       239.7       248.0       238.0       237.8       243.1       242.4       242.6         19.8       228.0       224.3       210.8       228.4       235.2       238.1       248.0       238.0       238.5       243.6       242.4       242.6         12.7       230.4       224.3       210.4       227.9       235.2       238.1       248.0       238.2       239.4       244.6       240.8       243.1         18.9       224.9       224.3       202.2       227.9       234.3       240.0       240.7       238.2       239.4       248.8       240.8       243.3         10.0       232.5       225.6       208.7       228.4       234.1       339.5       240.7       238.5       239.7       245.8       241.1       243.2         12.0       231.1       230.7       214.3       229.9       226.0       239.5       240.7       238.5       239.7       243.7       241.1       242.0         13.0       227.0       228.5       212.4       230.1       236.3       239.9       241.7       240.1       239.7       243.7       241.1       242.0 <td>50.8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	50.8												
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	78.7				219.0	232.9			238.0	237.8		242.4	240.8
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$													
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	19 5 72 7												
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	69 9				227.9	234.3	240.0	240.7	238 2	239.4		240.8	243.3
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	70 0			208.7	228.4				238.5			241 1	243.2
75.4         222.5         221.2         218.2         230.1         236.4         241.6         241.5         240.1         243.1         243.2         241.1         242.0           78.5         228.4         219.6         214.2         231.4         238.5         241.6         238.1         237.8         241.7         242.4         240.8         243.2           36.1         227.4         219.0         216.5         231.4         238.4         242.8         238.1         237.8         241.7         242.4         240.8         243.2           44.4         54.2         54.2         54.2         53.6         53.3         53.2         53.7         53.7         54.5         54.5         54.7				214.3									
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$												241 1	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	78 5												
	86.1												
d increasing Horizontal and Vertical Force.	5 <b>4 4</b>	54.2	5 <b>4</b> °2	54.2	54.2	53.6	5å·3	53.2	53.7	53.7	54.5	54.5	54.7
	d increa	sing Horizo	ntal and Ve	rtical Force.									
			<u> </u>			<u></u>		<del> </del>		<del></del>	<del></del>		

November 24th and	i 25th.			MAGNET	ICAL OBS	ERVATIO	NS.				
Mean Göttingen	Ang	ular Value o	of one Scale	Division =	0'`721.			]	DECLINATIO	ON.	<b>v</b>
Time.	10 <sup>h</sup> .	11 <sup>h</sup> .	12 <sup>h</sup> .	13 <sup>h</sup> .	14 <sup>h</sup> .	15 <sup>h</sup> .	16 <sup>h</sup> .	17 <sup>h</sup> .	18 <sup>h</sup> .	19 <sup>h</sup> .	20 <sup>h</sup> .
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.
o o	111'4	111.5	112.2	113.2	113'6	113.4	112.0	111.4	111.8	113.3	113.0
5 0	110.4	110.4	112.4	114'2	113.4	113.0	111.7 111.2	111.4 111.3	112.3 112.4	113'4 113'4	113.0
10 0	111.4	111.6	112.2	114.2	113°5 113°3	113'4 113'0	111.6	111.3	111.9	113.6	111.8
15 0	111.2	111.2	113.4	114.4	113.4	113.0	111.6	111.4	112.4	113.5	113.0
20 0	111'4	111.2	113.2	114.2 114.0	113.4	112.4	111.6	111.8	112.0	113.5	113.5
25 0	110.5	111.8	112.2 114.2	113.8	113.4	112.4	111.6	111.6	112.4	112.6	112.0
30 0	111.4	111.8	113.4	113.2	113.4	112.5	111.9	111.6	112.3	112.0	111.3
35 0	110.4	111.8 112.4	113 4	113.4	114.0	112.0	111.6	111.2	112.4	112.0	110.4
40 0	111'2 111'4	112.0	113.4	112.6	113.3	112.5	111.2	111.8	113.0	112.3	109.3
45 0	111.5	113.5	113.4	113.8	113.4	112.0	111.2	111.3	113.3	112.7	108.4
50 O 55 O	110.5	111.8	113.4	113.4	113.4	111.8	111.6	1111'8	113.4	113.0	109'4
м. s.	One	e Scale Divis	sion = '00	0087 parts	of the H. F			-	Horizonta	AL FORCE.	
2 0	631.2	630.2	631.2	632.2	633.0	631.2	631.5	631.0	631.0	630.5	636.0
$\begin{array}{ccc} 2 & 0 \\ \hline \end{array}$	631.2	630.2	631.2	632.2	633.5	631 2	631.1	631.0	631.0	631.0	635.0
$\begin{bmatrix} 7 & 0 \\ 12 & 0 \end{bmatrix}$	631.0	631.2	632.2	633.4	633.2	631.8	631.0	631.0	629.0	631.0	635.0
_	629.2	630.8	632.4	634.0	632.2	632.0	631.2	631.0	629.0	631.1	637.1
$\begin{array}{ccc} 17 & 0 \\ 22 & 0 \end{array}$	631.8	629.2	631.2	634.2	631.8	632.0	631.0	630.5	630.0	632.5	637.0
$\begin{array}{ccc} 22 & 0 \\ 27 & 0 \end{array}$	631.2	630.2	633.2	633.0	632 2	631.8	630.0	629.5	629.2	633.5	633.0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	628.2	630.2	635.4	633.0	632.4	632.0	631.0	630.0	630.0	635.0	635.0
37 0	626.8	629.2	636.0	631.4	631.2	631.8	630.8	630.0	630.1	631.0	630.0
42 0	632.2	630.0	632.8	631.5	631.4	630.0	630.2	629.0	630.2	631.5	632.0
47 0	632.5	631.8	632.2	630.8	631.7	630.2	629.8	631.5	629.0	632.0	632.0
<b>52</b> 0	630.8	631.8	633.8	631.0	631.8	630.3	630.0	633.0	629.7	632.5	632.0
57 0	630.5	631.0	635.0	632.4	632.0	631.0	629.7	631.3	630.2	632.2	635.0
Thermometer	52.8	53.6	54.1	55.0	55.0	55.0	55.0	54.8	54.4	54.4	54°6
M. S.	One	Scale Divis	ion = '000	0063 parts	of the V. F	•	·		VERTICA	L FORCE.	· · · · · · · · · · · · · · · · · · ·
3 0	239.1	235.0	234.1	233.1	232.5	231.6	230.6	232.9	235.0	232.0	230.7
8 0	238.3	235.3	234.1	233 1	232.5	231.6	231.4	232.9	235.0	232.0	230.7
13 0	237.8	235.3	234.9	232.7	232.7	231.6	231.4	232.9	234.6	231.6	230.7
18 0	237.8	235.3	234.9	232.7	232.7	231.6	231.4	232.9	234.6	231.6	230.7
23   0	237.0	234.0	235.0	232.7	232.7	231.6	231 5	232.9	234 6	231.6	230.7
28  0	236.5	233.9	235.0	232.2	232'1	231.6	231.5	233 1	234.6	231.6	229.9
33 0	236.1	233.9	235.0	232.2	232 1	231.6	231.5	233.1	234.6	231.6	230.0
38 0	235 4	233.9	235.0	232.2	232.1	231.6	231.7	235.0	233.0	231.6	229.5
43 0	335.4	233.3	234.2	232.1	232.1	230.6	232.9	235.0	233.0	231.6	229.6
48 0	235.0	233*3	233.1	232 3	232.1	230.6	232.9	235.0	232.7	231.6	229.5
53 0 58 0	235.0	233.9 234.1	233.1	232.3	232.1	230.6	232.9	235.0	232.0	231.6	228.2
Thermometer	52.2	54.2	55.2	56°0	55.7	55.8	55.8	55.7	55°3	56°2	56.8

		Declinati	ON.					Angt	ılar Value o	of one Scale	Division =	0' • 721.
21 <sup>h</sup> .	22h.	23 <sup>h</sup> .	Oh.	1 <sup>h</sup> .	2 <sup>h</sup> .	3 <sup>h</sup> .	4 <sup>h</sup> .	5 <sup>h</sup> .	6 <sup>h</sup> .	7 <sup>h</sup> .	8 <sup>h</sup> .	9 <sup>h</sup> .
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div
09'4	Sc. Div.	123.4	120.5	117.2	119.8	119.0	113.9	108.7	105.6	106.4	109 4	111.4
10.2	118.3	123.5	119.2	120.4	120.4	117.4	113.4	108.8	106.4	106 6	109.0	111.6
12.4	112.6	122.4	120.3	118.4	120.4	112.4	113.3	109.4	106.5	107.2	109.8	112.5
14.3	115.2	120.6	119.4	118.8	120.0	113.4	114.4	108.5	106.3	107.0	109.7	112.2
14'4	115.4	119.2	119.9	116.4	121.6	115.0	113.5	107.6	106.3	107.4	110.1	112.4
	116.2	119.4	120.5	119.0	121.8	116.0		106.6	106.0	107.5	110.4	112.4
18.2	117.4	118.3	119.4	118.4	126.0	114.4	112.2	100 0		108.4	110.4	113.5
19'6							111.6	106.6	105.6			
21'6	115.5	119.7	119.5	120.3	123.8	117.4	111'4	107.4	105.6	108.5	110.4	113'4
122.2	120.0	119.2	119.2	121.8	123.5	113.7	110.4	107.0	105.4	109.0	110.4	113.2
122.0	118.6	120.5	119.4	122.0	122.8	113.6	110.0	106.5	106.2	109.6	110.8	113.3
120.4	120.5	119.2	118.6	121.5	125.4	114.0	110.0	106.6	106.2	109'4	111.1	113.4
20.4	120.8	119.0	117.8	121.4	125.6	114.4	109.4	105.7	105.4	109.6	111.4	113.4
		Horizont	AL FORCE.		I	ncrease, in	Scale Divisio	ons, correspo	onding to 1°	decrease of	Temperatur	e, 1.63.
C00 * O	642.0	640.8	640.2	629.0	633.3	618.0	613.2	613.2	618.5	629.0	635.0	638.0
638.0					099 9							
538.5	637.2	640.0	637.3	631.2	626.0	610.0	612.5	615.0	621.2	630.0	635.0	638.0
341'1	638.9	640.5	639.0	633.5	627.0	618.0	613.0	616.0	623.0	629.0	635.8	637.9
643.7	637.5	640.2	641.4	631.0	627.4	619.0	613.0	618.0	623 0	630.0	636.5	637.0
639.0	640.2	638.5	639.5	631.0	623.9	618.0	614.0	619.0	624.0	632.0	636.0	637.5
642'0	640.2	637.8	638.7	630.0	624.0	620.0	614'3	618.2	625 0	630.0	637.0	636.8
641'0	641.2	638.0	639.4	629.8	625.0	607.5	614.0	620.0	625.0	630.0	637°0	636.0
643.5	640.5	640.2	637.8	631.0	625.2	618.0	615.0	619.0	626.0	631.0	637.0	634.5
641.0	639.9	638.8	638.0	629.0	627.0	621.0	614 5	618.2	628.0	632.0	637.0	636.8
640.0	641.8	640.0	638'4	628.8	626.8	617.0	614.0	620.5	627.5	631.0	637.0	637:5
640'0	642.5	638.8	633'4	628.0	623.0	614.0	617.5	621.0	632.0	633 5	637.5	636.0
642.0	643.0	640.0	634.0	628.0	622.8	615.0	615.5	619.0	632.0	634.0	637.0	638.0
5 <b>4</b> 6	54°5	54.1	53.8	5å·8	53.2	52°5	52.2	52°2	52.0	52°0	51.8	52°C
	<u></u>	VERTICAL	Force.		.:	Increase, in	Scale Divisi	ons, corresp	onding to 1°	decrease of	Temperatur	e, 1.64.
228.2	220.7	227.5	999.0	230.2	236.9	237.4	239.0	239.7	240 9	241.9	242.0	242.5
227.1	228.7	227.8	228.2	230.2	236.9	237.4	239.0	239.7	240.9	241.9	242.0	242 5
227.0						238.1	238.4	239.7	240.9	241.9	242.0	242.5
225.2	228.6	227.8	228.2	230.7	236.5	0201	238.4			241.9	242.4	242 3
	228.6	227.8	228.2	230.7	235.9	238.1		239.7	241.6			
223'3	228.6	227.8	229.4	230.7	235.9	238.1	238.4	239.7	241.6	241.9	242.5	242.3
223.3	228.6	228.1	229 4	232.0	235.5	239.0	238.4	239.7	241.6	241.9	242.5	242 3
224'1	228.1	228'1	229 4	232.0	235.5	236.4	239.7	239.7	241.6	241.9	242.5	242 3
226.1	228.1	228.1	229.4	232.0	235.5	238.5	239.7	239.7	241.6	241.9	242 5	242
226.1	227.7	228.1	229.7	232.8	235.5	238.5	239.7	239.7	241.6	242.0	242.5	242
228.9	227.7	228.2	229.7	232.8	235.5	238.5	239.7	240.0	241'6	242.0	242.5	242 3
227.4	227.7	228.2	230.0	232.8	234.8	238.5	239.7	240.9	242.3	242.0	242.5	242 3
228.4	227.5	228.2	230.5	232.8	234.8	238.5	239.7	240.9	242.3	242.0	242.5	242
5 <sup>9</sup> ·0	56°4	55.6	56°3	55.4	53.9	53.0	52.2	52°7	52.2	52.2	52.2	52.5

December 20th an	d 21st.			MAGNET	ICAL OBS		NS.		** ********* * * *******		
Mean Göttingen	Ang	ular Value	of one Scale	Division =					Declinati	ion.	
Time.	10h.	11h.	12h.	13h.	14 <sup>h</sup> .	15h.	16h.	17 <sup>h</sup> .	18h.	19h.	20h.
M. S.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div
0 0	109.8	111.8	112.6	112.4	114.3	114.4	114.4	115.6	113.6	112.8	113.4
5 0	110.0	112.0	112.6	112.6	114.1	114'4	114'4	115.8	113.6	113.2	113.4
10 0	110.4	112.0	112.2	112.9	114.2	114.4	114.4	115.4	114.6	113.5	113.6
15 0	110.0	112.6	112.5		114.4	114.4	114.4	116.4	114.6	113.4	113:3
20 0	110.4	112.3	112.6	113.2	114.4	114.4	114.4	116.4	114.4	112.8	113.0
<b>25</b> 0	110.4	112.4	112.7	113.4	114'4	114.6	115.2	116.2	114.3	112.4	113.0
30 0	110.6	112.4	112.7	114.3	114.4	114.9	115.2	116.2	114.0	112.4	113.8
35  0	110.9	112.4	112.6	114.4	114.4	114'4	115.5	115.8	112.8	112 8	114.0
40 0	110.9	112.2	112.4	114.2	115.2	114.4	115.4	116.4	113.4	113.0	114.0
45 0	111.0	112 4	112.3	114.5	115 1	114.4	115.2	115.8	114.0	113.4	113.8
50 0	111.2	112.4	112.4	114.5	115.4	114.4	115.2	114.8	114.2	113.6	113.4
<i>5</i> 5 0	111.6	112.4	112.3	114.2	114.5	114.4	115 4	113.6	113.3	113.8	113.4
M. S.	One	Scale Divis	ion = '00	0087 parts	of the H. F.				Horizoni	AL FORCE	•
2 0	664.0	663.5	663.0	660.0	661.4	663'1	662.0	663.0	661.6	666.6	668.0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	665.0	663.5	663.0	661.0	662 5	662.9	662.0	661.8	662.2	667.4	668.2
12 0	665.5	663.5	663.0	660.3	662.0	663 1	662.2	662.2	663.0	667.0	668.4
17 0	665.0	664.0	663.0	660.2	662 0	663.0	662.2	663.2	663.5	666.9	668.4
22 0	663.1	664.0	662.2	660.2	662.0	663.0	662.0	663.2	663.8	667.0	668.0
$\begin{array}{ccc} 22 & 0 \\ 27 & 0 \end{array}$	662.5	664.0	662.3	660.2	663.0	663.0	662.0	663.2	664.0	667.5	668.2
32 0	663.5	663.4	663.0	660.0	663.0	663.0	663.0	663.8	665.4	667.8	669.0
37 O	664.0	663.4	663.0	660.8	663.0	662.5	662.8	663.2	665.5	668.0	669.2
42 0	664.5	663.2	663.0	660.2	664.0	662.7	662.8	664.8	665.2	667.4	669.3
47 0	664.5	663.0	662.9	661.1	664.0	662.2	662.4	664.2	665.8	667.4	668 5
52 0	664 1	663 0	661.5	661.7	664.0	663.0	662.4	663.0	666.6	667.2	667.8
57 O	664 0	663.0	660.2	662.0	664.0	662 0	662.0	661.5	667.2	667.4	667.0
Thermometer	47.4	48.3	48°7	48.7	48.7	48.2	47°9	47°1	46.4	46.1	45.8
34 T 2 1 2 4 4 4 4 4	One	e Scale Divi	sion = '00	0063 parts	of the V. F				VERTICAL	Force.	
M. S.		<del></del>		1		<u> </u>		<del> </del>		1	i
3 0	248.6	246.7	244.7	245.0	244 9	245.6	246.1	246.6	247.3	247.3	247 1
8 0	248 6	245.8	244.7	245.0	244.9	245.6	246.1	246 6	247.3	247.3	247 2
13 0	248.6	245.8	244.7	245.0	244.9	245.6	246'1	246.6	247.3	247.3	247.2
18 :0	247.9	245.8	244.7	244.9	244.9	245.6	246.1	246.6	247.3	247.3	247.2
23   0	247.9	245.6	245.4	244.9	244.9	245.6	246.1	247.0	247.3	247.3	247 2
28 0	246.8	245.6	245.4	244.9	244.9	245.6	246.1	247.0	247.1	247.3	247 2
33 0	246.8	244.8	245.4	244.9	244.9	245.6	246'1	247.0	247.1	247.3	247 2
38 0	246.8	244.8	246.0	244.9	244.9	245.6	246.1	247.0	247.1	247.3	247 2
43 0	246.8	244'8	246'0	244.9	244 9	245.6	246.1	247.0	247.1	247.1	247.2
48 0	246.8	244.8	245'9	244 9	244.9	245.6	246'1	247.0	247.3	247.1	247.1
<b>5</b> 3 0	246.7	244.8	245.9	244.9	245.6	245.6	246'1	247.0	247.3	247.1	247.1
58 0	246.7	244.8	245 9	244.9	245 6	246.1	246'1	247:0	247.3	247.1	247.1
Thermometer	47.0	48.0	48.7	48.4	48.7	48.4	48.0	47.0	46°4	46.4	46.2

		DECLINAT	CION.					An	gular Value	of one Scale	Division =	= 0'·721 <b>.</b>
21h.	22h.	23h.	Oh.	1h.	2h.	3h.	4h.	5h.	6h.	7h.	8h.	9h.
Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div.	Sc. Div
13.2	115.0	107.6	107.4	101.9	117.5	121.6	119'1	114.8	110.8	109.5	109.4	110.4
13.3	116.4	107.4	109.8	102.3	115.6	123'0	118.3	117.4	111.4	108.8	109.4	110.8
13.3	116.4	105.4	110.4	103.4	118.6	122.9	118.1	115.0	110.4	109.0	108.6	110.4
07.8	116.2	102.4	108.6	105.4	117.6	122.4	118'4	115'4	111.3	109.2	109.4	110.4
15'9	115.6	100.7	108 6	107.4	118.4	121.6	118.5	115.8	111 4	107.4	109.3	110.5
16.0	116.3	96.6	106.7	109'4	120.4	122 4	117.4	115.4	111.0	107.0	109.3	111.3
17.9	117.3	96.4	106.4	109.4	121.4	122.4	117.4	112.4	110.4	108.7	109.2	111'4
17.9	119.4	91.9	105.6	110.0	121.2	121.6	116.4	110.3	109.2	109.0	109.2	111.6
18.1	116.0	90.0	105.4	110.7	123.4	121.4	117.6	114.8	108.4	108.6	109.4	112.0
116.4	113.4	91.4	105.4	111.4	124.5	122.4	115.4	115.2	107.8	109.4	109.0	111.4
16.6	111.6	$ _{102}^{93} \cdot \frac{4}{4}$	101.4	115.5	123 3	119.4	117.0	116'4	108.4	109.6	109.5	111.5
114.4	111 2	102 4	101 3	116.4	122.4	119.3	117.4	112.8	110.4	109.4	110.0	112.4
		Horizont	AL FORCE		]	Increase, in	Scale Divisi	ons, correspo	onding to 1°	decrease of	Temperatu	e, 1°63.
667.0	664.0	653.0	682.0	671.0	663.0	658.5	652.0	651.2	655.4	651.0	653.0	667.0
667.2	667.0	658.0	684.5	670.0	660.0	659.0	652.0	650.2	651.6	651.8	654.2	664.0
667.2	668.5	652.0	686.0	670.0	662.0	661.0	651.2	651.1	656.2	650.0	654.0	663.8
675'0	671.0	650.0	687.0	669.0	664.0	659.6	651.8	650.5	654.2	651.8	650.0	670.0
67.4	668.5	650.2	688.1	666'1	664.0	658.5	652.8	654.2	655.2	655.0	654.0	670.4
667.8	669.0	649.1	684.0	665.5	663.5	658.0	650.2	654.0	652.5	655.2	656.0	666.8
68.5	671.5	666.2	681.8	666.0	665.0	658.0	648.8	652.2	652.2	651.0	659.0	666.8
69.0	671.0	675.0	679.5	663.6	664.0	656.0	647.8	648.4	656.8	648.0	660.0	667.4
669°0	669.8	678.5	676.0	663.0	663.0	657.0	647.2	642.3	658.0	650.0	661.0	667.0
666.2	661.3	678.0	678.0	664.0	663.0	655.0	647.4	645.2	659.8	651.0	664.0	667.2
665.8	660.0	681.0	674.0	663.0	661.0	652.5	647.2	646.2	652.6	650.5	669.2	666.0
66.9	655.1	680.2	672.0	663.0	660.8	653.0	649.4	655.0	651.5	651.0	671.0	662.2
46°0	46°0	46.3	46.5	45°7	46.0	46.0	45.2	45°5	45.6	45°6	45°3	44.7
VERTICAL FORCE. Increase, in Scale Divisions, corresponding to 1° decrease of Temperature, 1.64												
247 1	238.7	234.9	223.9	235.5	242.2	246.6	047:4	248.3	248.5	248.9	251.7	951.6
247.1	237.9	234 9	226.9	235 5	242.2	246.6 246.6	247 4 247 4	248.3	248 5	248 9	251.7 $251.7$	251.6 251.6
47.1	237 9	230.5	228.7	235.5	242.5	247.4	247.4	248.3	248.5	248.9	251.7	251.6
47 9	237.9	226.8	230.6	237.0	243.7	247.4	247.4	248.3	248.5	249 2	251.6	251.6
47.5	237.9	225.1	231.7	238.2	243.7	247.4	247.4	248.3	248.0	251.7	251.6	251.6
47.5	237.6	222.8	231.7	239.4	243.7	247.4	247.4	248.3	248.0	251.7	251 6	251.6
47.5	237.6	225.9	232.0	239.4	243.7	247.4	247.4	248.0	249.0	$\frac{251}{251}.7$	251.6	251.6
47.5	237.6	225.9	232.2	239.4	245.4	247.4	247.4	248.0	249.0	251.7	251.6	251.6
47.5	237.3	224.3	232.2	240.7	245.4	247.4	247.5	$\frac{210}{247}.5$	249.6	251.7	251.6	251.6
41.5	237.0	222.0	233.6	240.7	246.5	247.4	247.5	248.7	249.6	251.7	251.6	251.6
41.5	237.0	222.0	235 • 5	241.3	246.2	247.4	247.5	248.0	248.9	251.7	252.7	251.6
41.8	235.2	222.4	235.2	242.2	246.6	247.4	247.6	248.5	248.9	251.7	252.7	251.5
16°6	46°6	4 <sup>°</sup> 7.2	4 <sup>°</sup> 3	47.4	46°4	46°0	45°4	45.6	4ŝ·6	45.4	45°2	44.8

TORONTO, 1846 to 1848.

METEOROLOGICAL OBSERVATIONS.

				Barome		BAROMET = 27 Engli			ers in the Ta	able.			
ours of Götting Time	Mean }	0	1	2	3	4	5	6	7	8	9	10	11
ours of Toron Tim	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
(	1 2 3	In. 2.714 1.929 2.314	In. 2.684 1.907 2.356	In. 2.674 1.866 2.388	In. 2.638 1.872 2.416	In. 2.641 1.864 2.443	In. 2.619 1.865 2.439	In. 2:569 1:855 2:427	In. 2:521 1:833 2:424	In. 2 489 1 829 2 421	In. 2.469 1.835 2.407	In. 2:419 1:845 2:427	In. 2:367 1:858 2:441
	4 5 6 7 8 9	2.694 3.002 2.370 2.393 2.562 2.470	2.716 3.016 2.360 2.415 2.547 2.470	2.732 3.024 2.330 2.425 2.556 2.465	2.748 3.032 2.304 2.453 2.584 2.454	2·791 3·035 2·300 2·447 2·594 2·443	2·797 3·034 2·275 2·451 2·590 2·414	2.804 2.983 2.227 2.447 2.572 2.378	2·798 2·953 2·215 2·454 2·561 2·328	2.806 2.919 2.201 2.462 2.555 2.298	2.832 2.911 2.200 2.478 2.555 2.278	2 · 845 2 · 895 2 · 186 2 · 493 2 · 551 2 · 232	2·855 2·861 2·214 2·514 2·544 2·267
JANUARY.	11 12 13 14 15 16	2·329 2·765 2·566 2·636 2·486 2·536	2:339 2:786 2:562 2:646 2:482 2:547	2:351 2:824 2:558 2:644 2:488 2:572	2:375 2:840 2:561 2:646 2:514 2:580	2:393 2:856 2:587 2:626 2:516 2:583	2:401 2:844 2:582 2:591 2:492 2:577	2.401 2.825 2.567 2.558 2.472 2.547	2:400 2:812 2:576 2:535 2:468 2:555	2:416 2:819 2:590 2:527 2:468 2:558	2:438 2:818 2:615 2:509 2:470 2:580	2:464 2:818 2:625 2:504 2:466 2:612	2:494 2:818 2:633 2:506 2:480 2:647
177	18 19 20 21 22 23 24	3:121 3:073 2:498 3:078 3:293 2:897	3·116 3·073 2·506 3·120 3·319 2·891	3·137 3·064 2·531 3·144 3·335 2·867	3·171 3·078 2·537 3·154 3·335 2·871	3·173 3·057 2·532 3·161 3·317 2·835	3 · 167 3 · 008 2 · 512 3 · 167 3 · 303 2 · 816	3 157 2 982 2 490 3 157 3 268 2 766	3:143 2:922 2:481 3:135 3:224 2:700	3 · 152 2 · 899 2 · 494 3 · 147 3 · 200 2 · 648	3 · 156 2 · 893 2 · 525 3 · 184 3 · 181 2 · 618	3·133 2·878 2·545 3·193 3·151 2·592	3°157 2°838 2°554 3°212 3°153 2°560
Feb.	25 26 27 28 29 30 31	2:340 2:618 2:571 2:675 2:268 2:540	2:322 2:638 2:583 2:679 2:262 2:590	2·322 2·670 2·609 2·671 2·270 2·656	2:320 2:701 2:631 2:668 2:242 2:692	2.319 2.718 2.659 2.656 2.231 2.739	2·281 2·724 2·658 2·633 2·225 2·766	2·273 2·714 2·660 2·598 2·225 2·778	2 · 240 2 · 702 2 · 655 2 · 552 2 · 215 2 · 776	2:238 2:678 2:643 2:556 2:215 2:794	2 · 246 2 · 664 2 · 658 2 · 546 2 · 201 2 · 824	2·266 2·663 2·676 2·506 2·204 2·861	2 · 298 2 · 655 2 · 690 2 · 508 2 · 200 2 · 901
Hourly	Means	2.6199	2.6271	2.6360	2.6451	2.6487	2.6382	2.6185	2.5992	2.5934	2.5960	2.5944	2.6009
	2 3 4 5 6 7 8 9 10 11 12	2·910 2·586 2·772 2·375 2·787 2·269 2·600 2·851 2·430 2·818	2:907 2:578 2:788 2:411 2:806 2:251 2:632 2:835 2:409	2 · 913 2 · 602 2 · 808 2 · 431 2 · 806 2 · 243 — 2 · 684 2 · 816 2 · 415	2:913 2:616 2:817 2:484 2:810 2:202 	2.910 2.626 2.814 2.512 2.820 2.176 ————————————————————————————————————	2.902 2.621 2.798 2.526 2.812 2.145 — 2.771 2.798 2.427	2.882 2.587 2.752 2.546 2.786 2.110 	2·877 2·568 2·700 2·558 2·725 2·074 ————————————————————————————————————	2·840 2·559 2·650 2·584 2·701 2·039 — 2·789 2·659 2·422	2·822 2·560 2·606 2·615 2·673 2·031 — 2·797 2·621 2·433	2·807 2·563 2·565 2·645 2·657 2·029 — 2·810 2·592 2·454	2.798 2.557 2.550 2.679 2.613 2.029 — 2.832 2.591 2.462
FEBRUARY	13 14 15 16 17	2.854 2.710 — 2.555 2.648	2.857 2.865 2.729 	2.877 2.895 2.727 — 2.566 2.684	2.897 2.892 2.714 — 2.548 2.713	2.913 2.880 2.710 — 2.528 2.712	2 · 920 2 · 877 2 · 692 ————————————————————————————————————	2.861 2.650 	2:900 2:840 2:609  2:478 2:732	2.894 2.814 2.586 — 2.472 2.730	2:891 2:795 2:592 — 2:468 2:732	2:894 2:805 2:572 — 2:482 2:741	2.902 2.789 2.503  2.499 2.754
Ħ	18 19 20 21 22	2:911 2:909 2:108 1:961	2:923 2:890 2:086 1:983	2:946 2:895 2:069 1:993	2 · 964 2 · 859 2 · 039 2 · 023	2.969 2.829 2.009 2.047	2 983 2 791 1 991 2 070	2 988 2 758 1 966 2 070	2.750 1.959 2.052	2:957 2:727 1:940 2:052	2 · 965 2 · 682 1 · 929 2 · 066	2.965 2.632 1.919 2.094	2.955 2.611 1.917 2.122
Marc	23 24 25 26 27 28 ch 1	2·436 2·613 2·878 3·122 3·219 2·727	2:448 2:637 2:900 3:143 3:218 2:727	2.450 2.677 2.909 3.182 3.220 2.740	2:448 2:695 2:915 3:202 3:211 2:720	2:440 2:692 2:935 3:217 3:192 2:724	2:438 2:696 2:907 3:231 3:168 2:714	2:424 2:684 2:900 3:226 3:143 2:708	2:406 2:691 2:888 3:214 3:097 2:695	2:395 2:705 2:875 3:198 3:078 2:692	2 · 405 2 · 722 2 · 876 3 · 198 3 · 046 2 · 694	2:376 2:748 2:875 3:200 3:009 2:702	2:370 2:772 2:885 3:208 3:008 2:719
Hourly	y Means	2.6687	2.6776	2.6895	2.6933	2.6932	2.6888	2.6724	2.6536	2.6399	2.6341	2.6307	2.6302

			Baro	meter at 32			RESSURE. $+$ the nur	nbers in the	Table.			<u></u>
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
In.	In.	Ţn.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
342	2.318	2 280	2.256	2:229	2:175	2.145	2.108	2.082	2.038	2.006	1.957	2.3642
886	1 934	1.976	2.010	2.042	2.093	2.132	2.162	2.205	2.235	2.256	2.281	1.9821
453	2.465	2.479	2.475	2.477	2.481						— ı∥	
		·	- 1			2.601	2.603	2.609	2.651	2.675	2.686	2.4816
863	2.875	2.903	2 920	2.934	2.953	2.959	2.956	2.965	2.968	2.978	2 976	2.8612
853	2.829	2.789	2.764	2.733	2.644	2.606	2.566	2.532	2.483	2.439	2.391	2.8039
226	2.236	2.249	2.265	2.274	2.286	2.300	2.314	2'342	2.369	2.373	2.377	2.2830
537	2.561	2:569	2.569	2.573	2.573	2.565	2.551	2.221	2.551	2.556	2.550	2.5057
554	2.567	2.567	2.575	2.563	2.563	2.551	2.535	2.529	2.21	2.501	2.473	2.5529
258	2.246	2.246	2.535	2.218	2.501	0:070	0:074	0:000	0:000	2.302	$2.\overline{308}$	2.3184
526	0.540	$2.\overline{566}$	$2.\overline{597}$	2.627	$2.\overline{645}$	2.272	2.274 2.684	2.292	2·296 2·714	2.743	2.746	2.5233
526	2.548 2.796	$\frac{2.366}{2.778}$	2.754	2.738	$\frac{2.045}{2.726}$	2.657 2.693	$\frac{2.654}{2.652}$	2.706 2.652	$\frac{2.614}{2.628}$	2.602	2.576	$\frac{2}{2},\frac{3}{2}$
·818 ·639	2.654	$\frac{2.718}{2.648}$	2.631	2.636	2.634	2.635	2.644	2.654	2.646	$\frac{2.602}{2.642}$	2.635	2.6133
516	2.516	$\frac{2}{2} \cdot 528$	$\frac{2.548}{2.548}$	2.552	2.548	2.20	2.212	2.528	2.517	2.497	2.490	$\frac{2}{2} \cdot 5500$
·481	2.481	2.482	2.484	2.486	2.495	2.491	2.492	2.228	2.528	$\frac{2}{2} \cdot \frac{13}{520}$	2.519	2.4906
684	2.708	2.733	2.752	2.772	2.784						]	-
_		!			<u> </u>	3.026	3.034	3.072	3.080	3.092	3.096	2.7387
151	3.141	3.141	3.143	3.148	3.135	3.115	3.097	3.047	3.102	3.103	3.073	3.1323
825	2.784	2.759	2.733	2.692	2.685	2.649	2.635	2.596	2.570	2.536	2.208	2.8224
•598	2.616	2.653	2.690	2.712	2.755	2.812	2.839	2.928	2.967	2.993	3.039	2.6586
239	3.241	3.243	3.257	3.269	3 284	3 284	3.294	3.300	3.301	3.291	3.287	3.2142
147	3.131	3.103	3.067	3.041	3.034	3.023	2.999	2.975	2.951	2 936	2.928	3 1428
553	2.233	2.216	2.495	2.461	2.433	0.440	0:440	0:441	0:405	0:414	$\{2, \frac{1}{370}\}$	2.6083
	0:057	0.070	$2.\frac{-}{400}$	$2.\overline{420}$	0:440	2.446	2 442 2 466	2.441	$2.435 \\ 2.519$	2.414 2.543	2.584	2.3696
332 3640	2.357 2.628	2.376 2.600	2 400	2 420	2.449 2.520	2 463 2 508	2 400	2 · 497 2 · 522	$\frac{2.519}{2.527}$	$\frac{2.543}{2.523}$	2.241	2.6157
2.698	2.712	2.712	$\frac{2}{2}.726$	$\frac{2}{2} \cdot 722$	$\frac{2}{2} \cdot 716$	$\frac{2}{2}.715$	$\frac{2.520}{2.713}$	$\frac{2.322}{2.716}$	$\frac{2}{2}.720$	2.711	2.684	2.6766
2'504	2.482	$\frac{2.470}{2.470}$	2.430	2.409	2.396	$\frac{2}{2} \cdot 368$	$\frac{2}{2}.347$	2.349	$\frac{2}{2} \cdot 321$	2.313	2.279	2.4968
2.183	2.183	2.183	2.226	2 230	2.236	$\frac{2.000}{2.257}$	2.310	$\frac{2}{2} \cdot \frac{371}{371}$	2.421	2.456	2.201	2.263
928	2.949	2.953	2.989	2.989	2.980						— า∥	2 8366
	_			· <del></del>	·	2.883	2.883	2.801	2.904	2.902	2.900 }	2 0000
6087	2:6108	2.6112	2.6135	2.6101	2.6082	2.6175	2.6160	2.6250	2.6284	2.6261	2.6206	2.6172
2.788	2.777	2.751	2.708	2.692	2.675	2.655	2.651	2.647	2.631	2.619	2.603	2.7782
2.579	2.601	2.611	2.617	2.627	2.661	2.667	2.704	2.723	2.735	2.739	2.762	2.6270
2.250	2.484	2.453	2.390	2.378	2.368	2.356	2.339	2.339	2 340	2.340	2.364	2.5538
700	2.727	2.739	2.745	2.761	2.769	2.767	2.767	2.772	2.775	2.773	2.786	2.6436
599	2.581	2.562	2.556	2.516	2.456	2.444	2.395	2.366	2.330	2.284	2.581	2.598
:062	2.109	2.132	2.511	2.254	2.282	0.200	0.501	2.525	2.523	2.523	$\{2.562\}$	2.242
832	9:070	0.000	0.000	0.060	2.872	2.523 2.875	2.521 2.878	$\frac{2.525}{2.880}$	2.523 $2.876$	2.880	2 362 )	2.809
8 832 8 835	2.870	$2.882 \\ 2.571$	2 862 2 544	2.860 2.514	$\frac{2.872}{2.508}$	2.489	$\frac{2.878}{2.475}$	2.458	2.448	$\frac{2.423}{2.423}$	$\frac{2.373}{2.430}$	2.619
2.202	2.551	2.605	2.645	2.673	$\frac{2.308}{2.703}$	2.721	2.737	2.744	$\frac{2}{2} \cdot 772$	$\frac{2}{2} \cdot 792$	2.804	$\frac{2.556}{2.556}$
918	2.918	$\frac{2.003}{2.920}$	2.923	2.919	$\frac{2}{2}.915$	2.892	2.868	2.878	2.868	2.856	2.852	2.891
789	2.818	2.816	2.809	2.813	2.800	2.790	2.782	$\frac{2.787}{2.787}$	2.785	2.755	2.716	2.817
2.468	2.432	2:362	2 390	2.376	2.340	ļ. <u>—</u>	-		ļ. <b>—</b>	<u> </u>		2.562
	_		l —	<b>—</b> .	<u> </u>	2.551	2.559	2.553	2.553	2.260	$\left[ \frac{-}{2.555} \right]$	
2.212	2.530	2.543	2.548	2.551	2.551	2.560	2.566	2.582	2.590	2.594	2.630	2.538
776	2.790	2.808	2.813	2.827	2.828	2.836	2.846	2.852	2.868	2.878	2.901	2.775
955	2.981	2.981	2.971	2.964	2.960	2.961	2.928	2.933	2.914	2.914	2'904	2.952
2.579	2.564	2.557	2.486	2.446	2'410	2:370	2,334	2.288	2.270	2.209	2.139	2.582
917	1.926	1.921	1.929	1:934	1.936	1.934	1 936	1'942	1.940	1.942	1.946	1.964
155	2.182	2.193	2.214	2.510	2.206	2.411	$2.\overline{429}$	2.438	2.460	2.451	$\left\{ 2.\overline{436} \right\}$	2,180
368	2:200	9:470	2.516	2.531	2.531	2.411 2.548	2 429	2.438 $2.550$	2.460	2.451 $2.593$	2.597	2.468
818	2.388	$\begin{vmatrix} 2.470 \\ 2.857 \end{vmatrix}$	2 865	2 891	2 888	2 886	2.894	2 894	2.884	2.871	2.868	2.783
2.897	2.849	2.857 $2.943$	2.865	2.981	2.999	3.011	3.043	3.057	3.077	3.083	3.115	2.95
3.208	3.234	$\frac{2}{3} \cdot \frac{945}{245}$	3.251	3.255	3.251	3.538	3.533	3.531	3.234	3 237	3.220	3.215
2.997	2.971	2.909	2.903	2.883	2.851	2.827	2.801	2.789	2.785	2.757	2.731	2.992
724	2.746	$\frac{2}{2} \cdot 762$	2.784	2.796	2.812			<u> </u>			1	2.781
	_			-		2.939	2.940	2.940	2.920	2.906	$2.\overline{924}$	Z (8)
6353	2.6474	2.6498	2.6517	2.6522	2:6488	2.6771	2.6739	2.6737	2.6729	2.6658	2.6665	2.665

				Barome			TRIC PRES		ers in the Ta	ible.			
lours of Göttin Tin	Mean }	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Toro Tin	f Mean nto ne.	18	19	20	21	22	23	0	1	2	3	4	5
	2 3 4 5 6 7	In. 2.952 3.073 2.749 2.567 2.502 2.664	In. 2 · 972 3 · 090 2 · 740 2 · 573 2 · 496 2 · 672	In. 2 · 995 3 · 098 2 · 735 2 · 581 2 · 494 2 · 668	In. 3 000 3 103 2 716 2 584 2 508 2 658	In. 3 015 3 099 2 692 2 586 2 514 2 638	In. 3.022 3.098 2.664 2.586 2.522 2.622	In. 3 023 3 073 2 617 2 593 2 528 2 624	In. 3.015 3.043 2.573 2.558 2.526 2.584	In. 3.006 3.020 2.521 2.542 2.511 2.526	In. 3.000 2.986 2.505 2.531 2.532 2.492	In. 3:002 2:975 2:435 2:532 2:553 2:488	In. 3 016 2 964 2 433 2 546 2 578 2 496
نا	8 9 10 11 12 13 14 15	2.823 2.863 2.854 2.685 2.363 2.089	2.865 2.878 2.850 2.682 2.385 2.092	2:884 2:900 2:874 2:680 2:378 2:088	2.896 2.919 2.868 2.676 2.371 2.064	2.903 2.928 2.854 2.659 2.335 2.056	2.911 2.926 2.848 2.640 2.307 2.056	2:901 2:917 2:823 2:628 2:286 2:052	2.886 2.905 2.794 2.614 2.250 2.046	2.866 2.887 2.770 2.603 2.173 2.044	2.869 2.889 2.752 2.591 2.179 2.042	2.858 2.888 2.750 2.555 2.139 2.052	2:853 2:890 2:751 2:541 2:114 2:072
MARCH	16 17 18 19 20 21 22	2·349 2·748 2·850 2·691 2·700 2·808	2:381 2:778 2:861 2:691 2:702 2:832	2:399 2:791 2:873 2:654 2:681 2:859	2:392 2:805 2:861 2:657 2:693 2:898	2:448 2:803 2:858 2:654 2:697 2:911	2.482 2.815 2.844 2.639 2.688 2.921	2.513 2.813 2.841 2.610 2.663 2.925	2:519 2:808 2:810 2:611 2:575 2:921	2:531 2:798 2:777 2:602 2:546 2:915	2:539 2:795 2:751 2:606 2:540 2:911	2:557 2:792 2:752 2:590 2:584 2:912	2:577 2:805 2:754 2:589 2:565 2:920
	23 24 25 26 27 28 29	2.742 2.441 2.013 2.114 2.162 2.383	2.738 2.453 2.003 2.114 2.178 2.395	2.724 2.451 1.977 2.114 2.186 2.397	2.706 2.447 1.971 2.090 2.196 2.403	2.682 2.441 1.953 2.106 2.213 2.419	2.665 2.441 1.934 2.100 2.218 2.413	2.649 2.423 1.927 2.084 2.231 2.407	2.620 2.410 1.934 2.077 2.243 2.407	2 · 604 2 · 392 1 · 942 2 · 071 2 · 257 2 · 407	2:592 2:362 1:944 2:070 2:265 2:407	2.562 2.359 1.949 2.076 2.251 2.417	2:560 2:345 1:988 2:108 2:303 2:441
(	30 31	2.829 2.944	2.845 2.950	2.862 2.971	2.868 2.984	2.874 2.983	2.858 2.979	2·856 2·985	2·848 2·972	2·835 2·966	2·829 2·960	2.829 2.960	2·849 2·969
Hourly	Means	2.6137	2.6237	2.6275	2.6282	2.6277	2.6230	2.6151	2.5980	2.5812	2.5746	2.5699	2.5789
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \end{pmatrix}$	3.125 3.145 3.153 3.081	3.156 3.163 3.166 3.085	3·174 3·169 3·177 3·095	3.187 3.180 3.186 3.092	3·194 3·176 3·188 3·090	3·187 3·159 3·167 3·089	3·174 3·146 3·158 3·091	3·170 3·142 3·156 3·096	3·145 3·117 3·139 3·071	3·136 3·112 3·123 3·051	3·122 3·100 3·110 3·045	3·127 3·090 3·120 3·029
	5 6 7 8 9 10 a	3 · 146 2 · 746 2 · 805 3 · 039	3·170 2·732 2·840 3·076	3·184 2·732 2·861 3·076	3·184 2·695 2·876 3·064	3·185 2·672 2·882 3·052	3·168 2·659 2·874 3·036	3 · 152 2 · 620 2 · 863 3 · 002	3:127 2:605 2:853 2:968	3:112 2:581 2:849 2:951	3.090 2.549 2.855 2.913	3 074 2 548 2 863 2 898	3.055 2.541 2.878 2.883
	11 12	2.179	2.169	2.128	2.106	2.085	2.100	2.119	2.185	$2 \cdot \overline{255}$	2.307	2.367	2.423
APRIL.	13 14 15 16 17 18	2:329 2:653 2:773 2:977 2:715 2:597	2:353 2:660 2:855 2:987 2:720 2:645	2:373 2:659 2:883 2:976 2:714 2:653	2:395 2:646 2:900 2:973 2:703 2:666	2:416 2:634 2:918 2:950 2:697 2:669	2.431 2.617 2.930 2.935 2.686 2.664	2'452 2'583 2'930 2'897 2'664 2'643	2.460 2.561 2.939 2.879 2.660 2.629	2.476 2.541 2.933 2.850 2.630 2.583	2.491 2.514 2.931 2.816 2.604 2.558	2.522 2.498 2.933 2.795 2.589 2.533	2:554 2:510 2:947 2:792 2:583 2:514
	19 20 21 22 23 24 25 26	3.010 2.682 2.790 2.639 2.402 2.559	3:005 2:676 2:800 2:650 2:400 2:582	3:003 2:666 2:808 2:646 2:400 2:608	2:997 2:653 2:797 2:654 2:396 2:623	2 · 984 2 · 634 2 · 797 2 · 648 2 · 398 2 · 616	2.950 2.600 2.797 2.635 2.395 2.610	2:921 2:575 2:775 2:617 2:393 2:616	2.865 2.555 2.753 2.605 2.383 2.604	2:842 2:541 2:736 2:597 2:380 2:604	2.804 2.551 2.710 2.565 2.352 2.608	2·774 2·574 2·574 2·533 2·356 2·608	2.761 2.643 2.700 2.549 2.364 2.592
	26 27 28 29 30	2·637 2·552 2·299 2·303	2:656 2:543 2:295 2:290	2:663 2:542 2:293 2:306	2.660 2.546 2.285 2.325	2·656 2·541 2·287 2·334	2.627 2.511 2.286 2.312	2.615 2.496 2.278 2.313	2.620 2.440 2.277 2.290	2·599 2·440 2·275 2·281	2·593 2·395 2·277 2·286	2·574 2·369 2·277 2·292	2:559 2:368 2:277 2:280
Hourly	Means	2.7334	2.7470	2.7516	2.7516	2.7481	2.7370	2.7237	2.7128	2.7011	2.6876	2.6853	2.685

				Baro	meter at 32		ETRIC PI			Table.			
	12	13	14	15	16	17	18	19	20	21	22	23	Daily and
	6	7	8	9	10	11	12	13	. 14	15	16	17	Monthly Means.
•	In. 3 * 028 2 * 936 2 * 416 2 * 568 2 * 606 2 * 490	In. 3.047 2.932 2.428 2.566 2.634 2.480	In. 3.063 2.918 2.426 2.583 2.651 2.480	In. 3.064 2.899 2.442 2.577 2.674 2.470	In. 3.053 2.882 2.450 2.563 2.704 2.459	In. 3.062 2.858 2.468 2.581 2.695 2.454	In. 3.054 2.840 2.476 2.573 2.700	In. 3.055 2.858 2.474 2.578 2.700	In. 3.045 2.830 2.482 2.578 2.692	In. 3.047 2.824 2.486 2.547 2.687	In. 3.050 2.793 2.486 2.523 2.710	In. 3.056 2.763 2.533 2.515 2.681	In. 3 0267 2 9565 2 5395 2 5638 2 5999 2 6067
	2.850 2.876 2.747 2.543 2.143 2.096	2.850 2.872 2.747 2.537 2.149 2.113	2:856 2:877 2:736 2:523 2:121 2:122	2:841 2:896 2:722 2:524 2:115 2:118	2.842 2.902 2.719 2.514 2.117 2.115	2.842 2.892 2.710 2.470 2.117 2.098	2.730 2.828 2.889 2.702 2.448 2.093	2.756 2.829 2.880 2.700 2.438 2.090	2.763 2.826 2.871 2.692 2.434 2.090	2.771 2.830 2.866 2.677 2.403 2.060	2.781 2.834 2.865 2.673 2.391 2.060	2·795 } 2·850 2·665 2·371 2·074	2 · 8584 2 · 8886 2 · 7616 2 · 5479 2 · 1879 2 · 1329
	2.589 2.805 2.750 2.610 2.576 2.940	2.619 2.803 2.735 2.623 2.580 2.960	2.641 2.805 2.736 2.643 2.602 2.983	2.662 2.818 2.716 2.641 2.607 3.001	2.660 2.816 2.715 2.646 2.634 3.004	2.669 2.824 2.720 2.641 2.649 3.006	2 · 268 2 · 665 2 · 819 2 · 722 2 · 635 2 · 665	2.284 2.666 2.818 2.715 2.637 2.692	2·296 2·672 2·780 2·690 2·634 2·705	2.291 2.678 2.780 2.681 2.637 2.725	2:305 2:695 2:770 2:675 2:641 2:747	2:718 2:802 2:691 2:681 2:767	2 · 5675 2 · 7996 2 · 7658 2 · 6360 2 · 6493 2 · 8961
	2.520 2.315 2.012 2.118 2.317 2.449	2·527 2·289 2·036 2·139 2·319 2·455	2.518 2.270 2.055 2.153 2.351 2.483	2.518 2.242 2.082 2.148 2.363 2.495	2·492 2·210 2·101 2·142 2·373 2·495	2.466 2.193 2.109 2.142 2.377 2.501	2 · 875 2 · 440 2 · 145 2 · 116 2 · 142 2 · 381	2.849 2.448 2.134 2.110 2.162 2.398	2.823 2.422 2.131 2.111 2.158 2.412	2.795 2.406 2.075 2.101 2.152 2.400	2.785 2.403 2.051 2.101 2.156 2.382	2·752 } 2·409 2·021 2·106 2·161 2·375	2.5589 2.2934 2.0240 2.1207 2.2980
	2·849 2·985	2.859 3.003	2:870 3:027	2.878 3.049	2·885 3·059	2·900 3·057	2.740 2.906 3.061	2.766 2.906 3.066	2.779 2.906 3.066	2.783 2.908 3.074	2.796 2.922 3.086	2·808 } 2·922 3·117	2.5186 2.8705 3.0114
	2.2821	2.2882	2.5958	2.5985	2.5974	2.5962	2.6120	2.6157	2.6111	2.6032	2.6031	2.5986	2.6026
	3.120 3.090 3.109 3.018	3·112 3·080 3·095 3·013	3·123 3·080 3·100 3·011	3·114 3·102 3·086 3·002	3·117 3·106 3·067 2·987	3·114 3·102 3·068 2·991	3·113 3·103 3·073	3·117 3·122 3·074	3·116 3·119 3·090	3 · 120 3 · 124 3 · 078	3.126 3.132 3.064	3.139 $3.138$ $3.058$ $3.121$	3·1387 3·1249 3·1169 3·0595
	3.014 2.490 2.898 2.858	2·997 2·506 2·898 2·842	2 989 2 511 2 914 2 837	2:972 2:499 2:943 2:826	2·943 2·533 2·968 2·800	2 · 895 2 · 563 2 · 980 2 · 779	3.070 2.853 2.595 3.008	3.070 2.805 2.630 3.016	3:069 2:781 2:656 3:019	3.069 2.767 2.699 3.025	3.093 2.755 2.717 3.027	$     \begin{bmatrix}       3.121 \\       2.752 \\       2.766 \\       3.036 \\       \hline       \\       2.187     \end{bmatrix} $	3.0071 2.6185 2.9180 2.7630
	2 · 464 2 · 569 2 · 518 2 · 944 2 · 765 2 · 577 2 · 566	2.516 2.588 2.516 2.944 2.775 2.555 2.566	2.553 2.608 2.524 2.972 2.781 2.549 2.568	2.547 2.636 2.510 2.978 2.768 2.539 2.559	2·527 2·636 2·488 2·977 2·786 2·541 2·565	2·529 2·636 2·488 2·975 2·780 2·530 2·569	2·319 2·395 2·646 2·512 2·977 2·758 2·520	2·283 2·379 2·651 2·548 — 2·744 2·519	2:221 2:377 2:661 2:574 2:973 — 2:505	2 · 211 2 · 367 2 · 662 2 · 627 2 · 970 2 · 695 2 · 499	2·191 2·331 2·656 2·681 2·978 2·695 2·501	2·327 2·650 2·718 2·959 2·699 2·561	2·3222 2·5355 2·5742 2·9356 2·8293 2·5984 2·6973
	2.755 2.662 2.672 2.503 2.368 2.572	2.750 2.692 2.668 2.503 2.396 2.585	2.744 2.700 2.680 2.499 2.418 2.590	2·744 2·734 2·668 2·489 2·428 2·603	2·738 2·735 2·656 2·471 2·442 2·589	2·736 2·725 2·644 2·449 2·441 2·587	3:004 2:736 2:733 2:645 2:437 2:445	2 · 991 2 · 721 2 · 743 2 · 645 2 · 420 2 · 451	3:005 2:715 2:752 2:652 2:412 2:455	2 · 988 2 · 703 2 · 747 2 · 648 2 · 420 2 · 459	2 · 999 2 · 689 2 · 743 2 · 653 2 · 406 2 · 497	3·001 } 2·681 2·681 2·651 2·394 2·535 	2 · 69 / 3 2 · 81 / 8 2 · 66 / 9 2 · 7104 2 · 5309 2 · 4148 2 · 59 / 3
	2:540 2:369 2:269 2:280	2.550 2.351 2.265 2.282	2·574 2·378 2·285 2·297	2.561 2.364 2.275 2.306	2·562 2·357 2·263 2·317	2:546 2:382 2:255 2:323	2.597 2.549 2.385 2.255 2.325	2:584 2:546 2:347 2:283 2:295	2:586 2:545 2:335 2:291 2:291	2:587 2:551 2:313 2:283 2:290	2:603 2:539 2:287 2:285 2:284	2:612 5 2:533 2:297 2:297 2:294	2:5856 2:4128 2:2797 2:2929
	2.6796	2.6818	2.6914	2.6901	2.6868	2.6835	2.6821	2.6660	2.6750	2.6761	2.6773	2.6867	2.7017

				Barom		BAROME' = 27 Engli		SSURE. - the number	ers in the Ta	able.			
Hours of Göttir Tim	Mean )	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Toro Tim	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
,	1 2	In. 2:310 2:340	In. 2 314 2 348	In. 2:319 2:350	In. 2:327 2:350	In. 2:317 2:349	In. 2:301 2:359	In. 2.300 2.365	In. 2·294 2·381	In. 2.280 2.382	In. 2 286 2 384	In. 2·290 2·408	In. 2.294 2.418
	3 4 5 6 7 8 9	2.696 2.645 2.578 2.615 2.612 2.429	2.720 2.653 2.594 2.624 2.620 2.429	2.718 2.635 2.600 2.628 2.634 2.413	2.731 2.627 2.630 2.622 2.629 2.385	2·725 2·629 2·637 2·636 2·626 2·375	2·720 2·638 2·659 2·625 2·623 2·357	2.713 2.624 2.650 2.620 2.612 2.343	2.683 2.634 2.646 2.601 2.618 2.294	2.666 2.614 2.644 2.601 2.592 2.270	2.659 2.589 2.624 2.583 2.582 2.252	2.641 2.585 2.622 2.582 2.579 2.234	2.636 2.570 2.615 2.588 2.579 2.224
MAY.	10 11 12 13 14 15 16	2:404 2:397 2:379 2:410 2:359 2:819	2:433 2:400 2:353 2:406 2:383 2:825	2·455 2·404 2·347 2·428 2·461 2·823	2:464 2:402 2:339 2:419 2:492 2:819	2:465 2:400 2:329 2:413 2:554 2:808	2:450 2:401 2:310 2:388 2:600 2:826	2.442 2.403 2.290 2.356 2.627 2.810	2:436 2:405 2:269 2:396 2:645 2:802	2:423 2:414 2:267 2:380 2:668 2:787	2 · 409 2 · 407 2 · 264 2 · 323 2 · 680 2 · 794	2·408 2·410 2·292 2·321 2·681 2·789	2.409 2.417 2.317 2.289 2.704 2.790
W	17 18 19 20 21 22 23	2.605 2.840 2.508 2.740 2.836 2.557	2.602 2.853 2.491 2.762 2.844 2.553	2:643 2:862 2:483 2:775 2:841 2:542	2.664 2.848 2.452 2.791 2.836 2.545	2.677 2.834 2.432 2.796 2.834 2.544	2.693 2.803 2.420 2.818 2.815 2.543	2.712 2.781 2.396 2.820 2.797 2.541	2.725 2.749 2.419 2.782 2.790 2.538	2.735 2.721 2.401 2.780 2.786 2.550	2.742 2.687 2.401 2.789 2.757 2.561	2.765 2.652 2.402 2.763 2.749 2.578	2.781 2.647 2.415 2.760 2.739 2.578
	24 25 26 27 28 29 30 31	2°644 2°551 2°275 2°291 2°330 2°207	2.645 2.554 2.282 2.291 2.325 2.213	2.650 2.552 2.265 2.289 2.325 2.215	2:643 2:548 2:270 2:273 2:323 2:225	2·642 2·539 2·271 2·268 2·324 2·225	2.648 2.514 2.268 2.260 2.318 2.221	2.638 2.501 2.279 2.258 2.314 2.210	2.621 2.480 2.283 2.251 2.308 2.207	2.616 2.476 2.276 2.235 2.283 2.201	2.616 2.439 2.284 2.225 2.271 2.195	2.610 2.440 2.283 2.217 2.275 2.201	2 612 2 442 2 278 2 207 2 263 2 201
Hourly	Means	2.5145	2.5200	2 5253	2.252	2.5250	2.2522	2.5155	2.2100	2.2018	2.4924	2.4914	2.4913
:	1 2 3 4 5 6	2·483 2·370 2·517 2·432 2·319 2·480	2·492 2·370 2·531 2·428 2·325 2·486	2:465 2:409 2:531 2:446 2:340 2:504	2.461 2.427 2.518 2.420 2.344 2.512	2.425 2.415 2.528 2.409 2.351 2.532	2:449 2:408 2:474 2:399 2:335 2:541	2:441 2:401 2:477 2:376 2:325 2:549	2:420 2:355 2:461 2:357 2:355 2:559	2:382 2:367 2:457 2:323 2:338 2:579	2:390 2:357 2:433 2:313 2:342 2:592	2:366 2:355 2:418 2:307 2:366 2:594	2:339 2:357 2:393 2:283 2:367 2:596
8	7 8 9 10 11 12 13 14	2·932 3·045 2·782 2·547 2·859 2·867	2.952 3.037 2.782 2.563 2.867 2.873	2.958 3.041 2.772 2.583 2.880 2.872	2.971 3.041 2.756 2.585 2.904 2.866	2.990 3.041 2.726 2.590 2.914 2.877	2 · 982 3 · 041 2 · 715 2 · 605 2 · 908 2 · 874	2 · 981 3 · 023 2 · 685 2 · 620 2 · 899 2 · 869	2 · 971 3 · 006 2 · 662 2 · 621 2 · 903 2 · 849	2 · 962 2 · 978 2 · 621 2 · 609 2 · 899 2 · 835	2.955 2.951 2.605 2.585 2.899 2.818	2.948 2.926 2.591 2.593 2.881 2.804	2 · 949 2 · 897 2 · 562 2 · 593 2 · 871 2 · 778
JUNE	15 16 17 18 19 20 21	2·552 2·628 2·638 2·573 2·333 2·376	2.558 2.643 2.649 2.576 2.335 2.376	2.560 2.648 2.654 2.560 2.327 2.392	2:561 2:649 2:654 2:551 2:317 2:401	2:545 2:648 2:661 2:550 2:309 2:417	2:544 2:660 2:650 2:536 2:275 2:420	2.531 2.660 2.633 2.503 2.271 2.426	2·522 2·658 2·630 2·485 2·256 2·443	2.517 2.650 2.616 2.465 2.248 2.451	2:507 2:637 2:603 2:465 2:241 2:469	2:503 2:637 2:601 2:434 2:248 2:478	2:496 2:615 2:594 2:402 2:252 2:485
	22 23 24 25 26 27 28	2.683 2.825 2.804 2.723 2.598 2.501	2.681 2.836 2.818 2.730 2.598 2.515	2.685 2.826 2.821 2.722 2.582 2.517	2.681 2.821 2.823 2.710 2.566 2.517	2.683 2.807 2.821 2.704 2.560 2.519	2.688 2.792 2.812 2.693 2.555 2.516	2.681 2.775 2.801 2.674 2.550 2.515	2.680 2.775 2.796 2.658 2.547 2.525	2:695 2:769 2:770 2:647 2:532 2:512	2.708 2.756 2.755 2.643 2.511 2.502	2·723 2·755 2·739 2·635 2·506 2·508	2.754 2.753 2.719 2.623 2.497 2.506
	29 30	2:551 2:517	2.553 2.522	2.553 2.524	2.559 2.529	2.557 2.539	$2.561 \\ 2.542$	$\begin{array}{c} - \\ 2.556 \\ 2.542 \end{array}$	$2.546 \\ 2.528$	2·522 2·522	2.509 2.511	2.519 2.506	2·507 2·489
Hourly	Means	2.6129	2.6191	2.6220	2.6209	2.6199	2.6144	2.6063	2.5988	2.5872	2.5791	2.5747	2.5645

		والمراب المامات ومروسا والوا	Ron	omotor at 3	$\begin{array}{c} \text{BAROM} \\ 2^{\circ} = 27 \text{ E}_{1} \end{array}$		RESSURE.		m.i.i.			
12	13	14	15	16	17	18	s + the nur	abers in the	Table.	22	23	D.II.
6	7	8	9	10	11	12	13	14	15	16	17	Daily and Monthly Means.
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2·300 2·426	2·304 2·446	2:304 2:460	2:308 2:472	2 · 326 2 · 482	2.320 2.480	2.308	2.298	2.302	2.302	2.304	2.316	2.3052
				· —	- 1.	2.636	2:637	2.644	2.647	2.661	2.689	2*4631
2.635	2.635	2.643	2.644	2.641	2.638	2.644	2.625	2.620	2.622	2.616	2.645	2.6632
2.549	$2.547 \\ 2.612$	$2.559 \\ 2.612$	$\begin{bmatrix} 2.561 \\ 2.628 \end{bmatrix}$	2.530 2.630	$2.539 \\ 2.633$	$2.527 \\ 2.623$	2.514	2.510 2.599	2.514 2.592	$2.534 \\ 2.604$	2.564 2.598	2 · 5788 2 · 6191
2 617 2 586	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	2.587	2.289	2.289	$\frac{2.597}{2.597}$	2.596	$\frac{2.512}{2.590}$	2.586	$\frac{2}{2},\frac{592}{582}$	2.586	2 584	2.5993
2.547	$\frac{2.561}{2.541}$	2.543	2.552	2.534	2.523	2.497	2.476	2 464	$\frac{2}{2}$ $\frac{362}{461}$	2.441	2.424	2.5545
2:208	2:214	2.510	2.202	2.189	2.177		<u> </u>		: <u> </u>		— 1	2 3089
						2.351	2.362	2 363	2.374	2.376	2.385 }	4
2.407	2.407	2.418	2.402 2.466	2.393	2.383	2.368	2.361	2.357	2.355	2.349	2.385	2.4076
2.436	2.440 2.337	2.442 2.339	2 349	$2.451 \\ 2.371$	2.446 2.373	$2.444 \\ 2.370$	2.422	2.414 2.380	2.403 2.382	2°392 2°386	2:386 2:396	2.4168 2.3393
2:325 2:283	2.303	2.319	2.323	2.332	2.356	2.366	2.349	$\frac{2}{2} \cdot 357$	2.337	2.329	$\frac{2}{2} \cdot 322$	2.3544
2.728	2.742	2.745	2.759	2.744	2.767	2.784	2.776	$\frac{1}{2} \cdot 777$	$\frac{2}{2}.771$	2.772	2.812	2.6681
2.786	2.786	2.798	2.804	2.805	2.791	_		_			) <sup> </sup>	2 7538
1						2.639	2.605	2.602	2.596	2.596	$\{2.591\}$	
2.782	2.782	2.793 2.627	2.799 2.618	2 818 2 556	2.820 2.552	$2.827 \\ 2.567$	2.816 2.551	2.809	2.804	2.811	2.821 2.514	2.7511 2.6703
2.634 2.436	2.629 2.468	2.499	$\frac{2.515}{2.515}$	2.524	$\frac{2.532}{2.540}$	$\frac{2.557}{2.554}$	$\frac{2.551}{2.587}$	2:538 2:620	$2.517 \\ 2.655$	2.507 2.681	$\frac{2}{2}.707$	2.5002
$\frac{2}{2},\frac{450}{754}$	2.758	2.768	2.776	2.768	$\frac{2.763}{2.763}$	2.776	2.778	$\frac{2}{2} \cdot 778$	$\frac{2}{2}$ .779	2.783	2.821	2.7782
2.723	2.691	2.680	2.682	2.655	2.638	2.638	2.636	2.624	2.587	2.593	2.565	2.7223
2.596	2.614	2.628	2.642	2.644	2.644						$\{2.644\}$	2.5866
		0:500	0:570	0:570	0:574	2.596	2.602	2.610	2.616	2.613	2.644	٧.,
2.600	2.596	2.582 2.383	2.578 2.361	2.578 2.344	2.574 2.330	2.567 2.314	2.570 2.298	2.558 2.291	$2.546 \\ 2.288$	$2.536 \\ 2.269$	2.561 2.273	2.6013 2.4197
2.442 2.278	2.443 2.289	2.304	2 305	2.306	2.311	2.297	$\frac{2}{2} \cdot \frac{290}{288}$	2.288	2.290	2.281	$\begin{bmatrix} 2 & 273 \\ 2 & 290 \end{bmatrix}$	$\frac{2.4197}{2.2850}$
2.232	2.236	2.261	2.267	2.275	2:288	2.260	2.290	2.294	2.300	2.299	2.320	2.2657
2.255	2.262	2.252	2.258	2.240	2.247	2.227	2.241	2.503	2.199	2.201	2.193	2.2682
2:211	2.237	2.241	2.282	2.309	2.317						}	2.2932
						2.200	2.488	2.482	2.476	2.477	2.492}	
2.4910	2.4964	2.5000	2.5056	2.2013	2.2018	2.2106	2.5058	2.5027	2.4998	2.2000	2.2114	2.5067
2.338	2.342	2.339	2:347	2.339	2.339	2.346	2.338	2.340	2.340	2.353	2:358	2 3847
$\frac{2}{2} \cdot 375$	2 400	2.442	2.463	2.463	2.471	2.482	2.474	2.482	2.485	2.485	2.517	2.4221
2:409	2.395	2.391	2.447	2.409	2.419	2.433	2.446	2.439	2.434	2.434	2.438	2.4513
2.295	2:295	2:304	2:328	2.323	2.312	2.313	2 300	2 298	2.292	2.309	2.321	2.3411
2.373	2.375	2.412	2.407	2.415	2.424	2.426	2.427	2.438	2.437	2.445	2.459	2.3810
2.616	2 625	2.653	2.675	2.687	2.694	2.830	2.837	2.841	2.847	2.871	$\{2.\overline{918}\}$	2.6507
2.951	2:953	2.959	2.970	2.982	2.987	2.996	2.987	2.988	2.991	$\frac{2}{2} \cdot 991$	3.027	2.9722
2 884	2.874	2.864	2:857	2.836	2.825	2.815	2.825	2.817	2.806	2.793	2.786	2.9169
2.534	2.538	2.521	2.544	2.551	2.545	$2^{ullet}545$	2.524	2.528	2.534	2.531	2.543	2.6124
2.605	2.617	2.627	2.675	2.694	2.708	2.737	2.762	2.777	2.792	2.820	2.838	2.6561
2.868	2 874	2.865	2.879	2.885	2'882	2.885	2.875	2 865	2.862	2.867	2.867	2.8815
2.766	2.763	2.761	2.760	2.751 —	2.735	2.546	2.538	2.526	2.520	2.526	$2.\overline{544}$	2.7466
2:498	2.508	2.21	2:539	2.550	2.259	2.569	2.592	2.590	2.590	$\frac{2.595}{2.595}$	2.612	2.5462
2.616	2.616	2.604	2 612	2.616	2.624	2.627	2.621	2.612	2.619	2.615	2.629	2.6311
2.594	2.586	2.590	2.595	2.592	2.585	2.579	2.571	2.572	2'568	2.562	2:572	2.6062
2.399	2.408	2.403	2'415	2.422	2.410	2.392	2 387	2:375	2.356	2.357	2.351	2:4490
2.274 2.493	2.298	2.303	2.320	2.302 2.498	2.309 2.500	2.322	2.333	2.333	2.334	2.355	2*366	2.3025
490	2.499	2.496	2.498	2 496 —	2 300	2.651	2.653	2.655	2.661	2.668	$\{2.687\}$	2.5039
2.765	2.765	2.777	2.788	2.795	2.810	2.829	2.797	2.789	2.785	2.788	2.813	2.7435
2.762	2.765	2.764	2.777	2.779	2.776	2.770	2.771	2.774	2.769	2.774	2.793	2.7818
2.713	2.721	2.719	2.735	2.731	2.722	2.726	2.720	2.703	2.704	2.699	2.725	2.7540
2.613 2.487	2.613	2 609	2.614	2.608	2.605 2.491	2.606 2.491	2.583 2.486	2.570 2.484	$2.567 \\ 2.486$	2.569	2.603 2.500	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
2 502	2.489 2.497	$\begin{bmatrix} 2.497 \\ 2.483 \end{bmatrix}$	$2.500 \\ 2.501$	$2.495 \\ 2.512$	2 510	2 491	2 700	- 104	400	2 490	1	1
1	491	4 400				2.518	2.515	2.213	2.509	2.522	$\left  \frac{1}{2.535} \right $	2.2113
2.513	2.513	2.515	2.521	2.211	2.509	2.508	2.507	2.507	2.500	2.502	2.211	2.5254
2.493	2.497	2.499	2.206	2.504	2.507	2.506	2.212	2.490	2.485	2.496	2.208	2.2114
2.5668	2.5702	2.5734	2.5874	2.5865	2.5870	2.5939	2.5916	2.5888	2.5874	2.5930	2 6085	2.5939

				Barome		BAROME' = 27 Engl			ers in the T	able.	****		
lours of Göttin Tim		0	1	2	3	4	5	6	7	8	9	10	11
Iours of Toror Tim	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	1 2 3 4	In. 2 · 497 2 · 608 2 · 723 2 · 547	In. 2:487 2:628 2:745 2:541	In. 2.500 2.639 2.745 2.540	In. 2:505 2:659 2:725 2:526	In. 2 · 509 2 · 659 2 · 720 2 · 527	In. 2:514 2:652 2:707 2:513	In. 2:501 2:647 2:695 2:498	In. 2 '486 2 '645 2 '667 2 '471	In. 2:473 2:648 2:649 2:442	In. 2:459 2:642 2:642 2:427	In. 2 · 473 2 · 632 2 · 636 2 · 402	In. 2 ' 471 2 ' 626 2 ' 609 2 ' 410
	5 6 7 8 9 10	2.426 2.574 2.564 2.515 2.494 2.478	2:435 2:585 2:558 2:558 2:522 2:495 2:482	2:434 2:593 2:575 2:523 2:504 2:473	2.438 2.607 2.564 2.547 2.502 2.467	2·452 2·611 2·568 2·544 2·507 2·456	2:449 2:610 2:534 2:594 2:493 2:449	2.445 2.602 2.516 2.618 2.485 2.434	2.444 2.600 2.507 2.494 2.492 2.433	2·426 2·583 2·487 2·494 2·475 2·453	2.433 2.568 2.483 2.496 2.457 2.445	2 · 426 2 · 562 2 · 469 2 · 478 2 · 457 2 · 438	2.409 2.559 2.464 2.459 2.439 2.426
JULY.	12 13 14 15 16 17 18	2.595 2.607 2.824 2.930 3.006 2.909	2.603 2.614 2.831 2.945 3.027 2.921	2·595 2·643 2·838 2·956 3·024 2·915	2·572 2·641 2·834 2·962 3·017 2·917	2·573 2·641 2·841 2·973 3·020 2·914	2:544 2:647 2:841 2:975 3:011 2:905	2.538 2.647 2.829 2.965 2.986 2.891	2:518 2:645 2:834 2:949 2:978 2:880	2.513 2.649 2.834 2.944 2.959 2.867	2.510 2.666 2.838 2.945 2.947 2.858	2.481 2.676 2.833 2.953 2.946 2.853	2 · 461 2 · 692 2 · 847 2 · 946 2 · 908 2 · 841
	19 20 21 22 23 24 25	2:576 2:602 2:585 2:492 2:300 2:592	2.582 2.612 2.597 2.501 2.310 2.608	2.587 2.610 2.593 2.492 2.308 2.619	2.575 2.610 2.584 2.471 2.284 2.625	2.584 2.611 2.557 2.460 2.282 2.653	2.585 2.610 2.569 2.456 2.258 2.638	2·574 2·599 2·568 2·438 2·275 2·633	2.561 2.594 2.550 2.431 2.291 2.645	2:546 2:589 2:549 2:425 2:305 2:644	2.538 2.581 2.537 2.406 2.319 2.643	2.531 2.577 2.534 2.388 2.349 2.630	2:531 2:572 2:533 2:362 2:362 2:626
	26 27 28 29 30 31	2.773 2.646 2.463 2.322 2.548	2.793 2.644 2.446 2.322 2.546	2.793 2.639 2.450 2.309 2.550	2.792 2.649 2.478 2.316 2.559	2.782 2.641 2.447 2.311 2.570	2.785 2.631 2.436 2.313 2.598	2.779 2.610 2.434 2.304 2.594	2.781 2.584 2.429 2.296 2.592	2.765 2.562 2.401 2.293 2.590	2.750 2.544 2.403 2.296 2.588	2.739 2.543 2.416 2.319 2.590	2:717 2:543 2:369 2:318 2:587
Hourly	Means	2.5999	2.6067	2.6093	2.6084	2.6079	2.6043	2.5965	2.5851	2.5765	2.5711	2:5678	2.5588
	$\left[ egin{array}{c} 1 \ 2 \end{array}  ight]$	2.663	2.685	2.693	2.700	2.700	2.697	2.691	2.685	2.685	2.670	2.677	2.678
	3 4 5 6 7 8	2.797 2.729 2.646 2.642 2.780 2.691	2.803 2.733 2.646 2.657 2.793 2.683	2.808 2.728 2.636 2.664 2.789 2.711	2.818 2.722 2.643 2.671 2.795 2.735	2.835 2.697 2.641 2.681 2.793 2.699	2.812 2.685 2.631 2.688 2.785 2.681	2.805 2.673 2.609 2.685 2.775 2.655	2.791 2.653 2.582 2.675 2.771 2.650	2.758 2.647 2.563 2.675 2.762 2.641	2·739 2·628 2·547 2·667 2·750 2·616	2.727 2.609 2.534 2.664 2.739 2.608	2.733 2.611 2.542 2.671 2.727 2.588
JST.	9 10 11 12 13 14	2·527 2·699 2·615 2·491 2·520 2·462	2·533 2·714 2·619 2·503 2·534 2·464	2.543 2.719 2.612 2.502 2.536 2.464	2.557 2.739 2.598 2.506 2.542 2.480	2:567 2:740 2:591 2:512 2:553 2:468	2.586 2.709 2.573 2.509 2.540 2.459	2.580 2.700 2.554 2.544 2.528 2.444	2.565 2.691 2.532 2.488 2.528 2.421	2:559 2:670 2:512 2:487 2:503 2:392	2 546 2 664 2 503 2 477 2 486 2 367	2:544 2:649 2:486 2:473 2:476 2:354	2:546 2:637 2:480 2:467 2:478 2:320
AUGUST.	16 17 18 19 20 21 22 23	2·407 2·733 2·807 2·625 2·583 2·550	2·419 2·743 2·811 2·634 2·576 2·570	2·435 2·745 2·815 2·636 2·609 2·572	2:448 2:771 2:817 2:634 2:617 2:575	2.465 2.775 2.814 2.631 2.627 2.565	2:472 2:775 2:809 2:627 2:625 2:558	2:482 2:765 2:802 2:628 2:612 2:548	2:482 2:763 2:791 2:597 2:612 2:531	2.486 2.769 2.773 2.605 2.617 2.531	2:486 2:757 2:763 2:583 2:595 2:521	2·494 2·751 2·759 2·589 2·585 2·513	2.508 2.748 2.741 2.579 2.568 2.504
	25 24 25 26 27 28 29 30	2·792 2·787 2·711 2·717 2·767 2·691	2.800 2.787 2.723 2.727 2.776 2.695	2.819 2.800 2.739 2.732 2.776 2.687	2.827 2.804 2.726 2.750 2.786 2.687	2·844 2·807 2·723 2·757 2·789 2·668	2.841 2.801 2.721 2.759 2.789 2.663	2·820 2·788 2·712 2·758 2·786 2·648	2.819 2.771 2.693 2.754 2.739 2.657	2·811 2·753 2·680 2·753 2·718 2·658	2·799 2·745 2·670 2·731 2·713 2·622	2.791 2.741 2.668 2.716 2.709 2.616	2.783 2.734 2.678 2.729 2.705 2.610
	31	2.611	2.641	2.642	2.642	2.635	2.625	2.611	2*608	2.596	2.577	2.573	2.267
Iourly	Means	2.6555	2.6641	2.6697	2.6765	2.6760	2.6700	2.6601	2.6480	2.6385	2.6239	2.6171	2.6128

			Baro	ometer at 32	$\begin{array}{c} \text{BAROM} \\ \text{S}^{\circ} = 27 \text{ Ex} \end{array}$	ETRIC PE	ESSURE.	thers in the	Table			
12	13	14	15	16	17	18	19	20	21	22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
In. 2:473 2:625 2:603	In. 2 '474 2 '636 2 '591	In. 2 '473 2 '642 2 '582	In. 2'486 2'672 2'606	In. 2 '494 2 '659 2 '599	In. 2 '496 2 '666 2 '583	In. 2 · 497 2 · 675 2 · 563	In. 2.513 2.684 2.560	In. 2:527 2:690 2:555	In. 2.538 2.684 2.560	In. 2.565 2.684 2.560	In. 2:592 2:697 2:550	In. 2.5001 2.6541 2.6323
2.408 2.415 2.565 2.459 2.450 2.494 2.428	2·396 2·445 2·567 2·471 2·430 2·474 2·428	2.392 2.452 2.570 2.463 2.442 2.498 2.429	2:439 2:474 2:587 2:492 2:446 2:547 2:450	2 · 445 2 · 490 2 · 589 2 · 494 2 · 448 2 · 534 2 · 446	2.438 2.498 2.582 2.497 2.452 2.527 2.432	2·339 2·505 2·565 2·487 2·447 2·524	2·347 2·506 2·568 2·490 2·455 2·517	2·355 2·508 2·565 2·492 2·469 2·485	2·368 2·519 2·561 2·497 2·471 2·487	2·378 2·518 2·559 2·506 2·488 2·491	2·397 } 2·555 2·563 2·504 2·494 2·483	2:4394 2:4626 2:5790 2:5059 2:4907 2:4942
2·453 2·707 2·861 2·940 2·902 2·849 — 2·525	2·457 2·717 2·863 2·936 2·896 2·843 — 2·536	2·483 2·717 2·861 2·932 2·909 2·841 — 2·544	2·502 2·721 2·887 2·946 2·921 2·842 ————————————————————————————————————	2·514 2·729 2·890 2·951 2·913 2·842 ————————————————————————————————————	2·531 2·732 2·899 2·956 2·915 2·838 — 2·578	2:548 2:546 2:735 2:899 2:951 2:912 2:561 2:579	2·550 2·538 2·765 2·902 2·951 2·898 2·563 2·579	2·552 2·548 2·769 2·904 2·950 2·895 — 2·551 2·578	2·553 2·551 2·789 2·908 2·958 2·958 2·878 — 2·551 2·574	2:562 2:562 2:815 2:925 2:975 2:889 ———————————————————————————————————	2·592 } 2·566 2·808 2·932 2·997 2·901	2:4752 2:5314 2:6988 2:8647 2:9536 2:9441 2:7946 2:5642
2.564 2.505 2.350 2.392 2.634	2.566 2.506 2.364 2.418 2.642	2.575 2.515 2.356 2.448 2.648	2:589 2:508 2:362 2:460 2:678	2.589 2.518 2.359 2.483 2.695	2:586 2:511 2:358 2:497 2:699	2.590 2.509 2.347 2.513	2:572 2:486 2:338 2:526	2:577 2:467 2:318 2:535	2.588 2.465 2.308 2.543	2:576 2:445 2:293 2:546	2.583 $2.465$ $2.298$ $2.578$ $ 2.744$	2:5884 2:5274 2:3905 2:3992 2:6665
2.697 2.525 2.364 2.332 2.601	2.693 2.525 2.366 2.348 2.617	2.691 2.511 2.385 2.381 2.626	2.707 2.515 2.373 2.398 2.635	2·702 2·520 2·343 2·405 2·635	2·704 2·526 2·345 2·414 2·642	2.741 2.695 2.501 2.333 2.415 2.638	2.742 2.688 2.497 2.313 2.419 2.647	2.740 2.685 2.464 2.303 2.439 2.648	2.738 2.678 2.426 2.304 2.448 2.646	2.739 2.662 2.464 2.317 2.455 2.646	2.744 J 2.648 2.472 2.321 2.502 2.658	2.7291 2.5492 2.3850 2.3615 2.6063
2.5600	2.2631	2.2691	2.2853	2.5872	2.5890	2.5783	2.5783	2.5766	2.5774	2.5831	2.5941	2.5847
2.678 	2.678 	2.681 2.733 2.611 2.561 2.697 2.726	2.704 	2.709  2.734 2.629 2.586 2.723 2.736	2.709 2.734 2.631 2.584 2.728 2.737	2.758 2.734 2.623 2.593 2.733 2.727	2.754 2.729 2.631 2.590 2.735 2.697	2.746 2.713 2.636 2.596 2.737 2.699	2.740 2.713 2.631 2.597 2.736 2.688	2.770 2.719 2.625 2.606 2.730 2.683		2.7050 2.7563 2.6497 2.5924 2.6950 2.7420
2.588 2.560 2.631 2.482 2.467 2.466 2.328	2.584 2.560 2.616 2.476 2.467 2.470	2.590 2.595 2.584 2.478 2.479 2.467	2.588 	2.585 2.612 2.609 2.481 2.505 2.479	2.577 2.629 2.611 2.475 2.522 2.480	2.488 2.639 2.606 2.471 2.510 2.473	2:470 2:646 2:601 2:474 2:498 2:459	2:471 2:651 2:598 2:478 2:494 2:400	2·472 2·653 2·604 2·472 2·492 2·439	2·490 2·654 2·598 2·468 2·497 2·448	2·505 2·675 2·608 2·479 2·498 2·456	2.5986 2.5888 2.6506 2.5165 2.4933 2.4893
2 516 2 748 2 719 2 576 2 564 2 494	2:326 2:481 2:750 2:721 2:579 2:564 2:484	2:342 	2·333 — 2·582 2·773 2·717 2·593 2·563 2·511	2:339 	2:344 	2·358 2·615 2·793 2·695 2·589 2·563	2:353 2:632 2:803 2:667 2:578 2:558	2:351 2:652 2:802 2:650 2:574 2:559	2:351 2:673 2:800 2:640 2:563 2:551	2:366 2:689 2:797 2:632 2:564 2:548	2·395 2·709 2·794 2·626 2·569 2·550	2:3867 2:5357 2:7706 2:7375 2:5969 2:5810
2.781 2.732 2.668 2.731 2.713 2.602	2.773 2.714 2.666 2.724 2.709 2.605	2 : 764 2 : 714 2 : 676 2 : 741 2 : 703 2 : 600	2 · 783 2 · 739 2 · 683 2 · 746 2 · 703 2 · 604	2 · 785 2 · 787 2 · 685 2 · 746 2 · 697 2 · 606	2.790 2.715 2.684 2.744 2.694 2.601	2·670 2·792 2·713 2·679 2·754 2·686	2·702 2·790 2·705 2·672 2·754 2·694	2.722 2.779 2.705 2.674 2.741 2.702	2.733 2.775 2.700 2.670 2.749 2.689	2.747 2.772 2.696 2.671 2.745 2.697	2.761 2.775 2.698 2.669 2.757 2.684 — 2.608	2·5785 2·7960 2·7452 2·6892 2·7423 2·7260 2·6306
2.267	2.573	2.586	2.595	2.596	2.606	2:596 2:598	2.598 2.595	2.604	2.605 2.606	2:604 2:596	2.596	2.6018
2.6111	2.6076	2.6162	2.6257	2.6282	2.6267	2.6329	2.6302	2.6282	2.6285	2.6312	2.6383	2.6382

			, <u>,,,</u> ,	Baron	neter at 32°	-	TRIC PRI	ESSURE. + the numb	ers in the I	Cable.			er er
Hours of Götti Tin	of Mean	0	1	2	3	4	5	6	7	8	9	10	11
	of Mean	18	19	20	21	22	23	0	1	2	3	4	5
	(1 2 3 4 5	In. 2.605 2.647 2.513 2.387 2.476	In. 2 '620 2 '656 2 '514 2 '403 2 '486	In. 2 * 624 2 * 652 2 * 508 2 * 405 2 * 496	In. 2 627 2 646 2 516 2 395 2 518	In. 2 · 643 2 · 646 2 · 508 2 · 398 2 · 529	In. 2.630 2.638 2.510 2.374 2.525	In. 2.595 2.619 2.500 2.358 2.533	In. 2 · 591 2 · 601 2 · 479 2 · 354 2 · 536	In. 2 · 590 2 · 592 2 · 453 2 · 292 2 · 546	In. 2:578 2:568 2:419 2:321 2:557	In. 2 * 584 2 * 573 2 * 423 2 * 322 2 * 575	In. 2:587 2:564 2:408 2:317 2:589
<b>.</b>	6 7 8 9 10 11 12	2.675 2.713 2.902 2.923 2.805 2.609	2.685 2.725 2.921 2.927 2.807 2.605	2.690 2.729 2.929 2.927 2.794 2.610	2.685 2.739 2.943 2.920 2.789 2.608	2.679 2.743 2.942 2.927 2.774 2.599	2.671 2.748 2.955 2.919 2.764 2.584	2.645 2.733 2.931 2.903 2.753 2.574	2.622 2.733 2.905 2.901 2.729 2.579	2 · 578 2 · 725 2 · 881 2 · 893 2 · 700 2 · 563	2.575 2.723 2.876 2.874 2.686 2.565	2:567 2:723 2:862 2:866 2:675 2:551	2.575 2.733 2.866 2.846 2.667 2.543
SEPTEMBER	13 14 15 16 17 18 19	2.510 2.633 2.810 2.577 2.460 2.674	2.506 2.665 2.851 2.571 2.484 2.687	2·490 2·695 2·827 2·565 2·490 2·696	2.478 2.717 2.811 2.560 2.499 2.724	2·457 2·729 2·805 2·542 2·531 2·735	2·440 2·732 2·797 2·530 2·535 2·737	2:440 2:714 2:772 2:516 2:550 2:736	2.459 2.688 2.754 2.511 2.548 2.743	2·387 2·672 2·720 2·494 2·541 2·731	2:366 2:674 2:701 2:506 2:546 2:718	2.360 2.672 2.678 2.498 2.555 2.728	2 · 358 2 · 660 2 · 671 2 · 490 2 · 563 2 · 733
	20 21 22 23 24 25 26 27	2.721 2.847 2.672 2.599 2.685 2.524	2.759 2.848 2.665 2.641 2.666 2.539	2.774 2.850 2.653 2.609 2.643 2.539	2.812 2.850 2.653 2.646 2.593 2.556	2'834 2'857 2'641 2'648 2'553 2'570	2 · 834 2 · 841 2 · 634 2 · 611 2 · 513 2 · 573	2·824 2·826 2·618 2·619 2·471 2·563	2.798 2.805 2.594 2.627 2.451 2.542	2.778 2.786 2.558 2.629 2.419 2.529	2.785 2.790 2.545 2.629 2.361 2.519	2.783 2.769 2.543 2.635 2.331 2.511	2.787 2.768 2.528 2.649 2.270 2.513
	28 29 30	2·874 2·762 2·437	2.862 2.740 2.441	2.878 2.736 2.433	2·876 2·719 2·420	2.893 2.699 2.413	2.861 2.681 2.398	2.846 2.641 2.375	2.833 2.639 2.352	2.823 2.627 2.324	2·799 2·626 2·310	2.793 2.604 2.312	2.789 2.590 2.326
Hourly	Means	2.6554	2.6644	2.6632	2.6654	2.6652	2.6552	2.6406	2.6298	2.6089	2.6007	2.5959	2.5915
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	2.475 2.434 2.732	2:491 2:470 2:766	2.518 2.471 2.766	2.543 2.505 2.765	2:543 2:525 2:776	$egin{array}{cccc} 2 & 555 \ 2 & 541 \ 2 & 747 \ \end{array}$	2:549 2:546 2:732	2:547 2:545 2:726	2.535 2.557 2.686	2.533 2.587 2.675	2.529 2.587 2.671	2.505 2.607 2.658
·	4 5 6 7 8 9 10	2:670 2:845 2:687 2:875 2:852 3:104	2.675 2.869 2.699 2.903 2.854 3.132	2.680 2.875 2.701 2.919 2.836 3.139	2.684 2.868 2.700 2.925 2.808 3.148	2.683 2.847 2.689 2.926 2.802 3.151	2.690 2.835 2.670 2.944 2.811 3.155	2.688 2.801 2.654 2.954 2.801 3.156	2.676 2.772 2.638 2.938 2.789 3.156	2.679 2.742 2.651 2.936 2.823 3.140	2.675 2.733 2.658 2.940 2.838 3.134	2.687 2.707 2.655 2.922 2.859 3.108	2.711 2.699 2.657 2.919 2.894 3.113
OCTOBER.	12 13 14 15 16 17	2.682 2.468 2.403 2.495 2.507 2.922	2.690 2.444 2.417 2.519 2.489 2.941	2.677 2.424 2.434 2.555 2.465 2.865	2.665 2.388 2.445 2.570 2.457 2.843	2.638 2.336 2.447 2.590 2.435 2.852	2.635 2.288 2.450 2.601 2.434 2.856	2.607 2.235 2.441 2.602 2.407 2.851	2.582 2.182 2.432 2.611 2.375 2.831	2.552 2.117 2.422 2.613 2.346 2.816	2:538 2:038 2:414 2:618 2:422 2:818	2·535 2·020 2·409 2·623 2·425 2·829	2.541 1.998 2.393 2.633 2.433 2.837
Ō	19 20 21 22 23 24 25	2·772 2·604 2·764 2·587 2·712 2·464	2.783 2.604 2.768 2.581 2.712 2.476	2.785 2.604 2.798 2.557 2.693 2.516	2·787 2·598 2·796 2·538 2·639 2·528	2·776 2·600 2·794 2·538 2·559 2·531	2.762 2.589 2.787 2.587 2.587 2.507 2.541	2·746 2·585 2·769 2·609 2·445 2·556	2.751 2.574 2.765 2.638 2.351 2.564	2.750 2.585 2.756 2.674 2.358 2.598	2·739 2·607 2·760 2·726 2·336 2·625	2.736 2.618 2.756 2.780 2.346 2.647	2.712 2.619 2.754 2.810 2.364 2.694
Nov	26 27 28 29 30 31	2·845 2·295 2·796 2·607 2·975 3·186	2 · 833 2 · 327 2 · 809 2 · 643 3 · 000 3 · 192	2·823 2·823 2·825 2·655 3·031 3·192	2 · 818 2 · 402 2 · 825 2 · 642 3 · 049 3 · 199	2·806 2·416 2·826 2·652 3·063 3·175	2.767 2.430 2.810 2.656 3.076 3.166	2·724 2·443 2·778 2·661 3·091 3·148	2.652 2.453 2.757 2.649 3.099 3.118	2.613 2.457 2.735 2.653 3.103 3.098	2 592 2 483 2 722 2 683 3 125 3 086	2:571 2:503 2:719 2:702 3:129 3:059	2 · 523 2 · 526 2 · 704 2 · 734 3 · 144 3 · 009
	Means	2 6947	2.7070	2.7097	2.7087	2.7028	2.6996	2.6881	2.6730	2.6665	2.6706	2.6716	2.6737

The color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the		المحون		and the second second	Bar	ometer at 32	BARON 2° = 27 E	METRIC P	RESSURE.	nbers in the	Table.	Para Pilin Lake Bus		
	15	2 1	3	14	3.5							22	23	
9 768	6	7		8	9	10	11	, 12	13	14	15	16	17	
2-567   2-566   2-622   2-633   2-632   2-646   2-653   2-652   2-669   2-668   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-676   2-67	2 59 2 54 2 4 2 3	93   2.6 47   2.5 10   2.4 14   2.3	13 37 05 <del>1</del> 4	2.632 2.542 2.408 2.354	2.624 2.546 2.408 2.357	2.627 2.533 2.390 2.371	2.634 2.537 2.382 2.385	2.633 2.531 2.374	2.630 2.530 2.325	2.624 2.512 2.329	2.628 2.510 2.341	2.628 2.498 2.347	2.624 2.482 2.375 2.452	2.6152 2.5711 2.4269 2.3715
2.536   2.576   2.412   2.391   2.391   2.395   2.596   2.460   2.460   2.460   2.461   2.568   2.766   2.768   2.768   2.768   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.776   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.777   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.778   2.788   2.789   2.787   2.788   2.789   2.789   2.789   2.789   2.787   2.789   2.789   2.780   2.789   2.789   2.780   2.789   2.787   2.781   2.782   2.782   2.782   2.788   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.785   2.78	2 50 2 7 2 8 2 8 2 6	67 2.59 40 2.76 56 2.8 34 2.89 51 2.63	- 96 35 19 20	2.622 2.782 2.857 2.820 2.629	2:633 2:783 2:861 	2:632 2:789 2:867 2:811 2:641	2:646 2:810 2:867 2:829 2:643	2.653 2.810 2.868 2.822	2.652 2.826 2.880 2.841	2.668 2.829 2.888 2.839	2:679 2:839 2:889 2:843	2.684 2.847 2.889 2.841	2.697 2.872 2.919 2.813	2 6407 2 7691 2 8919 2 8669 2 6818
2-186	2·36 2·6 2·6 2·4 2·5		- 76 96 59 77	2.412 2.708 2.663 2.477 2.599	2:391 2:714 2:642 2:487 2:604	2 391 2 714 2 636 2 463 2 614	2:399 2:722 2:624 2:454 2:621	2.409 2.723 2.607 2.462 2.632	2.430 2.749 2.622 2.438 2.625	2:443 2:745 2:610 2:434 2:630	2.506 2.760 2.598 2.426 2.630	2:534 2:780 2:590 2:431 2:643	2.593 2.809 2.586 2.432 2.660	2.4371 2.7102 2.6959 2.4924 2.5715
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2·7 2·5 2·6 2·2	$egin{array}{c cccc} 55 & 2.78 \ 27 & 2.58 \ 68 & 2.69 \ 66 & 2.2 \end{array}$	53 55 98 46	2.753 2.562 2.727 2.312	2:729 2:543 2:743 2:323	2.730 2.552 2.752 2.346	2.720 2.554 2.748 2.368	2:809 2:715 2:562 2:743 2:382	2.808 2.733 2.554 2.726 2.430	2.793 2.729 2.553 2.718 2.454	2 797 2 683 2 565 2 710 2 456	2.810 2.687 2.557 2.693 2.480	2:837 2:664 2:577 2:690 2:500	2.7982 2.7699 2.5819 2.6732 2.4383
2-503	2.5	66 2.5	78	2.565	2.264	2.555	2.532	$2.772 \\ 2.542$	2.784 2.506	2.781 2.489	2.775 2.481	2.772 2.473	2.764 2.463	2.8118 2.5991
	2:5	903 2.5	963	2.6081	2.6014	2 6092	2.6122	2.6115	2.6133	2.6139	2.6175	2.6231	2.6355	2.6237
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2.6	23 2.6	11	2.659	2.685	2.694	2.698							2.6103
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2.7 2.69 2.69 2.99	$\begin{array}{c cccc}  & & & & & & \\  & 11 & 2 \cdot 7^{2} \\  91 & 2 \cdot 68 \\  97 & 2 \cdot 76 \\  28 & 2 \cdot 96 \\  26 & 2 \cdot 98 \\  \end{array}$	- 13 39 09 04 38	2.769 2.693 2.719 2.890 2.982	2·793 2·665 2·715 2·910 3·021	2:816 2:673 2:735 2:908 3:029	2·813 2·661 2·767 2·902 3·035	2 · 823 2 · 666 2 · 787 2 · 878 3 · 036	2:834 2:672 2:775 2:844 3:038	2.846 2.673 2.770 2.844 3.049	2 · 853 2 · 671 2 · 814 2 · 838 3 · 062	2 · 843 2 · 669 2 · 828 2 · 834 3 · 076	2.834 2.687 2.849 2.844 3.084	2 · 7448 2 · 7376 2 · 7177 2 · 9010 2 · 9268
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2.00 2.40 2.64 2.45	$egin{array}{c ccc} 00 & 2.03 \ 05 & 2.40 \ 44 & 2.66 \ 58 & 2.46 \ \end{array}$	33 00 30 30	2.085 2.409 2.672 2.536	2.108 2.425 2.659 2.579	2 · 146 2 · 423 2 · 680 2 · 619	2.184 2.412 2.662 2.656	2.549 2.225 2.408 2.663	2:540 2:283 2:415 2:667	2:532 2:304 2:427 2:678	2:500 2:320 2:447 2:653	2:494 2:343 2:459 2:635	2 480 2 377 2 485 2 563 2 787	2.5750 2.2227 2.4259 2.6194 2.5323
	2 · 6 <sup>2</sup> 2 · 7 · 2 · 8 <sup>2</sup> 2 · 3 · 2 · 7 ·	$\begin{array}{c cccc}  & - & - & - & - & - & - & - & - & - & $	6 55 93 80 86	2.714 2.667 2.772 2.866 2.380	2·700 2·706 2·779 2·878 2·399	2:699 2:716 2:765 2:880 2:403	2.680 2.721 2.783 2.864 2.411	2.678 2.735 2.760 2.859 2.413	2.670 2.750 2.752 2.831 2.405	2.660 2.750 2.712 2.804 2.407	2.654 2.750 2.676 2.798 2.422	2.648 2.740 2.644 2.771 2.410	2.620 2.764 2.617 2.730 2.454	2:7189 2:6583 2:7537 2:7336 2:4534
	2.51 2.56 2.69 2.75 3.15 3.01	12 2.48 56 2.60 98 2.68 58 2.79 56 3.17 17 3.02	00 86 92 71	2.462 2.606 2.681 2.804 3.185	2.450 2.657 2.692 2.834 3.180	2:430 2:671 2:689 2:846 3:184	2.420 2.691 2.689 2.863 3.192	2:404 2:707 2:671 2:877 3:193	2.358 2.746 2.649 2.877 3.198	2:337 2:752 2:633 2:894 3:201	2:313 2:759 2:625 2:904 3:193	2·295 2·773 2·621 2·908 3·198	2:295 2:790 2:616 2:957 3:191	2.5555 2.5588 2.7190 2.7605 3.1303
	-		-	2:7020		2:7206		<del></del>					<u> </u>	

				Baron		AROMETR = 27 Eng			ers in the T	able.	···		
Hourso Götti Tin	f Mean	0	1	2	3	4	5	6	7	8	9	10	11
	f Mean	18	19	20	21	22	23	0	1	2	3	4	5
	2 3 4 5 6 7	In. 2.680 2.786 2.920 3.148 3.070 2.962	In. 2.680 2.800 2.950 3.174 3.058 2.950	In. 2 · 687 2 · 820 2 · 970 3 · 192 3 · 082 2 · 950	In. 2:677 2:818 3:004 3:206 3:090 2:939	In. 2.694 2.828 3.013 3.200 3.070 2.929	In. 2 · 684 2 · 827 3 · 034 3 · 192 3 · 065 2 · 931	In. 2.674 2.805 3.024 3.178 3.053 2.912	In. 2 · 667 2 · 791 3 · 035 3 · 173 3 · 022 2 · 904	In. 2.660 2.799 3.023 3.153 3.009 2.886	In. 2 · 646 2 · 798 3 · 031 3 · 147 3 · 002 2 · 883	In. 2.656 2.778 3.047 3.136 2.999 2.868	In. 2.680 2.783 3.071 3.127 2.979 2.860
BER.	8 9 10 11 12 13 14 15	2.639 2.758 2.648 2.874 2.858 2.736	2.657 2.754 2.670 2.902 2.866 2.752	2.663 2.782 2.686 2.910 2.868 2.759	2.684 2.776 2.700 2.926 2.862 2.761	2.682 2.770 2.714 2.930 2.857 2.753	2.688 2.741 2.712 2.930 2.845 2.739	2.681 2.733 2.718 2.917 2.819 2.731	2.683 2.719 2.724 2.894 2.807 2.712	2.678 2.693 2.717 2.886 2.793 2.692	2.690 2.677 2.735 2.884 2.785 2.694	2.690 2.695 2.747 2.886 2.783 2.696	2·718 2·691 2·773 2·878 2·780 2·700
NOVEMBER.	16 17 18 19 20 21 22	2.812 2.827 2.569 2.466 2.295 2.501	2.834 2.817 2.569 2.451 2.319 2.510	2.847 2.817 2.581 2.403 2.337 2.512	2.854 2.811 2.589 2.351 2.367 2.509	2'867 2'793 2'596 2'339 2'397 2'503	2.865 2.770 2.586 2.269 2.410 2.494	2.867 2.746 2.581 2.191 2.411 2.466	2.879 2.736 2.573 2.188 2.411 2.459	2.867 2.722 2.595 2.075 2.441 2.415	2.878 2.696 2.590 2.073 2.464 2.403	2.878 2.670 2.609 2.058 2.466 2.391	2.892 2.650 2.616 2.050 2.476 2.383
	23 24 25 26 27 28 29	2 · 499 2 · 378 2 · 261 2 · 214 2 · 560 2 · 350	2:531 2:386 2:259 2:223 2:554 2:366	2:539 2:396 2:256 2:233 2:568 2:394	2.591 2.400 2.258 2.242 2.578 2.437	2.604 2.397 2.211 2.238 2.572 2.475	2.617 2.395 2.184 2.212 2.548 2.483	2.613 2.385 2.172 2.199 2.521 2.498	2.631 2.375 2.153 2.192 2.497 2.506	2.621 2.379 2.156 2.188 2.467 2.514	2.604 2.385 2.168 2.213 2.439 2.521	2.600 2.378 2.184 2.232 2.429 2.525	2.583 2.373 2.197 2.250 2.395 2.535
	30	3.030	3.036	3.052	3.073	3.081	3.062	3.067	3.041	3.027	3.039	3.051	3.061
Hourly	Means	2.6736	2.6827	2.6922	2.7001	2.7005	2.6914	2.6785	2.6709	2.6582	2.6578	2.6581	2.6600
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{pmatrix}$	3:097 2:582 2:299 2:686 3:125	3:111 2:558 2:312 2:700 3:125	3 · 097 2 · 534 2 · 331 2 · 721 3 · 129	3.086 2.492 2.348 2.761 3.153	3.085 2.481 2.354 2.776 3.159	3.046 2.436 2.353 2.776 3.143	3.020 2.402 2.345 2.788 3.124	2 · 992 2 · 375 2 · 369 2 · 808 3 · 108	2.974 2.358 2.375 2.830 3.008	2.955 2.347 2.401 2.853 3.092	2.940 2.317 2.405 2.877 3.091	2.922 2.262 2.435 2.919 3.096
	6 7 8 9 10 11 12 13	2.731 2.297 2.579 2.566 2.556 2.877	2.721 2.312 2.603 2.554 2.584 2.889	2·768 2·340 2·619 2·462 2·616 2·905	2.632 2.358 2.676 2.422 2.636 2.922	2.611 2.378 2.719 2.401 2.656 2.945	2:547 2:359 2:705 2:358 2:659 2:929	2:507 2:367 2:708 2:320 2:658 2:907	2 · 486 2 · 363 2 · 726 2 · 306 2 · 664 2 · 905	2:440 2:364 2:742 2:306 2:677 2:871	2·434 2·381 2·746 2·305 2·696 2·871	2:416 2:394 2:746 2:301 2:712 2:857	2·390 2·421 2·749 2·303 2·698 2·859
DECEMBER.	14 15 16 17 18 19 20	2 · 924 2 · 893 2 · 795 2 · 544 2 · 388 2 · 028	2 · 931 2 · 900 2 · 789 2 · 538 2 · 382 2 · 039	2.959 2.920 2.778 2.545 2.372 2.055	2 · 984 2 · 922 2 · 781 2 · 563 2 · 340 2 · 075	2 · 983 2 · 920 2 · 790 2 · 590 2 · 304 2 · 094	2 · 960 2 · 906 2 · 753 2 · 556 2 · 257 2 · 083	2·940 2·872 2·732 2·553 2·215 2·081	2.926 2.857 2.728 2.543 2.196 2.090	2.920 2.841 2.697 2.523 2.178 2.112	2.926 2.842 2.686 2.509 2.158 2.144	2.936 2.839 2.671 2.493 2.153 2.170	2.936 2.844 2.654 2.485 2.134 2.186
	21 22 23 24 25 a	2:545 2:796 3:159 2:873	2.613 2.802 3.180 2.841	2:677 2:829 3:198 2:811	2.732 2.860 3.218 2.800	2·790 2·880 3·238 2·759	2:808 2:902 3:226 2:711	2·794 2·898 3·202 2·660	2.802 2.912 3.198 2.654	2.822 2.932 3.190 2.596	2 · 835 2 · 964 3 · 186 2 · 584	2.856 2.998 3.184 2.582	2.869 3.039 3.148 2.564
	26 27 28 29 30 31	2.895 	2 · 903 2 · 177 2 · 902 2 · 254 2 · 587	2 · 900 2 · 217 2 · 925 2 · 275 2 · 553	2.905 2.231 2.908 2.291 2.566	2.888 2.232 2.896 2.334 2.554	2.859 2.236 2.890 2.340 2.503	2.780 2.246 2.868 2.361 2.459	2·743 2·245 2·868 2·355 2·442	2·685 2·277 2·830 2·401	2.639 	2.603 	2·542 2·436 2·750 2·533
Hourly	Means	2.6585	2.6657	2.6745	2.6793	2.6853	2.6654	2.6464	2.443	$\frac{2.435}{2.6332}$	$\frac{2.440}{2.6381}$	2.6390	$\frac{2.436}{2.6388}$

<sup>&</sup>lt;sup>a</sup> Christmas Day.

				Baro	meter at 32	$\begin{array}{c} \text{BAROM} \\ 2^{\circ} \equiv 27  \text{Er} \end{array}$	IETRIC P.		abers in the	Table.	in and an analysis of the second	The bloom of a desired	
-	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
	6	7	8	9	10	11	12	13	14	15	16	17	Means.
3 3 6 4	In. : 655 : 787 : 071 : 134 : 977 2: 850	In. 2.655 2.793 3.093 3.115 2.979 2.848	In. 2.669 2.805 3.091 3.099 2.977 2.845	In. 2.690 2.826 3.106 3.088 2.982 2.821	In. 2.688 2.830 3.115 3.077 2.987 2.815	In. 2.698 2.835 3.118 3.065 2.967 2.797	In. 2.719 2.847 3.134 3.058 2.968	In. 2.742 2.851 3.119 3.064 2.950	In. 2.754 2.855 3.123 3.068 2.936	In. 2.766 2.872 3.132 3.070 2.940	In. 2 '782 2 '891 3 '132 3 '061 2 '940	In. 2.780 2.908 3.144 3.072 2.957	In. 2 · 6951 2 · 8222 3 · 0625 3 · 1249 3 · 0024 2 · 8202
6 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		2.734 2.693 2.808 2.886 2.782 2.690	2.742 2.675 2.808 2.886 2.781 2.670	2.750 2.675 2.820 2.889 2.785 2.675	2.750 2.646 2.836 2.889 2.768 2.677	2.756 2.642 2.838 2.875 2.764 2.676	2:634 2:764 2:646 2:836 2:865 2:754	2.631 2.757 2.622 2.841 2.875 2.752	2.618 2.758 2.630 2.849 2.853 2.752	2.611 2.756 2.622 2.849 2.853 2.750	2.610 2.756 2.622 2.853 2.853 2.746	2.630 } 2.758 2.629 2.855 2.857 2.732 	2 · 7152 2 · 6909 2 · 7722 2 · 8866 2 · 7946 2 · 7310
	2'906 2'642 2'608 2'021 2'502 2'390	2.906 2.638 2.626 2.019 2.496 2.365	2.898 2.608 2.631 2.007 2.498 2.307	2.890 2.608 2.629 2.005 2.506 2.289	2.882 2.590 2.609 2.041 2.506 2.271	2.870 2.580 2.598 2.066 2.513 2.277	2.780 2.866 2.564 2.598 2.092 2.505	2.772 2.857 2.566 2.580 2.126 2.493	2.784 2.855 2.567 2.554 2.132 2.479	2.792 2.845 2.566 2.514 2.178 2.482	2:803 2:831 2:562 2:476 2:243 2:490	2.833 2.561 2.470 2.271 2.499	2.8658 2.6711 2.5811 2.1715 2.4485 2.4107
	2.563 2.385 2.201 2.258 2.367 2.553	2·549 2·382 2·201 2·286 2·373 2·565	2·537 2·386 2·201 2·300 2·364 2·571	2.521 2.364 2.201 2.308 2.359 2.560	2.514 2.346 2.195 2.334 2.356 2.552	2·496 2·328 2·185 2·358 2·334 2·564	2:338 2:472 2:321 2:190 2:376 2:337	2:372 2:444 2:301 2:192 2:450 2:326	2:388 2:426 2:301 2:196 2:484 2:338	2.411 2.411 2.291 2.202 2.512 2.331	2:433 2:400 2:263 2:204 2:538 2:327	2·469 } 2·380 2·263 2·204 2·542 2·329	2:5311 2:3566 2:2013 2:3076 2:4279
	3.085	3.098	3.103	3.104	3.102	3.102	2.952 3.102	2.969 3.102	2.973 3.098	3.002 3.092	3.010 3.092	$\left[\begin{array}{c} 3.004 \\ 3.095 \end{array}\right]$	2.6200 3.0752
-	2.6614	2.6632	2.6584	2.6580	2.6550	2.6521	2.6687	2.6702	2.6708	2.6741	2.6768	2.6817	2.6714
	2 · 924 2 · 236 2 · 463 2 · 939 3 · 092	2.886 2.222 2.480 2.965 3.098	2.878 2.217 2.492 2.983 3.092	2:851 2:229 2:540 2:979 3:102	2.802 2.215 2.583 2.992 3.110	2.772 2.217 2.597 3.013 3.106	2.741 2.224 2.620 3.017 — 2.919	2.735 2.251 2.624 3.047 — 2.878	2.733 2.249 2.631 3.053 — 2.852	2.700 2.254 2.639 3.074 — 2.819	2.674 2.280 2.647 3.090 	2.627 2.274 2.655 3.103 	2:9020 2:3338 2:4707 2:9062 3:0435
	2·372 2·409 2·783 2·313 2·709 2·869	2:341 2:423 2:780 2:323 2:714 2:847	2:305 2:418 2:770 2:337 2:736 2:849	2·251 2·408 2·752 2·337 2·762 2·853	2·217 2·398 2·744 2·353 2·778 2·851	2·184 2·418 2·737 2·368 2·780 2·851	2 · 157 2 · 430 2 · 728 2 · 372 2 · 790	2 167 2 428 2 712 2 404 2 819	2 · 181 2 · 459 2 · 691 2 · 426 2 · 837	2 · 200 2 · 477 2 · 663 2 · 472 2 · 837	2 · 236 2 · 236 2 · 531 2 · 616 2 · 494 2 · 841	2 · 265 2 · 557 2 · 608 2 · 529 2 · 861	2:3983 2:4037 2:7042 2:3888 2:7198
	2 · 944 2 · 846 2 · 636 2 · 489 2 · 119 2 · 200	2'944 2'873 2'624 2'483 2'112	2 · 940 2 · 873 2 · 620 2 · 473 2 · 096 2 · 227	2 · 945 2 · 863 2 · 598 2 · 465 2 · 078 2 · 231	2 · 931 2 · 853 2 · 572 2 · 463 2 · 048 2 · 274	2 · 922 2 · 846 2 · 560 2 · 443 2 · 044 2 · 282	2 · 932 2 · 912 2 · 840 2 · 546 2 · 424 2 · 036	2:934 2:910 2:816 2:550 2:396 2:044	2 · 942 2 · 910 2 · 811 2 · 550 2 · 407 2 · 036	2.939 2.904 2.817 2.550 2.399 2.032	2.939 2.909 2.801 2.559 2.391 2.032	2·925 } 2·893 2·802 2·542 2·390 2·020	2 · 8945 2 · 9329 2 · 8582 2 · 6567 2 · 4860 2 · 1572
	2 200 2 877 3 048 3 155 2 562	2.219 2.885 3.060 3.157 2.545	2 · 887 3 · 067 3 · 146 2 · 522	2 : 887 3 : 059 3 : 126 2 : 506	2 · 890 3 · 069 3 · 097 2 · 496	2 · 866 3 · 069 3 · 069 2 · 494	2·400 2·853 3·067 3·035	2 · 390 2 · 809 3 · 085 3 · 021	2 · 382 2 · 799 3 · 091 3 · 011	2·407 2·781 3·119 2·992	2·457 2·779 3·135 2·978	$     \begin{bmatrix}                                $	2.2134 2.8017 2.9928 3.1255 2.6931
	2.499	2.467	2.437	2.382	2:345	2.312	2.800	2.826	2.854	2.860	2.848	$\left\{\begin{array}{c} 2.887 \\ - \\ 2.189 \end{array}\right\}$	2.5391
	2·492 2·738 2·534 2·443	2.549 2.682 2.580 2.427	2.584 2.612 2.584 2.408	2 · 650 2 · 566 2 · 608 2 · 406	2.679 2.500 2.610 2.399	2.684 2.440 2.610 2.399	2·190 2·751 2·414 2·597 2·400	2 190 2 785 2 376 2 616 2 366	2 195 2 819 2 360 2 623 2 392	2 : 203 2 : 843 2 : 326 2 : 597 2 : 386	2 187 2 847 2 302 2 589 2 402	2 189 ) 2 · 863 2 · 252 2 · 557 2 · 472	2:4893 2:6617 2:4767 2:4526
1	2.6420	2.6418	2.6367	2.6321	2.6257	2.6186	2.6229	2.6223	2.6267	2.6265	2.6286	2.6291	2.6424

		- 190	,	Baro	meter at 32°			RESSURE.	bers in the	Table.	<del></del>		
lours of Göttin Tim	gen }	0	1	2	3	4	5	6.	7	8	9	10	11
ours of Toror Time	Mean }	18	19	20	21	22	23	О	1	2	3	4	5
	1 2	In. 2:507 2:472	In. 2.510 2.490	In. 2:546 2:530	In. 2:582 2:581	In 2.628 2.606	In. 2.608 2.621	In. 2:594 2:622	In. 2.588 2.612	In. 2.581 2.646	In. 2:598 2:667	In. 2.604 2.681	In. 2.571 2.692
	3 4 5 6 7 8	2.813 2.036 2.580 2.005 2.440 2.852	2.748 2.095 2.586 1.933 2.483 2.866	2.713 2.148 2.600 1.946 2.521 2.870	2.656 2.181 2.645 1.917 2.559 2.858	2.624 2.232 2.634 1.895 2.607 2.861	2.552 2.224 2.608 1.871 2.612 2.836	2 · 474 2 · 213 2 · 578 1 · 893 2 · 615 2 · 798	2.401 2.237 2.555 1.921 2.628 2.775	2:337 2:242 2:546 1:966 2:667 2:782	2 · 283 2 · 260 2 · 538 2 · 008 2 · 708 2 · 794	2 · 208 2 · 270 2 · 523 2 · 034 2 · 738 2 · 801	2·161 2·284 2·535 2·078 2·746 2·794
JANUARY.	10 11 12 13 14 15 16	2.693 2.884 2.874 2.429 2.374 2.197	2 · 688 2 · 907 2 · 854 2 · 414 2 · 328 2 · 248	2.676 2.959 2.816 2.414 2.276 2.304	2.686 3.001 2.792 2.428 2.219 2.349	2.687 3.024 2.752 2.430 2.172 2.402	2.664 3.023 2.720 2.415 2.131 2.410	2.624 3.006 2.675 2.383 2.080 2.415	2:591 3:025 2:642 2:359 2:069 2:429	2.590 3.030 2.621 2.361 2.056 2.487	2 · 589 3 · 051 2 · 620 2 · 372 2 · 054 2 · 564	2.589 3.062 2.596 2.382 2.066 2.624	2.604 3.069 2.568 2.385 2.058 2.727
JAN	17 18 19 20 21 22 23	2:405 2:568 3:093 2:824 2:889 2:245	2:378 2:610 3:093 2:822 2:901 2:259	2:383 2:678 3:093 2:836 2:904 2:291	2:377 2:724 3:093 2:840 2:905 2:300	2:363 2:763 3:098 2:820 2:839 2:316	2·336 2·782 3·076 2·816 2·871 2·324	2.316 2.802 3.013 2.818 2.828 2.345	2·271 2·820 2·975 2·816 2·803 2·353	2·276 2·860 2·962 2·828 2·780 2·388	2·291 2·894 2·952 2·854 2·775 2·409	2·295 2·912 2·948 2·862 2·737 2·428	2·307 2·950 2·922 2·881 2·701 2·439
	24 25 26 27 28 29 30 31	2:902 2:411 2:867 3:218 2:638 2:207	2·922 2·378 2·898 3·219 2·616 2·227	2·948 2·304 2·937 3·216 2·599 2·288	2.958 2.295 2.956 3.232 2.593 2.312	2.960 2.268 2.984 3.219 2.545 2.337	2 · 959 2 · 254 2 · 990 3 · 208 2 · 472 2 · 356	2.941 2.236 3.001 3.163 2.370 2.372	2.931 2.232 3.008 3.137 2.296 2.385	2 · 930 2 · 286 3 · 021 3 · 104 2 · 231 2 · 401	2.917 2.357 3.051 3.090 2.189 2.429	2 · 922 2 · 432 3 · 087 3 · 051 2 · 149 2 · 451	2 · 901 2 · 472 3 · 107 3 · 007 2 · 123 2 · 473
Iourly	Means	2.5932	2.5951	2.6075	2.6169	2.6179	2.6054	2:5837	2.5715	2:5761	2.5890	2.5943	2.5983
	1 2 3 4 5 6 7	2:371 2:531 2:098 2:322 2:736 2:747	2:406 2:521 2:057 2:362 2:742 2:762	2:428 2:520 2:017 2:406 2:747 2:779	2.445 2.517 1.959 2.491 2.755 2.789	2:473 2:501 1:907 2:529 2:744 2:802	2.483 2.488 1.857 2.545 2.742 2.788	2.499 2.458 1.803 2.550 2.722 2.758	2 498 2 449 1 747 2 552 2 713 2 734	2.521 2.431 1.734 2.561 2.711 2.725	2:539 2:435 1:721 2:591 2:705 2:729	2.548 2.425 1.732 2.625 2.684 2.732	2.543 2.411 1.744 2.647 2.680 2.726
TARY.	8 9 10 11 12 13	2:257 2:159 2:451 2:630 2:471 2:734	2·273 2·223 2·465 2·637 2·471 2·738	2:284 2:258 2:486 2:644 2:485 2:741	2·282 2·294 2·507 2·662 2·501 2·724	2·275 2·321 2·497 2·661 2·531 2·698	2.252 2.336 2.507 2.649 2.545 2.687	2:240 2:342 2:491 2:633 2:544 2:652	2·224 2·340 2·488 2·633 2·537 2·625	2.188 2.350 2.493 2.637 2.556 2.599	2·175 2·364 2·514 2·637 2·591 2·595	2:167 2:378 2:534 2:623 2:621 2:593	2:131 2:404 2:553 2:639 2:665 2:591
FEBRUARY.	15 16 17 18 19 20 21	2:505 2:919 2:677 2:893 2:768 2:986	2:563 2:903 2:694 2:893 2:780 3:005	2.631 2.903 2.742 2.919 2.821 3.015	2.673 2.865 2.745 2.931 2.845 3.024	2:724 2:838 2:745 2:925 2:842 3:022	2.776 2.801 2.768 2.905 2.870 3.026	2.800 2.733 2.760 2.888 2.876 3.012	2'808 2'664 2'755 2'854 2'873 3'001	2:836 2:614 2:757 2:821 2:876 2:989	2.874 2.570 2.756 2.820 2.885 2.879	2.906 2.540 2.769 2.800 2.913 2.987	2:901 2:517 2:763 2:792 2:907 2:995
	22 23 24 25 26 27 28	2.452 2.894 3.083 2.816 2.995 2.355	2.452 2.945 3.093 2.834 2.991 2.301	2:458 2:975 3:093 2:838 2:990 2:229	2·472 3·007 3·100 2·846 3·012 2·217	2·472 3·019 3·091 2·872 2·994 2·167	2.466 3.036 3.081 2.867 2.973 2.073	2·463 3·026 3·056 2·872 2·924 1·954	2·472 3·017 3·015 2·862 2·906 1·925	2 488 3 019 2 985 2 854 2 891 1 866	2:505 3:017 2:978 2:863 2:864 1:838	2·527 3·036 2·944 2·882 2·837 1·818	2 · 572 3 · 042 2 · 938 2 · 897 2 · 813 1 · 818
ourly l	Means	2.6187	2.6296	2.6420	2.6526	2.6521	2.6467	2.6273	2.6122	2.6043	2.6060	2.6092	2.6120

			Ba	rometer at 8			PRESSURE es + the nu		e Table.			
12	13	14	15	16	17	18	19	20	21	22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
2.509	2.479	2.401	2.310	2.306	2.313	2.289	2.316	2.342	2.365	2.395	2.426	2 4737
2.712	2.726	2.724	2.738	2.744	2.753							:
	1					2.937	2.919	2.916	2.887	2.851	2.822	2.7062
096	2.056	1 989 2 340	1.883 2.370	1.858 2.404	1.840 2.426	1.862 2.475	1.914 2.504	1 934 2 542	1 952 2 570	1.968	2:002	2.2218
2°314 2°527	2.314 2.497	2.457	$\frac{2}{2} \cdot \frac{370}{393}$	2.381	2.324	2.475	2.230	$2.342 \\ 2.172$	2.141	2.582 2.107	2.564 2.039	2 326 2 4363
103	2.130	2.174	2.189	2.208	2.229	2.246	2.274	$\frac{2}{2} \cdot \frac{112}{292}$	2.331	2.367	2.401	2.1008
760	2.774	2.796	2.818	2.830	2.829	2.833	2.831	2.843	2.848	2.832	2.842	2.7150
791	2.822	2.845	2.839	2.821	2.863	0.700	21757	2.749	0.740	0.17.40	2.707 }	2.8067
2.613	2.640	2.656	2.680	2.730	2.746	2.769	2.757 $2.771$	2 749	2.743 2.825	2.740 2.851	2.863	2.689
3 070	3 081	3 072	3.058	3.042	3.044	3.016	2.986	2.968	2.934	2.888	2.888	3.0037
2:546	2.230	2.506	2.468	2.454	2.460	2.448	2.455	2.453	2.466	2.461	2.429	2 5920
2.421	2.427	2.447	2.490	2.476	2.472	2.467	2.485	2.485	2.457	2.429	2.419	2.4270
074	2 070	2:022	2.038	2.058	2.052	2.044	2.078	2.099	2.108	2.120	2 160	2.1169
2.777	2.864	2.899	2.930	2.944	2.979	2.649	2.602	2.592	2.546	2.498	$2.\frac{-}{436}$	2.5780
2·327	$\frac{-}{2 \cdot 337}$	2.350	2.356	$2.\overline{371}$	2.393	2.375	2.388	2.431	2.458	2 496	2 494	2:3647
972	2.974	2.984	2.995	3.004	3.025	3.029	3.052	3.069	3.079	3.079	3.075	2.9042
2.919	2.917	2.902	2.902	2 887	2.865	2.849	2.832	2.830	2.810	2.820	2.825	2.9451
2.895	2.897	2.886	2.891	2.877	2.893	2.893	2.907	2.909	2.914	2.910	2.881	2.8654
2 661 2 462	2.614 2.483	2.563 2.486	2.543	2.519 2.482	2.465	2.435	2.363	2.339	2.311	2.285	2.243	2.6364
	2.100	2 400			i —	2.841	2.853	2.863	2.867	2.882	2 888	2.5072
2*896	2.894	2 864	2.839	2.811	2.766	2.736	2.695	2.658	2.626	2.557	2.481	2.8338
2.226	2 578	2.605	2.654	2.663	2.693	2.717	2.756	2.777	2.795	2.813	2.838	2.5142
3'145	3.154	3.181	3°205 2°884	3 · 208 2 · 858	3°220 2°834	3 248 2 802	$3.252 \\ 2.770$	3·272 2·758	$3.258 \\ 2.743$	$\begin{vmatrix} 3.227 \\ 2.704 \end{vmatrix}$	3.200 2.666	3·1032 2·9893
3.002 2.097	$2.948 \\ 2.079$	2.055	2 884	2.025	2.029	2.035	2.040	2.063	2.099	2.141	2.173	2.9893
2.200	2.506	2.516	2.511	2 524	2.528					<u> </u>	<u> </u>	2.3911
	_					2:337	2.332	2.335	2.347	2.354	2.356}	
2.6044	2.6073	2.6012	2.5963	2.5967	2.5971	2.5843	2.5911	2.5960	2.5954	2.5899	2.2813	2:5954
2.570	2.566	2.582	2.618	2.642	2.603	2.598	2.600	2.604	2.589	2:562	2.549	2.5349
2.394	2.390	2.374	2.369	2.369	2.356	2.328	2.308	2.302	2.580	2.247	2°140	2:3977
791	1.835	1.862	1.905	1.970	2.019	2.039	2.083	2.158	2.210	2.257	2.290	1'9498
675 685	2 695 2 684	2.707 2.684	$2.715 \\ 2.676$	$2.721 \\ 2.688$	2.719 2.696	2.724	$\begin{vmatrix} 2.707 \\ 2.692 \end{vmatrix}$	2.709 2.692	$2.722 \\ 2.722$	$2.716 \\ 2.724$	2.732 2.730	2.6135 2.7104
716	2.694	2.688	2.699	$\frac{2}{2} \cdot 709$	$\frac{2}{2}.713$							
•	! - <u></u>	_		-		2.204	2.198	2.209	2.213	2.233	2.247	2.6081
117	2.112	2.109	2.035	2.015	1.981	1.957	1.971	1.983	2.017	2.039	2.095	2.1326
426 564	2.426	2.432	2.441	2.443	2.455	$2.443 \\ 2.632$	$2.445 \\ 2.621$	2.447 $2.612$	$2.454 \\ 2.608$	2.442 2.617	2.449 2.629	2.3780 $2.5524$
645	$2.572 \\ 2.639$	$2.583 \\ 2.627$	2.596 2.595	2.613 2.575	2.624 2.553	$\frac{2.032}{2.541}$	2.21	2.528	$\frac{2.502}{2.502}$	2.493	2.470	2.5993
679	2.692	$\frac{2.027}{2.717}$	2.734	2.740	$\frac{2}{2}.727$	2.733	2.732	2.740	2.726	$\frac{2.722}{2.722}$	2.732	2 6330
603	2 609	$\frac{2.638}{}$	2.645	2.632	2.620						) l	2.5994
						2.439	2.434	2.436	2.441	2.455	2.457	
.405	2.976	2.976	2.990	2.986	2.486	2.506	2.981 2.512	$2.974 \\ 2.552$	$2.973 \\ 2.580$	$2.958 \\ 2.596$	2.937	2.8610 2.6294
`495 `802	2 · 480 2 · 826	2.464 2.846	2.470 2.844	2:482 2:847	2.486 2.851	2.506 2.860	2.871	2 332	2 580	2 596	2.615 2.893	2 6294
774	2.760	$\frac{2}{2}$ . $\frac{840}{771}$	2.774	$\frac{2.047}{2.774}$	$\frac{2}{2}.772$	$\frac{2}{2} \cdot 772$	$\frac{2}{2}.754$	2.748	$\frac{2}{2}.742$	$\frac{2}{2}.746$	2,768	2.816
929	$\frac{2}{2} \cdot 957$	$\frac{2}{2} \cdot 953$	2.969	2 969	2 969	2.967	2.967	2.970	2.974	2.964	2.984	2.909
994	2.982	2.979	2.987	2.990	2.932	_					$2.\overline{454}$	2.8620
594	0.001		0.000	0.700		2.469	2.467	2.467 2.776	2.462	2.462		(
050	2.631 3.058	2.647 3.074	2.689 3.065	$\frac{2.732}{3.058}$	$3.744 \\ 3.062$	$\frac{2.758}{3.066}$	$\frac{2.757}{3.073}$	$\frac{2776}{3.070}$	2.799 3.067	$2.831 \\ 3.073$	2.864 3.085	2.6092 3.0347
896	2.882	2.859	2.864	2 864	2.860	2.852	2.826	2.797	2.793	2.793	2.803	2.939
902	2.928	2.932	2.947	2.953	2.964	2.965	2.973	2.981	2.982	2.985	3.002	2.9090
774	2.742	2.741	2.700	2.676	2.600	2.584	2.558	2.494	2.466	2.448	2.392	2.765
826	1.828	1.822	1.825	1.828	1.831 —	2.191	2.207	2.27	2.539	2.251	$\{2 \cdot \frac{-}{282}\}$	2.038
	1	-							I	L	1	1

				Barome			TRIC PRE		ers in the Ta	ble.			
Hours of Götting Time	Mean }	o	. 1	2	3	4	5	6	7	8	9	10	11
lours of ? Toron Time	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	1 2 3 4 5 6	In. 2:313 2:779 2:730 2:716 2:969 3:049	In. 2:329 2:787 2:731 2:738 3:008 3:062	In. 2:394 2:797 2:739 2:764 3:024 3:064	In. 2:428 2:810 2:702 2:773 3:026 3:052	2:442 2:818 2:690 2:782 3:033 3:051	In. 2:479 2:822 2:667 2:797 3:046 3:048	In. 2 '486 2 '815 2 '646 2 '802 3 '026 3 '028	In. 2:492 2:777 2:636 2:799 3:012 2:999	In. 2:491 2:758 2:615 2:794 3:015 2:983	In. 2:501 2:758 2:609 2:804 3:002 2:976	In. 2 · 520 2 · 759 2 · 593 2 · 804 3 · 000 2 · 948	In. 2:539 2:765 2:593 2:813 3:007 2:907
	7 8 9 10 11 12 13 14	2.679 2.984 2.683 2.891 2.733 2.694	2.716 2.982 2.693 2.923 2.734 2.714	2.745 2.988 2.695 2.905 2.736 2.724	2.767 2.973 2.713 2.896 2.780 2.740	2·792 2·977 2·705 2·890 2·767 2·727	2.793 2.959 2.683 2.864 2.730 2.728	2.807 2.959 2.672 2.855 2.724 2.722	2.801 2.901 2.663 2.824 2.696 2.686	2.811 2.885 2.659 2.816 2.686 2.673	2.839 2.873 2.658 2.804 2.707 2.668	2.845 2.859 2.670 2.791 5.685 2.667	2·854 2·821 2·692 2·795 2·653 2·678
MARCH.	15 16 17 18 19 20 21	2.742 2.707 2.965 2.763 2.936 2.583	2.755 2.714 3.002 2.757 2.950 2.563	2.763 2.732 3.008 2.757 2.970 2.517	2·752 2·742 3·006 2·746 2·971 2·457	2.750 2.748 3.004 2.734 2.976 2.423	2:703 2:764 2:988 2:716 2:980 2:378	2·742 2·765 2·979 2·705 2·968 2·338	2.732 2.771 2.948 2.706 2.955 2.289	2·716 2·768 2·922 2·685 2·939 2·229	2·718 2·788 2·895 2·682 2·921 2·182	2·718 2·793 2·883 2·683 2·916 2·200	2.718 2.799 2.877 2.723 2.904 2.171
	22 23 24 25 26 27	2:535 2:343 2:531 2:299 2:572 2:467	2.531 2.341 2.553 2.331 2.593 2.472	2:507 2:337 2:581 2:318 2:588 2:463	2·522 2·294 2·601 2·329 2·578 2·480	2.520 2.274 2.610 2.352 2.566 2.471	2.514 2.273 2.613 2.373 2.558 2.470	2:504 2:279 2:612 2:402 2:574 2:470	2·494 2·272 2·622 2·445 2·540 2·468	2·492 2·276 2·606 2·461 2·528 2·458	2:485 2:297 2:604 2:481 2:518 2:469	2.483 2.301 2.583 2.509 2.505 2.483	2:487 2:321 2:576 2:527 2:502 2:501
	27 28 29 30 31	2.148 2.613 2.601	2·138 2·631 2·639	2·109 2·635 2·664	2:115 2:647 2:708	2°135 2°645 2°720	2·158 2·646 2·743	2·208 2·598 2·749	2·247 2·588 2·748	2·297 2·556 2·754	2·332 2·512 2·760	$ \begin{array}{c c}  & - \\  2.370 \\  2.484 \\  2.776 \end{array} $	2:432 2:498 2:794
Hourly	Means	2.6676	2.6810	2.6861	2.6892	2.6890	2.6849	2.6828	2.6708	2.6620	2.6609	2.6603	2.6647
(	1 2 a	2.903	2.914	2.906	2.889	2.868	2.850	2.813	2.782	2.736	2.715	2.708	2.680
	$\begin{bmatrix} 2\\4 \end{bmatrix}$	2.269	2.588	2.602	2.616	2.614	2.605	2.606	2.596	2.596	2.281	2.574	2.569
	5 6 7 8 9	2.745 2.287 2.507 2.541 2.623 2.334	2.743 2.279 2.531 2.575 2.659 2.341	2.742 2.273 2.569 2.525 2.709 2.352	2.778 2.226 2.601 2.463 2.707 2.367	2.783 2.213 2.619 2.427 2.696 2.377	2.784 2.193 2.643 2.382 2.684 2.403	2·771 2·174 2·646 2·350 2·684 2·415	2.766 2.154 2.648 2.311 2.670 2.407	2·768 2·111 2·645 2·275 2·654 2·416	2·767 2·073 2·627 2·264 2·616 2·458	2·741 2·088 2·628 2·264 2·598 2·477	2.730 2.120 2.649 2.290 2.572 2.513
APRIL.	11 12 13 14 15 16 17 18	2·277 2·757 2·665 2·626 2·740 2·424	2·301 2·747 2·683 2·632 2·740 2·452	2:314 2:744 2:698 2:632 2:740 2:462	2:357 2:760 2:700 2:646 2:729 2:490	2:386 2:757 2:707 2:668 2:719 2:496	2·419 2·733 2·703 2·663 2·665 2·504	2.453 2.705 2.680 2.664 2.639 2.516	2:475 2:677 2:664 2:669 2:563 2:530	2:503 2:646 2:622 2:661 2:489 2:538	2.510 2.627 2.598 2.661 2.465 2.546	2·528 2·615 2·561 2·661 2·455 2·554	2:566 2:601 2:561 2:672 2:407 2:571
	18 19 20 21 22 23 24 25	2.978 2.838 2.530 2.574 2.860 2.993	2.972 2.837 2.540 2.592 2.884 3.005	2:949 2:837 2:556 2:603 2:896 3:011	2.943 2.819 2.546 2.632 2.919 3.026	2:930 2:815 2:515 2:641 2:934 3:029	2.916 2.805 2.501 2.653 2.944 3.033	2.889 2.760 2.484 2.667 2.949 3.035	2 · 868 2 · 766 2 · 486 2 · 684 2 · 956 3 · 038	2.847 2.749 2.482 2.684 2.945 3.022	2:836 2:740 2:499 2:682 2:938 3:006	2.823 2.704 2.478 2.694 2.945 2.989	2.824 2.714 2.481 2.687 2.947 2.988
	26 27 28 29 30	2.500 2.155 2.608 2.178 2.317	2:490 2:190 2:628 2:169 2:348	2·496 2·240 2·653 2·147 2·368	2·490 2·306 2·633 2·116 2·367	2·481 2·352 2·629 2·128 2·383	2:466 2:382 2:603 2:097 2:375	2:456 2:393 2:575 2:077 2:371	2:440 2:413 2:519 2:093 2:391	2·413 2·425 2·483 2·112 2·383	2:407 2:449 2:449 2:110 2:392	2:396 2:465 2:401 2:134 2:428	2·408 2·477 2·367 2·186 2·463
Hourly	Means	2.5812	2.5936	2.6010	2.6050	2.6067	2.6002	2:5909	2.5826	2.5682	2.5606	2.5564	2.261

<sup>&</sup>lt;sup>a</sup> Good Friday.

			- ".	<u>-</u>		ETRIC P					····	· · · · · · · · · · · · · · · · · · ·
		· · · · · · · · · · · · · · · · · · ·	Baro	ometer at 32			+ the num	bers in the	Table.			
12	13	14	15	16	17	18	19	20	21	22	23	Daily an Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
In. 2.557 2.761 2.591 2.829 3.013 2.890	In. 2·575 2·758 2·607 2·829 3·010 2·867	In. 2:579 2:764 2:607 2:838 2:996 2:832	In. 2:579 2:780 2:591 2:867 3:016 2:798	In. 2:579 2:788 2:591 2:888 3:010 2:763	In. 2:599 2:778 2:621 2:893 3:011 2:747	In. 2.615 2.776 2.614 2.893 3.015	In. 2.629 2.768 2.625 2.920 3.013	In. 2.678 2.768 2.632 2.919 3.014	In. 2·700 2·750 2·630 2·934 3·010	In. 2:704 2:748 2:624 2:941 3:014	In. 2 · 745 2 · 742 2 · 693 2 · 946 3 · 041	In. 2 5397 2 7761 2 6407 2 8368 3 0138
2 · 866 2 · 815 2 · 706 2 · 782 2 · 641 2 · 676	2·887 2·756 2·719 2·780 2·611 2·672	2·908 2·712 2·744 2·775 2·633 2·679	2 · 967 2 · 694 2 · 810 2 · 768 2 · 607 2 · 694	2:964 2:672 2:830 2:756 2:601 2:704	2:967 2:967 2:666 2:843 2:747 2:596 2:705	2.532 2.963 2.642 2.850 2.742 2.593	2:558 2:988 2:637 2:884 2:742 2:608	2:569 2:964 2:635 2:892 2:741 2:621	2.587 2.965 2.629 2.886 2.732 2.621	2.616 2.970 2.655 2.894 2.731 2.646	2.641 } 2.641 } 2.655 2.898 2.730 2.680	2:8570 2:8688 2:8054 2:7559 2:8038 2:6704
2.716 2.829 2.867 2.767 2.896 2.151	2.732 2.851 2.875 2.802 2.884 2.147	2.740 2.886 2.881 2.819 2.849 2.196	2·733 2·899 2·877 2·817 2·829 2·246	2.731 2.907 2.865 2.831 2.813 2.272	2.722 2.914 2.851 2.839 2.809 2.316	2.658 2.706 2.932 2.829 2.841 2.780	2.684 2.709 2.943 2.817 2.844 2.726	2.691 2.699 2.951 2.785 2.879 2.689	2.705 2.689 2.951 2.781 2.886 2.651	2.711 2.701 2.957 2.771 2.910 2.615	2:736 } 2:705 2:960 2:765 2:937 2:581	2:6978 2:7247 2:8368 2:8934 2:7848 2:8548
2 · 497 2 · 331 2 · 561 2 · 551 2 · 500 2 · 517	2.480 2.353 2.561 2.562 2.504 2.531	2 · 482 2 · 355 2 · 565 2 · 562 2 · 511 2 · 551	2 · 482 2 · 371 2 · 551 2 · 583 2 · 493 2 · 577	2.480 2.394 2.520 2.578 2.498 2.593	2 · 476 2 · 424 2 · 500 2 · 571 2 · 484 2 · 586	2 · 604 2 · 456 2 · 437 2 · 454 2 · 569 2 · 468	2.580 2.436 2.438 2.412 2.553 2.459	2:563 2:410 2:434 2:357 2:563 2:424	2:543 2:392 2:446 2:284 2:543 2:432	2:531 2:383 2:465 2:272 2:576 2:436	2·523 } 2·355 2·481 2·278 2·590 2·441	2:375; 2:475; 2:355; 2:517; 2:484; 2:511;
2·465 2·493 2·820	2:517 2:437 2:818	2.546 2.449 2.812	2·579 2·426 2·849	2.591 2.422 2.855	2.603 2.429 2.871	2:441 2:605 2:424 2:881	2:391 2:606 2:426 2:854	2:335 2:591 2:470 2:858	2·275 2·594 2·501 2·877	2 · 230 2 · 588 2 · 517 2 · 891	2·143 } 2·589 2·569 2·897	2.451 2.398 2.525 2.789
2.6699	2.6713	2.6767	2.6846	2.6850	2.6877	2.6785	2.6759	2.6716	2.6664	2.6703	2.6779	2.675
2.670  2.575	2.633  2.571	2.617	2:553	2:517  2:565	2·483 2·561	2·525 —	2·525 —	2·529 —	2·533 —	2.529	$\left\{ \begin{array}{c} -2.549 \\ 2.549 \\ -7.09 \end{array} \right\}$	2.684 2.614
2.708 2.170 2.661 2.314 2.546 2.539	2.666 2.222 2.660 2.346 2.504 2.547	2.667 2.273 2.656 2.375 2.507 2.590	2.635 2.305 2.664 2.396 2.493 2.611	2.617 2.326 2.665 2.401 2.466 2.626	2.560 2.338 2.660 2.439 2.446 2.627	2:707 2:520 2:352 2:633 2:458 2:421	2.707 2.497 2.368 2.634 2.471 2.385	2:711 2:409 2:381 2:601 2:493 2:350	2:690 2:391 2:411 2:579 2:509 2:321	2:672 2:335 2:441 2:595 2:529 2:309	2:313 2:463 2:565 2:537 2:312	2:6432 2:2600 2:6202 2:4140 2:5388
2 606 2 600 2 561 2 691 2 389 2 591	2.619 2.590 2.547 2.703 2.371 2.621	2.646 2.596 2.565 2.719 2.369 2.660	2.675 2.596 2.568 2.721 2.351 2.674	2.675 2.580 2.574 2.722 2.375 2.711	2.675 2.592 2.569 2.723 2.367 2.712	2:477 2:707 2:572 2:575 2:724 2:361	2·433 2·718 2·561 2·579 2·726 2·361	2:368 2:716 2:587 2:603 2:724 2:377	2:321 2:716 2:633 2:601 2:725 2:365	2:301 2:716 2:637 2:589 2:723 2:371	2·289 } 2·731 2·639 2·580 2·726 2·409	2:4412 2:553' 2:6480 2:614' 2:686' 2:492
2'841 2'714 2'492 2'688 2'949 2'988	2.836 2.680 2.509 2.703 2.964 2.976	2.856 2.673 2.510 2.705 2.972 2.976	2.870 2.649 2.522 2.704 2.984 2.989	2.852 2.628 2.522 2.709 2.970 2.978	2.862 2.578 2.524 2.712 2.979 2.984	3 · 003 2 · 860 2 · 566 2 · 544 2 · 738 2 · 983	3:003 2:856 2:510 2:542 2:749 2:987	3:005 2:838 2:500 2:540 2:761 2:985	3.001 2.836 2.516 2.518 2.784 2.980	2.991 2.818 2.516 2.534 2.795 2.981	2·979 } 2·824 2·516 2·542 2·841 2·980 — }	2.668 2.871 2.684 2.516 2.695 2.951
2·382 2·507 2·349 2·186 2·500	2·348 2·520 2·352 2·218 2·529	2.330 2.539 2.313 2.258 2.563	2 · 268 2 · 524 2 · 275 2 · 272 2 · 593	2·225 2·523 2·260 2·272 2·607	2.158 2.531 2.273 2.265 2.603	2.573 2.096 2.535 2.264 2.259 2.619	2.543 2.066 2.539 2.216 2.265 2.647	2:515 2:057 2:542 2:197 2:275 2:629	2:499 2:086 2:547 2:178 2:283 2:617	2:490 2:083 2:563 2:152 2:277 2:621	$ \begin{array}{c}  - \\  2 \cdot 475 \\  2 \cdot 129 \\  2 \cdot 582 \\  2 \cdot 146 \\  2 \cdot 309 \\  2 \cdot 630 \end{array} $	2.881 2.319 2.445 2.396 2.195 2.489
2.5687	2.5694	2.2812	2.5786	2.5746	2.2688	2.2629	2.5555	2.5477	2.5456	2.5427	2.5510	2.578

Vol. III.

		and a second		Barome		BAROME' = 27 Engli			rs in the Ta	ble.		. · · · · · · · · · · · · · · · · · · ·	
ours of l Götting Time	gen {∐	0	1	2	3	4	5	6	7	8	9	10	11
lours of Toron Time	ito }	18	19	20	21	22	23	0	1	2	3	4	5
(	1 2	2.636	2·658	2.660	2·670	2·677	In. 2.698	In. 2.665	2.648	In. 2.641	In. 2.641	In. 2.615	2 foo6
	3 4 5 6 7 8	2.616 2.906 2.953 2.852 2.515 2.140	2.617 2.917 2.959 2.863 2.509 2.148	2'620 2'916 2'966 2'860 2'499 2'138	2.643 2.920 2.965 2.835 2.465 2.140	2.654 2.933 2.970 2.818 2.452 2.138	2.662 2.907 2.959 2.802 2.431 2.137	2.691 2.903 2.942 2.774 2.396 2.139	2.697 2.870 2.925 2.745 2.364 2.149	2.705 2.861 2.894 2.722 2.331 2.156	2.723 2.847 2.875 2.701 2.313 2.154	2.745 2.847 2.859 2.699 2.288 2.168	2.750 2.847 2.848 2.679 2.286 2.153
X.	9 10 11 12 13 14 15	2.622 2.526 2.405 2.648 2.714 2.760	2:636 2:538 2:413 2:667 2:732 2:767	2:641 2:530 2:407 2:684 2:752 2:779	2:641 2:506 2:412 2:699 2:760 2:778	2.649 2.505 2.419 2.714 2.763 2.776	2.641 2.497 2.419 2.712 2.772 2.770	2.631 2.487 2.415 2.706 2.778 2.761	2:592 2:481 2:416 2:702 2:761 2:748	2.567 2.468 2.418 2.687 2.757 2.735	2·549 2·458 2·432 2·673 2·743 2·716	2.542 2.445 2.432 2.673 2.737 2.711	2 · 545 2 · 435 2 · 436 2 · 691 2 · 727 2 · 707
MAY	16 17 18 19 20 21 22	2:537 2:479 2:519 2:683 2:586 2:285	2:545 2:483 2:523 2:696 2:590 2:287	2.541 2.487 2.533 2.702 2.554 2.294	2·538 2·474 2·544 2·716 2·538 2·314	2:534 2:484 2:559 2:718 2:536 2:331	2:532 2:484 2:565 2:709 2:520 2:337	2·525 2·475 2·570 2·706 2·509 2·341	2:511 2:460 2:566 2:725 2:451 2:365	2:489 2:445 2:555 2:689 2:418 2:376	2.480 2.432 2.566 2.681 2.388 2.373	2·472 2·424 2·563 2·673 2·355 2·387	2 · 462 2 · 426 2 · 561 2 · 648 2 · 353 2 · 384
	23 24 25 26 27 28 29 30	2:543 2:490 2:694 2:826 2:751 2:591	2.559 2.481 2.713 2.814 2.773 2.584	2·555 2·466 2·745 2·825 2·763 2·580	2:563 2:454 2:757 2:824 2:723 2:548	2:553 2:440 2:773 2:812 2:718 2:524	2:549 2:423 2:773 2:809 2:704 2:510	2:543 2:397 2:772 2:778 2:681 2:521	2:514 2:342 2:784 2:755 2:660 2:483	2·516 2·348 2·780 2·743 2·658 2·497	2:501 2:348 2:758 2:730 2:641 2:462	2·495 2·333 2·758 2·723 2·632 2·463	2 · 499 2 · 322 2 · 732 2 · 712 2 · 624 2 · 472
	31	2.247	2.244	2.263	2.548	2.552	2.542	2.241	2.535	2.525	2.218	2.212	2.525
Iourly	Means	2.6086	2.6160	2.6177	2.6144	2.6155	2.6105	2.6018	2.5865	2.5762	2.5655	2.5597	2.555
	1 2 3 4 5 6	2:463 2:580 2:607 2:358 2:665	2°468 2°620 2°621 2°354 2°686	2·487 2·644 2·621 2·360 2·700	2:461 2:678 2:580 2:374 2:702	2.466 2.679 2.566 2.390 2.701	2:457 2:678 2:563 2:399 2:694	2.464 2.691 2.530 2.415 2.678	2:448 2:666 2:505 2:433 2:681	2.436 2.678 2.495 2.447 2.679	2:457 2:672 2:469 2:473 2:685	2:447 2:676 2:460 2:515 2:697	2.435 2.643 2.434 2.539 2.697
	7 8 9 10 11 12 13	2.798 2.690 2.517 2.320 2.135 2.455	2.802 2.698 2.501 2.318 2.133 2.467	2.799 2.690 2.505 2.298 2.133 2.472	2.819 2.672 2.492 2.294 2.137 2.474	2·814 2·692 2·527 2·284 2·126 2·480	2.808 2.663 2.466 2.284 2.111 2.492	2·783 2·668 2·449 2·280 2·129 2·480	2·764 2·659 2·432 2·257 2·115 2·451	2.731 2.651 2.422 2.250 2.157 2.434	2.741 2.643 2.371 2.231 2.149 2.413	2.718 2.630 2.375 2.211 2.168 2.399	2:691 2:636 2:356 2:207 2:191 2:392
JUNE.	14 15 16 17 18 19 20	2.021 2.358 2.651 2.858 2.800 2.441	2.020 2.373 2.658 2.872 2.788 2.433	2.060 2.379 2.658 2.875 2.778 2.403	2·072 2·401 2·657 2·876 2·774 2·385	2.097 2.423 2.658 2.881 2.751 2.372	2.125 2.450 2.671 2.883 2.741 2.364	2.163 2.463 2.689 2.871 2.710 2.371	2.195 2.474 2.699 2.882 2.663 2.395	2·238 2·474 2·698 2·876 2·632 2·427	2.254 2.480 2.711 2.880 2.604 2.434	2:276 2:485 2:713 2:868 2:584 2:438	2·292 2·502 2·713 2·839 2·565 2·431
	20 21 22 23 24 25 26 27	2:538 2:611 2:741 2:844 2:761 2:695	2:545 2:618 2:757 2:862 2:771 2:701	2:549 2:632 2:772 2:869 2:777 2:715	2:547 2:644 2:772 2:862 2:764 2:712	2:542 2:651 2:770 2:849 2:762 2:704	2.541 2.647 2.769 2.844 2.760 2.691	2:534 2:638 2:761 2:831 2:749 2:681	2·522 2·636 2·749 2·827 2·726 2·663	2.526 2.629 2.737 2.817 2.707 2.650	2·522 2·635 2·730 2·804 2·680 2·638	2·521 2·647 2·722 2·794 2·665 2·627	2:511 2:641 2:723 2:778 2:657 2:613
	28 29 30	2.628 2.593 2.659	2.636 2.596 2.673	2.644 2.598 2.681	2.639 2.583 2.696	2.633 2.584 2.691	2.646 2.577 2.690	2.634 2.573 2.683	2.616 2.577 2.676	2.603 2.564 2.658	2.585 2.564 2.652	2.567 2.556 2.641	2:563 2:559 2:639
Hourly I	Means	2.5694	2.5758	2.5807	2.5795	2.5805	2.5775	2.5738	2.5658	2.2622	2.5568	2.2238	2.

-			Pana	maken at 000		ETRIC PI				A CONTRACTOR		
			Baro	meter at 32	$^{\circ} = 27$ En	glish inches	+ the num	bers in the	Table.		n n	
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
In. 2.604	In. 2 591	In. 2.581	In. 2.621	In. 2.633	2.618	In.	In	In.	In.	<u>In.</u>	In	In. 2.6199
2.762 2.849 2.832	2·774 2·835 2·821	2·800 2·843 2·830	2.810 2.853 2.838	2·822 2·856 2·839	2.831 2.866 2.840	2.569 2.833 2.873 2.840	2.559 2.830 2.874 2.838	2:553 2:842 2:878 2:831	2'561 2'846 2'894 2'831	2.570 2.861 2.900 2.835	2.602 } 2.867 2.937 2.831	2.7500 2.8805 2.8800
2.663 2.268 2.179	2.639 2.263 2.185	2.627 2.266 2.216 — 2.534	2.634 2.248 2.234 — 2.548	2.632 2.238 2.255 — 2.545	2.600 2.223 2.277 — 2.547	2:599 2:201 2:571 2:548	2.570 2.177 — 2.576 2.504	2:550 2:137 2:568 2:498	2:535 2:105 — 2:569 2:480	2:526 2:129 — 2:579 2:488	2.523 2.099 	2 · 6853 2 · 3001 2 · 2739 2 · 5630
2.525 2.431 2.460 2.689 2.725 2.702	2.525 2.425 2.467 2.699 2.727 2.699	2 · 426 2 · 479 2 · 691 2 · 737 2 · 687	2 · 428 2 · 494 2 · 679 2 · 727 2 · 710	2 · 418 2 · 530 2 · 684 2 · 727 2 · 722	2 · 413 2 · 534 2 · 692 2 · 721 2 · 728	2:409 2:554 2:681 2:725	2:411 2:557 2:665 2:721	2.419 2.565 2.663 2.714	2:429 2:580 2:670 2:722	2:423 2:600 2:675 2:731	2:396 2:624 2:703 2:743	2 : 4543 2 : 4778 2 : 6853 2 : 7382 2 : 6824
2.454 2.425 2.571 2.644 2.331 2.404	2·452 2·425 2·573 2·636 2·363 2·442	2·441 2·437 2·581 2·641 2·372 2·461	2:440 2:464 2:589 2:633 2:371 2:498	2.442 2.468 2.593 2.625 2.364 2.494	2:447 2:460 2:610 2:627 2:322 2:498	2.526 2.451 2.466 2.616 2.596 2.298	2:513 2:454 2:461 2:615 2:597 2:246	2:508 2:453 2:468 2:621 2:590 2:233	2.516 2.456 2.477 2.624 2.582 2.233	2:524 2:456 2:484 2:632 2:587 2:235	2:535 } 2:456 2:496 2:640 2:583 2:269	2.4820 2.4618 2.5787 2.6536 2.3931
2.509 2.327 2.746 2.712 2.624 2.518	2·491 2·336 2·750 2·722 2·638	2:501 2:366 2:758 2:719 2:654	2·525 2·372 2·748 2·737 2·664 2·582	2:503 2:396 2:757 2:744 2:682 2:622	2.489 2.471 2.759 2.740 2.688 2.638	2:567 2:497 2:514 2:760 2:737 2:624	2:553 2:494 2:530 2:763 2:725 2:638	2:543 2:494 2:576 2:761 2:718 2:624	2:539 2:491 2:609 2:762 2:720 2:639	2.543 2.482 2.626 2.782 2.721 2.621	2·542 } 2·542 } 2·672 2·828 2·738 2·613	2·4232 2·5149 2·4433 2·7589 2·7539 2·6682
2.525	2.240	2.560	2.489	2.481	2.469	2.673 2.451	2.631 2.411	2.599 2.445	2.599 2.413	2.570 2.403	$\left\{\begin{array}{c} -2.540 \\ 2.400 \end{array}\right\}$	2.5545 2.4984
2 5569	2.5588	2.5661	2.5745	2.5797	2.2811	2.5838	2.5736	2.5712	2.5724	2.5763	2.5865	2.5837
2:427 2:644 2:424 2:559 2:743	2:425 2:628 2:424 2:559 2:749	2.431 2.636 2.393 2.573 2.753	2:439 2:637 2:381 2:617 2:740	2:447 2:631 2:367 2:620 2:746	2.459 2.635 2.362 2.630 2.751	2:475 2:637 2:338 2:621	2·489 2·594 2·344 2·607	2·493 2·582 2·341 2·616	2.512 2.584 2.334 2.615	2.526 2.580 2.338 2.630	2:580 2:609 2:328 2:642	2:4663 2:6376 2:4510 2:5144 2:7204
2 · 675 2 · 592 2 · 363 2 · 187 2 · 227	2.657 2.588 2.355 2.177 2.252	2.673 2.589 2.363 2.179 2.266	2.672. 2.591 2.393 2.165 2.287	2.672 2.593 2.385 2.166 2.297	2.664 2.573 2.393 2.163 2.318	2.733 2.655 2.561 2.391 2.151 2.327	2.734 2.670 2.548 2.355 2.152 2.344	2 · 754 2 · 667 2 · 540 2 · 339 2 · 122 2 · 358	2.754 2.667 2.532 2.332 2.115 2.378	2.769 2.667 2.523 2.324 2.127 2.389	2·798 } 2·695 2·497 2·317 2·129 2·441	2 7209 2 6133 2 4051 2 2111 2 2320
2:380 2:315 2:510 2:729 2:828 2:527	2:381 	2:368 2:334 2:544 2:749 2:834 2:500	2:376 2:353 2:580 2:768 2:823 2:492	2:386 2:355 2:581 2:783 2:809 2:487	2:386 	2.042 2.342 2.606 2.801 2.804 2.484	2.036 2.340 2.604 2.792 2.803 2.455	2.018 2.338 2.624 2.796 2.813 2.437	2.020 2.332 2.625 2.811 2.817 2.427	2.010 2.341 2.633 2.830 2.798 2.427	2·021 } 2·355 2·645 2·842 2·798 2·432	2:3264 2:2459 2:5141 2:7332 2:8419 2:5860
2'425 	2·476 2·501 2·647 2·736 2·753 2·643	2.486 2.501 2.669 2.733 2.754 2.646	2 · 512 2 · 545 2 · 677 2 · 753 2 · 756 2 · 660	2.512 2.556 2.667 2.765 2.759 2.669	2.525 	2·528 2·532 2·682 2·775 2·757 2·658	2:514 2:528 2:678 2:776 2:753 2:647	2:501 2:536 2:678 2:789 2:746 2:641	2.500 2.558 2.685 2.793 2.754 2.645	2:508 2:561 2:706 2:809 2:759 2:643	$ \begin{bmatrix}    $	2.4545 2.5361 2.6571 2.7606 2.7940 2.6923
2.565 2.565 2.567 2.643	2.610 2.568 2.563 2.647	2.616 2.577 2.570 2.649	2.630 2.573 2.588 2.656	2.643 	2.649 	2:594 2:570 2:596 2:677	2:597 2:570 2:595 2:695	2:597 2:571 2:596 2:702	2:591 2:567 2:606 2:701	2.598 2.567 2.618 2.708	$     \begin{bmatrix}                                $	2.6429 2.5935 2.5860 2.6740
2.5470	2.5490	2.5533	2.5640	2.5667	2.5698	2.5514	2.5469	2.5460	2.5483	2.5534	2.5679	2.2619

				Barom	eter at 32°		TRIC PRE		ers in the T	able.			
ours of l Gotting Time	en }	0	1	2	3	4	5	6	7	8	9	10	11
	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	1 2 3	In. 2.732 2.782 2.775	In. 2.745 2.795 2.797	In. 2.751 2.795 2.804	In. 2.759 2.809 2.808	In. 2.760 2.816 2.797	In. 2.767 2.817 2.791	In. 2.762 2.803 2.780	In. 2.758 2.791 2.763	In. 2·746 2·778 2·753	In. 2.737 2.763 2.740	In. 2·726 2·763 2·729	In. 2·713 2·750 2·723
	4 5 6 7 8 9	2.735 2.725 2.756 2.665 2.661 2.558	2.743 2.737 2.762 2.681 2.661 2.565	2.743 2.765 2.761 2.688 2.660 2.574	2·742 2·787 2·761 2·691 2·663 2·583	2.740 2.763 2.764 2.690 2.656 2.581	2·737 2·756 2·751 2·671 2·647 2·584	2.727 2.752 2.743 2.665 2.633 2.576	2·711 2·751 2·789 2·651 2·622 2·551	2.692 2.746 2.722 2.643 2.614 2.541	2.679 2.730 2.701 2.621 2.592 2.527	2.693 2.716 2.693 2.611 2.590 2.524	2:689 2:700 2:681 2:606 2:580 2:506
JULY.	11 12 13 14 15 16 17	2:549 2:528 2:685 2:593 2:604 2:617	2.553 2.526 2.689 2.607 2.612 2.615	2.558 2.540 2.702 2.611 2.609 2.615	2:572 2:530 2:701 2:607 2:611 2:618	2:565 2:526 2:693 2:600 2:629 2:605	2:572 2:517 2:681 2:593 2:610 2:611	2.566 2.514 2.667 2.588 2.595 2.601	2·557 2·494 2·665 2·567 2·594 2·596	2·533 2·505 2·669 2·548 2·588 2·579	2.518 2.506 2.663 2.530 2.574 2.610	2 · 510 2 · 516 2 · 643 2 · 536 2 · 571 2 · 599	2·499 2·527 2·617 2·528 2·579 2·611
	18 19 20 21 22 23 24	2.678 2.605 2.538 2.507 2.847 2.837	2.682 2.607 2.534 2.526 2.871 2.834	2.681 2.622 2.536 2.550 2.879 2.839	2.677 2.619 2.528 2.572 2.881 2.829	2.641 2.615 2.524 2.576 2.882 2.839	2:644 2:603 2:495 2:594 2:886 2:822	2.638 2.603 2.477 2.599 2.885 2.802	2.623 2.577 2.465 2.610 2.881 2.786	2:607 2:567 2:445 2:608 2:863 2:772	2.588 2.545 2.415 2.605 2.853 2.733	2.585 2.545 2.406 2.607 2.835 2.717	2:576 2:537 2:426 2:619 2:812 2:705
Aug	25 26 27 28 29 30 31	2:439 2:777 2:765 2:578 2:482 2:486	2·469 2·797 2·761 2·574 2·486 2·496	2·518 2·809 2·762 2·564 2·492 2·490	2 · 513 2 · 834 2 · 757 2 · 555 2 · 491 2 · 497	2·554 2·832 2·757 2·534 2·506 2·484	2.601 2.828 2.734 2.511 2.496 2.484	2:617 2:832 2:728 2:507 2:485 2:476	2:613 2:817 2:709 2:483 2:482 2:463	2·621 2·807 2·691 2·454 2·478 2·463	2:623 2:799 2:670 2:442 2:462 2:477	2.621 2.783 2.661 2.443 2.458 2.458	2:629 2:785 2:649 2:423 2:453 2:499
Hourly	Means	2.6483	2.6565	2.6636	2.6665	2.6640	2.6594	2.6526	2.6414	2.6309	2.6186	2.6135	2.608
	2 3 4 5 6 7 8	2.732 2.799 2.726 2.485 2.293 2.497	2.740 2.801 2.715 2.484 2.302 2.523	2.760 2.799 2.715 2.477 2.314 2.542	2:777 2:805 2:713 2:479 2:316 2:547	2.785 2.810 2.711 2.495 2.317 2.551	2.778 2.794 2.698 2.449 2.319 2.540	2.775 2.777 2.672 2.433 2.320 2.540	2.750 2.773 2.666 2.409 2.328 2.544	2.746 2.760 2.643 2.393 2.328 2.543	2.731 2.757 2.625 2.368 2.315 2.534	2.747 2.752 2.603 2.355 2.338 2.540	2·742 2·751 2·593 2·329 2·333 2·550
r.	9 10 11 12 13 14	2.762 2.810 2.747 2.768 2.714 2.575	2.796 2.816 2.751 2.780 2.724 2.583	2.796 2.826 2.752 2.792 2.717 2.583	2.798 2.838 2.765 2.792 2.703 2.600	2.809 2.835 2.761 2.793 2.700 2.591	2.809 2.821 2.762 2.788 2.697 2.592	2.799 2.812 2.753 2.763 2.674 2.583	2.796 2.801 2.759 2.763 2.658 2.576	2.789 2.777 2.753 2.734 2.640 2.572	2.783 2.761 2.739 2.741 2.624 2.560	2.780 2.767 2.721 2.713 2.610 2.549	2.783 2.753 2.736 2.701 2.606 2.570
AUGUST.	16 17 18 19 20 21 22	2.581 2.458 2.431 2.558 2.534 2.555	2.579 2.454 2.445 2.560 2.534 2.559	2 · 582 2 · 454 2 · 447 2 · 577 2 · 526 2 · 564	2:591 2:437 2:455 2:559 2:523 2:569	2.602 2.445 2.457 2.556 2.521 2.574	2:596 2:428 2:460 2:540 2:494 2:574	2 · 595 2 · 364 2 · 464 2 · 532 2 · 468 2 · 562	2 · 583 2 · 395 2 · 471 2 · 526 2 · 460 2 · 562	2:572 2:363 2:465 2:518 2:447 2:556	2.572 2.344 2.469 2.517 2.439 2.549	2:536 2:362 2:496 2:521 2:458 2:554	2.520 2.343 2.520 2.524 2.483 2.559
	22 23 24 25 26 27 28 29	2.788 2.867 2.929 2.757 2.575 2.658	2·795 2·872 2·929 2·747 2·591 2·666	2.800 2.883 2.953 2.733 2.593 2.665	2.812 2.899 2.946 2.717 2.617 2.672	2·818 2·907 2·941 2·716 2·631 2·667	2·813 2·902 2·941 2·679 2·639 2·663	2.801 2.895 2.924 2.662 2.627 2.653	2·797 2·891 2·910 2·646 2·633 2·647	2·771 2·880 2·915 2·616 2·622 2·630	2.773 2.878 2.891 2.593 2.620 2.618	2:770 2:874 2:869 2:581 2:613 2:608	2.758 2.871 2.863 2.558 2.610 2.610
	30 31	2.682 2.765	2.674 2.789	2.664 2.801	2.655 2.814	2.640 2.824	2.629 2.816	2.612 2.800	2.603 2.788	2·585 2·784	2·583 2·765	2.567 2.755	2·59 2·75
Hourly	Means	2.6556	2.6619	2.6660	2.6692	2.6714	2.6623	2.6485	2.6437	2 6308	2.6212	2.6169	2.61

			Baro	ometer at 32	BARON $= 27 \text{ Er}$		RESSURE,		e Table.			
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
In. 2:717 2:746 2:717	In. 2.711 2.740 2.697	In. 2.711 2.749 2.700	In. 2·743 2·745 2·707	In. 2·753 2·746 2·709	In. 2.760 2.752 2.720	In. 2.760 2.747	In. 2:749 2:741	In. 2·745 2·751	In. 2·745 2·760	In. 2.753 2.770	In. 2·771 2·775	In. 2.7447 2.7702
2.687 2.714 2.681	2.686 2.728 2.665	2.696 2.717 2.667	2.708 2.733 2.680	2.710 2.735 2.674	2·700 2·729 2·671	2.686 2.702 2.729 2.661	2.685 2.715 2.727 2.649	2.685 2.717 2.722 2.653	2.691 2.712 2.727 2.646	2.692 2.708 2.723 2.647	2·731 } 2·706 2·728 2·645	2.7366 2.7116 2.7350 2.6989
2:596 2:588 2:497	2.600 2.578 2.487	2.603 2.581 2.526	2.605 2.587 2.527	2.598 2.589 2.531	2 · 599 2 · 589 2 · 528 —	2.602 2.591 — 2.520	2.608 2.558 — 2.508	2.610 2.564 	2.611 2.560 — 2.508	2.611 2.558 — 2.525	$     \begin{bmatrix}       2.649 \\       2.554 \\       \hline       2.553     \end{bmatrix} $	2.6323 2.6032 2.5367
2.493 2.548 2.603 2.528 2.587	2.492 2.567 2.586 2.516 2.588	2.500 2.596 2.602 2.514 2.576	2.514 2.621 2.597 2.512 2.588	2.505 2.624 2.594 2.513 2.596	2.515 2.636 2.596 2.543 2.591	2.506 2.641 2.584 2.559 2.591	2.508 2.643 2.580 2.554 2.587	2 · 499 2 · 646 2 · 580 2 · 555 2 · 595	2:496 2:649 2:577 2:551 2:596	2.500 2.663 2.581 2.563 2.604	2.510 2.662 2.591 2.604 2.608	2.5246 2.5719 2.6311 2.5592 2.5951
2.639  2.574 2.540 2.419	2.639 2.568 2.544 2.427	2.646 — 2.574 2.555 2.422	2.654 	2.671 2.578 2.551 2.440	2.675 2.581 2.539 2.432	2.649 2.583 2.530 2.432	2.653 2.583 2.530 2.438	2.654 2.585 2.525 2.448	2.653 2.589 2.521 2.453	2.655 2.593 2.520 2.469	$\left. \begin{array}{c} - \\ 2.650 \\ 2.590 \\ 2.520 \\ 2.495 \end{array} \right\}$	2.6298 2.6066 2.5615 2.4620
2.627 2.792 2.699 — 2.647	2.655 2.796 2.685 — 2.665	2.683 2.806 2.673  2.686	2.732 2.829 2.653 — 2.702	2.746 2.841 2.630 — 2.719	2.755 2.848 2.610 — 2.719	2.767 2.841 ————————————————————————————————————	2 · 803 2 · 837 2 · 308 2 · 741	2.794 2.828 — 2.308 2.746	2.803 2.846 — 2.336 2.740	2.814 2.841  2.357 2.740	2.843 $2.831$ $ 2.372$ $2.743$	2.6665 2.8463 2.6442 2.6416
2.779 2.646 2.419 2.449	2.776 2.646 2.397 2.449	2.767 2.636 2.375 2.449	2.773 2.616 2.392 2.463	2.778 2.618 2.417 2.467	2.779 2.623 2.423 2.466	2.785 2.607 2.437 2.471	2.773 2.601 2.437 2.462	2.773 2.582 2.435 2.462	2·795 2·576 2·446 2·452	2.765 2.571 2.463 2.459	2.767 2.578 2.464 2.463	2.7921 2.6643 2.4655 2.4701
2·505 —	2.211	2:537	2.234	2.234	2.249	2.668 a	2.675	2.678	2.683	2.688	2.709	2.5445
2.6088	2.6074	2.6129	2.6198	2.6247	2.6270	2.6184	2.6168	2.6164	2.6193	2.6234	2.6338	2.6313
2.738 2.730 2.591 2.316 2.352	2.738 2.730 2.599 2.309 2.365	2.744 2.736 2.569 2.317 2.393	2.757 2.726 2.556 2.320 2.393	2.760 2.726 2.553 2.311 2.398	2.760 2.726 2.538 2.305 2.410	2.718 2.729 2.528 2.300 2.411	2.720 2.731 2.518 2.284 2.415	2.720 2.731 2.503 2.277 2.418	2.764 2.697 2.483 2.278 2.418	2.785 2.697 2.477 2.269 2.456	2.799 2.716 2.474 2.263 2.446	2.7527 2.7522 2.6029 2.3627 2.3624
2.561 2.784 2.755 2.734 2.703 2.601	2.559 2.781 2.755 2.728 2.701 2.595	2.564 2.780 2.751 2.739 2.710 2.596	2.573 	2:569 	2:567 	2.736 2.789 2.734 2.754 2.711 2.586	2.726 2.782 2.728 2.746 2.708 2.594	2.728 2.783 2.729 2.746 2.704 2.571	2.734 2.783 2.726 2.749 2.713 2.565	2·724 2·790 2·724 2·749 2·709 2·549	2·762 } 2·798 2·725 2·752 2·716 2·555	2.5939 2.7893 2.7708 2.7489 2.7346 2.6277
2·571 2·524 2·307 2·516 2·520 2·491	2.574 2.542 2.315 2.516 2.525 2.500	2·592 2·542 2·334 2·527 2·537 2·503	2·598 2·517 2·346 2·513 2·547 2·518	2.600 2.501 2.358 2.514 2.535 2.520	2·593 2·506 2·361 2·518 2·531 2·512	2.552 2.490 2.356 2.518 2.530 2.520	2:552 2:482 2:349 2:518 2:520 2:510	2.552 2.481 2.345 2.518 2.518 2.501	2:547 2:481 2:356 2:532 2:520 2:519	2.559 2.457 2.369 2.536 2.520 2.532	2·580 } 2·456 2·388 2·538 2·523 2·543	2:5752 2:5328 2:3763 2:4935 2:5331 2:5023
2.564 2.766 2.867 2.851 2.554 2.618	2.569 	2·572 	2:567 	2.568 2.807 2.897 2.806 2.516 2.629	2.570 2.818 2.905 2.807 2.496 2.643	2.721 2.827 2.905 2.808 2.479 2.652	2.728 2.807 2.898 2.791 2.488 2.645	2.734 2.814 2.901 2.772 2.498 2.641	2.747 2.817 2.903 2.779 2.502 2.650	2.756 2.830 2.908 2.775 2.510 2.653	2·745 } 2·745 } 2·839 2·925 2·767 2·529 2·658	2.6074 2.7994 2.8905 2.8603 2.5899 2.6261
2.610 2.623 2.747	2.596 2.626 2.721	2.620 — 2.650 2.728	2.647 2.636 2.713	2.639  2.649 2.711	2.632 	2.693 2.697 2.713	2.693 2.701 2.685	2.685 2.717 2.683	2.677 2.726 2.665	$ \begin{array}{c c} - \\ 2.670 \\ 2.735 \\ 2.657 \end{array} $	$\left\{ \begin{array}{c} -2.668 \\ 2.668 \\ 2.739 \\ 2.663 \end{array} \right\}$	2.6495 2.6525 2.7438
2.612	2.6142	2.6214	2.6228	2.6222	2.6224	2.6330	2.6277	2.6258	2.6281	2.6306	2.6372	2.6360

<sup>&</sup>lt;sup>a</sup> Proportion of 1st August.

			, , , , , , , , , , , , , , , , , , ,				TRIC PRE			- 1-u			
	f Mean		1		1	=27 Engl		the numb	1	able.	9	10	
Götti Tin Hours o	ne. ] [	0	1	2	3	4	5		7	1		10	11
Toro Tin	nto Si	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{pmatrix}$	In. 2:669 2:665 2:542 2:675	In. 2.669 2.675 2.540 2.687	In. 2:674 2:683 2:540 2:688	In. 2 670 2 686 2 542 2 688	In. 2.661 2.688 2.529 2.686	In. 2:647 2:681 2:525 2:676	In. 2.638 2.675 2.517 2.666	In. 2.639 2.669 2.510 2.644	In. 2 '622 2 '659 2 '499 2 '634	In. 2.615 2.641 2.478 2.604	In. 2.602 2.640 2.512 2.594	In. 2 598 2 639 2 542 2 594
R.	5 6 7 8 9 10	2.711 2.787 2.498 2.623 2.903 2.995	2.713 2.787 2.482 2.639 2.912 2.995	2.735 2.787 2.474 2.668 2.932 2.995	2.762 2.770 2.457 2.700 2.950 3.007	2.763 2.760 2.451 2.710 2.959 2.988	2.752 2.735 2.438 2.718 2.969 2.957	2·752 2·728 2·422 2·724 2·971 2·944	2.753 2.718 2.412 2.726 2.966 2.925	2.741 2.700 2.381 2.722 2.965 2.908	2.741 2.659 2.359 2.722 2.960 2.888	2.746 2.653 2.344 2.722 2.968 2.867	2.749 2.635 2.335 2.727 2.967 2.859
SEPTEMBER	12 13 14 15 16 17 18	2:581 2:764 2:893 2:782 2:620 2:445	2:583 2:772 2:901 2:782 2:620 2:447	2.589 2.779 2.906 2.782 2.610 2.439	2 · 595 2 · 794 2 · 901 2 · 783 2 · 611 2 · 439	2.601 2.796 2.894 2.768 2.608 2.433	2.603 2.814 2.882 2.749 2.600 2.439	2.602 2.814 2.853 2.727 2.597 2.425	2.600 2.803 2.840 2.697 2.581 2.428	2.602 2.789 2.818 2.683 2.568 2.428	2.617 2.785 2.805 2.676 2.558 2.420	2.630 2.786 2.796 2.674 2.533 2.432	2.636 2.789 2.783 2.653 2.534 2.430
	19 20 21 22 23 24 25 26	2 · 436 2 · 575 2 · 795 2 · 720 2 · 659 2 · 607	2:442 2:594 2:801 2:720 2:663 2:609	2:446 2:598 2:806 2:723 2:665 2:620	2.454 2.618 2.808 2.729 2.667 2.624	2:462 2:632 2:815 2:720 2:663 2:635	2.461 2.631 2.823 2.709 2.647 2.639	2:465 2:637 2:800 2:695 2:637 2:624	2·462 2·645 2·794 2·667 2·623 2·624	2·459 2·637 2·784 2·654 2·619 2·612	2.467 2.643 2.759 2.636 2.615 2.622	2:471 2:650 2:765 2:637 2:609 2:632	2 · 483 2 · 655 2 · 745 2 · 634 2 · 603 2 · 626
	27 28 29 30	2·298 2·292 2·345 2·380	2·303 2·290 2·363 2·406	2:300 2:301 2:351 2:419	2·302 2·305 2·351 2·426	2·293 2·303 2·351 2·433	2·279 2·306 2·337 2·426	2 · 268 2 · 302 2 · 325 2 · 410	2:255 2:322 2:298 2:405	2·234 2·318 2·317 2·404	2:226 2:327 2:297 2:397	2:210 2:328 2:287 2:392	2·182 2·349 2·298 2·390
Hourl	y Means	2.6254	2.6306	2.6350	2.6400	2.6385	2.6324	2.6238	2.6156	2.6060	2.5968	2.5954	2.5937
	$\left(\begin{array}{c}1\\2\\2\end{array}\right)$	2:309 2:691	2·328 2·718	2·359 2·725	2:378 2:748	2·399 2·751	2.432 2.750	2.459 2.741	2.467 2.730	2·477 2·723	2·486 2·732	2 498 2 745	2:516 2:745
	3 4 5 6 7 8 9	2.763 2.299 2.396 2.581 2.321 2.378	2.753 2.301 2.428 2.597 2.327 2.382	2·756 2·293 2·446 2·595 2·323 2·383	2·752 2·267 2·466 2·597 2·326 2·375	2.746 2.266 2.478 2.589 2.322 2.359	2·745 2·252 2·492 2·580 2·299 2·357	2·710 2·251 2·497 2·571 2·295 2·339	2.667 2.248 2.509 2.541 2.284 2.300	2.624 2.249 2.519 2.529 2.281 2.266	2.630 2.246 2.523 2.513 2.257 2.257	2:608 2:257 2:541 2:503 2:259 2:214	2·594 2·270 2·540 2·484 2·249 2·208
OCTOBER.	11 12 13 14 15 16	2.608 2.563 2.093 2.411 2.784 2.763	2.632 2.547 2.110 2.446 2.804 2.762	2.650 2.497 2.126 2.469 2.818 2.768	2.689 2.481 2.150 2.483 2.828 2.755	2.708 2.441 2.174 2.492 2.838 2.750	2.706 2.400 2.191 2.517 2.829 2.733	2.694 2.340 2.201 2.516 2.818 2.683	2:694 2:290 2:183 2:515 2:810 2:630	2.674 2.208 2.190 2.525 2.806 2.596	2.661 2.163 2.205 2.531 2.812 2.577	2.659 2.117 2.232 2.553 2.810 2.543	2.655 2.071 2.252 2.571 2.808 2.541
,00	18 19 20 21 22 23 24	2.693 2.690 2.838 2.956 2.629 2.725	2.697 2.710 2.844 2.962 2.617 2.753	2·679 2·736 2·854 2·984 2·637 2·783	2.669 2.736 2.858 2.961 2.663 2.791	2.616 2.744 2.852 2.939 2.653 2.804	2.587 2.746 2.831 2.950 2.664 2.799	2.536 2.734 2.798 2.938 2.670 2.791	2:510 2:721 2:777 2:898 2:660 2:779	2·477 2·705 2·764 2·882 2·658 2·766	2:468 2:704 2:781 2:863 2:672 2:769	2.464 2.719 2.785 2.840 2.675 2.794	2·437 2·735 2·797 2·834 2·675 2·819
	25 26 27 28 29 30 31	2:344 2:963 3:271 3:343 3:136 2:967	2°372 2°999 3°282 3°358 3°150 2°970	2·412 3·031 3·292 3·377 3·156 2·980	2·420 3·059 3·292 3·389 3·152 2·970	2:465 3:085 3:290 3:396 3:135 2:962	2·487 3·106 3·277 3·381 3·120 2·951	2·504 3·108 3·263 3·367 3·100 2·928	2.529 3.121 3.241 3.339 3.073 2.908	2:576 3:137 3:228 3:316 3:063 2:889	2.635 3.157 3.225 3.293 3.048 2.891	2.698 3.173 3.225 3.272 3.038 2.889	2·753 3·185 3·247 3·255 3·014 2·889
Hourly	Means	2.6737	2.6865	2.6973	2.7021	2.7021	2.6993	2.6866	2.6702	2.6588	2.6577	2.6581	2.6594

			В	arometer at	$\begin{array}{c} \text{BARO} \\ 32^{\circ} = 27 \end{array}$	METRIC : English inch			ne Table.	<u>- 10 - 20 (14) (14) - 1</u>		<del> </del>
12	13	14	15	16	17	18	19	20	21	22	23	Daily and
6	7 ·	8	9	10	11	12	13	14	15	16	17	Monthly Means.
In. 2 603 2 636 2 552 2 574	In. 2 602 2 619 2 590 2 563	In. 2.616 2.610 2.605 2.570	In. 2.612 2.612 2.632 2.546	In. 2.619 2.618 2.655 2.506	In. 2.621 2.607 2.663 2.518	In. 2.622 2.593 2.664	In. 2.630 2.579 2.656	In. 2.630 2.568 2.651	In. 2.631 2.556 2.659	In. 2.632 2.539 2.660	In. 2.652 2.528 2.658	In. 2 · 6322 2 · 6277 2 · 5800 2 · 6280
2·749 2·627 2·335 2·733 2·963 2·851	2·735 2·604 2·355 2·743 2·969 2·831	2.747 2.594 2.398 2.770 2.978 2.822	2·759 2·578 2·400 2·792 2·974 2·818	2.768 2.576 2.466 2.807 2.975 2.817	2·763 2·562 2·480 2·814 2·976 2·813	2:630 2:765 2:560 2:481 2:822 2:979	2:639 2:774 2:534 2:521 2:817 2:983	2:657 2:770 2:514 2:546 2:823 2:984	2 666 2 772 2 498 2 549 2 834 2 982	2:677 2:764 2:500 2:568 2:852 2:983	2:689 } 2:793 2:505 2:588 2:859 2:987	2 · 7532 2 · 6405 2 · 4475 2 · 7528 2 · 9648 2 · 8222
2:652 2:790 2:785 2:659 2:527 2:436	2 · 666 2 · 802 2 · 783 2 · 659 2 · 548 2 · 444	2 · 677 2 · 830 2 · 787 2 · 659 2 · 557 2 · 446	2·704 2·843 2·784 2·654 2·537 2·442	2.689 2.839 2.791 2.655 2.529 2.438	2.691 2.844 2.789 2.644 2.489 2.434	2.599 2.695 2.844 2.785 2.644 2.481	2.575 2.701 2.855 2.774 2.642 2.482	2.575 2.708 2.852 2.766 2.640 2.476	2:567 2:708 2:860 2:759 2:637 2:464	2:569 2:734 2:861 2:773 2:617 2:442	2.569 } 2.748 2.863 2.782 2.619 2.442	2.6505 2.8153 2.8179 2.6869 2.5422
2.492 2.668 2.746 2.634 2.605 2.614	2:510 2:680 2:754 2:640 2:607 2:614	2.514 2.697 2.748 2.651 2.611 2.620	2:521 2:717 2:745 2:659 2:623 2:624	2:523 2:721 2:745 2:647 2:612 2:624	2:524 2:720 2:734 2:644 2:600 2:614	2 · 448 2 · 524 2 · 732 2 · 732 2 · 652 2 · 611	2:440 2:524 2:743 2:743 2:654 2:604	2 · 436 2 · 526 2 · 744 2 · 732 2 · 638 2 · 596	2·415 2·528 2·745 2·725 2·638 2·596	2·420 2·534 2·752 2·721 2·632 2·596	$     \begin{bmatrix}       2 \cdot 430 \\       2 \cdot 551 \\       2 \cdot 753 \\       2 \cdot 719 \\       2 \cdot 640 \\       2 \cdot 602     \end{bmatrix} $	2 · 4347 2 · 4908 2 · 6745 2 · 7641 2 · 6655 2 · 6222 2 · 5525
2'202 2'364 2'299 2'390	2 183 2 376 2 303 2 390	2·184 2·376 2·316 2·390	2·234 2·376 2·327 2·384	2:271 2:371 2:330 2:386	2·299 2·350 2·306 2·343	2:394 2:304 2:348 2:298 2:329	2:376 2:307 2:355 2:305 2:285	2:352 2:292 2:362 2:309 2:257	2:330 2:297 2:349 2:316 2:261	2:324 2:297 2:346 2:335 2:281	2:300 } 2:307 2:347 2:358 2:295	2 3323 2 2636 2 3359 2 3217 2 3699
2.5956	2.2988	2.6067	2.6114	2.6145	2.6093	2.5975	2.5961	2.5925	2.5901	2.5927	2.5994	2.6099
2.518 2.751	2.538 2.763	2.556 2.784	2.586 2.793	2.596 2.805	2·599 2·820	2.611	2.622	2.629	2 639	2.659 —	2.670	2.5138 2.7553
2:596 2:283 2:543 2:478 2:235 2:178	2·572 2·300 2·564 2·474 2·235 2·154	2.528 2.316 2.568 2.472 2.259 2.130	2·476 2·312 2·582 2·458 2·290 2·158	2.506 2.309 2.574 2.452 2.299 2.182	2 · 480 2 · 299 2 · 572 2 · 400 2 · 312 2 · 206	2.786 2.456 2.295 2.577 2.385 2.336	2.780 2.446 2.324 2.575 2.387 2.338	2.761 2.437 2.323 2.575 2.365 2.356	2.762 2.355 2.355 2.579 2.349 2.357	2.762 2.317 2.333 2.573 2.327 2.363	2.762 } 2.327 2.373 2.569 2.327 2.368	2 7535 2 5768 2 2913 2 5286 2 4814 2 3038 2 3297
2.667 2.063 2.280 2.585 2.806 2.521	2.682 2.047 2.293 2.622 2.796 2.529	2.687 2.043 2.295 2.647 2.782 2.502	2.690 2.014 2.295 2.670 2.792 2.505	2.688 2.018 2.325 2.679 2.797 2.497	2.680 2.030 2.338 2.694 2.777 2.491	2:486 2:676 2:031 2:344 2:696 2:792	2:495 2:645 2:035 2:358 2:711 2:796	2:507 2:642 2:035 2:361 2:719 2:802	2:507 2:629 2:043 2:367 2:726 2:782	2:513 2:619 2:063 2:379 2:747 2:782	2·576 } 2·607 2·074 2·391 2·761 2·777	2.6642 2.1922 2.2555 2.5952 2.8019
2'417 2'755 2'821 2'810 2'683 2'821	2.416 2.760 2.837 2.791 2.684 2.814	2:413 2:760 2:860 2:762 2:682 2:830	2 · 458 2 · 796 2 · 879 2 · 756 2 · 709 2 · 833	2·482 2·803 2·887 2·740 2·727 2·834	2.510 2.801 2.898 2.708 2.703 2.836	2.734 2.534 2.800 2.902 2.695 2.686	2.726 2.576 2.804 2.909 2.687 2.683	2.732 2.600 2.805 2.916 2.678 2.681	2.736 2.616 2.808 2.933 2.638 2.695	2.732 2.640 2.819 2.943 2.638 2.699	2·728 } 2·677 2·836 2·959 2·622 2·710	2.6472 2.5488 2.7595 2.8551 2.8138 2.6756
2.791 3.204 3.256 3.237 2.994 2.889	2.806 3.219 3.264 3.219 3.000 2.887	2 · 824 3 · 234 3 · 271 3 · 211 3 · 004 2 · 889	2·851 3·257 3·275 3·214 3·004 2·874	2 · 861 3 · 251 3 · 273 3 · 216 2 · 996 2 · 872	2 · 872 3 · 253 3 · 278 3 · 182 2 · 993 2 · 864	2:311 2:890 3:256 3:278 3:169 2:977	2:298 2:899 3:253 3:276 3:168 2:980	2·293 2·907 3·255 3·274 3·168 2·988	2:293 2:919 3:245 3:305 3:158 2:968	2:304 2:932 3:246 3:307 3:158 2:968	2:308 } 2:949 3:264 3:335 3:150 2:976	2.6728 2.6957 3.1692 3.2719 3.2640 3.0430
2:6608						2.655	2.653	2.653	2.659	2.667	2.669}	2.8510
- 0000	2.6641	2.6657	2.6741	2.6796	2.6768	2.6676	2.6702	2.6716	2.6690	2.6727	2.6833	2.6753

				Barome			TRIC PRES		ers in the Ta	ible.			
Hours of Göttir Tin	f Mean ngen ne.	0	1	2	3	4	5	6	7	8	9	10	11
Hours o Toro Tin		18	19	20	21	22	23	0	1	2	3	4	5
	1 2 3 4 5 6 6	In. 2.669 2.692 2.472 2.549 2.587 2.834	In. 2.694 2.695 2.472 2.561 2.584 2.854	In. 2.699 2.677 2.462 2.575 2.601 2.871	In. 2 * 696 2 * 655 2 * 448 2 * 582 2 * 617 2 * 898	In. 2:703 2:649 2:450 2:574 2:621 2:912	In. 2.701 2.637 2.439 2.563 2.621 2.914	In. 2 · 692 2 · 602 2 · 420 2 · 542 2 · 609 2 · 908	In. 2 : 686 2 : 582 2 : 397 2 : 534 2 : 602 2 : 906	In. 2.684 2.573 2.389 2.504 2.614 2.896	In. 2 '680 2 '550 2 '393 2 '499 2 '631 2 '889	In. 2.680 2.544 2.403 2.495 2.650 2.876	In. 2.680 2.542 2.414 2.499 2.672 2.888
BER.	7 8 9 10 11 12 13	2.606 2.346 2.761 2.866 2.851 2.803	2.626 2.330 2.789 2.880 2.860 2.802	2.611 2.360 2.797 2.896 2.870 2.844	2:641 2:349 2:826 2:911 2:849 2:858	2.612 2.385 2.844 2.919 2.845 2.857	2.603 2.402 2.846 2.915 2.821 2.850	2·577 2·451 2·841 2·903 2·790 2·832	2:544 2:473 2:845 2:896 2:762 2:849	2.516 2.486 2.845 2.892 2.750 2.829	2:540 2:504 2:849 2:895 2:748 2:790	2.538 2.520 2.849 2.898 2.746 2.792	2:533 2:532 2:844 2:909 2:748 2:748
NOVEMBER	15 16 17 18 19 20 21	2:357 2:859 2:619 2:562 2:541 3:104	2:379 2:859 2:639 2:551 2:573 3:095	2.427 2.865 2.649 2.573 2.642 3.115	2.471 2.860 2.659 2.555 2.687 3.114	2:506 2:840 2:654 2:541 2:717 3:123	2.531 2.798 2.665 2.505 2.737 3.104	2:562 2:737 2:661 2:474 2:749 3:068	2:578 2:712 2:662 2:447 2:773 3:045	2.608 2.658 2.649 2.407 2.800 3.016	2.632 2.629 2.652 2.367 2.838 3.003	2:670 2:605 2:656 2:342 2:870 2:983	2.686 2.574 2.664 2.352 2.910 2.967
	22 23 24 25 26 27 28	2.828 2.598 2.372 2.257 2.603 2.677	2.841 2.582 2.380 2.265 2.632 2.660	2.853 2.558 2.384 2.283 2.663 2.645	2:863 2:537 2:400 2:271 2:708 2:624	2.878 2.531 2.414 2.276 2.753 2.622	2·871 2·510 2·412 2·267 2·765 2·594	2.863 2.471 2.386 2.263 2.774 2.556	2.858 2.464 2.376 2.263 2.778 2.544	2.823 2.449 2.351 2.293 2.787 2.533	2.824 2.453 2.351 2.307 2.803 2.539	2.830 2.444 2.335 2.321 2.817 2.552	2·825 2·423 2·307 2·344 2·823 2·553
	29 30	3°195 3°148	3.213 3.148	3·221 3·152	3·247 3·144	3.256 3.143	3·249 3·117	3·245 3·092	3·218 3·074	3.216 3.052	3·221 3·050	3.211 3.041	3·206 3·019
Hourl	y Means	2.6829	2.6909	2.7036	2.7104	2.7163	2.7091	2.6949	2.6872	2.6777	2.6783	2.6795	2.6793
	$\begin{pmatrix} 1\\2\\3\\4\\5 \end{pmatrix}$	2.843 2.410 2.566 2.728	2:841 2:430 2:582 2:726	2:851 2:455 2:586 2:735	2.839 2.465 2.607 2.737	2.822 2.475 2.587 2.727	2.806 2.488 2.583 2.721	2.769 2.497 2.552 2.696	2.741 2.497 2.531 2.674	2.703 2.491 2.540 2.642	2.691 2.520 2.553 2.625	2.687 2.530 2.574 2.623	2.699 2.556 2.586 2.624
	6 7 8 9 10 11 12	2.697 2.878 2.821 2.827 2.345 2.595	2.715 2.886 2.821 2.817 2.343 2.634	2:738 2:881 2:813 2:802 2:355 2:676	2.750 2.897 2.801 2.784 2.369 2.719	2.784 2.917 2.781 2.756 2.369 2.766	2.796 2.912 2.750 2.697 2.373 2.772	2.796 2.898 2.700 2.641 2.386 2.792	2.794 2.888 2.676 2.589 2.402 2.804	2·794 2·895 2·677 2·542 2·420 2·821	2.806 2.906 2.685 2.491 2.448 2.855	2.806 2.926 2.694 2.477 2.480 2.880	2.816 2.930 2.695 2.443 2.498 2.901
DECEMBER.	13 14 15 16 17 18 19	2.650 2.700 2.633 3.096 2.788 2.810	2.662 2.702 2.653 3.092 2.787 2.808	2.690 2.688 2.665 3.105 2.801 2.804	2.704 2.670 2.708 3.122 2.789 2.826	2·724 2·654 2·736 3·125 2·788 2·810	2.720 2.627 2.734 3.092 2.776 2.786	2.708 2.601 2.736 3.108 2.754 2.753	2.698 2.583 2.736 3.079 2.726 2.706	2·727 2·567 2·756 3·076 2·723 2·671	2·735 2·577 2·772 3·061 2·736 2·647	2·735 2·589 2·801 3·076 2·764 2·617	2·745 2·573 2·829 3·041 2·755 2·587
	20 21 22 23 24 25 a	2·792 2·940 2·178 2·324 2·051	2 · 822 2 · 930 2 · 180 2 · 322 2 · 063	2:842 2:912 2:172 2:272 2:125	2.860 2.907 2.170 2.246 2.177	2.886 2.889 2.166 2.201 2.215	2.877 2.853 2.161 2.153 2.254	2·877 2·792 2·143 2·074 2·273	2.865 2.750 2.151 2.057 2.300	2.868 2.719 2.162 2.025 2.314	2 · 898 2 · 646 2 · 193 2 · 014 2 · 331	2 · 926 2 · 638 2 · 221 2 · 027 2 · 350	2:961 2:586 2:255 2:007 2:357
	26 27 28 29 30 31	2.981 2.658 2.627 2.597 2.750	3.007 2.666 2.641 2.612 2.740	3.006 2.668 2.649 2.626 2.740	3.023 2.671 2.650 2.646 2.745	3.023 2.689 2.663 2.655 2.737	3·007 2·657 2·655 2·645 2·707	2 · 974 2 · 644 2 · 625 2 · 633 2 · 689	2.956 2.620 2.615 2.622 2.662	2 · 940 2 · 624 2 · 615 2 · 622 2 · 630	2 · 918 2 · 637 2 · 624 2 · 641 2 · 630	2 · 900 2 · 633 2 · 628 2 · 657 2 · 625	2.861 2.653 2.652 2.683 2.627
Hourly	Means	2.6648	2.6724	2.6787	2.6878	2.6902	2.6770	2.6581	2.6432	2.6371	2.6400	2.6486	2.6508

<sup>&</sup>lt;sup>a</sup> Christmas Day.

			Bar	ometer at 3	BAROI 2° = 27 E		RESSURE s + the nu		e Table.			
12	13	: 14	15	16	17	18	19	20	21	22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
In. 2.696 2.536 2.430 2.493 2.696 2.901	In. 2.710 2.544 2.434 2.491 2.720 2.889	In. 2.714 2.549 2.442 2.506 2.741 2.876	In. 2.722 2.553 2.466 2.504 2.756 2.880	In. 2.720 2.545 2.472 2.505 2.756 2.871	In. 2.722 2.530 2.480 2.525 2.766 2.866	In. 2.714 2.526 2.482 2.538 2.786	In. 2 '690 2 '521 2 '504 2 '553 2 '795	In. 2 · 690 2 · 521 2 · 521 2 · 557 2 · 787	In. 2.690 2.499 2.535 2.564 2.785	In. 2 '680 2 '487 2 '542 2 '572 2 '803	In. 2 676 2 480 2 546 2 582 2 820	In. 2:6953 2:5704 2:4589 2:5361 2:6925
2:536 2:547 2:840 2:918 2:748 2:724	2·539 2·553 2·866 2·920 2·760 2·646	2·529 2·573 2·870 2·910 2·760 2·606	2·523 2·591 2·876 2·914 2·758 2·571	2·510 2·597 2·878 2·916 2·762 2·503	2:494 2:603 2:860 2:910 2:762 2:414	2.648 2.468 2.606 2.858 2.898 2.758	2:636 2:443 2:659 2:864 2:884 2:754	2:627 2:435 2:677 2:856 2:882 2:769	2.613 2.405 2.692 2.851 2.868 2.769	2.619 2.393 2.709 2.856 2.869 2.777	2·605 } 2·360 2·745 2·860 2·855 2·783	2 · 8199 2 · 5243 2 · 5287 2 · 8446 2 · 8968 2 · 7833 2 · 6281
2.711 2.561 2.666 2.314 2.938 2.926	2.751 2.559 2.666 2.296 2.968 2.919	2.772 2.541 2.650 2.290 2.982 2.889	2.782 2.542 2.660 2.297 2.999 2.861	2.786 2.552 2.630 2.317 3.015 2.858	2.791 2.559 2.646 2.355 3.024 2.860	2:287 2:797 2:565 2:616 2:369 3:031	2 · 281 2 · 828 2 · 556 2 · 614 2 · 376 3 · 048	2 · 281 2 · 838 2 · 574 2 · 634 2 · 397 3 · 068	2:285 2:836 2:578 2:608 2:415 3:069	2:287 2:842 2:592 2:594 2:452 3:065	2:335 } 2:858 2:577 2:561 2:496 3:084	2 6666 2 6563 2 6406 2 4187 2 8803 2 9599
2.827 2.407 2.307 2.352 2.837 2.554	2·827 2·399 2·297 2·357 2·844 2·586	2·813 2·393 2·297 2·367 2·845 2·582	2·796 2·358 2·271 2·374 2·845 2·569	2.800 2.350 2.248 2.394 2.847 2.551	2·790 2·340 2·330 2·406 2·835 2·541	2.832 2.756 2.340 2.246 2.423 2.816	2.832 2.730 2.340 2.222 2.445 2.808	2 · 840 2 · 702 2 · 342 2 · 223 2 · 455 2 · 788	2.836 2.661 2.346 2.246 2.462 2.774	2.828 2.645 2.358 2.253 2.533 2.758	2.819 2.611 2.352 2.264 2.558 2.724	2.7965 2.4310 2.3155 2.3557 2.7761
3.505	3·201 2·990	3·195 2·976	3·190 2·962	3·180 2·951	3·180 2·937	3.059 3.180 2.929	3.079 3.185 2.923	3.106 3.187 2.923	3.130 3.189 2.891	3:138 3:166 2:875	3·169 } 3·156 2·860	2.7151 3.2045 3.0168
2.6797	2.6820	2.6795	2.6777	2.6736	2.6702	2.6742	2.6758	2.6800	2.6768	2.6802	2.6822	2.6851
2.686 2.557 2.604 2.612	2.660 2.575 2.606 2.595	2.640 2.565 2.610 2.575	2.628 2.575 2.618 2.541	2.588 2.581 2.634 2.518	2.552 2.577 2.640 2.514	2.510 2.583 2.649	2.486 2.575 2.665	2:442 2:565 2:681	2.414 2.553 2.691	2:404 2:547 2:699	2:402 2:538 2:716	2.6543 2.5252 2.6108
2·828 2·938 2·721 2·431 2·532	2.830 2.935 2.751 2.396 2.549	2.832 2.933 2.761 2.392 2.552	2.844 2.932 2.779 2.371 2.577	2.841 2.918 2.793 2.369 2.577	2.847 2.915 2.798 2.367 2.589	2:587 2:836 2:905 2:814 2:360 2:567	2:595 2:834 2:903 2:802 2:337 2:541	2.622 2.845 2.877 2.828 2.347 2.546	2.633 2.849 2.857 2.822 2.351 2.550	2.651 2.853 2.851 2.826 2.325 2.568	2.669 } 2.856 2.825 2.833 2.339 2.603	2.6404 2.8078 2.9001 2.7684 2.5105 2.4808
2 · 907 2 · 771 2 · 573 2 · 847 3 · 035 2 · 766 2 · 570	2 '941 2 '791 2 '564 2 '904 3 '018 2 '780	2 · 920 2 · 806 2 · 569 2 · 926 2 · 978 2 · 792	2.954 2.807 2.545 2.942 2.974 2.818	2.972 2.788 2.541 2.933 2.930 2.830	2.968 2.794 2.571 2.966 2.919 2.829	2.629 2.758 2.581 2.974 2.903 2.823	2.617 2.763 2.579 3.001 2.893 2.823	2.629 2.763 2.595 3.038 2.871 2.824	2.625 2.732 2.603 3.039 2.854 2.823	2.625 2.724 2.607 3.054 2.808 2.814	2·621 } 2·702 2·613 3·072 2·782 2·806	2.7760 2.7374 2.6030 2.8523 3.0016 2.7881
2.579 2.980 2.550 2.291 2.011 2.387	2.546 2.990 2.501 2.317 2.011 2.403	3.008 3.491 3.345 1.997 2.399	2·496 — 3·017 3·447 3·349 1·981 2·393	3.008 3.413 3.356 1.954 2.394	2.456 3.018 3.384 3.382 1.956 2.400	2.709 3.018 3.341 3.358 1.957	2·719 2·997 2·275 2·358 1·967	2·733 2·994 2·255 2·357 1·977	2·742 2·988 2·230 2·349 2·007	2.758 2.971 2.199 2.336 2.015	2·773 } 2·953 2·186 2·328 2·019 — )	2.6811 2.9340 2.5764 2.2616 2.0656
2.847 2.675 2.658 2.699 2.625	2·831 2·703 2·668 2·709 2·627	2.795 2.714 2.667 2.717 2.608	2.767 2.667 2.665 2.722 2.588	2.731 2.696 2.656 2.726 2.576	2·729 2·692 2·640 2·720 2·562	2.915 2.690 2.677 2.638 2.720 2.558	2·933 2·660 2·671 2·626 2·718 2·528	2.948 2.688 2.653 2.626 2.718 2.504	2.954 2.691 2.663 2.614 2.739 2.487	2.953 2.659 2.636 2.604 2.747 2.459	2.965 2.654 2.636 2.598 2.728 2.417	2·4523 2·8474 2·6639 2·6377 2·6793 2·6175
2.6581	2.6615	2.6583	2.6549	2.6465	2.6456	2.6562	2.6487	2.6510	2.6485	2.6420	2.6398	2.6567

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Götti	f Mean	0	1	Barome 2	eter at 32°	= 27 Engli	sh inches +	the numbe	rs in the Ta	ble.	9	10	11
Tin Hours o Tord Tin	f Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	In. 2.385	In. 2.368	In. 2:348	In. 2:334 2:640 a	In. 2:318	In. 2·276	In. 2·251	In. 2·211	In. 2.193	In. 2.185 2.607 a	In. 2.196	In. 2.229
	3 4 5 6 7 8 9	2.714 2.693 2.752 2.707 2.645 2.329	2.720 2.737 2.685 2.712 2.653 2.333	2·716 2·793 2·593 2·723 2·672 2·338	2.716 2.818 2.509 2.680 2.674 2.344 2.421	2·716 2·847 2·445 2·698 2·680 2·352	2·702 2·876 2·327 2·678 2·650 2·350	2.660 2.890 2.185 2.660 2.624 2.334	2.632 2.903 2.077 2.645 2.609 2.325	2.612 2.929 2.021 2.631 2.604 2.325	2.602 2.956 2.022 2.635 2.594 2.354 2.584	2.604 2.962 2.060 2.639 2.593 2.365	2:587 2:982 2:147 2:637 2:579 2:363
JANUARY.	10 11 12 13 14 15 16	2.982 2.965 2.938 2.818 2.740 2.366	3.003 2.940 2.958 2.804 2.754 2.360	3.038 2.895 2.980 2.802 2.768 2.368	3.068 2.870 3.022 2.824 2.780 2.374 2.986	3.092 2.828 3.027 2.793 2.780 2.390	3:109 2:785 3:016 2:789 2:766 2:390	3.103 2.699 3.001 2.764 2.736 2.377	3.109 2.638 2.979 2.747 2.718 2.382	3.120 2.636 2.980 2.739 2.708 2.402	3.155 2.633 2.980 2.739 2.702 2.442 2.897	3:172 2:668 2:974 2:745 2:692 2:477	3:180 2:703 2:972 2:738 2:680 2:541
JANI	17 18 19 20 21 22 23	2.731 2.507 3.259 2.822 2.393 2.824	2.815 2.587 3.267 2.811 2.392 2.796	2.875 2.653 3.285 2.820 2.379 2.796	2 941 2 711 3 298 2 825 2 375 2 801	2.978 2.767 3.284 2.829 2.344 2.787	2.987 2.836 3.275 2.811 2.347 2.747	2'971 2'869 3'215 2'776 2'358 2'690	2.961 2.911 3.207 2.758 2.364 2.651	2'961 2'953 3'179 2'723 2'410 2'619	2.960 2.987 3.161 2.705 2.479 2.595	2·942 3·022 3·144 2·695 2·537 2·593	2 · 914 3 · 061 3 · 106 2 · 675 2 · 578 2 · 620
	24 25 26 27 28 29	3.070 2.920 2.699 2.361 2.276 2.356	3.071 2.919 2.682 2.362 2.271 2.390	3.071 2.919 2.667 2.368 2.271 2.434	2:999 3:095 2:929 2:649 2:380 2:261 2:526	3.092 2.929 2.625 2.378 2.234 2.572	3.090 2.908 2.586 2.365 2.214 2.606	3.051 2.889 2.542 2.329 2.167 2.605	3.030 2.892 2.500 2.313 2.133 2.607	3.019 2.884 2.466 2.303 2.098 2.630	3.019 3.012 2.889 2.454 2.291 2.080 2.640	3.005 2.875 2.429 2.273 2.070 2.673	2:995 2:875 2:416 2:271 2:059 2:699
	30 31	2.348	2.330	2.312	2.774 2.292	2.248	2.221	2.174	2.143	2.129	2.652 2.133	2.157	2.176
Hourly	Means	2.6769	2.6815	2.6878	2.6960	2.6936	2.6810	2.6508	2.6325	2.6259	2.6302	2.6370	2.6455
,	1 2 3 4 5 6 7 8 9 10 11	2.254 2.428 2.398 2.225 1.963 	2·258 2·428 2·406 2·198 1·977 ———————————————————————————————————	2·252 2·454 2·420 2·182 2·995 — 2·581 2·515 2·748 2·711 3·141	2:253 2:452 2:436 2:151 2:003 2:211 a 2:600 2:528 2:729 2:732 3:155	2·257 2·459 2·446 2·121 2·009 2·606 2·542 2·708 2·806 3·160	2·265 2·452 2·434 2·085 2·008 2·612 2·565 2·650 2·817	2·277 2·443 2·421 2·046 1·996 — 2·604 2·578 2·594 2·800	2 · 286 2 · 422 2 · 403 2 · 012 2 · 001 ———————————————————————————————————	2:306 2:419 2:393 1:982 2:015 — 2:591 2:601 2:441 2:791	2:328 2:418 2:398 1:952 2:030 2:260 a 2:589 2:671 2:417 2:789	2:340 2:425 2:396 1:932 2:046 — 2:582 2:649 2:434 2:803	2:362 2:431 2:397 1:928 2:060 — 2:581 2:683 2:430 2:837
FEBRUARY.	12 13 14 15 16 17 18 19 20	3·015 	3·023 	3·037 	3.047 2.985 2.634 2.886 2.784 2.727 2.859 2.589 1.957	3 160 3 055 2 609 2 894 2 778 2 726 2 850 2 566	3.143 3.058 	3 · 113 3 · 042 ————————————————————————————————————	3.094 3.030 2.579 2.854 2.723 2.733 2.812 2.487	3.071 3.017 2.568 2.828 2.718 2.728 2.789 2.439	3.063 3.021 2.841 2.570 2.821 2.710 2.736 2.736 2.738 2.434	3.064 3.023 	3.053 3.029 
	21 22 23 24 25 26 27	2·298 2·587 2·552 2·890 3·091 2·918	2:356 2:601 2:588 2:890 3:109 2:920	2·394 2·586 2·608 2·910 3·118 2·902	2:445 2:582 2:627 2:921 3:120 2:883 2:645	2 · 468 2 · 582 2 · 631 2 · 923 3 · 119 2 · 852	2:491 2:583 2:635 2:921 3:120 2:827	2:509 2:546 2:625 2:909 3:106 2:789	2:540 2:528 2:630 2:889 3:086 2:744	2.547 2.500 2.648 2.875 3.066 2.694	1:897 2:558 2:486 2:677 2:874 3:053 2:656 2:666	2·564 2·486 2·682 2·876 3·051 2·636	2·571 2·474 2·697 2·892 3·040 2·635
	28 29	2.487 2.280	2.467	2.399 2.328	2·359 2·340	2·299 2·360	2·267 2·367	2·244 2·379	2·184 2·385	2·170 2·399	2.165 2.423	2·175 2·445	2·195 2·450
Hourly	Means	2.6078	2.6198	2.6286	2.6337	2.6330	2.6267	2.6150	2.5970	2.5838	2.5849	2.5860	2.5899

<sup>&</sup>lt;sup>a</sup> The Observations made at 9 a.m. and 3 p.m. on Sunday are for the first time given in this Abstract: they are not included in the Means.

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12	13	14	15	16	17	18	19	20	21	22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
In. 2 241	In. 2.300	In. 2:301	In. 2.370	In. 2.368	In. 2.388	In.	In.	In.	In.	In.	I n.	In. 2·3975
2.581 2.990 2.226 2.646 2.579 2.342	3:000 2:257 2:650 2:554	2·573 3·002 2·323 2·652 2·549 2·351	2.559 2.979 2.397 2.652 2.518 2.330	2·575 2·981 2·471 2·650 2·510 2·298	2:575 2:956 2:507 2:644 2:490 2:248	2.678 2.581 2.954 2.524 2.622 2.480	2·706 2·591 2·920 2·550 2·644 2·430	2.728 2.617 2.904 2.576 2.653 2.414	2.728 2.619 2.868 2.614 2.653 2.384	2.714 2.642 2.816 2.610 2.651 2.365	2·724 } 2·661 2·804 2·701 2·645 2·345	2 6303 2 8983 2 3987 2 6586 2 5498 2 4777
3·186 2·748 2·956 2·748 2·672 2·600	3·186 3·2·776 3·2·957 3·2·747 2·659	3·180 2·790 2·952 2·747 2·647 2·703	3:172 2:788 2:934 2:747 2:613 2:746	3:144 2:794 2:918 2:744 2:575 2:764	3 144 2 817 2 906 2 742 2 546 2 800	2.859 3.118 2.830 2.896 2.740 2.496	2.881 3.100 2.848 2.876 2.740 2.486	2.907 3.072 2.880 2.866 2.742 2.456	2.925 3.044 2.908 2.853 2.741 2.448	2.933 3.021 2.893 2.840 2.729 2.406	2·958 } 3·014 2·908 2·823 2·734 2·368	3·1047 2·8015 2·9418 2·7585 2·6332
2 904 3 090 3 076 2 671 2 606 2 63	2·874 3·122 3·050 2·653 6 2·622	2 · 844 3 · 133 3 · 026 2 · 661 2 · 670 2 · 668	2 · 805 3 · 143 2 · 996 2 · 613 2 · 712 2 · 688	2.775 3.148 2.952 2.587 2.724 2.691	2.721 3.156 2.896 2.565 2.751 2.697	2.639 2.649 3.159 2.862 2.544 2.778	2.632 2.638 3.173 2.858 2.531 2.785	2.632 2.567 3.201 2.868 2.515 2.811	2.622 2.517 3.212 2.853 2.481 2.824	2.634 2.501 3.226 2.825 2.457 2.823	2.642 } 2.495 3.251 2.814 2.426 2.825	2:5393 2:8053 2:9949 3:0732 2:6647 2:5786
2 · 989 2 · 872 2 · 400 2 · 263 2 · 05 2 · 723	2 · 985 2 · 2 · 887 2 · 397 3 · 2 · 259 7 · 2 · 057	2.972 2.889 2.390 2.241 2.059 2.766	2.968 2.878 2.380 2.240 2.071 2.776	2.964 2.860 2.383 2.231 2.091 2.790	2 · 964 2 · 840 2 · 373 2 · 217 2 · 132 2 · 800	3.062 2.943 2.820 2.373 2.212 2.148	3.064 2.944 2.802 2.385 2.206 2.167	3.069 2.944 2.800 2.383 2.220 2.193	3.070 2.926 2.776 2.383 2.231 2.211	3.074 2.926 2.750 2.365 2.250 2.216	3.080 } 2.926 2.724 2.355 2.272 2.296	2.7901 3.0022 2.8636 2.4701 2.2848 2.1597
2.202	_	2.265	2.274	2.298	2.301	2:501 2:290	2·477 2·288	2·467 2·296	$2.427 \\ 2.294$	2:417 2:271	$\left\{ \begin{array}{c} - \\ 2.380 \\ 2.251 \end{array} \right\}$	2·5840 2·2474
2.658	37 2.6610	2.6675	2.6673	2.6648	2.6606	2.6830	2.6816	2.6839	2.6774	2.6675	2.6701	2 6657
2:385 2:429 2:400 1:926 2:070	2.420 2.398 1.925	2:403 2:420 2:393 1:944 2:088	2:427 2:420 2:376 1:950 2:076	2:427 2:408 2:365 1:964 2:079	2:428 2:397 2:364 1:978 2:067	2:432 2:388 2:346 1:991	2·440 2·376 2·336 1·986	2:442 2:376 2:318 1:976	2 · 430 2 · 384 2 · 293 1 · 973	2:429 2:376 2:275 1:937	2·425 2·374 2·245 1·967 — }	2°3541 2°4166 2°3774 2°0138
2.577 2.702 2.428 2.856 3.048 3.038	2 2.728 3 2.446 5 2.887 3 045	2·571 2·742 2·472 2·909 3·020 3·043	2·551 2·754 2·475 2·940 3·011 3·042	2 · 533 2 · 766 2 · 486 2 · 952 3 · 010 3 · 039	2:536 2:762 2:500 2:986 3:006 3:039	2 · 428 2 · 536 2 · 772 2 · 514 3 · 000 2 · 992	2.450 2.531 2.775 2.522 3.025 2.982	2·472 2·523 2·778 2·537 3·046 2·988	2:494 2:500 2:774 2:547 3:047 2:984	2:508 2:484 2:776 2:570 3:051 2:985	2 · 522 } 2 · 476 2 · 779 2 · 599 3 · 089 3 · 005	2:5598 2:6671 2:5533 2:8747 3:0558
2.622 2.781 2.699 2.757 2.757 2.396	2 : 644 2 : 773 2 : 702 2 : 758 2 : 755	2.666 2.768 2.700 2.772 2.753 2.361	2.686 2.766 2.702 2.780 2.734 2.352	2.691 2.767 2.700 2.800 2.724 2.306	2.706 2.770 2.678 2.810 2.706 2.290	2.692 2.725 2.767 2.677 2.816 2.683	2.662 2.731 2.763 2.662 2.805 2.673	2.654 2.746 2.751 2.662 2.806 2.652	2.642 2.767 2.737 2.658 2.806 2.638	2.630 2.785 2.740 2.666 2.810 2.637	2.613 } 2.793 2.752 2.662 2.823 2.616	2 · 9385 2 · 6567 2 · 8041 2 · 7112 2 · 7606 2 · 7568
2.603 2.470 2.702 2.934 3.029 2.621	2.611 2.468 2.728 2.957 3.080	2 · 617 2 · 474 2 · 754 2 · 966 3 · 028 2 · 617	2 · 613 2 · 466 2 · 752 2 · 989 3 · 017 2 · 612	2.619 2.470 2.761 2.987 3.015 2.614	2 · 627 2 · 627 2 · 464 2 · 771 2 · 995 3 · 002 2 · 607	2·076 2·628 2·464 2·787 3·017 2·991	2·113 2·630 2·501 2·807 3·037 2·985	2:136 2:627 2:519 2:860 3:041 2:977	2·174 2·623 2·518 2·868 3·053 2·962	2 · 220 2 · 605 2 · 527 2 · 876 3 · 074 2 · 949	$ \begin{array}{c}  - \\  2 \cdot 259 \\  2 \cdot 596 \\  2 \cdot 550 \\  2 \cdot 895 \\  3 \cdot 080 \\  2 \cdot 926 \\  - \\  2 \cdot 527 \end{array} $	2:3852 2:5475 2:5180 2:7150 2:9542 3:0412 2:6985
2·195 2·450		2·199 2·528	2·199 2·555	2·173 2·561	2·173 2·567	2.644 2.171 2.565	2.642 2.181 2.575	2.622 2.198 2.581	2.606 2.217 2.591	2.566 2.230 2.600	2.527 § 2.262 2.635	2·2420 2·4655
2.594	6 2.6032	2.6083	2.6098	2.6087	2.6092	2.6041	2.6076	2.6115	2.6114	2.6122	2.6188	2.6084

		<del>,</del>		Baron			RIC PRES	SSURE. + the numb	ers in the T	able.			
Hours of Göttin Tim	f Mean ngen	0	1	2	3	4	5	6	7	8	9	10	11
	f Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	$\left( egin{array}{c} 1 \\ 2 \\ 3 \\ 4 \end{array} \right)$	In. 2.663 3.022 2.445 2.848	In. 2.700 3.020 2.445 2.846	In. 2.723 3.026 2.415 2.839	In. 2.742 3.017 2.423 2.833	In. 2.762 3.015 2.412 2.840	In. 2.765 3.002 2.407 2.818	In. 2.766 2.982 2.395 2.785	In. 2.749 2.946 2.379 2.737	In. 2.747 2.921 2.376 2.689	In. 2.755 2.894 2.396 2.676	In. 2.764 2.886 2.438 2.646	In. 2.811 2.856 2.486 2.623
	5 6 7 8 9 10	2·597 2·704 2·245 2·642 2·517 2·700	2.611 2.712 2.227 2.684 2.508 2.714	2.612 2.696 2.225 2.692 2.526 2.731	2.615 2.683 2.203 2.708 2.517 2.744	2.614 2.650 2.173 2.712 2.495 2.746	2.608 2.612 2.164 2.723 2.492 2.749	2.609 2.579 2.139 2.720 2.488 2.747	2.600 2.534 2.114 2.688 2.459 2.741	2.595 2.482 2.127 2.696 2.453 2.722	2.603 2.450 2.125 2.665 2.458 2.714	2.619 2.421 2.207 2.666 2.482 2.713	2:626 2:390 2:216 2:666 2:507 2:716
MARCH.	12 13 14 15 16 17 18	2.570 2.768 2.922 2.954 2.660 2.429	2:591 2:782 2:938 2:960 2:659 2:431	2.608 2.784 2.970 2.956 2.670 2.417	2.622 2.775 2.976 2.949 2.689 2.429	2.634 2.768 2.970 2.946 2.671 2.426	2.640 2.752 2.960 2.931 2.652 2.423	2.656 2.736 2.947 2.905 2.635 2.418	2.653 2.731 2.927 2.857 2.631 2.400	2.668 2.732 2.906 2.817 2.614 2.405	2.692 2.740 2.905 2.792 2.591 2.414	2·713 2·759 2·912 2·774 2·576 2·394	2.731 2.783 2.929 2.766 2.554 2.415
	19 20 21 22 23 24 25	2.692 2.348 2.712 2.734 2.928 2.734	2.686 2.416 2.716 2.756 2.942 2.728	2.700 2.436 2.723 2.778 2.952 2.716	2.629 2.458 2.734 2.782 2.962 2.691	2.604 2.473 2.725 2.802 2.954 2.669	2.615 2.501 2.723 2.792 2.935 2.645	2.570 2.504 2.708 2.827 2.948 2.641	2:486 2:520 2:700 2:828 2:920 2:607	2:442 2:517 2:685 2:806 2:903 2:586	2:356 2:533 2:661 2:808 2:896 2:551	2·335 2·544 2·653 2·810 2·906 2·541	2.272 2.566 2.641 2.815 2.893 2.503
	26 27 28 29 30 31	2.565 2.724 2.790 2.928 2.412	2·575 2·739 2·804 2·940 2·403	2.569 2.752 2.805 2.941 2.377	2·581 2·778 2·804 2·919 2·341	2·589 2·764 2·799 2·894 2·298	2·577 2·761 2·800 2·874 2·238	2.572 2.760 2.802 2.840 2.195	2.566 2.750 2.802 2.806 2.183	2.563 2.726 2.795 2.763 2.163	2:542 2:697 2:792 2:726 2:161	2.553 2.707 2.790 2.698 2.156	2:569 2:698 2:807 2:673 2:158
Hourly	Means	2.6760	2.6864	2.6903	2.6890	2.6817	2.6726	2.6620	2.6413	2.6259	2.6146	2.6171	2.6174
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \end{pmatrix}$	2.571 3.048 2.745 2.954 2.870 2.843 2.774	2.629 3.056 2.750 2.967 2.873 2.849 2.792	2.659 3.059 2.750 2.984 2.872 2.868 2.780	2.704 3.074 2.758 2.992 2.862 2.886 2.771	2.725 3.062 2.760 2.984 2.861 2.889 2.754	2.733 3.045 2.748 2.970 2.855 2.898 2.733	2.752 3.024 2.736 2.955 2.838 2.885 2.706	2.761 3.001 2.734 2.944 2.819 2.867 2.685	2.812 	2.831 2.938 2.740 2.912 2.774 2.833 2.649	2'860 	2·876 2·889 2·754 2·882 2·765 2·799 2·631
APRIL.	9 10 11 12 13 14 15 16	2:633 2:590 2:801 2:337 2:446 2:648	2.658 2.618 2.792 2.351 2.458 2.667	2.640 2.672 2.777 2.330 2.487 2.676	2.626 2.638 2.751 2.325 2.503 2.688	2.621 2.636 2.740 2.307 2.511 2.673	2.600 2.644 2.709 2.307 2.531 2.666	2.582 2.632 2.662 2.307 2.541 2.650	2:566 2:656 2:625 2:311 2:552 2:656	2.547 2.661 2.595 2.341 2.556 2.647	2:524 2:628 2:563 2:351 2:556 2:642	2:508 2:640 2:520 2:363 2:565 2:635	2:500 2:638 2:504 2:377 2:584 2:636
AP	17 18 19 20 21 a	2 · 952 2 · 784 3 · 030 2 · 976	2 · 960 2 · 771 3 · 038 2 · 974	2.962 2.761 3.069 2.973	2.962 2.751 3.089 2.955	2°962 2°759 3°088 2°935	2.950 2.770 3.082 2.904	2:934 2:788 3:061 2:848	2:905 2:804 3:069 2:812	2:887 2:802 3:060 2:776	2 · 883 2 · 801 3 · 041 2 · 730	2.877 2.819 3.028 2.699	2.861 2.845 3.022 2.694
	22 23 24 25 26 27 28 29 30	2:599 2:429 2:684 2:725 2:949 2:911 2:471	2.619 2.439 2.686 2.748 2.963 2.916 2.523	2·635 	2·643 2·459 2·701 2·768 2·989 2·902 2·638	2·659 2·451 2·697 2·779 2·994 2·862 2·670	2·651 2·494 2·682 2·777 2·979 2·850 2·704	2·652 2·488 2·633 2·775 2·963 2·830 2·726	2.645 2.498 2.617 2.781 2.946 2.790 2.752	2.633 2.515 2.580 2.777 2.934 2.740 2.769	2·620 2·529 2·561 2·777 2·916 2·715 2·779	2·614 2·535 2·540 2·787 2·923 2·674 2·788 —	2.621 2.551 2.536 2.798 2.909 2.659 2.806
 Hourly	Means	2.7404	2.7540	2.7639	2.7681	2°7658	2.7618	2.7487	2.7415	2.7318	2.7205	2.7155	2.7140

			Bar	ometer at 32			RESSURE.		Table.			
12	13	14	15	16	17	18	19	20	21	22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
In. 2.837 2.833 2.534	In. 2.873 2.797 2.599	In. 2.873 2.769 2.638	In. 2.918 2.749 2.669	In. 2 935 2 706 2 703	In. 2 936 2 660 2 735	In. 2 · 940 2 · 629 2 · 757	In. 2 960 2 583 2 770	In. 2 966 2 537 2 782	In. 2 998 2 503 2 796	In. 2.479 2.821	In. 3 003 2 475 2 844	In. 2.8342 2.8045 2.5694
2.612 	2 602 2 669 2 375 2 313	2.575 2.682 2.379 2.349	2.565 2.701 2.370 2.385	2.557 2.710 2.366 2.403	2.538 2.714 2.378 2.418	2 696 2 718 2 368 2 433	2.670 2.731 2.366 2.487	2:638 2:723 2:346 2:514	2 621 2 695 2 340 2 535	2.610 2.694 2.320 2.573	$\left\{ \begin{array}{c} -2.580 \\ 2.580 \\ 2.704 \\ 2.271 \\ 2.596 \end{array} \right\}$	2.6852 2.6534 2.4657 2.3088
2:661 2:521 2:709	2:673 2:538 2:712	2.665 2.574 2.712	2.662 2.595 2.718	2.622 2.597 2.715	2.608 2.598 2.711	2.581 2.597 — 2.394	2.561 2.624 2.466	2.561 2.636 	2:561 2:655 — 2:508	2.528 2.663 - 2.518	2:530 2:680 	2.6448 2.5492 2.6643
2.751 2.798 2.945 2.742 2.551 2.431	2.770 2.824 2.949 2.745 2.516 2.454	2.774 2.827 2.957 2.738 2.506 2.490	2.776 2.849 2.953 2.728 2.491 2.504	2.776 2.850 2.945 2.726 2.486 2.532	2.768 2.852 2.950 2.738 2.472 2.530	2.769 2.860 2.946 2.742 2.466	2.771 2.862 2.940 2.726 2.467	2.773 2.862 2.946 2.695 2.444	2.755 2.867 2.946 2.674 2.426	2.759 2.880 2.942 2.652 2.412	2.760 2.893 2.951 2.656 2.429	2:7075 2:8056 2:9430 2:7987 2:5528
2·242 2·600 2·619 2·821 2·889	2.219 2.635 2.617 2.830 2.887	2.217 2.652 2.616 2.849 2.859	2·170 2·675 2·654 2·846 2·840	2:188 2:674 2:664 2:845 2:824	2·200 2·692 2·666 2·856 2·818 2·425	2.708 2.204 2.690 2.666 2.854 2.790	2.699 2.210 2.692 2.670 2.857 2.796	2.722 2.210 2.678 2.689 2.859 2.773	2.709 2.216 2.671 2.678 2.876 2.753	2.699 2.248 2.675 2.691 2.890 2.744	2.703 } 2.258 2.688 2.708 2.913 2.754	2:5076 2:3737 2:5766 2:6800 2:8264 2:8694
2.488 	2.464 	2.456 2.623 2.675 2.857 2.584 2.108	2·452 2·635 2·658 2·886 2·545 2·130	2.425 2.628 2.650 2.904 2.513 2.196	2 423 2 632 2 668 2 911 2 499 2 251	2:549 2:640 2:667 2:912 2:499 2:339	2.528 2.648 2.681 2.899 2.493 2.380	2.520 2.654 2.705 2.900 2.470 2.415	2:521 2:673 2:701 2:926 2:458 2:417	2.521 2.684 2.709 2.929 2.438 2.463	2·523 } 2·702 2·741 2·917 2·420 2·495	2:5618 2:6047 2:7122 2:8455 2:6753 2:2720
2.6193	2.6270	2.6298	2.6342	2.6348	2.6379	2.6450	2.6495	2.6487	2.6474	2.6362	2.6570	2.6476
2*895 2*865 2*758 2*882 2*768 2*793 2*628	2:907 	2·927 ————————————————————————————————————	2·929 	2.951 2.850 2.829 2.896 2.809 2.783 2.626	2.972 2.848 2.834 2.888 2.802 2.777 2.626	3.040 2.838 2.856 2.874 2.814 2.784	3·035 2·822 2·856 2·859 2·804 2·788	3.031 2.804 2.856 2.869 2.814 2.807	3.026 2.775 2.870 2.863 2.813 2.790	3.036 2.759 2.892 2.866 2.813 2.777		2.8624 2.9152 2.7936 2.9143 2.8166 2.8234
2:492 2:652 2:470 2:393 2:592 2:642	2.527 2.658 2.457 2.401 2.601 2.648	2 · 543 2 · 683 2 · 442 2 · 419 2 · 613 2 · 657	2.551 2.698 2.430 2.418 2.607 2.666	2.554 2.704 2.402 2.419 2.610 2.677	2:548 2:714 2:370 2:416 2:612 2:693	2.611 2.557 2.730 2.347 2.417 2.610	2.609 2.551 2.746 2.313 2.415 2.592	2.600 2.547 2.757 2.291 2.415 2.585	2.604 2.543 2.764 2.297 2.424 2.602	2.608 2.550 2.770 2.306 2.425 2.608	2·609 2·578 2·767 2·322 2·426 2·628	2.6654 2.5644 2.6790 2.5202 2.3748 2.5646
2.853 2.871 3.013 2.694	2:845 2:899 3:011 2:677	2.853 2.924 3.011 2.692	2.829 2.928 3.012 2.694	2.816 2.936 3.011 2.693	2.806 2.940 3.005 2.691	2.829 2.792 2.950 3.004	2.841 2.794 2.940 2.990	2.852 2.776 2.955 2.990	2.884 2.789 2.972 2.986	2.900 2.775 2.978 2.980	2·926 } 2·776 2·981 2·966	2.7125 2.8666 2.8637 3.0273 2.7282
2.620	2.626	2.647	2.641	2.638	2.646	2.461	2.492	2.506	2.217	2.259	$\left\{ \begin{array}{c} -1 \\ 2 \cdot 555 \\ -1 \\ 2 \cdot 395 \end{array} \right\}$	2.2661
2.561 2.522 2.802 2.909 2.639	2.563 2.491 2.811 2.913 2.588	2·575 2·481 2·826 2·911 2·534	2:588 2:479 2:840 2:918 2:549	2.610 2.475 2.842 2.932 2.536	2.619 2.503 2.852 2.934 2.482	2:327 2:620 2:533 2:853 2:918 2:462	2:330 2:628 2:577 2:864 2:918 2:444	2:361 2:623 2:605 2:874 2:914 2:425	2:376 2:623 2:636 2:895 2:916 2:433	2:338 2:637 2:654 2:905 2:915 2:433	2.654 2.701 2.925 2.919 2.437	2.5478 2.5943 2.8140 2.9358 2.6553
2.806	2.832	2.857	2.861	2.863	2.876	2.763	2.757	2.739	2.732	2.700	2.701}	2.737
2.7133	2.7168	2.7248	2.7274	2.7276	2.7273	2.7079	2.7069	2.7082	2.7137	2.7168	2.7263	2.731

				Barom	eter at 32°		TRIC PRE		ers in the T	able.			
Hours of Götting Time	Mean }	0	I	2	3	4	5	6	7	8	9	10	11
Hours of Toron Time	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
MAY.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 56	In. 2.681 2.499 2.452 2.455 2.310 2.429 2.620 2.532 2.481 2.265 2.429 2.395 2.861 2.578 2.684 2.671 2.612 2.452 2.418 2.504 2.252 2.495	In. 2 · 683 2 · 512 2 · 443 2 · 461 2 · 306 2 · 429 2 · 620 2 · 536 2 · 487 2 · 263 2 · 444 2 · 385 2 · 856 2 · 592 2 · 686 2 · 616 2 · 469 2 · 438 2 · 517 2 · 258 2 · 509	In. 2 · 663 2 · 496 2 · 444 2 · 481 2 · 309 2 · 437 2 · 620 2 · 545 2 · 494 2 · 251 2 · 463 2 · 349 — 2 · 844 2 · 596 2 · 694 2 · 693 2 · 606 2 · 469 — 2 · 452 2 · 528 2 · 272 2 · 525	In. 2 · 659 2 · 481 2 · 453 2 · 453 2 · 306 2 · 363 2 · 363 2 · 621 2 · 546 2 · 485 2 · 256 2 · 480 2 · 277 2 · 701 2 · 843 2 · 601 2 · 599 2 · 470 2 · 418 2 · 466 2 · 512 2 · 274 2 · 514	In. 2 · 643 2 · 467 2 · 446 2 · 462 2 · 312 2 · 431 2 · 610 2 · 540 2 · 476 2 · 258 2 · 479 2 · 229 2 · 819 2 · 605 2 · 689 2 · 701 2 · 587 2 · 469 2 · 452 2 · 513 2 · 284 2 · 519	In. 2 · 630 2 · 483 2 · 438 2 · 454 2 · 309 2 · 421 2 · 597 2 · 531 2 · 480 2 · 261 2 · 468 2 · 170 2 · 795 2 · 620 2 · 676 2 · 686 2 · 577 2 · 476 2 · 462 2 · 508 2 · 291 2 · 514	In. 2 613 2 468 2 428 2 437 2 300 2 410 2 587 2 519 2 458 2 265 2 457 2 140 2 754 2 623 2 662 2 662 2 532 2 462 2 483 2 492 2 322 2 499	In. 2 '605 2 '463 2 '416 2 '409 2 '282 2 '406	In. 2 · 591 2 · 454 2 · 393 2 · 399 2 · 235 2 · 409 2 · 552 2 · 484 2 · 436 2 · 285 2 · 432 2 · 172 2 · 688 2 · 616 2 · 628 2 · 636 2 · 507 2 · 427 2 · 462 2 · 361 2 · 476	In. 2 · 567 2 · 451 2 · 374 2 · 380 2 · 245 2 · 389 2 · 530 2 · 484 2 · 420 2 · 295 2 · 440 2 · 200 2 · 762 2 · 632 2 · 616 2 · 614 2 · 617 2 · 546 2 · 431 2 · 334 2 · 464 2 · 440 2 · 366 2 · 465	In. 2 · 557 2 · 444 2 · 370 2 · 330 2 · 254 2 · 369 2 · 521 2 · 468 2 · 410 2 · 315 2 · 430 2 · 230  2 · 592 2 · 598 2 · 605 2 · 598 2 · 605 2 · 502 2 · 426 2 · 464 2 · 429 2 · 367 2 · 469	In. 2 : 546 2 : 444 2 : 364 2 : 314 2 : 250 2 : 380
Hourly	26 27 28 29 30 31 Means	2.638 2.829 	2.640 2.850 	2.639 2.850 — 2.538 2.658 2.5289	2.638 2.857 2.810 2.525 2.358 2.659	2.650 2.831  2.491 2.374 2.663	2 · 647 2 · 822 2 · 516 2 · 372 2 · 657 2 · 5134	2.645 2.822 	2.627 2.795 	2.632 2.773 — 2.407 2.398 2.633 — 2.4801	2:642 2:757 2:741 2:375 2:422 2:624	2.660 2.752 	2.674 2.741 2.395 2.454 2.598 2.4653
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 11 \\ 11 \\ 11 \\ 12 \\ 13 \\ 14 \\ 15 \\ 10 \\ 11 \\ 11 \\ 11 \\ 12 \\ 13 \\ 14 \\ 15 \\ 15 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10$	2.691 2.627 2.377 2.454 2.576 2.778 2.800 2.661 2.503	2.705 2.628 2.404 - 2.464 2.580 2.788 2.806 2.663 2.511	2.728 2.605 2.414 	2.726 2.588 2.415 2.358 2.486 2.594 2.791 2.793 2.641 2.506	2 · 718 2 · 563 2 · 421 2 · 486 2 · 630 2 · 777 2 · 784 2 · 626 2 · 486	2.705 2.531 2.426 2.468 2.644 2.761 2.773 2.608 2.481	2.691 2.509 2.428 2.443 2.650 2.750 2.761 2.583 2.469	2.662 2.481 2.415 2.431 2.659 2.743 2.739 2.550 2.461	2.650 2.458 2.411 2.407 2.662 2.736 2.532 2.458	2.645 2.424 2.388 2.219 2.413 2.659 2.736 2.710 2.521 2.435	2.644 2.404 2.388 2.675 2.733 2.710 2.508 2.428	2:632 2:381 2:386 2:400 2:691 2:743 2:699 2:493 2:436
JUNE.	11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	2·913 2·781 2·640 2·529 2·558 2·498 2·509 2·409 2·296 2·298 2·298 2·568 2·673 2·571	2:917 2:804 2:640 2:530 2:557 2:494 2:513 2:403 2:313 2:498 2:257 2:576 2:672 2:563	2:915 2:792 2:670 2:531 2:555 2:494 — 2:513 2:401 2:322 2:510 2:222 2:595 — 2:684	2 '663 2 '907 2 '789 2 '664 2 '534 2 '544 2 '492 2 '371 2 '514 2 '395 2 '315 2 '496 2 '213 2 '669 2 '702	2 · 900 2 · 773 2 · 665 2 · 523 2 · 545 2 · 484 ———————————————————————————————————	2·892 2·757 2·649 2·507 2·525 2·470 2·520 2·349 2·349 2·495 2·189 2·623 2·689	2 · 880 2 · 741 2 · 611 2 · 502 2 · 508 2 · 451 2 · 500 2 · 343 2 · 355 2 · 492 2 · 180 2 · 617 2 · 687	2 · 863 2 · 722 2 · 592 2 · 495 2 · 445 ———————————————————————————————————	2 *840 2 *701 2 *548 2 *478 2 *479 2 *427 2 *454 2 *292 2 *378 2 *486 2 *197 2 *617 2 *651	2 : 667 2 : 820 2 : 667 2 : 535 2 : 462 2 : 461 2 : 423 2 : 326 2 : 448 2 : 253 2 : 396 2 : 474 2 : 236 2 : 614 2 : 608 2 : 634	2 · 813 2 · 684 2 · 501 2 · 455 2 · 449 2 · 406 ————————————————————————————————————	2 · 807 2 · 678 2 · 474 2 · 447 2 · 437 2 · 402 
	28 29 30	2.535 2.648 2.567	2 563 2 553 2 650 2 572	2.552 2.563 2.656 2.566	2.543 2.580 2.654 2.554	2:535 2:594 2:651 2:549	2.525 2.602 2.641 2.528	2.498 2.582 2.637 2.509	2.488 2.586 2.620 2.484	2.469 2.590 2.609 2.467	2:444 2:584 2:598 2:455	2.422 2.587 2.590 2.430	2.424 2.589 2.580 2.404
lourly I	Means	2.5753	2.5793	2.2812	2:5785	2.5745	2.5654	2.5530	2.5403	2.5282	2.5179	2.2100	2.5099

			Ba	rometer at 3	BARON $2^{\circ} = 27 \text{ E}$	TETRIC P.	RESSURE.	nbers in the	Table.			
12	13	14	15	16	17	18	19	20	21	22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
In. 2 · 545 2 · 444 2 · 370 2 · 278 2 · 278 2 · 380	In. 2:545 2:446 2:376 2:270 2:308 2:368	In. 2.545 2.446 2.394 2.242 2.395 2.377	In. 2 '562 2 '453 2 '414 2 '248 2 '330 2 '395	In. 2.568 2.445 2.425 2.230 2.390 2.409	In. 2:535 2:438 2:425 2:216 2:377 2:426	In. 2 · 531 2 · 427 2 · 428 2 · 210 2 · 386	In. 2 · 510 2 · 405 2 · 440 2 · 206 2 · 386 —	In. 2:508 2:419 2:455 2:207 2:368	In. 2:498 2:420 2:462 2:230 2:361	In. 2:470 2:430 2:458 2:250 2:385	In. 2 · 479 2 · 440 2 · 441 2 · 291 2 · 409	In. 2:5723 2:4531 2:4212 2:3297 2:3246 2:4424
2:496 2:489 2:392 2:324 2:445 2:297	2.481 2.454 2.392 2.334 2.452 2.367	2.506 2.486 2.376 2.344 2.452 2.405	2·514 2·494 2·379 2·343 2·458 2·427	2:506 2:487 2:357 2:343 2:464 2:456	2·497 2·475 2·344 2·338 2·447 2·470	2:533 2:495 2:467 2:338 2:339 2:446	2:542 2:500 2:471 2:326 2:353 2:455	2.544 2.500 2.469 2.305 2.354 2.430	2 550 2 501 2 466 2 296 2 360 2 418	2:557 2:504 2:464 2:268 2:382 2:409	2 · 604 } 2 · 526 2 · 480 2 · 262 2 · 409 2 · 393	2:5402 2:4939 2:3962 2:3139 2:4453
2·583 2·617 2·589 2·602 2·469 2·417	2.585 2.621 2.599 2.596 2.469 2.413	2:565 2:631 2:605 2:588 2:473 2:451	2:547 2:649 2:610 2:586 2:482 2:462	2.545 2.653 2.611 2.585 2.482 2.452	2.537 2.650 2.610 2.608 2.464 2.446	2:834 2:517 2:642 2:628 2:609 2:462	2.838 2.515 2.647 2.625 2.624 2.441	2:840 2:513 2:647 2:621 2:621 2:429	2.846 2.524 2.648 2.639 2.615 2.417	2.857 2.538 2.659 2.648 2.607 2.430	2·847 } 2·548 2·667 2·661 2·596 2·446	2.4350 2.6469 2.6245 2.6376 2.6317 2.5061
2·473 2·389 2·427 2·500 2·678 2·751	2.467 2.379 2.427 2.513 2.694 2.754	2·474 2·353 2·427 2·527 2·706 2·756	2 · 483 2 · 350 2 · 458 2 · 543 2 · 725 2 · 769	2:489 2:325 2:448 2:562 2:737 2:776	2:476 2:298 2:456 2:578 2:757 2:779	2:352 2:480 2:282 2:460 2:580 2:767	2:340 2:483 2:276 2:460 2:597 2:768	2:346 2:467 2:242 2:469 2:604 2:782	2:340 2:479 2:222 2:465 2:612 2:782	2:352 2:489 2:268 2:465 2:622 2:795	2·364 } 2·496 2·248 2·488 2·634 2·792	2.4231 2.4697 2.3930 2.3841 2.5340 2.6965
2·395 2·467 2·602	2·399 2·480 2·604	2·405 2·487 2·602	2·410 2·496 2·620	2.410 2.518 2.614	2.415 2.539 2.624	2.612 2.417 2.521 2.633	2.611 2.417 2.545 2.648	2.613 2.424 2.562 2.652	2.592 2.427 2.572 2.661	2:592 2:362 2:593 2:672	2·591 2·351 2·616 2·689	2.7448 2.4387 2.4592 2.6361
2.4703	2.4738	2.4821	2.4891	2.4921	2.4898	2.4961	2 4974	2.4960	2.4964	2.2010	2 5099	2.4961
2.633 2.376 2.390	2.627 2.376 2.388	2.631 2.376 2.412	2.644 2.370 2.417	2.633 2.371 2.419	2.634 2.381 2.419	2.638 2.381	2:644 2:370	2.633 2.370	2.635 2.370	2.628 2.378	2.634 2.377	2.6588 2.4456
2·439 2·707 2·747 2·697 2·499 2·442	2:439 2:713 2:757 2:699 2:501 2:454	2.454 2.723 2.761 2.701 2.494 2.460	2·462 2·738 2·735 2·710 2·495 2·468	2:468 2:732 2:737 2:714 2:495 2:474	2.468 2.731 2.760 2.705 2.497 2.512	2:358 2:490 2:729 2:753 2:689 2:498	2·370 2·525 2·739 2·756 2·666 2·500	2·392 2·525 2·749 2·763 2·667 2·501	2:405 2:532 2:756 2:771 2:667 2:478	2·413 2·545 2·756 2·776 2·655 2·478	2.436 } 2.574 2.770 2.788 2.650 2.495	2:4038 2:4678 2:6856 2:7598 2:7224 2:5404 2:5641
2·809 2·678 2·452 2·456 2·428 2·397	2·781 2·680 2·454 2·468 2·452 2·390	2·773 2·660 2·467 2·479 2·473 2·396	2.784 2.662 2.459 2.487 2.495 2.390	2·793 2·667 2·496 2·490 2·506 2·396	2·798 2·667 2·496 2·494 2·517 2·382	2.795 2.791 2.652 2.485 2.497 2.506	2·829 2·771 2·651 2·483 2·518 2·498	2 · 827 2 · 768 2 · 629 2 · 480 2 · 506 2 · 488	2:843 2:758 2:622 2:478 2:510 2:482	2 · 860 2 · 759 2 · 630 2 · 483 2 · 523 2 · 483	2·891 } 2·775 2·633 2·507 2·550 2·494 — }	2 8261 2 6979 2 5387 2 4988 2 4974 2 4420
2'437 2'216 2'423 2'463 2'345 2'643	2.436 2.232 2.457 2.478 2.377 2.661	2·428 2·263 2·460 2·470 2·398 2·662	2:434 2:302 2:470 2:474 2:438 2:669	2·430 2·255 2·463 2·461 2·448 2·669	2'414 2'269 2'442 2'451 2'465 <b>2</b> '661	2:439 2:408 2:266 2:449 2:442 2:475	2:458 2:410 2:270 2:445 2:433 2:493	2·459 2·412 2·259 2·475 2·409 2·505	2:464 2:407 2:252 2:482 2:381 2:510	2:464 2:404 2:235 2:496 2:369 2:525	2·486 2·405 2·267 2·489 2·336 2·536	2 4420 2 4530 2 2990 2 4066 2 4605 2 3437 2 6345
2.586 2.428 2.597 2.580 2.406	2.572 2.463 2.598 2.580 2.424	2·575 2·471 2·602 2·572 2·411	2.607 2.478 2.611 2.570 2.419	2.612 2.492 2.616 2.571 2.414	2.610 2.487 2.621 2.574 2.428	2.649 2.600 2.490 2.628 2.565 2.428	2.653 2.583 2.482 2.618 2.561 2.428	2.661 2.589 2.491 2.618 2.560 2.432	2.654 2.584 2.491 2.621 2.550 2.460	2.666 2.569 2.499 2.627 2.542 2.475	2.673 } 2.564 2.533 2.633 2.535 2.519	2 · 6252 2 · 4933 2 · 5973 2 · 5956 2 · 4720
2.5105	2.5176	2.5220	2.5303	2.5316	2 5340	2.5423	2.5444	2.5449	2.5447	2.5476	2.5596	2:5435

		<del></del>			S'	FANDARI	THERM(	OMETER.			· · · · · · · · · · · · · · · · · · ·		
Göttir	f Mean }	0	1	2	3	4	5	6	7	8	9.	10	11
Tin Hours o	f Mean	18	19	20	21	22	23	0	1	2	3	4	5
Tin	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	28.5 36.4 29.9	29·2 36·5 30·3	29.6 37.2 30.3	30°8 37°6 31°1	31.6 39.0 31.8	32°9 37°9 33°9	32·4 36·7 35·0	32.7 36.7 35.5	32·2 36·3 35·9	32°4 35°9 35°9	33·2 35·5 35·6	34·2 35·4 35·3
	4 5 6 7 8 9	28°4 26°5 34°7 33°5 28°4 29°2	28°3 30°1 34°7 33°9 28°0 30°1	27.6 30.6 35.0 34.1 27.4 30.3	29.9 32.0 35.9 34.1 27.5 30.6	32.7 32.9 36.0 33.9 27.9 30.6	32.7 33.6 36.5 34.1 27.5 30.7	34·3 34·4 36·7 33·9 27·2 30·8	35.7 34.4 36.6 33.8 28.6 32.0	35.7 34.4 36.2 34.1 29.1 31.8	35·1 34·5 36·5 33·9 29·1 31·2	34.8 32.8 35.6 33.5 30.2 29.9	33 · 1 32 · 7 35 · 0 33 · 1 30 · 7 29 · 5
ANUARY.	11 12 13 14 15 16 17	25.0 9.5 28.4 18.4 30.6 11.6	25.0 9.7 28.1 24.5 31.0 10.7	24.9 12.0 27.8 28.7 31.1 9.7	24.6 13.0 28.7 32.0 31.4 8.8	24.6 17.8 29.9 34.1 31.8 10.1	26°1 20°6 32°0 35°4 31°8 10°5	26.7 23.5 33.3 37.3 29.9 10.5	27·1 24·1 33·9 29·0 28·4 10·0	26.7 24.3 34.8 40.1 28.0 10.9	25·3 24·0 35·0 40·5 26·7 12·5	24.4 23.4 34.6 38.4 26.1 10.3	23.7 21.3 32.5 38.8 25.4 9.2
J	18 19 20 21 22 23 24 25	7:1 9:5 21:9 - 0:7 6:6 20:2	6.9 9.5 22.1 - 0.2 6.0 19.2	6.9 9.7 22.3 - 0.8 4.9 20.8	8:4 10:9 22:0 2:7 9:5 22:9	11.6 14.5 21.7 6.4 13.9 26.3	13.4 15.2 22.7 9.5 17.4 29.0	14.8 17.3 22.7 12.4 19.2 31.0	14.8 20.0 23.2 16.6 20.2 31.4	15.2 21.6 24.6 18.8 20.8 32.9	15.8 22.0 25.1 18.9 21.9 34.9	16:2 22:0 25:6 18:8 22:3 34:7	14.3 22.1 25.5 17.1 20.8 33.5
$\mathbf{Feb}$ .	25 26 27 28 29 30 31	33.9 18.2 31.2 33.5 37.2 18.4	34·3 15·8 31·9 34·0 37·4 15·8	34.7 15.0 32.3 34.4 36.3 14.1	35.4 17.0 32.7 34.4 37.8 12.2	38.8 18.5 33.7 35.4 39.4 12.0	38.6 20.1 35.8 36.2 38.8 14.1	37.0 21.9 36.8 37.3 39.5 16.7	37.5 22.7 36.8 36.8 41.0 16.7	37.5 23.2 37.9 35.8 41.2 19.5	37.5 23.7 37.3 35.2 40.8 19.9	36.6 22.7 35.9 35.6 40.6 19.7	35.4 22.3 35.2 35.6 40.4 19.0
Hourly	Means	23.55	23.81	23.96	24.96	26.55	27.67	28.50	29.12	29.61	29.68	29.22	<b>2</b> 8.56
	2 3 4 5 6 7 8	19°2 29°7 28°8 34°9 24°0 25°5	21.5 30.7 29.0 36.1 24.4 24.8	21.9 32.7 29.2 35.5 27.1 25.0	23.7 36.2 30.6 38.6 29.0 34.3	26.0 36.8 31.8 39.4 34.1 37.5	28.1 38.1 33.3 38.6 36.2 39.7	29°3 39°4 34°1 38°4 38°6 39°5	29.9 39.8 35.2 39.5 38.3 39.4	30.2 41.3 36.0 38.6 38.9 38.4	30.2 40.8 36.0 37.2 39.0 37.4	29.9 40.2 35.2 35.8 38.6 37.8	29.7 40.0 34.5 35.1 36.5 37.0
FEBRUARY.	9 10 11 12 13 14 15	17:3 3:6 21:3 - 2:8 24:7 15:6	13·2 4·5 22·9 - 5·2 25·5 18·6	12:1 4:9 19:8 - 5:4 27:0 21:1	11.9 9.3 18.6 5.9 29.1 23.8	12.0 13.4 19.2 10.2 31.4 27.2	12.2 15.6 18.4 13.0 32.2 32.2	13:3 21:6 18:4 16:2 33:1 34:0	13.9 21.9 18.6 18.9 33.7 34.4	15.4 22.3 19.2 21.2 34.7 34.5	15.0 24.8 18.8 22.2 35.2 33.7	15°2 24°8 18°2 20°9 35°0 32°4	13.7 24.7 17.5 20.5 35.2 32.0
FEBR	16 17 18 19 20 21 22	21 · 4 18 · 4 10 · 7 6 · 4 24 · 5 25 · 5	21 · 3 19 · 2 11 · 3 11 · 8 24 · 7 26 · 1	21:5 20:2 15:6 11:6 25:1 27:1	21.7 23.6 16.6 19.6 25.9 28.8	25.5 25.9 23.6 27.2 26.3 30.6	26.5 28.6 24.2 27.7 26.5 31.0	26.1 30.1 25.3 28.3 26.3 31.6	26.9 29.7 26.1 29.2 26.8 30.8	26.3 30.1 26.9 28.9 28.1 29.0	26'1 31'0 27'6 26'9 30'3 29'9	25.7 29.7 26.7 28.2 29.7 28.6	24·4 27·4 25·5 27·4 28·0 26·1
Marc	23 24 25 26 27 28	12.4 11.6 0.3 -11.2 -12.1 11.3	15.4 10.2 1.8 - 9.8 - 3.4 11.8	16.6 12.6 3.6 - 5.6 - 9.5 12.4	21·1 15·6 7·8 0·8 1·4 14·9	23.8 17.3 10.9 1.9 7.0 16.7	24.7 18.0 14.1 3.9 11.3 18.3	25:4 22:7 16:6 5:8 14:0 18:5	24.7 23.8 16.4 7.2 15.2 17.7	25.4 20.4 17.2 8.4 15.8 18.1	25°1 20°1 16°5 7°4 15°0 19°4	23.6 18.8 15.5 6.0 14.5 19.2	20.0 16.4 14.0 4.9 13.0 18.5
Hourly	Means	15.04	16.10	16.75	20:37	23.12	24.68	26.11	26.58	26.05	26.90	26.26	25.08

					STANDA	RD THER	мометен	ł.				
12	13	14	15	16	17	18	19	20	21	22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
34.6 35.4	35.0 34.4 34.5	35·4 33·1 34·2	35·2 32·8 33·3	35.6 32.5 32.4	35.8 32.4	35.6 29.6	35·4 29·2	35°4 29°0	35.8 29.0	36·2 28·8	37·3 29·5	33.63 34.03
34.9  30.8 33.5 34.7 32.3	28.4 34.7 34.7 32.0	28·2 34·1 35·2 30·8	28.8 33.7 35.2 30.1	29.0 33.1 34.9 29.8	31.6 	32.7 28.0 33.5 35.2 29.5	33.8 25.9 33.9 36.1 29.2	33.7 25.1 33.9 35.4 29.0	31 · 9 24 · 4 34 · 7 35 · 1 29 · 1	31.6 23.6 34.7 34.1 29.0	26.7 } 26.3 33.7 33.8 28.5	32'99 29'79 33'15 35'37 31'88
31'0 29'5	30.0	30.3	29°2 30°4	28.7 31.2	28.6 31.0	28.6	28.6	28.4	29.2	29.9	$\frac{29.3}{25.3}$	28.89 29.48
22.6 20.2 31.3 40.0 24.8 8.0	22.0 16.3 26.3 40.0 24.3 8.8	21.1 22.2 25.0 39.5 23.3 8.0	19.9 22.8 29.5 37.2 22.3 7.4	18'3 22'5 28'6 38'2 21'5 6'0	16.4 22.7 28.4 37.1 20.0 4.3	27.4 14.8 24.2 25.9 36.6 19.0	14·3 24·4 20·4 35·8 17·5	26 6 13.7 25.9 22.1 34.3 15.8	13·3 26·9 20·0 33·7 15·4	12.0 27.4 19.4 32.4 13.4	10.5 28.5 18.8 30.6 11.6	20'96 21'13 28'11 35'11 24'21 9'18
12'1 21'9 24'2 15'4 20'0	11.6 22.9 23.0 14.5 18.8	10°1 23°3 20°6 13°7 18°2	8'9 25'0 17'1 13'2 16'5	8.0 24.7 13.5 13.0 16.0	7.0 24.7 11.6 12.6 14.9	10.5 5.7 21.8 8.8 9.7 13.3	9.9 5.9 21.9 6.0 12.1 11.8	9.0 7.2 21.9 3.3 7.7 11.4	8.4 7.3 22.1 1.2 6.5 15.9	7.9 7.5 22.3 1.0 4.4 16.4	7·4 } 8·2 21·9 - 0·4 2·9 17·3	10.20 19.53 17.05 10.22 15.58
32.7  33.9 22.7 34.9 36.4 39.9	31'0 	31.4 31.8 27.8 34.7 36.4 40.9	32 · 2 31 · 1 26 · 9 34 · 0 37 · 1 40 · 2	32.0 30.6 28.0 33.7 36.3 38.2	33.5 29.7 29.2 33.3 36.2 36.9	32.4 28.4 29.5 33.1 36.4 36.0	31.8 28.2 28.8 31.7 37.1 33.0	31.6 26.9 29.0 31.9 36.1 28.8	31.6 23.4 29.2 32.2 36.7 25.2	33.1 21.3 29.0 32.4 36.1 22.3	33·5 } 19·2 30·4 33·1 36·7 19·6	30°15 32°28 24°04 34°04 35°92 36°30
17.5	15.3	14.2	13.7 —		10.2	16.9	17.6	15.4	16.0	16.0	17.7}	15.85
27.97	27.31	27.15	26.80	26.22	25.72	24.93	24.72	24.02	23.71	23.27	22.91	26.56
29.5 38.6 35.2 34.6 34.9 37.1 11.3 25.0	29.9 38.0 35.6 34.1 34.5 32.7 - 9.9 25.7	29.9 36.8 36.4 32.4 34.2 29.0 - 8.4 26.5	31.4 35.4 37.2 32.1 33.9 23.2 7.4 25.0	32.0 35.2 39.2 31.4 34.2 20.2 - 7.4 25.8	31.8 33.6 39.5 31.2 31.2 18.2 ————————————————————————————————————	30.6 32.4 38.7 30.7 30.3 — 21.3 4.9 26.4	30·3 31·9 37·4 28·6 28·2 — 21·1 4·7 25·5	30.8 31.4 37.2 28.2 27.6 — 20.8 4.7 22.7	31.0 30.1 36.5 27.8 26.5 — 20.6 3.9 22.3	31 · 2 29 · 7 36 · 2 26 · 9 26 · 5 — 20 · 5 3 · 6 21 · 6	29·9 29·5 35·2 25·3 25·3 — 19·9 3·5 21·5	10.08 20.26
17.3 18.8 30.3 31.8	16.4 18.5 31.0 31.0	14.8 17.8 32.0 29.7	14.1 17.7 30.6 29.5	13.4 18.0 29.8 29.7	12.6 19.6 25.0 28.0	11.3 19.7 19.8 — 18.0	11.2 21.5 16.0 — 19.6	11°1 22°5 14°3 — 20°4	$ \begin{array}{c} 3 & 5 \\ 23 & 4 \\ 13 & 0 \\ \\ 21 & 1 \end{array} $	- 1.4 23.8 13.5 - 21.4	-1.6 $24.4$ $15.3$ $ 21.3$	14.73 15.89 26.97 26.70
22.8 25.4 17.9 28.1 27.1 25.0	22.9 24.3 13.2 28.7 25.9 25.0	22.9 23.7 10.7 25.0 23.6 23.4	21.9 22.9 10.7 25.5 25.5 23.2	21.5 22.5 10.1 25.5 26.3 20.9	20.4 21.3 9.9 25.5 26.3 20.0	18.8 21.1 8.4 25.7 24.6	18·4 19·4 6·4 25·1 25·7	20.0 18.2 7.3 24.2 25.7	20°2 10°1 6°0 24°0 26°2	20.6 6.1 5.7 24.0 26.7	20.2 4.1 5.5 24.3 26.6  13.1}	22.67 22.21 15.50 24.12 26.35 24.01
19.8 14.2 13.0 2.7 11.8	18:8 10:7 10:9 - 0:1 11:1	$ \begin{array}{c c}  & - \\  & 17.2 \\  & 8.9 \\  & 8.2 \\  & - 0.2 \\  & 11.1 \end{array} $	16.2 7.2 5.5 - 8.9 11.0	17.0 5.3 5.9 -11.0 10.7	15.4 3.1 5.1 -12.8 10.5	17.1 15.4 4.3 0.2 -14.5 10.7	17:3 14:5 6:4 0:0 -15:3 11:0	16.4 14.5 3.9 - 1.0 -15.8 11.1	15.7 12.4 2.3 0.0 -16.2 11.0	14.1 11.6 0.8 - 1.6 -12.2 11.8	11.6 0.4 - 9.8 -10.4 11.6	18:44 11:46 7:11 - 3:96 8:98
17.8	17°3	16.6	16.4	— — 16.0	15°1 —	16.4	15.6	14.8	14.5	13.9	13.4}	.[[
23.75	22.75	21 63	20.61	19.46	19.33	18.02	19.23	16.13	16.08	15.62	14.18	20.86

					S	TANDAR	D THERM	OMETER.					
Hours o Götti Tin	of Mean ingen ne.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Toro Tie		18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \end{pmatrix}$	13·2 9·5 14·0 32·0 28·0 10·3	14·3 10·3 20·1 31·0 28·2 13·7	17.5 14.8 26.3 33.5 29.6 17.5	20.8 23.4 32.3 35.3 31.4 24.0	23.4 28.0 34.1 38.2 29.7 27.4	24·4 29·3 35·7 39·1 29·7 28·6	24·2 30·0 37·2 37·8 31·0 29·5	25.6 29.9 38.2 38.0 29.7 28.8	26·1 30·2 38·1 39·8 30·3 29·0	26.6 30.3 37.4 43.6 29.7 30.6	26.7 30.3 37.3 39.8 29.7 30.7	25.7 29.0 38.2 43.6 28.3 30.3
	9 10 11 12 13 14	33.7 28.7 25.9 33.6 39.0 35.4	33.7 30.3 24.9 36.3 39.2 36.2	34.7 35.3 32.3 37.8 38.4 38.0	35 · 9 38 · 3 37 · 8 40 · 2 39 · 8 38 · 9	37.7 39.3 39.7 42.4 40.4 39.5	37·2 39·0 39·2 43·1 41·3 39·3	37·3 39·5 39·2 42·6 42·0 39·3	37·1 39·4 39·7 43·8 42·4 39·5	36·2 39·8 39·5 41·1 43·3 38·2	36.0 40.2 39.9 39.8 43.5 37.9	36·2 40·1 40·4 39·7 45·0 37·4	35.6 39.2 40.0 39.8 43.1 34.0
MARCH	15 16 17 18 19 20 21	29.9 25.9 22.5 35.0 27.4 33.1	29.6 26.1 24.9 36.8 30.1 33.1	29.7 26.9 26.7 38.2 36.8 33.2	28.8 27.8 31.4 42.8 43.3 33.1	29°2 28°8 36°0 44°7 40°9 33°5	29.6 29.0 38.2 46.2 42.8 34.2	29.1 30.8 38.2 47.5 44.5 34.9	29.9 33.1 39.2 49.2 45.4 36.3	31.2 34.7 39.5 46.4 47.6 37.2	31.6 36.0 39.7 45.0 46.4 38.0	32.8 35.4 39.4 40.8 44.9 38.6	33°3 33°9 37°5 40°7 42°1 38°6
	22 23 24 25 26 27 28 29	34·1 38·6 38·8 35·2 35·7 34·5	35.6 39.2 39.2 35.8 37.0 34.7	37.7 39.5 39.4 37.0 38.1 36.4	39.6 40.4 39.4 41.6 38.6 37.4	40°8 40°4 40°3 42°4 42°5 39°4	42°1 39°5 40°8 44°5 42°4 41°3	42.6 39.5 41.0 44.1 43.0 40.0	43°3 39°5 42°2 45°1 42°5 39°5	42.2 40.0 40.7 46.7 44.4 39.8	40.8 41.2 40.8 43.8 41.5 38.2	41.0 39.5 39.9 40.0 40.4 37.6	40.6 40.0 39.4 38.4 38.0 36.6
	$\begin{bmatrix} 30 \\ 31 \end{bmatrix}$	31.6 28.4	33.7 32.9	34°4 35°6	35.6 37.4	37·4 39·1	38.0 42.4	39.4 40.6	40°2 40°4	39.5 41.3	39.4 41.9	37.8 40.4	38·2 40·3
Hourly	y Means	29.00	30.27	32.21	35.50	36.74	37.57	37.88	38.38	38.55	38.45	37.76	37:09
	1 2 3 4 5 6	29.2 29.6 31.2 34.9 - 42.1	31.8 33.5 35.6 38.6 41.5	35°2 38°2 40°3 40°2 — 42°1	38.9 39.0 40.7 42.6 — 43.6	40°3 39°2 41°9 43°8 — 48°2	41.5 40.7 43.0 44.9 — 50.7	41.7 41.7 44.2 45.8 	41.5 41.2 44.7 45.8 — 52.5	42.2 41.7 45.4 47.8 ————————————————————————————————————	41'9 42'3 45'4 48'8 — 50'5	43.0 40.6 45.9 49.6 — 51.0	41.0 40.4 44.0 49.3 —
	7 8 9 10 <sup>a</sup>	44.0 33.9 24.5 —	45°9 34°9 33°5 —	49.0 36.4 37.6	51.7 36.9 41.8	55 1 37 9 42 7	55.1 39.8 44.3 —	54.4 39.4 46.2	54.2 41.3 48.0	53 · 2 41 · 9 48 · 6	54.7 42.4 47.8	55.7 42.4 43.2	52.7 42.2 39.8
APRIL.	11 12 13 14 15 16 17 18 19	38.8 	38.7 27.5 34.3 30.1 33.5 41.9 52.8	41.3 28.0 38.6 30.3 38.2 45.4 51.4	49.6 29.2 41.5 31.8 40.6 51.2 53.3	52.2 32.7 43.5 34.1 43.4 51.8 49.3	55.0 33.9 44.4 35.8 43.4 54.1 51.4	55.8 35.6 43.2 38.0 43.7 54.5 50.0	53·4 36·7 43·2 39·0 45·8 55·6 55·3	49.0 38.8 42.6 40.6 46.6 54.9 53.8	45.6 38.8 44.7 40.4 45.7 55.9 56.7	43.9 	41.2 
	20 21 22 23 24 25 26	31 · 2 44 · 5 43 · 0 49 · 2 50 · 8 43 · 8	39.4 53.2 44.4 50.9 51.3 44.2	44.9 58.5 44.7 50.8 51.3 43.4	46.8 62.3 45.2 47.4 51.9 41.3	50'4 64'6 45'8 50'3 53'2 41'3	54.0 67.9 46.4 51.8 53.8 42.6	56.6 70.8 48.0 53.8 54.6 42.3	59.0 70.8 50.5 54.5 56.1 44.4	62·2 79·1 50·6 55·3 54·5 46·2	61.5 74.6 50.2 55.0 55.2 45.0	60.9 71.4 51.6 54.8 55.8 44.6	58.8 62.9 48.4 55.3 56.0 44.7
	27 28 29 30	42.9 46.6 46.2 48.5	49.6 53.6 46.0 49.4	52.8 53.4 45.8 51.2	56.6 54.0 48.1 48.8	57.2 53.6 49.6 49.0	57.0 55.6 49.2 52.1	56.4 55.3 50.5 54.2	55.9 55.7 49.0 56.1	54.7 57.2 48.0 57.7	56.2 59.2 48.2 54.8	57.8 59.9 47.6 55.3	58.0 61.0 48.7 54.2
ourly	Means	38.23	41.44	43.56	45.39	46.84	48:34	49°11	50.01	50.24	50.46	50.17	48.90

			and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s		<del> </del>	STANDA	RD THER	MOMETE	₹.				
-	12	13	14	15	16	17	18	19	20	21	22	23	Daily and
-	6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
	22.2 28.0 39.0 41.0 24.6 30.1	16°1 23°0 38°4 39°5 20°8 30°1	15.6 18.6 37.5 36.6 17.1 30.3	12.9 16.9 36.9 32.2 15.0 30.6	12.5 17.1 36.8 32.2 13.2 30.1	9.2 16.6 35.4 29.6 13.1 29.5	8.6 21.5 31.8 26.8 10.5	7.6 21.1 34.2 27.6 10.2	8·4 22·1 33·1 27·9 9·2	10°1 19°8 33°7 29°2 8°4	8·2 16·9 34·9 28·7 9·2	10°3 15°5 34°1 28°4 8°6 ———————————————————————————————————	17.08 22.17 33.94 34.64 21.47 28.74
	34.5 36.1 38.0 39.8 41.0 33.5	31.4 30.6 35.6 39.6 39.7 31.6	29.2 28.2 34.7 38.2 37.5 31.2	31.6 28.0 33.4 39.2 37.2 31.2	32.7 27.1 33.5 40.0 36.9 30.8	32.9 26.9 33.3 40.1 36.9 30.8	35.7 33.7 25.5 32.2 39.9 37.0	35.7 34.1 26.1 31.6 39.8 36.4	35.1 33.7 26.9 31.0 40.2 35.6	34.5 32.2 26.9 31.0 40.3 35.6	33.9 29.7 25.7 31.6 38.6 35.2 — 30.4	25:3 31:8 38:4 36:2 	34·22 32·60 34·84 39·76 39·25 34·60
	31.4 32.2 35.0 39.0 40.4 37.2	29.0 28.4 33.6 37.6 40.0 34.5	27.8 27.4 32.4 35.4 42.3 31.4	25.7 25.6 33.5 34.3 37.8 27.6	24.8 24.6 33.9 31.0 38.2 26.8	24·4 23·3 33·3 30·1 38·2 27·8	31.9 25.9 21.7 32.9 29.2 36.6	32.4 25.6 21.5 34.6 30.1 35.8	31.6 24.9 21.6 34.6 30.1 35.8	30.8 24.2 21.9 34.1 28.4 35.4	23.8 21.8 34.6 28.4 34.1	30 6 7 24 · 9 20 · 4 35 · 2 29 · 0 33 · 2 	28 21 27 45 34 20 37 33 39 17 33 97
		39.1 40.7 39.3 37.0 37.6 34.7	38.4 41.6 39.6 37.0 38.2 34.7	38.3 41.3 39.3 36.4 37.8 35.0	38.4 41.7 38.6 36.2 37.0 34.5	39.0 40.4 38.4 36.6 37.2 34.1	34°3 39°3 39°8 37°8 36°4 36°8	34·3 39·5 38·7 36·8 36·2 35·9	35.2 39.5 38.4 36.4 35.8 35.5	34.7 39.0 38.3 35.8 36.0 34.5 — 30.2	33.9 38.5 38.4 35.4 35.4 34.5 	33.7 } 38.6 38.4 35.0 36.0 34.8 — 30.3	39 · 52 39 · 79 38 · 90 38 · 82 38 · 43 35 · 19
	37.2 41.2	35.6 36.0	33.3 32.3	31·2 33·5	29.6 31.9	29.0 30.8	29.2 31.2 29.8	30.2 32.3 27.1	30.6 31.8 26.9	31.8	30.8	29·7 29·2	34:55 35:02
	35.89	33.83	32.70	31.63	31.12	30.65	30.62	30.29	30.46	30.21	29.69	29.65	33.61
	39.0 37.8 41.5 45.8  49.1 51.5 40.2 38.4	33·3 33·3 35·6 45·0 	31.0 30.3 34.1 45.2 48.0 50.2 36.0 36.8	30°1 29°5 32°2 43°0 — 46°3 47°6 32°9 36°6	28 · 8 29 · 5 34 · 1 41 · 9 	29.5 29.7 35.2 40.3 	29.5 30.1 35.7 46.9 45.4 44.2 28.6 42.4	28.8 30.6 34.5 — 46.5 45.0 42.2 27.5 — 41.7	26 · 9 29 · 9 32 · 9 	26:3 30:1 30:3 	25.5 29.7 32.0 45.5 43.2 36.6 26.1 40.0	27.6 28.8 32.2 	34·35 34·89 38·03 44·53 46·76 48·06 34·95 40·11
	39.1 35.6 39.8 39.5 39.7 56.1 56.4 	38.0 33.5 37.6 34.8 39.8 51.9 53.4	37.5 — 29.7 36.4 31.0 39.7 49.3 50.0 — 54.9	36.4 	35.8 	34.9 	26.9 28.6 34.6 27.1 39.5 40.8 - 32.5 47.2	26.9 28.3 34.1 	26.8 27.4 32.1 26.6 — 42.1 — 31.6 45.5 50.0	26.5 28.1 31.4 26.0 38.8 41.0 — 31.0 44.9 44.8	26.5 28.4 30.9 26.0 36.0 46.1 	$ \begin{array}{c}$	39.44 31.48 37.77 32.81 39.80 48.40 46.94 51.03 57.50
	57.0 46.5 54.8 54.5 44.7 	55 5 44 6 54 1 48 4 44 0 	52.7 43.6 53.1 46.0 43.0 - 45.4 50.7 48.2 51.2	51.6 44.0 53.2 46.2 42.8 	50.9 43.4 54.5 47.6 44.7  43.8 47.8 47.2 50.8	51.0 44.4 55.3 49.2 44.6 	50°3 46°0 55°8 49°4 39°8 43°2 44°8 46°8 50°4	50.0 46.2 55.3 50.1 	50 0 46 3 54 0 50 1 40 7 39 7 47 8 46 6 51 0	44 8 46 0 50 6 49 4 — 40 4 39 2 48 6 47 2 50 9	47 · 2 50 · 4 49 · 4 — 39 · 5 37 · 2 48 · 4 47 · 2 52 · 3	47.8 50.8 44.7 	46°45 52°96 51°23
Name	47.28	44.83	42.96	41.82	41:30	40.80	40.26	40.69	39.45	38.61	38.21	38*26	44.09

						STANDAF	D THERM	MOMETER	•				
Hours o Götti Tin	of Mean ingen ne.	О	1	2	3	4	5	6	7	8	9	10	11
Hours of Tord Tim		18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1\\2\\3 \end{pmatrix}$	53°5 52°7	54·2 54·1	55°0 57°1	55°0 59°3	56°0 60°9	56.6 62.1	55°7 59°2	55.7 58.6	56.8 59.0	55°3 58°0	53°8 58°0	53°2 58°0
	5 6 7 8 9	42.4 45.8 54.8 49.0 51.3 54.5	53.0 51.4 55.9 53.2 55.2 55.1	57.6 58.0 56.3 54.5 56.9 56.0	59.8 59.1 56.6 55.1 59.5 55.1	62.7 55.5 53.9 54.7 60.7 55.1	63.8 54.5 52.9 56.4 61.7 54.5	65.7 58.8 52.3 57.1 61.3 55.1	64.7 62.1 52.3 57.8 62.1 55.8	65.0 62.9 53.6 55.3 61.7 55.7	64.9 64.7 55.7 56.4 59.7 55.8	66.9 63.3 55.8 56.2 58.8 56.3	66.5 59.5 56.0 56.2 57.8 57.0
MAY.	11 12 13 14 15 16	35 · 8 44 · 2 43 · 2 54 · 2 50 · 6 47 · 6	37.0 47.1 46.2 58.0 50.8 49.2	37.0 50.0 47.0 60.0 50.0 54.2	36.9 53.0 54.3 64.2 51.7 58.8	38.0 55.3 57.7 65.5 54.0 59.8	40.0 57.4 60.5 64.7 54.4 61.4	42·2 58·8 63·0 65·1 57·9 60·4	42.6 58.8 64.2 65.3 59.9 61.5	44.6 60.5 67.5 67.1 57.4 61.3	46.2 61.3 67.7 64.2 59.4 60.5	47.2 60.6 68.3 69.3 62.4 61.9	47:4 63:1 69:4 66:9 59:7 60:1
	18 19 20 21 22 23 24	54·1 39·0 44·1 42·8 42·4 50·1	53.9 42.5 48.7 44.7 47.4 54.3	53·1 44·9 53·2 45·4 49·0 56·4	54.7 47.2 57.2 45.8 53.8 57.4	55·3 48·7 61·3 46·6 54·9 61·3	55.8 50.8 64.0 46.8 57.6 61.5	55.5 50.4 64.6 47.4 56.6 65.1	54.2 51.6 65.1 48.2 56.6 69.6	53·1 54·0 66·5 49·3 57·8 69·8	53·3 55·1 66·1 51·5 56·0 68·1	53.0 55.2 65.7 50.3 55.9 66.4	51.6 53.8 64.9 49.6 53.5 66.1
	25 26 27 28 29 30 31	60.7 64.1 65.7 59.3 57.4 59.6	64.9 65.7 71.8 63.4 62.3 58.2	67.2 70.1 73.4 65.1 66.7 60.9	69·2 71·6 74·6 65·7 69·3 63·1	69°4 71°2 74°2 69°2 70°8 69°6	69.0 71.3 75.1 68.0 69.2 71.2	71:1 73:3 75:6 69:3 70:0 71:8	71.4 76.2 75.8 71.9 70.1 72.8	73.0 74.2 76.7 70.6 70.8 71.4	70.0 73.6 76.0 68.5 69.5 72.3	68:4 72:2 77:6 67:1 68:6 72:1	69°3 72°0 78°1 68°6 64°2 72°1
Hourly	y Means	50.84	53.78	55.96	58.00	59.32	60.05	60.90	61.73	62.14	61.92	61.97	61.33
	1 2 3 4 5 6	59.8 63.5 56.2 60.4 56.1 45.0	64.7 63.3 59.9 64.2 55.7 49.1	66.2 64.7 62.9 63.5 54.4 51.2	64.6 68.1 66.2 64.0 54.2 54.5	61°9 65°9 63°1 65°2 54°3 55°3	65.3 65.9 65.7 64.0 54.2 56.4	69.1 62.5 64.6 67.7 55.1 57.9	69.9 65.0 64.1 69.6 57.2 56.6	69.4 65.7 67.7 66.1 57.8 57.8	69°3 66°1 69°1 60°7 61°1 56°6	72.0 66.2 68.0 61.9 58.0 58.0	73°0 65°7 71°0 61°5 58°6 58°9
	7 8 9 10 11 12 13 14	48.0 51.1 53.4 58.2 52.6 58.4	55°3 55°8 58°2 63°1 54°5 62°5	59°5 62°1 64°7 65°0 56°5 62°3	61.9 66.0 66.2 68.7 59.2 65.5	63°3 68°2 66°5 69°9 61°5 65°3	65.7 68.3 69.4 67.5 59.5 64.7	65.4 66.9 71.6 64.6 59.2 64.6	65.6 67.4 72.2 62.5 59.7 64.6	65·3 68·7 74·1 63·3 60·3 65·5	66.2 69.1 74.7 66.3 61.1 63.9	67.5 69.6 74.9 65.7 62.3 62.7	66.9 69.0 71.8 67.9 62.7 62.0
JUNE	15 16 17 18 19 20 21	60.4 60.7 56.0 61.7 67.5 59.2	63.4 62.9 62.0 62.9 68.7 59.5	67.3 65.7 66.7 64.2 68.4 59.7	71.8 68.1 70.2 69.8 69.1 60.1	74.2 69.0 71.2 73.6 71.2 60.7	73.7 67.5 72.6 74.8 75.0 60.3	74.4 68.7 73.8 75.6 76.9 60.0	74.5 69.1 74.8 77.8 78.9 60.5	74.4 69.1 75.0 72.3 79.5 60.7	74.6 69.4 76.4 70.4 80.3 59.4	74.6 69.3 75.2 76.2 80.5 59.7	77.5 69.8 73.2 75.9 80.5 59.0
	22 23 24 25 26 27 28	54'3 58'4 60'7 66'1 64'2 63'0	55.8 61.9 64.6 68.4 64.9 68.0	58.0 63.6 - 66.4 71.8 67.7 66.9	60°3 67°3 69°3 75°7 68°9 67°7	64'1 71'0 72'6 78'5 73'6 69'1	66.5 72.8 75.0 80.9 76.0 71.6	65.7 73.7 77.8 81.9 75.5 73.2	68°1 74°2 78°2 83°3 75°4 71°4	68°1 74°4 78°9 81°2 78°7 69°3	67.9 75.0 77.3 79.9 80.3 68.6	66.7 75.2 79.3 79.7 75.6 69.3	65:3 74:6 78:7 78:5 76:5 69:6
	29 30	65.1 69.0	64.9 72.1	65 <b>·</b> 9 74 <b>·</b> 2	68.4 75.6	72.0 76.2	73.6 77.8	74·2 77·8	76·2 77·8	75.0 78.3	75·2 78·5	77·1 79·1	76·4 79·9
Hourly.	Means	58.81	61.78	63.83	66.21	67.59	68.64	69:17	69.79	69.87	69.90	70.12	70.17

_						STAND	ARD THE	RMOMETE	R.	<del></del>	<del> </del>	····	
	12	13	14	15	16	17	18	19	20	21	22	23	Daily and
	6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
İ	53°4 58°4	53°0 55°2	52.6 50.6	53°9 48°3	54.5 47.3	52°.5 49°0	5η8	5Î.6	51.4	51.9	52.4	52.4	53.84
	64.0 59.0 54.4	58.8 57.0 50.8	54.4 54.6 48.6	51.0 51.4 47.8	49.8 51.7 46.0	47.0 52.0 44.4	44.5 46.2 52.0 44.4	43.0 44.4 51.2	41.5 42.6 51.0 44.3	40.8 41.7 51.0 42.4	41.1 41.3 50.6 41.4	40.6 } 40.4 53.6 41.0	52°39 54°78 55°45 50°27
	55.8 58.2 57.6	54.4 57.1 57.8	53.0 55.8 58.4	50.2 55.8 58.8	49.0 56.0 58.4	47.8 55.7 58.4	48.7 55.8 —	44'9 49'3 56'0	48 · 2 55 · 1	49°2 54°9	48.0 53.8	49.6 54.2 - 35.6	52.71 57.30 51.86
	47.6 57.0 69.3 61.9	45.9 53.6 61.7 62.1	41°4 46°4 58°8 61°1	41 3 44 6 56 7 61 1	40.4 43.6 62.2 61.3	41.2 41.7 62.9 59.9	42.8 41.0 41.3 59.9 64.6	40.8 41.3 37.9 60.7 63.6	38 4 41 3 37 8 58 2 63 0	36.2 41.7 38.7 56.8 57.0	35.4 41.9 41.2 54.9 56.7	35.63 42.9 42.2 54.3 52.0	41.78 49.84 59.56 62.03
ŧ	57.0	54·3 57·6	52.4 53.3 —	50.2	49°3 49°0 —	48.9	46.3	46.0	46.0  55.1	45°4 — 55°1	44.9  54.9	$\frac{32.0}{45.2}$	52·25 56·13
	50°2 52°2 63°2 49°6 53°2	46.8 51.0 58.1 44.9 52.6	44.2 47.5 54.4 42.1 52.3	42.9 40.2 50.0 39.2 51.8	41.3 38.7 51.2 38.6 51.4	40.8 38.5 47.2 37.6 52.4	40.4 39.7 46.6 37.0 49.6	37.5 39.8 45.8 36.4 48.0	36.2 42.1 42.6 35.6 47.2	36.1 42.1 41.8 34.5 47.4	35.2 42.1 36.3 34.3 47.6	35.6 40.4 37.8 34.9 47.7	47.28 46.19 54.02 43.05 51.78
	63.8  71.4 69.3	61.9 69.6 67.0	59°5 66°3 62°7	58.2 63.9 62.1	58.0 63.1 61.1	58.0 62.0 61.1	50.5 60.7 59.9	50°0 60°4 60°5	48.9 60.5 60.4	52·1 61·5 61·1	55.2 59.1 60.5	$\frac{-}{57.2}$ } $\frac{-}{61.2}$ 60.9	59°14 65°97 66°80
	74.6 71.0 64.4 72.2	74.4 70.8 63.4 67.7	67.7 66.7 61.1 64.6	62.1 61.3 61.1 63.5	62.0 58.8 61.1 64.7	57.5 58.8 61.5 63.5	56.7 58.4 62.0 — 57.6	56°2 56°1 61°2 — 56°2	54.9 53.2 59.4 — 55.3	55.5 50.4 59.9 	55.1 52.3 59.8 — 56.4	55.8 51.8 59.8 — 58.2	67.80 63.18 64.32 64.67
	60.31	57.98	55.02	52.99	52.63	51.90	50.26	49.80	48.93	48.55	48.17	48.45	55.55
	68.4 62.9 69.5 61.5 58.4	65.6 59.0 64.5 61.9 56.6	64.1 63.1 62.0 58.8 54.4	64.6 60.3 62.1 58.8 48.5	63°3 55°8 60°5 59°4 50°1	62.5 53.2 60.1 59.1 49.4	62.2 52.0 59.4 58.8 49.0	61.2 51.2 59.4 59.2 48.0	60°5 51°8 59°4 57°4 45°4	60°5 50°2 58°2 56°6 44°2	59.7 49.2 58.2 56.5 43.4	60.9 49.6 58.8 56.4 42.8	64.95 60.04 62.94 61.38 52.79
	58°1 — 64°4	55.1	48·2 — 53·2	45.6	43.0	41.5	51.5 48.0	50°8 46°2	49·3 44·7	48·3 44·0	44.5 43.8	$\frac{-}{42.8}$ $\left. \begin{array}{c} -42.8 \\ 45.0 \end{array} \right\}$	51°50 56°17
	68.0 69.4 66.3 61.2	62.0 66.9 62.7 58.0	55°8 62°5 57°4 54°9	52°2 59°7 55°3 52°2	50°0 59°9 52°6 52°4	50.4 58.0 54.7 51.8	49.0 56.8 55.3 54.2	47.4 54.5 54.0 57.9	47.4 55.4 53.0 58.0	46.0 55.8 51.4 56.1	46.2 54.5 50.2 54.6	46.4 55.4 49.3 54.1	58.46 63.60 60.20 57.27
	61.4 76.3 68.1 72.4 76.7 76.7	60°3 73°0 64°0 68°9 75°0 69°4	59.4  69.9 61.3 66.5 68.9 68.5	56°3 	54.6 	53°8 	56.4 64.2 57.4 60.5 64.7 62.3	57.0 63.5 56.0 60.1 63.5 60.1	57.0 63.3 53.9 58.7 62.3 59.3	57.0 62.5 51.0 59.7 62.7 59.2	57.2 60.5 50.0 60.1 63.2 59.9	58·4 57·6 50·6 59·9 63·3 59·0	60°45 68°75 62°30 66°49 69°04 69°48
	58·3 — 62·7 74·2	57.1 61.3 71.2	57.2  59.0 67.3	54.7  59.2 65.3	54.4  57.4 63.8	53.0  55.3 61.8	49.6 52.7 61.3	49.7 53.6 60.5	49.6 54.5 60.2	49.7 54.4 57.8	49.6 54.7 57.6	52.4 55.3 58.6	56.42 60.04 66.74
	77.1 74.6 72.6 69.3	73·3 74·2 71·6 66·5	68.1 71.0 70.4 65.3	66.7 69.3 69.4 64.7	64.7 67.1 67.9 63.8	65.6 66.6 68.1 63.3	64.9 66.1 65.9	64.7 64.7 65.7	63.8 64.2 65.1	63.8 64.6 63.8	63.3 64.6 61.9	63.8 63.1 59.3	69°94 72°33 69°96
,    -	75°6 79°3	72.2	69.4 72.2	67.0 71.3	65.2 70.3	65.7 69.6	64.6 65.9 66.9	64.5 67.9 65.1	63.8 66.1 64.4	62.9 64.0 63.0	64°1 63°1 63°4	$ \begin{array}{c}  - \\  64.5 \\  63.9 \\  65.7 \end{array} $	66.88 69.60 72.65
	68.59	65.65	62.65	60.62	59:30	58.65	58'45	57.94	57.25	56 44	55.92	56.03	63.48

					S'.	randard	THERMO	METER.					
ours of I Götting Time	Mean }	0	1	2	3	4	5	6	7	8	9	10	11
ours of I Toron	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	1 2 3 4	69°4 65°3 61°5 58°0	72.8 67.3 66.9 66.6	75.2 68.1 69.8 71.3	75.8 68.2 71.6 72.0	76°4 70°2 72°4 74°5	77°3 72°8 73°0 77°3	78°3 75°5 74°2 77°8	75.6 76.2 73.8 75.4	76.9 74.9 74.6 78.9	75°4 75°3 74°6 75°4	74.8 75.4 73.3 78.2	71°5 75°0 74°2 75°8
	5 6 7 8 9 10 11	63 8 60 5 62 2 62 9 76 9 69 6	67.4 64.0 64.3 69.9 80.4 75.6	69.9 66.1 63.0 76.3 85.2 77.3	73.2 66.9 64.4 78.5 86.1 79.3	75.8 70.2 67.9 77.5 89.9 85.3	77.5 72.8 69.9 73.4 91.9 84.3	78.2 73.8 72.2 69.6 94.0 86.3	79.9 74.0 75.0 67.1 77.3 86.1	81·1 73·4 78·0 73·0 87·0 80·7	80°3 76°5 79°1 74°4 90°5 75°6	80.9 77.8 80.1 78.3 90.9 76.7	81 · 1 77 · 1 77 · 3 79 · 7 85 · 3 79 · 9
	12 13 14 15 16 17 18	57.6 52.2 50.0 54.0 49.6 56.2	59.7 55.8 54.2 59.7 58.8 63.5	63'1 58'6 56'1 61'7 66'1 66'7	67.9 60.5 58.4 63.6 67.3 69.1	69.6 61.5 58.2 64.9 69.5 70.6	71.6 62.9 59.7 62.7 70.6 71.6	74·1 64·9 61·9 65·3 71·0 72·8	75.8 64.0 61.9 66.5 71.0 73.8	75.0 64.9 62.6 69.1 73.0 74.4	76.9 63.9 61.1 68.3 70.0 74.1	77·2 62·9 64·6 69·3 69·3 75·0	74.8 61.5 64.4 70.4 68.1 74.6
	19 20 21 22 23 24 25	66.7 65.5 64.4 60.9 66.9 64.1	69.6 69.2 66.1 66.1 66.9 68.1	69°1 72°0 66°7 70°1 65°1 71°2	72.6 75.0 70.0 73.9 65.6 74.4	75.4 75.9 69.3 78.3 65.7 76.3	75.7 76.2 70.6 76.0 66.3 78.2	76.8 77.9 74.7 78.1 65.8 78.5	77·1 76·7 75·8 79·1 65·6 79·1	77.5 75.9 73.9 80.1 68.1 80.6	78.6 74.5 75.8 78.7 71.4 79.1	78.5 74.6 73.4 81.9 68.9 79.4	76.5 72.8 72.4 80.0 70.9 78.7
	26 27 28 29 30 31	63.5 62.6 69.3 72.4 65.0	68.5 66.1 74.0 75.2 65.5	71.2 70.0 74.8 78.0 66.9	72:3 72:9 77:5 78:9 69:8	73 · 1 75 · 3 78 · 9 80 · 5 72 · 6	72.6 75.5 79.7 79.9 72.8	73·2 74·1 82·7 79·5 75·1	73·1 74·0 80·9 82·9 76·2	74.0 75.4 78.2 84.5 76.9	75.5 76.0 81.3 84.9 77.4	75.0 75.4 82.7 81.5 78.0	74.2 75.2 81.4 82.7 77.3
lourly l	Means	62.63	66.75	69.24	71.32	73.17	73.81	75.05	74.59	75.65	75.73	76.07	75.29
(	1	62.4	66.9	70.5	73.2	74.2	75.2	76.2	76.0	76.7	77.1	76.4	76.0
	2 3 4 5 6 7 8	59 7 65 9 69 4 63 5 65 4 66 5	65.5 70.4 73.6 67.9 68.9 67.9	70.4 73.9 76.7 72.8 72.1 70.0	73.4 77.3 79.7 78.2 75.4 66.4	75.2 78.9 81.9 81.7 76.9 66.1	76.9 81.9 83.7 82.7 79.9 68.3	78.7 83.7 84.1 82.7 81.0 72.7	80'3 84'3 85'9 82'7 82'3 73'9	81'3 84'7 86'1 81'5 82'2 73'8	81.5 84.7 85.9 81.5 81.3 73.8	81'1 85'1 85'3 80'2 80'3 73'2	79.5 85.1 85.3 82.0 79.5 71.2
TST.	9 10 11 12 13 14 15	67.2 55.7 55.7 69.1 64.7 60.0	67.4 60.5 62.5 71.4 66.3 66.4	68.6 64.6 68.7 73.8 71.8 70.2	70.6 68.1 72.8 75.4 75.2 74.4	73.8 70.2 76.4 79.5 77.1 78.0	74.6 70.2 77.0 79.9 77.3 78.0	74.6 71.8 78.4 83.9 77.3 79.9	76.2 72.3 80.1 84.5 76.4 79.7	77.3 72.8 80.9 73.3 77.3 80.5	78:3 73:3 81:3 76:7 78:0 82:3	77.5 73.0 79.7 78.5 79.3 82.1	76.0 73.0 78.7 79.2 77.1 80.7
AUGUST.	16 17 18 19 20 21 22	61.3 50.4 54.6 61.5 57.1 64.4	63.8 53.3 61.7 61.9 62.6 65.1	66.5 55.7 62.5 62.1 67.7 65.3	68.1 59.1 64.0 62.8 70.8 65.3	71.2 62.3 64.4 63.8 71.4 66.3	71 ° 0 63 ° 3 66 ° 7 64 ° 5 72 ° 0 69 ° 1	71.4 63.3 66.3 65.5 72.4 71.0	70.6 64.1 66.6 67.3 71.6 70.7	72.1 64.4 68.7 67.5 72.4 73.5	72.4 65.3 66.1 67.7 74.0 71.3	72.4 65.3 65.6 68.3 73.1 70.3	71.0 65.6 64.7 68.7 72.8 68.3
	23 24 25 26 27 28 29 30	57.0 55.9 56.4 59.9 62.1 61.1	60°3 61°1 64°9 65°4 64°4 65°8	62.9 66.1 69.6 69.3 67.9 70.8	66.4 68.7 71.6 72.4 68.5 73.4	67.9 69.5 71.9 74.8 72.0 75.1	67.5 70.8 71.8 75.8 73.3 76.7	67.3 70.8 74.3 75.2 75.2 76.4	67.7 70.3 74.8 73.9 76.2 73.0	68°1 72°6 74°4 74°4 76°9 66°3	69°3 73°3 73°8 73°8 75°4 66°6	69°2 72°5 73°8 73°4 73°9 67°8	69'3 71'4 71'8 72'8 71'4 68'5
	31	65.4	66.2	72.4	74.1	75.9	77:1	79.3	80.1	80.5	80.8	79.9	78.3
Hourly	Means	61.24	65.10	68.26	70.97	72.95	74.05	75.13	75.83	75:39	75.60	75.28	74.23

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	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
	6	7	8	9	10	11	12	13	14	15	16	17	Means.
	70°2 74°7 72°2 73°8	69.3 71.0 69.3 70.8	66.9 65.1 60.9 69.4	65.7 60.6 58.0 66.7	64.4 59.4 56.6 66.7	65.6 57.4 56.2 64.9	62°9 58°4 54°9	66.5 59.4 55.0	66°1 59°5 56°0	65°3 58°8 56°1	64.4 58.0 55.8	64°0 57°6 55°3	70°45 66°84 65°26 69°90
	78.0 75.3 77.4 79.5 78.9 75.1	73°2 72°2 76°2 76°7 76°2 72°1	70.6 65.3 73.3 73.8 72.6 74.2	67.4 64.7 65.5 69.6 69.8 73.4	64.7 63.6 67.7 70.0 70.9 74.4	62:9 58:7 66:3 71:8 69:1 73:0	64.6 60.8 55.8 64.6 71.8 69.5	64.7 60.0 60.3 64.0 70.4 70.4	64.9 59.6 59.7 64.7 70.2 68.1	63.8 56.4 59.7 59.7 69.1 67.7	63.8 56.7 57.8 58.5 68.3 67.3		69 79 66 84 68 73 72 76 78 42 72 80
	70.6 59.7 64.2 66.9 66.5 70.9	66.9 57.6 61.9 62.7 64.1 67.3	62:1 54:9 58:0 56:8 59:5 61:1	61:3 52:6 57:0 51:8 55:5 58:8	61.5 50.4 54.7 50.8 56.6 57.8	59.6 51.4 54.4 49.6 55.1 56.6	62.1 57.6 50.8 54.4 48.4 55.3	61.4 52.6 48.5 54.0 48.4 54.1	58:2 49:3 48:3 53:2 47:6 53:3	55.7 46.4 46.4 51.4 47.1 51.3	55°2 46°0 46°0 49°7 46°8 50°2	55.8 } 46.4 47.1 49.7 44.9 50.8	63.48 56.14 57.32 58.22 61.53
	74.0 72.0 72.4 77.5 70.6 78.7	70.6 70.0 68.5 73.3 69.8 76.2	67.5 69.1 62.7 69.4 68.7 72.2	62.5 67.1 61.3 67.8 67.3 70.0	60°3 65°5 59°4 66°4 65°7 67°9	60°1 64°9 59°0 65°7 63°5 67°7	65.9 59.9 65.1 58.6 65.7 62.3	64.2 61.1 62.8 58.0 66.4 62.4	62.7 60.7 60.9 56.4 66.5 62.3	62.1 59.2 60.7 55.3 66.5 62.3	62.7 57.2 61.3 56.2 66.3 62.2		68:57 69:44 65:76 71:72 66:10
	73.0 74.6 76.5 79.2 74.6	67.5 70.8 75.3 77.4 70.6	61·1 68·9 75·2 73·8 66·6	58·2 65·1 74·0 72·1 63·5	57.4 63.5 74.3 69.6 61.3	57.0 61.9 71.7 68.6 61.3	63.5 57.2 63.5 71.8 67.9 61.5	62.7 58.0 63.8 71.4 67.1 60.4	61.5 57.8 65.2 70.6 66.5 60.1	59.4 58.0 65.7 70.2 65.7 59.7	59°9 59°4 65°5 70°1 65°1 59°5	59.5 60.5 66.1 68.7 65.0 59.0	71 12 66 30 69 46 75 47 74 95 67 98
	73.22	70.28	66.66	63.97	63.02	62.00	61.29	61.04	60.37	59.25	58.89	59.02	67.85
A CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR	74.0 	69'3	65.7 72.3 75.3 82.2 72.0 70.0 67.9	65.9 	65.7 	65.7 	58.7 61.4 68.5 73.6 64.0 66.9	58.0 64.0 68.9 70.0 65.7 67.2 66.1 58.2	57.0 60.9 67.5 71.4 66.3 66.9 	56.2 59.7 65.9 67.1 65.1 66.3 - 65.2 55.5	57.6 58.6 66.6 64.2 64.2 65.9 - 65.6 54.5	56.6 59.1 65.3 64.0 64.2 66.5 - 53.4	67:97 70:17 75:28 78:29 73:05 72:72 68:54 67:22
	71:3 76:5 77:3 76:9 76:9	67.1 73.9 76.2 72.0 75.2	64.9 62.0 72.2 73.4 68.5 74.0	60.0 71.2 72.2 64.2 73.2	61.9 59.0 70.2 69.3 63.4 71.4	60.5 57.6 69.3 69.1 62.6 70.8	59.7 57.3 69.6 68.5 61.7 — 60.6	55.8 70.2 65.6 61.5	54.7 68.3 65.5 60.7 ————————————————————————————————————	54.5 68.1 64.7 60.0 — 61.5	55.1 67.7 63.3 59.9 — 61.9	53.8 66.5 62.9 59.5 — 60.5	63 · 90 72 · 33 73 · 05 69 · 53 71 · 67
the second section of the second	69'4 63'1 64'2 67'9 69'8 67'1	64.9 57.5 62.9 65.5 68.5 65.1	62.2 54.9 62.3 63.5 66.5 64.9	60°2 53°6 62°1 63°1 66°5 63°5	59°2 53°2 61°5 62°2 66°8 62°6	58.3 52.6 62.3 62.1 64.9 61.7	57.8 51.6 62.1 61.4 65.0	52.4 52.0 62.5 60.7 63.3	50.8 51.2 62.5 59.9 62.7	51.6 50.8 61.5 58.4 62.7	51.6 50.6 61.5 58.0 63.8	51:0 51:2 61:5 57:2 64:4 	63°38 57°27 63°28 63°40 67°62 64°96
	67.4 69.3 69.8 69.6 71.0 69.6	60°1 66°3 63°5 65°8 68°7 65°5	56.8 64.6 61.9 64.6 67.3 64.6	54.5 62.9 61.7 62.4 65.3 62.9	54.4 63.5 60.9 62.9 65.0 62.3	53.8 62.3 60.9 62.5 64.9 62.9	62:3 53:2 62:3 60:3 64:0 63:3	58.4 52.0 60.9 59.5 63.8 62.3	58.2 52.2 59.7 59.1 63.3 61.1	58.6 52.2 59.0 58.6 61.9 60.3	58.2 52.0 57.6 58.2 61.5 60.1	57.8 52.8 56.6 58.0 61.3 60.0 	60.60 65.33 65.90 67.69 67.77 66.84
	74 4	72 2	71.2	69.6	69.3	65.9	64.6 63.8	61.9 63.5	61.3 62.9	61°3 62°1	61.5 65.1	64.4	71.46
	72.66	69.34	67'14	65.55	64.55	63.79	62.63	61.71	61.04	60.34	59.80	59.96	68.04

			<del></del>			STANDAR	D THERM	OMETER.						
Göt	of Mean tingen ime.	0	1	2	3	4	5	6	7	8	9	10	11	1
To	of Mean ronto ime.	18	19	20	21	22	23	0	1	2	3	4	5	-
	$ \begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{bmatrix} $	65.2 65.5 69.4 67.0 70.4	68.5 69.2 70.6 69.4 72.4	72°1 71°8 72°0 71°8 74°3	77.1 75.8 71.0 72.6 77.0	78.7 78.0 73.2 73.3 79.3	81°7 79°5 74°4 76°2 76°9	84·0 80·5 73·6 76·4 76·2	83.5 81.9 72.2 76.3 77.5	82.7 81.3 71.7 78.0 76.9	81°9 79°7 72°6 77°3 77°1	81°3 79°5 71°8 76°8 76°9	7 <sup>7</sup> ·5 77·5 71·9 76·0 75·0	=
2	6 7 8 9 10 11 12	65.5 60.7 52.0 61.5 64.7 68.2	69.9 62.7 54.0 61.5 67.4 72.4	74.8 64.4 56.4 61.7 69.8 76.1	78.0 66.7 58.0 64.0 72.4 78.5	79.7 69.1 59.0 64.7 72.7 78.3	80.9 70.1 59.7 65.9 73.6 79.3	82.9 70.0 61.0 66.5 74.9 75.0	82.7 69.6 62.7 66.2 77.8 66.5	83·1 69·4 64·3 66·8 78·6 68·7	82.7 68.7 64.5 67.5 76.0 71.6	81.5 68.5 65.2 68.1 74.4 72.0	80°5 66°9 64°9 68°0 75°2 72°8	
SEPTEMBER	13 14 15 16 17 18 19 20	66°1 55°1 45°0 54°0 56°9 46°8	68.8 56.0 50.8 55.3 57.8 52.6	72.6 56.4 58.2 57.0 58.7 58.7	75.0 57.0 62.3 58.9 62.9 64.0	78.5 59.0 64.0 60.3 66.1 68.3	81'3 60'1 64'7 62'5 67'1 70'2	80°1 61°7 65°0 63°3 66°5 71°8	81:3 62:7 65:1 63:3 66:7 72:0	81'9 64'6 65'7 61'9 67'1 72'2	79.7 65.3 64.7 59.7 66.5 71.3	77°1 66°1 63°5 58°1 67°1 72°0	79°1 64°8 63°8 57°2 65°9 70°6	
	21 22 23 24 25 26 27	51.6 40.0 45.5 59.4 49.7 43.4	51.8 43.8 53.5 63.3 50.3 46.2	51.6 52.0 59.9 64.2 50.8 49.2	52·4 57·6 64·2 64·0 50·6 52·8	54·2 58·8 66·5 64·2 53·2 55·5	56·1 60·5 69·3 64·2 54·6 56·5	57.8 62.1 71.1 65.5 55.1 58.0	59·1 62·5 72·3 65·0 55·8 60·3	60°1 63°8 72°4 61°1 56°5 59°4	60°0 64°5 72°2 61°5 56°8 60°0	60.7 64.6 71.5 61.7 55.3 61.0	59.5 63.2 69.3 60.9 53.0 59.0	
	28 29 30	39.0 56.2 57.6	41.7 58.6 59.7	44.7 59.7 61.5	48°2 62°8 65°1	51.6 64.8 67.2	54°5 66°5 68°7	55'8 67'6 69'2	56.0 67.1 68.2	57.8 67.5 67.3	59.0 66.3 66.9	58'9 63'8 65'3	57.8 62.7 62.5	
Hour	ly Means	56.78	59.55	62.32	64.96	66.85	68.27	68.81	69.01	69.26	69.00	68.57	67.52	
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	52.7 47.0 39.7	51.8 46.4 41.3	51.4 46.0 47.6	51.0 46.8 51.7	51.2 48.2 52.4	52.4 49.6 53.6	53.0 50.2 54.2	53.0 51.3 54.6	53.6 52.1 55.5	54·2 53·0 54·7	52.8 54.5 54.2	52°1 54°2 51°4	
	4 5 6 7 8 9 10	44.7 45.9 50.5 60.1 57.0 37.6	45.8 42.8 52.6 60.5 57.4 39.6	49.7 48.7 59.9 62.3 58.0 40.9	53.4 56.0 63.8 62.9 65.7 42.3	57.8 58.8 65.7 63.5 69.7 43.4	60°1 60°1 66°9 64°2 69°1 45°5	62:3 61:2 68:3 61:3 67:4 45:4	62:3 63:1 68:9 59:5 67:5 46:2	62·1 62·9 66·9 58·7 58·6 47·2	63.8 63.8 67.7 58.2 56.3 48.4	65.6 62.9 67.3 58.2 54.8 47.3	62 9 62 1 65 2 57 7 53 4 45 4	
OCTOBER.	12 13 14 15 16 17 18	50.7 49.1 35.6 37.0 47.2 35.1	54.7 48.7 34.9 37.6 48.2 33.5	56.7 48.9 39.7 40.4 50.0 33.6	58.7 48.8 43.8 44.3 50.9 34.6	60°1 48°2 48°2 46°0 53°0 35°2	61.1 47.8 49.2 46.8 54.3 35.5	61.5 47.6 50.6 47.4 55.8 36.1	61.5 47.7 51.4 48.3 58.4 36.6	62:3 47:2 51:5 49:0 57:6 36:8	62.5 46.4 52.0 50.2 56.8 36.4	61:3 45:4 51:4 48:8 56:5 36:6	60°3 43°2 46°4 45°8 56°4 36°0	_DOBBNING SCHOOL
	19 20 21 22 23 24 25	32·2 42·1 33·1 37·8 24·5 33·7	31.7 43.0 33.5 37.6 26.3 35.0	38.4 44.6 35.2 37.8 27.2 38.3	43.4 45.0 38.8 37.8 29.1 41.2	47.0 45.4 40.6 38.0 34.3 43.6	47.8 46.6 41.5 38.0 36.5 45.8	48.2 48.4 43.0 37.2 37.6 46.2	46.4 48.1 43.7 38.0 39.8 46.2	46.0 45.8 42.4 37.2 40.8 44.9	46.8 44.0 40.5 35.4 40.6 45.0	46.6 44.0 40.0 33.2 43.2 44.2	44.1 43.5 39.6 32.0 42.8 44.0	
Nov.	26 27 28 29 30 31	33.5 51.0 29.5 35.9 34.4 31.6	36°0 49°6 29°7 36°5 34°4 32°2	39.4 48.8 31.9 37.6 35.2 32.4	41.7 47.8 32.3 41.9 36.6 32.4	44.2 47.8 34.4 44.2 38.0 33.1	47.8 49.7 35.0 46.0 39.4 33.7	51.4 49.1 36.5 43.2 39.7 34.1	53.2 48.3 38.0 46.4 39.7 35.6	53.0 48.8 40.1 47.4 39.7 36.6	51'8 46'6 40'2 46'8 39'0 37'2	51 · 2 45 · 6 39 · 4 46 · 2 38 · 6 39 · 2	50°0 44°2 35°2 43°8 36°6 39°2	
Hourly	Means	41.08	41.23	43.73	46.03	47.85	49.04	49.52	50.14	49.80	49.57	49.22	47.69	

12	73.83 62.30 60.41
75'4 73'2 73'8 72'4 69'8 73'4 69'8 68'0 66'7 67'1 65'9 65'7 76'2 76'8 73'4 72'7 73'0 72'4 71'6 71'0 70'6 70'1 70'4 69'3 71'8 71'0 69'4 68'6 69'3 69'3 69'3 69'2 70'2 70'4 69'8 69'4 67'1 74'0 72'8 72'3 72'0 71'4 71'2 71'4 71'4 71'4 71'4 71'6 71'2 70'0 74'4 72'6 69'6 66'5 66'5 66'3 65'1 66'9 66'5 66'3 65'1 69'3 66'1 66'7 67'1 70'4 69'8 69'4 67'1 71'9 76'1 76'9 71'5 70'9 70'8 68'5 65'8 64'4 62'9 62'0 62'1 63'3 61'3 60'5 59'3 58'7 57'1 56'2 55'7 55'1 53'4 53'2 52'4 63'8 62'8 63'3 62'4 61'9 61'9 61'9 61'6 57'8 61'4 60'7 59'9 59'7 67'2 65'7 64'0 59'8 69'5 66'5 66'5 65'7 67'2 66'9 67'3 66'5 66'5 66'5 66'5 65'7 67'2 66'9 67'3 66'5 66'5 66'5 66'5 65'7 67'2 66'9 67'3 66'5 66'5 66'5 65'7 67'2 66'9 67'3 66'5 66'5 65'3 65'3 65'3 65'3 65'3 65	73°98 74°49 70°83 72°99 71°59 73°83 62°30 60°41
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	74:49 70:83 72:99 71:59 73:83 62:30 60:41
77.9   76.1   76.9   71.5   70.9   70.8   68.5   66.8   64.4   62.9   62.0   62.1   65.3   61.3   60.5   59.3   58.7   57.1   56.2   55.7   55.1   53.4   53.2   52.4   63.8   62.8   63.3   62.4   61.9   61.9   61.6   57.8   61.4   60.7   59.9   59.7   67.2   65.7   64.0   — 59.5   59.1   59.9   59.5   59.7   61.9   63.3   63.8   73.4   69.1   69.1   67.9   66.5   66.5   65.7   66.9   67.3   66.5   69.8   66.9   64.7   62.8   61.7   62.3   — — — — — — — — — — — — — — — — — —	73.83 62.30 60.41
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	63.74
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	73.17 56.83 59.10 58.29 58.76
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	47.48 52.38 55.94 63.25 58.97 52.50 44.18
61 1     59 5     54 5     52 8     52 0     51 8     51 6     51 5     52 1     51 5     51 6     38 2       43 6     43 2     44 0     43 4     42 4     41 6     41 3     39 6     39 3     38 6     38 2       42 0     41 7     44 5     44 2     43 7     53 4     43 7     44 0     43 2     42 6     39 7     38 0       41 8     41 1     40 8     41 3     41 9     42 6     43 0     43 2     43 0     44 7     46 6     47 2       55 8     55 1     53 4     50 0     46 0     44 9     44 6     41 8     40 4     39 2     38 3     36 2	56.35 44.48 44.81 44.12 49.62
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	34.74 42.71 40.02 38.20 30.79 36.28
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	49.18 42.85 33.30 40.16 35.48
-     -     -     -     47.2     47.4     47.6     48.6     49.0     48.6       45.95     44.83     44.22     43.20     42.30     42.20     42.90     41.93     41.48     40.88     41.13     40.91	44*88

Vol. III.

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Göti T	of Mean lingen	0	1	2	3	4	5	6	7	8	9	10	11
Hours To	of Mean ronto ime.	18	19	20	21	22	23	0	1	2	3	4	5
	$ \left(\begin{array}{c}2\\3\\4\\5\\6\\7\end{array}\right) $	48.6 46.6 42.0 36.9 30.6 39.0	48·4 46·8 42·2 37·4 32·2 40·7	47.8 47.6 45.0 40.5 36.2 41.9	50°3 49°1 49°4 43°8 39°8 43°6	51.2 50.2 50.9 47.2 44.7 45.8	51.8 52.7 51.4 49.2 47.8 48.3	52.2 53.1 52.0 50.0 49.0 49.7	52°1 52°2 52°2 49°6 50°0 48°9	52.7 52.4 52.8 48.8 50.2 49.7	53.0 52.2 53.0 49.4 50.4 49.7	53°3 52°1 51°2 47°6 49°3 49°3	53°0 49°0 48°0 43°6 46°4 49°0
3ER.	8 9 10 11 12 13 14	49.7 49.8 50.9 45.4 46.0 44.2	49.6 49.6 51.1 45.2 46.2 43.5	50°4 50°4 51°2 45°2 46°2 42°7	51.0 51.2 51.2 46.0 46.2 43.6	53 · 4 53 · 0 51 · 6 46 · 6 46 · 5 44 · 4	53.4 54.4 52.0 47.6 46.4 43.8	54.4 55.5 51.6 47.8 46.0 44.6	54.2 55.5 51.8 48.5 46.4 46.0	53.9 55.3 51.6 48.6 46.8 45.6	53.5 53.8 52.6 48.0 46.8 45.9	53.9 53.0 52.6 47.8 46.8 45.2	52.8 52.0 52.0 47.2 46.4 44.4
NOVEMBER	15 16 17 18 19 20 21 22	42.8 39.6 43.6 41.9 37.0 37.4	43.9 41.3 42.8 41.6 37.2 36.8	43.7 43.6 45.0 41.2 37.2 37.4	44.7 45.0 48.8 40.4 37.3 38.1	46·1 47·0 52·0 40·7 39·7 38·5	47.8 46.2 54.0 41.5 40.4 39.9	48.0 47.0 52.8 41.5 41.7 40.6	47.8 49.2 52.8 41.2 42.4 41.0	47·3 48·0 51·3 41·0 43·2 42·4	46.4 47.6 50.1 41.4 42.4 43.0	45.6 47.4 48.4 40.5 41.4 42.1	45.6 47.0 47.0 38.9 39.4 42.1
	23 24 25 26 27 28 29	30°3 34°1 25°3 19°4 24°2 37°2	30°0 32°7 22°1 19°5 22°5 36°8	30.2 33.5 20.2 20.9 22.9 38.2	31.6 34.9 20.2 22.7 24.4 37.9	33·3 38·2 19·8 24·6 25·8 38·4	33.9 40.6 20.4 27.4 26.9 40.1	34·7 41·7 20·8 27·6 28·4 41·7	36.0 43.2 21.3 28.2 30.0 42.8	37.4 40.5 21.6 29.0 31.4 43.5	36.8 40.0 21.4 27.8 32.9 42.4	36.2 38.6 21.7 26.3 33.7 40.2	35.2 34.6 21.1 24.8 34.7 39.0
	30	27.4	25.2	25.7	26.7	28.2	29.0	29.2	29.0	29.2	28.4	28.5	27.1
Hourl	y Means	38.80	38*62	39.39	40.72	42.31	43.48	44.06	44.49	44.57	44.36	43.71	42.41
	$\left(\begin{array}{c}1\\2\\3\\4\\5\\6\end{array}\right)$	13.9 34.5 34.4 25.8 29.9	13.0 35.0 34.1 25.9 29.5	15.6 35.7 33.5 27.0 29.5	19°1 36°6 33°4 29°9 30°8	20.8 37.5 34.0 31.8 32.4	23.2 38.5 34.3 32.5 33.5	24.9 39.5 34.2 33.7 34.3	26.7 41.3 33.1 34.3 34.7	27.4 43.6 33.5 33.7 34.3	27.6 42.3 32.7 34.6 34.3	28.1 42.1 31.6 34.6 33.5	28.9 43.6 31.4 34.7 33.3
	7 8 9 10 11 12 13	34.3 37.8 32.5 32.4 25.5 20.0	34.9 38.0 32.4 32.4 24.4 17.3	35.5 36.1 31.9 32.4 23.6 17.1	37.0 36.5 31.4 30.3 24.0 16.7	37.4 37.2 31.4 29.9 25.8 16.0	38·1 37·5 31·7 30·7 27·6 17·2	38.6 36.6 32.3 31.2 28.1 18.0	39·1 37·4 32·8 32·0 28·5 18·4	39.0 37.4 33.0 32.3 28.9 19.8	38.9 37.4 32.9 32.4 29.3 20.6	39.4 36.2 32.9 31.8 29.5 21.0	40·1 34·7 33·1 31·0 29·2 21·4
DECEMBER.	13 14 15 16 17 18 19 20	16.2 7.7 12.8 22.3 12.8 29.5	16.3 7.1 13.0 22.5 12.6 29.5	17.0 9.0 14.3 23.2 12.1 29.0	16.6 12.4 18.8 24.8 16.0 28.8	16.9 17.8 22.1 26.1 19.2 29.8	18°2 20°0 26°7 26°3 22°7 31°2	20°2 23°4 27°6 27°4 25°6 32°3	22°1 25°3 28°2 26°5 28°5 33°5	23·2 26·5 27·6 27·1 30·6 31·8	21.9 27.2 27.1 27.8 29.8 32.9	21.4 25.9 26.1 26.9 28.8 32.3	20.6 21.9 23.2 24.1 29.0 31.5
	21 22 23 24 25	22:1 22:1 7:1 27:5	20.8 20.6 3.7 28.1	18.9 20.4 4.5 28.8	19.6 21.5 9.2 29.9	21·2 22·3 14·8 31·2	23°2 22°5 18°2 33°9	24.9 24.2 20.5 34.1	26.5 24.2 22.1 33.9	27.9 26.1 23.6 34.4	27.6 26.1 23.8 34.6	26°3 25°5 23°9 34°7	21.4 21.9 15.8 35.3
	26 27	16.6	16.6	16.7	18.8	22.9	26.7	29·7 —	30.3	31.2	32.9	31.5	33.0
	28 29 30 -31	35.2 19.4 36.6 34.1	34.9 19.0 37.0 34.3	35.2 20.2 36.8 35.3	34.9 22.3 37.5 37.4	36.0 26.1 37.8 38.6	34·3 27·4 39·1 39·1	31.7 27.6 38.9 39.1	32.9 27.8 40.3 40.0	31.2 28.1 39.6 40.5	31.3 28.6 38.7 40.3	31.0 28.5 37.6 39.4	30°2 29°1 36°8 38°6
ourly	Means	24.73	24.34	24.59	25.93	27.58	29.01	29.95	30.78	31.24	31.59	30.77	29.76

					STANDA	RD THER	MOMETER	) b•		······································		
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
52.7 49.0 45.4 38.6 44.8 50.2	52.0 48.8 43.6 35.6 42.0 50.1	52·2 48·8 42·6 35·8 39·2 50·9	51.8 49.2 41.3 36.1 37.7 50.6	50.6 49.2 40.8 34.1 37.0 50.0	50°4 47°4 40°4 32°7 37°5 50°0	49·2 43·4 40·2 30·9 37·5	49.4 42.1 39.4 31.8 36.0	46.0 40.6 38.7 31.6 38.4	42.6 41.7 38.8 31.3 37.6	43.6 41.2 38.0 30.6 37.6	44.9 42.0 37.6 32.4 38.2 	49.99 47.81 44.87 39.40 41.25 48.11
52.8 51.8 51.0 47.0 46.4 44.7	52.4 52.0 50.8 47.1 46.6 46.0	52.2 52.0 50.4 46.9 46.6 46.6	52.3 52.6 49.0 46.6 46.4 47.2	52.2 52.8 48.0 46.6 46.0 47.0	51'8 52'6 47'2 46'0 45'2 46'6	49.0 51.6 52.3 47.1 45.8 44.9	49.2 51.0 51.6 46.9 46.2 45.2	49.4 51.0 51.4 47.2 46.2 44.9	49.7 50.8 51.0 47.0 46.2 44.7	49.7 50.3 50.4 47.0 46.3 44.6	50.2 5 50.0 50.8 46.4 46.1 44.7 	52.02 52.28 49.93 46.70 45.95
45.2 46.2 45.5 38.6 38.8 42.0	45.0 46.6 44.6 38.6 38.2 42.2	44.7 46.4 44.3 39.7 37.6 44.6	44.6 47.2 43.9 38.0 36.8 45.0	44.6 47.7 43.6 38.2 35.6 45.4	44.4 48.1 42.9 36.8 34.7 44.0	44 0 43 4 47 5 42 9 36 6 33 7	44.0 43.4 46.8 42.4 36.8 34.7	43.6 42.4 46.4 42.4 36.6 35.4	42.1 41.2 46.4 42.4 36.6 36.8	42.2 41.5 45.8 42.1 36.4 38.0	42.73 41.3 43.3 41.9 36.2 37.4 — 29.8	44.64 46.14 46.14 39.20 38.21 38.74
35·2 34·1 20·7 24·6 36·0 38·6	34.7 32.4 20.2 25.3 36.0 37.8	34.9 32.1 18.7 25.7 35.1 38.0	34.9 31.6 18.8 25.5 35.1 35.8	34.7 31.0 18.6 25.3 34.1 34.4	36°1 30°6 18°2 26°9 34°9 33°0	31.7 36.5 30.6 18.2 26.9 35.6	31.8 37.6 29.5 18.4 26.9 35.5	31.1 37.6 28.8 19.0 26.7 35.2	31.3 36.0 27.4 20.6 26.1 35.3	31.5 35.6 26.1 20.7 26.1 36.6	29.8 } 35.2 25.9 19.4 24.8 37.2 	34.77 33.86 20.31 25.38 31.85
24.8	23.4	22.7	20.5	19.4	19.0	30 <b>.</b> 9 18.2	29.7 16.6	29.1 15.2	29.6 14.5	29.5 15.0	30°3 } 14°3	23.53
41.79	41.58	41.12	40.74	40.28	39.90	38.74	38.52	38.20	37.91	37.86	37:72	40.87
28.9 45.0 31.0 34.5 32.0	30°3 45°2 30°3 34°5 31°1	31 · 2 45 · 0 30 · 1 33 · 3 31 · 0	32.2 43.6 28.5 32.3 31.0	32·2 43·8 26·9 32·3 30·4	32·7 49·2 25·9 32·2 30·2	32.7 48.9 25.3 32.0	33°1 43°2 25°6 31°8	33.5 41.5 25.7 31.9	32.9 37.8 25.7 32.0	33°1 37°0 25°8 30°9	33.5 $35.2$ $25.8$ $29.9$ $ 33.5$	27.31 41.07 30.20 31.92 32.20
40·3 33·9 32·7 31·0 29·7	40°1 34°1 31°6 29°9 29°5	39.6 33.9 31.2 28.1 29.5	39.4 33.5 31.2 27.5 29.2	39.4 33.3 31.0 27.0 29.2	39.7 33.1 31.0 27.6 28.1	32·2 39·8 33·3 30·7 27·5 26·5	32.7 39.8 33.1 30.3 27.4 21.5	32.7 38.6 31.9 30.0 27.1 20.4	32.7 38.2 31.2 30.0 27.1 19.6	33.5 37.8 31.6 29.3 27.2 18.4	38.1 32.8 28.4 26.3 19.0	38.46 34.94 31.49 29.69 26.04
21.3 19.4 17.7 22.9 19.3 29.0 31.2	21.7 	20°2 16°6 13°4 27°8 18°8 27°4 30°1	19.4 15.5 12.0 23.7 19.8 30.1 29.5	17.5  13.2 11.4 23.9 19.6 29.5 29.7	17.1 10.5 10.7 22.1 18.2 30.8 29.5	15.6 10.5 11.0 22.1 16.2 30.6	15.8 12.0 9.6 22.1 16.4 30.4	15.4 12.2 10.5 22.7 15.6 30.4	15.6 12.7 12.4 22.8 15.4 30.1	15.4 9.0 11.6 23.5 15.2 29.5	16.2 9.3 11.6 22.5 14.8 29.6	16.25 15.49 22.84 21.31 25.97
16°4 20°4 13°7 35°3	15°0 19°4 17°6 36°0	14.8 22.1 16.7 35.9	15°2 22°9 19°5 35°4	17°3 23°0 16°2 35°6	18.9 22.6 12.6 36.2	25.3 19.6 20.4 13.7	24.5 21.7 16.4 15.6 — 21.5	23.6 22.9 8.6 15.5 — 21.5	22.8 24.4 13.7 15.6 — 21.2	23.6 26.5 11.2 16.6 — 20.2	$ \begin{array}{c}  - \\  22 \cdot 4 \\  26 \cdot 0 \\  8 \cdot 4 \\  21 \cdot 7 \\  - \\  16 \cdot 9 \end{array} $	28.96 21.63 20.27 15.93 30.16
33.5 29.5 28.4 36.4 38.2	33.7 	34·1 27·4 30·8 35·8 37·4	34·3 26·1 31·8 35·0 37·6	35°3 25°7 32°4 34°7 37°0	36.0 25.3 32.9 34.9 36.9	21.7 41.1 26.8 33.1 34.7 37.2	39.5 23.4 33.1 35.4 37.0	39.4 21.9 33.1 35.8 37.3	38.7 22.5 34.9 34.4 36.6	38.8 21.7 35.4 34.1 36.7	36·1 20·8 36·0 34·5 36·8	31·13 29·10 29·03 36·61 37·65
28.91	28.81	28.55	28.32	27.98	27.88	27.25	26.65	26.14	26.19	25 91	25.62	27.84

			<del></del>		S	TANDARI	THERM(	OMETER.					
Hours of Göttin Tim	igen }	0	1	2	3	4	5	6	7	8	9	10	11
	Mean }	18	19	20	21	22	23	O	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	36.7 36.1	。 36.7 35.5	36·2 35·7	。 35 <b>·</b> 9 35 <b>·</b> 4	35.7 36.7	35.8 36.7	35°9 37°4	35.7 37.3	° 34°9 36°8	。 34.8 36.0	° 33*8 35*5	33°4 35°3
	3 4 5 6 7 8 9	34.0 37.1 30.4 29.3 10.2 11.4	34.5 36.5 30.7 28.1 8.3 11.4	34.6 36.8 30.9 27.6 7.5 11.4	34.9 35.7 32.2 26.8 7.5 12.7	35°3 36°3 33°4 26°2 8°1 14°1	36.5 37.5 34.4 25.8 9.1 15.2	34.8 37.9 34.2 25.6 9.6 17.4	34°3 38°3 33°8 23°7 10°8 19°8	34.8 37.6 33.2 23.5 10.8 20.2	34.8 35.9 33.2 25.1 11.0 19.3	34.9 35.3 33.0 23.9 10.4 18.5	35.4 35.3 32.1 22.0 10.0 18.2
JANUARY.	10 11 12 13 14 15 16	-2·1 12·9 24·9 35·5 36·9 36·1	1:4 13:0 25:4 35:7 36:9 35:5	1'0 13'8 26'2 36'1 37'1 33'8	6:1 14:6 27:5 36:1 38:3 33:0	10.9 16.0 30.7 36.6 38.6 32.7	11.7 17.2 31.1 37.1 39.0 32.7	12.0 17.6 32.1 38.5 40.4 33.7	12.6 18.1 34.2 40.2 42.0 30.3	13.8 18.7 35.0 39.6 41.8 28.3	14.8 18.3 34.7 39.4 40.7 24.7	14.5 17.4 33.9 38.7 39.6 22.3	13.8 15.5 33.0 37.8 40.2 18.5
JAN	17 18 19 20 21 22 23	31°1 10°8 6°2 14°0 7°5 22°5	32.5 9.2 6.0 13.5 7.1 23.3	32.7 9.3 7.1 12.9 6.5 24.8	33·1 8·9 9·8 13·3 8·5 27·7	34.0 10.4 14.4 13.8 8.5 30.1	35°3 11°0 18°3 13°3 11°3 32°5	35.2 11.4 20.1 9.8 11.3 32.5	35.2 10.8 20.8 9.8 13.8 32.8	35·2 11·4 21·4 8·7 14·2 33·0	34.2 10.6 21.5 6.5 14.1 33.0	33.4 9.6 21.3 5.9 14.6 33.4	32·3 8·2 20·0 4·6 15·3 30·2
	24 25 26 27 28 29 30 31	18·1 25·9 12·5 3·8 21·4 22·2	18°1 29°3 12°7 4°8 23°3 21°9	18.3 32.8 13.3 4.9 24.3 19.2	21·3 33·2 15·1 8·6 25·6 19·3	24.5 33.8 15.7 12.3 27.5 19.3	25°4 34°4 15°7 16°7 29°1 17°8	25.8 34.6 15.5 19.3 30.9 18.1	25.6 32.5 15.9 20.4 32.5 17.8	25.8 28.6 15.8 21.4 33.2 17.8	25.8 26.8 15.6 22.5 30.9 16.7	25.8 26.6 14.4 21.8 29.3 15.7	25°1 26°5 12°2 20°3 28°5 14°0
Hourl	y Means	21.75	21.97	22.11	23.15	24.45	25.41	25.83	26.12	25.98	25.42	24.75	23.76
	1 2 3 4 5	23.8 28.6 37.9 12.2 10.6 13.7	24.6 28.8 37.9 12.4 9.6 12.4	25·1 31·3 37·9 12·2 9·9 13·9	25.9 34.8 37.6 13.2 12.1 16.0	28 · 1 38 · 9 37 · 5 15 · 1 13 · 7 17 · 8	30.5 39.2 37.4 17.2 15.6 20.1	32·1 39·7 37·6 19·3 17·9 23·0	32.8 40.2 37.9 22.4 19.3 25.7	32.4 40.6 35.7 23.6 21.5 27.3	32.8 39.9 32.4 24.2 21.7 28.3	32.6 39.2 29.3 23.0 22.0 28.5	31.7 39.1 26.3 21.8 21.7 27.7
ARY.	7 8 9 10 11 12 13	29.0 29.0 26.9 16.7 13.3 16.0	28.6 27.3 27.0 17.0 14.9 15.8	29.0 27.1 26.7 16.3 14.3 16.0	30°5 29°5 28°5 17°8 17°0 17°9	32.4 30.7 29.8 20.7 20.9 21.4	34·3 32·2 31·8 21·3 23·2 23·6	34·7 32·3 32·4 21·6 23·8 24·5	35.7 32.6 35.3 22.2 25.1 24.9	35 · 2 32 · 3 34 · 8 21 · 7 27 · 1 25 · 7	35.7 31.8 33.8 21.6 24.3 25.7	35·3 32·0 32·1 21·3 22·5 25·6	32·3 31·1 29·4 19·7 20·4 25·3
FEBRUARY.	14 15 16 17 18 19 20 21	29.8 17.8 21.0 22.0 28.1 26.7	29°0 12°2 21°0 22°2 27°6 26°2	27.8 17.0 21.3 24.2 27.5 25.5	26.8 17.8 24.9 26.2 27.1 24.0	27.4 13.1 29.2 30.2 27.9 23.0	26.5 13.4 31.3 32.3 29.8 22.8	24.7 14.0 30.2 33.2 30.9 23.6	24.0 21.8 30.9 34.6 30.9 23.2	23.0 23.4 31.1 33.5 32.3 22.8	23·1 24·7 32·3 33·1 32·7 23·0	22.8 23.8 32.3 32.5 32.3 22.4	21:3 20:7 30:5 31:7 31:3 22:2
	21 22 23 24 25 26 27 28	15.8 4.4 3.6 18.3 9.1 26.9	15.8 3.2 2.8 17.8 10.3 27.1	15.9 4.6 7.4 18.1 17.3 28.5	16.6 7.2 10.0 21.1 21.8 27.6	17.8 9.7 15.4 23.4 26.9 28.3	20°2 11°7 19°7 24°9 27°8 29°4	19.7 14.3 21.8 25.9 27.5 29.8	20.7 15.7 22.8 26.2 27.7 30.4	20°5 17°4 23°0 26°6 27°1 31°1	20.9 17.9 23.2 26.5 26.3 31.2	20.9 18.7 22.2 26.0 25.9 32.2	20.7 16.8 21.8 24.6 25.7 32.5
Hourly	y Means	20.02	19.65	20.62	22°16	24.14	25.68	26.44	27.63	27.90	27.80	27:31	26.10

						STANDA	RD THER	MOMETE	R.				·
	12	13	14	15	16	17	18	19	20	21	22	23	Daily and
	6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
	32.8 35.4	32.5 35.4	32.8 34.9	32.5 35.1	32.9 35.1	34°1 35°1	35.0	34.8	36.3	36.3	36.2	36.1	° 34.81
	35.4 35.7 31.7 19.1 10.3 18.1	37·1 35·9 31·5 17·4 10·3 18·0	36.7 36.1 31.1 16.4 10.2 18.1	38.5 35.5 30.7 15.9 9.5 17.4	39.8 35.5 30.4 16.8 8.3 17.2	42·2 35·5 30·2 14·4 8·4 17·0	25.1 41.6 34.2 29.8 14.8 9.3	24.7 40.6 33.0 29.6 13.8 9.9	30°2 38°9 33°0 29°8 12°9 10°2	31.9 38.6 30.2 29.9 15.1 10.4	33.4 37.4 30.2 30.1 14.9 10.8	33·2 37·3 30·3 30·0 12·9 10·8	34.33 36.79 35.22 31.51 20.50 9.65 12.88
	13°1 13°1 32°3 37°1 41°1 16°1	12.5 13.5 32.4 36.4 41.1 14.2	11.7 14.2 31.9 35.7 42.7 13.3	11.7 15.1 32.7 36.1 42.2 12.9	11.9 15.5 32.5 36.3 42.2 12.3	11.8 15.1 33.3 36.3 42.7 12.0	7.5  13.5 35.1 34.7 41.6	5.0 12.1 20.7 35.8 35.3 41.2	2·4 12·2 22·0 35·7 35·3 40·1	0.0 12.3 20.8 36.1 35.7 38.6	0.0 12.5 23.3 35.9 36.7 37.8	$ \begin{array}{c c} -1 \cdot 2 \\ 11 \cdot 8 \\ 24 \cdot 2 \\ 35 \cdot 9 \\ 37 \cdot 0 \\ 36 \cdot 1 \\ \hline -28 \cdot 7 \end{array} $	10 61 16 84 32 43 36 83 39 95 24 78
	30.7 7.8 19.4 3.8 14.6 28.9	30.0 7.1 18.9 2.5 13.5 26.2	29°1 6°9 18°1 3°9 15°1 25°1	28·1 7·4 16·9 5·8 16·1 23·3	26.8 7.4 16.9 5.6 18.9 21.9	24.9 7.3 15.3 5.4 19.6 22.4	22·2 24·5 7·3 14·4 5·4 20·5	23·3 22·3 7·2 13·5 5·6 20·5	24.7 20.1 6.8 14.5 6.0 20.1	26.4 17.4 6.8 14.0 6.2 19.9	27.0 14.4 6.8 14.4 6.9 20.7	28.7 } 13.8 6.5 14.2 6.9 22.2	28.62 8.62 15.73 7.92 14.77
:	25°1 26°4 10°4 19°9 28°4 12°1	25°1 24°2 8°3 18°1 28°3 11°0	26.0 23.5 6.8 18.3 27.0 10.6	26.8 22.2 6.0 17.4 26.3 10.6	26.8 22.0 5.2 16.1 25.6 10.3	26°1 22°2 5°0 19°9 24°4 10°1	16.2 24.8 22.2 4.8 17.6 23.0	17.0 24.4 18.9 4.0 19.1 22.2	17·3 27·2 17·2 3·0 19·5 22·7	17.6 28.1 17.0 2.1 20.0 23.8	17.6 26.9 15.3 2.6 19.7 23.8	25.5 14.0 3.8 20.5 23.3	24.68 25.42 9.85 16.79 26.47
	23.03	22.36	22.16	22.03	21.93	21.95	24.3	23.0	23.0	22.3	22.1	22.4 }	23.06
1	31.7 40.0 23.6 20.3 21.7	31·3 40·4 21·7 19·1 22·2	32·1 39·9 19·8 17·8 21·1	31.9 39.1 18.7 16.8 20.7	31·2 37·9 17·4 16·2 19·8	30.9 37.3 16.6 16.0 18.4	31·3 38·1 16·6 15·4 18·1	29.4 37.9 16.7 14.5 18.0	28.3 38.3 15.2 14.1 16.2	30°4 38°6 14°4 13°6 15°8	30.5 37.5 13.8 13.0 14.1	29.0 36.9 12.6 11.6 13.4	30°02 37°59 26°36 16°88 17°30
	24.7 31.7 30.2 28.8 18.7 19.3 25.1	22.4 	22.2  31.1 29.4 26.3 17.4 18.1 23.9	21.7 	20.9 32.4 29.6 20.3 17.5 15.9 23.0	20.9 32.8 28.2 17.4 17.5 10.6 23.0	20°5 32°4 29°4 15°6 17°1 11°6	25·7 32·2 25·1 12·8 17·0 13·7	26.7 31.9 23.0 11.7 17.0 14.9	27.9 31.1 21.5 15.0 16.1 16.8	27.9 31.2 24.4 15.5 14.4 17.9	26.5 30.2 26.0 15.8 12.4 16.6	22.60 32.23 28.91 24.95 18.22 18.23
	20.5 21.5 29.4 29.8 30.9 22.2	20.7 22.4 27.1 30.0 30.8 22.2	20°3 22°2 25°7 29°1 30°5 22°0	19.5 23.5 22.7 28.5 30.5 21.8	18°1 20°3 20°5 28°1 30°2 21°5	17.0 19.1 19.6 28.1 29.8 21.7	29.6 16.8 19.3 16.9 28.1 29.2	29.5 17.9 20.1 16.0 28.5 29.2	30.0 19.1 19.8 16.6 28.6 29.0	30.2 19.7 19.8 16.6 28.6 28.5	29.8 18.9 20.0 19.6 28.1 28.1		24 30 22 23 19 48 24 49 29 13 29 68
	20.6 10.8 21.1 21.4 26.1 33.1	19.5 6.0 21.2 15.0 26.5 33.1	17.6 4.2 22.3 12.6 26.9 33.1	15.6 6.4 21.1 13.7 28.2 33.1	11.7 7.8 21.4 13.0 28.5 32.1	10.6 5.2 21.3 12.8 28.3 31.1	18.4 9.9 1.6 21.7 13.0 28.5 — 20.3	17.8 8.7 4.6 20.9 12.1 28.5 — 20.5	17.0 8.2 5.2 20.1 9.9 28.2 — 21.3	16.4 7.0 5.4 20.1 9.1 28.1 — 21.1	16.4 6.5 4.6 20.1 9.1 28.1 —	$\begin{bmatrix} -6 \\ -6 \end{bmatrix}$ $\begin{bmatrix} 7.9 \\ 4.0 \\ 19.6 \\ 10.8 \\ 28.1 \\ -6 \end{bmatrix}$	21 62 15 39 8 64 18 53 18 00 25 31 28 08
たが、	25.13	24.18	23.57	23.12	22.30	21.43	20.81	20.72	20.43	20.49	20.42	20.06	23.56

ours of	Mean )		<u> </u>		Ī	FANDARI			<u>, ,                                  </u>			10	
Götting Time	gen	0	1	2	3	4	5	6	7	8	9	10	11
Toroi Tim		18	19	20	21	22	23	0	1	2	3	4	5
	1 2 3 4 5 6	20°1 19°2 23°0 13°9 12°2 28°8	20·3 18·4 27·0 14·2 9·8 29·4	22·2 21·2 27·8 21·3 12·8 31·9	24·2 23·0 29·3 25·7 18·8 34·0	24.9 24.6 31.4 27.5 25.2 34.5	26·4 26·0 33·8 29·0 28·4 36·5	27.8 28.7 34.8 30.8 28.9 35.7	28.9 30.7 34.0 32.0 29.9 35.6	29.6 30.9 35.8 33.0 31.0 35.5	29.6 30.2 36.0 33.3 30.5 35.1	28.9 29.2 36.0 32.2 30.5 34.0	27.9 27.0 35.5 31.6 30.4 34.5
	7 8 9 10 11 12 13	25.0 19.1 22.7 15.0 6.1 10.3	26.3 19.1 23.4 15.2 6.8 9.9	28.8 18.8 27.3 17.1 10.6 12.6	30.0 20.3 31.0 19.6 15.3 15.4	31.6 21.8 33.8 20.1 17.8 19.4	34.6 21.8 35.2 20.6 19.1 21.8	35.8 21.5 36.1 20.8 20.2 23.6	36.2 21.3 36.8 21.7 21.3 24.3	31.7 21.4 37.1 22.5 22.5 26.9	32.0 21.4 37.1 22.5 23.4 26.5	31.7 21.3 36.4 21.9 22.5 25.1	31 · 2 20 · 9 35 · 5 21 · 6 21 · 5 24 · 6
MARCH.	14 15 16 17 18 19 20	13.9 10.0 15.0 29.2 24.6 32.9	15.2 10.2 16.5 30.2 26.3 33.1	16'4 13'0 20'0 32'5 29'8 33'1	17.9 15.0 23.8 34.6 31.3 34.5	19.7 18.3 27.0 35.1 34.7 35.7	22.7 19.5 32.0 38.1 36.0 37.2	21.5 22.7 33.5 38.6 37.3 39.0	24·3 20·2 33·1 38·9 36·6 39·9	24·4 24·0 35·1 40·3 36·4 38·4	22·3 22·7 34·6 40·2 37·0 38·6	22·1 21·7 34·3 42·8 37·3 37·3	21.5 22.0 33.8 42.1 34.9 37.1
	21 22 23 24 25 26 27	25.7 33.8 28.2 34.5 32.4 18.5	27.3 34.7 29.2 33.5 31.5 17.9	29.6 34.7 30.3 38.6 32.4 18.9	30.7 34.9 32.1 44.2 32.0 20.5	31'3 36'1 33'2 44'1 33'1 22'1	31.6 37.5 34.9 42.5 33.8 23.3	32.0 40.2 35.4 42.1 35.3 23.8	32.2 39.2 37.3 41.2 36.1 24.4	32.0 41.6 37.3 42.5 37.4 24.7	31.8 41.6 38.7 42.4 36.7 25.5	31.7 40.4 37.9 41.6 34.8 25.5	32.0 39.8 36.7 40.1 34.3 26.5
	28 29 30 31	32.0 23.6 14.3	34.0 23.8 16.2	37.4 26.9 17.9	40.7 26.5 18.7	42.5 27.1 20.8	43.4 28.4 22.3	44.4 27.8 24.3	43°1 26°7 25°5	40°8 26°5 26°1	38.5 25.7 27.0	36.9 24.8 27.0	35.0 24.7 26.1
Iourly	Means	21.66	22.20	24.59	26.81	28.64	30.24	31.51	31.23	32.05	31.89	31.33	30.7
	$\begin{pmatrix} 1 \\ 0 \end{pmatrix}$	9.2	13.9	19.2	27.5	29.8	31.3	31.8	32.4	32.2	33.3	32.8	31.7
	3	28.6	31.9	34.5	38.2	40.0	42.2	42.6	41.9	41.1	41.2	39.9	39.6
	4 5 6 7 8 9	31.4 38.3 40.0 41.9 34.3 38.5	36.7 38.8 42.4 41.7 35.3 44.2	39.7 41.5 42.9 43.1 36.6 45.2	40.8 43.1 43.6 45.4 39.5 46.2	41.9 44.4 46.3 48.1 41.3 48.4	41.7 46.5 48.4 49.9 42.9 47.4	41.5 44.0 50.6 58.3 45.0 47.6	41 8 45 6 52 2 58 3 43 8 49 2	42·2 46·1 53·9 55·0 45·5 48·5	39.8 48.4 55.6 55.8 46.3 44.3	40°1 49°1 55°5 59°9 45°7 44°5	38.4 50.1 55.2 56.9 43.6 40.7
APRIL.	11 12 13 14 15 16 17 18	33.5 29.3 31.7 31.7 25.9 33.8	36.5 36.8 35.4 33.0 29.2 33.4	44.2 40.5 39.4 34.3 32.3 34.3	46.1 42.6 43.5 35.7 37.6 35.1	48.7 44.0 45.6 34.9 38.5 36.0	48.7 44.5 46.3 37.7 38.6 36.2	48.3 46.5 45.8 37.4 40.0 36.2	48.7 46.9 46.3 36.9 40.5 35.5	47.1 47.1 45.9 37.6 38.4 33.7	47.4 45.7 45.5 38.9 36.4 33.0	46'9 45'7 43'4 37'1 37'0 33'4	45.5 44.6 41.5 37.7 36.9 32.0
	19 20 21 22 23 24 25	29.6 34.4 42.6 49.3 36.3 31.0	31.3 36.0 41.6 49.9 36.4 34.5	33°1 37°4 43°4 52°4 36°9 38°5	35·1 39·7 45·4 51·2 38·9 41·6	36.7 41.7 45.9 51.0 40.0 43.0	39.8 44.5 54.4 49.3 40.7 44.0	42.7 46.2 57.0 47.9 41.2 44.8	42.5 45.1 63.3 46.9 41.0 45.4	44.0 44.6 65.5 45.9 42.9 45.2	44.4 43.6 65.4 45.5 45.9 44.7	45.9 43.0 65.0 45.3 42.8 45.5	45 4 43 2 62 7 45 3 43 2 45 4
	25 26 27 28 29 30	47.9 43.8 30.5 34.9 36.7	49.1 44.5 33.7 35.5 37.1	50°7 43°8 36°8 36°1 37°9	53·2 42·4 40·0 36·5 40·7	55.8 42.0 40.2 36.1 41.9	58.4 42.9 42.5 37.3 43.6	59.9 43.4 43.2 39.2 44.5	58.0 43.6 40.7 39.7 45.0	58.5 44.6 40.1 41.6 47.5	56.5 43.8 39.6 45.1 48.1	58.5 42.6 37.1 41.5 44.5	58 8 41 1 37 8 39 7 41 9
Iourl	y Means	34.60	36°75	38.99	41.50	42.49	43.99	45.02	45.25	45.39	45.37	44.91	43.5

					STANDAR	D THERI	MOMETER	•				
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
26.4 24.6 33.6 30.5 28.2	26·1 24·4 31·7 29·2 24·5	25.4 24.3 31.3 27.8 25.6	25.7 23.7 25.6 26.4 26.8	25·2 23·5 24·2 22·0 26·2	24°4 23°4 20°0 20°1 25°2	24°0 21°2 20°9 18°5 25°1	23°5 21°5 19°1 16°2 26°6	23°5 20°5 22°9 15°9 27°6	22°0 20°1 24°4 13°6 28°0	21°6 21°2 24°3 13°6 27°6	19°5 22°5 18°4 14°1 27°3	24.92 24.17 28.37 23.85 25.30
32.6 	32.6 	32.8 	33.1 20.8 24.0 24.3 14.0 15.8 18.6	32.5 20.0 25.2 21.6 11.5 14.1 18.3	32.6 	39.1 18.9 24.8 20.1 8.9 13.3 — 26.5	38.8 18.8 23.0 19.8 8.6 12.9 — 24.0	34·1 18·5 22·9 19·3 6·1 13·2 —	33·2 18·6 22·2 17·1 4·8 13·2 — 20·0	30·1 18·9 22·4 16·5 5·0 12·3 ————————————————————————————————————	28·2 } 19·1 22·5 14·5 4·9 11·1	33.55 25.89 21.97 27.57 15.28 15.91 20.10
19.4 21.7 31.7 39.1 31.9 37.1	17.5 20.4 30.8 36.3 29.6 37.1	16°3 19°0 30°7 33°6 28°4 36°8	13.9 17.3 30.3 31.9 26.9 39.1	13.6 15.7 29.9 29.9 28.6 36.1	13.6 14.7 30.0 28.7 29.9 35.1	13 '9 13 '9 30 '2 27 '6 29 '2 	12.7 13.2 30.2 26.9 30.3 ——————————————————————————————————	12.4 13.0 29.8 26.2 31.3 — 24.6	12.2 12.5 29.1 26.3 32.2 — 24.6	12.1 13.6 29.6 26.2 32.4 — 24.7	10.5 15.5 29.6 24.9 32.5 	17.08 17.08 29.19 33.34 31.89 33.72
32·4 39·7 35·0 39·0 32·2 25·5	37.6 32.0	32.4 36.3 32.8 36.9 32.2 23.6	32·2 36·3 32·2 36·4 31·4 22·3	32.3 34.6 32.6 36.0 30.1 22.0	32.6 34.3 30.7 35.0 29.2 22.3	33.2 33.2 30.7 33.8 28.0 — 32.2	33 · 1 32 · 5 31 · 2 34 · 7 27 · 1 32 · 3	33.0 32.1 32.9 33.7 25.9 — 32.2	33.2 31.4 34.1 33.5 24.6 — 31.9	33.5 31.1 34.1 32.4 23.9 — 32.6	33.7 30.7 33.7 32.0 19.7 	31.75 35.99 33.51 37.85 31.09 25.26
31.8 22.2 23.8		29.2 22.6 20.2	28.0 22.2 17.5	26.9 21.3 14.1	26.7 21.0 13.2	26.2 21.0 15.2	25.7 20.8 13.0	25.5 20.4 13.0	25.5 18.4 10.3	25.1 17.8 8.4	24.7 16.2 8.8	33 12 23 27 18 56
28.9	7 27.67	26.87	25.80	24.74	24.06	24.33	23.77	23.44	22.85	22.21	21.75	26.65
31.0 38.7 36.9 48.4 48.3 46.6 41.5 41.6	35.8 46.3 44.2 44.5 39.2	29.6  33.1  35.9 44.7 40.8 43.2 38.7 38.6	30°1 	30.8 30.7 36.1 42.1 38.0 41.2 37.0 36.6	31·2 30·2 37·3 41·6 36·6 40·7 36·9 35·8	33.0 37.4 37.3 41.2 38.3 39.0 37.1	29.6 36.8 37.9 41.0 37.8 38.1 37.7	29.0 36.9 37.7 40.4 38.1 36.3 37.5 — 35.4	31·3 36·9 36·6 40·4 39·2 35·4 37·5 —	29.6 	28·0} 33·2} 38·1 39·8 41·4 34·7 38·7	28.68 36.51 38.25 43.59 44.57 45.44 39.98 41.07
43 0 42 1 40 3 34 9 36 9 31 0	39.1 39.7 35.1 36.2	38·3 37·9 39·3 31·4 35·0 26·4	37·2 36·9 39·2 29·7 34·8 25·4	36.4 36.1 35.8 29.1 34.0 23.7	35°3 34°9 33°3 28°0 33°6 23°1	34.5 35.1 34.5 33.7 28.2 33.1 ——————————————————————————————————	35.4 35.0 38.7 33.3 27.5 32.2 — 24.8	33.8 36.3 32.9 27.5 32.6 ————————————————————————————————————	31·1 34·9 32·8 25·9 32·2 ——————————————————————————————————	29.6 34.0 31.8 25.1 33.3 —	27.8 $32.0$ $31.7$ $24.2$ $33.5$ $ 29.6$	40°19 39°65 38°92 32°48 34°95 30°53
41 · 9 43 · 1 59 · 8 44 · 7 41 · 5 44 · 6	43°2 58°5 44°4 35°7	39.7 43.2 60.5 43.2 34.8 37.7	38.9 43.9 59.7 41.1 33.7 34.8	37.1 44.4 59.5 40.8 32.6 34.2	36°3 43°8 58°1 40°5 32°0 33°8	34.9 44.8 55.6 39.7 30.5	32·3 44·0 52·0 37·1 29·7	30.5 43.6 53.8 36.9 30.0	29.7 43.7 55.6 36.7 29.7	29.7 44.6 54.4 36.3 29.8	32.0 44.6 52.2 35.9 30.1 	37.13 42.76 55.50 44.05 36.51 41.15
54.2 39.1 37.1 38.8 40.8	46.5 35.7 35.5 37.7	45.2 33.5 34.8 36.9 38.4	43.8 32.3 34.3 35.5 36.6	44.6 30.9 34.5 35.5 35.7	45°8 28°7 34°8 36°1 33°5	44.4 46.6 28.6 34.8 37.1 33.5	43.3 46.5 28.7 34.3 40.5 32.0	42.8 46.1 36.6 34.3 40.7 30.7	42.3 46.3 26.2 34.5 39.3 29.1	41.6 45.0 25.1 34.5 38.3 27.8	44.3 } 42.5 24.2 34.5 37.1 29.2	50.75 36.59 36.65 38.20 38.19
41.8	39.52	38.43	37.50	36.70	36.08	36.76	36.25	35.87	35.60	35.21	34.97	39.69

	STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STANDARD THERMOMETER.   STAN												
Gottin	igen }	0	1	2	3	4	5	6	7	8	9	10	11
Hours o	f Mean }	18	19	20	21	22	23	0	1	2	3	4	5
•	2	<u>-</u>	<u>•</u>	<u>-</u>	o 	<u></u>	<u> </u>	<del></del>	<u></u>	<u>-</u>	<u>-</u>	<u>•</u>	
	4 5 6 7 8	36.9 40.5 41.6	46.6 46.8 50.5	51.5 51.8 53.6	53°3 54°9 56°5	57.0 57.3 57.8	59.0 60.2 59.0	55.6 59.2 63.5 59.6	61.7 62.8 61.4	61.3 62.4	61.1 59.6 58.0	60.6 57.7 59.2	57·3 60·4
Y.	10 11 12 13 14 15	52.5 54.2 54.7 53.1	52.5 55.4 58.0 58.5	53.7 60.2 60.0 59.5	59.8 61.4 60.0 60.4	63.1 63.4 60.8 59.4	64.1 65.3 60.4 59.0	64.7 66.2 60.8 57.6	64.0 66.4 63.2 56.6	63.4 64.9 63.2 56.8	63.6 61.6 63.8 58.1	59.8 62.2 64.5 60.6	58.9 61.2 64.1 61.8
MA	17 18 19 20 21 22	47.1 50.4 49.6 48.3	53.7 54.1 52.9 50.6	58.5 58.5 56.3 50.8	62'3 61'2 60'5 53'5	64.6 64.9 62.1 52.7	67.1 63.0 62.3 55.4	69.2 63.2 63.0 59.0	69.8 65.7 62.8 62.2	66.7 66.0 63.0 62.8	67.6 65.7 62.3 63.3 67.0	67.4 65.3 61.8 60.7	67.2 65.7 58.4 58.8
	24 25 26 27 28 29	50.5 39.6 45.3 54.1	53.7 41.7 50.9 54.0	57.7 44.7 54.2 56.2	61'1 46'9 54'7 56'9	61.8 49.1 56.9 64.0	62.9 52.1 58.7 68.0	63.2 52.2 57.6 71.9	65.5 52.9 56.0 72.4	66'3 53'9 58'3 72'4	63.1 63.0 56.4 58.5 68.8	58.9 58.1 58.9 67.8	60°1 56°9 59°5 66°9
	1	48.2	47.7	47.6	47.0	45.9	45.2	44.2	44.2	44.2	44.2	44.4	44.4
Hourl	y Means	48.61	52.34	55.19	57.56	59.23	60.32	61.03	61.48	62.05	61.85	61.25	60.64
	2 . 3 . 4 . 5	52.6	53.0	54.6	56.2	58.9	60.5	62.9	61.9	59'9	59.9	60.3	61.2
	6 7 8 9 10 11 12	50.8 55.2 56.3 63.2 58.0 49.1	55.0 55.6 58.4 63.7 61.3 52.8	62:1 55:7 62:2 64:8 65:0 57:7	64.7 57.1 66.0 63.7 66.7 59.9	65:3 59:9 66:7 63:1 65:3 60:5	66.9 58.9 68.5 63.1 67.0 60.7	67.7 58.2 69.1 63.6 62.7 62.3	70°1 58°7 72°7 63°7 65°1 64°6	70'8 61'5 74'1 63'9 61'2 65'2	70°3 62°1 74°1 64°8 59°4 65°7	67.5 60.6 75.5 62.7 58.5 66.9	64.5 58.1 72.5 62.9 57.3 66.3
JUNE.	13 14 15 16 17 18 19	55.0 39.8 46.9 48.5 52.6 56.0	55.0 41.3 49.1 53.0 58.3 56.2	51.8 42.9 51.8 57.5 58.3 57.9	50°4 44°6 53°5 59°7 60°9 59°7	49.7 46.3 55.2 60.3 61.7 62.1	50°0 47°6 56°0 60°9 64°8 62°1	48.2 48.7 56.1 62.3 65.8 61.3	44.6 52.0 54.8 61.5 65.6 62.6	44.6 55.7 55.0 63.5 64.9 60.5	48:5 57:9 56:3 65:0 64:2 61:5	48.6 58.9 57.1 68.2 62.4 65.6	49°1 58°5 56°7 67°7 59°3 67°4
	20 21 22 23 24 25 26 27	55.6 53.3 57.1 57.4 60.3 63.7	59.5 54.8 61.7 64.1 65.3 68.2	63°1 53°4 64°8 66°7 63°5 72°9	63:9 59:7 67:7 69:1 66:9 74:9	65.2 62.1 67.8 71.7 69.2 75.2	65.2 65.7 69.9 72.7 71.1 78.2	67.0 67.0 69.6 72.3 71.5 75.8	67:3 68:7 70:1 72:3 73:5 76:5	59°4 68°5 70°1 73°4 73°9 74°5	63.0 62.9 71.4 73.7 75.3 76.5	66'3 60'3 70'7 74'1 72'9 74'3	67·1 63·3 67·6 74·9 68·7 74·7
	28 29 30	62.1 59.3 58.9	62.7 60.8 63.0	63°1 62°5 68°8	66.8 64.7 70.9	68°1 66°6 71°5	67.7 68.8 69.7	69.9 70.4 72.0	73 · 1 70 · 8 72 · 1	74°1 72°7 72°4	75°2 68°1 70°9	74°3 68°3 70°8	70.7 68.3 69.6
Hourly	Means	53.96	56.73	58.98	60.97	62.24	63.64	64.30	64.77	64.24	64.70	64.64	63.76

T						STANDAI	RD THER	IOMETER	•		3)		
-	12	13	14	15	16	17	18	19	20	21	22	23	Daily and
	6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
=	0	0	· ]	<u> </u>	<u> </u>	·	0	°	o	<u> </u>	0	·	<u> </u>
	_	_	_	_			_	_		_	_	_	_
	49.8 53.0 54.8 59.4 58.6	48.0 50.1 49.7 56.2 57.2	46.8 48.3 47.4 55.9 57.6	44.9 45.6 45.9 50.6 57.3	42.4 42.4 46.1 49.2 57.4	38.3 40.6 43.9 53.3 56.3	38.5 39.8 43.2 54.7	43.4 37.2 42.2 55.2	42.6 36.7 40.4 56.0	39.1 36.7 39.6 57.5	35°1 . 36°0 . 39°2 . 57°3 .	33.4 35.9 38.0 59.8	46.24 48.29 50.17 56.05
	56.3 57.7 60.0 64.0 57.0 65.0	55.7 54.1 61.0 59.6 56.6 59.5	54.4 53.7 61.0 57.7 53.8 54.7	53.5 53.7 60.5 53.8 52.5 52.4	52.8 53.5 59.8 52.0 49.6 51.8	54.7 55.1 60.0 52.1 49.8 51.4	48.5 54.6 56.0 57.3 51.1 45.6	48°3 54°3 54°2 58°1 50°0 44°1	51 · 3 53 · 3 53 · 4 57 · 7 50 · 4 43 · 4	51.8 51.9 53.1 55.7 49.7 42.7	50.2 53.1 54.3 53.5 49.5 42.9	48.6 } 53.5 55.6 54.3 48.3 42.3	55.35 56.11 57.27 60.05 57.15 53.40 57.88
	63.4 65.2 65.3 57.4 59.3 60.5	61.7 59.7 63.7 54.7 55.2 60.0	61°2 56°7 60°3 53°6 54°8 59°3	59°3 54°2 59°2 50°6 49°2 59°3	56.2 53.4 58.7 49.4 48.1 57.5	52°3 52°0 56°4 47°7 51°5 56°3	51.6 55.2 51.8 55.8 46.5 51.3	52 · 2 · 54 · 5 · 50 · 9 · 54 · 1 · 45 · 9 · 53 · 4 ·	51.0 50.8 50.0 52.9 43.7 51.8	47.3 46.3 49.8 51.6 43.3 52.4	45 3 45 3 49 8 50 1 42 9 53 2		57.66 58.46 59.28 33.97 54.69 59.62
	61.5 59.9 54.9 59.2 66.9 61.5	59.7 59.6 48.1 55.3 63.1 58.5	59°1 57°9 47°1 51°9 60°3 56°7	56.2 55.9 45.1 49.8 64.1 56.3	55.8 56.9 43.9 48.6 63.7 56.0	53.5 46.8 41.7 46.9 62.7 56.0	53.4 52.6 45.2 40.0 46.3 61.1 ——————————————————————————————————	51.5 49.7 43.1 39.6 45.2 60.9	51.5 49.2 41.3 40.2 43.2 57.2 48.8	51.7 48.7 40.0 40.0 42.8 58.5 	51.6 47.3 39.6 36.8 44.6 57.5 49.8	54.0 } 48.4 38.3 37.5 45.8 56.6 — }	56.80 54.53 46.64 52.04 62.75 57.07
	44.8	44 8	45.0	45.9	46.1	46.8	47.2	47.0	47.0	47.3	47.6	47.3	46.04
	58.98	56.33	54.80	53.16	52.14	51.09	49*93	49.38	48*49	47.79	47:19	47:23	54.91
	57.3 60.4 56.5 53.6 61.1	56°3 57°0 56°2 52°8 60°3	54.5 54.7 55.0 50.6 55.6	54.0 53.0 54.4 47.3 53.0	54°3 52°4 52°4 46°1 48°4	53'4. 48'9 52'4 45'0 45'6	52.4 48.2 53.2 43.0	51.0 46.7 53.4 42.1	50.4 45.3 53.8 39.8	49.7 45.2 54.0 37.9	51.3 44.1 53.8 37.2	52.0 44.9 53.7 36.7 - 43.6}	54·24 54·29 55·82 51·17 52·83
	60.4 57.2 72.7 61.9 55.0 65.4	58.0 57.1 72.9 61.7 51.4	56.3 56.7 69.5 60.3 51.2	56.0 57.7 65.0 60.5 51.0	55°4 57°7 65°3 59°3 .50°7 55°2	55.4 56.5 67.3 58.6 50.9 54.4	51.0 54.4 55.4 65.5 59.6 50.8	50°4 54°4 55°6 63°3 61°1 51°0	45.9 53.2 56.2 62.4 60.3 50.6	44.6 53.2 54.0 62.4 60.3 49.0	42.6 53.1 53.4 61.0 57.7 47.9	53.6 53.5 60.8 57.1 46.9	59.96 57.19 66.84 61.73 56.41
	48.0 57.3 55.6 66.2 57.8 66.5	61.7 47.1 55.2 55.8 61.1 57.0 57.9	56.5 	55.8 	42·3 47·5 45·7 47·6 58·1 51·6	41 7 46 8 45 7 47 4 58 5 51 0	52·3 41·3 47·7 44·9 45·6 58·3	52.0 41.0 47.3 45.1 44.4 56.7	51·4 41·3 46·0 44·2 43·6 56·7	51.6 41.3 45.5 43.9 43.0 56.9	51.6 40.1 44.8 41.7 46.1 56.7	$\begin{bmatrix} -1 \\ 51.4 \\ 39.6 \\ 45.2 \\ 42.6 \\ 48.1 \\ 56.7 \\ -1 \\ 51.7 \end{bmatrix}$	57.96 46.13 49.11 50.69 55.28 59.50 57.65
	66.0 63.2 67.5 73.9 68.3 71.6	60°1 60°4 64°4 69°7 63°7 68°7	57.5 57.7 61.1 68.3 62.1 67.7	56.9 56.6 59.1 60.5 61.5 69.3	56°3 56°7 58°3 58°5 60°7 65°9	56°3 55°4 58°1 57°5 60°1 64°4	53.4 54.9 55.7 55.8 55.8 61.3	52.0 53.2 55.7 55.8 54.4 61.9	52.8 51.6 55.4 53.2 53.4 61.5	52.4 49.7 55.0 52.8 53.8 61.5	52.4 49.5 50.4 51.4 53.0 60.9	52.0 52.0 51.4 55.5 59.3	59.44 58.91 62.39 64.86 65.62 70.19
	69°2 70°5 68°1	66'9 67'4 64'4	66°1 63°7 61°1	64'8 61'9 57'7	64°5 60°3 56°5	63°6 59°5 56°7	68.4 62.0 57.9 55.4	67.6 61.3 56.5 52.8	65.8 60.3 56.7 50.8	64°1 59°5 55°4 50°1	63.7 55.7 54.8 50.1	61.9 57.5 55.6 52.0	65.80 63.40 62.76
	62.74	60.50	57.95	56.07	54.91	54.27	54.01	53.33	52.41	51.80	50.96	51.36	58.47

					s	TANDARI	) THERM	OMETER.					
Gött	of Mean ingen me.	,o	1	2	3	4	5	6	7	8	9	10	11
Tor	of Mean onto me.	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \end{pmatrix}$	56.7 57.1 61.5	61.1 63.8 67.9	65.1 70.1 73.5	69°9 76°2 76°5	73°1 75°3 78°5	72.7 74.5 80.4	74.5 76.5 81.7	74.8 78.7 81.8	76·1 78·2 81·6	75°4 78°9 81°2	75.7 79.3 81.5	74°9 79°0 79°7
	5 6 7 8 9 10	62.0 67.1 65.2 67.7 68.0 69.3	67.6 67.7 67.8 71.1 72.5 69.9	72·2 67·2 69·1 76·3 75·9 71·8	77.9 69.7 76.1 79.0 78.0 74.1	80·1 71·2 76·9 79·7 78·7 74·9	79.6 73.5 78.2 80.7 81.5 76.3	80·1 75·9 80·3 80·3 81·2 76·7	81.3 78.7 80.3 80.3 81.2 79.5	81.8 77.1 81.3 77.6 79.6 81.7	80.9 76.6 81.1 78.0 79.6 80.6	78·2 78·7 81·3 77·6 77·2 80·5	70·5 75·2 79·9 77·9 77·0 77·5
JULY.	$\begin{vmatrix} 12 \\ 13 \\ 14 \\ 15 \\ 16 \\ 17 \end{vmatrix}$	68*9 72*5 57*5 54*6 65*2 70*0	74.7 75.5 61.5 58.7 70.6 71.4	76.3 76.8 65.3 63.7 74.0 74.3	76.8 79.7 69.3 68.8 77.1 78.2	78.0 81.5 70.7 71.4 79.4 82.7	79.7 83.3 73.3 73.3 81.1 83.5	79.5 83.6 73.9 75.4 82.5 84.7	79.8 83.1 74.0 76.5 83.3 83.7	81.7 79.7 72.7 76.7 81.7 84.3	82·1 77·8 71·5 76·7 82·1 75·3	83·2 77·1 70·7 75·4 80·0 76·8	79.4 74.3 70.2 73.0 77.8 78.2
	18 19 20 21 22 23 24 25	71.6 71.2 69.1 69.7 53.6 58.7	77.4 75.7 72.0 72.0 59.3 62.8	80.0 79.1 71.7 71.7 64.9 67.1	80°1 77°8 73°2 72°9 69°1 69°3	82.9 79.7 76.5 74.7 69.9 67.9	85°1 77°4 79°7 75°7 70°7 67°5	87.0 79.5 79.7 77.8 71.3 67.1	85.1 77.6 79.4 78.2 71.4 66.1	82.1 77.8 81.5 79.3 70.3 68.7	85°1 80°7 79°1 78°9 72°7 69°9	86.1 76.3 80.3 78.2 74.5 69.5	85.5 76.7 78.2 78.2 73.3 68.2
Augi	26 27 28 29 30 31	57.8 51.2 50.8 57.7 55.9 51.4	56°3 55°0 56°9 62°1 59°5 60°1	55.8 58.1 62.3 64.8 60.3 64.6	56.0 61.5 64.6 66.8 60.1 66.1	55°2 61°7 65°3 68°6 66°3 68°5	56.2 63.1 65.3 70.4 63.9 68.1	56°3 64°1 64°1 70°7 65°2 71°5	59°1 63°5 65°7 70°0 62°1 67°0	62 · 1 63 · 5 65 · 2 68 · 9 63 · 5 68 · 1	61.7 63.3 65.2 69.0 65.3 68.7	62.7 65.0 65.5 69.1 66.1 70.5	63°2 64°8 65°0 68°1 66°5 67°1
	y Means	62:30	66.33	69.33	72.03	74.12	74.62	75.60	75.64	74.92	75.46	75.44	74.05
	2 3 4 5 6 7 8	52·2 55·4 59·4 59·9 63·1 59·5	59°1 61°9 65°6 65°4 65°7 60°1	65.2 65.9 70.1 69.2 71.5 64.6	66.0 69.8 70.5 70.9 74.3 67.1	69.5 70.3 70.9 71.5 77.8 68.9	71.0 70.5 73.0 72.7 77.6 72.7	71.5 70.7 73.9 72.9 77.7 73.1	72.5 71.1 74.2 73.1 76.5 73.1	70.8 70.6 75.7 74.7 78.5 71.2	72.5 72.1 75.9 74.5 76.7 71.3	72·3 73·2 76·9 73·1 75·1 70·2	69°5 74°1 76°3 71°5 70°3 68°9
ST.	9 10 11 12 13 14 15	63°1 64°7 66°1 57°7 63°5 66°3	63.5 66.3 67.4 59.3 66.9 69.1	64.1 67.9 69.7 63.9 78.1 71.6	66:2 71:6 68:2 69:1 78:1 74:3	66.9 74.9 68.9 73.5 74.9 77.4	68.9 76.2 70.1 74.8 74.5 77.2	71:1 76:4 72:1 75:3 75:5 77:8	73.2 76.5 73.3 74.8 75.3 79.6	73·4 77·8 71·1 75·5 77·2 75·7	74.6 76.0 67.3 75.1 74.3 78.9	73.7 75.1 69.1 72.3 74.2 76.4	73:3 74:3 69:9 73:9 73:5 77:0
AUGUST.	16 17 18 19 20 21 22	68.0 64.8 56.3 46.0 54.2 54.9	71 · 2 72 · 6 57 · 3 50 · 1 59 · 1 57 · 2	73.8 73.7 59.1 55.4 61.3 59.8	76.7 74.9 61.5 57.7 66.0 64.4	78.2 75.9 63.1 61.3 68.7 66.8	80°2 72°5 63°7 61°5 67°1 68°5	79.8 72.7 65.7 63.0 70.5 70.5	80.5 71.1 66.3 64.1 70.7 71.5	82·1 73·9 67·3 64·4 70·5 73·0	82.5 71.3 67.7 66.3 72.9 73.5	81.9 70.3 64.9 65.2 69.1 73.5	83·1 71·1 60·7 65·4 60·7 73·9
	23 24 25 26 27 28 29	53.5 52.8 53.8 53.4 56.2 47.5	59.0 57.3 57.1 58.3 56.8 54.0	63.5 60.5 65.5 63.1 58.9 62.0	65 2 64 4 68 7 67 2 60 3 63 8	63.5 67.0 70.3 68.7 61.7 66.1	64·4 69·3 69·7 71·7 63·6 67·8	66.1 70.5 70.5 71.2 64.9 68.1	66.5 70.0 69.9 73.9 66.0 68.3	67.5 70.4 70.7 74.0 65.3 69.0	68:3 70:4 71:1 74:7 63:9 68:1	68.1 70.6 69.5 74.8 64.6 68.3	67.8 70.6 68.4 70.9 65.5 68.7
	30 31	58.7 50.6	64.2 54.1	65.8 56.2	69°6 57°5	71.5 58.7	72·7 59·6	73.0 60.7	73·3 61·7	$\begin{array}{c c} 72.5 \\ 61.7 \end{array}$	70·7 62·7	68.7 61.6	66.4 60.4
Hourly	Means	57.75	61.20	65.41	67.85	69.20	70.44	71.35	71.81	72:10	72.05	71.26	70.23

				***		STANDA	RD THER	MOMETE	R.	·			
-	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
	6	7	8	9	10	11	12	13	14	15	16	17	Means.
۱,	74·7 76·5	69°.5 70°.9 72°.5	63.7 66.7 66.9	60°7 64°6 62°8	59°1 63°9 60°1	59°8 62°0 60°0	60°1	58°6 58°3	59.6 56.9	58°1 56°3	55°9 55°1	54°0 55°2	65°99 68°04
1	78·3 71·0 72·2 77·8 77·7 76·3	70.5 71.1 73.7 75.5 74.1	68.3 67.2 68.9 71.7 71.5	67.8 65.1 66.5 69.6 71.9 72.2	67:3 63:7 65:4 70:5 70:5	68.9 63.5 65.7 69.9 70.3	60 3 68 9 64 4 66 5 69 9 70 1	59.7 66.9 62.8 65.3 69.3	59.1 67.9 61.5 62.3 68.7 69.5	57.5 67.3 63.1 61.8 66.4 68.7	57:1 67:3 62:9 63:0 65:8 68:7	56.7 66.9 63.5 63.0 66.1 68.7	69.87 72.13 69.15 71.56 73.64 74.17
	76·1 	73.3 79.5 69.1 64.1 69.5 75.1 77.4	73.3  73.5 66.3 60.3 68.5 71.3 74.3	70°3 63°9 57°5 68°3 69°3 73°1	72:2 69:1 62:3 56:6 68:3 68:7 73:5	71.3 	67:3 69:5 60:0 53:1 66:1 68:5	66.7 68.8 59.3 52.5 60.7 68.1	65.5 65.9 58.7 51.8 61.3 67.9	65.5 63.5 57.8 51.2 60.3 66.5	65°3 65°5 56°7 52°3 59°5 65°7	65.0 70.3 56.2 51.8 59.1 67.1 	72.77 74.39 70.33 62.76 67.63 73.60 75.07
	84·3 72·3 75·1 76·2 73·3 67·5	79'4 71'7 73'3 71'1 68'3 66'3	75.2 70.8 70.9 67.2 63.3 65.1	72:9 70:3 68:9 62:9 59:5 65:5	71.5 70.6 67.7 60.7 57.7 66.1	70.9 70.0 65.7 58.3 57.3 66.3	70.2 70.3 70.0 67.3 54.8 55.9 — 65.6	68.7 68.1 69.3 66.3 52.8 55.8 — 68.4	69.1 68.3 68.5 65.8 52.0 55.4 ——————————————————————————————————	67.5 68.7 69.5 66.7 51.0 54.4	66 9 68 3 68 4 68 7 48 7 53 6 — 61 5	68.5 68.5 48.3 53.8 —	77·25 73·73 72·72 67·14 63·72 66·29
	60°3 64°4 62°5 68°1 65°5 63°7	58'3 60'4 60'9 67'0 62'5 60'0	54.9 54.7 57.7 67.0 60.1 61.3	52:6 51:8 54:0 63:7 59:4 58:1	48.7 51.2 53.2 62.9 57.9 56.2	47.5 48.9 52.2 61.9 57.1 54.5	47.3 48.1 52.2 60.7 55.8	47 · 1 48 · 5 52 · 6 59 · 5 53 · 1 — 55 · 4	46.7 46.9 52.6 58.9 52.8	46.3 46.5 51.3 55.8 50.1	43.8 45.3 49.5 55.3 48.7 — 51.2	47.1 45.5 48.7 54.9 48.3 — 50.1	54·29 56·13 58·47 64·25 59·42 61·03
-	72.59	69.81	66.69	64.56	63.54	62.80	62.14	61.18	60.63	59'69	58.91	58.93	67.98
	72·3 73·7 75·1 69·1 63·9 67·5 72·3 70·5 70·9 72·3	67:3 69:7 71:7 67:1 64:7 64:6 70:0 69:7	61.9 62.4 64.0 64.8 67.0 63.3 — 68.3 69.1 64.6	60.7 58.1 59.9 63.1 66.7 62.3  68.5 68.5 62.1 66.9	60:3 55:1 58:6 64:1 67:0 62:3 — 68:3 67:9 61:1 66:8	58·1 54·4 57·9 63·3 66·9 61·7  66·7 67·7 60·6 66·5	57.1 55.1 58.1 63.3 66.8 ——————————————————————————————————	53·2 54·2 56·5 63·6 65·8 ————————————————————————————————————	52.6 52.8 56.2 62.7 64.4 — 62.3 63.3 65.3 59.0 65.3	52.8 52.4 56.5 62.4 61.1 62.1 62.5 65.0 59.5 62.5	49.7 51.4 55.9 61.8 58.7 61.7 62.7 65.5 57.8 62.7	48.5 52.0 56.9 60.9 57.5 — 62.5 63.7 66.1 57.3 62.3	62.78 63.20 66.24 67.32 68.97 65.65 67.83 70.24 65.49 68.31
	72.7 75.0 80.9 68.9	68.7 70.5 73.7  75.7	67.9 69.3 70.3 71.5	69.1 68.7 	67·3 67·5 67·1 62·6	66.9 67.0 66.3 61.7	66.1 66.1 65.5 59.6	68·1 65·5 64·8 56·8	67.3 	67.0 64.0 64.4 56.4	66 3 	66.5 64.0 63.0 56.5	70°96 71°33 73°16 66°70
	59°3 64°8 60°1 71°5	67.9 56.3 60.3 58.7 66.5	66°3 54°6 56°5 58°7 59°5	52°2 55°9 58°3 58°3	51.6 55.7 57.1 57.5	49 6 55 6 55 2 55 4	48.6 56.0 55.4	48 · 3 54 · 2 54 · 0 — 53 · 0	48·3 52·4 54·0 — 51·8	48.3 50.4 53.4 — 51.4	48·1 51·4 53·0 — 50·6	45.0 51.8 53.0 — 50.8	56.83 57.73 60.90 62.00
	66.3 69.1 66.4 69.3 65.5	60.5 61.7 62.2 66.1 59.0 60.0	56.9 58.9 58.5 65.2 58.5 58.7	56.2 57.6 57.5 65.1 56.5 56.5	54.2 55.1 56.9 66.5 54.6 56.4	53°1 55°1 56°3 66°3 53°1 55°0	54·1 52·0 55·4 55·9 64·0 53·2	52°1 54°6 55°0 62°9 52°4	52.8 54.4 54.1 63.3 49.5	52·3 54·2 53·5 61·7 47·3	49.6 52.8 53.6 60.3 48.0	49°3 52°6 51°9 56°9 48°8	59.53 61.47 61.96 66.23 58.09 60.95
	63.8 58.9	62.0 54.7	59.4 51.3	60.4	59°4 48°5	58·1 48·3	59.0 56.6 47.7	57°5 56°2 47°5	56.0 55.4 45.5	55.5 49.9 48.1	55°6 49°5 49°1	55.4 } 48.5 50.4	62·78 54·36
	68.68	65.23	62.59	61.28	60:37	59.49	59.08	58.22	57.45	56.72	56.25	55 85	64.27

			•		SZ	TANDARD	THERMO	METER.			·	······································	
flours of Göttir Tim	Mean }	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Toro Tim	Mean hto	18	19	20	21	22	23	0	. 1	2	3	4	5
	1 2 3 4 5	51.4 49.3 57.4 56.0	52.8 55.2 62.4 56.1	56.4 60.9 64.1 56.1	59.2 64.8 64.2 56.3	62:3 67:5 70:4 57:1	64°1 68°7 73°1 57°7	63.9 69.4 73.7 57.3	65.9 70.1 70.9 57.8	66.4 72.1 74.8 57.7	66°3 71°9 73°5 58°3	66.0 72.1 70.6 58.5	65.4 69.5 65.5 58.9
	6 7 8 9 10 11	49.2 52.6 65.0 50.1 45.3 46.8	51.8 59.6 66.1 50.1 49.7 52.0	56.2 63.7 68.4 51.1 55.8 56.1	62:3 64:9 69:6 52:7 60:3 61:5	63:3 65:2 73:0 55:8 61:7 61:5	63.5 65.3 74.6 56.8 62.2 63.1	63.3 64.6 74.8 58.2 63.5 62.2	65°3 65°1 73°5 60°5 63°5 62°1	65.9 63.0 73.8 60.3 64.0 61.9	67.7 63.3 72.9 60.1 63.7 61.6	65.8 63.1 72.5 60.2 63.3 60.9	65·1 62·7 70·8 59·0 63·0 60·3
SEPTEMBER.	12 13 14 15 16 17 18 19	54.6 45.0 38.1 38.1 50.4 57.3	53.9 45.7 42.9 43.3 51.4 58.1	53.2 46.7 46.3 50.8 56.5 59.4	54.8 47.4 50.1 53.4 60.0 59.8	54.8 48.7 52.0 57.7 61.5 61.1	54.8 48.4 54.2 58.3 62.5 60.7	55.0 49.4 55.6 58.7 62.1 61.3	55.5 50.0 57.1 58.3 62.0 61.5	53.8 53.0 57.0 59.0 61.1 60.5	52.2 53.3 57.3 59.5 61.3 61.0	50.9 52.9 57.9 59.7 61.0 61.0	49°2 51°8 57°9 58°3 60°0 60°1
	20 21 22 23 24 25 26	54.8 51.4 44.8 49.9 54.6 49.0	55.4 53.7 48.3 52.8 54.0 48.9	56.3 56.3 52.5 58.7 54.0 50.0	56.5 58.3 56.2 61.5 54.4 53.1	57·1 59·9 59·2 62·9 54·4 55·1	56.8 60.1 59.5 65.0 54.6 56.7	57.0 62.5 59.4 65.5 56.0 59.1	57.0 61.7 58.7 66.1 55.8 58.1	56.7 62.7 59.5 67.3 55.8 57.2	56.5 61.7 59.3 67.1 55.6 56.2	56.6 59.7 60.1 66.7 55.7	57.1 58.3 58.7 66.0 55.3 55.5
	27 28 29 30	58.0 46.7 43.6 39.6	59°2 49°3 44°4 41°9	60°1 53°0 48°3 45°0	60.6 54.9 51.4 48.9	62:3 57:5 54:2 52:8	64°1 59°5 50°4 53°2	66°3 60°3 54°2 54°7	67.5 52.2 55.4 54.8	68:3 55:0 48:7 52:2	68.7 54.4 46.6 52.0	69°1 52°2 48°2 53°0	67.1 51.3 48.5 51.6
Hourly	Means	49.96	5 <b>2</b> · 27	55.23	57.58	59:58	60.30	61.08	61.02	61.07	60.85	60.21	59.50
	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	44°4 39°3	46°3 41°9	48 <b>.</b> 9 46.9	50°0 51°3	50°9 53°5	52.7 54.8	52.8 54.6	53.7 55.0	52.8 56.2	54°0 56°3	54°0 55°0	52°2 52°8
Particular of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Con	3 4 5 6 7 8 9	40.7 57.3 57.3 55.5 55.6 40.8	44.0 58.3 57.2 54.8 55.5 44.2	51.5 58.8 57.0 55.0 55.7 47.1	56.7 60.7 56.9 55.0 56.2 51.9	58.1 59.5 56.7 56.2 57.5 54.2	59.5 60.1 56.9 55.6 58.5 53.8	60°5 63°7 57°5 55°0 59°0 53°6	59.4 63.2 57.3 55.5 56.8 54.0	59°3 63°9 58°0 55°6 56°7 56°5	58.1 65.0 58.7 55.8 56.3 56.5	58.0 62.3 58.5 56.0 56.8 56.5	56°9 60°5 58°7 56°0 57°9 55°6
OCTOBER.	11 12 13 14 15 16 17	39.4 41.4 38.6 35.0 29.7 42.8	39.6 42.4 39.1 35.4 30.6 44.3	41.7 43.8 41.3 35.6 33.7 46.1	44.4 45.0 41.7 39.1 35.3 47.9	46.5 46.7 43.0 41.0 37.6 49.9	47.8 47.8 43.9 40.3 41.5 51.2	49.5 45.3 46.5 41.0 41.9 52.7	49.5 45.3 47.3 40.0 41.6 54.5	50.6 44.0 47.1 40.8 43.2 55.4	51.0 44.2 46.0 41.0 42.6 55.7	50.7 43.9 44.1 40.2 41.7 54.5	48'1 44'0 43'4 38'9 39'8 53'2
,20	18 19 20 21 22 23 24	39·1 41·9 29·9 34·5 38·1 35·3	42°1 41°1 31°9 35°9 38°2 35°1	45.3 44.3 37.8 38.1 38.1 37.2	49.8 48.5 44.4 41.5 37.9 41.6	54.0 49.5 47.3 44.0 38.7 46.0	56.3 51.6 49.5 44.9 39.2 48.0	60.3 53.6 49.9 44.7 38.9 49.3	61.7 52.4 51.4 44.1 39.4 48.9	61.5 54.5 54.0 44.0 40.0 49.1	61.0 53.5 54.4 43.9 40.4 49.1	60°5 52°8 52°8 44°0 41°0 48°9	58.7 50.1 48.5 43.4 40.6 46.1
	25 26 27 28 29 30 31	46·3 29·1 21·9 25·3 28·6 34·1	46°3 30°2 21°7 27°0 32°7 33°9	46.6 31.8 23.8 32.4 34.5 36.4	48'3 31'6 29'0 35'3 41'0 43'7	47.9 31.9 30.8 39.4 45.2 47.3	48.7 31.3 32.0 41.0 47.3 50.5	48.4 32.4 33.7 41.0 48.0 50.4	48·2 31·0 35·8 41·0 49·0 51·3	45.2 30.9 36.2 41.4 49.2 50.2	42.6 30.7 35.7 40.8 48.9 50.1	39.6 29.7 34.7 40.4 48.1 49.3	37·3 27·8 33·5 38·6 44·6 46·3
Hourly	y Means	39.30	40.37	42.67	45.57	47.43	48.64	49.39	49.51	49'86	49.70	49.00	47.44

					STANDAR	D THERM	IOMETER	•				
12	13	14	15	16	17	18	19	20	21	22	23	Daily an
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
63.9	58°4	56·3	54°·9	54.4	53.9	53° I	52°0	·51°·1	5°1.4	5ΰ1	49°7	5 <b>7</b> °98
68'1	65.2	65.2	64.1	61.7	59.5	58.3	56.7	56.2	54.4	55.6	55.4	63.00
62°3 59°3	60°0 59°7	59.1	58.9 60.6	58 2 60 6	56°3 59°5	55.9	55.8	56.7	56.7	56.3	56.2	63.04
		}	_			49.8	48.7	48.3	48.1	47.7	$\frac{-}{48\cdot 1}$ }	55.77
63.6	60.0 62.2	57.7 61.3	57°2 63°1	56.8	55.0	55.0	53.6	52.6	51.9	51.6	51.8	58.59
68.0 61.3	66.5	66.1	$\frac{65.7}{65.7}$	64 · 1 58 · 3	63.0 55.2	$\begin{array}{c} 63.3 \\ 55.2 \end{array}$	63.9 54.0	63.5 $54.0$	63 6 53 6	63.9 51.8	64·1 49·5	62°93
58.9	57.2	56.5	53.2	50'1	48.0	45.7	44.4	44.5	43.9	43.6	43.3	52.68
60.6 59.0	53.7 52.6	51.4 51.0	50.6 50.8	49.5 50.4	48.9 50.1	48.6	48'4	47.7	46.7	46.3	46.5	54.79
			_			56.3	55.6	54.6	54.4	54.2	$\frac{-}{55\cdot 4}\}$	<b>56.4</b> 3
48°1 51°2	47°1 46°1	46.1 44.6	$\begin{array}{c} 45.5 \\ 43.2 \end{array}$	45°2 43°6	44.6 42.4	44.6 41.9	44.6 40.1	44·4 39·5	44.4 38.1	44 · 1 39 · 1	44 6 38 6	49°42 45°86
55.0	49.2	48.3	49.2	48.3	47.1	45.8	43.2	40.9	39.7	$\frac{39}{38}.\frac{1}{9}$	38.2	48.78
55.3	50.8	49°0 58°5	47.8	48.5	49:5	49.5	49.3	49.3	48.7	49.3	50.1	52.18
58.8 59.3	58.7 60.1	59.8	58°3 59°1	55.8 58.9	55.4 59.3	54.6	58.3	58.3	58.1	57.5	57.5	58.32
				_		55.4	55.4	55.2	54*8	54.8	54.8}	58.70
55.6 55.0	53.0 51.6	53.6 49.9	$53 \cdot 2$ $49 \cdot 3$	52.8 48.4	52.0 48.3	52.0 46.7	53°4 44°6	53.0 43.6	52°3 44°7	54°1 44°9	$\frac{52.7}{44.4}$	54°81 53°24
53.8	51.9	50.1	49.2	50.6	48.9	47.3	46.1	45.9	45.5	45.5	45.7	52.36
62.5 $54.8$	61.1 54.4	59.5 54.6	58°1 55°0	56 <b>·</b> 9 54·1	56°3 53°4	58°3 53°1	57°1 52°8	56.5 52.1	56.0 50.6	55.2 49.5	54.6 48.8	60.07 53.89
54.8	54.6	54.1	53.6	53.4	53.4			_	_	}	— Դ∥	55.20
64.6	$\frac{-}{62\cdot 3}$	62.3	60.9	58.7	56.3	56.5 52.8	57°3 49°7	58°1 48°6	58.3 46.7	58°3 46°9	57·9 } 46·3	59.48
49.8	48.7	46.7	44.9	44.8	43.0	42.1	41.7	41.5	43.0	43.4	43.9	49.16
47.7 51.0	47°1 45°9	46°2 45°2	$\begin{array}{c} 44.8 \\ 45.2 \end{array}$	44°4 46°1	45°3 47°7	45°3 49°1	43°4 50°0	40'4 49'9	$\frac{41.5}{48.7}$	38.5 48.1	39.6 45.9	46°59 48°85
57.77	55.32	54.36	$\frac{45 \ 2}{53.71}$	52.87	52.01	$\frac{49}{51.47}$	50.77	50.25	49.84	49.62	49.38	55.26
								1		<u> </u>		
$\frac{48\cdot1}{48\cdot3}$	43.4 45.7	42°4 45°3	39 <b>.</b> 8 46.6	40°4 46°7	40°8 44°3	39.8	37.9	38.2	40.0	39.6	39.6	45.96
	_		40 0	40 /	44 5	45.5	45.7	44.2	43.8	42.9	$\frac{-}{42\cdot 6}$	48*30
56°2 59°5	56.2	55.8	55.8	54.0	53.9	54.5	54.4 57.2	53°3 57°3	$54.2 \\ 57.2$	54.2 57.2	56.0 57.1	55 <b>°0</b> 5
58°5	59.0 58.3	58°5 57°3	58°3 56°9	57°5 57°1	57°1 56°6	57°3 56°6	56.1	55.8	55.6	55.4	55.5	57.10
56.2	56.5	56.7	55.8	55.8	55.8	56.1	56.2	55.8	55.8	55.8	55.8	55.76
57.5 53.1	57°3 52°9	55°6 54°4	52.8 54.4	51.5 53.6	50°1 53°0	48.1	47.3	46.3	44.5	42.5	42°1	53°25 49°70
-	_	_				42.3	41.5	40.6	41.0	41.0	$\frac{-}{40.2}$	
46.7 44.0	43.4 43.6	43°0 43°2	41°2 42°8	40°4 42°4	37 <b>.</b> 9 43 <b>.</b> 0	37.7 42.8	$\frac{37.7}{41.2}$	38.4 40.3	38.7 39.6	40.0 39.2	41.5 38.6	45.64 $43.58$
40.3	39.5	37.2	35.3	34'1	32.9	32.2	33.7	34.1	34.7	35.4	35.2	39.4
36'1 39'3	33'1 41'5	31`6 40 <b>`</b> 9	30°3 40°3	29.0 41.8	28.8 42.8	27.5 42.8	27°4 42°4	$\begin{array}{c} 27.7 \\ 44.4 \end{array}$	28.6 $44.3$	29.0 44.3	29.0 43.4	34.48 40.31
53.8	53.2	52.6	52.2	52.0	51.8	_					— )	48.10
59·1	$\frac{}{57\cdot 2}$	56.3	 57 <b>·</b> 9	<u></u> 54.0	52.2	40.6 51.2	39·1 50·1	39°1 48°9	38°2 47°1	37.6 43.4	37·4 } 42·2	52.9
46'1	44.8	43.8	40°8	38.9	34.3	33.5	32.1	31.1	30.9	31.0	30.8	43.00
45°3 43°2	43.4	43.0	40.6	39.9	36.6	32.0	31°4 38°7 .	30.6 38.3	31.2 38.3	31.0 38.1	33 <b>·</b> 9	41 32 41 1
40.3	43 <b>·</b> 2 39 <b>·</b> 9	42.6 39.8	$\frac{42.5}{39.5}$	$\frac{42.5}{38.9}$	39.8 39.1	39.3	37.5	35.5	34.3	34.8	36.2	38.2
45.3	40.2	40.2	38.6	38.3	38.9					_	$\frac{-}{46.3}$	43.9
	34·5	34.5	32.2	32.2	31.8	46.7 31.2	46.7 31.0	46.7 30.8	46.5 30.3	46.5 28.8	28.2	38.5
35.3	25.7	24.6	23.8	22.7	21.7	21.1	20.2	20.6	20.6	20.9	20.8	26.5
26.5		31.6	31.5 31.1	31.8 29.9	28°8 29°5	$28 \cdot 2$ $29 \cdot 5$	27.8 30.0	27.6 28.8	28 <b>·</b> 2	28.0 28.3	27.1 29.0	30.9 34.1
26.5 31.7	32.0	22.47		499			33.9	33.1	32.9	33.1	33.3	39.7
26.5 31.7 37.9 43.4	32.0 37.0 41.5	35.7 41.1	37.4	38.5	35.0	34.6	00 3	00 1	) <b>-</b> 0	00 1		39 (
26.5 31.7 37.9	37.0				35°0 35°9 —	48.9	48.8	47.7	48.1	47.7	$\frac{1}{47.8}$	39 7 44.7

		-2		S'.	randari	THERM(	OMETER,			`	· · · · · · · · · · · · · · · · · · ·	
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \end{pmatrix}$	47.7 49.7 46.0 41.9 35.7 31.8	48.2 49.7 46.2 41.5 35.6 29.7	49.4 50.8 53.4 45.1 38.6 32.4	50°6 52°3 54°0 48°9 40°5 35°5	52.6 54.0 53.2 49.3 42.9 36.7	53.6 55.8 53.0 51.5 43.6 37.7	55·2 56·3 54·4 51·4 44·6 37·5	55.2 58.2 54.3 51.1 46.2 37.2	54.4 56.1 54.8 51.0 44.6 37.3	53.2 55.8 54.0 48.8 45.0 38.3	51°9 54°8 53°8 49°6 43°1 38°7	49 <sup>1</sup> 7 52·0 53·0 46·1 41·2 36·1
7 8 9 10 11 12 24 13	45.2 50.8 37.3 35.7 31.8 34.4	45.5 51.0 37.5 35.9 30.8 34.0	46.0 53.2 38.1 36.3 32.3 34.7	46.6 53.6 38.5 36.7 36.5 37.4	46.0 55.6 38.3 37.0 38.3 38.6	46.3 54.1 39.6 37.2 39.3 39.6	46.9 52.6 39.9 37.7 39.2 40.4	48°3 51°2 40°1 37°9 39°8 41°0	48.0 51.8 39.8 37.9 39.5 40.8	48.3 52.1 39.6 37.7 40.0 40.0	48.5 51.8 39.0 37.5 38.9 39.2	48·3 47·4 38·3 36·7 37·9 39·1
13 14 15 16 17 18 19 20	38 · 2 28 · 4 46 · 0 42 · 4 33 · 8 18 · 8	38.7 27.4 46.1 41.9 33.6 18.6	38.9 30.6 45.9 41.9 31.4 20.0	40.0 36.3 46.6 42.2 30.8 23.6	41.3 39.5 48.7 42.6 29.9 26.3	41.5 41.0 50.6 42.8 28.8 27.8	40.0 43.3 52.4 42.6 28.4 28.8	40.6 44.4 50.6 42.6 28.4 29.5	41·2 46·5 49·5 43·0 29·6 30·2	41.3 46.9 52.0 43.7 28.6 30.0	40.7 46.3 51.7 45.2 28.2 29.2	40.0 45.7 49.3 45.5 27.6 27.9
21 22 23 24 25 26 27	35 · 4 42 · 0 47 · 5 40 · 4 26 · 2 24 · 6	35.9 42.3 45.4 40.4 25.5 25.4	36.1 42.6 45.7 39.3 25.7 26.5	38.4 43.9 45.9 41.9 25.7 27.5	40.8 45.5 47.9 42.4 25.7 26.7	43.7 47.6 49.5 42.4 25.9 27.8	45.3 50.0 50.0 41.4 25.9 27.8	46.5 51.2 50.0 40.3 26.3 30.8	45.8 50.8 49.8 39.3 26.3 31.6	45.2 51.3 48.1 39.1 26.5 31.2	43.3 51.6 47.5 38.9 25.9 29.9	41.5 52.4 47.1 37.7 24.4 30.1
28 29 30	9.6 18.6	9.3 18.2	9.8 21.1	10°1 22°6	$\frac{11.2}{23.7}$	13.4 24.6	13.4 25.1	13.7 25.7	14.3 26.5	15.4 26.8	15.4 25.7	$\begin{bmatrix} 13.4 \\ 24.4 \end{bmatrix}$
Hourly Means	36:15	35.93	37.15	38.72	39.80	40.72	41.17	41.58	41.55	41.50	41.01	39.72
$\begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{bmatrix}$	31.8 35.0 33.7 25.9	33°3 34°5 33°6 25°7	36·1 34·4 33·5 25·7	37°2 35°9 33°6 27°5	37.9 36.9 33.7 27.8	38.9 37.7 34.2 29.7	40.6 38.7 34.1 30.0	40°2 38°7 33°8 30°0	40.6 38.6 32.3 30.3	42.2 38.3 32.0 31.1	38.8 37.2 31.3 31.0	38°1 35°0 30°6 30°9
$egin{array}{c} 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ \end{array}$	26:9 32:7 36:3 37:6 47:1 33:4	26.5 32.7 36.1 37.1 45.7 33.9	27.6 31.6 37.4 36.5 45.8 34.7	29.5 36.1 39.6 36.1 45.7 35.1	31 · 2 37 · 7 42 · 1 36 · 5 47 · 2 36 · 1	30.2 38.4 44.1 37.5 47.1 36.5	31.4 39.1 45.3 38.2 49.5 36.1	32.0 39.5 45.8 38.5 49.9 37.1	33.7 40.0 44.5 39.7 49.5 37.4	32.7 39.8 44.7 41.6 45.9 37.6	32.7 38.1 44.6 42.3 44.7 36.2	29.9 35.2 43.9 42.9 44.0 33.7
12 13 14 15 16 17 17 18	37.0 32.0 34.1 13.2 16.4 13.2	36.9 32.0 32.4 13.2 17.5 13.7	36:1 32:2 29:9 13:8 18:2 14:6	36.1 32.7 30.1 13.8 19.2 18.4	36°1 33°1 31°0 15°0 21°2 22°5	36.1 33.2 31.6 15.8 21.5 24.8	36.7 33.5 32.3 17.2 24.0 27.0	36.3 33.3 32.8 18.1 25.9 29.9	34.6 33.1 32.7 19.4 27.1 31.3	33.5 33.0 32.7 19.8 27.5 31.4	33.7 32.9 31.8 20.0 27.6 32.4	33°3 32°7 29°7 21°2 26°1 33°1
19 20 21 22 23 24 25 a	13.7 10.4 21.1 17.7 21.3	13.7 9.9 20.8 17.7 20.6	13.2 9.5 20.6 19.9 20.4	12°1 10°3 21°3 19°4 22°3	12.8 13.0 22.3 20.2 22.0	13.4 16.1 23.4 21.9 21.3	14·1 17·2 24·0 23·6 21·7	15.0 18.2 23.9 24.0 21.6	15°1 18°7 24°6 24°0 22°1	15.7 20.2 24.9 24.4 22.1	14.1 21.3 25.0 24.6 21.5	11.0 21.5 24.4 24.4 20.9
26 27 28 29 30 31	13°0 30°3 37°2 41°7 42°4	12.0 30.9 38.0 40.6 41.7	10.7 31.4 38.3 41.0 41.9	12 1 33 0 39 5 43 0 42 4	15.7 34.1 41.7 43.3 43.9	17:3 34:4 42:4 44:3 45:5	18.8 34.4 43.4 45.2 45.1	18.2 34.5 42.4 46.2 44.9	19 1 34 1 42 2 45 5 44 9	19.8 34.7 42.1 44.2 44.2	19'4 34'7 42'4 44'2 44'0	19:8 34:7 41:9 43:2 43:6
Hourly Means	28:27	28.10	28.27	29.31	30:58	31.43	32:35	32.72	32:89	32.93	32.56	31.76

Christmas Day.

فس						STAND	ARD THE	RMOMETE	ZR.			الأسماس والوجرة والمساجعين	***
	-12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
	6	7	8	9	10	11	12	i3	14	15	16	17	Means.
	46.8 50.6 53.8 43.0 38.5 32.9	48.3 49.4 52.5 41.5 37.1 30.3	49°3 50°4 52°5 42°4 36°1 29°3	50°1 52°6 52°8 38°5 35°3 29°7	49°3 51°6 52°6 41°1 36°1 29°7	49°5 50°2 50°0 40°9 36°3 29°5	49°7 49°9 49°1 40°0 35°3	50°9 49°7 49°3 37°5 34°5	49°5 49°7 46°1 35°7 33°8	49°4 49°3 44°8 34°9 33°1	49°5 47°4 42°8 35°1 32°7	49°5 47°1 41°3 36°3 32°2	50°56 51°81 50°74 43°46 38°44
į.	48°3 46°5 37°7 36°4 37°5 39°6	48.3 41.7 37.3 36.0 36.9 40.0	48.5 41.3 36.9 35.7 36.5 40.0	48 1 43 8 37 2 35 5 35 7 40 0	48.0 42.8 36.7 35.5 35.7 40.2	48.2 42.1 35.7 35.5 35.7 38.9	43.7 49.3 42.1 35.9 35.5 35.7	43.6 49.1 38.7 35.9 34.9 36.1	44.2 49.1 37.3 35.7 34.7 36.9	44.6 50.8 37.5 35.5 34.1 37.3	44.8 50.6 37.6 35.5 33.5 37.0	$ \begin{array}{c}  - \\  45.0 \\  51.8 \\  38.1 \\  35.5 \\  33.0 \\  36.6 \\  - \\  \end{array} $	36.51 48.08 46.45 37.56 36.02 36.75 38.46
	38 · 9 45 · 2 47 · 7 45 · 3 27 · 6 29 · 1	37:4 45:7 47:3 45:3 26:7 30:7	36 9 45 5 47 6 45 3 26 1 31 8	35.6 45.2 46.3 49.9 25.6 31.4	33.7 45.2 46.1 48.1 24.9 31.1	33.5 48.0 46.3 46.3 23.8 30.6	37.8 33.7 45.9 46.3 45.3 22.8	37·7 33·7 45·9 45·9 43·3 21·7	37·7 32·4 45·7 45·3 41·8 21·5	37·3 30·1 46·7 44·2 40·4 20·2	36.7 30.6 45.3 44.0 37.3 20.0	$\left\{ \begin{array}{c} -1 \\ 37.9 \\ 29.2 \\ 45.9 \\ 43.1 \\ 36.1 \\ 19.0 \\ -1 \\ 35.6 \end{array} \right\}$	37 · 00 42 · 77 47 · 48 43 · 25 26 · 63 29 · 25
1	40.4 51.4 45.8 37.7 23.7 30.1	40°3 51°8 44°3 37°3 22°6 30°1	40°4 51°2 43°3 36°0 22°5 29°9	41.0 51.2 42.4 36.0 21.7 31.1	41.5 51.8 42.3 35.1 21.3 30.6	41.5 50.8 42.1 33.9 20.4 30.0	33°1 42°1 49°7 41°9 32°9 19°6	33.1 41.9 49.1 41.5 31.6 20.5	34'1 42'2 48'3 41'1 31'2 21'5	35.1 42.6 49.7 40.9 30.6 22.1	35.6 42.2 49.1 40.7 28.4 22.5	35.6 { 41.7 49.4 40.8 27.1 25.0 7.8 }	41·49 48·95 45·06 36·72 23·86 24·02
	12°1 23°8	11.6 25.1	11.6 26.3	12·1 27·5	12.6 29.5	14.3 30.1	10.4 15.2 30.4	10°2 17°4 30°0	9.2 17.2 26.1	8.8 16.2 23.6	8'4 18'1 24'2	7.8 5 18.3 24.2	13.57 25.16
	38.86	38:29	38.50	38.22	38.20	37.85	37.43	37.07	36.46	36.12	35.75	35.67	38.46
	37.5 -35.4 29.9 31.1	35.9 35.4 29.2 31.7	36°1 35°6 29°0 32°5	35.7 35.3 28.8 33.7	34.8 34.9 28.8 33.9	36.1 33.7 28.4 33.7	36.7 32.9 27.6	36.7 33.6 26.9	36.0 33.5 27.4	35.7 33.9 26.7	35.7 33.8 26.3	35°1 33°5 26°1	36.99 35.52 30.48
	28.4 32.7 42.9 43.0 42.1 29.9	$\begin{bmatrix} & - & & & & \\ 31 & 8 & & & \\ 32 & 2 & & \\ 41 & 9 & & \\ 43 & 7 & & \\ 41 & 2 & & \\ 28 & 4 & & \end{bmatrix}$	30.4 31.4 41.6 43.7 41.2 27.4	28.9 31.8 41.7 44.8 40.2 27.9	33°1 33°1 41°5 44°3 39°3 27°2	32.7 31.8 42.6 47.1 38.7 28.3	26·3 32·7 32·4 42·6 46·5 38·4	26.5 32.3 32.2 42.4 46.9 37.9	26.8 32.8 33.3 41.0 45.3 36.5	26.4 32.9 33.1 40.4 44.8 35.3	25.5 33.0 34.9 39.8 46.0 33.2	$\left\{ \begin{array}{c} -1\\ 26\cdot 4\\ 32\cdot 9\\ 35\cdot 9\\ 38\cdot 1\\ 46\cdot 2\\ 33\cdot 3\\ -1\\ 38\cdot 7 \end{array} \right\}$	29·17 31·09 34·82 41·70 41·95 42·48 34·63
	33 · 1 32 · 9 28 · 8 21 · 5 25 · 5 33 · 9	33.1 32.9 26.9 21.5 24.6 33.7	31.4 32.9 25.7 20.7 24.6 34.3	31.8 32.7 23.0 20.4 23.0 33.7	30.8 32.4 20.6 20.6 21.1 31.9	31.0 32.4 19.4 20.0 18.9 33.5	39.6 30.7 32.4 17.7 18.8 18.4	39·2 30·6 33·4 16·6 17·7 16·5	39.0 30.6 33.3 15.2 16.1 14.5	38.7 31.2 33.5 14.1 15.2 14.0	39.0 31.4 33.7 13.0 15.0 14.8	31.8 33.9 12.6 16.4 14.5	33 · 50 32 · 92 25 · 61 17 · 68 20 · 94 24 · 93
	10.6 21.5 21.3 24.2 20.8	9.7 23.2 19.6 24.2 20.4	9'0 23'4 19'6 24'2 20'0	10.5 23.7 18.4 24.2 19.2	10.7 23.8 18.6 24.5 18.5	10.9 24.2 19.0 24.2 18.2	18.4 10.9 24.4 17.7 22.9	18:3 10:1 24:8 17:3 23:2 —	18.0 9.9 24.0 17.3 23.9	17.7 10.0 23.2 17.2 24.4	16:4 9:7 22:1 17:5 23:8	16:2 } 8:9 21:5 17:5 22:9	11.87 19.42 20.72 22.85
	19.6 34.7 41.2 42.8 43.2	19.4 35.3 40.4 43.2 42.4	19 0 35 3 39 8 43 2 42 1	21.5 36.1 38.8 42.1 41.9	22.7 35.4 38.7 42.0 43.4	24.5 35.5 38.6 41.6 43.2	9.9 25.0 36.1 40.0 41.5 44.0	10°1 26°1 36°3 40°3 41°6 44°6	10.7 26.0 37.0 41.0 41.6 45.1	12.0 27.0 36.5 41.7 41.2 45.7	14·3 28·4 36·7 42·3 40·6 45·8		18.55 20.18 34.72 40.69 42.74 43.83
	31.10	30.84	30.24	30.38	30.25	30.32	29.40	29:31	29.07	28.94	28.95	28.94	30.38

			<del>11</del>		S'	randari	THERMO	METER.	. <u>, , , , , , , , , , , , , , , , , , ,</u>			** <u>, , , </u>	
Hours o Göttii Tim	f Mean	0	1	2	3	4	5	6	7	8	9	10	11
	f Mean	18	19	20	21	22	23	0	i	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	45.8 — 33.0	° 46.9 33.0	6.3  33.9	46.7 — 35.4	6 3 - 36 0	47.8 - 36.9	37°1	48.0  37.9	48.9  38.2	48.5 - 38.3	51.5  37.7	51·4 
	4 5 6 7 8 9	34.7 23.8 11.8 12.8 30.3	33.8 25.5 10.9 13.7 31.2	31.9 26.7 10.0 13.9 31.0	30°3 27°4 10°0 14°8 30°8	30°1 27°8 10°7 15°0 31°4	28 9 29 1 12 0 16 0 32 0	27.6 31.6 12.7 18.4 32.3	27:1 34:9 14:0 19:4 33:7	26.6 34.7 13.2 19.8 34.1	25.6 36.9 13.9 19.8 32.7	23.9 35.1 13.8 19.6 32.1	21.5 31.2 13.0 19.6 30.6
ARY.	10 11 12 13 14 15	-11.3 8.8 10.9 33.3 36.7 39.8	-12.0 9.2 8.1 33.7 36.8 39.6	$ \begin{array}{c} -11.8 \\ 15.0 \\ 7.2 \\ 33.1 \\ 37.1 \\ 41.1 \end{array} $	- 9'3 16'9 13'7 35'2 37'3 41'2	-6.9 17.8 19.1 35.9 37.3 42.4	- 4.6 19.8 21.7 35.9 37.9 43.2	- 2.5 20.0 25.0 35.6 37.8 44.4	0.6 21.7 26.7 36.9 38.1 44.1	0°2 22°5 25°9 37°1 38°3 44°6	0°2 22°5 26°9 37°2 38°3 47°3	0°1 21°7 25°0 36°9 38°3 47°1	0'6 21'1 21'3 36'9 38'2 43'8
JANUARY.	/ 16   17   18   19   20   21   22   23	31.5 30.3 5.0 29.7 38.3 15.2	31.3 25.3 5.0 30.2 38.0 15.4	25.9 22.7 5.7 30.4 38.0 16.9	24.8 22.8 9.2 33.5 40.6 18.4	23.4 21.9 13.2 36.0 43.2 20.0	24.0 21.1 14.6 37.6 45.2 22.7	24·3 21·5 17·4 38·5 45·3 25·3	25.0 21.1 18.1 38.8 44.4 26.3	25.7 20.4 19.8 40.6 41.9 27.8	26.5 20.6 21.3 41.9 38.2 29.7	25°3 18°8 21°9 39°2 34°2 29°2	24.8 17.6 21.1 37.1 32.0 27.2
	25 24 25 26 27 28 29 30	21.9 27.4 38.0 38.1 31.0 26.5	20.6 28.0 37.7 37.4 31.7 29.5	21·1 28·9 37·9 37·9 31·8 30·7	26.7 33.5 38.2 38.7 31.4 31.6	29.5 36.1 38.2 39.9 33.8 31.6	30.6 37.7 38.0 40.7 34.5 31.3	31·2 37·7 38·3 42·3 35·1 31·6	31.0 38.2 38.5 41.4 35.5 31.8	32.7 39.8 39.3 40.2 35.5 32.1	32.7 39.9 39.6 40.2 35.1 32.4	32·3 38·3 39·8 39·3 33·3 32·1	30.8 35.9 40.0 38.3 33.1 31.6
	31	33.3	33.9	34.3	35.9	36.2	36.7	37:3	37.8	37.9	39.2	38.8	36.2
Hourl	y Means	26.02	25.90	26.06	27.53	28 69	29 67	30.54	31.19	31.45	31.73	31.00	29.69
	$ \begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \end{pmatrix} $	27.1 20.8 28.6 32.0 28.8	27.4 21.3 27.4 33.7 28.0	28.0 21.7 27.4 34.3 27.4	29.1 28.7 31.8 36.7 27.1	30.2 33.7 35.7 39.3 27.9	30°2 35°5 38°1 39°6 28°4	28 '9 35 '5 39 '3 39 '6 28 '3	27.6 36.1 41.0 38.7 27.8	28.6 36.5 41.4 37.5 28.4	29·2 36·5 40·8 37·4 28·0	29.0 35.9 39.1 37.5 27.6	26·9 34·1 36·3 37·2 26·1
RY.	7 8 9 10 11 12 13	22.7 18.9 22.3 21.1 0.4 13.0	21.7 19.5 22.5 18.7 0.6 13.4	21.6 20.2 25.5 16.5 1.0 14.4	21.7 21.7 29.5 13.3 3.2 15.6	22.9 23.2 29.0 13.9 5.5 19.6	23.6 24.0 31.6 14.3 8.2 21.7	24.9 25.3 33.7 15.1 10.6 22.8	25.3 26.9 33.5 16.0 11.8 24.4	26.7 28.2 34.9 16.9 12.7 25.5	26.9 27.8 34.5 16.6 14.1 25.3	26.9 26.9 34.5 16.0 14.8 24.4	26·1 26·1 33·7 14·5 14·2 22·6
FEBRUARY.	13 14 15 16 17 18 19 20	19.2 20.3 21.7 21.7 20.6 30.8	18.2 18.8 24.8 20.7 20.8 31.7	20°2 19°0 26°1 25°5 25°7 32°9	27.6 21.5 32.0 30.2 31.9 34.9	32.1 24.7 34.1 33.8 34.8 35.9	34°3 27°4 35°7 35°7 36°3 37°1	36.9 30.1 36.7 36.7 37.1 39.0	37.9 33.3 36.7 36.9 37.7 39.5	38.9 32.4 35.9 36.8 38.1 39.3	38.8 31.6 35.8 36.1 37.4 38.1	38.3 32.0 35.3 35.3 37.7 36.9	36.9 31.3 33.3 32.7 36.9 36.7
	21 22 23 24 25 26 27	36.9 30.3 31.5 22.4 11.0 12.1	37:1 31:6 29:8 23:0 10:6 12:2	37.1 33.1 32.7 24.1 12.1 19.2	39 · 1 34 · 4 35 · 0 24 · 9 15 · 8 26 · 3	40.0 35.9 35.7 25.8 17.7 30.3	41.5 37.7 35.7 27.5 19.0 31.1	43.8 38.7 35.1 26.9 20.1 31.8	45'3 40'6 37'2 28'0 20'8 33'5	46°3 39°7 33°4 29°0 23°6 34°3	46.9 37.1 33.9 30.1 22.3 34.3	46.5 36.6 32.4 30.3 23.4 34.2	43.0 35.8 30.8 27.6 21.5 32.7
	28	28.5	28.4	29.7	28.8	29.9	30.8	31.8	33.8	34.9	36.1	36.5	36.8
Hourly	Means	22.60	22.28	23.98	26.70	28.82	30.21	31.50	32.10	32.20	32:32	31.99	30.28

						STANDA	RD THER	MOMETE	R.		<del></del>		
ľ	12	13	14	15	16	17	18	19	20	21	22	23	Daily and
	6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
ĺ		0	o	o	0	o		0	0 .	٥	o	٥	0
	43.2	40'6	38.9	37°1 —	36.1	34.2	32.2	32.9	31.8	32.7	$\frac{-}{32.7}$	$\frac{-}{33\cdot 1}$	41.75
	36.7 20.2	37·3 19·7	37·2 19·4	37·3 19·0	37·3 18·6	37°7 18°4	38.3 18.2	37.6 19.0	36.7 19.3	35.5 20.3	36.0 20.5	36.3 20.2	36°58 23°96
	28.6 12.1	26.7 11.7 23.6	26.4 11.0 23.5	23.3	20.0	18.2 10.6	17.2 10.5	16.9 10.7	17.7 10.8	14.8 11.3	12.4 11.2	12.0 12.3	24.95 11.65
	22.8 29.9 —	29.9	28.6	24.8 26.9	25.6 25.5	26.5 23.6	$\begin{bmatrix} 27.2 \\ -4.5 \end{bmatrix}$	$\begin{bmatrix} 27.2 \\ -6.4 \end{bmatrix}$	$\begin{bmatrix} 28.4 \\ -7.7 \end{bmatrix}$	$\begin{bmatrix} 28.8 \\ -8.9 \end{bmatrix}$	$\begin{bmatrix} 29.5 \\ -10.5 \end{bmatrix}$	$-\frac{11.0}{20.1}$	21.70 20.73
	- 5.3 20.8	- 7·3 21·1	$-7.3 \\ 21.4$	$-6.5 \\ 21.5$	$-\frac{7.7}{21.5}$	$-\frac{8.9}{21.3}$	$-\frac{9.1}{4.0}$	-8.6	$\begin{bmatrix} -7.7 \\ -5.3 \\ 20.4 \end{bmatrix}$	$\begin{bmatrix} -0.3 \\ -2.7 \\ 20.0 \end{bmatrix}$	0.4 14.6	$\begin{array}{c} 0.5 \\ 9.2 \\ \end{array}$	- 5.20 18.79
	21°1 36°7	26.1 36.9	26.7 36.7	26.7 36.9	28.0 36.7	28.4 36.6	27.8 36.9	29·1 36·9	29·3 36·7	32.0 36.9	32·4 37·1	33·1 36·5	23.84 36.22
	38.7 40.0	39°1 37°5	39 <b>·</b> 5 36 <b>·</b> 4	36.1 38.6	40.0 34.4	39.8 34.2	39.6	40.6	39.8	39.6	40.0	39.8	38.68 38.53
	25.7 16.0	26·2 14·4	26.5 13.9	27.6 14.1	26.4 14.8	27.4 15.0	30.6 28.0 13.7	30.6 28.0 10.3	31.4 30.3 9.1	31.8 31.0 7.1	31.6 30.8 6.4	31·4 } 30·8 5·7	27.13 16.86
	20.6 36.4	23.6 34.1	23·8 35·7	24.6 36.1	25·3 35·9	25.0 37.7	26·3 38·1	25.5 38.7	25·5 39·1	27·4 39·5	27·9 39·3	• 29·2 38·6	19.88 36.48
	30.6 26.5	28 <b>.</b> 4 23 <b>.</b> 4	26.5 23.0	$\begin{array}{c} 24.2 \\ 22.3 \end{array}$	23.7 22.5	22·3 21·8	20.4	19.2	19.0	18.1	17.0	16.9	31.07 23.24
	28.8	27.5	26.7	26.2	26.3	26:3	24.2 25.9	24.0 24.6	24.0 25.9	23.8 25.7	23.6 26.5	24·4 }	27.45
	36.7 40.8 37.5	36.7 40.3 36.3	36.5 38.9 34.5	35.2 38.3 35.3	36.1 38.1 35.3	35.7 38.3 35.0	36.1 37.3 34.3	36.7 36.5 34.8	37.3 37.1 34.5	37.7 37.6 34.6	39'3 37'6 33'8	38 · 2 37 · 9 32 · 2	36.00 38.45 37.19
	33·2 30·8	33.8 30.6	30.0 33.3	33·5 29·7	$\frac{30.7}{29.2}$	28.6 29.2	27.1	26.3	25.7	25.2	26.3	24.7	31.27
	35.7	32.0	31.6	29.2	26.3	26.1	31.3 25.5	31.6 25.1	31.8 25.3	32.0 25.3	32·2 25·5	32·7 } 25·7	31.00 32.13
	28.65	28.08	27.67	27:35	26.81	26.21	25.16	24.96	25.12	25.28	25.16	24.90	27.70
	26'3	23.8	21.1	19.4	17.7	18.0	18.6	19.4	20.8	21.7	22.5	22.1	24.73
	33·1 32·5 37·1	33.1 31.4 36.1	32.7 31.0 34.1	32.4 30.0 33.7	$\begin{array}{c} 32 \ 0 \\ 29 \ 0 \\ 32 \ 7 \end{array}$	$\begin{array}{c c} 32.4 \\ 28.7 \\ 31.8 \end{array}$	32 9 27 5 31 0	32 9 27 2 30 1	32 7 27 6 29 7	31.6 28.4 29.5	31.3 29.5 29.2	31.0 31.4 29.0	31.85 32.55 34.48
	25.3	25.0	24.4	24.6	24.4	24.8	24.0	23.4	23.2	$\frac{25}{22} \cdot 5$	22.3	$\frac{-}{22\cdot 9}$	25.86
	24.0 25.3	22·3 25·3	20.6 $25.3$	20.6 25.6	18.8 26.0	18.6 24.2	16.6 23.2	16.4 21.8	16.0 19.2	16.6 18.1	17:3 21:2	18°1 .22°1	21.54 23.58
j	33°1	32.7 12.4	32.4 12.2	32.0 12.2	31.8 12.0	30.8 9.9	29.1	27.4 5.7	27.0	27.8 2.5	26.3	25.0	30.03 12.01
	12.6 20.5	$\begin{array}{c} 12.6 \\ 17.7 \end{array}$	16.6 13.0	12.8 15.2	12.4 14.4	12.2 13.9	12.6 	13.4 	13.1 - 27.8	13.4 — 28.5	13.4  23.6	$\frac{13.2}{20.4}$	10.49 20.53
	34·9 28·6	33·1 26·7	31.6 26.6	30.0 23.6	29.6 23.5	27·1 23·8	26.3 21.7	25.5 20.8	24·4 20·3	25.9 20.3	23.3	22.8 22.7	29°74 25°04
	28·8 31·5	27.0 28.0	26.0 27.4	25·5 25·9	25·3 25·3	24·2 24·4	24.0 24.1	23.6 22.7	24.4 21.8	23.6 21.5	22·3 20·4	21.9 22.1	28.53 28.22
	32.0 37.8	30°1 37°7	29·2 38·6	28.8 38.4	29.7 38.1	29.7 37.0	30.1	29.5	30.0	29.6	29.3	$\frac{29.2}{37.5}$	31.32
	38·2 34·7	38.7	38.3	38.6	36.7	35°1	38.0 34.9	38.0 34.9 32.4	37.8 32.0 32.4	37.4 31.6 32.3	37.6 31.6 31.1	37.5 } 31.3 32.0	38.26 34.42
	29·5 24·0	34.1 28.4 22.1	33.8 27.6 22.1	33.7 27.9 22.5	32.7 26.9 22.1	33.5 26.8 21.9	32.7 26.5 20.4	26·1 19·0	24·1 17·5	22·7 16·3	$\begin{array}{c} 25.3 \\ 13.1 \end{array}$	22.1 12.2	29.75 23.05
	19.5	19.1	17.6 29.1	16.0 30.4	15.5 29.7	16.0 28.9	18.1	15.1	14.2	14·3 —	13.4	12.4	17.05
	35'4	33.9	32.1	32.7	31.6	29.7	15.2 28.6	14.8 26.8	13.0 25.0	12.2 22.9	18.0 23.2	$\left\{\begin{array}{c} -26.6 \\ 26.6 \\ 20.9 \end{array}\right\}$	25 43 30 34
	28.68	27.55	26.81	26.35	25.75	25.12	24.61	23.82	23.58	22.97	22.67	22.93	26.96

	45-	B		<del></del>		STANDAR	D THERM	OMETER.	1				,
g. Göt T	of Mean tingen ime.	0	1	2	3	4	5	6	7	8	9	10	11
1.0	of Mean ronto	18	19	20	21	22	23	0	1	2	3	4	5
	1 2 3 4	10.1 8.0 18.4 18.3	7·2 8·7 18·6 17·7	9.6 11.9 17.5 18.8	10°7 14°1 18°6 20°2	12°4 16°2 19°5 23°4	15°2 16°9 21°6 23°2	18·2 18·4 22·9 24·4	20°0 20°8 23°9 24°0	21°1 20°8 26°0 23°6	18.9 20.3 26.4 21.9	20°0 20°0 25°3 20°9	18.0 17.7 24.4 19.5
	5 6 7 8 9 10 11	20.0 17.3 36.5 23.6 16.4 16.5	19.8 20.0 37.9 22.9 16.3 17.7	21.7 24.1 38.9 23.8 16.2 21.1	23 '4 31 '0 39 '8 24 '8 18 '4 26 '3	25°3 34°4 42°8 25°7 20°9 29°2	26°1 36°1 44°4 25°9 23°8 30°6	27°1 38°5 44°8 26°9 26°3 33°1	28.7 39.8 45.0 27.1 28.4 32.9	31.0 40.6 43.6 28.4 32.0 33.9	32.0 41.6 47.4 29.2 31.1 34.7	32.8 41.1 40.8 28.4 29.6 34.0	32.7 40.0 36.5 27.4 29.7 33.1
MARCH.	12 13 14 15 16 17 18	24·1 11·6 2·7 11·6 24·2 20·0	24.6 11.1 3.9 13.1 25.1 22.9	24.5 12.6 5.9 16.6 25.7 27.4	24·3 13·2 8·0 20·4 24·7 30·7	23.0 15.6 10.9 22.3 24.7 32.1	24.5 15.2 12.0 24.3 25.1 33.1	24.6 15.6 14.8 25.7 25.7 33.8	25.3 15.6 15.5 27.0 25.8 34.9	25·3 14·8 17·1 28·2 26·3 33·9	23.0 13.9 17.5 28.8 26.4 33.2	22.9 12.2 17.3 28.1 27.0 32.7	22·7 10·4 16·4 28·4 26·8 32·0
	19 20 21 22 23 24 25	24.8 40.4 30.4 33.7 28.2 36.2	26.8 39.5 32.2 33.9 32.4 37.1	31.0 39.1 34.2 34.7 35.7 40.6	32·7 41·9 36·3 35·1 37·0 41·8	34·9 43·7 36·9 37·8 39·1 39·1	34.7 46.6 37.3 39.4 38.9 39.3	35·3 48·1 37·5 40·2 39·2 39·3	34.5 48.9 37.5 41.2 39.6 39.6	35.0 49.3 37.3 39.5 38.3 41.5	35.7 49.3 37.7 40.2 38.8 44.2	36.5 48.3 37.1 39.7 39.2 44.2	36.6 46.3 36.1 39.6 37.5 44.1
	26 27 28 29 30 31	33·3 27·4 32·0 33·2 36·3	33°3 29°5 36°1 37°5 38°5	33·3 33·3 41·5 38·9 42·5	33.9 37.1 45.3 40.8 48.0	34.7 40.0 47.3 40.8 51.4	36.7 43.2 48.3 41.0 55.0	40°2 44°6 50°6 41°5 57°1	41.5 43.8 52.6 40.6 56.9	41.7 45.6 57.8 43.0 58.3	40.6 44.5 57.7 44.4 61.9	39.1 44.6 58.9 45.3 59.9	38.0 44.6 58.9 44.8 57.5
lourl	y Means	23.53	24.60	26.71	28.83	30.25	31.79	33.13	33.76	34.59	34.86	34.59	33.32
•	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	33.7	34.3	33.7	33.7	34.2	36.8	36.7	36.4	36.4	36.9	<b>3</b> 5°7	35.2
	3 4 5 6 7 8	33°1 43°1 31°9 29°7 35°3 29°5	38·1 43·2 33·2 33·1 38·5 34·4	40°8 42°8 34°6 37°8 41°9 43°2	42·3 44·4 36·5 42·9 45·7 46·9	43.8 44.9 38.9 44.5 46.8 48.2	44.4 44.9 41.3 46.0 46.3 48.7	44.4 45.3 43.9 46.3 45.3 49.9	45°3 45°4 42°4 46°9 44°4 50°1	45.3 47.5 41.9 46.9 44.6 53.3	45.2 46.7 41.6 47.9 46.0 53.9	47.9 45.2 41.3 48.3 45.2 53.2	48.0 44.4 41.9 49.9 44.7 53.5
RIL.	9 10 11 12 13 14 15	38°1 46°9 32°2 37°1 37°5 40°6	45.1 48.5 38.9 38.7 39.1 44.0	54.0 51.4 43.6 39.4 39.5 47.7	59.7 50.7 48.3 39.5 41.8 50.0	58.7 50.6 50.1 41.2 42.9 53.4	62.5 51.5 51.0 40.4 43.4 55.1	63°1 51°0 50°4 40°2 45°5 56°3	65.4 50.4 53.8 42.6 48.1 56.7	64.5 50.4 54.4 40.4 45.5 56.5	62.5 48.9 53.4 40.4 45.7 56.7	63.4 47.3 52.4 40.0 45.2 56.1	60°3 47°3 49°5 38°5 42°8 55°4
APRIL.	16 17 18 19 20 21 a	33.6 33.8 26.3 27.6	36.0 33.3 30.6 31.8	36.8 34.7 32.2 39.1	38.2 35.3 33.3 41.0	40.4 36.0 35.9 42.5	42·2 37·3 36·7 43·8	43.8 33.7 39.5 46.9	45°1 32°2 39°1 47°9	45.2 29.2 39.4 49.1	42.5 29.0 37.9 50.4	43'4 29'9 38'2 48'1	43.8 29.9 39.6 48.1
	22 23	41.5	41.9	43.6	45.2	44.4	45'3	48.9	49.9	49.0	46.7	48 1	51.0
	24 25 26 27 28 29 30	36.3 28.8 33.3 29.6 38.8 42.6	36.7 33.9 36.7 38.4 46.4 44.4	37.5 36.5 38.7 42.7 41.5 43.9	40.4 41.0 40.6 45.3 42.4 42.8	42:3 42:3 44:0 46:7 44:0 44:2	43.2 43.4 44.5 49.5 45.7 45.5	44°0 45°0 45°1 49°8 44°8 47°8	43.4 46.0 45.1 52.8 46.1 49.1	42.8 45.6 48.1 52.8 48.3 49.3	43.2 43.6 46.7 54.2 49.6 50.4	42.3 44.4 47.2 52.4 47.9 50.4	41.8 41.7 46.6 50.1 47.1 48.7
urlyl	Means	35.04	38.30	40.73	42.41	44.22	45.39	46.12	46.86	46.92	46.67	46.40	45.84

a Good Friday.

					STANDA	RD THER	MOMETE	R.				
12	13	14	15	16	17	18	19	20	21	22	23	Daily Mon
6	7	8	9	10	11	12	13	14	15	16	17	Mea
16.2	15.2	1å·0	<b>8.</b> 0	12.2	11.3	6.4	°°8	<b>4</b> .2	8.0	8.4	8.8	12.
		15.0	15.6				18.2		19.0	19.3		16.
15.5	15.0			15.3	16.0	17.5		18.8			19.0	
22.9	21.1	19.0	18.4	17.6	17.3	18.6	18.4	20.2	20.8	21.1	18.4	20
18.1	17.5	17.6	17.4	18.0	16.6					01:0	- }	20.
	00:0		90.5			19.2	20.2	21.3	20.3	21.9	22.8}	
32.2	26.9	23.2	20.5	20.2	20.7	17.5	17.7	17.7	18.0	17.5	16.0	23.
39.8	38.5	37.9	38.7	39.0	39.1	38.4	38.7	39.3	38.5	38.1	37.0	36.
35.5	34.9	34.2	34.3	34.4	34.1	33.2	31.9	29.9	28.7	27.8	27.1	36.
27.5	26.4	26.3	26.5	25.2	24.7	24.3	24.0	21.2	20.7	18.2	17.5	24.
27.8	25.5	22.9	20.8	20.6	20.2	20.0	18.6	17.6	16.9	16.0	17.3	22.
31.6	29 9	29.8	29.9	29.1	30.3	20.0			07:4	26°1	$\frac{-}{24\cdot 4}$	28.
~~		10:0	77:0	70.0	15.0	30.6	30.8	28.8	27.4		24.4)	i
20.0	18:8	18.0	17.3	16.0	15.2	14.5	14.0	13.4	13.1	12.8	12.6	19.
7.8	6.8	6.6	5.7	5'6	5.3	4.8	4.6	3.7	3.5	3.6	3.3	9.
14.2	12.4	12.0	10.9	10.2	9.6	9.0	8.6	7.4	7.2	9.9	10.2	10.
27.4	27.4	26.2	26.3	26.3	26.1	25.7	25.3	24.7	24.4	24.8	24.6	24
26.3	22.9	21.1	20.8	19.6	18.4	19.4	17.8	16.0	17.8	18.6	19.4	22.
3116	31.2	31.0	31.0	30.3	30.1	00:1	04:0	25.3	24.3	$\frac{-}{24 \cdot 2}$	$\frac{-}{23\cdot 9}\}$	29.
97 • 1	$\frac{-}{37\cdot 1}$	36.6	36.1	35.4	35.0	28°1 35°1	$\frac{24.9}{35.5}$	25 3 37 1	43.1	43.7	43.5	35.
37.1	$\frac{37}{38}$	36 6	36.0	33.8	33 3	31 8	31.4	30.8	30.6	$\frac{43}{29}.7$	29.7	$\frac{39}{20}$
41:2	33°8	32.8	32.9	32°4	32.7	$\frac{31.8}{32.7}$	33.1	32.4	32.9	33.4	33.7	34.
34.9	35°5	$\begin{bmatrix} 32.8 \\ 32.8 \end{bmatrix}$	30.6	29.5	29.0	29.0	28.6	27.8	28.6	27.4	28.0	$34^{\circ}$
37.0 35.3	34°1	34.8	35°1	35.2	36.0	36.7	36.8	$\frac{27}{35}.7$	36.0	36.7	36.3	36.
43.0	42.6	42.2	41.4	41.1	40.6	t I			50 0			
45 0	42 0	1	41 4	41 1	40 0	36.9	$\frac{-}{35.9}$	35.2	34.6	33.9	$\frac{-}{33\cdot 7}\}$	39.
36.6	35.1	34.1	33.3	31.1	30.8	29.3	29.9	28.2	28.4	28.2	27.4	34
42.4	41.1	40.8	40.8	40.6	39.2	38.7	36.3	38.9	36.4	36.1	$\frac{2}{32} \cdot 4$	39
55.6	47.8	44.2	40.7	38.8	36.9	34.1	32.0	31.4	31.8	30.1	30.6	43
42.6		39.8	39.6	39.6	38.9	38.3	37°9	37.3	36.7	36.0	35.2	39
54.0	$\frac{40.6}{51.2}$	49.1	48.3	47·5	40.7	37.3	36.9	35.9	35.1	34.7	34.5	47
31.64	29.91	28.84	28.03	27:59	26.61	26*20	25.21	25.50	25.29	25.13	24.74	28
01:01	20 01	1	20.00	2, 00	20 01	20 20						
34.7	33.3	32.8	32.8	32.3	32.0	34.9	34.3	33.9	33.7	33.4	$\frac{-}{31.8}$	34.
46.6	46 0	46.5	45.3	44.8	46.3	46.9	45.7	45.3	44.3	45.2	44.0	44
43.0	$\frac{40}{42}$ 3	41.0	39.3	37·7	$\frac{40.3}{37.2}$	36.6	34.9	33.9	33.3	32.4	30.9	40
41.4	$\frac{42}{38}$	36.1	34.2	33.2	$\frac{37.2}{32.0}$	30.3	29.2	28.0	27.8	27.6	$\frac{30.5}{27.5}$	35
48.2	44.8	41.9	40.6	38.7	38.1	36.9	35.2	$\frac{25}{35} \cdot 7$	35.7	35.4	34.4	41
44.6	40.4	36.7	35.0	35.5	$37 \cdot 2$	33.9	33.7	33.7	30.7	30.1	28.2	39
53.0	47.5	42.6	41.4	40.6	40.8		-			-		
- 05 0		í I	- 1	40 0		39.3	39.3	38.5	36.6	36.9	$\frac{-36.6}{3}$	44.
59:3	58.7	57.3	51.0	49.1	47.5	48.3	51.2	51 2	50.9	47.1	43.9	54
47.7	47:1	47.5	49.7	49.9	48.7	46.3	41.4	37.3	34.5	35.1	31.3	46
48'1	47.7	46.7	48.1	48.7	45.0	43.8	44.1	43.8	42.5	40.6	39.8	46
38.7	37.7	36.9	37.1	36.8	36.2	36.9	36.7	35.7	36.7	36.7	37.1	38
41.3	40.0	38.3	37.7	40.0	39.2	35*4	35.1	40.0	40.3	39.8	39 2	40
53.4	48 9	46.3	45.0	44.6	43.6							
				I		40.8	39.3	36.9	35.7	33.9	$\frac{-}{31\cdot 4}$	47
42.8	39.5	38.7	38.7	38.7	38.7	39.3	38.1	37.8	36.1	35.4	34.3	39
30.1	29.5	29.7	30.3	29.8	27.8	26.8	27.4	25.7	24.7	24.5	24.0	30.
38.6	$\frac{25}{35} \cdot 9$	33.0	34.5	31.2	27.8	27.1	25.9	25.0	26.9	26.3	25.0	32
47.5	43.8	40.9	40.4	39.6	39.6						. — ı	43
52.0			-	_	35.9	48.7	49.8	47.4	45.7	45.3	42.1	
52 U	44.8	44.6	42:3	40°6		35.1	35.7	36.3	36.5	35.9	$\frac{-}{35\cdot 3}$	42.
41.9	39.1	36.9	35.4	35.1	32.4	31.0	30.6	30.6	26.9	26.3	26.9	36
14 0	41.3	41.5	40.8	40.4	43.8	42.4	38.7	36.5	34.1	32.0	29.9	39.
	41.5	39.3	37.5	36.2	33.1	31.0	28.4	28.4	27.6	26.7	27.4	38
41.0	44.8	44.8	41.5	38.7	37.4	37.9	37.3	36.3	36.2	37.0	37.8	43
41 0 44 3	ا ت نند	42.4	42.9	43.5	42.9	42.9	42.8	42.6	42.4	42.2	42.0	44.
41.0 44.3 47.3	43.8	4 4	~ 0						_			
41.0 44.3 47.3 45.3	43°8 44°6		39.6	- 38°8 L	34 8 1	<del></del> '						40.
41.0 44.3 47.3	43.8 44.6	42.1	39.6	38.8	34.8	36.7	36.3	35.5	34.7	38.2	$\frac{-}{39.5}$	42

	·——				S7	ANDARD	THERMO	METER.					
lours of Göttir Tin	Mean }	0	1	2	3	4	5	6	7	8	9	10	11
	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
•	1 2 3 4 5 6	40°8 41°4 45°6 46°4 54°2 52°4	42.6 42.3 51.4 49.4 60.3 59.7	44.0 44.8 55.0 53.2 60.9 62.7	46.9 50.7 56.2 58.3 65.9 65.0	48°1 53°6 59°5 57°9 67°7 66°7	48.9 51.7 60.4 58.7 69.7 70.3	49°7 52°5 61°4 56°5 69°3 70°1	46°3 53°3 60°1 55°2 70°9 71°0	44.5 54.0 61.3 54.7 68.5 72.1	46.3 53.1 64.1 54.0 69.7 70.7	47.4 53.1 63.7 52.0 70.0 68.4	47.4 54.1 64.6 51.4 62.5 68.5
	7 8 9 10 11 12 13	41'3 45'1 45'8 46'1 42'1 36'3	46 1 52 3 47 9 46 1 44 5 38 7	49.9 55.7 50.0 47.7 46.2 40.0	53.5 57.5 52.4 49.4 48.3 40.1	53.7 57.7 52.5 50.2 50.8 40.2	55.6 57.9 52.5 51.8 52.3 42.3	56.6 59.5 53.1 51.2 52.9 43.8	57.0 62.3 54.4 49.3 53.3 48.1	56.6 60.3 55.4 48.7 54.3 45.9	56.9 56.9 54.8 48.3 54.2 46.1	57.4 57.9 54.4 49.8 54.2 43.2	56.9 56.3 53.6 50.8 54.4 41.2
MAY.	14 15 16 17 18 19 20	39.9 49.1 42.4 50.8 56.3 58.5	46.6 52.5 52.2 58.3 57.9 58.6	52.5 54.9 54.0 59.9 63.5 62.8	54·1 56·5 57·0 64·4 66·1 68·4	55.7 57.9 58.1 66.0 68.7 69.9	57.5 58.5 60.7 67.0 71.7 69.6	56.0 58.7 61.7 68.9 71.4 73.9	56.5 59.7 62.9 70.6 70.7 68.9	54.0 59.3 63.7 72.8 72.0 69.5	50.6 57.9 64.6 73.2 69.5 67.6	50.4 59.3 65.0 72.7 64.9 65.6	47.9 57.0 62.8 71.6 66.5 66.4
	21 22 23 24 25 26 27	57.4 57.1 53.8 56.0 51.9 50.8	55 1 55 0 54 4 57 3 54 3 52 8	55.9 55.6 57.8 59.7 56.5 58.2	59.5 55.2 60.1 62.5 57.5 61.5	61.1 55.0 65.0 66.7 59.4 62.3	61.4 55.0 66.7 69.4 61.5 62.4	60.7 55.2 69.2 70.3 65.6 62.2	61'3 55'8 71'7 70'4 66'1 64'9	61.5 56.9 72.1 72.3 67.1 66.3	61.5 59.5 73.3 76.3 65.3 66.0	60°3 58°9 74°1 78°5 63°9 66°9	62 · 1 59 · 9 67 · 8 73 · 5 64 · 6 64 · 8
	28 29 30 31	59°3 54°0 43°8	63°3 59°1 45°5	62.5 63.3 46.1	64.0 63.7 48.8	69.4 64.4 50.7	64°1 66°3 52°5	69.6 67.2 54.0	72·1 67·6 54·9	71.5 61.9 55.1	73·3 59·2 55·6	70.9 57.6 56.7	75°5 55°7 57°3
Hourl	y Means	48.84	52.01	54.57	57.17	58.85	59.87	60.79	61:31	61.50	61.06	60.64	59.82
	$\begin{pmatrix} 1\\2\\3 \end{pmatrix}$	46.6 48.7 66.1	51.2 55.1 65.5	53.4 59.0 65.5	54.9 61.3 67.1	55°9 64°0 67°9	58°1 66°5 68°1	59.8 67.9 69.3	61.3 69.6 69.5	60.7 70.3 70.9	61.3 69.3 71.3	62.2 66.4 70.1	64°1 68°9
	4 5 6 7 8 9	55.2 48.1 47.2 52.7 54.8 60.3	59°1 50°8 49°6 56°4 61°1 60°7	62.9 51.2 51.4 60.4 61.1 66.7	63°3 53°6 53°6 62°4 65°6 69°3	64'1 52'4 56'2 64'1 67'5 71'5	66.6 53.8 58.0 65.2 69.0 70.3	67:3 56:3 60:2 64:2 70:9 70:1		59 · 9 56 · 4 63 · 5 64 · 1 73 · 1 71 · 7	64.0 56.7 63.8 65.7 73.3 79.1	68.9 56.7 62.1 68.6 74.3 67.7	62.6 55.4 62.3 63.3 71.1 70.5
JUNE.	11 12 13 14 15 16 17 18	48.5 46.6 45.0 61.0 73.1 67.1	49.7 48.9 45.2 67.4 75.5 72.5	51.0 52.0 49.3 72.1 79.4 76.0	52.0 53.4 54.2 74.0 82.0 76.9	54.6 56.7 55.7 78.2 84.6 79.9	55°1 58°3 61°8 85°1 83°4 82°3	56°0 60°7 59°3 88°0 87°8 82°7	56°3 61°7 56°9 89°5 83°5 78°7	56.7 62.5 61.7 91.1 85.1 76.3	56.9 63.0 65.5 92.0 85.7 81.9	56.8 62.2 65.9 91.0 81.9 77.0	56.3 61.3 64.4 90.5 82.7 79.9
	19 20 21 22 23 24 25	63.9 62.6 58.9 57.2 61.1 58.9	65.5 65.5 62.7 59.7 62.0 61.9	70°0 69°5 61°3 67°3 63°6 64°8	72.7 72.3 63.9 68.9 64.4 65.2	72.7 73.9 66.1 66.5 67.5 68.5	74.9 70.7 65.1 67.7 70.3 70.3	75°3 71°8 67°3 69°1 71°9 71°7	78.0 71.5 68.3 71.5 74.8 72.7	73.1 71.9 68.3 69.9 77.8 73.1	72.5 71.1 69.7 70.1 73.5 73.9	74.5 72.5 71.5 69.9 72.9 73.1	72·3 60·7 70·6 65·3 68·0 72·7
	26 27 28 29 30	61.8 60.1 69.1 60.4 58.7	69.5 65.4 68.0 64.9 62.3	75°1 70°5 70°9 69°3 67°9	74.7 74.3 71.1 71.9 68.8	77.1 74.7 71.9 72.3 70.4	78.6 74.1 70.7 72.1 73.7	80·3 75·7 70·7 73·1 72·9	81.5 76.1 70.7 73.5 78.5	82·1 77·8 71·2 74·5 77·6	82.5 76.6 72.1 74.8 77.2	81.9 77.6 71.7 75.9 77.1	80.5 72.6 71.1 73.3 77.8
Hourl	y Means	57.45	60.62	63.91	65.82	67.50	68.84	70.01	70.37	70.82	71.67	71.17	69.4

						STANDA	RD THER	мометег	₹,				
Ì	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
	6	7	8	9	10	11	12	13	14	15	16	17	Means.
	45.4 52.9 57.7 53.0 60.7	43.0 49.3 53.6 54.0 57.4 62.6	41°8 45°7 49°7 54°8 62°9 62°4	40°4 43°4 47°1 54°2 62°1 62°5	39.6 41.4 45.2 54.6 56.2 61.3	38.9 39.5 43.3 54.7 56.6	38.5 47.3 44.4 53.4 55.7	37°5 47°7 43°5 52°6 55°4	36°9 45°0 43°4 52°4 50°4	37.0 41.0 43.5 51.2 49.3	36.8 39.1 41.0 50.4 48.3	37°1 41°0 39°7 47°6 47°5	42.74 47.41 52.31 53.36 60.50
	61:3 53:6 53:4 51:8 51:2 52:1 39:6	51.4 52.9 52.2 50.8 48.5 40.6	49.7 50.6 51.0 49.8 44.5 41.2	49.5 49.3 49.6 48.9 41.2 41.5	51.2 48.9 48.6 48.1 40.6 42.1	60'1 52'6 47'5 48'7 47'1 38'7 41'9	46.1 51.7 44.9 48.2 46.0 37.7	40.4 46.3 42.8 47.4 45.8 33.5	39.6 44.2 45.4 47.1 44.0 33.9	37°1 41°4 45°6 46°5 43°2 35°3	38.7 40.6 45.7 46.4 42.1 31.8	39·3 } 41·5 44·3 46·4 41·7 33·7 — 34·5 }	58.71 50.63 52.11 50.45 47.84 44.96 40.51
	47.7 55.6 59.2 69.7 66.5 66.6	47.1 53.0 56.2 65.0 60.9 65.9	45.5 50.1 54.4 60.2 56.5 62.9	45.7 51.9 51.6 57.5 57.9 56.5	45°1 48°5 49°5 56°3 58°8 57°5	46.1 47.3 48.3 52.6 58.4 59.3	42:3 46:5 45:0 49:3 51:5 57:5	38.7 46.9 42.2 47.3 50.1 57.0	36.3 46.9 39.1 46.9 49.7 57.0	33.6 46.9 39.0 45.0 49.7 56.5	34·1 46·7 37·4 44·4 49·7 55·4	47.2 38.9 44.2 51.0 56.2	49.17 51.22 54.23 60.80 62.42 63.43
,	59.1 58.8 65.3 69.9 64.4 66.3	56.5 57.0 63.5 65.9 60.3 62.1	53.6 56.9 60.5 62.3 55.0 55.8	53:3 57:7 57:5 56:9 53:4 52:7	53.8 58.2 57.1 55.8 52.0 52.5	54.7 57.5 56.3 55.2 49.9 53.0	59.7 52.3 55.5 56.2 53.1 49.1	59.2 54.1 54.8 52.8 52.4 48.7	59°1 54°0 55°9 52°2 50°6 47°1	58.9 53.6 55.6 51.0 48.1 47.8	58.6 54.8 56.3 50.6 47.5 47.0	58:3 } 54:9 55:8 53:6 46:4 47:0	57.19 56.63 60.94 61.54 56.48
	75°9 54°0 55°6	71°3 52°0 55°0	67°9 49°4 49°5	62.7 49.0 47.5	59°5 49°3 44°1	56.6 48.9 45.3	56.3 54.5 46.7 46.3	54.0 54.2 43.7 43.0	54.4 53.4 45.3 41.2	54.5 51.4 44.8 40.3	53.7 49.5 42.6 39.5	53.4 } 48.1 42.0 40.4	63°35 54°57 48°70
	58.02	55*85	53.50	51.91	50.96	50.33	49.47	47.85	47.09	46.21	45.21	45.62	54.10
	59.8 66.9 67.3 56.8 54.6 61.9 59.3 68.0 70.5	59°1 64°6 64°1 	51·2 62·1 62·7 54·9 51·4 56·3 57·1 66·3 64·8	47:1 59:7 60:9 54:4 50:8 53:6 56:9 66:1 62:5	47:3 60:8 59:5 - 51:6 46:9 53:0 56:3 65:3 57:9	47.0 63.1 57.3 50.4 44.8 52.6 54.6 64.4 55.4	44.6 61.7 61.5 50.1 43.8 52.0 54.3 63.3 -49.7	45.0 60.8 — 61.3 46.3 42.8 50.4 51.5 62.5 — 48.3	43.8 58.4 — 60.7 46.5 42.2 48.1 50.6 61.7 — 47.0	44.5 59.4 60.3 45.0 41.0 48.9 49.3 58.1 45.3 42.2	42.8 61.1 54.4 44.9 41.4 48.1 48.0 57.3 44.1 42.4	$ \begin{array}{c} 42.6 \\ 63.7 \\ \hline 50.1 \\ 46.7 \\ 41.6 \\ 48.5 \\ 49.5 \\ 57.7 \\ \hline 44.0 \\ 43.4 \end{array} $	52.68 62.85 64.18 56.63 50.04 55.08 58.25 65.43 61.98 49.64
	55°2 59°1 65°0 87°6 87°6 74°9	52.6 56.2 63.5 84.7 79.5 70.7	49.9 55.0 58.3 76.0 77.4 67.5	45°3 52°0 55°8 71°7 69°4 68°2	43.6 50.8 54.0 70.3 68.9 66.3	45.5 45.7 53.4 69.5 68.1 66.3	41.0 45.5 52.5 69.3 66.8	38·3 43·3 52·2 72·5 65·2 — 62·9	42.2 41.9 50.1 72.7 63.1 	41.0 48.3 70.5 61.3 — 63.9	42 4 40 9 51 4 70 7 59 5 — 61 3	40.6 52.0 68.5 59.8 — 60.8	52.47 55.89 77.66 75.47 71.68
	70.8 64.1 69.8 63.3 67.5 70.3	68.7 63.1 67.3 64.6 64.8 67.0	66.1 62.1 63.1 62.0 61.5 60.8	64.8 61.1 62.5 61.8 60.3 58.5	65.2 60.3 57.3 61.3 58.1 54.0	65.5 58.4 55.2 59.3 57.5 52.2	65.3 57.3 52.8 59.5 57.3	62.5 56.3 53.2 57.5 57.5	60.7 53.6 53.4 59.7 57.1	60°1 52°6 52°6 59°5 56°4	59.9 54.6 52.6 61.1 55.5	62·3 54·1 53·7 61·5 55·4	68.22 63.82 61.97 63.93 64.03
	73·2 71·4 70·3 70·9 74·1	68.5 73.4 69.3 67.8 71.7	64.8 70.1 67.3 64.8 70.1	62.9 67.3 64.1 58.1 70.3	62.8 66.7 62.9 57.0 68.7	63.6 64.6 61.1 56.0 68.4	60.7 61.3 64.4 57.7 54.6 64.9	58.8 60.5 66.3 56.5 53.4 63.1	56.7 59.7 65.9 55.8 51.9 62.3	56.3 56.5 65.7 55.2 50.4 61.5	56.5 56.5 66.3 54.0 52.4 57.9	58.3 } 58.4 68.9 54.3 55.4 53.3	64 04 69.76 70.27 65.74 64.53 68.72
	67.77	65.54	62.45	60.23	58.72	57.69	56.73	55.73	54.95	54.07	53.68	54.04	62.88

					<del> </del>	WET T	HERMOM	ETER.			<del>- , </del>	<del> </del>	
Hours of Göttin Time	gen }	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Toro Tim	nto }	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	26·1 36·4 28·8	27.3 37.3 28.9	27.7 37.5 29.3	29.4 36.6 29.3	30.8 38.6 30.4	31.7 36.9 32.1	30°1 35°8 31°9	29.9 36.2 32.2	30.7 35.8 32.2	32·2 35·4 33·0	32.6 34.8 33.7	33.8 34.8 32.0
	4 5 6 7 8 9	27.7 25.9 34.2 33.0 27.6 27.7	27.5 29.6 34.6 32.6 27.4 28.7	27·1 30·3 34·8 32·3 26·5 28·7	29.5 31.4 35.5 32.4 26.7 29.2	31.6 32.0 35.9 32.2 25.7 29.2	31.0 32.2 36.1 32.0 25.9 28.8	32·3 33·5 36·2 31·3 25·2 29·2	33.4 33.0 36.1 31.4 26.5 30.4	33.0 33.0 36.1 32.3 27.5 31.0	33.4 32.4 36.5 31.5 28.1 29.3	33.5 31.7 35.6 31.8 28.8 28.0	32.0 32.0 34.7 31.5 29.4 27.9
ANUARY.	11 12 13 14 15 16 17	23.9 9.1 26.3 17.8 29.2 10.1	23.6 9.1 26.3 24.1 29.4 9.5	23.7 11.1 26.7 27.9 29.3 8.0	23.0 12.4 27.9 30.8 29.7 7.2	22.4 16.9 28.5 32.0 29.7 8.6	23.0 18.7 30.6 32.1 29.2 8.7	24.3 20.7 30.9 34.5 27.9 8.8	24·1 21·0 31·5 36·2 26·3 8·7	24·1 21·6 31·6 36·5 25·9 8·9	23 · 2 21 · 5 32 · 4 37 · 2 24 · 5 10 · 2	22.0 20.9 32.0 36.2 23.9 8.5	21:6 19:5 29:9 36:2 23:6 7:0
ľſ	18 19 20 21 22 23 24	5.5 8.7 21.1 - 1.3 5.8 18.8	$ \begin{array}{r}  - \\  4.7 \\  8.8 \\  21.4 \\  - 2.1 \\  5.3 \\  17.8 \end{array} $	4.5 8.8 21.5 - 1.3 4.5 19.4	7.4 10.4 21.4 2.8 9.0 21.1	9:3 14:0 21:1 5:4 12:8 24:0	12.1 14.3 21.8 8.8 16.3 26.5	12.6 16.6 21.8 12.2 18.0 29.2	12.6 19.0 22.8 15.6 17.8 29.8	13.4 20.5 24.1 16.1 19.4 31.4	14.1 21.5 24.6 16.6 19.9 32.2	14.6 21.4 24.8 16.2 20.8 32.3	13°1 21°1 24°1 14°8 19°7 32°2
${f F}$ eb	25 26 27 28 29 30 31	33.7 17.1 29.8 32.5 37.2 16.4	34.1 14.9 30.8 32.5 37.2 13.9	34.4 14.4 31.2 33.0 36.2 12.4	35°3 15°9 31°5 33°3 37°7 10°7	38·1 16·9 32·1 33·3 38·7 10·7	38°1 18°5 33°9 34°0 38°5 13°2	36.9 20.5 34.1 34.9 39.2 14.3	37.1 21.1 34.3 34.3 40.6 14.3	37.2 21.4 34.8 34.2 40.5 16.8	37 · 2 21 · 9 34 · 4 34 · 3 40 · 2 17 · 7	36°3 21°6 34°6 34°5 40°3 16°3	34.6 21.1 33.4 34.5 39.9 16.2
Hourly	Means	22.56	22.78	22.96	23.98	25.19	26.11	26.77	27.27	27.78	27.98	27.69	27.06
	2 3 4 5 6 7 8 9	18:3 29:3 28:2 31:6 22:8 24:9	20.6 30.5 25.3 32.5 23.5 24.5 ————————————————————————————————————	20.5 31.6 26.1 33.0 25.9 24.4 ——————————————————————————————————	22·2 34·3 26·4 34·9 27·5 31·8 — 10·0 8·5	24.5 35.1 28.1 34.5 32.0 34.4 — 10.1 12.4	26.1 36.2 29.6 32.5 32.2 37.1 — 10.0 14.9	27.5 37.2 30.7 32.4 35.3 37.1 — 10.7 20.3	27.9 37.9 31.4 33.3 35.0 36.9 ————————————————————————————————————	27.8 38.7 32.0 32.9 35.2 36.4 -12.6 20.6	27.6. 38.1 32.0 32.2 35.4 35.2 	27.9 37.2 31.8 32.0 34.9 36.2 	27*9 36*2 31*6 30*6 34*0 35*8 10*3 23*0
FEBRUARY.	11 12 13 14 15	20.8 - 3.4 23.2 15.1	22.6  23.6 18.3	19·2 25·2 20·9	17.8 	18·3 	17.4 12.0 28.8 30.4	17.7 16.0 29.6 31.7	17.8 17.7 30.0 31.6	18.7 20.7 31.0 31.6	18.0 20.5 31.5 31.9	17:3 20:0 33:3 31:0	17.0 19.4 33.9 30.7
FEBR	16 17 18 19 20 21 22	20°1 18°0 10°7 6°6 24°1 24°3	20.4 18.7 10.5 10.7 24.3 24.9	20.8 19.9 14.7 10.7 24.9 26.1	21 · 1 23 · 0 16 · 0 17 · 7 25 · 7 26 · 7	24.1 25.3 21.5 24.3 25.9 27.9	25·1 27·4 21·3 24·3 26·0 28·3	24.8 28.8 22.4 25.9 25.6 29.5	25·2 28·5 23·5 25·3 26·4 28·8	25°1 28°4 23°7 25°3 27°4 27°1	24.8 29.7 24.6 24.3 29.8 27.9	24.5 28.4 24.3 24.6 28.8 25.9	23.6 26.4 23.5 25.9 27.3 24.9
Marc	23 24 25 26 27 28	12.0 11.2 - 0.9 - 10.3 -	14.6 10.2 1.4 — 10.6 —	15.6 12.1 3.2 — 11.1	20°2 14°8 7°6 — 1°4 13°9	21.8 16.8 10.2 ————————————————————————————————————	22·2 17·2 14·0 2·8 10·2 17·2	23·2 21·3 15·1 4·4 12·9 17·4	22.7 22.0 14.6 5.5 14.0 17.0	23.1 18.7 15.4 6.9 14.4 16.9	23°1 18°3 15°6 6°0 13°8 17°4	21.9 16.8 14.2 4.5 13.5	18.5 14.8 13.2 3.4 11.5 17.2
Hourly	Means	16.28	18.51	19.08	20.22	22.82	22.63	24.06	24.35	24.61	24.65	24.53	23.36

	······					WET TE	ERMOME	rer.					
Iours of Göttin Tim	Mean }	0	1	2	3	4	5	6	7	8	9	10	11
	f Mean }	18	19	20	21	22	23	o	1	2	3	4	5
	(2 3 4 5 6 7	0 11.4 8.5 12.9 29.7 27.1 8.8	0 13.5 9.1 17.8 28.8 27.7 12.8	0 16'9 12'4 24'3 30'5 28'4 17'1	20.7 21.3 30.3 32.0 29.4 23.7	23.0 24.5 31.6 33.9 27.5 26.4	21.8 26.3 32.2 34.1 27.3 27.8	22.7 26.6 34.7 34.3 27.9 28.6	22:3 27:1 34:8 34:9 27:6 28:3	24.9 27.7 35.4 36.0 27.9 28.8	24.5 27.9 34.9 37.0 27.3 30.3	23.7 27.4 34.5 36.4 27.5 30.0	23:0 26:8 34:7 39:0 26:6 29:7
Ŧ.	8 9 10 11 12 13 14	31.0 27.3 25.1 31.8 38.1 35.2	30.7 28.3 24.4 34.5 38.6 35.8	31.2 32.4 30.8 35.8 37.9 37.6	32.4 34.9 	33.9 35.4 36.2 39.0 40.3 37.4	33.8 35.8 35.8 39.1 41.1 38.1	34·3 35·6 36·2 39·4 41·9 37·0	34.2 34.9 36.2 41.2 42.1 37.1	33 · 1 35 · 8 35 · 8 40 · 4 42 · 9 36 · 4	33.7 35.8 36.2 39.1 43.5 35.8	34.1 35.0 35.3 39.1 44.7 34.2	33.7 34.1 36.0 39.0 43.4 32.9
MARCH.	15 16 17 18 19 20 21	27.5 23.7 21.1 33.2 26.8 29.8	27.3 24.0 23.4 33.9 29.6 29.3	26.3 24.5 24.9 33.5 35.6 29.5	27.5 24.9 28.2 37.2 37.5 28.6	26.1 25.4 32.0 36.9 38.5 30.5	26.8 25.9 32.4 39.4 40.8 29.6	25:9 27:9 33:9 39:4 40:8 29:7	26.8 29.4 34.9 41.9 40.5 30.8	28.8 30.5 35.4 40.2 42.8 32.0	30°0 31°5 34°9 39°6 42°3 33°0	31.0 31.3 35.6 36.0 40.3 32.2	32.0 30.8 34.3 36.1 39.0 32.7
	22 23 24 25 26 27 28	32.0 38.1 38.1 34.7 34.9 33.5	33.3 38.4 38.3 34.6 36.0 33.4	34.6 38.7 38.5 36.0 36.9 34.7	35.8 39.1 39.0 39.6 37.3 35.4	36.7 39.1 39.4 40.4 40.4 35.8	37.4 38.4 40.2 41.1 39.7 37.7	38.1 38.4 40.5 41.6 40.4 36.7	38.1 38.5 41.8 40.7 39.9 36.3	38.3 39.0 40.5 41.9 40.8 36.7	36.8 39.6 40.5 40.3 38.7 35.8	37.0 38.4 39.6 37.7 38.5 35.2	36.7 39.0 39.0 36.5 36.5 36.5
	29 30 31	30.5 27.9	31.7 31.0	32.0 32.0	33.8 30.0	32.6 35.3	32.7 38.0	33 · 9 37 · 3	36.0 37.3	35.8 37.5	35 <b>.3</b> 37.9	34.9 38.1	34.7 39.4
Hourly	y Means	28.75	29.85	31.70	33.89	35.13	35.73	36.12	36.24	37.02	36.89	36.31	35'98
	1 2 3 4 5 6 7 8	27.3 27.7 28.5 31.6 — 39.6 42.1 29.6	30.0 30.5 32.2 34.3 — 39.2 43.4 29.6	31.7 33.9 33.9 36.7 ————————————————————————————————————	33.7 34.1 34.4 38.4 — 40.9 47.0	35.4 34.2 36.1 38.9 	35'4 36'5 37'2 40'3  46'4 49'4	36°3 36°1 38°7 40°8 — 46°5 48°4	36.7 35.4 37.2 41.0 	37.2 35.3 37.4 42.1 — 47.1 49.3	35°8 35°6 36°5 41°8 — 46°5 49°3	36°2 34°5 36°3 42°6 — 47°3 51°5	35.8 34.3 35.8 41.4 
	9 10° 11	23.5	30.8  38.3	$ \begin{array}{c c} 31.7 \\ 32.2 \\ \\ 40.7 \end{array} $	31.0 37.1 — 49.2	32.4 38.5 — 50.0	34°1 37°5 — 51°1	33.0 39.0  49.1	33.5 39.9 — 45.3	33°3 40°3 — 40°9	33.7 40.3 — 39.1	34.5 37.0 — 38.7	33.4 34.6 — 36.0
APRIL.	12 13 14 15 16 17 18 19	25.9 27.6 28.4 26.5 31.7 46.4	26.4 32.7 27.9 31.6 38.4 46.9	26.6 34.5 27.9 32.7 41.7 48.5	27.5 37.7 28.4 37.1 45.2 50.5	28.5 39.0 32.0 38.3 46.7 47.4	30°3 39°0 33°5 38°3 47°2 48°2	31.6 38.1 34.3 39.0 47.7 47.7	32.0 38.7 34.5 39.2 48.5 50.9	32·4 38·7 39·4 39·7 47·5 50·1	32·2 38·2 35·2 40·0 48·4 51·4	32.9 38.3 35.8 37.1 48.7 51.2	31.4 38.5 36.2 35.6 48.1 51.7
	20 21 22 23 24 25 26	30.0 40.3 41.4 47.2 48.2 39.4	37.0 47.7 42.3 49.3 49.2 39.6	41.4 50.7 42.5 50.7 49.2 39.4	42.7 53.2 43.1 46.5 49.2 37.2	45.4 55.4 43.3 48.2 50.0 37.2	47.6 57.3 43.4 48.7 51.2 38.3	49.7 58.3 44.7 49.7 51.4 37.4	51·1 58·5 46·9 50·4 54·4 38·1	52.2 59.4 47.3 50.3 52.4 40.1	51.9 58.3 46.7 50.4 54.1 38.7	51°4 56°6 47°7 49°1 55°1 38°2	50°1 54°9 45°5 51°2 55°5 38°5
	27 28 29 30	37.1 40.3 44.6 47.7	41.9 43.8 44.6 48.5	42.5 44.4 44.6 49.4	46.5 44.2 46.4 48.1	47.2 44.1 47.4 48.0	47°0 45°0 47°1 50°7	46.9 45.3 48.2 52.3	46.5 46.2 47.2 53.7	46.5 48.3 46.8 55.3	47.1 49.4 47.2 52.5	48°3 50°5 46°7 53°4	48·3 49·7 48·1 52·7
Hourl	y Means	35.64	38.24	39.66	41.17	42.58	43*23	43.61	44.08	44.37	44.01	43.98	43.37

a Good Friday.

					WET	THERMO	METER.	<del></del>				
12	13	14	15	16	17	18	19	20	21	22	23	Daily an
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
0	。 14'6	° 14.0	11.2	° 11.4	0	0	0	0	0	0	0	0
19 <b>·</b> 5 24·4	21.2	18.0	16.7	16.9	8'4 16'4	7.8	7.4	7.7 19.9	$\begin{array}{c c} 9.2 \\ 17.7 \end{array}$	7°1 1 <b>5</b> °6	9°2 14°5	15.68 20.34
35 1	35'1	34.6	33.7	33.7	33.1	30.3	32.8	31.6	31.3	32.4	31.0	31.37
35.8	33.5	32.3	26.3	27.3	25.4	23.6	25.6	26'1	27.7	28.4	28.2	31.10
23.2	19.6	16.1	14.7	12.1	12.3	9.8	10.1	6.0	8.6	9.0	8.3	20.51
29.4	29.4	29.4	30.1	29.8	29.0	31.7	32.2	31.7	30.8	30.2	30.8	27.38
32.9	29.6	27.7	29.5	30.6	31.0	31.7	31.9	31.8	31.0	30.6		31.90
32.0	27.9	26.3	26.3	25.7	25.2	24.5	25.3	25.6	25.9	25.1	24.6	29.98
34.5	32.8	31.8	31.6	31.8	31.6	30.8	30.3	29.7	29.6	30.4	30.6	32.30
39.0 40.9	39.0 39.4	37.7 37.4	38 <b>5</b> 37 2	36.8 36.8	40·1 36·9	39.7 37.2	39.7 36.1	40.2	40.3	38.4	36.0 38.1	38 <b>°6</b> 0
<b>32.</b> 0	30.0	29.3	28.8	28.6	28.6	3/ 2	30 1	35.3	35.3	34'8	36 0	
			_	<del> </del>		30.8	31.0	28.4	29.4	29.8	28.6}	32.95
28.4	26.4	25.9	24.6	23.5	23.2	23.9	23.9	23.5	23.0	22.6	23.7	26.19
31°0 32°4	26.8 30.7	25.6 29.5	24.5 30.5	23·3 30·4	22.4	21.1	20.5 31.5	31.0 19.8	18.7 32.0	19'4 32'0	19.4 32.8	25.09 30.95
35.3	33.7	32.1	31.4	29.2	28.4	28.4	29.6	29.6	28.3	28.1	28.6	33.76
37.3	36.2	37.5	36.7	36.4	34.5	33.3	32.7	32.4	31.2	30.8	30.6	36.02
31.7	30.7	28.8	26.3	24.9	25'4	_				_	$\frac{-}{31\cdot 4}$	30.23
35.8	36.2	34.5	36.6	37.1	37.7	31.8	31.6 38.1	31.6 38.2	32.0 38.1	38.0 31.6	31.4 J 38.1	36.73
39.0	38.9	40.0	40.4	40.0	39.0	38.3	38.0	37.4	37.5	37.9	37.7	38.70
39.0	38.9	39.5	37.3	36.7	36.3	35.8	35.2	35.2	34.7	34.4	34.3	38.03
36.9	36.1	35.8	35 3	35.3	35.2	35.4	35.4	35.5	35.3	35.1	<b>3</b> 5 · 2	37.14
37·1 33·6	36.3	36.8 32.6	36.3 32.8	35.6 32.6	36.2 32.6	35.8	34'6	34.2	33.4	33°4	33.2	36.82
- S	99 9 —	32 0	52 0	34 0	32 0	28.3	29.3	29.2	28.6	29.5	$_{29}^{-}$ .	<b>3</b> 3.20
33.9	33.1	31.8	29.8	28.2	28.1	32.0	30.9	31.0	31.0	30.0	29.3	32.05
36.2	32.7	32.3	30.2	29.4	27.9	27.3	26.1	25.9	26.4	26.6	26.6	32.24
34.66	32.93	31.88	31.13	30.70	30.19	30.31	30.41	30.06	29.88	29.66	29.60	32.72
35.1	29.8	28.3	26.6	26.3	26.5	26.4	25.9	25.1	24.9	24.6	25.3	30*68
32.9 35.7	29.5	27.8	28.2	27.6	26.6	27.0	27.3	27.1	27.5	27.4	26.4	30.97
39.7	30.7 38.8	29'4 38'1	29·2 <b>37·</b> 9	30°6 37°6	31.6 37.4	32.4	30:7	29.3	27.9	30.2	30.2	33.03
_	-			-		46.3	45.8	45.4	45.5	43.6	40.8}	40.28
46.4	45.8	45.6	44.8	45.2	44*4	43.7	43.6	43.3	42'3	41.8	40.9	44.17
49.7	48.9	48.2	46.0	44.6	41.5	40.6	38.1	36.0	33*3	32.3	31.4	44.28 29.81
32·2 33·7	31.0 32.5	33.8 30.0	28.8 32.2	$27.2 \\ 31.4$	27.1 31.6	26.2	25.4	24.7	24.2	24.7	23.2	
34.1				_	31.4	38.8	39*4	38.9	39.0	39.0	38.1	35.79
	33.4	33.3	32.4	32.0	31 4	25.4	25.6	25.4	25.6	25.3	$\frac{1}{26\cdot 1}$	36.11
32.0	30.8	26.6	25.9	25.5	26.5	26.4	26.6	25.9	27.1	27.3	27.2	28.56
38.6	37.1	36.2	36°3	35.2	35.1	33.3	29.8	28.5	28.8	28.3	28.4	34.86
35.6	32.6	29.6	27.6	26.8	26.8	26.4		25.9	25.4	25.4	24.4	30.43
35.8 47.9	36 <b>·</b> 9 46·9	36.5 45.2	37·3 42·5	36.5 41.0	37°3 40°9	36°5 39°6	36.9 38.2	40.2	36.2 40.1	33.9 $43.2$	32°3 47°1	36.14 43.87
47.4	46.2	45.2	45.8	42.9	39.4			10 2	_	I		
_	[	_		_		31.0	31.4	30.7	29.6	28.8	$\frac{-}{28\cdot 4}$	43.25
48.7	48 1	48.0	47.7	46.2	42.9	42.4	43.4	41.8	40.9	41.4	41.6	45.15
53°4 44°1	52.1	50.5	50.1	50.1	50.1	49.3	49.1	49°3 44°4	43.6	41.8	41.2 45.8	51.30 44.29
49.7	42.8 48.7	41'9 48'5	42.5 48.1	$\frac{42.6}{48.7}$	43.5 49.0	44.7 47.7	45°1 47°4	46.9	44.4 46.5	46.5 46.2	48.5	48.65
54.2	47.3	45.5	45.8	47.4	48.5	48.3	49.4	49.4	48.9	47.2	41.6	49.73
38.2	38.2	38.2	38.2	38.8	38.6				- 1		$\frac{-}{34\cdot 5}$	37.70
	40.17		-	20.5		35.4	36.2	35.3	35.1	34.9	34.5	
17:5	43.7	39.8 44.2	39°2 43°5	38.5 43.1	38.5 42.9	$\frac{38.5}{43.5}$	38.1 45.0	36.7 47.0	36.0 47.4	34.9 47.1	34.4 46.4	42°15 45°68
47.5	47.0		Ttt ti	10 T	T4 7							
47.5 48.1 48.1	47.0 48.1				46.1	45.8	46.3	46.0	46.5	46.5	47.0	46.69
47.5 48.1	47.0 48.1 51.0	47·2 50·1	46.7 49.7	46°3 50°1	46°1 49°7	45.8 49.7	46°3 49°6	46.0 50.3	46.5 49.9	46.5 50.9	47.0 50.4	46°69 50°67

2 P

			·			WET I	HERMOM	ETER.	·			T	
Hours o Götti Tin	of Mean ngen ne.	0	1	2	3	4	5	6	7	8	9	10	11
	of Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$	51°3 49°6	51.7 50.7	52°2 52°4	51°7 53°4	52·2 56·3	52°3 56°8	52·4 54·6	52.7 55.5	52°5 55°5	51°4 55°1	51°4 55°1	52·3 54·4
	4 5 6 7 8 9	40.3 44.0 51.5 41.8 49.7 54.0	48.5 47.7 49.4 44.2 52.7 54.3	53.8 52.0 48.4 44.7 53.8 55.0	53.8 55.0 48.6 45.6 55.0 54.3	55.5 51.7 47.1 47.1 54.8 54.1	54.4 50.3 46.4 49.3 55.6 53.9	56°1 53°6 45°3 51°1 55°3 54°3	54.8 55.5 45.6 52.0 56.1 55.2	55°5 58°0 45°2 50°9 56°0 55°2	55.6 58.8 47.2 51.2 53.7 55.2	57.1 58.0 46.9 52.3 53.6 55.8	53°8 56°0 47°4 52°3 53°5 56°0
MAY.	10 11 12 13 14 15 ( 16	31 · 2 39 · 2 41 · 8 53 · 6 50 · 2 44 · 8	30.9 41.2 44.6 56.9 49.9 47.5	30.9 42.7 45.8 58.3 48.9 51.9	32.4 45.5 51.7 60.9 50.3 55.4	33 · 3 46 · 2 54 · 8 61 · 5 52 · 0 55 · 8	35°1 47°7 56°9 59°4 51°9 57°7	36.5 52.7 57.7 59.7 54.0 57.1	35·4 52·2 57·6 60·2 57·9 <b>5</b> 7·6	37.5 53.3 58.8 60.4 55.6 57.0	39.7 53.1 59.0 58.0 57.9 56.4	39.1 53.7 59.0 61.6 59.4 57.3	39.0 54.2 59.7 59.1 57.2 55.5
W	17 18 19 20 21 22 23	51.9 36.0 40.3 37.7 39.2 49.0	51'3 38'0 43'3 38'5 42'9 52'5	48.5 39.2 45.6 40.6 44.5 54.6	48.9 39.4 48.2 41.2 47.9 56.8	48:4 41:7 49:9 41:9 49:0 59:5	47.2 45.0 50.7 42.1 50.5 59.0	46.9 44.6 50.9 43.3 48.3 63.1	43.0 45.8 50.4 43.4 48.7 64.1	43 · 5 46 · 9 53 · 4 44 · 6 48 · 5 64 · 2	43.9 48.1 50.9 45.0 46.7 61.9	43°1 49°1 50°5 44°6 46°7 61°3	41.6 48.1 49.9 43.8 48.1 60.5
	24 25 26 27 28 29 30 31	59.9 63.3 64.1 57.9 54.9 58.3	62.9 64.1 67.6 60.2 58.7 57.3	65 · 3 67 · 2 67 · 7 61 · 3 60 · 2 59 · 7	66.8 68.4 66.9 63.1 62.6 61.6	67.2 67.7 66.2 66.1 65.1 67.4	66.2 67.6 66.7 64.0 62.9 68.4	68.5 69.4 66.3 65.9 64.4 69.1	69.0 71.9 65.5 67.6 64.1 69.3	70°0 70°3 65°5 66°1 64°1 68°1	68:1 69:2 65:3 63:8 63:5	66.8 67.9 65.9 63.1 62.5 67.0	67·7 67·9 67·7 63·1 59·7 67·1
Hourl	y Means	48.29	50.59	51.74	53.28	54.33	54.24	55.43	<b>5</b> 5.81	56.02	55.63	55.72	55.22
	$\begin{pmatrix} 1\\2\\3\\4\\5\\6\\7 \end{pmatrix}$	58.8 62.5 55.2 59.7 52.9 42.5	62°1 61°9 57°5 62°7 52°4 45°8	62.8 63.4 58.7 62.2 52.7 47.7	61.9 65.9 61.4 62.5 53.0 48.9	61.4 64.5 61.2 63.0 52.9 49.7	63.7 64.5 62.3 62.3 52.5 49.8	66.1 60.2 59.2 64.3 53.1 50.3	66.6 62.7 59.0 65.4 54.2 49.4	66.6 62.7 59.9 62.9 54.6 50.7	65.9 62.5 62.8 58.3 58.5 50.0	67.4 61.2 62.7 58.5 55.9 50.5	68.5 61.3 64.7 60.0 56.4 47.9
VE.	7 8 9 10 11 12 13	46.1 46.4 50.3 53.9 46.3 54.8	48.7 50.5 53.7 58.0 47.2 57.4	54.2 55.0 58.7 59.6 48.2 57.5	55°2 49°8 57°1 62°5 50°5 59°4	55.5 60.2 59.5 63.5 54.3 59.9	57.8 58.5 63.8 62.6 53.0 59.7	57.8 58.3 65.7 60.9 52.7 58.8	58°3 59°1 65°9 59°1 52°9 57°9	57.5 60.0 65.7 59.8 53.2 59.7	57.9 61.1 67.2 61.5 53.3 58.7	59'4 61'5 66'8 61'9 54'3 56'6	59.5 59.0 64.9 63.5 64.2 55.5
JUNE	15 16 17 18 19 20 21	58.7 56.3 53.2 60.2 66.4 55.5	60°2 57°7 57°7 61°8 67°4 55°7	61:1 58:9 60:9 62:1 66:7 55:7	64.7 60.4 64.1 66.8 67.9 56.2	68.4 61.6 64.5 70.2 68.8 56.9	67.7 60.2 64.9 70.1 72.1 56.0	69.4 62.6 67.2 71.3 72.1 55.4	68:4 62:8 68:1 73:2 70:2 55:2	68.2 62.7 68.1 70.8 69.1 55.0	65.9 62.8 69.1 67.7 66.5 54.2	67.9 63.9 69.1 74.0 65.1 53.6	64.9 63.9 67.5 72.4 66.9 53.4
	22 23 24 25 26 27 28	50°2 51°4 53°4 55°3 57°5 60°4	50.7 54.3 58.4 56.4 58.0 64.6	52.9 55.3 56.9 60.0 60.6 63.1	53.5 57.0 57.8 62.4 61.5 62.9	55.3 59.1 59.3 61.8 64.3 62.9	54.6 59.3 59.7 63.5 65.4 64.9	55.0 57.5 59.7 63.7 65.1 65.4	54.8 59.9 60.8 65.4 64.8 64.9	53.5 60.4 59.9 69.1 66.9 62.2	54.6 59.9 63.6 68.1 66.9 62.1	54.9 60.1 58.9 67.9 67.9 63.6	54·4 58·1 61·3 67·8 67·0 63·4
	29 30	64·1 65·6	63.8 67.2	64.7 68.1	65.7 69.1	68°3 70°1	68.7 69.8	68 <b>.</b> 9	69.1 69.2	69.2 70.3	69.3 68.3	69.8 68.8	69.2 69.5
Hourly	Means	55.29	57:38	58.76	59.93	61.43	61.81	61.93	62.20	62:26	62:20	62:39	62.20

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12	13	14	15	16	17	18	19	20	21	22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
52.1	51.7	51.7	52.3	53.5	51.5	51.1	<i>5</i> 0°.7	50°7	50°9	50°·9	50°2	51.72
<b>55</b> 6	52.7	49.1	47.0	46.0	47 4	41.4	40.9	39.8	39.2	38.9	38.5	49.41
54·3 55·7	51.6	49.7 52.4	47°1 50°0	45.8 50.0	44 · 1 50 · 2	43 · 8 50 · 7	41 7 48 6	40.5 48.6	39.6 48.6	39°3 48°1	38.8 51.2	48 98 52 02
46 2 52 5	44.9 51.5	42.5 50.5	41.8 48.3	41.8 47.0	40°0 45°6	40.0 46.3	40'9 46'8	40°2 46°7	38·2 47·9	38·1 47·0	36.7 48.3	44·18 48·37
5416 56.6	54.0 57.1	53°1 57°5	53.0 57.8	54°1 57°8	54·1 57·9	54.3	54.3	53°8 —	53.8	52.9	$\begin{bmatrix} 53.6 \\ \\ 31.2 \end{bmatrix}$	53°97 50°09
39 <b>.</b> 4	39.4	36.2	37.3	36.5	36.3	36.8 36.8	35.5 37.2	$\begin{array}{c} 33.5 \\ 37.2 \end{array}$	32.0 $37.2$	$31\cdot2$ $37\cdot1$	39.0	36*25
52°1 59°9	48.5 55.2	44.0 54.0	42.7 52.5	41 0 56 2	39°2 58°2	39.0 57.2	36°3 58°7	36°5 57°3	37.5 56.4	39.8 54.1	40°6 53°6	44.95 55.03
5616 51.2	56.4 49.9	56.9 48.7	56°9 47°1	56°1 46°7	55.6 46.6	60.6 44.8	60.4 44.3	60.7 44.1	56.2 43.7	56 1 43 4	51°3 43°1	58.06 49.95
55 4	53.7	50.9	48.3	47.5	47.7	52.5	52.4	53.7	53.9	53 1	$\frac{-}{52\cdot 3}$	53.14
40 6 47 3	38°3 42°9	37.4 42.1	36.9 38.1	35.8 37.3	35.6 37.2	35·3 37·5	34·3 37·0	33·1 38·2	33.3 38.3	32.6 38.5	33·1 37·7	41 02 41 42
50 1 44 0	47 · 9 40 · 5	46.5	44·1 37·1	44 · 2 36 · 7	42.6 36.0	40 9 35 4	40 4 34 9	39·1 34·1	38.0 32.9	$34.5 \\ 32.7$	35.6 33.1	45°33 39°28
47.7	47.5 57.1	45.6 56.4	45.0	44 8	45°3 55°4	46.3	44.8	45.8	45.8	46.7	46.9	46.38
1 -		_	<u> </u>		_	49.4	49.2	48.3	51.2	55.0	56.0	56'44
68 8 65 2	67°7 64°4	64 9 62 2	63°4 60°4	62.7 59.9	61.7 60.0	60°4 59°0	59°5 59°7	59.6 59.4	60°6 60°2	58°3 59°7	60°4 60°2	64.43 64.38
66.8 65.7	64:9 63:1	61.6 59.6	59°2 57°3	59°2 57°1	55°9 55°9	55.8 55.4	54.6 54.2	53.6 52.1	54.0 49.2	53.5 50.5	54*4 50*5	62.04 59.70
59°7 67°1	59.5 63.2	57.7	56.8 61.6	56.9 61.9	57 0 61 5	57.7	58°7	57°5	58 <b>·3</b>	58.7	58.8 — )	60.00 62.08
						56.1	54.9	54.3	55.2	55.1	56.9}	
54.76	52.97	51.18	49.91	49.69	49.17	47.85	47.34	46.86	46.64	46.38	46.61	51.49
65°3 58°8	63°5 55°8	62°5 55°7	$62.1 \\ 55.2$	61.6 53.2	61 3 51 4	60.6 50.7	59°7 49°9	59°2 50°9	59.7 49.0	58.2 $48.2$	59°8 48°5	62.72 57.52
63.1	59.9	58.5 58.1	59.7 58.1	59·4 59·1	58.9 58.6	58·3 57·9	58.3 56.5	58·3 55·2	57°3 54°2	57·3 53·5	58°3 52°9	59.66 59.44
56°3 48°4	54.6 47.7	50.9	46.5	46.4	45.6	44.6	44.0	42.7	41.8	41.2	40.5	50.17
58.8	_	44.8	42.8	41.2	40.1	49.1	48.5	45.2 42.3	44.7 41.4	42.8 41.1	$\frac{-}{41.6}$	46.67 51.12
60.4	56°0 57°4	50.9 50.9	47·7 49·6	46°4 47°5	45°2 47°1	44 · 2 46 · 4	43.0 45.0	45 0	44.4	43.8	45.0	52.91
62.6 60.9	61.3 58.5	58.0 55.5	57.0 53.5	56°3 50°7	54.9 <b>52.</b> 9	54°2 48°5	53°1 46°1	52.5 45.9	52.9 45.3	51.4 44.8	51.9 44.2	58°56 55°57
53.8 55.4	52.5 55.5	49.7 54.9	47.9 53.4	$\begin{array}{c} 47.7 \\ 52.4 \end{array}$	$\begin{array}{c} 47.7 \\ 50.7 \end{array}$	49`7 —	51·9 —	52°5	52 <b>`</b> 5	51·7 —	$\begin{bmatrix} 51.7 \\ \overline{57.1} \end{bmatrix}$	51.64 56.74
63.8	61.6	60.0	59 <b>·</b> 9	 58·3	 58 <b>°</b> 3	55°1 57°8	55°8 58°6	55.7 58.3	55.9 58.3	55°9 57°6	54.8	62.20
63 9 67 5	59 5 64 6	58·1 62·3	57·1 59·8	54·3 58·7	54.6 58.0	54.6 58.9	53°0 58°3	52·1 57·1	$\frac{49\cdot2}{58\cdot0}$	48 <b>.</b> 5 58.3	48.9 58.9	57.82 62.28
73.5 66.4	72.7 64.1	66.7 64.1	66°1	65 5 62 6	64.9 61.5	64·1 59·6	62.9 58.0	61.7 57.5	62·1 56·9	62.7 $56.2$	62.6 55.6	66.92 64.37
53 2	52.3	51.9	51.0	51 0	50.0	47.3	47 7	47.3	46.4	46.4	48.0}	52.30
55.8 59.5	55 <b>'8</b> 58'3	54·4 54·4	54.0 53.3	53.8 52.3	52.7 49.9	50°2 52°5	50·3 52·4	49·4 52·2	48.5 51.7	48 · 5 51 · 5	48 4 51 5	52.74 55.49
61.2	62 9 62 3	57.9	55.7	55.3	<b>54 '</b> 9	54.1	54.2	53·2 55·4	53.0 55.6	52·5 55·6	53.0 58.0	57.41 60.30
64 9 62 5	64.4	60 4 64 1	59.8 63.9	57.5 63.3	57.0 63.0	56.4 62.5	55.7 61.3	60.2	60.5	59.2	57.4	62.93
_	61.3	60.9	61.6	61.1	61.3	62.9	62 9	62.6	61.9	62.9	$\frac{-}{63.7}$	62.78
68°2 70°4	67.6 67.5	65 . 7 67 . <b>5</b>	64°1 65°6	62.9 64.5	63.0 64.3	63·3 63·1	63.7 62.1	63.3	60.6	61.6	62.1 $63.4$	65°77 66°58
61 65	59.91	57.65	56.48	55.20	54.92	54.87	54:34	53.74	53.20	52.81	53.07	58.18

	<u></u>		~, A = 1000 "" "			WET T	HERMOMI	ETER.					
Hours of Göttir Tin	f Mean	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Toro	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \end{pmatrix}$	65°3 61°7 60°4 55°0	67°2 62°4 63°7 62°7	69°6 62°1 64°3 66°9	68°5 62°5 64°5 67°0	69°8 63°8 64°5 69°0	69°3 63°5 62°4 70°3	71°6 68°3 64°3 71°2	69°8 67°9 63°1 69°4	70°2 67°9 65°6 70°5	68.7 68.2 63.6 68.7	69°0 67°4 62°5 69°8	68°4 67°4 64°3 68°1
	5 6 7 8 9 10	60.9 57.6 56.0 60.4 72.6 67.2	64.1 59.1 58.7 64.5 74.2 72.8	62.6 58.3 61.7 67.9 78.1 74.0	67.6 59.1 62.7 71.0 78.3 74.8	63.5 57.9 65.4 70.0 77.6 76.3	67.2 58.9 65.1 69.8 77.3 76.1	67.6 58.5 66.7 65.4 81.1 74.6	63.6 63.5 68.1 65.2 72.3 74.6	64.3 64.4 69.1 68.5 78.2 73.8	63.9 58.3 70.0 69.8 80.0 71.3	63.7 59.3 70.9 71.0 78.7 72.3	64.6 58.1 69.3 71.5 71.3 74.2
JULY.	12 13 14 15 16 17 18	56°1 50°1 48°4 51°9 47°7 54°3	58.7 54.8 50.3 57.5 54.0 59.7	59.5 57.2 51.5 58.3 59.1 61.9	63.0 53.9 53.0 61.8 58.7 63.1	61:7 55:5 51:4 57:2 60:4 63:7	61.7 55.3 52.7 56.0 61.8 64.5	63.3 56.0 54.2 56.6 60.9 64.3	69.8 55.9 55.0 56.2 61.3 63.9	65°3 57°1 57°9 57°1 61°3 64°5	67.7 57.1 55.4 57.3 59.2 63.6	70°3 54°1 60°6 57°2 58°3 64°3	65.6 53.4 57.1 58.1 58.9 64.3
	19 20 21 22 23 24 25	62.5 63.7 62.8 59.2 65.6 60.0	65.6 66.1 63.9 63.1 64.9 62.5	65.2 67.7 64.5 63.9 63.9 64.5	67.7 67.2 66.1 64.5 64.5 64.9	68.6 68.1 65.6 68.7 64.3 64.9	68 2 67 7 65 9 68 8 64 6 65 3	68:4 68:5 67:9 69:8 64:8	67.5 67.4 67.7 70.1 63.8 65.8	69°2 66°6 66°4 67°9 65°3 70°2	69°0 66°4 68°2 67°1 66°9 69°1	68.7 65.4 66.7 68.4 66.5 68.8	67.6 64.6 66.6 67.0 66.4 69.0
	26 27 28 29 30 31	61.5 59.4 68.3 71.2 61.8	64°9 62°6 71°2 73°5 61°6	66°3 65°1 70°5 75°1 62°4	66:3 66:3 72:8 75:6 63:3	66.5 67.9 73.3 75.4 63.6	65:3 67:4 74:3 74:3 62:9	62.9 66.9 75.8 75.0 64.7	61.8 67.2 74.0 73.0 63.3	61.8 68.4 72.8 74.8 63.9	62.9 68.3 74.3 73.9 63.7	62.7 67.7 74.6 72.4 64.5	61:3 69:0 72:8 72:3 66:5
Hourly	Means	60.06	63.12	64.52	65.21	65.73	65.80	66.44	65.97	66.78	66.39	66.21	65.84
	$\left(\begin{array}{c}1\\2\end{array}\right)$	58.7	60.2	60.5	61.1	62.3	64.6	66.1	66.8	65.9	65.9	64.9	64.3
	3 4 5 6 7 8	57.9 60.6 67.7 60.4 60.4 62.9	63.1 64.1 68.9 62.3 62.9 63.3	66.5 68.3 71.3 64.5 65.3 63.7	67'9 69'2 74'6 68'1 68'4 64'1	68.6 71.5 74.8 73.4 73.2 63.8	69.8 72.3 75.8 73.0 71.0 65.9	70.5 73.4 75.8 72.6 71.2 69.2	72.6 74.1 76.5 72.0 72.0 68.9	70.8 74.1 76.4 71.2 72.8 68.5	68.7 74.2 75.6 70.8 70.8 68.1	66.8 74.8 74.6 70.1 69.3 69.0	66.8 75.2 74.6 69.8 70.2 67.9
UST.	9 10 11 12 13 14 15	64.4 50.7 55.0 66.9 59.7 57.9	64.4 53.1 60.6 69.3 61.1 62.8	64.9 55.9 65.1 70.6 63.6 65.9	65.2 60.0 67.7 71.0 64.1 69.2	66.2 61.5 71.2 73.8 69.2 71.1	67.7 61.9 70.5 74.1 69.5 71.2	66.2 64.5 69.6 73.5 69.8 70.4	66.2 64.1 70.2 74.5 68.4 69.8	67.0 64.5 70.2 70.8 67.6 72.0	67.5 64.5 70.6 71.9 69.1 71.2	66.7 63.9 69.6 72.8 69.8 71.0	64.5 63.9 67.4 73.5 68.8 71.3
AUGUST.	16 17 18 19 20 21 22	59°1 47°4 53°1 60°1 56°0 61°9	60.8 48.9 56.6 60.9 61.7 62.4	61'9 49'9 56'8 61'3 65'6 62'4	63°1 53°3 56°1 61°9 68°1 62°9	63.9 56.7 56.2 62.8 67.6 64.3	62.9 57.8 57.8 63.5 67.7 64.5	62.6 57.3 58.0 64.2 68.7 68.1	61.7 57.7 58.5 63.8 67.9 67.5	62.7 58.1 60.2 65.2 68.7 68.7	60°9 59°3 59°3 64°1 69°0 67°2	60°6 58°8 59°8 66°6 66°7 66°6	59.4 58.4 59.7 66.8 66.3 64.5
	23 24 25 26 27 28 29 30	49.9 53.1 55.1 58.3 60.4 60.4	52.0 57.5 63.4 63.1 62.4 64.3	54.6 61.7 66.2 65.6 63.5 68.5	58°1 63°4 66°6 68°5 64°3 70°3	59.4 63.8 65.9 70.0 68.7 70.4	60.4 64.7 65.9 70.3 69.3 71.8	60.9 64.4 67.9 69.8 71.0 71.8	61.5 64.4 66.7 68.8 71.8 70.8	60'4 64'9 65'6 68'8 71'0 63'9	61.5 65.9 63.4 67.4 70.8 64.5	60.6 65.3 62.9 66.8 69.5 64.9	61.8 64.6 62.6 66.0 69.1 65.9
	31	63.2	64.1	69.8	70.8	71.0	72.4	72.9	73.0	71.8	72.1	72.0	72.1
Hourly	Means	58.52	61.32	63.60	65.31	66.97	67.55	68.09	68.08	67.76	67.46	67.09	66.75

					<del></del>	WET	THERMON	ÆTER.					
	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
	6	7	8	9	10	11	12	13	14	15	16	17	Means.
6	66.8 68.1 64.9 68.1	66°4 65°9 63°9 66°6	65°3 62°1 57°9 65°5	64.4 59.1 55.9 63.0	63°3 57°6 54°3 63°2	62.7 56.3 53.4 62.0	62°1 57°2 52°7	64.6 58.3 52.5	63.8 58.3 52.9	62°8 57°4 52°5	$62^{\circ}1$ $57^{\circ}2$ $52^{\circ}3$ —	61°3 56°8 52°3	66°38 62°39 59°53 65°43
	 31·1 57·0 69·3 72·1 69·8 71·2	59.4 56.6 70.3 71.6 67.9 69.3	59.2 55.4 66.2 69.2 68.3 71.3	58.8 55.4 61.7 67.7 66.7 70.1	57.5 54.6 61.5 68.1 68.1 71.0	57.2 51.4 60.9 69.6 67.0 70.3	63.8 56.4 51.1 60.7 69.8 68.0	63 · 1 56 · 2 52 · 5 61 · 1 68 · 3 66 · 8	63 · 1 56 · 1 52 · 5 60 · 9 68 · 9 64 · 9	62:1 53:6 52:6 58:1 67:0 65:1	61.5 54.6 52.7 57.4 66.7 65.1	59.8 } 54.3 54.4 56.9 69.2 64.3	60°75 56°63 63°70 68°47 71°74
	65°1 65°1 65°4 67°4 67°7 68°1	63 · 3 51 · 4 55 · 4 54 · 6 57 · 5 62 · 6	59.9 49.7 54.8 51.5 54.4 58.7	59.2 48.8 54.8 49.1 51.2 56.6	59.2 46.4 52.0 47.5 51.9 56.0	58.3 47.5 51.5 46.5 51.2 54.6	60°2 56°1 47°4 51°5 46°3 51°2	59.2 48.4 46.4 50.5 46.1 50.2	57.1 47.1 46.4 50.5 45.5 49.7	55.4 44.8 44.6 49.2 45.0 48.9	53°1 44°3 44°6 47°7 44°7 48°3	55.3 45.0 45.1 47.9 43.6 49.2	68.56 58.89 51.30 52.95 52.64 55.44 60.75
	67.7 64.1 66.2 67.0 66.2 69.2	66.4 63.9 64.1 66.8 66.1 67.7	64.1 63.8 60.2 64.9 65.4 63.9	60°2 63°3 59°6 64°1 64°5 61°1	58.8 62.5 58.1 63.7 61.9 59.2	58.8 62.1 56.6 63.1 60.5 59.2	59.6 58.7 63.1 56.6 62.4 60.2	59.0 60.0 60.9 56.6 63.3 60.4	58 1 59 2 59 6 55 1 63 9 60 2	58°3 57°8 59°8 54°0 62°9 60°5	60°2 56°2 60°2 55°5 63°8 60°5	59·2 } 57·9 59·8 56·4 64·0 59·4 ————————————————————————————————————	63 · 92 64 · 27 62 · 14 65 · 35 63 · 64 63 · 63
		58 8 67 6 72 2 69 5 63 1	56°5 66°2 72°0 66°9 60°2	54.6 63.9 72.3 65.6 58.6	53°4 62°4 72°3 63°6 55°5	52.9 60.8 71.3 62.1 55.2	61 · 1 53 · 6 62 · 7 70 · 9 64 · 1 55 · 0	61:3 54:4 62:9 70:5 63:8 56:2	60°2 55°2 64°5 69°8 62°9 56°0	58·3 55·0 64·5 69·3 61·6 55·8	58°3 56°4 64°9 69°3 61°7 56°4	58.1 5 57.5 65.0 68.1 61.8 56.4	59'79 65'43 71'85 69'19 60'69
_	65.56	64.03	61.8	60.38	59.39	58.63	58.61	58.28	57.87	56.92	56.88	57.00	62°41
	64·1 64·3 74·4 73·0 69·8 69·2 66·8	61.5 .  64.7 71.2 71.8 63.6 66.2 65.9	58.8 	58.3 	58.3 58.1 68.9 70.8 59.3 63.1 66.5	58.3 	57.3 57.1 66.4 68.1 59.3 62.1	56.2 56.9 66.4 64.7 59.2 62.7	55.8 56.4 64.9 63.3 59.2 62.7	55.2 56.1 64.0 61.5 58.8 62.5	56.0 55.5 65.1 60.2 59.7 62.4	55.2 55.9 64.1 60.2 58.9 62.3	63.29 69.37 70.59 64.96 66.23
	61.3 64.4 67.5 72.7 68.3 70.4	57.7 62.3 . 66.4 65.9 66.5 69.2	55.6 59.7 64.6 65.5 64.5 68.7	56.2 58.3 64.3 65.4 61.3 67.9	54.4 57.5 64.1 62.3 60.4 68.5	54.6 56.6 63.8 62.3 59.6 67.9	64.1 52.8 55.9 64.4 62.3 58.9	64.5 51.7 54.6 64.7 60.7 59.1	63·3 50·7 53·6 64·2 59·6 58·3	62.6 50.1 53.8 64.9 58.1 57.6	62.9 49.1 54.0 64.9 57.5 57.7	$\left\{ \begin{array}{c} -2.8 \\ 48.7 \\ 52.3 \\ 64.4 \\ 57.0 \\ 57.1 \\ -1 \\ 58.1 \end{array} \right\}$	65.55 59.74 58.81 66.08 67.17 63.75 66.35
	58.5 57.4 60.2 66.1 66.3 64.1	57.7 54.3 59.8 64.1 65.5 62.8	55°9 53°4 59°5 62°7 64°7 62°3	55.0 51.2 60.2 62.5 64.4 61.8	54.4 51.2 59.8 61.5 64.9 61.1	54.0 50.9 60.4 61.5 63.7 60.5	59°8 53°7 50°1 60°2 60°9 63°6	59°2 50°0 50°4 60°5 59°9 62°5	59.7 48.5 49.6 60.7 59.2 61.8	59.5 48.6 48.9 60.4 57.5 61.8	59.7 48.5 48.9 60.0 57.2 61.7	58.1 } 48.1 49.2 59.8 56.6 62.4 — } 50.6 }	57.19 53.29 58.90 62.12 64.89 61.61
	60.8 63.9 61.1 65.1 67.7 66.4	56.7 63.3 60.2 61.9 66.6 63.8	54.4 62.1 59.4 61.1 65.6 63.1	52.5 61.1 58.1 59.3 64.1 62.3	52.4 61.3 58.0 59.1 63.5 61.4	52°0 60°7 58°1 58°9 63°6 62°3	57.4 51.4 60.2 57.9 59.6 62.3	55.5 50.3 59.5 56.8 58.8 61.4	55 · 1 49 · 4 58 · 7 56 · 2 58 · 7 60 · 4	54·3 49·4 57·7 56·6 59·7 59·6	52·1 49·6 56·9 56·0 59·4 59·4	50°6 } 50°5 55°6 56°2 59°6 58°8 — }	55.44 61.45 61.12 63.53 65.20 64.68
	69*4	68.5	67.0	66.2	65.7	63 1	63°1 62°1	60.2	59.6 61.9	59.6 60.4	60.2 63.3	63.1	67.43
(	65*89	63.76	62.67	61.70	61.02	60.26	59.65	58.79	58.13	<b>57</b> .66	57.61	57:32	63.07

						wer 1	HERMOM	ETER.	<del></del>		1,14,111		
Hours of Göttin Tim	f Mean	, ,,	1	2	3	4	5	6	7	8	9	10	11
	f Mean }		19	20	21	22	23	0	1	2	3	4	5
	$\left( egin{array}{ccc} 1 & 2 & \\ 3 & 4 & \\ 5 & 6 & \end{array} \right)$	63.7 64.4 68.2 65.9 69.8	67°0 67°9 69°4 67°9 71°3	68.3 70.2 69.4 69.0 73.0	72·3 72·5 69·4 70·0 74·6	73.7 73.6 70.8 70.8 75.5	70° 5 74° 6 71° 8 73° 6 74° 2	71°0 76°0 71°3 73°4 73°5	72.4 75.5 71.0 73.4 73.8	72.8 74.8 71.0 73.8 73.5	71.8 74.0 71.8 73.5 74.3	71.8 73.8 70.6 73.2 73.8	71°1 73°2 71°1 72°8 72°5
	7 8 9 10 11 12	64.7 57.8 45.5 53.7 62.9 67.2	69·2 59·1 47·0 54·4 65·3 70·8	73°0 60°2 49°1 55°2 65°7 73°3	74.8 61.3 50.2 54.1 68.0 74.2	76 2 62 8 51 7 54 6 68 4 74 2	77.0 63.5 51.9 54.8 69.3 73.9	78.4 63.1 51.3 54.4 69.8 71.8	76.7 63.1 53.8 55.0 71.8 63.4	76·1 64·9 54·2 56·9 72·2 65·9	75.5 60.5 54.1 57.6 70.8 67.0	74.6 59.2 54.2 58.5 70.5 67.4	73 '9 58 '3 54 '6 59 '4 71 '3 68 '7
SEPTEMBER	13 14 15 16 17 18 19	65.3 50.4 43.1 52.1 54.6 45.8	68.3 50.0 47.9 52.5 55.1 50.7	71.2 49.2 52.7 54.2 55.8 56.8	72·2 49·2 55·5 55·2 58·3 59·3	73.8 50.0 57.2 57.0 59.6 63.6	75.5 49.1 57.8 57.8 60.7 65.1	75.0 51.2 57.9 59.6 60.5 66.1	75.8 50.2 57.5 59.2 60.8 64.7	76.7 50.9 57.9 57.8 61.5 65.7	75.4 51.4 57.2 57.3 61.6 65.1	74·4 52·7 56·9 56·2 61·8 65·1	75°4 52°7 57°2 55°6 61°7 64°3
	20 21 22 23 24 25 26	45.8 38.5 44.5 58.3 48.4 42.3	48.4 42.3 52.7 61.8 48.9 44.8	48.2 49.0 58.9 61.8 49.2 47.1	48.7 54.0 61.2 62.9 49.9 50.7	48.7 55.4 62.9 63.3 52.3 52.7	49.7 56.8 64.7 63.4 53.7 52.9	51.0 57.5 66.6 64.4 54.2 53.8	52.1 58.0 66.4 63.9 54.6 55.4	52°2 58°6 66°7 59°4 55°5 55°0	52.4 58.9 66.5 58.9 55.9 55.8	52.2 59.3 66.1 59.1 54.2 55.5	50'9 58'7 65'1 58'3 51'9 55'1
	27 28 29 30	37·7 54·1 55·6	40°3 55°5 57°4	42.9 56.8 57.8	45°2 59°2 60°5	47.1 60.5 60.8	51.7 61.2 62.6	51.5 60.5 63.3	51.2 61.1 63.1	53°4 60°6 62°3	53 · 9 59 · 7 62 · 3	53.7 59.5 61.3	52.9 60.0 59.2
Hourly	Means	54 63	57.15	59.15	60.90	62.20	62.99	63.35	63.24	63.47	63.20	62.91	62.23
	7 1 2 3	49 1 45 5 38 3	47°3 45°1 39°6	47.7 44.9 45.0	47.0 45.3 48.5	47.0 46.2 48.9	47.8 47.1 50.3	48.5 47.1 50.9	48.7 48.0 51.1	49.9 47.3 51.4	50.0 47.5 50.3	48.3 49.2 49.2	48°3 49°0 47°2
	4 5 6 7 8 9 10 11	44.2 40.5 49.3 59.3 56.4 36.2	45°3 41°2 51°7 59°0 57°0 36°5	49°1 47°1 58°3 60°9 57°3 37°0	51.6 54.3 60.8 60.9 64.5 38.5	55.2 56.5 61.5 62.1 65.5 40.1	57.1 57.5 62.1 62.5 65.3 42.4	57 '9 58 '8 63 '4 59 '6 65 '1 43 '5	57.9 59.5 63.9 58.5 64.3 44.1	57.5 59.5 62.4 57.5 54.5 44.5	58·1 59·4 63·6 57·2 53·0 45·4	57°3 58°0 63°3 57°0 51°3 45°1	56.9 57.5 61.7 56.4 50.7 44.2
OCTOBER.	12 13 14 15 16 17	48 4 47 5 34 9 36 2 45 4 33 9	51'3 47'1 34'3 36'0 46'5 32'6	52.8 47.1 39.1 39.0 47.5 31.8	54.6 47.4 41.5 40.5 48.2 33.4	55°0 46°9 46°4 41°2 51°3 34°1	55.9 46.2 46.5 41.6 52.2 34.3	56.4 45.6 46.4 41.7 53.8 34.9	56.4 45.8 46.2 41.8 56.1 35.1	57.0 45.8 45.8 42.6 55.6 34.2	56.9 45.8 46.4 43.2 55.8 34.2	57.2 44.8 46.2 43.3 55.0 33.6	56.9 42.7 44.1 41.2 55.5 32.9
	19 20 21 22 23 24 25	31.8 41.0 31.7 36.3 23.8 32.8	31 ° 0 42 ° 6 32 ° 0 36 ° 2 25 ° 1 34 ° 3	35.8 42.6 33.5 36.5 25.5 37.1	38.8 43.5 36.2 37.0 27.6 39.4	40.4 43.1 37.3 36.4 32.4 41.4	42.3 43.8 37.9 35.8 36.2 40.9	42.1 45.0 38.8 34.9 37.1 40.9	40.8 45.4 39.5 34.1 39.0 40.9	40.3 43.3 38.5 34.1 38.8 38.9	40'8 41'2 37'6 32'9 38'9 39'1	41.2 41.4 37.4 31.2 40.0 38.2	40.0 40.2 37.2 31.0 38.9 36.7
	26 27 28 29 30	32·3 49·9 28·0 34·3 32·0 28·4	35 5 47 9 28 5 34 7 32 2 30 5	38'3 46'7 30'0 35'8 32'9 29'4	40.5 45.4 30.0 39.4 33.9 29.7	43°1 44°8 31°4 40°9 34°1 30°5	46.4 46.4 31.7 42.5 34.6 31.6	48.2 44.2 32.3 39.4 34.4 32.0	49.4 44.2 34.3 40.9 34.5 33.9	49°1 44°2 35°6 41°2 34°9 35°5	48.4 42.6 36.0 40.9 34.5 36.3	48°1 41°9 35°6 39°9 33°9 36°9	47.0 40.8 33.2 39.4 32.6 38.1
Hourly	l÷	39.53	40.04	41.80	43.64	44.95	45.89	46.03	46.46	45.92	45.78	45.35	44.46

						WET	THERMO	METER.		The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon		and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	
	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
	6	7	8	9	10	11	12	13	14	15	16	17	Means.
	71°0 72°8 71°0 71°6 70°2	69.6 72.4 70.4 70.8 67.9	69.8 71.8 68.3 70.5 66.7	69°3 71°0 67°7 70°3 65°1	67.7 69.8 67.9 70.0 64.1	69 3 69 4 68 2 70 0 64 1	67°5 69°5 68°3 70°5	66°7 69°2 69°2 70°8	65° 5 68° 4 69° 5 70° 8	65.4 68.0 69.1 70.8	64.5 68.6 68.6 70.4	$6\overset{\circ}{4} \cdot 5$ $67 \cdot 6$ $65 \cdot 9$ $69 \cdot 4$ $ 64 \cdot 5$	69.05 71.21 69.58 70.97 69.48
	72.8 57.2 53.2 59.0 70.2 66.9	72.3 55.4 53.1 59.9 66.9 65.1	69.6 55.5 54.0 59.7 67.4 62.9	69.4 54.0 54.6 — 66.7 60.7	67.9 50.6 54.2 57.7 65.3 60.6	67.0 48.9 56.1 57.8 65.3 61.5	65.9 63.9 47.5 56.2 58.5 64.5	65.5 60.3 46.7 52.5 58.1 66.3	59.7 46.0 55.8 59.3 65.4	64.0 58.9 45.8 54.8 60.3 66.7	64 9 58 9 45 3 54 0 61 3 65 9	64.5 } 59.0 45.1 52.7 62.1 66.7 — 64.1 }	69.58 55.49 52.87 57.49 67.64 66.74
	74.0 51.3 57.4 55.4 59.4 63.9	74.0 50.1 57.3 55.1 55.6 60.7	73.8 49.2 56.8 55.5 53.6 60.4	72·2 48·1 56·4 55·4 54·0 58·5	70°1 47°5 54°8 55°3 53°5 57°4	67 1 48 1 52 9 55 1 53 1 55 7	64.4 66.1 47.9 51.1 54.9 51.8	64 · 3 63 · 4 47 · 1 50 · 3 54 · 8 51 · 2	64.6 60.9 46.9 50.9 55.2 49.7	64.5 54.0 45.4 51.0 55.2 47.1	64.4 53.1 44.3 51.1 54.6 46.7	51.2 44.4 51.9 55.4 45.8	69 · 12 49 · 05 54 · 20 55 · 68 55 · 56 59 · 45
	52 2 57 6 63 6 58 1 50 3 54 6	49.2 53.5 64.1 57.1 49.7 53.5	47°3 51°4 63°7 56°0 50°3 53°3	46.7 49.2 63.1 54.9 49.4 50.7	45.6 48.5 62.9 53.7 49.2 49.7	44.6 47.3 61.1 52.7 49.9 46.5	61.7 44.2 46.5 61.7 52.0 49.1	61.4 42.9 46.4 62.5 51.3 48.9	58.7 42.1 45.8 62.0 50.5 48.7	54.2 41.4 44.8 59.7 50.1 46.2	52 1 41 5 44 4 58 8 49 2 44 8	49.7 } 40.4 44.4 58.5 48.7 43.4	47 · 43 51 · 12 61 · 83 57 · 07 50 · 36 48 · 91
	53.5 58.9 61.7	52.4 56.2 60.7	51.5 54.4 60.4	49.7 54.6 60.4	49°3 52°7 58°3	49.4 55.6 56.0	43°3 49°4 55°5 53°8	42.5 49.7 55.2 53.2	41.8 49.7 55.2 52.3	39.8 49.7 55.4 50.4	38 9 50 9 55 0 48 7	38 2 } 52 7 55 4 50 5	49.57 57.20 58.03
	61:84	60.20	59.76	58.88	57.86	57.41	57.14	56.55	56.17	55.10	54.65	54.32	59.41
	48 1 47 3 44 0	47.9 43.7 43.6	46 4 43 1 43 6	45.1 40.3 42.6	44.6 39.4 42.1	44.7 40.2 41.2	44.7 40.2 — 44.7	44.0 39.0 	44.3 38.6 	44.0 37.5 	44.6 37.5 	$     \begin{array}{c}       44.8 \\       38.3 \\       \hline       41.2     \end{array} $	46.78 43.64 44.97
	52.2 57.5 60.5 56.0 48.8 39.4	49.2 54.8 63.3 55.9 47.9	50.2 55.2 63.1 56.0 47.5	49 3 52 3 63 3 56 9 44 6	46 7 50 5 62 8 56 7 40 5	44 6 53 3 61 9 57 0 39 6	44.6 53.5 61.6 57.0 39.2	42 1 53 6 59 1 56 4 39 6	40.9 51.3 58.0 56.6 39.2	39.9 49.7 59.2 56.9 38.3	39.8 50.7 59.2 56.6 37.7	40°9 48°5 59°2 56°6 36°1	49.52 53.36 60.55 57.89 50.16
4	57 · 1 43 · 3 40 · 7 39 · 0 54 · 2 33 · 5	37.5  57.4 42.1 40.7 38.3 52.9 32.0	37 · 1  53 · 1 41 · 9 42 · 7 38 · 1 51 · 4 30 · 6	37.1 51.5 41.3 42.5 37.9 47.9 29.4	37.4 	36.1 	49.4 50.9 39.8 42.6 39.8 42.8	48.7 50.8 39.4 42.1 40.9 40.0	48.8 50.8 38.1 41.0 40.9 37.9	49.1 49.6 37.9 40.9 43.5 37.3	48.7 49.7 37.2 38.3 44.5 36.2	46.5 49.8 36.8 37.4 45.6 34.7	42.22 53.40 43.01 42.15 40.62 47.67 33.04
	39.8 39.3 36.7 28.8 38.5 36.3	39.0 37.7 35.6 28.4 38.1 35.3	39.0 36.9 33.7 27.9 36.2 34.3	38.8 35.3 34.2 26.8 36.3 31.8	38.7 34.1 34.9 24.9 36.7 31.3	39'4 33'2 34'3 22'4 35'3 30'5	34.8 40.6 31.5 34.3 21.8 35.6	34.5 40.9 32.0 34.3 21.5 34.1	33.9 40.8 31.3 34.7 20.5 35.1	34·3 40·6 31·0 35·3 20·2 34·9	33.8 40.8 30.3 36.0 22.0 34.2	33.5 } 40.6 31.7 36.2 23.0 32.5	39 · 35 38 · 22 35 · 74 29 · 36 34 · 62 35 · 69
	49.8 40.0 30.3 37.9 32.3 38.5	49.7 39.1 28.1 36.7 31.8 39.1	49.7 38.7 27.5 36.2 32.2 40.4	49.7 37.1 29.2 36.1 31.8 39.4	49.7 36.7 31.0 35.1 31.1 39.8	49.7 35.9 31.0 34.3 30.5 39.9	33.1 50.2 35.3 28.4 33.5 30.1	32·3 49·7 34·6 30·8 33·0 29·2	33.5 49.7 32.9 32.5 32.9 28.6	33 · 4 49 · 1 32 · 2 32 · 6 32 · 6 28 · 8	32.5 50.0 32.0 31.7 32.5 28.3	50.2 29.4 32.3 32.0 28.4	46.81 40.12 31.33 36.75 31.98
		— —	40 4 —	- -	39 8	39 9 —	45.5	46.1	46.2	47.0	47.2	$\frac{-}{47\cdot 5}$	37.89
	43`33	42.44	41.95	41'06	40.36	40.02	40.94	40.41	40.02	39.87	39.73	39.46	42.48

	: = <del></del>				WET TE	ERMOME	TER.					
ours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
ours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
$\left(\begin{array}{c}2\\3\\4\\5\\6\\7\end{array}\right)$	47.7 46.0 40.9 36.0 30.0 37.3	36.2 31.2 38.3	47.1 46.7 44.0 38.3 32.2 39.7	949.2 47.9 46.8 41.2 38.3 41.6	50°1 48°7 45°6 44°0 43°1 43°1	51.4 49.6 46.2 44.8 44.8	51.1 49.7 46.0 45.3 45.3 46.4	51.0 48.7 45.8 45.5 45.0 45.5	51.6 49.2 45.8 44.5 45.4 45.8	52·2 48·5 45·5 44·8 45·6 46·1	52.4 49.4 44.5 44.0 42.9 44.9	52.4 47.5 42.9 41.6 42.4 43.5
8 9 10 11 12 13 14	49.2 48.8 49.4 42.9 44.1 42.9	49.1 48.9 49.9 42.4 44.1 42.1	49.9 49.4 50.1 42.8 44.1 41.6	50°3 50°3 50°2 43°6 44°2 42°1	52.7 51.2 50.4 44.2 44.4 42.3	52.4 52.0 50.5 44.6 44.7 41.8	53.3 52.3 50.3 44.6 41.9	53.0 52.5 50.7 45.4 44.6 43.5	52.7 52.4 50.5 45.4 44.6 42.5	52.6 51.3 51.2 45.2 44.6 41.7	52.5 50.5 51.2 44.8 44.7 41.4	51.7 49.7 49.9 45.0 44.7 41.0
NOVEMBER. 19 50 50 50 50 50 50 50 50 50 50 50 50 50	42.0 38.9 42.8 40.9 34.9 35.1	42.8 40.2 42.1 40.2 34.5 34.5	43°1 42°1 44°5 39°4 34°5 34°7	43.8 43.5 47.7 39.2 34.5 35.4	45°3 44°7 49°7 39°6 35°8 35°1	46.5 44.5 49.7 40.2 37.1 36.3	46.4 45.0 48.7 40.2 37.4	45.8 46.1 46.8 40.0 38.2 37.7	45.4 45.5 46.2 40.0 39.4 39.1	44.8 45.6 44.9 40.2 39.1 40.4	44.3 45.5 44.6 39.2 38.1 39.0	44.2 45.8 43.8 37.7 36.7 39.4
22 23 24 25 26 27 28	28·3 33·1 23·9 17·5 22·2 36·4	28°3 31°5 20°9 17°4 21°1 36°0	28.4 32.4 19.2 18.8 21.7 36.2	29.3 33.6 19.4 20.8 23.4 36.1	30'4 36'2 18'2 22'8 23'4 36'7	31.2 37.5 18.7 25.1 24.2 37.9	30.6 38.1 18.9 26.2 25.9 38.1	31.0 39.0 19.1 26.8 28.0 38.7	32.0 37.9 19.6 27.6 29.4 39.1	32.7 36.9 19.4 24.9 30.7 38.2	32.6 34.9 20.0 23.6 31.0 37.3	32.7 32.0 20.1 22.6 32.0 36.2
$\begin{pmatrix} 29\\30 \end{pmatrix}$	25.2	24.5	24.2	25.1	25.9	26.6	26.7	26.8	27.4	26.4	26.1	25.1
Hourly Mean	37.47	37:21	37.80	39.10	40.14	40.92	41.22	41.41	41°56	41.34	40.74	40.02
$\left(\begin{array}{c}1\\2\\3\\4\\5\end{array}\right.$	13.1 33.5 31.0 24.5 27.7	12.6 34.3 30.8 24.6 28.3	13.7 35.2 29.5 25.7 28.3	17.9 36.0 30.3 28.3 28.8	19.4 37.2 30.5 31.0 30.8	21.9 38.1 30.9 29.5 31.5	23.2 39.0 31.5 30.6 31.8	24.7 40.7 31.0 31.2 32.0	25.5 42.6 28.8 31.6 31.6	26'0 41'3 28'8 32'0 32'0	26'4 40'9 28'4 32'0 32'1	27.2 42.5 28.5 31.0 32.0
6 7 8 9 10 11 12	32.0 36.3 30.4 31.0 23.9 18.9	32.0 36.2 30.0 31.0 22.5 16.9	32.7 34.2 29.6 30.3 22.0 16.1	34.8 35.1 28.8 29.3 22.2 15.9	35°1 35°0 29°4 29°4 23°6 15°0	36.0 34.8 29.5 30.1 24.9 16.1	36.5 33.5 30.3 30.6 25.5 16.6	36.9 34.4 30.5 31.2 26.2 16.6	37.0 34.3 30.3 31.8 26.4 18.0	37.1 34.4 30.3 32.0 27.3 18.8	37.5 33.3 30.3 31.2 27.1 19.4	38.9 32.7 30.3 29.8 27.4 20.1
DECEMBER. 13 14 15 16 17 18 19	15.7 8.0 11.6 21.1 11.5 27.7	15.9 7.3 11.9 21.5 11.3 27.6	15.6 10.0 12.4 22.0 10.7 27.9	15.2 12.1 17.1 23.9 14.4 27.2	15·1 16·7 19·9 24·9 17·1 27·5	16.4 18.5 24.2 25.4 20.1 28.4	17.9 20.0 24.9 25.9 23.0 28.8	19.2 21.7 25.6 25.1 25.4 30.6	20°3 23°3 25°6 25°4 26°8 30°6	20°1 22°8 24°6 26°1 27°3 30°6	19°1 22°2 24°6 25°2 26°8 28°8	18.6 19.2 21.7 22.3 26.6 28.8
20 21 22 23 24 25°	20°6 20°6 7°4 25°5	19.2 19.6 4.2 27.1	17.0 18.8 4.6 27.1	17.8 18.9 9.6 28.3	19.2 19.7 14.4 28.8	20°4 20°0 17°0 31°4	21.6 20.9 18.8 31.7	22.8 21.3 20.2 31.6	23.5 23.0 21.4 31.8	23·3 23·4 21·3 32·2	22.8 23.0 21.3 32.2	19.7 20.6 15.6 33.3
$\begin{bmatrix} 25 \\ 26 \\ 27 \end{bmatrix}$	16.3	16.1	15.7	17.9	21.4	24.2	27.1	27.9	29.2	30.0	29.2	30.8
28 29 30 31	32·9 17·6 36·2 33·7	31.8 18.0 36.7 33.8	32.3 18.8 36.5 35.1	32.0 20.5 37.0 36.5	32.8 23.7 37.2 37.7	31 · 2 25 · 1 38 · 6 37 · 9	28.4 25.9 38.1 37.9	29.5 25.9 39.0 38.5	28°2 25°6 37°5 39°0	28 1 26 2 36 7 38 3	27.9 26.2 36.3 38.0	27.5 26.8 35.8 37.7
Hourly Mean	s 23.41	23.12	23.12	24.45	25.86	27.02	27.69	28.45	28.81	28.88	28.55	27.9

<sup>&</sup>lt;sup>a</sup> Christmas Day.

					WET	THERMO	METER.				,	
12	13	14	15	16	17	18	19	20	21	22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
52.2 47.5 41.4 37.7 40.7 43.9	35°3	51.9 47.3 39.8 34.5 36.5 45.2	51.2 47.4 38.7 35.1 36.0 45.0	50°1 47°4 38°3 32°8 35°8 43°9	° 49.7 44.8 38.3 31.8 36.2 43.9	% 48.5 41.8 38.3 29.9 36.3	% 48.9 41.2 37.7 30.6 34.9	° 44.8 39.5 37.4 30.6 36.3	0 41'4 40'4 37'3 29'9 35'6	36.6 30.5 36.0	44.3 41.0 36.4 31.0 36.5	49·20 45·98 41·48 37·33 38·58
51.4 49.7 49.4 44.6 44.7 41.6	51'3 49'7 48'8 44'4 44'6 42'5 44'2 45'6	51.0 49.8 48.3 44.3 44.6 43.9 — 43.7 45.4	51'1 50'1 46'1 43'8 44'6 43'9 — 43'4 46'2	50.7 50.2 45.2 44.0 44.1 43.9 — 43.3 46.5	50'4 49'9 44'6 43'4 43'4 43'8 — 43'0 46'6	47.9 50.3 50.5 44.7 43.3 43.1 	47.5 49.9 49.9 44.6 43.5 43.5 42.5 41.9 45.3	48.6 49.7 49.7 44.7 43.5 43.1 	49°3 49°7 49°2 44°6 43°5 43°1 — 41°0 40°1 45°1	49.3 49.4 49.2 44.6 43.5 42.9 	49.3 } 48.9 49.1 43.8 43.5 43.5 41.8 } 40.2 42.5	44.78 50.97 50.26 48.07 44.01 44.11 42.33 43.43 44.67 43.87
43 3 37 5 36 1 39 4 — 32 8 32 0 20 0	37.5 36.3 40.2 ————————————————————————————————————	42.1 38.2 36.0 41.8  32.0 29.8 17.7 23.1	42.0 37.2 35.6 42.4 — 32.9 29.6 16.9 23.0	42.0 36.5 34.7 42.5 	41.4 35.3 33.9 41.4 ——————————————————————————————————	41.7 35.1 32.9 — 28.6 35.7 29.4 16.5	41.6 35.3 33.3 —————————————————————————————	41.8 35.1 34.2 28.4 36.2 26.3 16.7 25.3	41.5 35.1 35.4 28.3 34.9 25.4 19.1 24.1	40.9 35.1 36.0 	40.9 34.4 35.3 	43 87 37 88 35 83 35 95 32 37 31 63 18 77 23 28
32°1 35°6 23°0	33.0	33·2 34·9 ————————————————————————————————————	33·3 34·2 — 20·1 — 38·79	23.0 33.2 32.6 	24.5 34.3 31.8 - 18.2 - 38.03	24.5 35.0  27.9 16.9 37.21	25°1 34°9 26°8 15°4 36°92	25 5 34.7 26.6 14.7 36.66	34.8 27.7 13.6 36.40	36·2 27·5 14·2 36·47	$ \begin{array}{c} 36.4 \\ -7.6 \\ 13.5 \\ \hline 36.29 \end{array} $	30·17 33·97 21·74 38·83
27.4 43.6 28.4 30.6 30.6	44.4 28.1 30.8	29.4 44.2 27.4 31.2 28.4	30.0 42.1 26.3 31.1 28.6	29.8 42.1 25.1 31.2 28.2	30.6 46.7 23.5 31.0 28.2	30.8 45.3 23.3 30.8 — 30.6	31.7 38.8 23.6 . 30.6 — 30.7	31.7 39.2 23.7 30.9 — 30.7	32.0 36.0 24.0 30.9 — 30.7	32.0 34.7 24.1 29.4 — 31.4	32.4 32.4 23.8 28.3 	25.72 39.62 27.55 29.95 30.19
39°0 31°8 30°8 29°8 27°8 19°9	31.8 30.0 29.2 27.5	38.6 31.5 29.6 27.2 27.8 19.1	38.7 31.2 29.4 26.3 27.3 18.1	38.8 31.2 28.6 26.0 27.2 16.4	39.0 30.6 29.2 26.4 26.3 15.9	39.1 30.7 28.6 26.4 25.6	38.5 30.7 28.4 26.6 20.8	37.7 29.6 28.4 26.1 19.4 	37.7 28.8 28.4 26.1 18.6	37 · 2 29 · 7 27 · 8 26 · 0 17 · 7 ——————————————————————————————————	37·4 30·9 26·8 25·1 17·9	36.96 32.61 29.38 28.70 24.27 17.02
17.6 16.8 22.0 18.3 26.6 28.2	15°2 23°3 16°4 25°6	16.0 13.2 25.9 17.4 24.9 27.2	15°0 11°5 22°6 19°2 27°5 27°2	12.6 11.3 23.0 18.9 26.3 27.2	10'4 10'4 21'3 16'3 26'4 27'2	15.0 10.5 10.7 21.3 14.9 26.8	15.0 11.8 9.4 21.3 15.4 27.3	12°1 10°3 21°7 13°8 27°3	12.7 11.6 21.7 13.3 27.5	8'9 10'8 22'2 13'2 27'1	9'3 11'0 21'5 12'6 28'1 	15.12 14.33 21.33 19.94 23.43 26.68
15.8 19.2 13.3 33.3	18.6	14.1 20.7 16.3 33.6	14.4 21.4 18.7 33.2	16.4 22.2 15.4 33.7	17.4 21.7 12.4 34.1	23.0 18.1 19.7 13.4 — 21.2	22.8 19.2 16.4 14.8 — 21.1	21.5 20.7 8.7 15.0 — 20.3	21.1 22.1 13.2 15.0 — 20.3	21.8 23.5 11.1 16.1 — 19.7	24.9 8.6 20.4 	19.53 18.80 15.18 28.41
30.6 27.3 26.5 35.3 37.9	27°3 28°4 35°4	31.6  23.5 28.3 34.7 36.3	31·7 	32.0 22.9 29.6 33.9 36.5	33.7  22.8 30.8 33.9 36.4	39.4 23.7 31.5 33.9 36.5	38·4 21·9 31·8 34·5 36·2	38°1 19°4 31°8 35°1 36°3	37.6 20.8 33.7 33.9 35.6	37.5 20.5 34.3 33.7 35.4	33.6 19.9 35.6 33.8 35.6	29·22 26·50 27·10 35·75 36·73
27.2	0 27.12	26.85	26.73	26.40	26.52	25.80	25.30	24.79	24.94	24.57	24.41	26.16

Vol. III. 2 Q

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	3 4 5 6 7 8 9	31.6 33.3 27.6 27.4 8.8 10.7	31.7 32.2 28.0 26.8 7.4 10.4	31.6 30.6 28.3 26.4 6.3 10.7	32·2 30·8 29·4 25·9 6·8 11·4	32°2 30°2 32°3 25°3 7°1 12°6	31.7 31.8 31.5 24.9 7.7 13.5	31.8 31.3 28.9 23.6 8.2 15.1	32.0 31.3 28.6 22.0 9.2 17.3	33.1 33.9 28.1 21.5 9.3 17.2	33.4 31.4 28.5 22.5 10.0 17.0	33.9 32.6 28.8 21.5 9.3 16.3	34.4 30.7 28.3 20.0 8.9 16.1
ANUARY.	10 11. 12 13 14 15 16	-2.7 10.9 21.9 33.5 36.0 34.1	1'0 12'0 22'4 34'3 36'1 32'0	0'9 12'2 23'4 35'1 36'3 29'6	5.5 12.8 24.7 35.1 37.7 28.5	9'3 13'9 27'2 35'4 38'1 28'6	9.9 15.0 26.8 36.2 38.5 28.4	10°2 15°1 28°5 37°5 39°9 31°6	10°4 15°2 30°0 38°1 41°2 30°0	11 1 15 9 31 0 37 4 41 0 25 3	12.2 15.5 31.0 37.4 39.7 21.0	12°1 15°4 30°0 37°3 39°0 18°7	11'9 14'5 30'0 36'5 39'6 15'2
JANUA	17 18 19 20 21 22 23	27.8 9.5 5.3 12.6 6.3 19.5	29.3 8.9 5.3 12.2 5.8 20.3	29.6 8.0 6.2 11.0 5.6 21.6	30.0 7.7 8.7 11.3 7.1 23.9	30.5 7.8 12.3 11.3 7.3 25.3	30.6 8.4 15.1 10.7 9.3 27.4	30.5 8.7 17.0 8.7 9.4 28.1	31.0 8.4 17.5 8.7 11.4 26.3	30.0 9.0 17.9 7.6 11.8 26.8	28.6 8.6 18.5 5.3 10.7 26.6	27.9 7.5 17.7 4.7 12.8 27.3	27.9 6.6 17.3 3.8 13.7 25.6
	24 25 26 27 28 29 30 31	16.4 24.9 11.4 3.6 20.6 19.6	16.7 28.5 11.5 4.5 22.2 19.6	17.1 32.0 12.1 4.5 23.1 17.5	19.0 32.0 13.7 8.1 23.6 17.6	22.0 32.7 13.9 11.1 25.5 17.3	22.8 33.9 13.7 15.5 27.9 15.1	23·2 33·9 13·3 18·3 28·8 15·1	23'4 31'4 13'7 19'2 29'2 15'4	23.6 26.8 13.6 20.5 29.4 15.4	24.0 25.1 13.0 21.3 28.8 14.6	23.4 24.1 11.8 20.7 27.9 14.0	22.8 23.8 10.5 19.5 27.4 12.8
Hourly	Means	19.97	20.28	20.28	21.18	22.19	22.85	23.31	23.46	23.27	22.75	22.33	21.65
Hourly	1 2 3 4 5 6	22.3 28.1 37.8 9.2 8.4 10.9	23·3 28·1 37·9 9·3 7·5 10·2	23.5 30.4 37.7 9.0 7.6 11.1	24.4 32.2 37.3 10.2 9.2 13.2	26.4 36.1 37.2 11.5 11.0 14.7	29.4 36.2 37.1 13.6 12.4 17.0	31.0 36.3 37.3 15.3 15.7 19.4	31.6 37.2 37.6 18.3 16.3 21.6	31.6 38.0 34.4 18.9 18.9 23.0	31.5 38.0 31.2 19.8 19.2 24.1	31.7 36.8 27.4 19.4 19.9 24.5	30.7 36.4 24.1 18.1 19.8 24.0
ARY.	7 8 9 10 11 12 13 14	27·3 27·1 25·5 14·8 11·5 14·0	27°1 25°3 25°6 15°1 13°3 13°5	27·1 25·3 25·5 14·2 12·4 14·0	28:5 26:6 26:6 15:4 15:1 16:1	29.8 28.1 28.2 18.5 18.8 18.5	31.6 29.6 28.7 18.9 20.6 20.5	32.0 28.6 30.0 18.9 21.1 20.7	32 · 1 29 · 2 31 · 8 20 · 0 22 · 8 21 · 3	32·1 28·4 32·0 18·8 25·1 22·3	33.1 28.3 32.0 18.8 21.3 22.3	32.0 28.4 30.8 18.3 18.8 21.9	31.0 27.6 28.6 17.3 16.8 21.7
FEBRUARY.	15 16 17 18 19 20 21	27.9 15.6 19.6 19.2 25.5 25.3	27·1 10·2 19·4 19·6 25·2 24·5	25°3 15°2 20°0 20°8 25°3 24°1	24·2 16·5 23·0 23·7 25·7 22·2	24.8 11.3 27.3 29.2 26.2 21.0	22.6 11.6 29.2 31.1 28.1 20.7	21.4 12.4 27.5 32.0 28.5 21.4	19.8 20.5 28.4 32.2 28.8 21.1	19°2 21°7 28°6 32°2 31°0 20°6	19.2 23.4 29.6 32.0 31.4 20.9	19.0 22.5 28.1 31.6 30.9 20.2	17.8 19.4 28.1 29.6 30.0 20.0
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lourly	Means	17.99	17.60	18.49	19.94	21.80	23.11	23.87	24.91	25.31	25.27	24.75	23.75

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Hours of Toron Time	Mean }	18	19	20	21	22	23	0	1	2	3	. 4	5
	1 2 3 4 5 6 7	18.5 17.4 21.6 13.0 12.1 27.1	18.6 17.1 25.1 13.3 9.8 27.8	19°8 19°2 26°4 20°2 12°6 30°3	20°8 20°7 27°9 23°8 17°7 30°5	20°8 21°1 29°4 24°5 23°6 32°0	22.6 22.0 30.8 25.1 26.0 32.7	24.6 24.6 32.4 26.8 26.2 32.5	26.5 27.1 31.1 28.1 27.3 32.3	27.4 26.8 31.8 29.4 28.2 31.8	25.8 26.4 31.7 29.4 27.9 31.4	25·1 26·3 32·0 28·8 27·9 31·4	24.5 24.2 32.0 28.4 27.4 32.5
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MARCH.	14 15 16 17 18 19 20 21	11'9 9'0 13'7 27'3 22'2 30'4	13:3 9:2 15:2 27:9 23:5 31:0	14.7 11.6 18.1 30.0 25.3 31.2	16.0 13.2 22.6 31.5 27.1 32.4	17.3 15.9 23.9 30.6 29.4 34.1	20.1 16.6 27.8 32.2 30.6 34.2	18°3 19°4 29°2 33°3 32°0 35°6	20.6 18.1 29.4 34.1 32.2 36.5	21:1 21:2 29:2 35:5 32:1 35:4	19.8 20.9 29.4 35.6 32.1 35.6	19.2 20.4 29.2 36.5 32.0 35.4	19.0 20.2 28.4 37.3 30.4 35.4
	21 22 23 24 25 26 27 28	24.5 22.2 26.0 30.7 27.3 16.7	25.9 33.0 26.8 30.4 27.8 15.5	27.9 33.1 27.8 35.3 28.0 15.7	29·2 33·3 29·7 38·5 28·4 17·1	29.8 34.3 29.8 38.1 28.9 19.0	30.0 35.3 31.8 38.1 30.3 20.3	30.5 37.8 31.4 37.9 31.6 21.1	29.6 36.6 31.4 35.4 31.9 21.5	29.9 37.1 31.9 35.8 34.5 21.9	30.0 36.2 32.7 35.8 32.7 22.2	30°1 35°2 33°2 35°4 33°3 22°2	30.6 34.7 31.7 36.5 32.5 22.2
	29 30 31	29.4 21.2 11.6	30.9 21.2 14.4	32·3 23·9 15·2	35°3 23°3 15°0	37·9 23·7 16·9	38.2 24.3 17.9	36.7 23.7 19.8	37·1 22·6 21·2	34.4 22.9 22.3	32·7 23·0 22·1	31.4 21.6 21.9	29.8 22.3 22.3
Hourly	Means	19.78	20.34	22.35	24.14	25.49	26.71	27.59	27.84	28.17	28.04	27.75	27.46
APRIL.	1 a 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30												

<sup>&</sup>lt;sup>a</sup> No reliable observations for this month.

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	12	13	14	15	16	17	18	19	20	21	22	23	Daily and
	6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
	23.5 22.4 32.0 27.3 25.8 28.9	23·2 22·3 29·7 26·2 23·0 28·8	23.0 22.3 29.4 24.7 24.1 29.5	22.6 21.8 24.4 23.9 25.2 30.6	22.7 21.7 23.3 20.4 24.8 30.4	22.6 19.7 19.5 18.6 24.1 30.3	22.6 19.7 20.1 17.3 24.2	22.0 19.5 18.9 15.2 25.3	22.0 18.7 21.4 15.2 26.1	20.5 18.5 23.2 13.0 26.5	19.4 19.5 22.3 13.2 26.1	17.7 20.9 17.3 13.8 25.9	22.37 21.66 26.40 21.65 23.66 31.02
	24.8 20.2 29.8 17.5 17.4 19.4	22°3 21°1 28°4 15°4 15°5 17°3	20.8 21.5 26.2 14.3 14.2 16.2	19.4 23.1 22.2 12.2 13.3 16.1	18.5 24.3 19.8 10.4 12.5 15.9	17:3 24:7 18:9 8:9 12:0 16:1	37·3 17·1 23·9 18·4 8·3 12·0	36.9 16.9 22.1 18.3 8.0 11.6	33·1 16·5 22·5 17·6 5·7 11·8	32·1 16·5 21·0 15·7 4·8 11·9	29.4 16.5 21.6 15.2 4.9 11.0	$\left\{ \begin{array}{c} -1\\ 24.9\\ 16.5\\ 21.7\\ 13.6\\ 4.9\\ 10.1\\ -12.6 \end{array} \right\}$	23°30 20°55 24°98 13°71 13°79 17°19
-	17.5 18.1 28.4 34.1 28.7 35.4	15.9 17.3 27.9 32.5 26.8 35.4	14.9 15.9 26.8 28.0 25.5 35.3	12.9 14.6 26.4 26.4 25.1 36.5	11.9 13.8 26.1 26.3 26.6 33.1	11.6 13.2 26.7 25.8 27.7 32.1	24·1 12·4 12·3 27·3 25·1 27·3	21.4 11.6 12.1 27.3 24.7 28.0	19.4 11.0 12.2 27.2 24.2 29.2	17.5 10.8 11.3 26.7 24.5 29.8	14.0 10.7 12.2 27.2 24.5 29.9	9.8 13.8 27.3 23.5 30.0	15.09 15.10 25.89 29.64 28.48
	31.0 34.1 31.1 37.3 30.3 19.0	31.0 33.3 29.7 35.9 29.8 19.6	31.0 32.7 29.4 33.3 29.9 18.8	30.9 32.5 28.8 35.1 27.7 18.1	30.8 31.3 29.5 34.8 26.6 18.9	31.0 31.1 27.8 33.6 25.5 19.6	25.7 31.0 28.9 27.8 32.3 24.7	24.0 31.2 29.2 28.4 32.1 23.7	23·4 31·1 28·7 29·9 30·4 23·3	23.5 31.3 28.2 31.0 29.2 21.6	23.5 31.9 28.3 30.9 27.5 21.2	22.6 } 32.1 28.1 30.7 27.1 17.3	30 · 09 32 · 72 29 · 97 34 · 02 27 · 87 22 · 01
-	28.8 21.1 20.7	26.2 21.2 18.0	27°1 21°3 17°0	26.2 20.3 15.0	23.8 19.5 11.9	23.9 19.6 11.3	30.7 22.4 19.3 12.5	29.8 22.3 19.3 10.8	29.5 22.1 19.1 10.3	29·2 22·2 16·7 8·9	29.6 22.2 16.3 7.4	30·1 } 21·9 14·6 7·4	28.97 20.92 15.49
	26.10	24.95	24.19	23.38	22.58	21.97	22.40	21.87	21.54	20.97	20.61	19.86	24.00
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MAY.	10 11 12 13 14 15 16	45.4 52.0 53.6 52.8 48.8 46.2	47.8 52.0 54.4 54.2 52.0 50.8	50°2 53°1 57°1 54°7 54°6 54°9	51·1 57·0 58·2 53·7 53·1 56·8	52.7 58.6 59.8 53.3 51.4 56.7	53.7 59.4 60.7 52.3 52.2 58.6	53.5 57.9 61.7 52.7 51.3 58.6	54·1 57·8 60·8 54·7 50·4 58·8	56.0 57.5 59.1 54.9 50.8 59.0	55°9 58°5 59°0 55°7 52°5 59°1	57.0 56.2 58.8 56.2 52.4 57.9	55.7 56.3 58.6 55.9 54.8 57.1
M	16 17 18 19 20 21 22 23	43.9 44.7 47.3 45.3 46.5 56.3	48:3 49:4 49:4 47:1 47:7 59:4	53.8 52.9 51.8 49.0 48.4 57.8	55°3 57°4 53°9 51°8 50°1 59°6	55.4 57.8 59.4 51.9 49.9 61.9	55.5 57.8 57.1 52.4 51.8 64.1	54.9 59.1 56.6 53.1 53.9 63.5	55.8 60.2 58.0 53.7 56.4 60.8	54.7 58.0 58.3 53.9 56.8 62.7	54·1 58·3 57·1 53·4 57·4 62·9	54·2 58·2 57·3 53·3 54·4 60·9	53°3 58°5 58°5 51°8 52°7 58°6
	25 24 25 26 27 28 29 30	55·1 50·2 36·6 44·6 50·6 54·7	56.7 52.8 38.3 48.8 51.2 52.9	57·1 55·9 40·3 50·6 53·4 53·7	56.9 59.2 41.9 50.4 53.4 59.1	57.5 59.1 43.0 52.3 58.6 57.0	58.4 59.9 46.1 53.6 61.4 57.5	58.7 58.4 47.7 53.0 64.8 55.9	60°6 60°9 47°6 51°5 64°0 56°4	62:0 60:8 48:0 53:1 64:2 59:0	61.6 59.3 50.0 52.4 62.0 61.7	61.8 56.7 51.4 52.7 60.9 58.0	61.4 58.0 50.6 53.6 61.7 62.8
	31	47.8	47.0	47.0	46.5	45.3	44.8	44.2	44.0	43.9	43.8	44.0	44.0
Hourl	y Means	46.68	49.15	51°17	52.70	53.60	54.37	54.61	54.91	55.29	55.15	54.60	54.83
	$\left(\begin{array}{c}1\\2\\3\\4\\5\\6\end{array}\right)$	45.6 50.6 48.2 53.0 40.1	45.6 50.6 54.1 54.2 42.0	48.2 51.6 54.7 55.8 45.4	52.2 52.0 54.6 54.1 46.3	54.9 53.9 55.2 54.2 48.4	59.2 55.3 56.6 55.1 50.5	59.8 56.9 59.2 53.1 52.4	58.2 58.7 58.7 53.5 54.9	57.8 56.5 55.8 52.0 55.5	54.6 56.5 56.4 51.0 56.9	56.1 56.4 55.3 49.0 54.2	56.5 57.2 53.5 48.0 54.1
	7 8 9 10 11 12 13	47.8 52.1 55.9 61.8 57.4 46.7	51.4 51.4 57.8 62.0 60.0 48.8	56.3 51.4 60.6 63.0 62.6 54.7	58.5 52.6 63.5 63.0 64.6 56.3	58 · 2 55 · 4 63 · 8 62 · 4 62 · 0 55 · 6	59.2 55.2 65.0 62.0 63.6 56.3	59.8 54.8 65.6 62.6 61.0 56.6	61.2 54.9 68.5 62.5 62.1 58.0	61:3 57:1 69:6 63:2 59:0 58:5	61'4 58'0 69'3 64'0 58'5 58'9	58.5 56.8 69.6 62.0 57.8 60.0	56.5 55.1 67.0 62.2 53.1 59.6
JUNE.	14 15 16 17 18 19 20	54.5 38.0 43.2 46.8 49.0 55.3	53.2 39.1 44.9 48.4 53.3 55.3	48.6 40.1 46.3 52.4 53.3 57.2	49.0 41.2 47.5 55.9 55.4 59.3	47.4 42.8 48.6 55.7 56.0 61.6	46.7 43.9 49.6 56.2 57.8 61.2	45.0 44.9 49.7 57.5 59.0 60.6	43·2 47·6 49·0 57·2 61·0 60·8	42.2 50.4 48.8 56.9 58.0 57.4	44.7 52.0 50.3 58.0 57.2 58.7	44.0 52.3 50.6 58.3 56.4 61.2	44·4 51·8 ·50·6 57·3 56·3 62·8
	21 22 23 24 25 26 27	53.8 52.5 55.1 55.5 56.7 61.6	56.4 53.9 58.2 60.6 61.5 63.7	59.7 52.5 59.6 62.8 60.5 67.9	61.0 57.4 63.0 64.5 62.6 69.7	61.5 59.6 63.4 66.4 62.8 70.1	61.2 63.0 65.4 68.4 62.6 72.3	62:3 63:8 65:4 65:9 64:0 70:9	62.2 64.6 65.5 63.8 64.8 70.7	57.5 64.0 65.0 65.0 65.0 69.5	60.7 60.4 65.4 67.1 66.6 70.3	62'9 58'5 64'8 66'2 65'1 69'1	62.8 60.1 62.8 66.5 60.4 69.1
	28 29 30	58.7 54.3 53.9	58.7 55.5 57.4	56.7 56.1 61.7	58°1 58°0 62°8	59°2 59°0 63°4	59°3 60°3 62°0	62.0 60.6 64.2	66'3 61'4 65'1	61.0 63.0 65.0	60°8 63°2 64°0	61.3 63.0 63.9	61.5 63.6 63.0
Hourly	Means	51.85	53.77	55.38	57.04	57.75	58.77	59.14	59.78	59.04	59.42	58.97	58:30

6 7 8 9 10 11 12 13 14 15 16 17 Million 14 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 16 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 16 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million 15 17 Million		·		<del> </del>	. to Medical local in		WET 7	HERMOM	ETER.					
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53'8         54'7         53'6         52'9         52'1         54'3         64'4         53'3         53'1         52'5         53'1         53'1         53'1         52'7         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3         55'3 <th< td=""><td>-</td><td>49'8</td><td>46.3</td><td>45.9</td><td>44.2</td><td>43.8</td><td>45.6</td><td>-</td><td>39.9 46.7</td><td></td><td></td><td></td><td></td><td>45 00 48 50</td></th<>	-	49'8	46.3	45.9	44.2	43.8	45.6	-	39.9 46.7					45 00 48 50
58-1   53-0   52-5   53-1   53-1   53-1   53-7   53-7   53-3   53-1   52-7   53-7   55-0   54-5     57-8   58-4   58-4   58-6   57-8   57-8   58-7   58-5   58-5   58-5   58-5     55-7   54-2   53-0   50-0   49-0   48-5   47-8   47-8   47-0   46-7   46-4   46-7   46-7     52-1   49-6   48-4   46-9   46-7   44-6   43-0   42-4   41-3   41-6   40-9     52-1   52-6   49-8   49-4   49-2   49-7   47-5   47-9   45-7   41-6   40-9     52-0   50-6   51-0   50-6   49-6   47-7   47-5   47-9   45-4   41-3   41-6   40-9     52-0   50-6   51-0   50-6   49-6   47-7   47-5   47-9   44-9   43-3   42-6   42-4     52-0   50-6   51-0   50-6   49-6   47-7   47-5   47-9   47-1   46-1   45-4   45-9     52-0   50-6   51-0   50-6   49-8   49-1   49-2   48-0   47-7   47-5   47-9   47-1   46-1   45-4   45-9     52-0   50-6   50-7   50-0   47-8   46-9   45-9   48-5   47-9   47-1   46-1   45-4   43-9     53-8   51-7   53-1   48-2   47-4   50-8   50-7   52-9   51-2   51-6   52-4   53-6     53-8   51-7   53-1   48-2   47-4   50-8   50-7   52-9   51-2   51-6   52-4   53-6     53-8   51-7   53-7   50-9   51-6   49-9   47-9   47-9   47-9   47-9   47-9     49-8   43-5   44-9   43-9   47-9   47-9   47-9   47-9     49-8   43-5   44-9   43-9   43-9   43-9   43-9     49-8   43-5   43-9   43-9   43-9   43-9   43-9     49-8   43-5   43-9   43-9   43-9   43-9   43-9     49-8   43-5   43-9   43-9   43-9   43-9   43-9     49-8   43-5   43-9   43-9   43-9   43-9   43-9     49-8   43-9   43-9   43-9   43-9   43-9   43-9   43-9     41-6   44-6   44-6   44-6   43-5   43-9   43-9   43-9   43-9   43-9     41-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6   44-6	1		_			_			47.4				44.7}	48.70
57.8   58.4   58.4   58.6   57.8   57.8   55.7   56.5   55.4   53.9   51.4   52.9   57.5     51.4   52.1   49.6   48.4   46.9   46.7   44.6   43.0   42.4   41.3   41.6   40.9   48.5     56.1   55.7   55.9   52.6   49.8   49.4   49.2               52.0   50.6   51.0   50.6   49.6   49.7   47.7   47.7   45.7   45.9   45.4   42.6   42.4   41.3     57.4   51.5   50.8   49.6   49.3   48.2   48.0   47.7   47.8   47.8   47.2   44.7   42.6     59.9   55.0   52.2   50.3   50.0   49.5   48.5   48.7   47.9   47.1   46.1   45.4   45.7   52.5     51.1   50.7   50.0   47.8   46.9   45.9   44.9   44.6   43.2   42.9   42.6   43.6   48.5     53.8   51.7   53.1   48.2   47.4   50.8   50.7   52.9   51.6   52.4   53.6   51.7     57.8   58.1   57.7   57.9   56.7   55.5   55.0   52.9   51.6   49.2   48.6   48.4   47.1   48.1   55.7     57.9   58.2   57.3   54.8   55.3   44.2   41.9   44.0   43.2   42.9   42.6   43.6   48.1     57.9   58.2   57.3   54.8   55.3   44.2   41.9   44.0   43.2   42.9   42.6   43.6   48.1     57.9   58.2   57.3   54.8   55.3   44.2   41.9   44.0   43.2   42.9   42.6   43.6   48.1     57.7   57.9   56.7   55.5   55.0   52.9   51.6   49.2   48.6   48.4   47.1   48.1   55.7     57.9   58.2   57.3   54.8   55.3   54.2   40.8   39.4   39.1   39.7   39.5   36.4   35.2   52.2     49.8   45.5   44.6   43.5   42.4   40.8   39.4   39.1   39.7   39.5   36.4   35.2   52.2     49.8   45.5   57.8   58.0   58.3   56.9   56.7   56.7   55.0   55.5   55.5   55.5   56.3   56.9   56.7   56.7   55.0   55.5   55.5   55.5   56.3   56.9   56.7   56.7   55.0   55.5   55.5   56.8   56.9   56.7   56.7   55.0   55.5   55.5   56.8   56.9   56.7   56.7   55.0   56.4   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.0   44.				52.5				54.4 53.7		53'1	52.7	53.7	55.0	53.04 54.96
Si		57.8	58.4											57·35 51·77
S2*0   50*6   51*0   50*6   49*6   49*7   47*7   47*9   43*5   42*4   42*6   42*4   50*6   57*4   51*5   50*8   49*6   49*3   48*2   48*0   47*7   47*8   47*8   47*2   44*6   44*6   50*6   50*0   50*0   47*8   46*9   45*9   44*9   44*8   47*1   46*1   45*4   45*9   52*2   50*3   50*0   49*5   48*5   47*9   44*6   48*2   42*9   42*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6   43*6		51.4	52.1	49.6	48'4	46.9	46.7		43.0					48.88
\$\frac{87*4}{59*9} \ \ \frac{61*5}{55*0} \ \ \frac{59*2}{50*2} \ \ \frac{50*8}{50*0} \ \ \frac{49*2}{50*3} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \							I		45.9					52.15
\$69.9				50.8						47.8	47.8	47.2	46.7	52.68
58:8         51:7         53:1         48:2         47:4         50:8         50:7         52:9         51:2         51:6         52:4         53:6         51:         57:7         57:9         56:7         55:5         52:9         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0         51:0		59.9												52.60 48.79
60°2 58°6 57°8 55′5 55′0 55°0 52′9 51′6 49°2 48°6 48°4 47°1 48°1 55′5 57°9 58°2 67°3 54°8 65°3 44°2 41°9 40°1 38°2 37°3 36°4 35°2 52′5 54°5 44°6 48°5 44°6 48°5 44°6 48°9 45′5 45°0 48°5 42°6 42°2 44°0 45°1 48°1 52°9 50°7 44°6 46°9 45′5 45°0 48°5 42°6 42°2 44°0 45°1 48°1 51°1 55°0 58°4 55°3 54°1 58°0 58°3 56°9 56°7 56°7 55°0 55′5 55′5 55′5 55′5 55′5 55′5 55′5		53.8	51.7	53.1	48.2	47.4	50.8		52.9					51.81
57:9         58:2         57:3         54:8         55:3         44:2         41:9         40:1         38:2         37:3         36:4         35:2         45:2         44:6         43:5         42:4         40:8         39:4         39:1         39:7         36:4         37:0         43:0         43:0         43:5         42:6         42:2         44'0         45:1         48:6         61:7         57:9         57:1         58:0         58:3         56:9         56:7         56:7         55:0         55:5         55:5         55:2         57:0           58:4         55:3         34:1         54:0         52:9         58:1         -7         -5:0         55:5         55:5         55:5         55:5         55:5         55:5         55:5         55:5         55:3         56:1         56:4         44:6         44:6         44:6         44:5         46:0         46:0         47:1         46:8         46:7         47:4         48:5         48:7         48:7         45:3         44:4         47:2         45:3         45:4         47:4         47:4         47:4         47:4         47:4         47:4         47:4         47:4         47:4         47:4         47:4         47:4	and the second	_	,						51.0		51.2	51.1		57.60
49'8	****									38.2	37.3	36.4	35.2	52.00
61.7 57.9 57.1 58.0 58.3 56.9 56.7 56.7 55.0 55.5 55.5 55.2 57.2 57.5 58.4 55.3 54.1 54.0 52.9 53.1 — — — 45.7 45.3 46.6 47.4 48.5 48.7 54.5 44.6 44.6 44.6 45.6 46.0 46.6 47.1 46.8 46.9 47.0 47.4 47.2 45.5 46.6 53.6 51.9 51.0 51.0 5 49.82 49.19 48.28 47.10 46.7 1 46.15 45.79 45.4 43.4 45.4 47.2 45.5 55.5 55.3 53.7 52.8 52.3 51.2 50.6 49.2 48.8 48.2 49.8 50.2 52.5 56.4 53.7 52.5 51.3 50.9 48.3 47.5 46.5 44.9 44.8 48.8 44.4 51.5 53.9 53.0 52.7 52.7 51.2 51.6 52.5 52.3 53.1 52.7 52.7 52.7 51.2 51.6 52.5 52.3 53.1 52.7 52.5 53.4 46.9 44.2 42.8 42.0 40.7 40.0 37.4 36.1 35.1 34.7 46.5 46.7 44.0 42.4 42.6 46.0 44.2 42.8 42.0 40.7 40.0 37.4 36.1 35.1 34.7 46.5 46.7 46.7 44.0 42.4 42.6 46.0 44.2 42.8 42.0 40.7 40.0 37.4 36.1 35.1 34.7 46.7 46.7 46.7 46.7 46.7 46.7 46.7 4		49.8	45.5	44.6	43.5	42 4								43°30 48°82
44*6         44*6         45*6         46*0         46*6         47*1         46*8         46*9         47*0         47*4         48*5         48*7\$         45*3           53*61         51*91         51*05         49*82         49*19         48*28         47*10         46*71         46*15         45*79         45*43         45*49         50*           55*5         55*3         53*7         52*8         52*3         51*2         50*6         49*2         48*8         48*2         49*8         50*2         52*5         56*4         53*7         52*5         51*3         50*9         48*3         47*5         46*6         44*9         44*8         43*8         44*4         44*8         43*8         44*4         44*4         44*8         43*8         44*4         44*4         44*4         44*4         44*4         44*4         44*4         44*4         44*4         44*4         44*4         44*4         44*4         44*4         44*6         44*1         44*7         44*0         44*4         42*6         48*8         48*2         49*8         50*2         52*3         53*1         53*1         53*1         53*1         53*1         53*1         53*1         53*1		61.7	57.9	57.1	58.0	58.3	56.9						55.2	57.95
53*61         51*91         51*05         49*82         49*19         48*28         47*10         46*71         46*15         45*79         45*43         45*49         50*           55*5         55*3         53:7         52*8         52:3         51*2         50*6         49*2         48*8         48*2         49*8         50*2         52*5         56*4         53*7         52*5         51*3         50*9         48*3         47*5         46*6         44*9         44*8         43*8         44*4         51*3         50*9         48*3         47*5         46*5         44*9         48*8         48*2         49*8         50*2         52*5         52*3         53*1         53*1         52*7         52*5         53*3         44*8         44*8         44*8         44*8         44*4         51*4         52*7         50*0         48*4         40*0         40*7         40*0         37*4         36*1         36*1         36*1         44*1         42*4         42*6         48*8         48*2         49*8         52*9         54*4         46*3         46*3         46*1         50*6         50*6         52*5         52*3         51*6         52*5         52*3         51*6         51*6	and the second	`. <del></del>	_	_	_								48.73	54·11 45·70
55:5         55:3         53:7         52:8         52:3         51:2         50:6         49:2         48:8         48:2         49:8         50:2         56:4         53:7         52:5         51:3         50:9         48:3         47:5         46:5         44:9         44:8         43:8         44:4         51:3         53:9         53:0         52:7         52:7         51:2         51:6         52:5         52:3         53:1         52:7         52:5         52:3         53:1         52:7         52:5         52:3         52:0         52:5         53:3         43:4         46:0         40:7         40:0         37:4         36:1         35:1         34:7         46         52:7         52:0         52:3         52:0         51:6         56:5         56:6         56:6         56:6         46:3         44:7         44:0         42:4         42:6         42:6         43:7         46:5         46:3         34:7         44:6         54:3         55:4         53:3         52:9         52:9         54         54:3         54:1         56:6         66:4         63:1         64:4         63:5         61:7         61:1         60:9         59:8         59:6         63:6         66:	i													50.73
56.4         53.7         52.5         51.3         50.9         48.3         47.5         46.5         44.9         44.8         43.8         44.4         51.5         53.9         53.0         52.7         52.7         51.2         51.6         52.5         52.3         33.1         53.1         52.7         52.5         52.5         53.3         34.7         46.9         44.9         44.8         42.9         40.7         40.0         37.4         36.1         35.1         35.7         52.5         52.5         52.5         52.3         34.7         46.0         44.7         40.0         37.4         36.1         35.1         35.7         46.3         44.7         44.0         42.4         42.6         42.6         42.6         42.4         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6         42.6 <td< td=""><td></td><td></td><td>· · <u> </u></td><td></td><td> </td><td></td><td></td><td></td><td>40.0</td><td>40.0</td><td>40:0</td><td>40.0</td><td>50.0</td><td>52.76</td></td<>			· · <u> </u>						40.0	40.0	40:0	40.0	50.0	52.76
58.9         58.0         52.7         52.7         51.2         51.6         52.5         52.3         53.1         53.1         52.7         52.7         52.8         53.4         36.1         35.1         34.7         46         52.7         50.0         48.4         42.8         42.0         40.7         40.0         37.4         36.1         35.1         34.7         46           52.7         50.0         48.4         44.0         44.2         —         —         —         —         40.5         46.5         46.3         44.7         44.0         42.4         42.6         48.5           53.8         52.5         52.3         52.0         51.5         52.3         51.6         51.6         50.6         51.2         51.4         51.9         54           54.3         54.1         53.9         54.7         54.3         54.3         54.3         55.4         53.3         52.9         52.9         54           67.1         67.5         65.6         62.4         63.1         64.4         63.5         61.7         61.1         60.9         59.8         59.8         59.8         59.8         57.4         56.5         60.3         44.7	Ì							47.5	46.5	44.9	44 8	43.8	44.4	51.72
52.7         50.0         48.4         46.0         44.2         —         —         46.5         46.3         44.7         44.0         42.4         42.6         }         42.6         53.8         52.5         52.3         52.0         51.5         52.3         51.6         51.6         50.6         51.2         51.4         51.9         54         54.3         54.7         54.3         54.3         54.3         55.4         53.3         52.9         52.9         52.9         54         67.1         67.5         65.6         62.4         63.1         64.4         63.5         61.7         61.1         60.9         59.8         59.6         63         60.4         48.9         48.0         47.7         47.5         46.3         45.1         44.9         59.8         59.8         59.6         63         60.4         49.9         48.9         48.0         47.7         47.5         46.3         45.1         44.9         43.9         43.9         43.9         43.9         43.9         43.9         44.9         44.9         44.9         44.9         44.9         44.9         44.9         44.9         44.9         44.9         44.9         44.9         44.9         44.9		53.9	53.0	52.7	52.7									53.90 46.91
53.8         52.5         52.3         52.0         51.5         52.3         51.6         51.6         50.6         51.2         51.4         51.9         54         54.3         54.7         54.3         54.3         54.3         53.3         52.9         52.9         52.9         54         67.1         67.5         65.6         62.4         63.1         64.4         63.5         61.7         61.1         60.9         59.8         59.6         63         66.2         61.0         59.8         60.1         58.8         58.2         59.3         60.4         59.8         59.8         57.4         56.5         60.5         60.4         59.8         59.8         57.4         56.5         60.5         60.4         59.8         59.8         57.4         56.5         60.5         60.4         59.8         59.8         57.4         56.5         60.5         60.4         59.8         59.8         57.4         56.5         60.5         60.4         49.0         47.7         47.9         48.2         48.0         47.7         47.5         46.3         45.1         44.9         53.7         52.2         51.5         7.7         77.4         47.7         46.1         44.8         44.6 </td <td></td> <td></td> <td>52.7</td> <td>20.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>48:38</td>			52.7	20.0										48:38
67.1 67.5 65.6 62.4 63.1 64.4 63.5 61.7 61.1 60.9 59.8 59.6 63.6 61.2 61.0 59.8 60.1 58.8 58.2 59.3 60.4 59.8 59.8 57.4 56.5 60.5 50.6 48.5 49.0 48.0 47.9 48.2 48.0 47.7 47.5 46.3 45.1 44.9 53.5 59.3 56.6 53.1 52.7 52.2 51.5 ——————————————————————————————————	7		52.5	52 3				51.6	51.6	50.6	51.2	51.4	51.9	54.70 54.29
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	;									61.1	60.9	59.8	59.6	63.87
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	61.2	61.0	59.8	60.1	58.8								53.89 53.89
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	;						51.5		<del></del>	_	-		50.7	54.50
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			43.5				38.0	37.8	37.5	37.6	37.6	37.2	37.4	43.05 45.39
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4												41.7	46.60
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		56.2	56.1	50.7	47.9	45.7	45.2	43.9	43.0					50.83 56.33
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$					52.0	50.6	50.2					<u> </u>	l — 1	55.94
$\begin{bmatrix} 59.9 & 57.9 & 56.1 & 55.0 & 54.9 & 54.0 & 53.7 & 53.7 & 53.4 & 53.3 & 49.0 & 50.6 \\ 62.9 & 60.7 & 59.0 & 57.8 & 57.0 & 56.9 & 54.3 & 52.3 & 50.6 & 49.8 & 50.0 \\ 65.6 & 64.0 & 63.2 & 56.5 & 54.7 & 54.3 & 53.2 & 52.5 & 51.8 & 51.8 & 51.4 & 53.1 \\ 62.2 & 60.0 & 59.6 & 57.3 & 57.0 & 58.5 & 59.6 & 60.3 & 59.9 & 60.1 & 59.6 & 57.8 \\ 66.8 & 65.2 & 65.0 & 65.8 & 64.3 & 62.2 &$	-	61.8	58.0	56.2				53.9	52.1	50.6	49'1	48.8	51.1	57.04
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	,	59.9	57.9	56.1	55.0	<b>54</b> • 9	54.0	53.7						56.74 58.96
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		65.6	64.0	63.2	56.5	54.7	54.3	53.2	52.5	51.8	51.8	51.4	53.1	60°20 61°02
60.9     59.4     56.6     56.2     55.2     55.4     54.6     54.0     53.2     53.1     53.4     52.9     56.9       59.9     58.8     55.7     53.7     53.9     53.3     51.4     50.6     50.6     50.6     50.2     50.9     50.9       61.8     59.8     56.2     54.3     52.9     51.8     50.8     49.0     48.1     47.5     47.2     48.0	- 1						62.2							65.29
59.9     58.8     55.7     53.7     53.9     53.3     51.4     50.6     50.6     50.6     50.2     50.9       61.8     59.8     56.2     54.3     52.9     51.8     50.8     49.0     48.1     47.5     47.2     48.0	1		_		l —								52.9	57.85
01 0 09 0 00 2 01 0 02 0 01 0 00 0 00 0		59.9	58.8	55.7	53.7	53.9	53.3	51.4	50.6	50.6	50.6	50.2		56.57 57.24
57 47   56 01   54 47   53 02   52 24   51 83   51 68   50 95   50 16   49 70   49 12   49 45		57.47	56.01	54.47	53.02	52 24	51.83	51.68	50.95	50.16	49.70	49.12	49.45	54.81

						WET T	HERMOM	ETER.					
Gött	of Mean ingen me.	0	1	2	3	4	5	6	7	8	9	10	11
To	of Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	$\left(\begin{array}{c}1\\2\\3\\4\end{array}\right)$	51.1 54.4 58.2	54.5 58.8 62.8	57.4 62.0 68.3	61°4 67°5 68°9	66.0 67.0 70.0	65°0 66°6 70°4	66°5 67°7 69°6	66.5 69.0 70.3	65.5 68.7 70.8	64.2 69.0 70.2	64.2 69.3 70.9	64.6 69.7 71.6
	4 5 6 7 8 9	60°2 62°4 62°9 65°5 65°4 64°8	62.6 64.8 64.3 68.3 68.3 66.6	65.0 64.6 65.3 71.0 70.9 67.3	70.6 65.8 69.4 73.7 72.2 68.7	71.0 66.6 70.0 71.9 72.0 69.4	70.4 68.3 72.0 73.7 74.3 70.7	71:4 69:3 72:5 73:5 73:0 69:8	71.4 71.5 72.5 73.7 73.2 71.1	71:4 73:6 73:0 72:1 72:6 71:5	71.7 72.7 73.2 71.9 72.1 70.5	67.1 75.6 72.4 71.1 70.0 70.1	65.9 70.0 73.5 71.9 69.1 68.7
JULY.	11 12 13 14 15 16 17	66.6 66.2 52.9 53.3 63.0 67.9	70.7 69.7 54.7 56.5 66.3 68.4	71.9 70.4 56.7 59.8 68.4 69.9	72.7 73.3 58.2 62.7 69.8 72.5	73.5 72.1 58.6 65.0 71.5 74.7	74.7 72.7 61.0 66.2 72.1 75.1	73.6 72.9 61.0 68.1 71.9 76.1	76.2 72.3 62.8 68.9 73.1 74.7	77.0 70.3 62.0 68.4 72.5 76.1	75.7 68.7 60.4 68.9 71.9 72.7	74.1 67.7 61.0 68.3 71.7 74.3	72.7 65.6 60.8 67.3 70.5 74.9
	18 19 20 21 22 23 24	70.0 69.1 68.5 68.1 51.7 57.3	73.7 72.0 71.2 66.4 56.6 60.8	76.2 74.2 70.3 66.4 61.1 64.4	75.9 73.5 71.4 64.7 64.2 65.6	77.2 75.1 73.5 64.8 64.4 64.4	78.2 73.3 74.7 64.8 64.8	78.8 74.9 73.9 66.5 64.8	77.0 75.1 74.4 67.9 63.9 64.2	74.9 74.7 75.5 65.8 63.0 65.3	77.2 76.1 73.5 66.0 65.0 66.6	77.0 73.3 73.3 65.6 66.6 65.6	76.4 72.7 72.5 65.6 66.2 64.0
Aug	25 26 27 28 29 30 31	56 · 1 47 · 7 48 · 5 55 · 7 55 · 0 50 · 6	54.9 50.2 52.9 59.1 57.9 58.4	53.5 52.1 55.5 60.6 58.3 60.6	51.8 54.7 57.3 61.9 58.3 62.0	52.0 55.3 59.8 62.7 62.2 63.4	52°1 56°1 58°2 63°9 60°3 63°3	52.0 57.3 56.7 64.0 60.8 65.0	55°3 57°3 59°0 63°4 60°3 62°2	53.5 56.2 57.5 63.6 62.0 62.2	53°3 56°1 57°2 65°7 62°8 62°3	53.7 57.3 57.7 63.6 62.6 62.8	52.7 58.2 56.5 63.1 62.8 59.6
Hourl	y Means	59.74	62.64	64.52	66.25	67.11	67.69	68.01	68.41	68:14	67.99	67:29	66.93
	$\begin{pmatrix} 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \end{pmatrix}$	51.2 53.3 56.7 57.9 60.5 55.7	57°3 58°2 61°0 61°1 61°7 55°9	60.0 59.4 65.3 64.4 64.0 58.2	61.8 63.1 64.8 66.6 66.3 60.0	63.4 62.6 64.0 66.5 69.9 62.6	64·4 62·4 65·7 65·7 69·7 66·0	64.4 63.0 66.0 66.4 69.9 65.9	65.8 62.8 65.8 66.6 69.1 66.0	64.0 62.0 67.2 66.6 68.7 64.7	64.9 62.7 67.5 65.4 69.4 64.1	66.4 64.8 67.1 65.2 66.8 65.2	62.8 65.8 66.8 64.4 64.0 63.9
	8 9 10 11 12 13 14	62.4 64.2 65.8 57.1 62.8 65.8	62.8 65.8 66.6 58.4 65.4 68.3	63.6 67.2 68.1 63.4 70.1 69.9	65.0 69.6 67.4 66.5 69.7 71.4	65.4 71.8 67.7 70.1 71.1 73.7	66.6 72.1 69.7 70.3 70.7 73.7	68°1 71°7 70°2 70°4 69°7 74°0	69.7 72.0 70.7 70.7 69.2 75.1	69.7 72.5 68.5 70.7 71.1 72.7	70.6 70.9 65.6 70.3 69.2 74.7	69.6 70.9 66.6 66.8 69.5 72.7	69°1 70°3 66°6 68°1 69°4 72°7
AUĞUST	15 16 17 18 19 20 21	67.1 64.3 53.7 44.9 52.1 50.6	69.4 71.3 55.5 47.7 55.7 52.0	70°5 72°1 55°5 51°4 58°1 54°6	71.0 72.6 56.1 50.6 59.0 57.1	70.2 73.3 56.3 53.1 60.7 56.6	74.3 70.7 55.9 52.3 61.5 57.3	74'0 71'7 56'7 53'2 62'6 58'2	74·2 69·2 58·0 53·4 61·0 58·9	73.7 70.1 57.3 53.9 61.2 59.9	73.7 69.5 58.0 55.4 59.8 60.2	74.7 68.5 55.7 54.4 62.6 59.2	75·1 69·3 53·3 53·9 57·8 61·2
	23 24 25 26 27 28 29	50.7 51.0 50.4 52.5 54.5 46.5	55.2 54.9 54.1 56.9 54.8 52.0	58.0 57.2 61.2 61.0 55.1 58.5	58.8 61.0 63.5 63.9 56.1 60.8	57.3 61.6 64.6 65.0 55.9 61.8	59.2 62.4 64.4 68.7 56.8 60.8	61.0 63.8 63.2 66.9 57.3 61.4	62.0 62.6 62.4 69.1 57.8 60.0	63.0 62.1 62.7 68.3 59.0 60.9	64.8 61.4 62.2 69.0 59.1 60.0	63:3 61:5 61:0 68:1 59:3 61:2	63°1 62°0 60°8 65°8 60°2 62°3
	$\begin{array}{c c} 30 \\ 31 \end{array}$	28.0 28.0	63 0 52 7	63.6 54.0	66.0 52.2	66°3 53°7	66.8 53.2	66.0 54.2	66.2 54.9	65.8 54.7	64.6 56.7	62.8 56.8	63°0 55°7
Hourly	Means	56.14	59.14	61.71	63:12	64.05	64.68	65.01	65,13	65.04	64.99	64.64	64.13

					WET	THERMO	METER.		<del></del> ,,,,,,,-			
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
63°6 69°4 70°5	61.6 64.8 67.3	58°6 62°0 64°2	55°7 60°0 59°6	53°9 59°1 57°1	58°6 58°6 56°6	53°3 56°5	52°6 55°9	53°5 55°3	53·2 54·8	52°.6 53°.3	51°·2 53°·5	58°75 62°19
66.6 68.8 70.7 70.9 69.3	66'3 67'8 68'5 71'6 68'5	66.4 64.6 66.4 68.5 66.8	65.6 63.6 64.6 66.6 66.5	65'1 62'6 64'0 65'7 65'8	63°8 62°4 63°7 66°0 65°2	57.0 64.2 63.0 64.5 65.7 65.2	56.5 63.2 61.6 63.5 65.1 64.8	55.9 62.6 60.4 61.1 64.8 65.8	55.5 62.6 61.4 60.8 63.4 65.6	55.3 62.2 60.6 61.8 62.8 65.2	$\left\{ \begin{array}{c} -1 \\ 55.4 \\ 62.0 \\ 60.9 \\ 61.8 \\ 63.1 \\ 65.0 \end{array} \right\}$	63.87 66.22 65.95 67.18 68.83 68.62
68.8 	66.6 73.1 61.4 59.4 66.2	67.2 70.3 59.6 56.7 65.8	66.6 	66.6 66.8 57.5 53.1 65.9	66.0 66.6 56.8 52.0 64.3	66.4 66.8 56.3 50.8 64.0	65.6 66.2 55.4 50.4 59.6	64.6 64.5 54.0 49.8 59.8	64.6 62.1 53.1 49.4 58.6	64.2 62.4 52.1 51.1 58.2	64·2 64·5 51·7 50·6 57·9	67.53 70.22 63.43 56.26 63.59
68.3 76.3 — 75.4 70.6 70.1 64.0 65.6	70.5 76.3 — 71.1 70.3 68.7 61.7 62.8	67.3 72.9 ————————————————————————————————————	66.5 72.1 	66.4 72.5 	66.0 72.3 — 67.9 69.3 64.6 54.6 55.4	66.2 68.5 68.1 69.2 65.2 53.1 54.5	66.4 66.3 66.6 68.7 65.3 51.2 54.5	66°3	64.8  66.5 67.0 68.7 66.1 49.6 53.0	64.6  65.9 66.8 67.6 66.5 47.8 52.6	65.8 66.0 66.4 67.7 67.3 47.8 52.9	68'41 71'68 72'59 71'36 69'58 60'33 59'59
63.6  51.8 58.1 53.7 62.8 62.6 59.4	63.0 50.9 56.1 55.3 61.8 61.0 55.4	62.5  50.7 52.3 53.7 61.4 59.0 58.0	63.0 48.6 50.3 51.4 61.0 58.6 56.6	63.6 	64.0 45.2 47.5 50.6 61.0 55.9 53.6	64.8 44.9 46.9 50.6 60.0 54.9	67 1 44 6 47 3 51 4 58 0 52 4	67.4 44.0 45.9 51.4 57.2 53.0	65.7 43.9 45.9 50.2 55.0 49.8	59°0 42°2 45°4 48°8 54°5 48°0	56.5 42.6 44.6 48.2 54.2 47.8	63.67 49.87 52.03 53.88 60.67 57.64
66'23	$-\frac{-}{64.74}$	62.98	61.61	60.81	60.12	53.6	59.01	52.4 	50.6 	50.0	50.0}	63.39
63.8 65.0 66.8 63.4 62.0	62.1 62.8 65.8 62.6 62.8	58.7 59.0 61.2 61.2 63.6	57°1 55°5 57°5 60°0 63°2	56.7 53.3 56.4 60.0 63.4	53.7 53.1 55.7 59.6 63.2	53.1 52.3 56.1 60.2 64.8	49.8 52.3 55.1 61.0 64.0	49.8 51.4 54.7 61.0 63.4	50°3 51°2 55°1 60°9 60°8	48.2 50.3 54.7 60.7 58.2	47.7 50.6 55.7 59.8 56.7	58 · 23 58 · 20 61 · 36 62 · 80 64 · 42
63.8 	61.9 67.0 67.7 64.6 66.1 69.4	60.0 66.2 67.4 63.0 66.1 68.5	58.8 	59°2 66°6 66°8 60°2 65°7 65°7	58.7 	61:3 64:6 66:6 59:0 64:9 65:0	61.6 63.4 64.9 58.7 64.7 66.4	61.4 62.8 64.6 58.6 64.0 66.3	61.2 61.8 64.3 58.9 61.6 66.1	61.0 62.2 65.0 57.2 61.8 65.6		61 61 65 48 68 10 64 12 65 80 67 98
70°3 74°3 67°9 52°7 55°3 58°2 60°0	69.7 70.9 66.6 51.0 55.1 56.7 59.0	68.1 68.4 64.8 50.0 52.5 55.9 55.2	67.2 67.3 64.2 48.8 49.7 55.3 54.1	66.2 65.8 59.9 48.2 51.1 55.1 53.5	66°2 65°2 59°5 47°3 50°9 53°7 52°4	65.6 64.8 57.0 46.8 51.8 54.0	64.8 63.8 55.5 45.9 50.6 52.7	64.4 64.1 53.8 46.3 50.0 52.5	63.4 63.6 55.0 47.3 48.6 51.4	63 · 2 64 · 1 55 · 6 47 · 3 49 · 2 50 · 2	63.6 62.4 53.7 43.0 50.0 49.4	69.06 69.28 64.84 51.94 51.63 56.55
61.6 62.1 59.7 64.8 60.6	58.4 58.0 57.8 62.8 55.7	55.5 55.1 55.7 62.0 56.9	54.7 53.9 55.3 62.1 55.1	53°3 52°6 55°0 62°0 53°5	52.1 52.8 54.9 63.4 52.3	49.8 50.9 52.5 54.4 62.3 51.6	49.8 51.0 52.1 52.9 61.8 50.8	49.0 50.9 51.3 52.3 62.6 48.4	49.0 50.7 51.3 52.1 60.0 46.4	48.8 48.7 49.8 52.2 58.6 47.0	48.8 } 48.5 50.1 50.6 54.5 47.7	54.80 56.36 56.80 57.64 63.00 54.66
60.6  62.6 55.5	57.4 61.2 52.4	56.2 59.0 50.0	55.4  58.6 48.2	55°5 	54.1 	58.1 54.2 46.9	56.7 53.6 45.9	55.2 52.7 44.7	54.6 49.2 47.1	54.9 48.6 47.3	-54.9 $47.8$ $48.8$	57.50 59.74 51.30
63.66	61.75	60.02	58.89	58.11	57:53	57.25	56.53	56.01	55.46	55.02	54.59	58.63

Vol. III.

					100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 -	WET	THERMO	METER.					
Göt	s of Mean ttingen ime.	} o	1	2	3	4	5	6	7	8	9	10	11
To	s of Mean pronto ime.	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1\\2\\3\\4\\5\end{pmatrix}$	49°8 48°9 56°8 53°7	50°8 54°1 61°9 53°7	54°4 59°0 63°1 53°5	55°9 61°7 63°1 54°2	58°4 63°5 67°1 54°7	59°5 64°0 69°1 55°2	59°8 63°6 69°1 55°2	60°2 63°4 66°9 55°7	59°5 65°4 69°5 55°7	59°2 66°0 68°5 56°3	59.6 66.5 66.9 56.3	60°2 65°4 61°2 56°8
	5 6 7 8 9 10	48.2 52.1 63.0 49.3 44.0 46.5	50°3 58°0 64°0 49°1 49°0 50°8	53.5 60.6 65.6 49.7 51.7 54.5	59.0 60.0 66.6 49.3 56.2 58.5	60·2 59·7 69·0 50·8 56·5 58·0	60.8 59.7 69.6 50.6 56.5 58.6	60.6 59.8 69.9 51.4 57.9 57.2	61.4 60.8 68.9 55.3 56.3 57.4	61:3 59:8 69:6 55:5 57:5 56:5	62.4 59.9 68.8 55.5 57.5 54.4	60.5 59.8 68.7 55.5 58.1 54.0	60°3 60°0 69°2 55°1 58°0 54°1
SEPTEMBER.	12 13 14 15 16 17 18	52.7 43.4 37.2 37.8 49.4 55.9	51.4 43.8 41.3 42.8 49.8 57.1	50.6 44.2 43.4 48.5 53.9 58.3	50°9 44°9 45°3 49°8 56°3 58°6	50°8 45°8 46°6 53°1 58°3 59°6	50°1 45°3 47°8 53°7 58°4 59°4	50.5 45.8 48.5 54.3 58.0 60.0	50.6 45.9 49.3 54.5 57.7 60.1	48.8 47.2 52.0 55.3 56.5 59.4	47.8 47.2 52.2 55.2 56.8 59.4	46.5 48.4 52.4 55.3 55.9 58.1	45 '9 45 '7 53 '0 54 '0 55 '0 57 '3
	19 20 21 22 23 24 25 26	53.5 50.5 44.2 49.6 52.7 47.1	54.0 52.6 47.5 52.3 52.5 47.5	54.7 54.0 50.6 56.9 52.5 48.5	54.7 55.1 51.6 59.0 52.5 50.7	54·9 55·5 56·3 59·7 52·9 52·6	55°1 56°3 56°3 61°6 52°7 53°9	55°3 57°3 56°0 61°5 53°7 56°0	55°5 56°2 54°9 62°2 53°9 55°2	55°1 56°3 54°5 62°8 53°7 54°6	55°1 54°9 53°9 61°8 53°9 54°1	54.4 53.7 55.5 62.2 54.0 53.7	55.7 53.1 55.3 62.3 54.1 53.9
	27 28 29 30	57.3 45.7 42.6 38.4	58.4 48.1 42.9 40.5	59°2 50°7 45°3 43°0	60°0 50°6 47°5 46°1	61.7 51.4 50.6 48.2	63°2 52°4 46°1 48°0	64.7 52.5 49.3 50.0	65°3 49°2 50°8 49°0	64.8 48.8 45.2 47.1	64.9 48.2 45.5 47.4	65.2 47.1 46.9 48.4	64.0 47.6 47.0 48.4
Hourl	y Means	48.86	50.93	53.07	54.24	56.00	56:30	56.84	56.49	56.63	56.42	56.59	55.87
	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	43°3 38°2	44.4	45.6 44.8	45°3 46°5	45.4 48.2	46.8 48.3	47.4 47.7	47°3 48°2	46.9 51.0	46 <b>.</b> 9 51.5	46.6 49.9	46°2 49°3
	3 4 5 6 7 8 9	40°3 56°6 55°8 54°2 54°9 39°5	43.7 57.6 55.9 53.9 54.7 43.0	50.9 58.1 56.0 53.9 54.9 45.3	55.2 59.3 56.1 53.7 55.2 47.8	56.0 58.6 55.8 54.2 56.2 49.6	56.9 59.5 55.8 53.7 56.7 49.1	57·1 61·6 56·1 54·0 57·1 49·1	56·1 61·3 55·8 54·1 55·9 51·6	55.7 61.3 55.7 54.7 55.7 53.4	54·3 61·9 55·7 54·7 55·7 52·8	55·1 60·0 55·8 55·2 56·0 53·3	54·3 58·8 56·2 55·0 55·1 53·1
OCTOBER.	10 11 12 13 14 15 16 17	36.3 39.3 36.9 33.7 28.7 41.4	36.8 40.6 37.5 33.9 29.2 42.2	37.8 42.2 38.9 33.9 31.6 43.9	38.6 43.5 38.6 35.7 33.3 44.8	39.4 44.7 39.5 36.7 34.3 46.0	40°2 44°7 39°9 36°1 38°5 46°7	40.6 43.4 39.9 36.1 38.4 47.5	41.0 42.9 39.5 35.2 38.6 49.6	42.1 42.6 39.5 36.0 39.3 50.3	42.8 42.5 38.8 35.6 39.1 50.5	42.4 42.7 38.8 34.3 37.8 49.9	42°1 43°0 36°6 32°3 37°5 49°1
00C	17 18 19 20 21 22 23 24	38.8 41.0 28.9 32.8 37.2 35.0	40.1 40.7 30.9 33.6 37.3 34.4	44.6 43.5 36.0 36.0 37.2 36.8	48.2 46.1 41.3 38.6 37.0 40.8	52.0 44.7 44.4 39.7 37.5 42.6	53.8 44.9 45.5 41.3 37.6 43.6	56.7 45.1 45.0 41.1 37.2 46.5	57.5 44.5 45.8 40.4 37.8 46.4	57°3 45°4 44°7 40°3 38°4 45°8	56.9 45.4 44.4 40.4 39.2 46.3	56.4 43.7 43.1 40.4 39.4 46.0	55.4 42.7 40.1 40.2 38.7 44.3
	25 26 27 28 29 30 31	45.4 27.4 17.6 24.5 27.0 33.5	45.2 30.5 17.2 25.5 31.9 33.3	45.6 31.9 19.0 30.0 32.6 36.0	46.4 28.8 25.6 31.6 39.0 42.7	44.1 28.9 27.0 33.1 42.2 45.6	43.0 28.6 28.0 36.6 43.9 46.9	42.7 29.2 30.3 35.8 44.6 46.7	42.4 28.5 31.5 36.4 44.8 47.5	40.0 27.8 31.8 37.1 45.0 47.5	37.4 27.5 32.8 36.9 44.7 47.1	34.4 25.9 30.5 35.9 44.9 46.9	32.4 24.7 30.4 34.5 42.4 44.2
ou rly I	Means	38.01	39.02	41.04	43.07	44.09	44.87	45.27	45.41	45.29	45.45	44.82	43.79

	12	13	1			", 232	. ддекм(	OMETER.					
			14	15	16	17	18	19	20	21	22	23	Daily and
J=	6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
	60°1 64°0 58°8 57°1	56.4 62.0 56.5 57.4	54·1 63·0 55·7 58·1	53.4 63.2 55.8 58.7	52.9 60.8 55.5 58.8	52.7 59.0 54.5 59.0	51.9 58.0 53.9	50°8 55°9 53°5	50°3 55°4 54°1	50.6 53.7 54.1	50.3 55.0 54.1	49°0 54°8 54°1	54.99 60.26 60.16
	59.3 58.8 66.9 54.7 56.5 54.2	58.0 59.2 66.0 53.5 52.4 50.4	56°3 58°6 65°5 53°7 50°6 49°2	56°3 60°8 65°6 50°6 49°6 49°2	56.0 61.4 57.4 49.2 48.7 49.0	54:3 61:0 53:7 47:3 48:0 48:8	48.4 54.3 61.2 53.5 45.2 47.8	47.5 52.9 61.6 52.5 43.9 47.7	47.3 52.1 61.4 52.7 43.9 47.1	46.9 51.1 61.6 52.5 43.3 46.2	46.9 50.8 61.8 49.6 43.0 45.7	46.9 } 50.8 62.1 48.0 43.0 45.9	53.92 56.28 59.99 62.37 49.93 51.89
	45 · 1 45 · 1 52 · 3 52 · 3 54 · 2 56 · 6	44.4 42.4 48.2 49.5 54.1 58.2	43.4 41.7 46.7 48.2 54.0 58.2	42.8 41.1 46.2 47.0 54.7 57.5	42·4 41·5 45·7 47·6 53·3 57·4	42·4 40·9 45·1 48·2 53·3 57·7	54.5 42.4 40.3 44.2 48.6 53.1	54·2 42·6 39·0 42·2 48·5 58·1	53.7 42.8 38.4 40.1 48.5 57.1	53.7 43.0 37.4 39.1 48.0 56.7	53.9 43.4 38.0 38.3 48.8 56.4	54·3 } 43·3 37·5 38·0 49·4 56·3	53.57 46.44 42.93 45.63 49.95 55.30 57.09
	54.5 50.6 52.3 60.0 53.9 53.5	51.8 48.8 50.9 58.9 53.7 53.3	51'9 47'5 49'4 58'8 53'7 53'3	51.6 47.1 48.6 57.8 53.4 52.7	51.2 46.7 50.1 56.4 53.2 52.5	50.6 46.7 48.1 55.7 52.3 51.3	53.5 50.6 45.7 47.2 57.4 52.1	53.5 51.8 43.8 45.7 55.5 52.0	53.7 51.8 43.0 45.3 55.0 51.3	53.7 51.0 43.9 44.9 54.2 49.2	53.5 52.5 44.0 45.1 53.4 47.7	53.5 } 51.5 43.8 45.3 52.7 47.1	53 · 28 50 · 30 50 · 40 57 · 82 52 · 45 53 · 64
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	54.75	53.18	52.52	51.92	51.58	50.52	50.03	49.56	49.13	48.76	48.55	48:27	52.79
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	54.5 57.9 56.4 55.4 54.0 51.5	54.6 57.7 56.3 55.7 53.9 51.0	54.7 57.7 56.4 55.9 51.2 51.3	54.3 57.6 56.1 55.2 48.4 51.8	53°2 56°8 56°2 55°0 47°1 50°5	53°1 56°6 55°6 54°5 46°8 49°9	53.6 56.6 55.3 54.4 46.0	53.5 56.6 54.9 54.8 45.3	52.8 56.4 54.9 54.5 44.0	53°5 56°4 54°7 54°3 43°1	53.6 56.2 54.5 53.7 41.6	55.4 55.7 54.6 55.1 41.3	53 43 58 20 55 69 54 58 51 28
	41.6 43.1 35.3 30.9 36.6 49.5	39.5 42.9 35.3 30.4 39.0 50.4	40.4 42.2 33.9 29.4 38.8 50.3	39°3 42°1 32°9 28°8 38°5 49°7	38.6 41.9 32.1 28.2 40.0 49.7	37.1 42.1 31.3 28.0 41.0 49.9	40°3 36°9 41°4 30°9 26°4 41°0	39.5 36.7 39.5 32.3 25.9 40.9	38.8 37.6 38.8 32.9 26.0 40.8	38.8 37.6 38.0 33.4 27.5 41.0	38 '9 39 '1 37 '5 34 '2 27 '7 41 '0	37·3 39·5 37·3 34·3 28·2 40·5	46.97 39.33 41.62 35.97 31.54 37.72
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3 2 2 2 3 4	31.9 21.4 29.6 33.8 41.3	31.4 20.8 31.9 33.6 39.7 42.7	31.3 20.0 30.6 32.7 39.4 39.3	30.5 19.4 29.0 29.4 36.7 37.5	30.5 18.8 29.0 28.1 35.4 35.3	29.7 18.0 26.8 28.0 34.1 35.1	46.3 28.9 17.5 26.5 28.0 33.6	46.3 28.6 16.5 26.0 27.5 33.1	45.8 28.1 16.8 25.9 26.9 32.3	45.7 27.8 16.8 25.9 27.3 32.1	45.7 27.6 17.0 25.9 26.7 32.4	45.5 26.5 16.8 25.5 26.8 32.9 47.6	42 45 35 49 23 31 27 26 31 11 37 75 43 05
	2.95	42.39	41.86	40.93	40.34	39.63	39.35	46.9 38.75	46°9 38°37	47.6 38.34	47.6 38.13	38.26	41.65

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lours of Göttin Time	gen }	0	1	2	3	4	5	6	7	8	9	10	11
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ER.	7 8 9 10 11 12 13	45°0 50°6 34°8 33°2 30°8 33°4	45.5 50.6 35.0 33.6 29.5 33.0	46.0 52.7 35.4 33.6 31.0 33.7	45.7 53.3 36.3 34.0 34.6 35.4	46.0 54.7 36.9 34.5 35.9 36.0	46.4 51.5 35.7 34.8 36.0 36.4	46.7 49.1 36.0 34.8 36.2 37.2	48°1 47°5 35°8 34°8 36°2 37°9	47.9 47.2 35.6 34.8 35.5 38.5	48°1 47°1 35°5 34°4 36°2 37°5	48'3 45'8 35'6 34'4 35'6 37'2	48 · 2 43 · 2 34 · 8 34 · 1 34 · 8 36 · 9
NOVEMBER	14 15 16 17 18 19 20	37·1 28·0 43·2 42·2 31·6 19·2	37.2 27.4 43.1 42.0 31.4 19.2	37.4 30.4 43.6 42.0 29.4 20.4	38°1 35°6 44°5 42°2 28°4 23°0	38.7 37.7 46.1 42.7 27.9 25.8	38.9 39.3 47.3 42.8 26.9 26.9	38.7 42.0 47.4 42.9 27.2 27.4	37.9 43.1 47.9 42.8 26.6 28.1	37·2 44·6 47·6 43·2 26·9 28·6	36.9 45.2 48.1 44.0 26.9 28.4	36.7 44.0 47.6 45.4 26.1 28.0	37.0 43.2 47.4 46.0 25.8 27.2
	21 22 23 24 25 26 27	35.8 41.8 48.0 40.0 26.0 23.8	36.2 42.1 45.7 40.0 25.4 24.6	36.2 42.7 46.0 39.6 25.2 25.6	38.2 44.1 46.4 41.4 25.1 26.3	40.2 45.7 48.3 41.1 25.1 26.5	42.7 47.7 49.6 41.1 25.1 26.9	43.7 49.5 48.4 39.9 25.2 26.9	44.3 50.5 48.7 39.4 25.8 29.2	43.3 50.2 48.8 38.8 25.8 30.5	42.9 50.7 47.8 38.4 25.6 30.5	41.5 50.6 47.7 38.2 24.8 29.4	40°2 51°2 47°1 36°9 23°5 29°1
	28 29 30	10.0 18.4	9.8 18.2	10°3 20°6	10.4 22.2	$\frac{11.4}{23.1}$	13.4 23.7	13.4 24.2	13.8 24.6	15.2 25.3	$\begin{bmatrix} -1 \\ 15.6 \\ 24.7 \end{bmatrix}$	15.6 23.2	13.9 22.5
Hourl	y Means	35.48	35.30	36.39	37.52	38.48	39.05	39:30	39.60	39.56	39:39	38.96	38.13
	$ \begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{bmatrix} $	31.9 35.1 33.0 26.0	33.2 34.6 33.0 25.7	33.4 34.5 33.0 25.7	33.6 35.5 33.0 27.2	34·2 36·2 33·0 27·4	35.4 36.7 33.2 29.4	36.5 37.5 32.9 30.3	36°3 37°4 32°9 30°3	37.5 36.2 31.7 30.0	37.3 36.7 30.5 30.2	36.4 36.2 30.3 29.8	35·2 34·7 29·5 30·0
	5 6 7 8 9 10	26·3 31·7 35·1 36·0 47·2 33·8	26.7 31.7 34.7 36.0 46.1 34.2	27.0 31.2 35.8 35.6 46.2 34.7	28.6 33.2 37.2 36.0 46.3 35.2	30.5 34.7 39.6 36.5 47.3 35.8	29.6 36.0 41.3 37.5 46.9 35.7	31:3 36:5 42:2 38:3 46:9 33:6	31.7 36.7 42.8 38.8 46.7 34.1	33.2 37.3 42.3 39.7 46.9 34.5	32·4 37·2 42·8 41·9 43·7 34·4	32.4 37.1 42.6 42.5 42.5 34.1	30'4 34'6 42'4 43'3 41'0 32'1
DECEMBER.	12 13 14 15 16 17 18	36.8 31.5 32.8 12.9 16.0 14.0	36.7 31.6 29.4 12.9 16.6 14.3	35.8 31.9 27.8 13.3 17.1 15.4	35.9 32.5 28.6 13.3 17.7 19.0	35.9 32.8 28.1 14.6 18.2 22.5	36.0 33.0 29.4 15.3 19.8 24.8	36°3 33°0 30°9 16°5 22°1 26°9	36.0 33.0 29.2 17.2 24.6 29.4	35°2 32°9 29°3 18°2 25°8 30°3	34·1 33·0 29·5 18·6 26·2 30·3	34.0 33.0 28.2 19.6 26.4 31.1	33.6 32.9 27.4 20.0 25.3 32.0
Q	19 20 21 22 23 24 25 a	13°3 11°1 20°8 17°7 20°4	13°3 10°2 20°6 17°8 20°0	12.7 9.8 20.6 19.6 19.9	12·4 10·4 21·4 19·4 21·4	13°1 13°2 22°4 19°6 21°6	13.4 16.4 23.5 21.8 20.0	13.8 17.1 23.2 23.1 19.9	14·4 17·7 23·3 23·5 20·4	14.8 18.2 23.5 24.1 20.3	14.1 19.4 23.7 24.3 20.3	13°1 20°5 23°8 23°6 20°1	11.1 20.8 22.5 23.3 19.8
	26 27 28 29 30 31	12'9 29'6 36'9 40'6 42'6	12.2 30.5 37.6 39.8 42.1	11.3 30.8 37.5 40.0 42.3	12.2 32.3 38.6 42.0 42.7	15:3 32:8 40:2 42:5 44:3	15.8 32.9 40.2 43.3 45.4	18°3 33°3 41°2 44°7 44°6	17.7 33.4 40.8 45.0 44.7	18.6 33.6 40.6 44.7 44.9	19.2 34.1 40.5 43.7 44.3	18.9 34.1 40.8 43.7 44.3	19.6 34.6 40.6 43.1 44.0
Hourl	y Means	27.92	27.75	27.80	28.68	29.70	30.49	31.19	31*46	31.70	31.63	31.20	30.8

<sup>&</sup>lt;sup>a</sup> Christmas Day.

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36.7 42.8 46.1 45.6 25.5 28.2	36.5 43.7 45.7 45.7 25.4 30.2	35.8 43.7 45.5 45.7 24.9 31.0	34.7 42.7 45.6 48.9 24.7 31.1	33.0 42.7 45.2 46.2 24.6 30.7	32.1 45.0 44.9 44.5 23.4 29.8	37:1 32:3 43:9 44:3 43:7 22:7	37.1 32.1 44.0 44.3 40.9 22.1	37.1 31.5 43.9 43.9 39.6 21.9	36.5 29.4 44.3 43.7 38.4 21.0	36.0 29.4 43.6 43.7 35.0 20.7	36.9 } 29.0 42.9 42.8 34.2 19.4 	35.18 40.99 45.40 42.78 25.47
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13.0 22.2	12:3 23:7	12°3 24°6	12.8 26.2	13.5 28.2	14.9 29.4	10.9 15.6 28.5	10.4 17.9 28.6	9°8 17°4 26°1	9°4 16°5 24°1	8.8 18.1 24.5	8.6 } 18.1 24.5	13.97 24.23
37.49	37.18	37.10	37.20	36.98	36.61	36.33	36.05	35.66	35.44	35.02	34.97	37.22
34.8 35.1 29.1 30.2	34.0 35.1 28.5 31.2	34.0 35.1 28.3 32.0	33.8 34.6 27.9 33.2	34.6 34.2 27.8 33.2	35.8 33.2 27.6 33.0	36.7 32.8 26.9	36.8 33.1 26.8	36.0 32.9 27.0	35.8 33.1 26.7	35.6 33.2 26.2	35°2 33°0 26°1 — \	35°18 34°86 29°79
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33·2 32·8 26·7 20·2 25·1 32·8	33.0 32.7 26.0 20.8 22.5 32.6	31.9 32.8 24.1 19.8 22.5 33.0	31.9 32.8 21.2 19.6 21.8 32.0	31.0 32.6 20.5 19.6 20.2 30.7	30.9 32.8 19.1 19.1 18.4 32.4	39.6 30.7 32.8 18.1 18.4 18.1	39.1 30.7 32.9 17.1 17.9 16.9	39.1 30.7 32.8 15.8 15.8 15.4	39.1 30.9 32.9 13.5 15.1 14.8	38.9 31.0 32.1 12.6 14.8 13.2	38·7 } 31·3 33·2 12·5 15·8 15·0	33.48 32.68 24.07 17.05 19.99
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19.6 34.6 40.2 42.7 43.4	19°2 35°0 39°6 43°1 42°7	19.0 35.0 39.1 43.1 42.4	22·1 35·0 38·5 42·1 42·3	23°3 35°0 38°4 42°2 43°5	24.8 35.2 38.3 41.8 43.4	10.7 25.1 35.8 39.4 41.7 44.3	10.7 25.8 35.8 39.8 41.7 44.9	11 3 25 8 36 3 40 0 41 7 45 3	12:3 27:0 36:1 40:6 41:3 46:0	13.8 28.0 36.3 40.9 40.7 46.0	13·3 28·6 36·8 40·9 42·2 46·2	20°01 34°12 39°63 42°39 44°03
30.37	30.11	29.81	29.81	29.83	29.95	29.24	29.07	28.73	28.26	28:44	28:53	29.72

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Göt	of Mean }	0	1	2	3	4	5	6	7	8	9	10	11
To	of Mean ronto ime.	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	6.2	47.2	% 46.6	47.1	46.6	47.9	48.3	° 48.2	49.2	48.3	50.4	50.2
	2 3 4 5 6 7 8 9	32.6 33.7 24.2 12.0 13.5 30.4	32.5 34.1 25.6 11.2 14.8 31.0	32.9 32.1 26.5 10.4 14.6 30.8	34.0 28.0 27.4 10.7 15.5 30.7	34.5 28.6 27.8 10.7 15.8 31.0	35.2 28.1 29.3 12.1 17.0 31.6	35.5 26.0 31.7 12.9 18.8 31.8	36.0 25.1 33.4 13.9 19.6 33.1	36.2 25.5 33.6 13.5 19.8 33.0	36.5 25.1 35.6 14.0 19.9 30.7	35·4 24·0 33·6 14·0 19·7 30·3	35.0 21.6 29.6 13.3 19.7 29.2
ARY.	10 11 12 13 14 15 16	-10.5 9.6 11.7 31.5 36.7 40.0	-11·2 9·6 8·9 32·1 36·8 39·8	-10'9 14'9 8'2 32'8 37'3 41'1	- 8.8 16.6 14.4 33.1 37.5 41.1	- 6.2 17.4 19.1 33.6 37.5 42.8	- 2·5 19·4 21·4 34·2 37·9 43·7	- 2·2 19·6 24·0 35·4 37·9 44·7	-1.8 21.0 25.9 35.7 38.3 44.5	0.8 21.8 25.5 35.8 38.4 44.9	0°9 22°3 26°0 36°3 38°4 47°1	0.6 21.6 23.7 36.2 38.4 45.4	-1.9 21.2 21.2 36.3 38.5 41.8
JANUARY	16 17 18 19 20 21 22 23	29.5 27.0 5.6 27.5 35.9 15.1	29·3 25·3 5·6 28·0 35·8 15·4	24.6 19.7 6.5 28.2 35.8 16.5	24.0 22.0 9.6 30.7 37.2 17.6	22.7 20.6 13.5 33.2 39.6 19.2	21.6 19.6 14.3 33.5 39.8 21.7	22.0 20.0 16.9 34.2 38.5 23.5	23.5 19.2 17.5 35.9 37.3 24.6	22.9 18.9 19.3 36.7 35.4 25.6	23.7 18.3 20.3 38.2 33.8 27.4	23.7 17.0 20.9 36.7 29.7 26.8	23.5 16.6 21.4 35.4 29.6 26.4
	23 24 25 26 27 28 29 30	21.9 27.4 37.5 38.0 29.0 26.1	20.9 27.8 37.4 37.5 29.6 29.1	21.3 29.4 37.5 38.1 29.6 28.6	26 0 32 7 38 0 39 0 29 6 30 7	27.6 33.2 38.0 40.1 31.3 29.0	28.6 35.7 37.9 41.2 32.6 28.6	29·4 36·2 38·3 42·1 33·0 28·7	29·2 36·6 38·7 41·4 33·4 29·0	30·7 37·7 39·4 40·1 33·4 29·4	30.7 38.0 39.7 40.2 33.2 29.3	30.8 36.7 40.0 39.2 33.2 30.3	29.4 34.8 40.2 38.3 33.0 29.9
	31	33.5	. 33'6	34.4	35.8	36.0	36.2	37.0	37.5	37.7	38.8	35*4	31.4
Hourl	y Means	25.59	25.68	25.67	26.92	27.82	28.73	29:39	29.87	30.50	30.49	29.76	28.69
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \end{pmatrix}$	24 · 1 21 · 1 29 · 0 32 · 3 27 · 2	24.6 21.5 27.6 32.8 26.8	25°1 21°8 27°7 33°2 26°4	25°8 27°4 32°1 35°4 26°0	26.4 31.9 33.0 37.5 26.4	26.6 33.2 34.4 37.8 26.9	26.4 33.0 37.1 37.6 26.9	25.6 33.0 37.5 37.8 25.8	26.0 33.2 37.7 37.0 26.5	26.0 33.4 37.5 37.3 26.4	26.0 33.2 36.5 37.4 25.7	25.6 33.0 34.6 37.0 25.2
RY.	7 8 9 10 11 12 13	21.6 18.9 22.3 20.1 1.0 12.8	20.8 19.4 22.3 18.1 - 0.4 13.3	20.4 19.8 24.8 16.4 0.9 14.3	20°3 21°2 27°2 13°1 3°2 15°3	21.1 22.5 26.9 13.5 5.0 18.0	21.8 22.9 28.4 14.0 7.5 19.5	22.5 24.6 30.5 14.6 10.3 19.7	23.4 25.8 30.9 15.5 10.3 21.8	24.6 26.4 30.9 15.4 11.0 22.9	25.6 26.2 30.9 16.0 12.1 23.1	25.8 25.7 30.5 15.3 12.6 22.9	23.0 25.2 29.8 14.4 12.9 21.8
FEBRUARY	14 15 16 17 18 19 20	19.6 19.4 20.2 21.6 20.4 30.8	18.7 18.0 23.3 21.0 20.5 31.6	20.4 18.1 24.8 24.8 24.8 32.7	25.8 19.6 30.4 28.5 28.1 33.1	28.4 22.7 31.3 32.4 31.9 34.2	31·1 25·2 32·6 33·1 32·9 35·6	32.8 25.8 33.1 34.0 33.0 36.9	33.8 30.5 33.1 34.1 33.0 37.1	34·4 28·7 32·8 34·5 34·6 36·7	34.6 28.0 33.1 34.0 34.2 36.0	34.6 29.4 32.9 33.5 35.1 34.9	33.8 28.4 31.6 31.5 34.2 34.5
	21 22 23 24 25 26 27	34.4 31.1 30.5 20.0 10.7 13.0	34·2 31·3 29·6 21·0 10·2 12·9	34.2 32.5 32.3 22.0 11.5 19.0	35.4 33.8 33.7 21.8 14.9 25.2	35.9 35.3 32.6 23.0 16.9 27.9	36.5 36.7 31.5 24.0 18.1 27.6	38:1 37:7 29:6 24:1 19:4 27:9	38.7 38.3 34.2 25.4 20.2 28.6	39.8 37.1 31.1 26.8 22.7 30.5	39.2 36.8 31.1 27.0 21.0 30.8	39.0 36.3 30.5 28.0 20.9 30.5	38.1 35.7 29.4 26.2 20.2 30.3
	28	26.4	26.8	27.6	28.7	29.8	31.1	32.1	32.8	33.2	35.4	3 <b>5</b> .6	34.6
lourly	Means	22.02	21.91	23.12	25.30	26.85	27.87	28.65	29.48	29.78	29.82	29.70	28.79

					WET	THERMO	METER.		18 year an anning parties of the state from			
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
° 42.3	38.7	° 37:0	° 35.8	° 34.3	32.3	0	0	0	· _	0	° }	41.16
35.0 19.8 26.2 12.5 22.5 29.0	35°1 19°2 25°4 11°3 23°7 29°1	35.1 19.2 25.6 11.5 23.5 28.2	34.8 18.9 21.1 11.6 25.1 26.6	35.0 18.4 19.6 11.1 25.8 24.4	35.4 18.0 18.1 11.4 26.6 23.5	31.4 35.4 18.5 17.1 11.3 27.1	31.7 35.3 18.6 16.1 11.5 28.0	31.3 35.0 18.8 16.9 11.7 27.8	32.1 34.0 19.8 14.6 12.2 28.4	32.1 34.7 20.9 12.3 12.1 29.2	32.4 } 34.2 21.0 12.5 13.0 29.5	34.80 23.46 24.33 12.08 21.91 20.43
- 5.0 20.8 21.0 36.2 38.7		$ \begin{array}{r} -7.4 \\ 21.0 \\ 25.6 \\ 36.2 \\ 39.4 \end{array} $	- 7.8 21.2 25.6 36.4 39.8	- 7.9 21.4 26.9 36.3 40.2	- 8·2 21·3 27·2 36·3 40·0	- 3.6 - 8.2 21.1 26.9 36.6 39.8	- 5.6 - 8.0 21.2 27.9 36.7 40.9	- 7.0 - 5.1 20.6 28.4 36.5 40.0	- 8.4 - 2.1 20.2 30.5 36.7 39.9	- 9.4 0.9 14.6 31.1 36.9 40.2	-10.2 } 1.3 9.7 31.7 36.5 39.9	- 4.90 18.70 23.25 35.46 38.82
36.9 	35.6 	34.6 	34.6 26.0 13.8 23.8 34.6 22.5 22.1	33.7 25.2 14.6 24.4 34.6 22.1 22.5	33.0 25.8 14.6 24.6 35.5 21.0 22.0	30.7 26.4 13.5 25.1 35.8 19.3	30'9 26'4 10'8 24'4 36'2 18'4	30.9 28.6 9.6 24.4 36.5 18.4	30.8 29.1 7.6 25.6 36.6 17.4	30.3 29.1 6.7 26.0 36.5 16.7		37.88 25.38 16.02 19.27 34.33 28.25
28.0 35.8 41.0 37.5 33.3 28.6	27.0 35.8 40.5 36.3 33.9 28.4	26.6 35.8 39.1 34.6 33.4 28.2	26.4 35.4 39.1 35.2 32.9 28.1	26.4 36.0 38.5 35.2 28.1 27.8	26.4 35.6 38.7 34.8 26.5 27.8	23.7 26.0 35.9 37.5 34.2 26.0	23·5 24·9 36·2 36·7 34·0 25·5	23.5 26.0 36.5 37.4 34.0 25.2	23.5 26.0 36.9 37.9 32.8 25.1	23 · 1 26 · 6 37 · 7 37 · 9 32 · 8 25 · 6	24·3 } 27·0 37·1 38·0 31·1 24·9	22.47 26.83 35.04 38.54 36.99 30.05 29.61
30.8	29.4	29.1	27.2	25°8	25.6	31.3 24.1	31 8 24 4	$\begin{array}{c} 32.0 \\ 23.2 \\\end{array}$	32·3 23·2	32.6 23.0	33.0} 23.3	30.69
27.66	27.22	26.86	26.57	26.17	25.92	24.73	24.55	24.66	24.64	24.62	24.42	26.95
25.4 32.6 31.5 36.8 24.6 — 22.0 24.6 30.5 13.4 12.2 20.2	23·3 32·8 30·2 35·9 24·6 20·6 24·6 29·6 12·6 12·5 17·7	20.6 32.6 30.6 34.0 24.2 	19°2 32°6 29°5 33°8 24°1 — 19°6 24°8 30°5 12°2 12°1 15°8	18.0 32.1 28.5 32.8 24.0 ————————————————————————————————————	18·4 32·6 28·2 31·9 24·2 ——————————————————————————————————	18.8 33.0 27.2 29.7 ————————————————————————————————————	19.4 32.9 27.1 28.6 ————————————————————————————————————	20.4 32.8 27.4 28.0 ————————————————————————————————————	21'2 31'9 28'6 28'2	22.0 31.6 29.8 27.6 	21'9 31'3 31'3 26'5	23 · 20 31 · 02 31 · 44 33 · 62 24 · 75 20 · 49 23 · 07 27 · 81 11 · 86 9 · 82 19 · 70
31.9 26.5 28.2 30.3 30.7 34.8	31.5 25.9 26.7 27.8 29.7 34.8	29.6 25.2 25.8 27.4 29.4 35.2	28.4 22.8 25.8 26.2 29.2 35.0	28.2 22.5 25.4 25.9 30.3 35.0	27.0 22.0 24.6 24.7 30.3 35.8	25 · 9 21 · 0 24 · 3 23 · 5 30 · 3 — 36 · 0	25·3 20·4 23·8 22·5 29·4 — 35·6	24.5 19.8 24.4 21.4 29.8 — 35.9	24.8 19.8 24.0 20.6 29.6 — 34.8	22.0 19.6 22.7 19.6 29.4 — 34.8	22.0 20.8 22.2 21.4 29.1 	27.88 23.34 27.38 27.26 30.01 34.85
34.4 34.8 28.2 23.7 19.0 29.6	34.0 34.1 27.2 20.4 18.8 28.3	34.0 33.8 26.8 20.8 17.7 28.2	33.9 33.8 26.9 21.8 16.5 28.0	34·2 32·8 26·6 20·2 16·1 27·8	33°2 33°6 26°6 19°8 16°5 27°2	33.6 32.8 24.2 19.4 17.1 — 15.8	33.4 32.8 24.4 17.9 15.6 — 15.4	31.3 32.8 23.6 16.3 15.4 ————————————————————————————————————	30.9 32.6 22.5 15.4 14.9 — 13.0	31.1 31.5 20.6 12.7 14.2 — 18.4	$ \begin{array}{c} 30.9 \\ 31.4 \\ 20.6 \\ 11.5 \\ 13.3 \\ \\ 25.6 \end{array} $	34.93 34.14 28.10 21.22 16.74 23.97
33.1	32.5 26.50	32.8	32·4 25·62	30.9	29.9	23.94	26.0	23.3	21.8	22.1	20.6	29.47

			A Section of		WET	THERMON	IETER.		·····			
Hours of Mean Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	111
Hours of Mean Toronto	18	19	20	21	22	23	0	1	2	3	4	5
$\begin{pmatrix} 1\\2\\3\\4\\5 \end{pmatrix}$	10°2 8°5 19°0 17°9	7.8 9.4 19.1 17.5	9.7 11.9 18.2 18.8	10°7 13°8 19°0 20°0	12°3 16°0 19°6 22°5	14.6 15.6 21.7 22.3	17.0 17.9 23.1 23.0	18.6 19.8 23.7 22.3	18°8 20°8 25°4 22°8	18°8 20°2 25°3 21°7	18°1 19°8 24°4 20°4	17°1 17°9 22°2 18°9
6 7 8 9 10 11	20°0 17°6 34°6 23°2 15°8 16°6	20°2 19°8 35°0 22°7 15°8 17°7	21.0 23.8 36.6 23.7 15.7 20.3	22.0 29.4 37.1 24.6 17.7 24.0	23.8 32.8 39.3 25.3 19.4 26.1	25·1 33·6 40·3 24·2 21·8 27·2	25·4 35·7 39·9 25·4 23·5 30·8	26.8 36.2 41.0 25.2 25.2 31.5	29.4 37.5 40.4 26.0 29.2 30.5	28·2 37·7 44·0 26·7 26·9 30·9	28.7 36.5 39.1 26.4 26.8 30.6	29'9 37'2 35'8 25'6 26'0 30'9
MARCH. 13 14 15 16 17 18 19 19	23·1 11·2 3·0 11·7 22·7 18·4	23.4 10.4 4.1 13.1 23.5 21.6	22·2 11·5 5·9 16·0 23·2 23·4	22.5 12.4 7.6 19.6 23.4 26.6	21.8 14.0 10.4 20.9 23.4 28.1	21.6 14.0 10.7 22.1 23.4 29.2	22.4 14.8 14.0 23.2 23.5 29.6	24.2 14.6 15.6 24.5 23.5 31.7	23.8 14.0 15.0 25.4 23.0 31.7	22.6 12.3 15.6 26.0 23.4 32.1	21.4 11.6 15.2 25.9 24.0 31.9	21'4 10'4 14'2 25'3 24'0 31'3
20 21 22 23 24 25 26	25:2 38:7 29:4 31:9 26:7 34:7	26.8 38.5 31.1 31.9 29.8 35.5	31.0 38.2 32.5 31.9 32.6 37.7	32.6 40.2 33.6 32.6 33.9 38.1	33 · 2 42 · 2 33 · 8 34 · 4 34 · 9 36 · 7	33.4 42.9 34.0 34.7 36.2 37.2	33.4 43.3 34.8 37.3 37.1 37.5	34.0 44.7 34.8 38.1 37.8 37.5	34'9 44'2 34'6 36'7 35'6 39'0	35.7 44.0 34.8 37.3 36.3 40.9	36.2 42.5 34.9 36.7 36.9 40.8	36.5 41.6 33.8 36.7 36.2 41.0
27 28 29 30 31	32.6 26.9 31.7 31.1 35.8	32.6 28.6 35.5 34.6 37.7	32.8 32.1 39.8 36.0 40.8	29.9 33.0 41.9 37.0 45.4	30.7 36.0 43.6 37.7 47.9	31.9 38.3 44.0 37.9 50.6	35.6 39.8 46.1 38.6 52.5	36.2 39.0 47.4 38.2 53.1	36.7 40.8 51.5 39.2 55.3	36'3 40'9 48'3 40'2 59'4	35°0 40°3 49°2 41°0 58°2	34.2 40.8 50.1 41.0 56.7
Hourly Means	22.90	23.84	25.46	26.99	28.40	29.20	30.26	31.30	31.93	32.09	31.57	30.99
TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TINAY  TI	31·3	33·2 36·7 42·0 32·1 31·4 34·8 32·1 42·1 42·0 37·0 35·0 37·9 39·6 31·8 28·6 30·5 29·2 38·9 31·3 33·4 35·0 37·5 42·1	32·1  38·7  42·0 32·3 33·9 36·7 37·4  46·6 43·5 39·1 42·3  — 32·7 30·5 30·7 33·2 — 40·1  33·0 33·4 34·6 39·7 38·0 40·6	32·1	32·7	34·8	34·2 41·2 44·7 40·1 41·8 40·4 42·9 54·3 43·4 45·6 38·3 41·3 46·6 36·9 29·8 35·1 42·5 43·0 37·9 39·6 40·0 44·2 39·8 42·0	33.9  41.8 44.8 38.8 41.8 38.9 43.1	34.0	34·0  42·3 46·1 38·2 42·3 40·0 45·8	32.6	32·5  43·5  43·5  43·9  37·7  42·0  39·2  45·2  51·7  42·3  44·9  37·3  40·6  43·9  — 39·4  29·7  35·5  43·4  — 45·7  — 34·4  39·1  40·6  42·5  42·5  39·9
lourly Means	32.97	35.26	36.87	38.46	39.48	40.41	41.07	41.26	41.59	41.39	41'15	40.73

a Good Friday.

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	12	13	14	15	16	17	18	19	20	21	22	23	Daily and
	6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
	15.1 16.1 20.8 17.9	14.0 15.6 19.8 17.2	12.6 15.6 17.9 17.7	8·2 16·3 17·5 17·7	12°3 16°1 16°9 17°9	11°7 16°7 16°6 16°9	7·1 18·1 17·5	°°7 18°6 17°5 —	\$.1 19.2 19.6	8.6 19.6 20.0	9·0 19·7 20·2	$ \begin{vmatrix} 9.5 \\ 19.6 \\ 18.1 \\ 21.6 \end{vmatrix} $	12°03 16°78 20°13 19°85
1	29.4 36.5 35.2 25.2 24.8 30.5	26.2 36.0 34.8 25.5 23.5 28.6	22.9 35.8 34.4 24.8 21.6 28.3	20.5 36.2 34.2 25.1 20.4 28.5	20.6 36.5 34.4 24.2 20.1 29.0	20.4 36.3 34.0 23.3 20.2 28.4	19.7 17.9 36.0 33.4 23.0 20.0 — 30.9	20.6 18.1 36.1 31.6 22.8 18.8 ————————————————————————————————	21.6 18.1 36.3 28.2 19.4 18.1 ——————————————————————————————————	19.6 18.2 35.8 27.4 19.4 16.9	19.9 17.9 35.7 26.4 17.7 16.2 ————————————————————————————————————	21.6 } 16.9 34.8 26.0 17.3 17.3	22.82 33.74 35.13 23.61 20.90 27.05
	18·1 7·6 13·1 23·8 23·5 31·3 —	18.7 6.5 11.3 23.6 22.5 29.1	16.9 6.3 11.1 23.7 20.8 29.0	16.4 5.9 10.7 23.5 20.6 29.4	15.7 5.7 10.0 24.0 19.4 29.4 ————————————————————————————————————	15.1 5.5 9.4 23.7 18.1 29.2	14.6 5.5 9.4 23.5 18.4 — 27.5	13.9 5.1 9.0 24.0 16.7 ————————————————————————————————————	20 8 13 1 4 4 8 4 23 4 16 2 25 4 36 9	12.7 4.2 8.0 23.3 17.4 ————————————————————————————————————	12.5 4.3 10.0 23.1 17.9 	12:2 3:4 10:9 23:1 18:4 	18.76 8.98 10.53 22.35 21.29 27.70 35.22
	37.7 33.4 34.2 34.2 40.6	34.8 32.6 32.8 32.6 40.4	34.2 32.4 31.1 32.9 40.6	33.5 31.5 29.6 33.8 40.4	32.4 31.3 28.6 33.8 40.0	35·2 31·7 31·7 27·8 34·2 39·8	35.4 30.7 31.5 27.6 34.8 — 33.8	35.8 30.5 31.6 27.2 34.9 — 32.8	29.8 31.7 26.8 34.4 ——————————————————————————————————	29.6 31.7 26.8 34.5 — 31.3	28.6 31.9 26.4 34.8 	28.6 31.8 26.4 34.8 — 30.5}	36.80 32.72 31.90 34.32 37.07
	33.8 39.6 48.3 39.8 53.9 29.68	33.0 ,38.7 ,42.5 38.3 51.1	32.7 38.8 40.2 38.1 49.1	31 · 8 38 · 8 37 · 9 38 · 1 48 · 6	29.9 38.8 36.5 38.3 46.0	29.5 37.9 35.0 37.9 39.4	29°3 37°4 33°1 37°5 36°0	28.5 35.8 31.5 37.3 35.6	27.1 37.3 30.7 36.9 34.3	27.2 36.2 30.7 36.5 33.8	27 · 1 35 · 2 29 · 6 35 · 9 32 · 9 24 · 25	26.6 32.6 29.4 35.1 32.8	31.75 36.82 39.77 37.59 45.29
}		28.40	27.63	27.09	26.79	26.13	25.54	24.79	24.49	24 52	24 20	20 90	21 47
	32.5 42.7 42.3 36.7 40.2 39.8 46.2 51.1 42.5 44.1 37.0 40.4	31.5 42.3 41.6 36.5 38.5 36.2 42.5 	31.5 42.5 40.2 34.2 37.3 34.6 39.9 49.3 42.7 35.6	31.5 	31.6 	31'3 42'1 35'6 30'5 34'6 33'3 37'7 43'5 46'4 43'3 35'4	33.8 42.5 35.2 28.9 33.6 31.6 	32.7 42.0 33.8 27.8 32.8 31.3 - 37.7 45.0 38.3 42.5 35.8	32.6 41.7 33.3 27.0 32.8 31.5 	32.8 41.4 32.8 27.2 32.8 28.2 	32.6 41.9 31.9 26.7 32.7 27.9 35.4 44.0 34.6 37.5 36.1 36.4	31·3 } 41·4 30·9 26·5 32·7 26·6	32 · 63 41 · 15 39 · 99 33 · 16 36 · 74 35 · 45 39 · 54 48 · 12 41 · 48 42 · 47 36 · 42 38 · 77
	42.5 	38.7 40.6 — 36.3 27.9 33.0 39.5	36.8 39.1 	36.2 38.7 — 35.3 29.5 31.6 37.5	38 · 3 38 · 7 35 · 1 29 · 2 28 · 4 36 · 5	37.9 38.1 — 35.0 27.2 26.9 36.6	35.0 36.5 34.0 25.4 26.3	33.8 	33 · 8 34 · 1 24 · 6 25 · 1 42 · 3	32.8 32.6 23.5 25.1 41.4	31.7 31.3 23.5 25.2 41.2	29.8 29.4 23.2 24.6 -39.1	40°30 35°20 28°00 30°31 39°38
	45.6 37.5 38.7 37.6 41.6 42.9 39.6	41.6 36.7 38.0 35.2 39.9 41.8 37.8	38'3 34'9 37'7 36'5 39'2 41'2 36'5	36.5 32.9 37.7 35.4 37.9 41.4 34.8	35.2 30.8 37.3 35.0 36.2 42.3 34.6	32.8 29.2 37.1 32.1 35.2 42.3 31.6	43.7 30.3 28.2 36.7 30.3 35.6 42.6	31·2 28·2 36·0 27·8 35·3 42·5	32.8 28.2 33.8 27.4 35.0 42.5	33°3 25°8 31°9 26°8 35°2 42°3	33°1 25°6 30°5 26°4 35°6 42°1	$ \begin{array}{c} 39 & 1 \\ -2 & 3 \\ 25 & 3 \\ 28 & 5 \\ 26 & 7 \\ 36 & 0 \\ 42 & 0 \\ -36 & 7 \end{array} $	38.56 33.01 36.28 34.78 39.13 41.01 38.15
	40.18	38.72					34.4 35.31	33.8	33.4	32.8 33.58	$\frac{36.2}{33.34}$	36.75	37.50
	70 10	00 (Z	37.65	36.81	90 99	3 <b>5</b> 65	99 91	0± 00	31.00	55 50	55 01	-2 00	

		- <del> </del>	egylige a circumstantia antistica			WETT	HERMOM	ETER.					
Gött Ti	of Mean ingen me.	0	1	2	3	4	5	6	7	8	9	10	11
101	of Mean conto ime.	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \end{pmatrix}$	38·3 41·2 44·0 44·1 52·5 51·7	40°2 42°1 49°5 45°3 57°5 57°5	41.4 44.1 50.9 48.1 58.2 59.9	44.3 47.8 52.0 50.9 61.8 61.0	44.9 49.9 53.6 50.7 63.0 61.4	45.6 49.0 54.1 51.1 63.8 64.2	45.9 49.7 53.9 49.8 63.6 64.4	44.4 50.2 52.4 48.8 64.0 64.9	43°5 50°4 52°1 48°6 61°4 66°8	45°2 49°4 54°8 48°8 62°8 64°7	46°5 48°9 53°7 47°6 62°9 62°4	46°3 49°6 52°3 48°4 59°4 62°9
	8 9 10 11 12 13	39°3 42°5 45°2 45°2 37°7 33°6	41.4 46.7 46.4 45.2 39.4 36.3	43.9 50.1 46.9 45.4 40.4 38.3	47:2 51:2 47:4 46:1 42:3 38:5	46.6 51.0 48.0 46.6 43.3 39.8	47.5 51.8 48.2 46.6 44.3 42.1	48.7 52.9 48.8 46.6 44.0 43.6	48.6 54.4 50.2 45.6 44.2 46.2	48.2 53.1 51.2 46.2 44.9 44.2	48·1 51·2 50·2 46·0 46·4 43·0	49.3 52.6 50.2 47.0 46.9 41.0	48.8 50.2 49.8 46.6 47.4 39.0
MAY.	14 15 16 17 18 19 20 21	37.0 49.0 42.0 49.9 54.6 58.6	41.8 50.9 49.7 55.7 55.8 58.6	45 · 1 51 · 6 51 · 2 56 · 7 59 · 9 62 · 6	46.4 52.1 52.6 58.4 61.9 67.1	47.8 54.4 53.6 59.7 63.6 66.6	50.0 55.7 55.5 59.0 66.1 66.9	49.2 56.2 55.8 60.6 65.7 70.6	49°3 55°6 56°7 60°8 65°3 67°4	47.6 54.7 58.0 62.7 66.5 68.4	45.6 54.0 57.8 62.0 63.9 66.3	45.6 55.7 57.4 62.0 63.1 64.7	46.5 55.2 55.6 62.5 65.3 66.0
	21 22 23 24 25 26 27 28	55°1 53°9 53°7 54°2 48°3 48°0	50.8 52.3 54.1 55.9 48.9 49.6	50.9 51.9 56.5 57.5 49.6 53.7	55.7 49.6 59.2 59.3 50.2 56.3	56.5 49.3 63.5 63.0 51.3 56.7	56.5 49.3 64.7 64.3 54.3 57.4	55.7 49.9 62.7 64.8 58.1 57.2	56.1 50.7 65.3 64.5 59.9 58.5	56 · 2 52 · 1 64 · 0 65 · 7 58 · 1 58 · 9	56°3 54°7 63°7 65°1 55°3 57°1	55.0 54.7 65.3 62.3 53.9 58.1	56.9 55.1 62.4 63.7 54.5 56.7
	29 30 31	57.9 52.9 38.8	60°9 55°0 40°2	60°5 55°0 40°2	62.0 55.1 42.1	65.9 54.2 43.1	61.7 56.1 44.6	67.5 56.5 43.3	68°1 54°6 45°3	67°1 51°6 43°8	68'8 49'8 44'5	69°1 48°5 45°7	70°3 46°9 46°4
Hourly	y Means	47.01	49.17	50.76	52.54	53.63	54.61	55.03	55.26	55.04	54.65	54.45	54.25
	$\left( egin{array}{c} 1 \\ 2 \\ 3 \\ 4 \end{array} \right)$	42.9 46.2 64.1	44.2 51.4 63.9	45°3 54°3 63°9	45°7 56°5 65°2	45°5 58°3 65°5	46°3 59°7 65°5	47.8 60.1 66.2	47.0 60.8 65.9	50°9 61°0 66°3	52.5 60.3 66.3	53.9 58.8 66.1	55.7 60.3 65.3
	5 6 7 8 9	54.0 46.4 43.2 48.0 52.9 58.0	55.8 48.2 44.6 51.2 56.8 59.4	59.7 48.4 45.7 54.2 61.9 58.8	60'1 49'4 47'1 55'9 61'9	60°3 48°4 48°7 59°3 62°1 64°4	61.7 49.1 50.1 60.1 63.0 63.3	61.9 50.0 52.0 59.3 63.5 63.3	57.7 50.4 52.2 59.3 63.5 64.4	56.9 49.4 53.1 59.6 63.9 64.6	61.3 49.9 53.5 60.7 64.6 64.4	62.4 49.1 52.3 62.5 65.7 62.0	58.0 47.4 52.2 59.5 64.9 64.4
JUNE.	11 12 13 14 15 16 17 18	43.6 41.1 42.4 59.3 68.4 64.9	43.2 40.6 42.4 63.7 69.3 69.0	42.8 43.2 46.4 68.6 71.1 70.9	43°1 42°9 50°3 70°1 72°4 71°5	43.9 45.1 50.9 72.4 73.4 73.3	43.4 46.0 54.8 70.7 75.6 74.3	44.8 46.8 53.4 72.1 72.4 74.7	45.4 47.2 53.5 71.7 74.1 72.3	45.7 46.4 56.2 71.1 74.0 71.3	46.9 47.3 57.3 70.9 74.1 73.3	46.4 47.2 59.0 68.9 72.3 71.3	45.6 46.6 58.1 68.5 72.5 72.7
	19 20 21 22 23 24 25	63.8 61.7 57.2 55.7 60.9 56.1	65.0 64.3 60.8 57.3 62.1 57.3	66.5 66.5 59.9 63.1 63.6 57.9	69:5 67:5 61:9 64:9 64:3 56:5	69.9 69.2 61.5 63.6 66.7 56.3	71:5 67:9 60:5 63:8 69:0 57:0	71.7 69.5 61.5 64.6 68.5 56.4	71.7 67.7 61.9 65.8 70.3 55.9	69:3 67:6 61:0 64:5 66:3 55:9	69.3 66.5 61.4 64.3 64.1 56.9	70.5 67.5 62.3 63.9 60.9 54.5	69.0 58.6 62.0 61.1 60.7 54.1
	26 27 28 29 30	60'3 58'2 68'9 56'5 56'9	64.9 63.0 68.1 59.8 58.9	67.9 66.1 69.7 63.5 64.2	68.8 68.5 70.2 66.3 64.8	70.1 69.1 69.7 66.3 66.0	70.4 68.9 68.7 65.6 67.3	71.4 70.1 65.0 66.3 65.9	71.4 70.9 65.3 67.3 66.3	71 · 1 70 · 9 64 · 6 67 · 9 67 · 0	70'6 70'1 66'1 68'1 68'1	70.9 70.9 64.5 67.9 67.5	70°1 66°2 62°1 67°1 68°5
Hourly	Means	55.06	57:12	59.39	60.64	61.23	62.08	62.28	62:30	62:17	62.65	62°28	61.20

						WET	THERMO	METER.					
	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
	6	7	8	9	10	11	12	13	14	15	16	17	Means.
	45°2 48°4 51°0 49°6 57°6 58°4	42.6 46.0 48.4 50.2 54.9 60.1	41°3 43°4 46°7 51°1 58°8 60°1	39.7 41.4 45.0 50.9 59.0 58.4	39.4 40.2 43.2 51.2 54.2 57.4	38.8 38.7 42.2 51.0 54.4 55.8	38.6 43.6 43.4 50.1 53.6	37°5 44°1 41°8 49°4 53°4	36.7 42.4 41.7 49.4 50.7	36.9 39.8 41.7 49.4 49.5	36.6 37.8 39.8 49.0 48.0	36.8 39.6 38.8 47.2 47.2	41.53 44.90 47.79 49.20 57.18
	47.0 50.0 48.6 45.5 45.9 37.4	45.8 49.6 48.2 44.2 43.2 38.6	44'2 49'4 47'6 42'7 39'6 39'4	44·2 48·6 46·7 42·3 37·3 39·6	44.6 48.4 46.2 41.4 36.8 40.0	44.9 47.4 46.6 40.8 34.2 39.8	45.0 44.4 44.8 46.6 40.2 33.4	37.8 42.8 42.8 46.6 40.1 30.6	36.6 41.0 45.4 46.4 38.9 30.6	35.4 39.0 45.8 46.2 38.4 31.6	36 · 2 38 · 6 45 · 7 46 · 0 37 · 2 30 · 0	36.8 38.6 43.4 46.0 36.9 31.4	54 99 44 70 48 71 47 68 43 40 39 41 38 40
	45.9 53.6 52.7 62.2 65.1 65.6	46.6 52.0 51.2 58.9 60.9 65.6	44.6 49.6 50.5 55.4 55.9 62.4	45 · 2 48 · 6 49 · 4 53 · 4 56 · 8 56 · 7	45.6 46.1 47.9 52.6 58.3 57.7	45.8 44.4 47.1 51.1 58.2 59.6	38.4 46.2 42.8 47.8 50.2 57.5	35 · 4 46 · 9 40 · 4 47 · 0 49 · 4 57 · 2	33.0 47.0 38.2 46.4 49.0 57.1	31.2 47.0 38.4 44.6 49.0 56.7	31:2 46:7 36:7 44:0 49:3 55:7	32.0 } 47.1 37.4 43.9 50.2 56.3	46 19 48 89 50 77 55 86 60 31
	55°1 54°2 59°7 59°9 53°9 59°1	53.4 51.8 58.8 57.6 52.2 56.9	52.1 51.3 56.7 54.9 49.4 51.5	49.9 52.3 54.5 50.7 45.5 50.5	50°5 51°7 54°7 50°1 46°4 50°2	52.9 51.2 54.1 48.6 45.5 50.1	59.3 51.7 52.2 53.3 48.6 45.2	59.1 52.9 52.4 51.9 48.0 45.0	58.9 52.7 54.4 51.5 48.0 44.2	58.6 52.4 53.9 50.3 47.0 44.1	57.8 52.1 55.9 50.1 44.6 43.7	56.9 } 52.1 54.9 52.3 45.1 43.8	53·73 52·49 57·63 55·98 50·05 54·55
	70.6 45.6 46.0	67.0 44.5 45.8	63°0 43°6 46°0	59°6 43°3 45°0	57.8 44.0 42.4	54.7 43.8 42.2	54.9 52.3 41.4 42.1	53.9 51.9 39.8 40.4	53.9 51.3 40.0 38.8	53.9 49.7 39.2 38.4	53.3 48.2 38.6 37.6	52.7 } 47.4 38.8 38.3	60°56 47°45 42°54
	53.10	51.67	50.04	48.69	48.11	47.55	46.95	45.80	45.34	44.74	44.09	44.14	50.27
	52.5 59.9 64.2 54.3 47.0 52.1 55.7 63.2 64.9 45.0 46.1 59.0 69.5 75.9 69.9 67.1 62.1 59.8 59.3 60.5 53.3	51.5 59.5 60.9 54.4 45.8 48.7 55.7 60.2 60.6 43.6 45.2 60.3 68.1 71.4 66.8 66.2 61.1 59.1 60.3 58.5 53.1	46.8 58.5 60.9 51.2 45.4 48.0 55.1 57.9 58.3 42.4 44.6 55.6 69.2 69.9 64.5 61.1 56.5 58.7 57.0 50.1	43.6 55.9 59.8 	44·4 58·0 58·7	44.8 59.8 56.9 48.8 43.6 45.4 53.5 55.7 50.9 40.6 42.6 51.5 65.7 65.9 64.0 62.7 57.9 53.4 57.1 54.3 46.5	43.4 59.4 	43.5 59.1 	42:3 57:2 57:7 45:3 40:5 44:8 49:9 53:9 43:6 38:6 40:3 49:0 67:7 62:4 62:9 59:7 55:1 55:7	42.6 58.3 57.3 44.3 39.7 44.4 49.0 54.9 42.4 38.6 47.4 66.5 60.5  51.7 58.9 51.7 58.9 54.8  55.9	40.7 59.9 	41.0 62.3 49.6 45.6 40.1 44.7 48.0 54.7 39.7 38.0 51.2 65.8 59.1 60.8 59.9 53.7 53.0 60.7 53.9 56.7	46:45 58:15 61:62 53:86 45:80 47:89 54:91 59:33 56:43 42:44 43:60 51:85 67:95 68:96 67:80 52:83 61:68 57:63 60:77 60:33 54:70
the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	64.9 66.7 62.9 66.4 67.7	62.5 69.1 62.9 64.2 66.1	60.7 68.7 61.7 63.9 65.7	59°3 66°8 59°7 57°6 64°5	60°1 66°1 58°7 56°1 66°3	61 · 2 63 · 9 57 · 3 54 · 9 65 · 5	60°2 63°9 55°9 54°1 63°8	59.9 66.5 54.4 53.0 62.7	58.9 66.1 54.2 51.2 61.7	55.9 65.9 54.1 49.8 59.3 52.51	55.9 66.5 53.3 51.7 55.9 52.18	58.0 68.6 53.0 53.1 51.0	64'39 67'15 62'13 60'78 63'82 57'96
	60.38	59.07	57.59	56.07	55:36	54*78	54.47	53.89	99 10	02 01	02 10		9.0

			HUMI	DITY OF	THE AIR	, AND TE	ENSION O	F THE AT	гмоѕрне	RIC VAPO	OUR.		
Hours of Göttin, Tim	igen }	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Toro Tim	f Mean nto ne.	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \end{bmatrix}$	76 100 89	81 400 86	82 100 90	86 91 83	93 96 87	89 91 82	79 92 73	74 95 70	87   96   66	98 95 73	95 94 83	96 94 73
	5 6 7 8 9 10	94 94 95 95 92 85	92 95 99 86 94 86	94 97 98 81 90 84	96 93 96 83 91 95	90 92 99 83 77 86	84 87 95 80 84 82	80 92 95 71 79 84	79 86 95 78 79 83	75 86 99 81 84 93	84 79 100 79 90 82	88 90 100 84 86 81	90 94 97 86 88 84
dity of the Air.	12 13 14 15	87 93 78 93 86 76	83 90 84 95 84 78	86 83 90 93 83 70	82 90 93 89 84 73	96 88 86 80 80 75	66 75 87 71 76 69	75 68 79 76 80 71	68 64 78 76 78 60	72 69 73 70 78 65	76 71 75 71 76 63	73 72 76 80 75 68	75 78 78 78 78 79 60
Humidity	19 20 21 22 23 24 25	72 85 89 87 85 81	58 88 91 52 87 81	56 83 90 68 90 82	81 91 93 100 85 77	61 91 92 80 82 74	79 87 88 88 88 84 67	66 91 88 96 83 83	66 87 94 85 70 85	73 87 94 64 82 87	75 92 94 69 76 74	78 93 90 68 83 77	81 87 83 67 86 88
$\mathbf{F}\epsilon$	25 26 27 28 29 30 31 eb. 1	98 85 87 91 700 73	98 87 90 87 98 72	97 90 90 86 99 74	99 84 89 90 99 78	94 80 86 80 91 79	95 80 83 80 97 85	99 83 76 80 98 66	96 81 79 79 97 66	97 78 73 86 94 76	97 78 75 92 95 77	97 86 88 90 98 57	93 86 83 90 95 63
Hourly	Means	88	86	86	89	85	83	82	80	81	82	83	83
	$\begin{pmatrix} 1\\2\\3\\4 \end{pmatrix}$	In. 121 213 149	In. 131 221 146	In. 135 223 153,	In. 150 203 145	In. 163 228 156	In. 166 206 162	In. 144 199 150	In. 139 205 145	In. 158 202 141	In. 179 200	In. 178 194 171	In. 189 194 150
	4   5   6   7   8   9   10   11	146 138 192 181 144 139	143 160 199 168 145	144 166 197 161 136	161 168 201 164 139	165 172 209 162 119 148	156 166 205 160 128 140	158 181 206 151 119	165 171 207 153 126	156 171 210 161 126 159	172 159 214 154 145 143	176 167 207 162 146 135	170 174 197 162 149
Tension of the Vapour. JANUARY.	12 13	120 1066 123 1096 148 1059	115 065 129 128 149 060	118 068 138 146 145 050	111 1076 1146 1159 1149	120 1090 143 160 145	1095 1087 1157 1148 1136 1051	120 1088 149 168 134 1053	102 1085 154 180 125	106 1093 1177 1174 1122 1050	106 1095 154 181 112 1051	.098 .092 .155 .186 .109 .051	
Tensic	19 20 21 22 23 24 25	.047 .061 .109 .037 .054 .092	*036 *063 *112 *025 *054 *088	·035 ·061 ·111 ·032 ·054 ·095	.056 .070 .114 .054 .065	·048 ·081 ·111 ·052 ·073 ·108	. 067 . 079 . 112 . 063 . 085 . 112	.061 .090 .112 .079 .091 .144	.061 .097 .121 .083 .079	*067 *104 *126 *068 *095 *162		·075 ·013 ·128 ·072 ·101 ·156	*072 *106 *118 *068 *100 *167
Fel	26 27 28 29 30 31 5. 1	190 1088 152 173 220 1076	193 1082 160 168 217 068	·195 ·083 ·163 ·170 ·210 ·066	·205 ·083 ·165 ·177 ·224 ·062	·220 ·084 ·165 ·165 ·226 ·063	·173 ·090 ·173 ·170 ·228 ·075	216 101 166 176 234	·214 ·101 ·171 ·171 ·240 ·065	·216 ·101 ·167 ·180 ·242 ·081	216 103 166 189 240	·209 ·109 ·186 ·187 ·244 ·063	191 106 170 187 237 068
ourly N		123	125	126	132	134	133	137	137	141	-142	140	140

Note. —Wet Thermometer higher than the Dry Thermometer where the reading appears in italics.

		HU	MIDITY C	F THE A	IR, AND	rension	OF THE A	ATMOSPH	ERIC VAI	POUR.	<u> </u>	
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
95 94	95 88 67	93 90 66	95 91 70	93 80 84	88 80 74	92 85	96 74	76	98 81	100 77	90 78	91 89
78	92 84 96 88 97 80 75 87 85 66 80 63 76 78 88 86 78 88 97 88 86 78 88 86 97 88 86 87 88 88 88 88 88 88 88 88 88 88 88 88	90 94 99 91 92 86	95 92 96 95 90 92 83 78 88 84 80 81 74 68 95 84 92 85 93 91 95 96	94 95 96 98 80 89 73 82 89 82 75 90 83 79 94 85 85 91 93 87 93 99 91 81	93 95 97 98 87 82 88 82 89 83 77  81 79 99 90 88 81  87 84 92 100 88 74	97 90 94 95 91 87 88 91 82 86 87 76 78 92 88 100 85 94 97 93 86 95 96 97 98 99 99 99 99 99 99 99 99 99	88 94 92 91 95 94 84 91 83 93 89 61 90 91 100 89 89 95 92 87 94 100 78 91	90 86 94 95 90 95 90 76 94 83 79 70 83 91 100 98 95 94 84 86 92 99 90 91	92 93 96 93 89 90 	94 93 95 91 87 95 ——————————————————————————————————	94 } 94 97 93 90 94	81 90 92 96 87 89 86 81 80 70 77 87 91 81 86 85 93 84 86 91 94 76
85	84	 85	86	87	86	89	89	89	88	, 90	90	86
In. 199 194 155 - 162 173	In. 192 171 133 - 144 168	In. 192 170 131 140 183	In. 195 167 134 150 176	1n. 193 149 149 	In. 185 149 133 — 144 175	In. 191 140 — 180 140 178	In. 199 121 — 170 134 177	In.	In. '204 '130 '164 '125 '194	In. '212 '125	1n. 199 129 	In. 176 177 152 149 173 198
196 178 160 140	194 158 163 134	203 155 152 145	197 159 145 157	195 163 129 155	198 163 137 143	194 149 137 — 133	192 153 147 — 125	195 145 148 — 125	190 143 145 — 121	140 156 	$\begin{array}{c} .143 \\ .155 \\ \phantom{00000000000000000000000000000000000$	`158 `142 `140
.094 .085 .147	.092 .083 .123	.097 .096 .126	.094 .098 .143	.076 .102 .140	'085 '104 '139	.082 .110	.080 .112 .107	.078 .109	.078 .117 .103	.073 .120 .103	.068 .136 .106	'096 '095 '135
177 105 046	163 108 044	171 104 046	185 198 1053	189 1990 1056	183 183 1081 1044	122 186 081 —	.186 .080	114 165 075 —	·157 ·079	159 1072	154 078	166 110 050
177 105 046  1067 108 107 068	163 108 044  054 110 096 070	171 104 046 — 062 104 089 072	185 1998 1053 	189 1090 1056 107 1081 1070 1081	183 081 044  052 107 078 074 079	.186 .081	186	165	157 079  043 055 108 050 057 087	159 072  045 061 110 047 052 086	154 1078 1044 1065 106 1040 1045 1082	166 110 050 058 093 095 062
177 105 046 067 108 107 068 1098 160 185 097 172 190 240	163 108 108 1044 1054 110 1096 1070 1093 151 179 115 162 198 235	171 104 046 — 062 104 089 072 087 151 — 179 125 159 198 248	185 1098 1053 1054 1095 1095 1072 1089 1154 160 126 180 1200 1235	189 1090 1056 107 1081 1070 1081 160 159 134 178 210 208	183 1044 1052 107 1078 1074 1079 1157 143 1137 174 112 1192	186 081  059 057 106 070 062	186 080 045 056 110 063 072 070 169 156 138 166 219 147	165 075  049 054 110 056 065 074  124 139 164 209 143 	157 1079 	159 072 	154 1078 1044 1065 106 1040 1045 1082 189 189 157 170 170 104	166 110 050 058 093 095 062 081 145 174 113 168 192 205
177 105 046 067 108 107 068 1098 160 185 097 172	163 108 044  054 110 096 070 093 151  179 115 162 198	171 104 046 — 062 104 089 072 087 151 — 179 125 159 198	185 1098 1053 1054 1095 1095 1072 1089 1154 160 126 180 1200	189 1090 1056 107 1081 1070 1081 160 159 134 178 1210	183 081 044 	186 1081 	186 080 045 056 110 063 072 070 169 156 138 166 219	165 075  049 054 110 056 065 074  165 124 139 164 209	157 1079 	159 072  045 061 110 047 052 086  167 097 147 167 212	154 1078 1044 1065 106 1040 1045 1082 1189 1088 1157 170 170 116	166 110 050 058 093 095 062 081 145 174 113 168 192

urs of M Göttinger Time.	fean }	0	1	2	3	4	5	6	7	8	9	10	11
urs of M Toronto Time,	lean }	18	19	20	21	22	23	0	1	2	3	4	5
	$\left( egin{array}{c c} 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \end{array} \right)$	88 96 95 71 85 93	89 98 63 67 89 96	83 90 70 78 87 94	83 83 60 69 85 78	84 83 66 60 80 73	79 83 68 49 64 79	81 81 70 49 72 80	80 84 68 50 72 79	78 80 67 52 69 82	75 78 67 56 70 80	80 75 71 69 69 86	82 69 74 62 78 90
of the Air. UARY.	8 9 10 11 12 13 14	67 76 93 87 83 92	70 79 96  79 96	77 82 92 — 80 97	68 85 89  81 93	69 83 88  71 93	64 90 86 83 70 83	58 84 91 97 70 79	59 82 89 84 67 69	59 80 93 95 68 74	43 95 89 80 69 83	62 73 88 89 84 87	47 80 93 86 88 88
Humidity of FEBRU	(15 16 17 18 19 20 21 22	84 94 100 100 95 86	89 93 86 80 95 86	91 96 87 83 98 89	92 93 92 76 98 78	83 93 75 69 96 74	84 88 66 65 94 74	86 88 67 76 92 80	82 88 72 62 96 81	87 83 66 64 93 80	86 88 69 72 96 80	87 87 75 64 91 73	92 89 78 25 93 86
Ma	23 24 25 26 27 28 ar. 1	93 94 68 — 80 —	88 100 90 — 80 —	85 92 90 — 79	89. 88 96 — 100 85	76 92 88 — 95 84	72 90 99 77 80 85	75 83 80 72 82 85 —	77 78 74 70 83 91	73 79 75 74 80 84	77 77 87 73 82 74	80 74 81 72 84 81	81 78 87 70 78 82
Hourly I	Means	87	86	87	85	81	78	78	77	76	77	78	79
the Vapour. UARY	2 3 4 5 6 7 8 9 10 11 12 13 14	In.  '095 '159 '149 '145 '113 '131 '068 '043 '110 '036 '113 '086	In.  106 168 102 145 120 130 059 046 122 110 101	In. 101 167 112 161 131 128 062 049 102 121	In. 108 177 105 162 137 156 — 054 061 094 — 132	In. 119 183 118 144 160 164 055 072 095 126 138	In. 123 190 129 118 136 191 - 051 084 090 070 127	In. 133 194 138 117 168 192 - 050 101 095 093	In. 134 205 138 121 166 191 051 099 094 090 130	In. 130 204 141 123 162 191 055 099 101 110 136	In. 126 197 140 125 166 181 031 094 095 099 140	In. 134 187 147 144 161 194 058 100 090 105 170	In. 136 169 150 127 168 195 041 099 094 188
Tension of the Va	14 (15 16 17 18 19 20 21 22 23 24 25 26	100 100 1099 1076 1064 1128 1123 1076 1074 1032	101 105 101 1068 1065 129 123  1083 1074 1047	114 -109 109 1081 1067 135 133  1083 1076 1051	122 -110 120 ·089 ·084 ·139 ·127 -104 ·083 ·064	138 113 133 098 104 139 128 101 094 067	152 -124 139 089 100 137 129  100 092 086 043	156	141 -123 145 104 1099 141 140  105 103 072 046	149	162 123 153 105 107 163 134  107 087 084 048	159	158 - 123 135 109 129 143 123 - 091 075
Ma	27 28 ar. 1	·063	·064 —	·064	.051 .076	.058 .082	.063 .089	.073 .089	·075 ·092	.030 .075 .087	.074 .080	.075 .084	·065

, . T		HU	MIDITY C	OF THE A	IR, AND	rension	OF THE	ATMOSPH	ERIC VAI	POUR.		
12	13	14	15	16	17	18	-19	20	21	22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
84 66 73 64 78	87 64 76 59 78 70	89 67 73 71 78 64	91 74 70 80 82 70	87 72 59 74 83 72	88 86 60 73 94 69	90 80 57 78 92	97 95 62 80 97	95 76 61 82 91	98 91 62 85 91	98 80 66 89 95	99 79 69 87 94	87 80 68 69 82
64 80 89 90 80 87	71 79 82 93 80 83	76 87 86 93 80 78	88 94 81 94 82 80	83 95 86 88 88 76	89 94 81 85 93 88	88 87 94 80 88 92	89 87 89 83 93 100	91 87 91 85 85 87	94 89 89 84 81 100	95 84 91 68 84 100	96 } 78 94 67 86 92	83 72 86 86 88 83 83
94 89 83 77 92 89	94 90 95 86 96 87	91 86 94 97 93 86	91 86 94 93 96 82	91 90 100 100 93 80	92 84 100 98 93 75	96 88 86 96 97 99	91 91 92 95 98 91 —	94 89 81 88 93 89 —	94 91 96 84 97 92 —	89 91 95 85 96 99	88 } 94 85 89 93 87 ———————————————————————————————————	89 89 85 82 94
85 79 76 70 94 71	82 79 64 68 100 73	81 83 76 61 90 71	84 86 72 	81 85 78 — 86 74	77 82 79 — 97 77	53 87 60 	75 79 — 89 — 76	77 90 — 92 — 80	82 84 ——————————————————————————————————	83 59 — 85 — 80	700 68 	80 83 80 71 88 79
80	81	81	84	84	85	85	88	86	89	87	86	83
In. 139 153 150 131 161 169 - 050 110 089 095 136 154	In. 145 148 158 119 157 136 1052 113 080 097 140 148	In. 148 146 158 129 156 104 — 054 128 078 095 144 129	In.  160 155 152 148 161 091 059 128 072 096 142 132	In. 157 149 142 130 164 082 054 134 075 090 146 127	In. 157 166 147 128 163 073 057 139 070 094 128 136	In. 154 148 138 132 157 103 052 136 063 098 102 098	In.  164 170 142 126 151 104 052 126 066 110 096 100	In.  164 134 138 129 140 106 052 115 067 106 077 106	In. 169 153 134 130 133 108 050 112 047 105 085 109	In. 171 133 141 133 138 109 049 109 032 111 085 106	In.  165 130 141 122 133	In. 139 166 138 133 150 139 053 100 081 096 124
120 125 1086 121 136 123	120 121 081 136 136 120	115 113 071 134 120 112	110 110 1071 131 135 105	109 113 074 140 135 092	106 100 1073 138 135 1084	· 094 · 102 · 066 · 136 · 139 — · 089	· 095 · 101 · 061 · 135 · 130 —	100 1084 1059 124 127 	103 071 053 129 133 — 086	105 060 053 127 131  090	$egin{array}{c} \cdot 107 \\ \cdot 049 \\ \cdot 055 \\ \cdot 124 \\ \cdot 127 \\ \hline \cdot 079 \end{array}$	112 113 1080 113 136
·095 ·070 ·064 ·048 ·075 ·073	'088 '060 '049 '032 '076 '074	.082 .059 .052 .031 .070 .070	· 080 · 056 · 043 — · 071 · 068 —	*080 *051 *048  *066 *070	· 071 · 045 · 047 — · 072 · 070	.050 .050 .028 	· 068 · 052 — · 068 — · 070	.069 .052  .071  .072	· 069 · 044 — · 072 — · 072	· 067 · 029 — · 065 — · 072	· 079 · 032 — · 062 ·	*086 *068 *060 *043 *069 *076
.111	108	104	108	106	104	100	104	099	.099	.096	*094	107

				HUMII	OITY OF	THE AIR,	AND TE	NSION OF	THE AT	MOSPHER	IC VAPOU	JR.		
lour Göt	of M tinger	ean }	0	1	2	3	4 .	5	6	7	8	9	10	11
our		ean i	18	19	20	21	22	23	0 ,	1	2	3	4	5
		2 3 4 5 6 7	72 79 82 78 90 76	88 79 70 79 95 85	92 64 79 73 88 94	98 75 81 72 81 96	94 65 78 64 78 89	70 70 68 58 77 92	83 68 79 70 71 91	64 72 71 73 79 95	86 77 77 69 78 98	78 78 79 52 77 97	68 72 76 72 78 94	70 78 70 66 83 95
le Air.		8 9 10 11 12 13 14	75 86 90 83 93	73 98 94 84 95 96	70 73 87 82 95 96	68 71 77 97 88	67 68 71 74 99 82	71 72 72 69 98 90	74 68 75 75 99 80	75 63 · 71 81 97 80	72 67 69 94 97 84	78 64 69 94 100 81	81 59 60 95 97 72	82 58 67 93 100 90
Humidity of the	MARCH	15 16 17 18 19 20 21	78 75 83 83 94 71	77 77 83 74 95 66	67 83 80 60 89 68	87 70 70 57 56 61	70 67 67 45 81 73	72 69 50 52 84 61	68 73 64 50 73 56	70 67 65 52 64 56	78 64 66 57 67 59	86 63 61 60 71 57	83 65 68 61 67 46	88 72 72 63 75 50
		22 23 24 25 26 27 28	80 95 94 96 93 91	78 94 93 89 91 88	73 92 93 91 89 85	69 89 97 84 88 82	67 89 93 84 81 70	64 91 95 75 79	76 91 96 81 80 73	61 92 96 68 80 73	70 92 98 65 73 74	67 87 97 74 78 80	67 91 98 81 84 80	68 92 97 83 87 76
		29 30 31	90 95	81 82	79 70	54 70	58 68	55 67	55 73	66 74	69 70	66 74	75 81	70 93
Hoı	urly l	Means	85	85	81	78	75	73	75	73	76	76	76	78
		2 3 4 5 6 7 8 9	In. '061 '057 '073 '143 '140 '056 '146 '136	In. '077 '059 '079 '138 '148 '075 '141	In. '093 '059 '113 '140 '144 '095 '140 '151	In. '015 '097 '150 '149 '144 '127 '144 '164	In. 122 100 154 146 129 135 - 151	In.	In. 110 113 173 158 123 149 163 162	In. '091 '121 '163 '167 '132 '050 '165 '152	In. 123 129 175 167 131 158 — 152 163	In. 112 131 175 144 127 166 — 167	In. 100 121 168 174 129 160 171 146	In. '099 '126 '161 '184 '130 '160 '172 '139
e Vapour.	H.	11 12 13 14 15	131 161 218 203	130 179 226 204	157 186 220 219	190 237 205	173 197 246 197	170 191 252 214	177 202 262 192	172 227 261 193	166 239 268 192	169 229 278 187	147 230 289 161	165 227 277 174
Tension of the Vapour.	MARCH	16 17 18 19 20 21 22	128 108 103 168 142 133	127 110 115 162 159 125	112 119 119 137 193 129	138 108 123 156 156 116	113 107 140 130 205 140	120 112 117 161 229 120	111 126 146 159 210 115	117 125 154 180 193 119	137 130 159 176 217 130	152 133 148 180 220 129	155 134 163 155 196 108	168 140 161 159 200
		23 24 25 26 27 28	160 222 220 195 194 180	163 222 220 186 200 176	165 1225 1222 199 204 182	165 222 231 219 206 183	169 222 230 226 222 168	168 218 240 216 212 184	177 1218 1242 1231 1220 179	169 220 246 201 214 176	185 224 247 207 211 180	171 224 246 208 202 182	173 218 238 198 210 179	171 224 231 192 198
		29 30 31	·159 ·049	158 154	158 146	·112 ·136	129 163	126 177	152 183	164 185	167 179	-157 189	170 201	161 130
lou	rly M	leans	142	149	155	·156	164	166	171	168	177	176	173	170

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		HU	MIDITY O	F THE A	IR, AND T	ENSION (	OF THE A	ATMOSPHI	ERIC VAP	OUR.		***
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
67 64 67 59 83 94	80 83 72 48 83 94	77 93 75 62 85 91	78 97 72 68 94 95	80 97 72 56 82 97	85 97 79 59 87 95	86 93 87 66 88	96 99 87 79 99	87 74 87 81 96	83 73 78 85 100	79 81 77 97 96	80 82 73 98 95	81 80 77 70 86 87
85 66 70 93 99 87	83 74 73 95 97 86	85 80 74 95 99 82	80 73 83 94 100 78	80 85 84 99 100 79	82 82 83 100 100 79	67 81 88 87 98 100	68 79 91 88 100 97	71 82 86 88 100 97	69 89 89 86 100 97	70 100 94 89 98 96	74 } 92 89 97 98 — }	76 77 79 90 98
72 89 76 69 74 56	74 84 74 66 71 68	80 81 73 70 63 76	87 87 73 74 90 86	85 84 69 86 84 79	86 88 67 83 69 76	90 78 91 69 93 71 —	87 80 88 73 95 71 —	70 83 78 70 95 69 70	87 85 61 80 99 65 —	94 86 71 76 97 70 —	80 } 86 87 78 96 76 —————————————————————————————————	79 76 71 72 75
62 92 97 88 88 88	78 84 97 92 94 87	67 87 97 89 87 79	85 93 83 90 87 79	88 86 83 92 87 81	89 88 81 90 91 86	90 88 82 91 91 —	88 94 88 93 88 —	89 92 89 97 88 —	86 93 90 94 90 — 84	95 95 91 97 90 —	94 94 94 93 88 	77 91 92 87 86
71 63	78 70	80 72	85 73	85 78	91 73	100 76	87 89	93 90	93 75	93 75	96 75	78 76
77	80	81	84	84	84	85	87	85	85	88	87	81
In. '083 '099 '160 '150 '113 '157 '169 '140 '160 '227 '251 '167 '126 '161 '154 '164 '185 '124	In. '076 '106 '167 '117 '093 '157 '147 '127 '154 '230 '236 '152 '120 '133 '143 '148 '174 '134	In.	In. '065 '096 '157 '112 '087 '162	In.  '068 '096 '156 '101 '070 '163	In. '061 '094 '161 '098 '074 '156 '156 '122 '163 '246 '218 '136 '115 '115 '128 '139 '158 '116	In. '060 '110 '155 '097 '065 '138 '158 '126 '157 '240 '220 '161 '111 '110 '130 '148 '152 '147	In.  1064 115 170 121 1073 142 158 132 156 243 208 160 115 105 146 159 150 151	In060 -090 -163 -126 -068145 -160 -127 -153 -247 -201124 -115 -094 -138 -159 -145143	In. '061 '080 '152 '139 '069 '135 '162 '133 '151 '248 '201 '150 '114 '074 '160 '154 '133 '154	In.  1055  1080  156  153  1068  137  171  133  158  1228  197  159  114  1086  156  152  139  155	In. '060 '078 '142 '153 '066	In. '079 '099 '151 '140 '106 '136 '156 '141 '158 '220 '235 '171 '125 '116 '141 '156 '176 '131
156 224 232 203 204 171	·184 ·214 ·230 ·202 ·210 ·174	155 227 233 195 200	195 239 198 194 196 160	·204 ·225 ·194 ·196 ·191 ·163	210 220 189 194 200 168	147 •214 •214 •186 •195 •197	151 ·212 ·219 ·192 ·197 ·186	214 211 192 202 183	209 215 188 198 178	· 220 · 220 · 189 · 201 · 178	219 217 193 196 176	185 221 218 202 200 168
157 160	 160 149	158 158 148	100  131 140	163  141 140	108  146 136	147 181 126	154 158 133	148 165 132	143 165 120	157 159 123	$\begin{bmatrix} -155 \\ 159 \\ 123 \end{bmatrix}$	154 154 147
165	159	154	153	153	151	152	155	150	149	152	151	159

Vol. III.

			ним	DITY OF	THE AIR	, AND TE	INSION O	F THE AT	MOSPHEI	RIC VAPO	UR.		
Iours o Götti Tin	of Mean }	0	1 ,	2	3	4	5	6	7	8	9	10	11
	of Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{pmatrix}$	81 81 74 72	98 73 69 64	70 64 49 72	56 59 50 69	60 59 55 63	53 66 56 67	58 57 60 64	64 54 52 66	61 51 42 61	53 49 38 53	49 52 34 54	59 52 41 48
	6 7 8 9 10 <sup>a</sup>	81 85 63 88	82 82 56 75	79 71 62 54	79 70 53 63	75 63 53 68	72 66 53 50	71 65 47 50	69 66 40 46	74 76 35 45	73 68 36 49	76 75 41 53	86 80 35 58
Air.	$\begin{vmatrix} 11 \\ 12 \end{vmatrix}$	95 —	96	95 —	97	86	77	61	51	47	54	62	59
Humidity of the A	13 14 15 16 17 18 19	90 95 78 90 83 55	88 85 78 83 73 64	86 66 78 53 73 81	82 70 69 72 62 82	63 67 79 62 67 87	69 60 78 62 59 79	67 62 68 65 60 85	62 66 63 54 60 74	54 70 85 53 57 78	45 50 58 59 57 69	50 57 33 67 57 69	53 80 56 65 52 66
H	20 21 22 23 24 25	89 69 88 86 83 68	80 66 84 89 85 67	81 58 83 99 85 69	71 53 84 94 82 67	67 55 82 86 80 67	62 51 78 80 84 67	62 46 76 75 80 62	57 50 77 75 89 54	50 28 79 70 87 57	50 35 77 72 93 55	50 74 75 66 96 54	53 60 80 75 96 56
	26 27 28 29 30	56 56 88 94	50 42 90 94	38 46 91 88	43 43 88 88	44 44 85 93	44 40 86 91	46 42 85 88	47 45 88 85	51 51 91 91	49 47 93 86	47 50 94 89	47 41 96 91
Hourl	y Means	80	77	72	70	68	66	64	62	62	59	61	63
	$\begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \end{bmatrix}$	In. *131 *134 *130 *146	In. 165 140 143 150	In. 144 146 121 176	In. 154 140 127 183	In. 149 140 145	In. 137 166 153	In. 151 148 171 194	In. 164 139 145	In. 162 132 131 200	In. 140 130 112 183	In. 133 131 104 189	In. '150 '130 '115 '168
ŗ.	5 6 7 8 9 10 a	·214 ·243 ·123 ·119	·211 ·249 ·113 ·144	·209 ·243 ·132 ·120	·222 ·264 ·114 ·165	250 266 121 182	·262 ·282 ·131 ·146	261 267 113 154	266 277 102 151	273 302 091 153	·266 ·284 ·094 ·162	-279 •326 •110 •148	·297 ·316 ·091 ·141
apon	11 12	224	225	·224 —	339	329	325	•266	204	160	·162	175	•152
Tension of the Vapour. APRIT	13 14 15 16 17 18 19	134 146 133 136 160 243	134 168 132 161 191 250	132 153 132 124 216 304	134 181 123 180 228 331	116 185 158 172 257	134 174 164 172 241 295	138 170 156 182 249 300	153 182 149 162 256	122 189 218 164 239 314	106 130 146 180 249	118 162 140 172 254 308	117 204 148 158 233 307
-	20 21 22 23 24 25 26	·155 ·200 ·240 ·297 ·302 ·190	·192 ·264 ·243 ·328 ·320 ·190	·230 ·275 ·242 ·362 ·320 ·194	·223 ·295 ·250 ·302 ·314 ·172		· 252 · 337 · 242 · 303 · 341 · 181	·272 ·334 ·254 ·303 ·336 ·165	·279 ·351 ·276 ·314 ·395 ·156	·269 ·269 ·283 ·302 ·361 ·177	·270 ·291 ·375 ·308 ·398 ·162	 ·264 ·393 ·281 ·278 ·416 ·155	· 258 · 332 · 267 · 323 · 425 · 162
	27 28 29 30	152 176 273 318	174 170 275 329	150 185 277 326	196 174 291	·205 ·175 ·296 ·318	·203 ·174 ·295 ·348	208 182 305	·204 ·198 ·299 ·379	·219 ·232 ·302 ·412	·215 ·236 ·308 ·360	·224 ·254 ·305 ·378	·222 ·221 ·324 ·374
lourly	Means	.189	202	205	•217	•222	•226	•226	•229	227	•223	•228	•225

<sup>&</sup>lt;sup>a</sup> Good Friday.

			HUI	MIDITY O	F THE A	IR, AND T	TENSION (	OF THE A	TMOSPHI	ERIC VAF	OUR.		
-	12	13	14	15	16	17	18	19	20	21	22	23	Daily and
-	6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
	67 57 56 57	69 66 59 55	74 77 59 50	67 87 73 62	76 81 70 66	70 70 70 70 76	70 70 70	71 77 67	80 73 69	85 76 78	89 78 87	76 77 85	69 67 61
	81 88 36 60	84 88 49 62	83 86 52 73	89 89 63 61	88 77 57 67	95 72 55 71	95 87 73 78	94 89 68 78	90 89 71 83	91 90 69 86	84 89 62 85	82 } 87 69 89	69 82 74 58
	59	61	$\frac{76}{64}$	64	69	$\frac{71}{70}$	72	82	81	84	92	90 }	66 75
	70 90 68 68 54 94	75 95 78 76 68 57	70 98 86 73 72 70	82 99 87 75 82 74	80 96 92 75 84 84	80 94 92 81 90 78	85 77 88 93 75 90	86 83 62 79 93	96 85 68 92 — 85	90 89 76 95 78 93	87 89 76 95 81 79	92 } 90 70 95 89 63	74 77 78 71 71 78
	57 79 82 69 97 56	56 80 86 67 99 60	59 86 87 72 95 66	60 91 89 68 96 68	66 94 93 65 98 56	74 94 93 63 95 56	87 66 93 90 53 92	87 55 94 91 55 95	92 73 95 86 57 95	86 70 90 88 72 96	88 67 91 94 72 85	93 } 68 89 86 84 76	64 72 85 74 90
	51 40 95 88	59 41 95 90	60 58 91 93	66 62 94 96	61 67 93 95	67 86 94 94	64 65 90 92 95	60 64 94 95 95	57 75 95 95 96	57 73 91 94 93	63 80 90 94 91	61 } 76 93 94 98	57 61 92 92
	<b>6</b> 9	71	74	78	78	79	80	80	82	84	83	83	73
	In. 160 130 156 174 280 330 095	In. 131 127 122 162 - 277 321	In. 129 129 118 147 274 309	In. 1112 142 132 169 276 288 119	In. 121 133 136 175 278 252	In. 1115 1143 189 282 214	In. 114 118 146 303 261 218	In. 114 127 133 295 263 180 119	In. 121 121 128 283 260 171	In. 123 126 131 286 252 150 122	In. 126 127 156 — 155 244 134	In. '116 '122 '153	In. 136 133 135 193 258 251 112
	·139	136	160	132	136	145 —	194	•113	209	$\cdot \frac{-}{213}$	$\cdot _{225}^{-}$	$\left. \frac{-}{214} \right\}$	158
	139 	140 	142 -115 209 152 177 248 249	138 126 212 139 187 241 259	·143 ·121 ·200 ·140 ·180 ·231 ·248	143 	126 123 175 138 180 228	127 130 128 - 189 222	135 129 122 136  225	·133 ·139 ·134 ·134 ·182 ·236 —	·128 ·139 ·130 ·134 ·171 ·243	$\begin{bmatrix} -136 \\ 140 \\ 124 \\ 130 \\ 170 \\ 250 \\ -148 \end{bmatrix}$	184 130 167 146 171 235
	253 359 258 293 408	·243 ·343 ·251 ·278 ·320 ·169	·251 ·336 ·243 ·284 ·294 ·181	·249 ·340 ·251 ·273 ·298 ·183	· 247 · 348 · 262 · 272 · 320 · 165	230 346 268 270 329 165	- 159 213 334 277 234 320	162 198 333 283 232 339	162 219 338 266 237 339	207 268 270 265 335	147 205 248 304 260 294	148 ) 209 240 280 310 223 145 }	·235 ·312 ·267 ·289 ·336 ·166
No. of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least of the least o	·225 ·201 ·323 ·362	•207 •194 •323 •349	179 211 306 343	186 214 305 344	·172 ·221 ·300 ·348	182 252 299 340	156 178 263 292 342	154 174 286 303 341	143 182 309 300 351	144 174 309 304 342	151 176 304 304 350	145 ) 167 300 309 358	191 227 301 349
_ ;	227	.212	.212	213	.210	209	•209	.206	.209	205	.199	194	*214

		n }	0	1	2	3	4	5	6	7	8	9	10	11
Torc Tin	f Me	ean }	18	19	20	21	22	23	0	1	2	3	4	5
		1 2	86 80	85 79	84 73	85 68	77 76	75 71	80	82 82	75 80	76 83	85 83	94 79
		$\begin{array}{c c} 3 \\ 4 \end{array}$	83	$\frac{-}{72}$	78	$\frac{-}{67}$	<del></del> 63		$\frac{}{54}$	<u></u> 52	54	55	<u>-</u>	84
		5	87	72	66	76	77	75	70	65	74	70	72	80
		6	80 52	$\begin{array}{c} 63 \\ 46 \end{array}$	55 43	$rac{56}{45}$	60 56	60 60	57 65	58 67	$\begin{array}{c c} 49 \\ 73 \end{array}$	51 70	49 76	50 76
		8	89 06	85 95	82	75 95	68 93	67	67	78	69	67	71	76
		9	96 	_	94	-		96 —	95	96 —	96	96	97	94
H:	ļ	$\begin{vmatrix} 11 \\ 12 \end{vmatrix}$	66 63	$\begin{array}{c} 52 \\ 59 \end{array}$	$egin{array}{c} 52 \ 52 \end{array}$	.60 55	$\frac{60}{48}$	60 47	56 66	46 64	49 61	55 58	$\begin{array}{c} 45 \\ 63 \end{array}$	44 54
∢		13	89	88 93	90	84	83	80	72	67	59	59	56	56
the	ا بر	$\begin{vmatrix} 14 \\ 15 \end{vmatrix}$	97 97	95 94	$\begin{array}{c} 90 \\ 92 \end{array}$	83 90	79 87	$\begin{array}{c} 74 \\ 82 \end{array}$	73 78	74 88	67 89	$\begin{array}{c} 69 \\ 92 \end{array}$	64 84	62 86
	MA MA	$\begin{vmatrix} 16 \\ 17 \end{vmatrix}$	74	89	85 —	81	78	66	81	79	77	77	75	74
Humidity	' '	18 19	$\frac{86}{74}$	84 65	71 59	65 46	61	50	50	35	42	44	41	38
II n	1	20	74 74	63	59 54	$\frac{46}{50}$	53 42	$\frac{62}{36}$	62 35	63 32	58 40	59 31	64 30	65 30
		$\begin{vmatrix} 21 \\ 22 \end{vmatrix}$	$\frac{61}{75}$	56 69	65 70	$\begin{array}{c} 67 \\ 64 \end{array}$	66 64	66 60	71 53	66 56	68 49	59 47	63 47	61 67
		23	9 <b>2</b>	89	89	96	90	87	89	47	73	71	74	72
		$egin{array}{c c} 24 \ 25 \ \end{array}$	$\frac{-}{95}$	87	90	88	89	87	88	88	86	90	92	92
		$\begin{array}{c c}26\\27\end{array}$	96 92	92 80	86 73	85 67	83 66	82 63	81 61	81 57	83	80 56	80 53	81 57
		28	92	83	80	86	85	80	84	80	54 79	77	80	76
		29 30	86 92	80 94	68 93	69 92	74 89	71 87	73 87	$\begin{array}{c c} 72 \\ 84 \end{array}$	69 84	$\begin{array}{c c} 72 \\ 78 \end{array}$	71 76	77 76
		31												'
ourl	y M	Ieans	83	77	74	73	72	69	70	68	68	67	67	69
		$\left( egin{array}{c} 1 \\ 2 \\ 3 \end{array} \right)$	In. •346 •313	In. •348 •325	In. •347 •331	In. •350 •335	In. 340 390	In. :336 :388	In. •348 •366	In. 356 395	In. •338 •392	In. •329 •392	In. •347 •392	In. •375 •373
		4	223	285	363	339	350	331	-329	•308	•322	327	345	.376
	ĺ	5 6	·263 ·336	·276 · <b>2</b> 72	$^{:213}_{:245}$	377 $246$	·332 ·241	`312 `236	330 217	`356 `224	·415 ·199	$^{\circ}_{222}^{417}$	.410 .216	398 224
		7	`180 `312	·183 ·362	.180	192	•232	265	.301	*314	'316	'312	*341	*341
	ĺ	8 9	404	404	·371 ·413	·374 ·404	·354 ·400	364 402	·361 ·404	·393 ·419	'372 '419	*338 *419	·345 ·430	*353 *128
		10 11	135	$\cdot \overline{112}$	.112	·13 <b>3</b>	·163	· <del>-</del>	· <del>-</del>	124		168	·144	140
		12 13	$^{`180}_{`245}$	$\overset{\boldsymbol{\cdot}}{237}^{188}$	·187 ·290	114	204	·218	.321	.308	'316	*302	327	'310
ਲੋ <b>ਂ</b> >		14	*398	•438	457	.346 .485	*388 *485	.412 .436	·407 ·438	·390 ·453	386 437	*389 *401	·382 ·446	389 402
File		15 16	·353 ·249	$\begin{array}{c} 343 \\ 305 \end{array}$	·328 ·353	*343 *391	·358 ·390	348 391	·366 ·419	$^{ullet}_{ullet}447 \\ ^{ullet}_{421}$	'412	454	·462 ·408	·430 ·379
Tension of the vapour.	됩	17 18	 •353	343	284		<u> </u>				405	397	_	<u> </u>
TISTO		19	176	176	172	274 $151$	$^{\circ}_{180}^{256}$	$\overset{\boldsymbol{\cdot}221}{\cdot_{228}}$	$^{\circ}219 \\ ^{\circ}224$	·145 ·236	·168 ·237	·175 ·251	$^{\circ}162$ $^{\circ}274$	144 265
1		20 21	·208 ·167	$\overset{.215}{_{162}}$	$^{:214}_{:195}$	$\begin{array}{c} 229 \\ 204 \end{array}$	$^{\cdot 224}_{\cdot 209}$	$^{\circ}_{212}$	•209	194	.250	.193	.189	·183 ·215
		22 23	·200 ·329	$\cdot_{222}$	238	•261	274	·283	$^{\circ}229$ $^{\circ}238$	$^{ullet}_{249}$	·237 ·230	·220 ·208	$^{226}_{210}$	269
	- }	24		*366 —	· 397 —	·442 —	·477 —	*460 	·540 —	·519	.219	470	·472	*450 —
		$\begin{bmatrix} 25 \\ 26 \end{bmatrix}$	·495 ·556	$\begin{array}{c} 529 \\ 562 \end{array}$	.584 .614	611 638	.620 .618	.594 .614	653	662	676	647	618	.639
	1	27	562	<b>'</b> 610	•592	551	535	.614 .541	$\begin{array}{c} \cdot 652 \\ \cdot 522 \end{array}$	.709 .493	$^{\circ}674$ $^{\circ}482$	.644 .484	·613 ·485	.616 .538
	-	28 29	.454 .395	·473 ·419	·485 ·435	.529 .476	·592 ·536	·535 ·487	$\begin{array}{c} 579 \\ 524 \end{array}$	607 514	·572 ·504	·522 ·500	*518 *482	·506 ·449
1	- [.	30	462	450	·486	.518	625	643	659	·655	630	605	·585	.286
	- (	31	!						1	000	000	000	000	

			HU	MIDITY (	OF THE A	IR, AND	TENSION	OF THE	ATMOSPH	ERIC VAI	POUR.		
-	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
	6	7	.8	9	10	11	12	13	14	15	16	17	Means.
	91 83	91 85	94 90	90 90	93 90	93 89	96	94	94	94	91	86	87
	52	<del></del> 61	$\frac{}{72}$	 75	73	79	76 83	83	86 83	87 83	$\frac{82}{84}$	83 } 87	81 70
	81	80	86	90	89	88	91	80 83	85	85	84	85	80
	$\frac{52}{80}$	$\begin{array}{c} 62 \\ 82 \end{array}$	60 85	59 87	70 . 86	68 84	68 83	70 83	69 89	68 91	73 93	66 91	61 73
	79	82 96	84 94	83 94	88	90	91	90	92	93	94	96	82
	94		_		96	96 —	54	58	58	65	65	$\frac{-}{63}$ }	87
	$\frac{45}{71}$	54 68	60 82	67 87	68 80	61 81	$\begin{array}{c} 63 \\ 82 \end{array}$	67 86	67 88	64 90	62 88-	70 87	58 70
	57	65	73	75	68	77	85	89	94	97	95	96	77
Ì	71 66	69 73	77 76	77 79	$\frac{72}{82}$	76 84	78 89	83 88	87 86	95 88	96 89	96 84	79 85
	77 —	78	85	85	90	91	$\frac{-}{78}$	<del></del> 79	91	92	<del></del> 89	$\frac{-}{86}$ }	82
	39	42	50	55	57	59	59	72	72	74	76	78	58
	69 37	49 45	$\frac{62}{54}$	$\begin{array}{c} 83 \\ 62 \end{array}$	87 56	88 68	81 60	77 61	70 73	71 70	$\begin{array}{c} 72 \\ 84 \end{array}$	70 80	67 53
	63 66	69 69	74 58	82 57	83 59	· 86 56	86 77	87 78	87 90	85 88	85 94	83 95	72 67
	74	74	82	85	85	85					-	<u>}</u>	84
	<del></del> 88	90	$\frac{}{92}$	$\frac{-}{97}$	98	98	92 98	95 95	96 95	97 95	99 95	$\begin{array}{c c} 92 & \\ 95 & \\ \end{array}$	92
	80 66	87 58	96 71	90 84	93 84	94 91	95 95	95 91	94 92	95 91	95 90	96 91	88 74
	75	65	65	78	90	83	81	88	93	91	88	91	82
	76 76	79 78	81 80	77 89	77 86	76 89	77	86 —	88 —	91	94	94	78 87
							92	92	93	91	92	92 }	87
	70	71	76	80	81	82	81	83	85	86	87	86	76
	In. 367	In. 362	In. 366	In. 367	In. 391	In. 362	In. •361	In. •354	In. 354	In. 355	In. 350	In. •332	In. 353
	'401 —	362	326	302	·291	·304 —	$\cdot \overline{}_{222}$	$\frac{-}{228}$	223	$\cdot {220}$		$\cdot _{208}^{-}\}$	320
	·302 ·397	· 293 · 368	·296 ·359	·274 ·338	·257 ·336	·252 ·337	·255 ·349	·229 ·308	·225 ·311	·217 ·311	$^{216}_{303}$	·217 ·344	·289 ·340
	<b>'214</b>	227	199	194	214	195	195	207	199	.181	.190	167	•219
,	*349 *377	340 374	·334 ·365	·312 ·363	·294 ·390	·275 ·393	283 397	·288 ·394	298 392	·313 ·394	·306 ·383	·318 ·397	$\begin{array}{c} 286 \\ 372 \end{array}$
Ì	'437	*448	454	.457	•462	*464 —	- 149	146	 134	· <del>1</del> 39	.133	$\cdot _{131}^{-}\}$	•342
- (	146	165	153	175	169	156	159	172	172	·169	163	191	152
	·326 ·396	·279 ·351	$\begin{array}{c} \cdot 257 \\ \cdot 355 \end{array}$	·251 ·340	$^{\circ}225}_{\circ}374}$	·210 ·428	·209 ·427	·195 ·460	·199 ·450	·209 ·439	·226 ·403	·233 ·396	·241 ·378
	·386 ·303	·379 ·304	·404 ·297	·404 ·283	·380 ·286	384 287	·467 ·276	·477 ·267	·491 ·263	$^{\cdot 433}_{\cdot 262}$	·432 ·260	·364 ·250	$^{\cdot 428}_{\cdot 333}$
	'384	363	339	309	308	312			_	<u> </u>		— 1	364
	·141	132	144	150	$\frac{-1}{146}$	148	345 147	·345 ·161	389 152	·395 ·158	·375 ·155	·359 } ·160	.189
	<b>'264</b>	179	•203	204	•204	205	197	·195 ·187	184 197	.186 .183	191 179	180 181	207 205
	206 220	211 200	·222 ·195	·217 ·194	*206 *194 .	·218 ·193	187 188	187	180	.169	·168	167	<b>.</b> 198
	$^{\circ}264 \\ ^{\circ}426$	·266 ·401	$^{ullet}_{224}$	·216 ·403	·217 ·400	·216 ·400	·272	·256	·287	·285 —	*305 —	309	·250
	-						334	*336	*327	·367 ·506	·422 ·468	·424 } ·506	·420 ·575
	.651 .557	.636 .559	·583 ·540	·562 ·495	·550 ·490	·532 ·493	·511 ·478	·488 ·491	·489 ·484	•500	•491	502	•566
	.549 .555	·490 ·475	·465 ·418	·459 ·414	·460 ·437	·420 ·405	·426 ·391	·400 ·390	·389 ·369	·394 ·331	*384 *341	398 347	·485 ·469
	<b>.</b> 446	454	429	•402	•403	•403	'418	455	*443	459	470	.474	•457
	*586 —	·512 —	·480 —	*513 —	·508 —	508•	$\frac{-}{423}$	· <del>4</del> 08	•402	415	409	$-\frac{1}{437}$	*521
	·371	351	.339	.331	*330	*327	.310	.309	.308	307	.305	307	*345

				HUMI	DITY OF	THE AIR	, AND TE	NSION OF	THE AT	MOSPHER	IC VAPO	UR.		
Iours o Götti Tin	f Mea ngen ne.	an }	0	1	2	· 3	4	5	6	7	8	9	10	11
Iours o Tore Tir	onto	an }	18	19	20	21	22	23	0	1	2	3	4	5
		1 2 3 4 5 6 7	94 93 94 96 81 82	87 92 86 92 81 77	83 93 78 93 90 78	86 89 76 93 92 66	97 92 90 88 91 67	92 92 82 91 90 62	85 87 73 83 88 58	85 87 74 80 82 60	87 84 62 84 81 60	84 82 71 86 86 69	78 75 74 82 87 59	80 77 71 91 87 41
ne Air.		8 9 10 11 12 13	87 70 81 76 61 79	61 69 75 74 57 74	70 63 70 73 53 75	64 74 56 71 53 70	60 62 66 70 62 73	61 54 73 76 64 75	62 58 73 80 64 70	64 61 72 82 63 66	61 59 64 81 62 71	60 62 67 75 59	61 63 65 80 59 88	64 54 69 87 56
Humidity of the Air.	HUDP	14 15 16 17 18 19 20	90 77 83 91 94 78	83 73 77 94 93 79	71 67 71 88 91 77	68 64 72 85 94 78	74 65 69 84 88 79	73 65 66 79 87 77	77 72 70 81 78 75	73 71 71 80 64 68	72 70 70 93 59 68	63 69 68 87 48 71	70 75 73 90 43 67	50 72 73 84 49 68
		21 22 23 24 25 26 27 28	75 62 61 49 66 86	71 60 69 45 66 84	71 58 55 49 67 81	63 52 49 46 65 76	56 48 44 36 58 71	44 43 38 37 57 70	50 34 31 35 57 66	40 42 34 36 56 71	35 42 30 53 54 67	40 40 46 54 49 69	45 40 26 54 67 72	47 35 35 57 60 71
	12	29 30	$\frac{\overline{94}}{84}$	94 77	93 73	$\frac{-}{87}$	82 74	78 67	77 65	70 64	$\frac{\overline{74}}{67}$	76 59	69 59	69 58
Hourl	у Ме	eans	80	77	74	72	71	69	67	66	66	66	66	64
		1 2 3 4 5 6 7 8 9 10	In. '474 '538 '415 '492 '355 '240 '285 '257 '323 '359	In. '514 '523 '438 '539 '348 '266	In. 1518 1553 1436 1532 1371 1287 1350 1344 1416 1436	In.  509  592  474  535  381  277  349  466  353  481	In.  523  574  505  535  377  287   346  418  418	In.  556  574  507  527  368  276  378  369  512  496	In.	In.  '597 '529 '430 '562 '377 '265 '393 '395 '547 '451	In. '602 '521 '415 '522 '381 '283 '376 '408 '520 '463	In. '579 '509 '485 '450 '452 '279 '375 '433 '562 '475	In. '600 '469 '494 '442 '413 '277 '403 '438 '543 '496	In. '626 '480 '522 '490 '418 '202 '412 '373 '521
	JUNE.	12 13 14 15 16 17 18	·238 ·380 — ·464 ·393 ·367 ·494 ·617	·236 ·404 ——————————————————————————————————	238 409  455 408 454 520 618	· 264 · 427 — · 515 · 426 · 512 · 603 · 645	*331 *442 	*319 *442  *590 *427 *511 *650 *730	*315 *418 	*315 *393 *606 *485 *590 *737 *617	*318 *433 	*310 *424  *520 *481 *606 *625 *475	321 379  585 516 621 785 425	314 356  455 510 588 731 483
T		20 21 22 23 24 25 26 27 28	*389 *310 *293 *316 *305 *387 *485	392 	*388 	397 	·408 	388 	377 	· 360 	·359 ·235 ·354 ·287 ·551 ·504 ·466	· 353 · 266 · 332 · 415 · 534 · 486 · 469	335 	· 336  · 290 · 284 · 331 · 537 · 533 · 499
	2	29 30	.570 .575	.563 .589	.582 .599	· 585 · 615	631 645	623	624 602	-609 -595	·626 ·629	 649 557	-623 -565	·612 ·579
Hourl	у Ме	eans	*397	•419	•433	452	•468	•469	•467	•469	•470	•465	•470	•462

		HU	MIDITY (	OF THE A	IR, AND	TENSION	OF THE	ATMOSPH	ERIC VAI	POUR.		
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
85	89	91	87	90	93	91	92	92	95	91	94	89
78	82	62	73	84	88	91	91	94	91	93	92	86
70	76	81 96	87	94	93	93	93	93	94	94	96	83
91 88	92 88	96 79	96 86	99 75	97 74	94 71	$\begin{array}{c c} 84 \\ 72 \end{array}$	87 80	85 82	82 83	79 82	89 83
47	57	77	80	86	89			_		[	. 48	71
	<del></del>	<del></del> 85			_	84	84	72	75	87	90 }	
72 64	$\frac{77}{75}$	71	84 83	80 84	77 78	73 82	76 83	$\begin{array}{c} 82 \\ 83 \end{array}$	81 88	79 82	79 90	$72\\71$
69	72	76	85	80	82	84	91	82	82	81	79	$7\overline{5}$
73	77	88	89	88	89	60	53	57	62	64	66	75
61	69	69	73	71	74	72	67	68	79	82	85	66
67	73	75	83	86	81	92	92	$\frac{-}{92}$	93	92	$\frac{-}{92}$ }	79
49	52	55	63	64	67	68	76	74	77	84	84	70
79	77	82	86	86	.83	83	81	88	88	88	88	77
78 85	. 80 90	78 89	88 89	91 90	91 96	91 97	89 97	91 96	90 95	89 97	94 96	80
58	75	78	87	83	81	85	87 87	96 89	95 86	79	96 81	90 77
71	72	69	77	79	81						~ !!	76
_						84	86	84	78	78	$\frac{-}{72}$ }	
64 40	67 45	74 41	71 43	79 44	84 40	85 54	78 57	69 58	64 66	63 66	60 61	$62 \\ 49$
40	55	53	48	54	63	48	49	48	47	47	47	47
71	50	53	56	55	54	54	55	56	55	55	74	52
66 68	67 74	71 77	74 84	78 86	76 89	83	77	75	81	85	89	69
_	/ <del></del>	"	- 04		-	91	92	94	95	93	$\frac{-}{95}$	80
68	78	83	85	87	86	85	79	85	88	92	90	82
64	63	78	73	73	75	82	85	86	87	90	87	73
68	72	74	78	79	80	80	79	80	81	81	82	74
In.	In.	In.	In.	· In.	In.	In.	In.	In,	In.	In.	In.	In.
570	•546	•534	•499	515	·516	<b>.</b> 498	483	477	•491	463	490	532
437	·398	349	368	368	353	*349	$^{\circ}338 \\ ^{\circ}464$	356 464	$\frac{328}{450}$	320 450	`324 `470	·443 ·464
·490 ·490	$\begin{array}{c} 451 \\ 501 \end{array}$	·441 ·465	·473 ·465	·483 ·485	·473 ·476	*464 *460	415	400	385	368	353	476
'419	395	326	289	268	257	241	238	239	•235	230	•223	332
224	$\cdot 242$	•254	•240	235	.530						}	•261
•421	·389	*339	.300	278	258	$^{\circ}_{242}$	$\begin{array}{c} 310 \\ 237 \end{array}$	$\frac{248}{240}$	$^{\cdot 251}_{\cdot 229}$	·253 ·224	$^{\cdot 245}$ $^{\cdot }$	*321
•427	·409	.309	320	•296	281	282	268	268	270	255	279	<b>.</b> 344
475	$^{\cdot}465$	420	423	'402	387	*381	.380	354	360	337	340	·431
·459 ·322	*433	'410	381	*342	$\frac{372}{280}$	·258 ·278	$^{:216}_{:312}$	$\overset{\boldsymbol{\cdot}}{224}$	·228 ·346	`231 `343	·229 ·350	391 302
362	$^{\circ}324$ $^{\circ}376$	·291 ·372	·279 ·367	·273 ·359	328		-			1	— ı	400
			·			409	422	420	424	422	441	
434	405	392	417	392	398	395 387	·429 ·360	·419 ·361	·429 ·323	·433 ·317	$\frac{390}{321}$	·476 ·424
.530 .601	·447 ·543	435 499	·430 ·476	402 465	387 453	468	456	438	452	456	475	505
763	751	609	600	589	591	•575	•553	•529	535	$\cdot 549$	•545	623
'513	521	532	537	*514	•489	467	•447	443	425	.399	*394	*536
'341	330	319	*325	328	*320	$\frac{-}{294}$	304	•294	$\frac{-}{273}$	$\cdot \frac{-}{273}$	$\left\{ \begin{array}{c} -\frac{1}{280} \end{array} \right\}$	*340
357	*361	362	351	366	360	.330	320	290	•269	266	256	*309
.330	.330	<b>1</b> 267	261	254	217	287	•292	•293	307	304	*293	306
353	440	353	308	320	343	288	·292 ·332	·277 ·330	·272 ·330	·264 ·330	·272 ·414	323 399
592	·410 ·506	393 508	*393 *515	355 512	·344 ·503	334 512	480	453	468	·461	•440	481
473	470	473	498	495	506		· —		<u> </u>	_	- 1	.510
<u> </u>		, —	_		<u> </u>	540	541	539	528 512	·546 ·518	·565 } ·523	.575
585	'605 '554	574 600	·547 ·549	·529 ·524	530 525	·532 ·524	· 526 · 509	·533 ·503	·489	518	523	567
'619	001											

				HUM	IDITY OF	THE AI	R, AND T	ENSION C	F THE A	TMOSPHE	CRIC VAPO	our.		
Hours Göti Ti	of M tinge ime.	Jean en	0	1	2	3	4	5	6	7	8	9	10	11
To	of M ront ime.		18	19	20	21	22	23	0	1	2	3	4	5
		$\begin{pmatrix} 1\\2\\3\\4\\5 \end{pmatrix}$	81 82 93 82	74 76 83 80	75 71 74 80	68 72 67 76	71 70 65 75	66 59 54 71	72 69 57 72	74 64 54 73	71 69 62 66	71 73 54 71	74 65 54 65	85 67 58 67
		6 7 8 9 10 11	85 84 67 87 81 88	83 75 76 75 74 87	67 63 92 64 73 87	74 62 90 68 71 81	88 47 88 68 57 66	58 42 78 83 51 68	57 38 74 80 56 57	39 56 70 90 78 57	38 61 64 80 67 72	39 30 63 80 63 81	39 33 63 69 57 81	40 29 67 66 50 75
Humidity of the Air.	JULY.	12 13 14 15 16 17 18	91 87 89 86 87 89	94 94 76 87 73 80	81 92 73 82 66 76	76 64 69 90 59 72	63 67 63 61 58 69	56 61 62 63 60 67	54 56 60 57 55 63	74 59 63 51 57	59 61 75 46 50 58	61 65 69 50 52 55	71 55 79 46 50 55	61 58 64 47 57 56
Har		19 20 21 22 23 24 25 26	80 91 91 91 93 78	81 85 89 84 90 73	81 80 89 71 94 69	77 66 81 59 94 58	70 67 82 61 92 53	68 63 78 69 91 49	64 61 70 65 95 45	60 61 65 64 91 48	65 60 67 52 87 59	61 63 68 54 79 60	60 61 70 49 88 58	62 64 73 50 84 61
		27 28 29 30 31	89 82 95 94 83	83 83 87 92 79	77 77 81 87 77	73 70 80 85 70	70 67 76 79 60	68 65 77 76 57	55 68 72 81 56	51 69 71 82 48	48 70 77 63 48	49 67 71 59 46	49 54 68 64 47	46 72 65 62 56
Iour	ly M	<b>I</b> eans	86	82	78	73	69	65	63	64	63	61	60	61
		$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{pmatrix}$	In. 5559 495 501 390	In. '582 '491 '518 '511	In. '636 '476 '524 '589	In. '595 '486 '510 '585	In. 630 503 500 626	In. '604 '464 '427 '639	In. ·673 ·591 ·472 ·668	In. '639 '567 '442 '631	In. '639 '582 '510 '625	In. '603 '601 '446 '603	In. '620 '561 '427 '610	In639 -564 -472 -580
ır.		6 7 8 9 10 11 12	*488 *433 *367 *486 *726 *621	544 •433 •431 •528 •748 •751	·470 ·388 ·503 ·567 ·849 ·775	· 592 · 402 · 536 · 652 · 848 · 781	543 430 580 625 775 773	*528 *327 *545 *665 *738 *776	*535 *306 *574 *562 *880 *695	386 450 590 583 708 697	395 485 589 626 833 730	*390 *269 *607 *653 *872 *693	*389 *294 *629 *654 *809 *716	·403 ·256 ·603 ·655 ·583 ·753
Tension of the Vapour.	JULY.	13 14 15 16 17 18	·422 ·332 ·317 ·352 ·305 ·391	·472 ·410 ·315 ·438 ·355 ·456	·457 ·442 ·321 ·438 ·410 ·485	·504 ·333 ·332 ·517 ·385 ·496	·446 ·364 ·295 ·369 ·411 ·495	·423 ·341 ·310 ·360 ·438 ·510	·442 ·336 ·323 ·350 ·405 ·487	638 345 346 323 418 465	·495 ·366 ·416 ·319 ·395 ·477	*551 *378 *365 *334 *369 *453	642 312 470 319 351 465	*508 *307 *380 *333 *382 *467
Ten		20 21 22 23 24 25 26	*504 *553 *539 *473 *598 *459	*567 *587 *552 *529 *576 *486	.560 .608 .564 .489 .564 .513	.599 .559 .580 .482 .578 .490	.600 .580 .572 .570 .570 .470	584 558 567 600 573 458	556 569 585 611 585 430	545 544 564 610 555 464	597 527 544 524 574 596	579 537 583 512 588 576	568 504 559 521 606 562	-556 •498 •567 •492 •590 •577
		27 28 29 30 31	508 458 662 730 501	.558 .513 .712 .781 .490	.571 .544 .673 .809 .497	.561 .553 .727 .818 .490	· 557 · 577 · 729 · 792 · 469	· 523 · 559 · 758 · 756 · 446	·441 ·557 ·783 ·787 ·476	·409 ·569 ·734 ·674 ·418	399 595 719 722 429	 •415 •585 •740 •685 •417	·416 ·559 ·736 ·667 ·436	382 618 684 658 509
lourly	у Ме	eans	·488	•531	545	*555	*550	•536	•544	•530	*545	•533	•533	•519

	-		HU	MIDITY O	F THE A	IR, AND T	rension (	OF THE A	TMOSPHI	ERIC VAP	OUR.	<del></del>	
	12	13	14	15	16	17	18	19	20	21	22	23	Daily and
Ì	6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
	84 71 87 74 36 29 73 69 63 83 74 60 66 59 65 72 65 73 57 80 61 54 74	86 76 75 85 43 35 74 78 64 87 — 82 65 65 59 66 77 — 81 80 78 78 63 — 59 84	92 84 83 82 50 52 69 79 80 87  88 69 81 70 71 87  83 75 87 79 84 63  75 92	93 91 87 82 59 55 80 90 85 87 87 87 87 87 87 81 90 81 86 59 79 94	94 89 86 82 64 55 71 90 91 85 88 73 89 91 84 92 86 80 60 77 94	85 93 84 76 70 60 73 89 89 87 92 75 82 79 76 88 92 86 86 86 86 86 86 87 94	95 93 86 ——————————————————————————————————	90 93 85 —92 79 58 85 89 93 —88 75 88 77 —74 94 89 91 84 89 91 84 89 91 89 91 89 91 89 91 89 91 89 91 89 91 89 91 89 91 91 91 91 91 91 91 91 91 9	88 92 81 91 81 61 80 94 84 — 93 85 87 83 85 76 91 92 92 87 88 — 92 85 96	87 92 79 90 84 61 91 89 87 98 88 87 85 84 79 91 95 92 82 90 93 82 93	88 96 79 88 87 72 93 92 89 87 87 89 86 84 86 87 93 94 96 87 91 91 82 98	86 95 81 	81 79 74 79 64 55 77 81 74 82 78 73 75 71 68 73 75 71 83 73 88 68 68 69 81
	79 65 63	86 67 65	86 70 69	93 71 75	91 72 68	98 69 67	96 81 65	96 83 67	97 82 77 86	96 79 79 87	97 82 82 82	97 83 84 	85 76 66 
	66	72	77	81	81	81	85	85		In.	88 In.	In.	In.
	In.	In.	In.	In. 573 474 413 518 — 386 323 492 636 600	In. '552 '445 '386 '524 '382 '315 '460 '647 '607	In. '522 '430 '368 '485 '393 '290 '459 '674	In. '535 '444 '364 '568 '395 '315 '473 '683 '649	In. '570 '464 '359 '545 '397 '298 '492 '649 '595	In. '550 '463 '357 '542 '399 '305 '478 '670 '562	16. 1529 1446 1346  1524 1372 1308 1455 1618 1572	· 517 · 449 · 346 · - · 504 · 394 · 332 · 449 · 639 · 573	· 498 · 446 · 351 · 475 · 408 · 373 · 439 · 633 · 562	.585 .504 .438 .563 .426 .340 .524 .630 .689
	** 697	. 663 	· 709	· 677 · 468 · 295 · 395 · 312 · 321 · 422 — · 484 · 521 · 479 · 539 · 539 · 424 — · 377 · 564 · 746 · 538	· 697 · 465 · 265 · 350 · 287 · 325 · 416 · 468 · 517 · 458 · 543 · 496 · 393 · 354 · 535 · 743 · 505	·687 ·462 ·279 ·340 ·276 ·329 ·395 — ·470 ·512 ·422 ·534 ·480 ·394 — ·346 ·506 ·737 ·469	·489 ·423 ·283 ·340 ·285 ·323 ·426 ·470 ·540 ·425 ·510 ·486 -499 ·363 ·547 ·724 ·537		·443 ·293 ·289 ·331 ·275 ·309 ·420 ·475 ·483 ·409 ·548 ·486 ·495 ·397 ·582 ·697 ·518			$ \begin{array}{c}  -422 \\  -279 \\  -273 \\  -307 \\  -265 \\  -327 \\  -452 \\  -4482 \\  -4482 \\  -4483 \\  -4565 \\  -4565 \\  -4565 \\  -418 \\  -586 \\  -662 \\  -501 \\  \end{array} $	*646 *448 *320 *347 *332 *359 *456 *530 *530 *509 *548 *492 *432 *565 *717 *636
	*521	478	437	424	365	357	*339	371	.390	392	408	415	*436
	*523	<b>.</b> 519	·498	·480	*464	453	•461	•454	<b>.</b> 451	·438	•442	•443	501

				HUM	AIDITY OI	F THE AI	R, AND T	ENSION (	OF THE A	.TMOSPH1	ERIC VAP	OUR.		
G	rs of M öttinge Time.	fean }	0	1	2	3	4	5	6	7	8	9	10	11
П	rs of Moronto Time.	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
		$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	79	67	55	49	49	56	58	61	56	55	53	52
		3 4 5 6 7 8	89 74 91 84 74 82	87 71 79 73 71 78	81 75 76 64 70 71	75 66 78 59 70 87	71 72 71 67 83 87	70 62 69 63 64 -	67 60 68 61 61 83	68 61 64 58 60 78	59 60 63 60 64 76	52 60 61 56 59 74	46 61 60 60 57 80	51 63 60 53 62 84
of the Air.	JST.	9 10 11 12 13 14 15	87 70 96 89 75 88	86 60 90 90 74 82	82 56 83 85 63 80	75 62 76 80 53 77	67 60 77 76 67 72	69 62 72 75 67 71	64 66 64 63 68 64	59 63 61 62 67 60	58 64 59 89 60 65	56 61 58 78 64 57	56 61 59 75 61 57	53 61 54 75 65 62
Humidity o	AUGU	16 17 18 19 20 21 22 23	88 80 91 92 93 87	85 73 72 94 95 86	77 66 69 95 89 85	75 67 59 95 87 82	67 70 59 96 82 89	83 71 57 94 80 78	60 69 60 93 83 81	60 68 61 82 82 85	58 69 60 88 83 79	51 70 66 82 77 80	50 68 71 92 71 83	50 65 75 91 71 81
		25 24 25 26 27 28 29 30	60 83 92 91 90 96	56 80 97 88 89 92	58 78 84 82 79 88	60 74 77 81 79 85	60 72 73 79 82 79	72 73 80 81 78	69 75 71 76 81 80	71 72 65 77 81 89	63 66 62 75 74 88	64 67 59 71 79 89	60 68 53 70 80 86	64 69 59 70 89 87
	'	31	90	88	87	85	78	79	74	71	65	65	67	93
Iou	rly Me	eans	85 -	81	76	74	73	72	70	69	68	66	66	68
		$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	In. •441	In. '433	In. 396	In. 387	·407	.470	·507	In. 531	In. •495	In. •496	In. •468	In. 452
		3 4 5 6 7 8 9	·449 ·455 ·638 ·478 ·457 ·518	537 508 631 482 489 512	.588 .608 .680 .495 .528 .502	.601 .599 .773 .552 .595	*603 *675 *756 *701 *748 *550	·625 ·656 ·769 ·676 ·636 ·593	628 678 764 559 632 654	·688 ·697 ·774 ·637 ·642 ·627	·613 ·693 ·768 ·624 ·676 ·618	.534 .699 .738 .598 .613 .603	·485 ·713 ·709 ·597 ·569 ·641	·493 ·731 ·709 ·566 ·609 ·626
rension of the Vapour.		10 11 12 13 14 15	*556 *306 *416 *613 *442 *445	554 311 494 670 467 516	557 339 560 689 479 569	542 413 600 688 454 634	539 432 683 743 603 660	*579 *445 *647 *747 *610 *665	530 507 600 691 620 622	·512 ·488 ·603 ·711 ·584 ·593	524 495 594 703 546 662	.531 .490 .605 .703 .589 .616	513 474 584 717 596 616	·459 ·474 ·523 ·735 ·587 ·634
rension or	AUG	17 18 19 20 21 22	.464 .288 .380 .492 .426 .512	·484 ·291 ·391 ·510 ·526 ·517	·488 ·286 ·387 ·521 ·590 ·515	506 331 346 530 637	*495 *386 *348 *548 *612 *562	*466 *406 *367 *557 *607 *538	· 453 · 393 · 376 · 568 · 637 · 624	·434 ·395 ·388 ·537 ·621 ·616	· 447 · 401 · 412 · 578 · 637 · 625	390 427 - 416 539 631 600	381 410 435 614 564 592	364 397 442 616 553
	2 2 2 2 2 2 2 2	24 25 26 27 28 29	·273 ·364 ·409 ·459 ·495 ·506	286 423 562 537 525	323 486 587 572 520 652	378 508 576 634 539 683	398 511 552 655 646 665	·434 ·526 ·552 ·668 ·649 ·698	·449 ·526 ·590 ·644 ·690 ·703	·460 ·520 ·543 ·626 ·705 ·705	·426 ·511 ·514 ·618 ·670 ·551	·442 ·534 ·459 ·579 ·680 ·566	·417 ·524 ·435 ·562 ·649 ·566	·453 ·514 ·448 ·543 ·663 ·590
	\3		•548	555	· <del>67</del> 5	695	679	·715	•711	· <del>7</del> 08	656	· <del>66</del> 3	•670	•694
url	у Меа	ıns	455	492	523	.549	•583	•589	•591	•590	•579	•567	558	555

		HU	MIDITY (	OF THE A	IR, AND	TENSION	OF THE A	ATMOSPH	ERIC VAI	OUR.		
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
57 48 71 55 57 67	63 	66 61 83 59 60 75	63 	64 	69 78 90 64 78 72	91 77 89 75 76 80	89 64 88 75 68 78	93 80 87 64 66 79	93 80 90 73 69 80	91 82 93 79 77 83	92 } 81 93 80 73 78	68 70 75 69 65 72
90 	52 76 67 57 74 77	93 55 88 65 66 80 77	93 	93 	92 	89 62 91 80 71 84 —	92 64 92 74 75 87 —	96 68 93 80 70 87	86 68 96 84 67 87 —	86 68 93 86 70 87 —	85 } 71 90 90 69 86 — 87 }	85 65 75 73 74 74
51 71 79 91 83 85 — 69 75 60 79 84	64 81 83 93 86 88  81 85 83 80 90	67 91 84 95 91 91 	72 85 89 97 90 90 — 88 90 81 83 93	73 87 89 96 90 92 — 87 88 84 80 93	76 90 89 97 94 93 — 88 91 85 81 93	76 90 89 96 92 74 88 88 86 77 94	86 90 89 96 95 — 83 89 97 84 75 95	84 89 70 96 95 — 82 81 94 83 76 96	81 88 94 94 95 — 76 81 92 88 88 96	80 89 91 95 89 — 66 85 96 87 89	81 86 90 96 89 60 85 95 89 90 94	71 78 77 93 87 82 74 81 78 80 87
85 	91 81	92 	96  85	95 — 83	96  85	92 91	90 93	90 94	90	92 91	$\frac{-}{92}$ }	89 83
70	75	79	. 81	82	84	84	85	84	85	86	85	75
In. 467 —436 -741 -648 -583 -603 -616 —392 -559 -551 -725 -575 -644 -356 -396 -464 -603 -589 -547	In. 443 —497 676 616 397 548 593 — 347 491 544 500 570 636 — 386 375 466 565 577 530	In	In.	In.	In. 404	In. ————————————————————————————————————	In. ————————————————————————————————————	In	In	In. ————————————————————————————————————	In	In.  '438  '497 '635 '647 '512 '559  '580 '428 '433 '556 '590 '516 '577 '394 '356 '438 '532 '570
. 443 . 516 . 427 . 550 . 620 . 593 . 641	530 -411 ·530 ·473 ·495 ·609 ·557  ·624	398 398 516 468 486 595 547 —	364 ·504 ·432 ·458 ·568 ·540 — ·596	362 503 438 446 553 519  575	360 ·499 ·441 ·445 ·557 ·540 — ·532	·405 ·353 ·486 ·443 ·449 ·535 — ·547 ·525	*398 *340 *493 *419 *427 *519  *491 *527	388 316 472 408 431 506 	364 316 453 425 474 490 - 479 495	**314 **322 **446 **412 **472 **488 ** **495 **544	·280 } ·336 ·421 ·420 ·479 ·471 — ·543 ·545	378 378 491 476 530 581 574
		•511	•499	•490	*486	•471	457	•446	•440	•441	*436	•515

			HUM	MIDITY O	THE AL	R, AND T	ENSION (	OF THE A	TMOSPHI	ERIC VAP	OUR.		
Göttin Tim	ie.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Toron Tim		18	19	20	21	22	23	0	1	2	3	4	5
	$\left(\begin{array}{c}1\\2\\3\\4\\5\\6\end{array}\right)$	93 94 95 94 98	92 93 94 93 95	82 92 87 86 94	79 86 92 88 89	78 81 89 89 89	57 79 88 89 89	52 81 89 87 88	58 74 94 87 84	62 74 97 81 85	60 75 97 83 88	62 76 94 84 86	73 81 97 85 89
Air.	7 8 9 10 11 12	96 84 59 59 90 95	97 81 56 62 90 93	92 78 59 65 81 87	85 73 58 52 80 81	85 71 60 51 80 82	83 70 58 47 80 77	82 68 50 44 78 86	75 70 55 47 75 84	72 79 51 53 72 86	71 62 49 54 77 78	72 57 47 56 83 78	72 59 50 60 83 81
Humidity of the Air. SEPTEMBER	13 14 15 16 17 18 19 20	97 72 85 88 86 91	97 65 81 83 84 88	93 59 69 83 83 88	87 57 63 84 76 76	80 52 66 81 68 77	76 43 65 75 69 76	78 47 65 80 71 73	77 39 62 79 71 67	78 35 62 77 73 71	82 35 63 86 75 72	88 38 65 88 73 69	85 42 66 91 79 71
	21 22 23 24 25 26 27	63 88 92 93 91	78 89 95 92 90 89	78 80 94 87 89 85	76 79 84 94 95 86	67 81 82 95 94 83	63 79 78 95 94 79	62 75 79 94 94 71	62 76 73 94 92 73	58 73 73 90 94 75	59 72 73 85 95 77	55 73 75 85 93 69	54 76 80 85 93 77
	28 29 30	89 87 88	88 82 86	86 83 79	79 81 76	72 78 69	82 74 72	75 66 72	74 71 75	75 67 75	71 68 76	71 78 79	72 85 82
Hourly	Means	87	86	82	79	77	74	73	73	73	72	73	76
	$\begin{pmatrix} 1\\2\\3\\4\\5\\c\end{pmatrix}$	In. 558 575 656 606 700	In.	In. '624 '698 '669 '657 '772	In. '715 '735 '680 '681 '801	In. '749 '752 '706 '703 '809	In. • 593 • 772 • 725 • 773 • 786	In. '588 '815 '717 '762 '768	In643 -781 -724 -763 -765	In668 -763 -728 -760 -760	In. '639 '747 '746 '755	In 645 - 743 - 713 - 749 - 772	In. 665 741 730 745
apour.	$\begin{bmatrix} 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ 13 \end{bmatrix}$	587 •435 •225 •317 •538 •636	684 ·449 ·233 ·334 ·582 ·713	766 463 260 351 568 763	·799 ·467 ·270 ·299 ·615 ·768	*835 *485 *293 *302 *626 *773	·850 ·494 ·291 ·294 ·646 ·749	*889 *485 *261 *275 *648 *718	*820 *488 *306 *295 *687 *532	790 548 297 339 691 588	768 421 292 353 672 590	752 386 285 372 677 600	737 378 300 397 700 633
SEPTEMBER.	14 15 16 17 18 19 20	· 598 · 307 · 253 · 361 · 392 · 292		727 263 327 380 403 431	. 733 . 256 . 353 . 395 . 425 . 440	754 252 380 416 423 518	786 217 390 414 444 543	781 251 389 456 447 559	799 216 377 445 451 512	*827 *209 *382 *421 *467 *541	*801 *214 *372 *434 *476 *530	· 787 · 237 · 374 · 420 · 478 · 522	*808 *251 *380 *415 *488 *514
	21 22 23 24 25 26 27	·234 ·215 ·278 ·464 ·320 ·254	·296 ·250 ·381 ·522 ·325 ·276	293 307 475 512 326 294	· 297 · 369 · 492 · 546 · 345 · 339	·277 ·391 ·518 ·555 ·375 ·358	· 277 · 410 · 543 · 560 · 395 · 352	· 289 · 412 · 583 · 575 · 401 · 349	304 422 562 565 403 373	· 294 · 424 · 572 · 476 · 420 · 375	· 299 · 422 · 567 · 457 · 427 · 388	· 286 · 434 · 561 · 461 · 398 · 369	267 •432 •553 •447 •367 •380
	28 29 30	·210 ·387 ·410	·231 ·395 ·435	·253 ·419 ·424	·261 ·451 ·462	·268 ·465 ·445	·345 ·467 ·484	·325 ·434 ·497	·323 ·458 ·506	350 437 489	·351 ·424 ·494	 ·346 ·449 ·483	·336 ·475 ·455
ourly M	Ieans	·416	453	·478	•500	.516	•523	•526	•520	•524	•516	-512	•513

		HU	MIDITY (	OF THE A	IR, AND	TENSION	OF THE	ATMOSPE	IERIC VA	POUR,	and the second of the second	
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
80 85 97 89 82	83 81 97 91 79	81 93 95 92 86	85 92 96 92 93	89 85 92 93 93	81 85 95 95 94	89 89 96 96	93 91 95 97	94 89 96 97	91 90 97 96	92 91 96 96	93 92 93 97 —————————————————————————————————	79 85 94 91
78 60 48 61 85 86	83 70 51 71 89 91	69 72 54 78 91 90	89 70 60 —————————————————————————————————	85 56 59 89 94 94	82 55 69 92 94 95	94 78 52 71 92 94	96 72 48 70 92 96 —	96 76 47 70 97 92	95 78 54 67 91 97	97 83 52 68 89 97	96 } 83 54 62 90 97 —————————————————————————————————	81 64 58 66 87
78 47 66 89 81 81	85 66 65 86 86 79	85 60 76 87 91 78	84 61 81 88 93 79	79 63 81 89 55 81	76 64 77 89 89 87	94 80 72 83 87 93	95 75 69 80 86 90	97 71 71 83 87 92	97 68 76 85 87 90	95 73 77 86 86 91	96 7 73 83 87 88 89 — }	81 58 73 85 81
81 82 84 87 91 82	85 89 89 86 89 81	87 90 92 87 90 85	86 91 89 91 85 85	81 90 93 91 86 85	81 92 95 93 88 89	88 84 93 95 91 88	90 87 91 94 90 85	89 87 90 96 90 84	88 88 90 95 91 88	83 88 92 96 90 84	93 95 95 91 89 — 93	75 84 87 90 90
80 84 85	80 82 94	80 68 90	87 76 79	79 88 77	75 82 73	91 78 87 70	91 77 96 75	95 75 87 85	90 75 87 86	93 83 87 84	93 ) 87 86 83	79 80 80
79	82	82	85	82	84	86	85	86	86	87	87	81
In. '688 '742 '730 '723 '668	In. '659 '721 '714 '708 '608	In.  '660 '737 '660 '701 '604	Iu.	In. 633 668 647 695 568	In.	In.	In. '621 '672 '682 '726 '601	In. '597 '649 '687 '726 '591	In.	In. ·574 ·657 ·670 ·712 —	In. ·577 ·640 ·606 ·692	In. '635 '706 '688 '713
725 365 277 394 678 606	722 368 285 437 613 580	617 374 304 451 633 538	674 349 330 — 624 493	629 269 323 447 592 503	597 247 372 453 592 522	525 228 379 445 576	*446 *212 *327 *457 *618 — *576	*446 *203 *372 *489 *593 — *583	·440 ·214 ·354 ·494 ·631 — ·583	·450 ·207 ·342 ·506 ·613 ·578	$egin{array}{c} \cdot 452 \\ \cdot 212 \\ \cdot 310 \\ \cdot 422 \\ \cdot 631 \\ \hline \cdot 575 \end{array}$	667 364 322 388 627
.755 .252 .384 .409 .456 .534	.775 .289 .382 .398 .406 .473	·770 ·264 ·403 ·407 ·388 ·467	717 257 407 407 397 437	668 255 383 407 304 423	586 262 347 405 375 408	*575 *575 *278 *338 *396 *366	*511 *262 *322 *395 *354	335 399 337	·344 ·258 ·341 ·399 ·304	343 250 342 392 301	*319 *261 *358 *407 *287	*662 *255 *359 *406 *398
*347 *430 *536 *447 *345	318 378 358 558 430 333	·299 ·357 ·556 ·413 ·342	· 292 · 331 · 540 · 406 · 322	271 320 544 389 322	261 308 515 378 333	509 262 303 527 366 322	510 253 297 540 354 315	*462 *245 *290 *534 *346 *313	388 240 278 491 341 288	353 242 276 479 328 268	319 } 239 282 472 324 260	·278 ·347 ·516 ·444 ·344
*384  *365 *455 *503	*366  *347 *407 *506	*370  *335 *349 *495	*336 	325  308 367 429	*296 	·264 ·307 ·407 ·345	·255 ·308 ·418 ·349	·255 ·306 ·400 ·357	·229 ·306 ·404 ·335	·226 ·335 ·400 ·314	·218 } ·365 ·403 ·332.	*318 *313 *418 *433
*508	•492	•481	472	*450	*445	•445	*438	432	'418	'414	•406	•475

			ним	DITY OF	THE AIR	, AND TE	ENSION O	F THE AT	гмоѕрны	RIC VAPO	UR.		
Göt	s of Mean tingen ime.	0	1	2	3	4	5	6	7	8	9	10	11
To	of Mean ronto ime.	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \end{pmatrix}$	77 89 88	77 90 86	76 91 81	74 89 78	72 86 77	71 83 80	72 79 80	73 79 79	77 70 75	74 66 73	72 68 71	76 69 73
	5 6 7 8 9 10	95 61 91 95 97 87	95 88 94 91 97 74	96 89 91 92 96 68	88 89 84 89 93 71	85 87 78 92 80 75	83 85 76 90 81 77	76 87 76 90 88 86	76 81 75 94 84 84	75 82 77 92 76 80	71 77 79 93 80 79	59 74 80 92 79 84	69 75 82 92 83 90
of	0CTOBER. 11 12 13 14 15 16 17 18	84 89 95 93 87 89	80 89 95 86 88 92	77 88 96 88 84 83	76 89 82 72 82 89	72 90 88 65 89 90	72 89 81 64 86 89	72 85 72 60 88 89	72 87 67 56 86 87	73 89 63 58 88 78	70 95 64 55 94 79	77 95 67 62 91 73	81 96 82 67 95 72
Humidity	O 19 20 21 22 23 24 25	96 91 87 87 92 92	94 97 87 87 86 94	79 85 85 88 88 82 89	66 89 78 93 85 85	54 83 73 86 81 83	62 79 71 80 97 65	59 77 68 80 95 62	61 80 68 67 93 62	59 82 70 72 84 57	58 79 76 78 86 57	62 80 78 81 75 56	69 75 80 91 70 46
	26 26 27 28 29 30 31 Nov. 1	89 93 85 86 78 70	95 88 88 84 78 84	91 85 82 84 78 72	90 83 78 81 76 76	91 79 73 75 67 76	89 78 72 74 60 80	79 67 63 71 57 80	76 50 68 61 58 84	75 68 63 57 61 90	78 72 66 58 63 92	80 73 68 56 60 80	80 74 81 67 64 91
Iourl	y Means	88	88	85	82	80	78	76	74	74	75	74	77
	$\begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$	In. ·302 ·283 ·213	In. •281 •281 •221	In. 283 281 266	In. •272 •281 •297	In. 270 285 301	In. 276 291 322	In. 285 283 327	In. •290 •296 •328	In. :311 :266 :326	In. :307 :261 :310	In. · 284 · 284 · 289	In. 289 283 272
	4 5 6 7 8 9 10	· 280 · 188 · 332 · 486 · 438 · 195	· 290 · 238 · 366 · 471 · 449 · 178	336 301 459 506 452	354 394 484 498 577	397 ·419 ·483 ·527 ·563 ·208	·422 ·435 ·488 ·532 ·562 ·233	·420 ·458 ·510 ·479 ·573 ·256	*420 *457 *520 *469 *549 *260	·412 ·459 ·497 ·451 ·369 ·259	·407 ·446 ·525 ·447 ·357 ·264	365 :414 :519 :440 :332 :270	385 385 412 496 430 333 273
Lension of the Vapour.	12 13 14 15 16 17 18	308 306 197 203 278	333 301 192 193 293 202	347 298 230 219 296 161	· 371 · 306 · 232 · 206 · 301 · 177	367 303 290 200 353 184	·379 ·290 ·282 ·200 ·359 ·185	387 278 263 195 384 189	387 282 249 186 412 189	394 287 238 195 410	388 297 247 196 425	·410 ·287 ·249 ·214 ·408 ·157	·413 ·264 ·258 ·203 ·421 ·151
Tensic	19 20 21 22 23 24 25	175 241 164 196 124 176	166 ·264 ·167 ·195 ·126 ·191	180 246 171 199 123 205	·182 ·261 ·182 ·210 ·138 ·219	173 248 183 195 162 232	· 204 · 250 · 186 · 183 · 208 · 196	196 256 187 176 212	188 267 193 152 227 192	182 249 187 161 213	184 224 191 159 215 169	194 228 192 155 207	·197 ·209 ·193 ·163 ·190 ·132
N	26 27 28 29 30 31 Jov. 1	169 340 140 181 158 124	199 309 145 180 156 153	·217 ·290 ·148 ·188 ·160 ·134	· 236 · 272 · 144 · 212 · 164 · 139	·262 ·258 ·146 ·215 ·152 ·144	·295 ·273 ·146 ·228 ·144 ·157	295 •230 •135 •196 •138 •160	303 193 156 190 141 175	·298 ·235 ·156 ·185 ·147 ·193	·296 ·225 ·163 ·185 ·149 ·203	· 295 · 220 · 163 · 172 · 141 · 191	· 283 · 213 · 166 · 190 · 139 · 215
ourly	Means	236	•242	254	270	279	•286	•284	*284	275	•274	268	•266

T			HU	MIDITY O	F THE A	R, AND T	ENSION (	OF THE A	TMOSPH	ERIC VAP	OUR.		
ŀ	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
-	6	7	8	9	10	11	12	13	14	15	16	17	Means.
	80 71 83	79 82 79	80 79 88	80 87 78	80 93 81	80 88 83	84 91	85 88	93 91 —	92 91	88 91 —	89 90	79 83
	83 	82 76 87 92 81 98 87 91 92 77 86 82 75 85 79 75 73 79 75 74 69	71 87 86 93 81 92 90 90 86 78 87 80 75 85 87 73 74 80 87 73 70	75 94 88 94 75 93 91 80 87 73 85 79 76 87 84 89 81 79 77 78 95 79 72	81 83 93 89 95 83 92 94 83 90 74 79 86 78 87 73 94 87 85 75 72 96	79 92 74 95 87 95 87 96 84 93 75 84 81 74 93 79 95 90 90 85 79 96 73 73 97	94 85 91 94 95 84 	93 93 93 86 94 97 89 —————————————————————————————————	93 93 93 90 92 96 90 	90 95 89 94 97 88 85 87 88 87 90 84 — 93 92 89 83 95 93 — 77 92 74 75	92 93 90 94 97 91 	93 } 88 91 95 96 73	83 85 86 93 85 85 85 84 86 87 86 87 88 88 88 88 88 88 88 88 88
	93 —	93	96 —	94			87	90	89 87	<del>89</del> <del>89</del>	88	$\frac{-}{92}$ }	87 
	In. 295 267 258	82 In. •291 •253 •248	In.	In.	85 In. 259 231 235	In. 262 230 230	87 In. •266 •234	1n. •261 •220	In. 276 220	In. :272 :210	In. ·275 ·210	In. •277 •216	In. •280 •256
	353 417 488	 :313 :374	.301	.303	287	256	$^{\cdot 284}_{\cdot 268}$	$\frac{258}{255}$	$^{\circ}249 \\ ^{\circ}244$	$\frac{237}{237}$	$^{•}239$ $^{•}234$	·246 } ·236	·269
	306 228	·535 ·424 ·296 ·220	·400 ·534 ·424 ·292 ·209	375 539 442 250 210	*348 *535 *441 *226 *210	*385 *481 *444 *224 *205	386 520 445 215	·378 ·479 ·439 ·227	·354 ·456 ·442 ·224	*333 *480 *449 *213	*346 *480 *443 *212	·322 ·482 ·440 ·171	322 378 487 458 350 247
	'306	$\overset{\boldsymbol{\cdot}424}{\cdot 296}$	534 424 292	539 442 250	·535 ·441 ·226	`481 `444 `224	*386 *520 *445 *215  *337 *358 *223 *256 *205 *251	· 378 · 479 · 439 · 227 · 313 · 357 · 218 · 243 · 226 · 224	*354 *456 *442 *224  *313 *350 *211 *228 *228 *199	*333 *480 *449 *213  *318 *327 *210 *233 *264 *199	· 480 · 443 · 212 — · 325 · 331 · 204 · 213 · 265 · 187 —	· 322 · 482 · 440 · 171 · 291 · 335 · 200 · 215 · 283 · 185	378 487 458 350
	306 228 409 273 236 204 394 166 205 206 191 137	· 424 · 296 · 220 · 437 · 252 · 239 · 198 · 367 · 162 · 200 · 204 · 180 · 134 · 192	**534 **424 **292 **209 **379 **248 **250 **197 **350 **150 **— **200 **198 **173 **141 **174	**539 **442 **250 **210	*535 *441 *226 *210 *359 *232 *254 *193 *242	· 481 · 444 · 224 · 205 — · 361 · 225 · 258 · 205 · 248	**386 **520 **445 **215 **337 **358 **223 **256 **205 **251 ********************************	· 378 · 479 · 439 · 227 · 313 · 357 · 218 · 224 · 226 · 224 · 190 · 232 · 167 · 174 · 115 · 169 —	*354 *456 *442 *224 *313 *350 *211 *228 *228 *199 ** *182 *238 *161 *176 *112 *195 ** ** ** ** ** ** ** ** ** ** ** ** **	· 333 · 480 · 449 · 213 — · 318 · 327 · 210 · 233 · 264 · 199 — · 190 · 239 · 162 · 183 · 110 · 193 —	· 480 · 443 · 212 · 325 · 331 · 204 · 213 · 265 · 187 · — · 181 · 236 · 162 · 188 · 115 · 190 · —	· 322 · 482 · 440 · 171 —   · 291 · 335 · 200 · 215 · 283 · 185 —   · 174 } · 238 · 168 • 191 · 118 · 180	378 487 458 350 247 369 259 242 211 312 172 202 212 181 151 183
· ·	306 228	· 424 · 296 · 220 · 437 · 252 · 239 · 198 · 367 · 162 · 200 · 204 · 180 · 134 · 192 · 169 · 312 · 201 · 145 · 180 · 141	**534 **424 **292 **209 **379 **248 **250 **197 **350 **150 **—**200 **198 **173 **141 **166 **—**301 **206 **138 **174 **144	**539 **442 **250 **210 **250 **210 **359 **226 **248 **188 **304 **141 ***200 **188 **177 **138 **188 **156 **** ***303 **189 **156 **185 **147	**535 **441 **226 **210 **359 **232 **254 **193 **242 **144 *** **201 **180 **167 **131 **199 **159 *** **323 **184 **167 **172 **141	· 481 · 444 · 224 · 205 · 361 · 225 · 258 · 205 · 248 · 142 · 180 · 171 · 120 · 193 · 159 · 326 · 183 · 169 · 163 · 140	**386	378 479 439 227 313 357 218 243 226 224 190 232 167 174 115	*354 *456 *442 *224 *313 *350 *211 *228 *228 *199  *182 *238 *161 *176 *112 *195	· 333 · 480 · 449 · 213 — · 318 · 327 · 210 · 233 · 264 · 199 — · 190 · 239 · 162 · 183 · 110	· 480 · 443 · 212 · 325 · 331 · 204 · 213 · 265 · 187 · 181 · 236 · 162 · 188 · 115 · 190	**322	378 487 458 350 247 369 259 242 211 312 172 202 212 181 151 183 178 292 218 154 179 143
	306 228	· 424 · 296 · 220 · 437 · 252 · 239 · 198 · 367 · 162 · 200 · 204 · 180 · 134 · 192 · 169 · 312 · 201 · 145 · 180	**534 **424 **292 **209 **379 **248 **250 **197 **350 **150 **—**200 **198 **173 **141 **166 **—**301 **206 **138 **174	**539 **442 **250 **210 **250 **210 **359 **226 **248 **188 **304 **141 ***200 **188 **177 **138 **188 **156 **** ***303 **189 **156 **185	**535 **441 **226 **210 **359 **232 **254 **193 **242 **144 *** **201 **180 **167 **131 **199 **159 *** **323 **184 **167 **172	· 481 · 444 · 224 · 205 — — — — — — — — — — — — — — — — — — —	*386 *520 *445 *215 	*378 *479 *439 *227 *313 *357 *218 *243 *226 *224 *190 *232 *167 *174 *115 *169 *178 *331 *191 *157 *151	**354 **456 **442 **224 **313 **350 **211 **228 **228 **199 *** **182 **238 **161 **176 **112 **195 *** **183 **331 **166 **150 **156	**333 **480 **449 **213 **318 **327 **210 **233 **264 **199 ***	· 480 · 443 · 212 · 325 · 331 · 204 · 213 · 265 · 187 · — · 181 · 236 · 162 · 188 · 115 · 190 · — · 177 · 337 · 158 · 166 · 157	· 322 · 482 · 440 · 171 · 291 · 335 · 200 · 215 · 283 · 185 · 174 · 168 · 191 · 118 · 180 · 165 · 341 · 144 · 165 · 153	378 487 458 350 247 369 259 242 211 312 172 202 212 181 151 183 178 292 218 154 179

Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   S				HUMI	DITY OF	THE AIR	, AND TE	ENSION O	F THE AT	TMOSPHE	RIC VAPO	UR.		
The content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the content of the	lours of M Göttinge Time.	fean }	0	1	2	3	4	5	6	7	8	9	10	11
S	ours of M Toront	lean )	18	19	20	21	22	23	0	1	2	3	4	5
9   96   96   96   96   96   94   93   92   92   94   91   93   95   93   94   88   85   80   81   82   90   90   86   81   82   90   90   90   86   81   82   90   90   90   86   81   82   90   90   90   86   81   82   90   90   90   86   81   82   90   90   90   86   81   82   90   90   90   86   81   82   90   90   90   86   81   82   90   90   90   86   81   82   90   90   90   86   81   82   90   90   90   86   81   82   90   90   90   86   81   82   90   90   90   86   81   81   81   82   90   80   86   81   81   81   82   90   80   80   80   80   85   87   84   84   85   85   86   88   80   80   80   80   80   85   85		3 4 5 6 7	95 91 92 95	93 90 89 91	94 92 82 64	91 82 81 88	89 71 76 88	80 67 70 79	79 62 69 74	77 60 72 66	79 57 70 68	76 54 69 68	82 57 75 57	89 65 84 72
21	the Air. 3ER.	9 10 11 12 13 14	93 90 82 86	95 92 79 84	93 93 82 84	94 93 82 85	88 92 82 84	85 90 79 87	80 91 77 89	81 93 78 87	82 93 77 84 77	90 90 80 84	85 90 79 84	84 86 84 87
23	Humidity of a	16 17 18 19 20 21	92 93 92 81	91 94 88 77	89 95 85 77	89 92 90 76	83 84 91 68	87 74 89 73	85 74 89 66	78 63 90 68	86 82 67 92 71	85 66 90 74	86 74 89 74	90 76 90 77
Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   Second   S		23 24 25 26 27 28	91 84 75 76	89 84 72 82	90 87 74 85	88 90 76 88	82 80 79 74	74 78 76 71	79 86 85 75	58 68 73 85 80	79 76 85 81	71 75 70 79	69 80 71 75	76 87 75 75
In.			80	86	84	83	76	77	76	78	81	79	76	79
1	Hourly M	Ieans	88	87	86	86	83	80	79	77	78	77	77	81
1010 1010 1010	uoı	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	·317 ·300 ·240 ·201 ·161 ·201 ·338 ·328 ·331 ·245 ·263 ·258 ·255 ·227 ·263 ·241 ·178 ·178 ·175 ·117 ·081 ·103 ·204 ·103	*308 *298 *240 *198 *164 *203 	*311 *305 *272 *204 *136 *217 	· 331 · 315 · 286 · 226 · 213 · 236 · 351 · 350 · 346 · 253 · 263 · 248 · 272 · 261 · 315 · 224 · 168 · 175 · 140 · 177 · 101 · 096 · 119 · 191	· 343 · 323 · 252 · 246 · 252 · 244 · 382 · 349 · 347 · 260 · 263 · 242 · 288 · 265 · 324 · 229 · 164 · 166 · 141 · 189 · 089 · 107 · 106 · 196 · 196 · 196	*368 *313 *249 *243 *258 *265	· 356 · 312 · 239 · 243 · 254 · 273 · 385 · 348 · 345 · 253 · 375 · 232 · 292 · 292 · 292 · 292 · 173 · 184 · 130 · 198 · 076 · 130 · 119 · 187 · —	*354 *300 *230 *253 *2253 *261 	*362 *307 *223 *240 *243 *259 	· 375 · 294 · 214 · 240 · 245 · 265 · 378 · 355 · 354 · 264 · 265 · 212 · 275 · 276 · 235 · 233 · 199 · 219 · 138 · 182 · 089 · 108 · 150 · 181 · —	· 375 · 317 · 212 · 243 · 199 · 244 — · 371 · 334 · 354 · 258 · 267 · 214 — · 272 · 278 · 247 · 223 · 190 · 200 — · 144 · 160 · 095 · 103 · 146 · 188 —	*379
		-	·218	·216	118	$\frac{\cdot 123}{\cdot 231}$	·120	·123 ·238	123	·126 ·235	133	·125 ·235	120	118

		. HUN	AIDITY O	F THE AI	R, AND T	ENSION (	F THE A	TMOSPHE	RIC VAP	OUR.		
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means,
96 89 71	97 89 78	97 89 78	96 88 80	96 88 80	95 81 82	95 88 84	96 93 86	90 91 89	90 89 88	93 92 87	95 92 89	94 87 77
93 70 59	97 75 61	88 77 63	92 85 63	88 89 61	92 88 61	91 89 —	89 90 —	91 81 —	87 82 —	99 86 —	87 85	84 79 78
90	93 84	92 85	92 85	90 84	91 82	92 91 88	88 92 89	94 91 88	97 92 88	97 94 91	94 } 92 88	93 87
85 89 83 87	86 80 85	85 81 85	80 79 87	80 81 86	81 81 .86	83 82 86	82 80 87	82 80 86	83 80 88	83 80 87	80 80 90	87 80 86
$\frac{75}{93}$	$\frac{74}{93}$	$\frac{80}{92}$	$\frac{76}{90}$	$\frac{77}{90}$	$\frac{79}{89}$	90 91	89 89	90 91	91 91	93 89	$\frac{-}{93}$ }	83 90
92 83 91	92 82 91 83	92 83 88 86	92 85 93 89	91 88 85 92	89 89 87 93	92 90 87 93	89 93 87 86	90 96 87 89	90 93 87 87	91 90 88 82	93 92 84 81	89 84 89 80
77 80 —	84	79	81	79	80	71	<del></del>	$\frac{}{73}$	$\frac{-}{71}$	79	$\frac{-}{83}$ }	77
78 80	77 78 94	74 78 87	81 81 75	78 79 75	92 80 75	93 89 77	86 82 74	87 75 69	90 79 82	90 80 81	95 90 81	78 80 81
91 78 66 74	76 72 79	$\begin{array}{c c} 71 & \\ 82 & \\ 73 & \\ \end{array}$	73 83 86	74 92 82	75 95 89	75 95 —	80 95	85 95 —	78 95 —	72 96 —	76 93 — ]	77 83 78
79	82	<del></del> 86	95	88	89	71 82	71 82	76 86	81 86	80 88	74 } 87	83
82	83	83	84	84	85	87	86	86	87	88	87	83
In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
·377 ·307	·373 ·302	376 304	364 301	350 301	·343 ·263	·328 ·243	*335 *246	$^{\cdot 279}_{\cdot 228}$ $^{\cdot 207}$	$^{\circ}_{234}$ $^{\circ}_{204}$	`260 `235 `198	`280 `242 `199	337 287 223
·212 ·215	·218 ·201	·211 ·185	·204 ·193	·202 ·172	·205 ·170 ·197	·208 ·156	*205 *159 *190	161 188	152 184	·169 ·193	159 159 194	203
·203 ·211	·199 ·215	·183 ·230	191 231	·195 ·214	214	.199 	304	$\frac{133}{329}$	·341	.341	$\frac{101}{336}$	257
357 326	$\frac{-}{359}$	·354 ·326	·355 ·329	347 328	·345 ·322	*345 *341	·340 ·334	·335 ·331	338 $323$	·337 ·331	$^{\circ}328 \\ ^{\circ}323$	355 336
·329 ·264	316 257	·309 ·257	273 $250$	·264 ·254	$262 \\ 247$	·265 ·249	$^{\circ}_{247}^{263}$	$\begin{array}{c} 264 \\ 247 \end{array}$	$\frac{264}{247}$	$^{\circ}264$ $^{\circ}246$	$^{\cdot 252}_{\cdot 248}$	`311 `253
·272 ·221	·268 ·228	·268 ·252	$^{\circ}_{270}$ $^{\circ}_{245}$	· 263 · 247	·256 ·250	254	·258 —	·254	·257	*253 —	$\left\{\begin{array}{c} \cdot 264 \\ \cdot 251 \end{array}\right\}$	·268 ·245
·276	$\frac{-2}{278}$	.269	263		.258	$^{\circ}255}_{\circ}254}$	$251 \\ 247$	$^{\circ}252$ $^{\circ}244$	$\substack{.241\\.233}$	· 249 · 232	233	.265
·284 ·251	·289 ·239	·287 ·239	$^{:296}_{:242}$	·299 ·246	·297 ·240	·298 ·246	·280 ·253	$^{\circ}281 \\ ^{\circ}255$	·281 ·249	·279 ·239	$^{\circ}259$ $^{\circ}241$	·275 ·258
·210 ·181	210	·212 ·193	·211 ·193	·194 ·191	188 186	·188 ·178	·188 ·173	188 184	188 189	190 188	·178 ·180	212 183
210	·191 ·224	230	238	235	•228	170	123	128	125	139	$\left  \frac{1}{137} \right $	182
159	154	152	164	157	195	199	193 135	195	·190 ·119	187 115	·193 ·124	159 157
160	143 106	·143 ·091	·145 ·080	.138 .080	·138 ·078	.080	.078	.075	.093	.094	.088 .103	·095
`105 `136	106 152	. 100 167	·102 ·169	·103 ·179	111 192	·111 ·197	120 196	·125 ·195	1112	·103 ·207	204	153
`172 —	·177	•167 —	.180	164 	.167 .095	·124 ·086	·119 ·080	122 085	·134 ·076	.131	$\{ \begin{array}{c} -125 \\ 077 \end{array} \}$	·170
108	107	109	109	219	218	216	212	211	209	.210	•209	•224

**2** X

			HUMI	DITY OF	THE AIR,	AND TE	NSION OF	THE AT	MOSPHER	IC VAPO	UR.		
ours of Göttin Tim	Mean }	0	1	2	3 .	4	5	6	7	8	9	10	11
Iours of Toroi Tim	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	1 2 3 4 5	86 91 71 85 78	93 94 71 86 88	71 95 65 86 88	84 95 57 84 81	84 97 69 93 86	84 96 70 72 81	80 96 75 72 78	79 95 80 73 75	80 92 59 80 75	84 92 65 76 79	83 90 70 76 87	82 91 72 68 88
11.	6 7 8 9 10 11 12	78 87 80 87 82 86	75 85 78 87 78 94	82 83 79 80 81 85	80 87 76 90 78 88	80 80 81 95 75 85	81 77 80 95 72 84	81 72 81 95 74 81	81 74 79 93 76 76	83 73 75 95 76 77	84 74 76 96 80 77	84 74 76 95 77 81	89 81 74 86 81 84
Humidity of the Air.	. 19 1	91 400 80 85 80 82	93 100 81 87 79 80	80 700 70 85 77 89	80 95 78 89 78 84	74 85 74 86 72 77	76 81 74 90 69 73	71 62 72 85 71 69	65 60 74 84 69 74	66 65 79 82 64 89	78 54 74 82 76 79	72 60 85 81 80 69	74 67 82 79 76 75
H	20 21 22 23 24 25 <sup>a</sup>	83 82 100 79	81 87 400 89	75 81 100 83	76 69 100 84	75 69 93 78	67 71 83 78	63 63 79 78	60 66 77 79	55 66 74 77	56 71 71 77	62 73 70 77	79 84 97 81
	26 27 28 29 30 31	96 	92 73 86 95 95	86 	88 	82 71 74 95 93	76 	75 70 83 94 90	78 	81 71 75 82 88	$egin{array}{c c} 74 \\ \hline 72 \\ 76 \\ 82 \\ 83 \\ \end{array}$	81 71 76 88 88	79 74 77 91 93 .
lourly	Means	85	87	83	83	82	79	77 .	77	76	76	78	81
	$\begin{pmatrix} 1\\2\\3\\4\\5 \end{pmatrix}$	In. :076 :179 :140 :121 :131	In. :079 :191 :139 :122 :143	In. '066 '198 '125 '128 '143	In. :090 :204 :117 :141 :140	In. '097 '216 '136 '165 '156	In. 108 223 139 136	In. '110 '229 '150 '140 '155	In. '116 '244 '152 '143 '154	In. '121 '257 '114 '157 '151	In. '128 '245 '121 '155 '158	In. 128 239 124 155	In. 132 255 128 136 168
our.	6 7 8 9 10 11 12	158 196 149 159 116	154 192 144 159 105	165 176 142 148 106 085	176 188 135 153 104	178 178 144 158 108	·186 ·171 ·143 ·161 ·110 ·085	189 155 149 164 114 083	192 164 147 166 121	196 163 142 173 121	198 164 143 177 130	·201 ·157 ·143 ·168 ·126 ·094	· 221 · 163 · 141 · 154 · 133 · 100
Tension of the Vapour. DECEMBER.	13 14 15 16 17 18 19 20	· 087 · 068 · 067 · 104 · 066 · 135	· 090 · 066 · 069 · 109 · 065 · 133	·079 ·073 ·063 ·108 ·061 ·143	· 077 · 077 · 082 · 122 · 074 · 135	· 073 · 087 · 091 · 125 · 078 · 128	· 079 · 091 · 108 · 130 · 087 · 128	·079 ·079 ·110 ·129 ·100 ·126	·079 ·085 ·114 ·124 ·108 ·142	.085 .096 .121 .122 .110	*095 *082 *111 *126 *126 *148	·084 ·085 ·121 ·122 ·128 ·126	-085 -081 -106 -105 -123 -133
Te	21 22 23 24 25 <sup>a</sup>	·101 ·101 ·066 ·120	· 093 · 101 · 057 · 139	.079 .091 .058 .132	·084 ·082 ·072 ·140	088 085 085 137	.086 .089 .086 .152	.088 .083 .089	.088 .089 .094 .154	.086 .095 .097 .154	·086 ·102 ·094 ·155	·091 ·102 ·092 ·154	· 094 · 103 · 091 · 167
	26 27 28 29 30 31	·093 ·160 ·083 ·207 ·188	·089  ·148 ·093 ·209 ·187	·083 	·094 ·152 ·097 ·212 ·206	·105 ·148 ·107 ·214 ·215	112  1144 1115 226 213	·123 ·124 ·127 ·219 ·213	131  132 124 221 215	142  125 116 198 219	138 - 124 121 193 207	·142 ·123 ·121 ·198 ·210	·150 ·124 ·125 ·197 ·215
		122	122	119	125	130	133	210	210				140

<sup>a</sup> Christmas Day.

Note.—Wet Thermometer higher than the Dry Thermometer where the reading appears in italics.

		HU	MIDITY O	F THE A	IR, AND I	TENSION (	OF THE A	TMOSPHI	ERIC VAP	OUR.		
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
85 89 75 66 84	77 93 79 68 74	83 93 74 80 75	79 89 77 89 78	78 87 80 90 79	80 83 74 89 80	82 75 78 89	87 67 78 89	85 82 78 91	92 84 80 90	90 80 80 87	90 73 78 84 — }	83 88 73 82 81
89 80 78 86 78 82	89 79 86 94 80 79	92 78 85 90 83 86	91 78 83 87 80 82	95 80 78 89 80 85	94 78 83 87 81 82	86 94 76 79 88 90 —	81 89 78 81 91 91	81 93 79 84 89 87 —	81 95 78 84 89 87 —	80 95 82 85 87 91 —	80 } 94 82 84 86 85	87 79 79 90 81
75 88 88 86 76 71	81 93 84 91 75 71	92 96 80 81 75 72	92 96 86 92 67 77	85 98 88 91 68 76	99 96 89 74 59 76	100 95 89 81 64 —	97 96 89 86 70 — 80	99 97 87 73 70 —	100 86 86 68 75 —	99 86 87 70 77 —	100 87 87 66 85 — }	85 85 82 82 73 77
91 85 93 81 74	89 89 89 78 —	89 83 93 79 —	88 82 89 79 —	88 89 88 82 — 73	81 89 96 81 <del></del>	81 91 94 — 92 —	70 100 88 — 94 —	75 100 92 — 85 —	73 86 92 — 89	67 98 93 — 93 —	100 84 — 99 }	81 89 83 82
78 81 90 97	80 78 93 95	59 77. 90 90	71 72 94 95	69 75 93 95	73 80 91 95	86 66 86 93 94	91 83 88 92 93	89 70 88 94 91	91 78 89 95 91	89 85 90 96 88	78 } 89 96 94 89	74 81 92 92
83	83	83	83	84	83	85	. 86	86	86	86	87	82
In. 136 263 130 132 152 — 221 158 146 154 129	In. '131 '279 '133 '134 '129 '221 '156 '152 '155	In. 146 278 123 153 130 220 154 150 141	In. '145 '248 '123 '162 '135 '226 '151 '146 '132 '131	In. 143 245 120 163 133 228 153 135 135	In. 150 287 106 161 135 228 147 144 133 126 082	In. 152 256 108 159 156 229 145 137 134	In. 164 185 109 159 152 217 148 137 138 109	In. 163 211 110 162 152 215 142 141 133 099	In. 172 190 114 161 152 218 137 141 133	In. 170 174 115 150 155 212 147 139 131	In. 171 152 110 141	In. 129 227 124 147 148 203 160 143 149 117
· 098 · 081 · 089 · 112 · 094 · 123 · 125	*095 -084 *088 *115 *090 *117 *122	· 097 · 089 · 083 · 124 · 086 · 113 · 121	091 	.085 .077 .077 .117 .100 .112 .125	002 074 072 110 077 102 125		·084 ·078 ·070 ·110 ·082 ·119 —	· 087 · 079 · 072 · 110 · 068 · 119 — · 098	· 085 · 083 · 071 · 110 · 066 · 125 · 099	*088 *070 *068 *112 *065 *126  *103	$\left\{ \begin{array}{c}$	*088 *081 *078 *105 *100 *106 *125
.088 .096 .081 .167	-082 -097 -090 -165	.081 .102 .092 .166	.081 .105 .098 .164	.088 .114 .084 .171	.086 :111 :080 :172	103 1089 105 105 1111	.084 .097 .082 	·098 ·094 ·069 ·084 — ·102	· 099 · 078 · 084 · — · 105	.099 .076 .089 	·129 ·069 ·101 ·— ·099	.090 .093 .084 .142
142. -128 126 192 223	146  130 133 197 217	154 	152  102 130 191 212	149 	166 -101 150 183 206	·220 ·099 ·162 ·186 ·206	·218 ·107 ·166 ·190 ·203	·213 ·085 ·166 ·197 ·200	·211 ·098 ·179 ·188 ·202	208 103 186 188 191	$\begin{bmatrix} -164 \\ \cdot 164 \\ \cdot 104 \\ \cdot 202 \\ \cdot 186 \\ \cdot 193 \end{bmatrix}$	148 121 133 199 206
440						1	i .	1	1	İ	1	H

oursof	. М.	an VII	1	1			. I	ISION OF	2 1			_	10	
Göttin Tim	gen ie.	<u>}</u>	0	1	2	3	4	5	6	7	8	9	10	11
ours of Toro Time	nto	an }	18	19	20	21	22	23	0	1	2	3	4	5
		$\frac{1}{2}$	88 74	87 76	89 70	87 74	88 71	87 71	87 79	86 80	84 81	83 81	86 81	87 78
	Ì	3 4	78	$\frac{1}{74}$	$\frac{1}{73}$	74	$\frac{-}{71}$	61	$\frac{-}{73}$	<del></del>	84	87	91	91
		$\frac{\hat{5}}{6}$	67 73	62 75	50 75	59 74	51 90	55 74	55 55	46 55	68 55	63 59	74 63	$\begin{array}{c} 61 \\ 65 \end{array}$
		7 8	80 75	87 83	87 77	90 87	90 81	89 74	78 75	78 74	76 75	71 81	73 80	76 80
Ì		9	89	82	89	79	78	75	67	69	61	69	71	72 —
.,	- 1	11 12	88 68	90 83	99 76	89 72	74 69	70 69	70 66	65 61	58 63	61 62	65 72	69 85
e Ain	. ]	13 14	66 81	66 87	69 91	71 91	67 89	60 92	68 92	64 82	66 81	68 83	65 88	73 88
of the	A K	15 16	$\begin{bmatrix} 92\\82 \end{bmatrix}$	93 71	93 64	95 61	95 63	95 61	95 80	93 95	93 69	92 59	95 59	95 56
Humidity of the Air.	AP (	17 18	$\frac{32}{70}$	$\frac{71}{71}$	$\frac{61}{72}$	$\frac{61}{72}$	69	$\frac{60}{60}$	$\frac{60}{60}$	$\frac{-}{65}$	$\frac{55}{57}$	53	<del></del>	<del></del>
[umi	ل ا	19 20	77 83	95 87	76 83	78 80	55 67	56 56	54 60	60 59	61 58	65 63	62 57	$\begin{array}{c} 72 \\ 65 \end{array}$
Ŧ		$\begin{vmatrix} 20\\21\\22\end{vmatrix}$	78 77	79 75	69 83	69 75	64 77	59 65	80 67	80 65	80 63	77 49	76 73	83 77
		$\begin{bmatrix} 22 \\ 23 \\ 24 \end{bmatrix}$	64	65	63	61	54	55	60	43	46	44	47	56
		$\begin{bmatrix} 24\\25\\26 \end{bmatrix}$	78 88	81 92	83 93	$\begin{array}{c c} \hline 72 \\ 89 \end{array}$	$\frac{-}{72}$ $92$	$\begin{array}{c} - \\ 71 \\ 95 \end{array}$	$\frac{\overline{71}}{94}$	75 90	75 81	79 82	74 74	$\begin{array}{c} 74 \\ 71 \end{array}$
ł		27 28	80 95	80 92	81 90	79 94	75 79	71 82	67 87	67 85	67 89	62 85	61 87	63 90
		29 30	90 69	86 72	85 78	78 78	79 79 74	88 63	80 59	69 68	66 68	80 69	85 75	89 81
		31												
Hourly	у М	eans	79	80	79	78	74	71	72	71	70	70	73	75
		$egin{pmatrix} 1 \ 2 \ 3 \end{bmatrix}$	In. 191 156	In. 188 164	In. 190 147	In. 183 155	In. •184 •153	In. 182 153	In. •183 •175	In. 179 177	In. 169 176	In. 167 170	In. 167 168	In. 167 160
		5 4 5	·155 ·146	·150 ·133	·148 ·110	151	146	130	·149	158	168	174	183	187
		6	·124 ·131	130 135	129	123 136	108 170	123 148	120 108	106 107	152 104	132 110	154 119	126 117
1		8	.055 .069	.057	.133 .051	134 057	131 055	128 053	110 054	103 056	.099 .057	.098 .063	.096 .060	.093 .059
		9 10	.037	.065  .046	.069	.066	.069	.069	.068	°076	.069	·075 —	· 075	074
our.		11 12	.056 .091	.070	.049 .066	.055 .065	.055 .066	.055 .069	.056 .067	.053 .063	.050 .066	·055 ·064	.057 .072	060
Vap	Ι.	13 14	.168	182	101	107 293	115 192	106 202	$^{\cdot 122}_{\cdot 211}$	126 203	·133 ·196	·136 ·199	·128 ·204	·137 ·199
Tension of the Vapour.	JANUARY	$begin{pmatrix} 15 \\ 16 \\ 17 \\ \end{bmatrix}$	·201 ·174	203	·204 ·124	·218 ·113	·222 ·117	·226 ·114	·231 ·157	·247 ·161	$\begin{array}{c} 245 \\ 109 \end{array}$	· 231 · 079	·229 ·071	·235 ·059
ion o	JAN	18 19	$\frac{121}{059}$	131	· 134 · · 055	136	136	125	124	132	116	103	100	1111
Tens	•	20 21	·052 ·069	·054 ·068	.054	055 059	.040 .060	.043 .059	.043 .068	046 068	.047 .068	049	.045 .066	·049
		$\begin{vmatrix} 21\\22\\23\end{vmatrix}$	.051 .080	.049	057	.058 .051	.054 .053	.049 .051	.059 .052	.059 .055	056 056	.049 .043	046	.048 .071
		25 24 25	.079	.084 .084	.088	.093 —	.091	.100	1111	.081	087	.083	.090	·095
		26 27	127 067	149	173	169	.098 .176	.099 .188	101	107 165	108 130	114 121	106 108	102
		28	.054 .107	067	068	.071 .063	.069 .064	.080 .080	.063 .094	.064 .096	.064 .106	057 106	053 105	102
		$\begin{vmatrix} 29 \\ 30 \\ 31 \end{vmatrix}$	·085	088	·114 ·083	110 085	·120 ·080	·141 ·064	.139 .061	·128 ·069	· 126 · 069	·139 ·068	·140 ·070	·140
U		<u> </u>	104	107										
Tour	y 19	1eans	101	101	105	.111	.109	108	112	.111	109	106	107	10

		HU	MIDITY (	F THE A	IR, AND	TENSION	OF THE	ATMOSPH	ERIC VAI	POUR.	~	
12	13	14	15	16	17	18	19	20	21	.22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
89 74	88 73	87 74	87 72	90 73	90 73	94	94	87	89	86	74	87 78
91 64 54 68 80 70	92 68 67 67 78 68	92 65 64 69 78 71	96 69 69 72 77 77	94 69 66 55 85 72	87 62 63 67 85 73	95 80 72 66 73 75 74	93 73 75 68 81 79 —	84 77 81 67 85 78 —	83 73 85 70 75 77 —	86 81 78 73 75 77 — 52	80 } 74 73 77 81 77	81 66 67 77 79 75
76 92 76 92 95 66	71 79 72 95 95 69	81 81 76 94 95 70	80 79 74 92 95 73	79 79 78 94 94 75	86 82 78 90 90 77	93 72 86 88	80 82 78 93 88 —	89 72 79 90 87 —	83 79 90 90 —	80 74 76 88 84 —	$ \begin{array}{c} 83 \\ 73 \\ 76 \\ 94 \\ 86 \\ \hline 72 \end{array} $	77 75 72 85 92 70
73 75 69 95 78 63	90 75 69 95 77 74	80 77 78 85 73 76	87 73 80 76 72 79	87 74 80 81 64 83	86 76 84 81 70 78	77 66 76 80 83 62	72 59 79 82 83 65	69 61 83 78 85 69	69 83 84 81 69	70 76 77 79 62	72	69 72 73 79 70 67
78 74 66 89 89 79	78 73 76 88 85 79	79 77 81 89 93 75	77 69 85 94 91 75	85 66 83 97 89 80	82 73 85 89 84 83	95 85 72 85 92 79	84 87 76 90 83 86	84 92 75 100 88 86	80 86 74 100 89 75 —	79 89 79 100 92 76 — 86	75 } 89 81 76 91 72 	80 80 78 89 83
78	78	79	80	80	80	73 80	61 80	63 81	80	79	78	77
In. 166	In. 162	In. 162	In. 160	In. 168	In. •174	In. 191	In. 189	In 187	In. 191	In. 183	In. 156	In. 177
155 	162 153 	162 151 199 137 112 067 058	160 147 	108 148 	148 	131 207 141 110 066 052	126 184 142 112 071 057	· · · · · · · · · · · · · · · · · · ·		·164 ·180 ·131 ·122 ·067 ·059 ·025	$\begin{bmatrix} .153 \\ .153 \end{bmatrix}$ $\begin{bmatrix} .164 \\ .123 \\ .127 \\ .069 \\ .059 \\ .033 \end{bmatrix}$	1155 1177 1133 1119 1091 1057
	.058 .068 .134 .203 .244 .061	.065 .071 .137 .196 .258 .059	.065 .071 .138 .195 .252 .060	.063 .073 .143 .198 .249 .061	. 068 . 074 . 150 . 193 . 243 . 061	·049  ·080 ·146 ·173 ·230 	. 055 . 065 . 094 . 164 . 182 . 226 	.072 .088 .165 .185 .214	·028 ·070 ·097 ·169 ·188 ·208	.068 .095 .160 .191 .190	'068 '098 '160 '205 '182	*059 *075 *133 *198 *226 *100
126 1050 1076 1054 1070	146 1049 1074 1051 1066 108	130 1050 1079 1048 1067 1105	135 1048 1078 1046 1069 102	127 1048 1078 1050 1069	118 '051 '077 '049 '076 '096	.095 .091 .051 .071 .050 .070	*092 *071 *052 *071 *051 *073	. 093 . 069 . 053 . 070 . 053 . 077	101 1070 1053 1073 1051 1076	106 063 049 069 051 071	.066 .051 .069 .051 .077	112 050 068 053 063 091
108 107 049 099 139	108 108 1097 1052 1090 134 1060	114 1114 101 051 092 1138	114 1085 1053 1095 132 1056	125 080 049 093 127	117 1089 1051 1099 114 1062	'090 '117 '089 '050 '093 '101	*084 *117 *081 *052 *090 *105	*085 *137 *074 *055 *097 *109	*082 *133 *073 *052 *099 *099	. 080 . 133 . 072 . 054 . 103 . 100	·075 ·126 ·071 ·043 ·105 ·093 —	109 117 057 089 121
						•099	.078	.080	*097	105	.109}	*076
107	107	107	107	107	107	.106	.103	105	105	104	102	107

urs of Götting Time	Mean }	0	1	2	3	4	5	6	7	8	9	10	11
	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	1 2 3 4 5 6 7	83 95 99 50 62 57	85 94 100 48 62 64	82 92 98 47 60 57	84 75 97 52 54 59	82 76 97 48 58 56	90 74 97 50 52 60	90 72 97 48 70 60	89 75 97 51 59 55 —	93 78 98 48 69 56 —	88 84 89 51 70 58 	92 80 81 60 75 59	91 77 76 57 77 63
ARY.	8 9 10 11 12 13 14	82 80 85 73 72 71	86 79 85 73 77 65	80 82 87 70 70 71	80 71 81 68 73 75	75 75 84 72 74 64	75 77 71 71 70 65	75 66 79 67 69 61	70 70 74 74 60	65 74 65 79 63	68 83 65 65 63	68 88 63 59 59	88 67 92 70 56 60
FEBRITARY.	14 15 16 17 18 19 20 21	81 69 82 66 74 85	80 60 82 68 76 81	75 72 84 63 77 84	72 82 78 73 85 79	73 72 81 90 82 76	58 73 81 89 83 76	63 76 74 89 78 74	53 84 77 78 80 74	58 79 77 88 88 75	56 85 76 90 88 74	58 84 62 92 87 74	93 83 78 80 88 74
	22 23 24 25 26 27 28	64 79 25 57 50 89	67 21 17 53 53 89	69 29 28 53 62 91	68 33 43 60 65 91	74 36 51 59 65 95	69 39 54 55 66 94	71 51 65 56 72 96	66 51 75 55 71 91	71 45 72 65 74 96	71 46 70 64 71 95	74 53 72 67 70 95	72 68 74 70 64 95
Iourly	Means	72	69	70	71	71	70	72	71	73	73	73	76
Vapour.	1 2 3 4 5 6 7 8 9 10 11 12	In. 109 148 225 040 047 048 — 133 130 126 071	In. 115 147 227 040 045 052 135 120 126 072 070	In. 114 161 222 038 043 049 130 121 128 067	In. 120 152 217 044 042 056 137 117 127 069	In. 128 180 216 044 050 059 140 128 140 083	In. 153 177 215 050 050 068 151 139 128 084	In. 162 174 217 052 072 074 154 121 144 080 090	In. 166 185 220 063 066 079 144 129 145 091	In. 170 197 184 061 082 084 148 117 153 078	In.  164 205 162 069 084 091 158 121 163 078	In. 169 190 131 074 091 093 148 121 159 074 069	In. 161 183 110 066 093 094 160 118 150 076
Tension of the Vapour.	14 15 16 17 18 19 20 21 22 23	· 067 · 135 · 071 · 097 · 080 · 114 · 125 · 061 · 046	.062 .130 .054 .095 .085 .116 .117  .064 .012		· 078 	'076 '110 '060 '132 '152 '127 '096 '075 '025	.084 .085 .062 .141 .162 .137 .095 	·078 -087 ·067 ·124 ·169 ·134 ·097 - ·079 ·045	· 083 - 071 · 102 · 132 · 155 · 139 · 095 - 076 · 049	· 090 · 070 · 103 · 134 · 167 · 160 · 094  · 080 · 045	· 090 	.085 .069 .111 .113 .169 .158 .092  .085	*086 
	24 25 26 27 28	*013 *061 *034 *133	008 054 040 133	*018 *055 *062 *143	.032 .070 .078 .140	.047 .073 .096 .147	.060 .075 .102 .152	1078 109 160	.094 .080 .109 .156	.091 .096 .111 .168	*089 *094 *103 *165	*089 *096 *100 *172	*089 *095 *091 *176

12	13	14	15	16	17	18	19	20	21	22	23	Daily a
6	7	8	9	10	11	12	13	14	15	16	17	Month Means
91 79 75 58 75 75	94 80 66 57 62 80	88 79 61 69 60 75	82 82 68 67 59 67	83 91 68 64 59 69	86 95 59 59 64 71	89 94 65 58 65	92 94 65 63 67	90 90 62 62 61	89 90 60 65 62	90 95 56 64 64	95 98 49 64 64	88 85 78 57 64
90 71 91 78 57 61	90 68 85 77 56 63	95 70 84 74 55 64	93 77 74 76 67 64	91 80 77 72 65 66	91 81 80 80 60 68	82 95 80 81 82 51	85 89 78 80 80 58	84 89 77 77 80 63	79 95 74 79 79 63	77 96 73 78 76 67	83 } 86 85 70 73 82	68 85 74 81 73 66
64 77 72 85 89 74	58 86 73 84 88 74	55 86 66 84 89 78	57 84 72 77 89 71	55 80 68 77 90 68	54 81 72 81 86 67	98 56 78 74 81 91	98 52 78 78 76 91	95 69 77 73 75 91	95 70 77 73 77 87	90 72 80 70 74 87	89 } 75 77 70 87 85 — }	72 65 78 74 80 85 73
70 52 74 70 73 100	69 51 72 66 66 98	60 35 74 49 70 90	64 56 71 53 74 80	47 29 66 57 76 88	50 34 68 47 82 93	68 47 31 70 45 86	69 42 15 72 53 88	69 37 29 65 15 86	67 38 22 74 42 90	66 30 15 70 42 90	66 } 100 16 71 60 90	62 39 62 55 73 87
<u>-</u> 75	73	71	72	70	71	84 	60 72	67 70	68 71	71 	70 } 	72
<del></del>		_		_			_		_		_	
In. 161 195 098 066 090 102	In. 164 199 079 062 075	In.  159 194 069 071 070 092	In. 148 194 072 066 068 081	In. 146 206 067 061 067	In. 150 209 057 056 067 082	1n. 155 214 064 055 066	In. 150 210 064 056 068	In. 142 207 057 053 058	In. 150 208 053 054 058	In. 153 211 048 052 056	In. 151 213 041 051 053 -122 }	In. 148 190 130 056 065
7160 7119 7145 7081 7063 7086	112 126 126 1079 1060 1082	164 115 123 1073 1058 1083	167 126 100 1074 1065 1082	·165 ·132 ·087 ·073 ·062 ·084	169 127 1087 1087 1081 1045 1087	1093 1173 1132 1086 1082 1041	121 161 108 066 079 050	125 159 1097 1060 1079 1058	123 164 088 071 076 062	119 168 1098 1073 1069 1069	1122 } 146 121 073 058 080	114 116 116 1076 1076
073 092 118 141 154 091			.063 .110 .090 .123 .151 .086	· 057 · 091 · 076 · 121 · 152 · 081	·054 ·087 ·079 ·127 ·146 ·080	162 056 085 073 127 147	161 054 087 074 120 147	158 1075 1085 1071 120 146	159 1077 1085 1071 1121 1137	150 077 089 076 114 135	$ \begin{array}{c}     146 \\     \cdot 079 \\     \cdot 086 \\     \cdot 081 \\     \cdot 135 \\     \cdot 129 \\     \hline     \cdot 062 \end{array} $	*083 *088 *102 *132 *14
080 039 086 083 106 188	·076 ·032 ·084 ·061 ·098 ·184	·061 ·020 ·091 ·041 ·104 ·170	·060 ·023 ·087 ·045 ·114 ·153		038 019 080 040 129	'072 '034 '016 '084 '038 '135	'071 '029 '008 '084 '043 '138	069 024 017 075 012 135	064 024 013 084 029 141	· 064 · 019 · 009 · 079 · 029 · 141	· 062 } · 000 · 008 · 078 · 046 · 141 · 078 }	057 029 077 060 106
						095	.069	.076	.079	.081	.078 }	

				HUM	IDITY OF	THE AIR	, AND TE	NSION O	F THE AT	MOSPHE	RIC VAPO	UR.		
lour G	s of I ötting Time	Mean gen	0	I	2	3	4	5	6	7	8	9	10	11
Iour		Mean }	18	19	20	21	22	23	0	1	2	3	4	5
		$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \end{pmatrix}$	80 76 82 85 98 82	79 82 79 86 100 84	72 75 85 88 96 86	62 74 86 79 85 69	55 61 81 68 82 78	60 56 73 61 76 66	67 58 77 62 73 70	76 67 74 64 75 70	78 61 67 69 73 69	63 63 65 65 75 69	63 71 67 70 75 76	65 70 71 70 71 80
the Air.		7 8 9 10 11 12 13	84 65 89 85 92 75	66 67 88 87 90 79	67 70 88 82 88 77	67 79 78 68 78 68	70 77 75 81 56 51	74 77 65 71 57	67 78 60 93 56 53	76 77 54 76 50 58	74 74 59 71 51 45	68 78 61 68 64 62	59 81 77 61 68 60	63 81 82 59 72 63
Humidity of th	MARCH.	19 20	69 82 80 81 73 78	71 82 81 78 70 80	76 78 76 78 57 82	74 73 85 75 62 79	70 68 67 62 62 86	69 64 62 49 56 74	61 61 62 55 58 72	61 73 67 60 61 72	63 67 51 61 64 74	77 79 56 63 59 74	65 84 57 52 59 83	70 79 54 63 61 85
		21 22 23 24 25 26 27	86 85 77 68 55 76	85 84 77 72 66 68	83 85 77 72 60 57	86 85 79 58 68	86 84 70 56 63	86 80 73 66 69 65	87 81 67 68 70 68	76 78 54 54 66 66	80 64 58 49 75 72	83 58 50 49 64 64	86 59 60 52 86 64	87 59 59 70 82 55
		28 29 30 31	77 73 60	72 69 74	56 68 63	57 65 52	64 65 52	61 58 48	44 57 51	55 56 54	49 61 60	56 70 48	56 63 47	57 73 60
Iou	rly N	Ieans	78	78	76	72	69	65	66	66	64	65	67	69
		1 2 3 4 5 6	In. ·090 ·082 ·106 ·075 ·081 ·132	In '088 '086 '119 '076 '073 '139	In. '089 '088 '131 '103 '081 '154	In. '083 '093 '140 '111 '090 '136	In. '074 '082 '144 '104 '115 '157	In. '087 '082 '141 '099 '120 '142	In. 103 094 157 108 117 147	In. 122 114 143 115 125 145	In. 129 107 139 129 129 142	In. 104 107 156 -125 128 139	In. '101 '116 '140 '127 '128 '150	In. 101 104 147 124 120
apour.		7 8 9 10 11 12 13 14	115 070 113 077 058 055	· 096 · 072 · 115 · 080 · 057 · 057	105 074 133 082 066 063	111 088 135 075 072 064	· 124 · 093 · 145 · 087 · 059 · 055	149 193 132 181 1062 1060	141 1994 125 107 1064 1068	160 :090 :118 :091 :058 :075	·132 ·087 ·129 ·089 ·063 ·069	123 1093 136 136 1085 1092	·107 ·097 ·165 ·073 ·085 ·085	110 1098 168 169 1085
Tension of the Vapour.	MARCH.	15 16 17 18 19 20 21	.060 .060 .073 .131 .099 .146	· 066 · 060 · 079 · 131 · 101 · 152	· 073 · 065 · 084 · 143 · 096 · 155	·076 ·067 ·112 ·146 ·108 ·159	.076 .071 .100 .127 .122 .179	· 087 · 069 · 112 · 114 · 118 · 163	·072 ·076 ·120 ·129 ·129 ·168	·078 ·082 ·127 ·141 ·132 ·168	.084 .089 .103 .150 .136 .171	*088 *098 *113 *154 *128 *172	·079 ·102 ·112 ·142 ·129 ·183	· 083 · 095 · 103 · 165 · 126 · 186
		22 23 24 25 26 27 28	122 164 121 134 100 080	129 167 125 139 116 069	137 170 129 166 111 061	·146 ·172 ·143 ·166 ·121 ·066	152 178 134 160 119 077	152 180 148 178 135	·156 ·199 ·138 ·179 ·141 ·090	140 185 117 139 139 091	145 168 127 132 167 097	149 150 118 133 140	153 147 135 135 173 090	·157 ·143 ·128 ·173 ·164 ·081
		29 30 31	·138 ·094 ·053	141 1091 1071	125 101 065	·143 ·096 ·053	·174 ·097 ·060	170 1092 1059	·127 ·089 ·068	151 083 075	125 191 1085	153 1099 1073	·122 ·088 ·071	116 100 085
out	rly M	Ieans	.097	.100	106	.110	114	115	.119	·119	119	•120	120	•121

		Н	JMIDITY	OF THE A	AIR, AND	TENSION	OF THE	ATMOSPH	ERIC VA	POUR.	· · · · · · · · · · · · · · · · · · ·	e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de l
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71	71	71	73	76	76	78	78	78	79	78	78	73
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		HUMI	DITY OF	THE AIR,	AND TE	NSION OF	THE AT	MOSPHER	IC VAPOU	JR.		
Göttingen Time.	0	1	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	o	1	2	3	4	5
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the Air. 7   7   8   9   10   11   12   13   14   14   15   15   15   15   15   15			— — — —		- - - - - -				-			
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23 24 25 26 27 28 29 30					- - - - -							
Hourly Means				_		_				_		
Tension of the Vapour.  APRIL.  APRIL.  1a 5 6 7 8 9 10 11 11 12 13 14 5 6 15 20 21 22 23 24 25 26 27 28 29 30 Hourly Means	In.	In.	In.	In	In	In. —	In.	In	In	In. —	In	In

<sup>&</sup>lt;sup>a</sup> No reliable observations for this month.

		HU	MIDITY (	F THE A	IR, AND T	rension	OF THE A	TMOSPH	ERIC VAI	POUR.	<u></u>	
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
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		•	нимі	DITY OF	THE AIR	, AND TE	nsion oi	THE AT	MOSPHER	RIC VAPO	UR.		
Hours of I Göttin Time	ngen }	О	1	2	3	4	5	6	7	8	9	10	11
Hours of I Toron Time	nto }	-18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	_	_		-		_	_		_	_	_	
	3 4	<del></del> 85	81	<del>7</del> 5	70	<del>-</del> 69	68	57	55	58	56	59	$\frac{-}{64}$
	5 6	84 95	72 82	62 69	66 63	58 54	54 50	54 46	47 48	45 55	44 52	46 55	46
	8	$\begin{array}{c} 98 \\ 74 \end{array}$	67 73	67 64	58 52	58 54	$\begin{array}{c} 54 \\ 52 \end{array}$	59 52	52 52	55 46	55 42	49 42	53 54
	9 10 11	77 97	68 97	66 96	62 84	61 76	67 76	67 65	69 69	70 69	70 74	75 80	79 85
Air.	12 13	96 89	93 78	82 71	83 66	81 60	76 67	77 57	72 57	71 58	86 59	82 59	85 58
of the AY.	14	73 89	64 69	72 67	61 64	56 62	63 63	65 59	65 61	66 57	68 53	57 56	63 59
		84 83	74 74	$\frac{-}{72}$ 68	$\frac{-}{68}$	58 66	 68 56	57 54	56 56	50 59	46 57	45 57	43 58
Humidity	19 20	80 73	67 69	63 58	62 54	72 48	69 50	65 50	62 54	62 54	58 54	60 56	65 63
	21 22	88 95	81 94	85 93	79 90	82 84	84 77	72 76	69 80	69 79	69 80	66 80	66 84
	23 24	96	96	94	97	97	97	94	92	94	92	84	88
	25 26	$97 \\ 74 \\ 94$	94 74 86	89 68	89 64	85 60	83 63	76 72	77 67	73 64	81 63	87 63	88 64
	27 28 29	79 83	83 83	78 84 82	74 79 80	73 72 79	72 68 78	74 68 81	74 63 88	57 63 83	66 67 85	65 68 85	67 74 85
	$\begin{vmatrix} 30 \\ 31 \end{vmatrix}$	95	95	96	$\frac{60}{95}$	$\frac{75}{95}$	96	$\frac{61}{97}$	98	97	96	96	96
Hourly	Means	87	80	76	72	69	69	66	66	65	66	66	69
	$\left(egin{array}{c}1\2\end{array} ight]$	In. —	In.	In.	In.	I.	In.	In.	In.	In.	In.	In.	In.
	$\begin{bmatrix} 2\\3\\4 \end{bmatrix}$	199	· <del>2</del> 31	248	• 246	• 272	277	247	•229	-222	-222	-228	244
	5 6	·184 ·237	224 258	·232 ·262	$\frac{263}{226}$	·261 ·249	$265 \\ 255$	·266 ·264	·251 ·269	·238 ·291	·230 ·259	·242 ·259	-212
	8	$^{\cdot 255}_{\cdot 246}$	·240 ·255	·268 ·248	·261 ·241	·271 ·243	·262 ·227	·291 ·230	·276 ·239	$^{\circ}_{252}$	·263 ·247	·244 ·248	·275 ·279
	9 10 11	·259 ·375	·271 ·375	·290 ·389	·290 ·422	309 432	·337 ·442	335 391	348 398	·372 ·397	·373 ·423	-401 -400	390 413
Vapour.	12 13	·397 ·370	·403 ·367	·420 ·360	·438 ·353	·461 ·313	·465 ·292	·485 ·297	·455 ·322	·423 ·328	*458 *342	·446 ·346	·454 ·344
he $V_{\varepsilon}$	14	·291 ·292	306 304	·361 ·355	·313 ·372	·282 ·362	·305 ·396	300 385	·291 ·393	·297 ·381	·323 ·371	·292 ·361	·342 ·363
Tension of the MAY.		·258	·286 ·298	349	363	335	364	326	335	•303	•284	•279	264
ensio	18 19 20	·265 ·285 ·248	282 283	329 301	*405 *325	390 433	*362 *389	374	383	373 388	·370 ·358	374 369	·382 ·399
T	21 22	·292 ·433	·294 ·485	258 308 457	·279 ·318 ·479	·263 ·322 ·505	·273 ·348 ·527	·270 ·351 ·513	302 378 476	305 385 506	·298 ·394 ·512	300 343 480	302 321 452
	23 24	· <del>4</del> 17	 443	446	447	- - 458	$\frac{327}{474}$	472	.501	.529	.509	•504	.503
	25 26	`354 `180 `283	*382 *191 *215	.416 .198	$^{\cdot 470}_{\cdot 205}$	·459 ·205	469 239	·424 ·276	·470 ·265	·456 ·262	·452 ·282	·424 ·298	·449 ·291
	27 28 29	*323 *388	339 361	·322 ·367 ·360	312 360	*333 *421	346 454	342 516	322 485	302 489	317 464	'319 '444	356 477
	30 31	•320	310	·369 ·311	·446  ·306	·409 - ·290	·418  ·288	·399  ·283	·423 — ·281	·452 — ·279	· 503  · 277	· 441 	·524  ·279
Hourly I	Means	*298	.308	*328	*340	345	*353	350	354	356	*355	*347	*362

		HUM	IDITY OF	THE AI	R, AND T	ENSION O	F THE A	rmosphe:	RIC VAPO	UR.	en en en en en en en en en en en en en e	
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
	_		_	_	_	_		_	_	_		_
-	69	$\frac{}{73}$	$\frac{}{73}$	$\frac{}{81}$	87	82	<del>-</del> 65	$\frac{-}{66}$	$\frac{-}{75}$	87	<del>-</del> 87	${71}$
67 61	63	68	72	77	79	86	94	92	89	87 88	89	69
51 48	67 44	74 43	77 59	76 63	83 54	81 50	82 51	89 49	89 58	70	87 61	69 57
56	59	55	56	57	58	94	94	82	85	81	74 }	63
85 91	94 93	95 92	96 96	96 97	97 90	98 86	97 94	97 97	96 97	97 97	98 96	82 87
87 58	85 70	85 73	89 76	88 80	87 77	91 79	91 81	86	89 80	87 79	90 82	85 71
68 56	74 80	69 87	75 83	81 84	79 85	92	91	92	89	90	89	73 69
<del>-</del> 43	$\frac{-}{43}$	47	<del>-</del> 54	62	$\frac{-}{71}$	63 55	61 57	64 62	73 78	79 80	83 } 80	61
61	55 56	65 57	73 53	75 53	76 62	76 58	79 63	85 64	86 65	82 69	89 68	$\frac{69}{64}$
73 64	76	78	81	83 95	88 96	88 97	90 97	96 96	97 95	97 95	92 96	71 84
69 85	79 89	90 91	93 92	95	95		$\frac{97}{97}$	$\frac{36}{97}$	$\frac{38}{97}$	$\frac{36}{97}$	$\frac{50}{97}$ }	89
92	94	92	96	95	96	93 94	96	96	97 78	98 73	98 73	94 84
88 69	92 81	96 82	93 88	91 89	81 93	75 95	77 96	75 96	96	96	95	78
$\frac{65}{74}$	$\begin{array}{c c} 72 \\ 73 \end{array}$	81 81	85 70	89 72	89 69	90 76	87 77	95 87	96 83	95 . 88	$\frac{94}{92}$	80 75
83	81	84 —	86	81	82	66	<del></del>	85	86	91	$\frac{-}{95}$ }	82
98	98	96	97	99	98	99	98	99	97	98	99	97
71	74	77	80	82	82	82	83	84	86	88	88	76
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_		_							179	· <del>1</del> 76	·166	
$\frac{.234}{.243}$	·227 ·225	·228 ·234	·216 ·218	·216 ·208	·200 ·197	·191 ·208	·180 ·206	·177 ·199	192	183	·187 ·198	·224 ·238
$^{\cdot 220}_{\cdot 242}$	·237 ·197	·238 ·190	·236 ·213	·233 ·220	·234 ·212	$^{\cdot 223}_{\cdot 208}$	·217 ·217	·222 ·217	·215 ·267	·208 ·326	.309	251
•270	270	*255 —	255	·260	*256 —	318	312	*305	·323	· <del>2</del> 88	247	263
·379 ·421	·409 ·383	·395 ·373	*386 *389	·375 ·391	·408 ·384	·412 ·379	·403 ·388	·388 ·392	*362 *385	*385 *399	·395 ·418	361 398
442 338	·450 ·350	450	·462 ·311	·445 ·307	·442 ·295	·416 ·291	·428 ·290	·403 ·278	*387 *280	$^{\circ}349$ $^{\circ}275$	·377 ·273	·432 ·319
309	*331	290	287	287 321	279	•279	•261	256	240	245	$\left\{\begin{array}{c} \cdot 236 \\ \cdot -230 \end{array}\right\}$	292
·337	397	364	322	<b>!</b> —	276	·234 ·235	·233 ·236	·235 ·226	$^{:234}_{:242}$	$^{\circ}235 \\ ^{\circ}238$	237	·326 ·280
·251 ·373	·235 ·280	·251 ·297	·264 ·298	·273 ·299	288	*286	·289 ·258	·302 ·252	·305 ·244	·290 ·245	·297 ·248	330 318
$\frac{.442}{.297}$	·326 ·318	291 314	·258 ·297	256	·269 ·284	253 276	276	270	268	265	·268 ·396	283 344
·244 ·337	·337 ·451	376 450	*320 *454	315 441	·357 ·423	*357	387	364	366	377	$\left  \begin{array}{c} .396 \\ .396 \end{array} \right $	•442
· <del>4</del> 95	•470	453	$\frac{-}{426}$	•416	387	*374 *363	·361 ·338	·361 ·332	364	363 316	*327	432
·447 ·294	·459 ·270	454	·408 ·260	·409 ·251	$^{\circ}_{242}^{257}$	·224 ·233	211	·193 ·236	190 234	·175 ·209	·169 ·212	368 243
*321	'311	*309	•299	298 415	·283 ·385	·280 ·400	·258 ·402	·262 ·398	·259 ·397	·277 ·409	·288 ·410	301 419
·477 ·443	389	·419 ·382	·403 ·383	357	.363	243	240	•288	300	322	$\left\{ -\frac{1}{331} \right\}$	382
$\cdot \overline{\overset{-}{288}}$	•288	286	297	305	•311	318	313	316	314	320	.318	299
*339	*334	329	*319	*316	*306	292	•289	286	.287	.286	289	*324

Aura - P	Maan : II		TUMI	DITT OF	лав АІК,	ARD IE	)		MOSPHER	1			
ours of Götting Time	gen }	0	1	2	3	4	5	6	7	8	9	10	11
ours of Toron Time		18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{pmatrix}$	97 87 96 90 85	97 85 91 89 79	100 82 89 83 75	96 76 88 79 73	96 72 86 74 67	91 72 83 66 63	87 69 83 52 60	85 82 84 66 75	85 81 84 61 76	91 81 83 61 73	86 79 82 65 52	92 77 84 65 54
Air.	6 7 8 9 10 11 12	80 81 97 92 95 84	78 76 96 91 92 75	69 75 91 91 88 83	69 74 87 96 90 80	66 75 85 96 83 72	63 79 85 94 83 77	62 81 84 94 91 70	60 78 81 94 85 67	58 77 80 95 88 67	60 78 79 96 94 67	66 79 74 96 95 67	61 82 75 96 77 67
numidity of the JUNE.	18	91 85 74 89 77 96	89 82 72 72 72 72 95	79 79 65 71 72 96	90 75 64 79 70 97	84 75 62 75 70 97	79 74 64 75 65	78 74 64 75 67 96	89 73 65 77 77 90	83 73 64 66 67 82	74 67 66 64 65 84	69 64 63 54 68 78	68 63 65 52 82 78
	20 21 22 23 24 25 26	84 95 87 89 80 89	82 94 82 82 80 78	82 94 74 81 84 77	85 87 77 78 79 77	81 87 83 76 71 77	79 86 79 80 62 75	76 84 81 72 66 78	76 81 79 62 61 75	89 78 77 64 61 78	88 87 72 70 63 74	83 89 72 66 65 77	79 83 77 64 62 75
	27 28 29 30	82 72 72	78 71 71	67 67 67	59 66 63	59 63 64	61 60 64	63 56 65	70 58 69	46 57 67	43 76 69	46 74 69	59 77 70
<b>Yourly</b>	Means	86	83	80	79	77	75	74	75	73	74	72	72
	$\begin{pmatrix} 1\\2\\3\\4\\5 \end{pmatrix}$	In. •297 •339 •325 •375 •225	In. '297 '336 '395 '391 '232	In. '332 '340 '399 '403 '359	In. '378 '334 '396 '370 '262	In. '415 '359 '398 '358 '273	In. '475 '369 '415 '354 '286	In. '474 '384 '454 '286 '299	In. '444 '445 '450 '331 '370	In. '438 '407 '404 '298 '381	Iп. •402 •407 •410 •286 •394	In. •411 •399 •391 •274 •299	In. •432 •409 •371 •263 •306
apour.	6 7 8 9 10 11 12	·294 ·346 ·432 ·521 ·455 ·288	332 326 462 522 489 293	376 324 498 540 526 385	·411 ·337 ·542 ·553 ·568 ·402	394 379 543 540 504 376	·403 ·383 ·559 ·529 ·533 ·393	·412 ·382 ·573 ·541 ·505 ·382	·425 ·379 ·630 ·537 ·510 ·399	·419 ·406 ·649 ·572 ·462 ·404	·427 ·424 ·639 ·534 ·471 ·408	·401 ·408 ·632 ·538 ·459 ·427	-355 -390 -579 -519 -349 -421
Tension of the Va	13 14 15 16 17 18 19 20	· 399 · 206 · 232 · 296 · 301 · 416	375 211 247 282 340 418	300 214 246 327 340 450	·326 ·217 ·256 ·393 ·367 ·489	· 296 · 232 · 262 · 382 · 371 · 527	·277 ·241 ·275 ·387 ·388 ·517	·258 ·250 ·277 ·408 ·410 ·508	·259 ·275 ·275 ·409 ·472 ·498	·239 ·300 ·269 ·378 ·396 ·426	·248 ·313 ·290 ·389 ·378 ·451	·234 ·309 ·288 ·364 ·377 ·477	·234 ·301 ·293 ·340 ·408 ·505
7	21 22 23 24 25 26 27	· 375 · 378 · 400 · 409 · 409 · 509	·409 ·398 ·435 ·476 ·487 ·523	·461 ·377 ·439 ·512 ·479 ·605	· 491 · 435 · 507 · 537 · 504 · 644	*488 *470 *528 *570 *483 *655	· 481 · 530 · 557 · 626 · 455 · 697	·492 ·538 ·561 ·548 ·495 ·677	*488 *545 *559 *478 *496 *661	·442 ·529 ·543 ·505 ·497 ·639	·490 ·486 ·541 ·568 ·535 ·648	.520 .460 .529 .536 .513 .631	508 470 502 535 419 626
	28 29 30	*444 *355 *350	·437 ·371 ·398	377 366 455	·376 ·393 ·464	391 401 474	·397 ·414 •453	*452 *404 *495	*549 *421 *521	*375 *450 *516	*360 *506 *502	*380 *505 *500	·426 ·516 ·485
lourly	Means	*361	*380	•401	·421	•426	*438	•441	*455	*436	•443	*433	•422

		-	HUM	IIDITY O	F THE AI	R, AND T	ENSION (	OF THE A	тмоѕрне	CRIC VAPO	OUR.		
-	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
	6	7	8	9	10	11	12	13	14	15	16	17	Means.
	89 78 84 64 56	94 81 82 64 59	95 86 86 64 67	92 89 89 77 72	87 90 92 76 84	86 96 95 77 89	88 95 96 81	88 98 93 83	89 96 96 80	90 96 94 84	90 97 93 81	88 95 92 82	91 85 89 74 74
B .	65 83 74 96 74 70	70 80 75 96 81 73	76 84 82 97 85 80	76 78 86 97 81 81	77 82 88 98 98 82 81	81 86 90 97 82 82	71 83 93 89 98 82 —	73 83 92 91 96 79 —	91 84 96 93 97 80 —	95 87 96 92 97 81 —	98 89 97 93 98 80 —	92 } 89 96 93 97 85 	73 83 86 96 85
A distribution of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second o	73 65 70 53 87 78	74 67 70 70 93 87	76 73 70 75 96 87	71 77 85 82 97 93	72 80 91 86 96 94	71 84 89 84 96 95	72 78 88 87 96 —	72 77 87 89 96 —	71 78 88 85 96 —	71 83 88 86 96 — 88	76 82 90 76 96 —	81 76 93 77 96 — 93	77 75 75 75 83
	79 83 77 64 71 78	88 86 80 74 81 84	92 91 89 76 92 87	90 91 92 78 78 84	94 89 92 78 80 92	92 91 92 81 91 88	94 87 92 84 91 —	93 87 80 89 91 —	94 88 84 90 91 —	96 90 81 87 92 —	95 90 91 90 92 — 64	94 90 92 86 92 — }	87 88 83 78 78
	62 53 70	64 59 77	55 60 73	57 58 80	55 66 79	59 66 71	61 64 73	62 71 76	62 65 82	65 72 83	86 72 81	74 72 75	62 66 72
	73	77	81	82	84	85	85	85	86	87	88	87	80
	In. '410 '398 '378 '262 '293	In. '416 '368 '360 '249 '303	In. *396 *361 *363 *233 *291	In. 377 352 371 250 282	In.	In. 344 327 366 230 270	In. '342 '316 '379 '224	In. '324 '306 '372 '221	In. '322 '289 '388 '192 '278	In. '316 '288 '386 '191 '278	In. '336 '278 '377 '180 '265	In. $\begin{array}{c} 337\\ 282\\ 373\\ 178\\ -\\ 258 \end{array}$	In. '378 '352 '387 '276
-	*331 *380 *580 *515 *312 *425	327 370 370 592 495 303 390	339 376 569 503 316	335 364 519 479 295	*327 *386 *537 *471 *296 *350	349 387 565 468 301 340	*262 *343 *400 *547 *496 *298	262 343 398 518 506 289	334 421 511 496 288	*347 *390 *505 *496 *288	*354 *386 *488 *458 *264  *358	360 384 484 440 271 	*364 *380 *548 *511 *390
	241 302 302 326 410 497	237 285 303 375 425 406	·223 ·277 ·303 ·316 ·444 ·381	196 267 273 299 461 368	189 262 278 280 454 351	184 265 270 270 462 349	359 186 255 259 263 461	359 183 251 256 257 430	356 182 256 251 238 431	*354 *182 *251 *249 *238 *433 	187 248 236 235 429	196 229 250 256 429	·243 ·259 ·268 ·321 ·409 ·424
	490 467 506 519 477 581	·477 ·442 ·475 ·515 ·463 ·568		-406 ·407 ·453 ·400 ·412 ·576	*413 *402 *439 *376 *412 *568	·406 ·394 ·440 ·375 ·463 ·520	377 397 381 397 368 478	359 369 381 346 365 494	*357 *451 *377 *333 *360 *486	342 334 378 318 355 493	*347 *331 *326 *339 *393 *481	349 359 346 344 369 455	·438 ·431 ·456 ·467 ·473 ·567
	·426 ·383 ·466	308 -410 386 449	370  338 344 384	376 -344 -311 -374	*318 *335 *352	336 327 321	'613 '333 '298 '313	*539 *326 *306 *298	*380 *317 *293 *300	383 323 310 294	370 373 305 287	340 312 284	381 376 406
	<b>'</b> 411	•400	*384	*366	.361	*359	.359	*348	*342	*335	*332	.333	.391

		HUM	IDITY OF	THE AIR	R, AND TH	ension o	F THE A	rmosphe)	RIC VAPO	UR.		
Hours of Mean Göttingen Time.	0	l	2	3	4	5	6	7	8	9	10	11
Hours of Mean Toronto Time.	18	19	20	21	22	23	0	1	2	3	4	5
$\left(egin{array}{c}1\2\3\4\end{array} ight)$	63 84 83	65 74 76	62 63 77	61 63 68	69 64 64	65 66 61	66 63 53	64 61 56	57 61 58	53 60 57	53 59 59	56 61 67
5 6 7 8 9 10	90 76 88 89 88 79	76 86 83 87 81 85	68 87 81 77 78 79	70 82 71 77 75 76	64 79 70 68 72 76	63 77 74 71 71 76	65 72 69 72 68 70	61 70 69 72 68 66	60 85 67 76 71 60	62 83 68 74 69 60	55 86 65 72 69 59	79 77 74 74 67 64
Humidity of the Air.  JULY.  101 121 131 141 151 151 151 151 151 151 151 151 15	89 72 73 91 88 90	82 74 64 87 80 86	81 73 58 80 75 80	82 74 50 72 69 76	81 63 47 72 67 69	79 60 49 69 64 68	75 60 47 69 59 67	85 58 52 68 61 65	81 62 54 65 74 68	74 63 51 64 60 89	65 60 57 70 66 89	72 63 57 72 70 87
H 19 20 21 22 23 24 25	92 90 98 92 87 92	84 84 97 74 84 89	84 78 94 75 80 87	82 81 92 64 76 83	77 81 86 58 75 84	70 82 79 55 73 87	69 81 75 55 71 89	69 89 79 58 66 90	71 86 75 48 67 84	70 81 76 50 65 85	66 86 71 50 66 82	66 82 76 50 69 80
26 27 28 29 30 31 Aug. 1	91 78 85 88 95 95	92 72 77 84 91 90	86 66 · 64 · 79 · 88 · 79	76 64 64 75 89 79	81 66 73 72 79 76	76 64 66 70 81 76	75 66 63 69 78 71	78 69 67 69 90 76	56 64 62 74 92 72	56 64 61 81 87 71	54 62 62 74 83 65	48 67 58 76 82 63
Hourly Means	86	82	77	74	72	70	68	69 ~	69	68	67	69
$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \end{pmatrix}$	In. *290 *383 *337	In. •340 •427 •499	In. •373 •449 •614	In. •431 •555 •598	In. •540 •546 •613	In. *510 *544 *605	In. •540 •555 •561	In. •537 •576 •588	In. •511 •570 •608	In. •454 •574 •590	In. •452 •579 •613	In. :474 :588 :657
5 6 7 8 9 10	·489 ·493 ·532 ·585 ·575 ·546	·495 ·564 ·546 ·640 ·625 ·597	519 562 562 681 676 598	642 571 620 742 696 618	633 382 631 669 683 634	·614 ·614 ·693 ·725 ·738 ·664	646 620 683 725 693 626	·632 ·665 ·683 ·726 ·698 ·642	·628 ·762 ·689 ·700 ·695 ·630	·647 ·734 ·700 ·687 ·677 ·606	*519 *820 *668 *664 *629 *594	
Tension of the Vapour.  JULY.  JULY.  18 19 20 19 19 19 19 19 19 19 19 19 19 19 19 19	.607 .554 .340 .383 .535 .638	·682 ·636 ·343 ·420 ·579 ·641	708 ·645 ·352 ·457 ·611 ·659	730 719 347 486 622 707	748 676 342 525 657 741	·774 ·657 ·384 ·545 ·657 ·745	·734 ·662 ·377 ·584 ·636 ·772	*832 *643 *428 *598 *670 *729	*841 *611 *419 *580 *667 *776	786 576 386 585 641 749	·710 ·548 ·413 ·591 ·657 ·792	701 ·514 ·411 ·509 ·639 ·803
21 22 23 24 25	·693 ·665 ·671 ·649 ·352 ·443	·762 ·718 ·733 ·566 ·417 ·496	*829 *712 *702 *569 *482 *557	*814 *750 *724 *501 *526 *569	*836 .788 .762 .484 .525 .548	*843 *745 *774 *473 *529 *566	· 856 · 785 · 743 · 502 · 522 · 570	*802 *719 *765 *544 *492 *661	756 796 781 462 477 567	*812 *818 *735 *473 *510 *597	791 758 713 469 544 568	775 775 732 707 469 545
26 27 28 29 30 31 Aug. 1	*421 *287 *309 *411 *414 *354	·407 ·303 ·347 ·455 ·452 ·460	*375 *314 *353 *469 *454 *470	331 342 376 483 456 495	345 354 439 487 498 509	335 359 394 503 471 510	332 381 363 502 469 523	384 389 411 492 491 490	303 357 375 375 511 526 478	302 357 368 577 529 472	303 371 379 509 515 469	271 399 348 505 514 409
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-	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
-	6	7	8	9	10	11	12	13	14	15	16	17	Means.
=	54 69	63 <b>72</b>	75 76	72 77	71 76	67 80	63 86	66 86	66 91	$72 \\ 91$	81 89	83 90	65 73
	68	73	86	83	83	81	81	82	82	88	<del></del> 89	$\frac{-}{92}$ }	74
	80 84	81 85	92 87	89 92	89 94	76 94	77 93	82 94	75 94	77 91	75 88	75 87	74 85
	71 72	. 77 84	88 85	90 84	92 78	89 83	90 81	91 81	93 81	94 84	93 84	93 84	81 79
	71 69	75 <b>7</b> 0	78 73	75 74	78 74	77 75	$\frac{77}{96}$	79 — 94	83  96	85  96	84 — 94	$\frac{82}{96}$ }	76 77
	74 64	74 64	85 67	90 72	89 75	89 78	87 79	88 78	$\begin{array}{c} 90 \\ 92 \\ 74 \end{array}$	92 73	84 74	72 74	82 69
	67 81	76 85	80 87	84 88	80 88	80 89	86 89	87 94	86 92	88 90	92 92	92 92	69 81
	70 93	80 95	81 94	87 96	89 96	90 97	89	92	92	92	94	93	78 86
	<del></del>	<del></del> 66	72	75	81	86	92 89	89 92	92 92	96 92	96 92	97 } 92	79
Marcan .	92 77	94 80	98 83	97 85	97 90	97 94	97 90	98 94	96 96	97 97	97 89	97 94	90 86
	51 66	58 74 83	64 88 87	80 91	77 89 87	79 9 <b>2</b> 88	90 92	90 92	91 92 —	91 91	94 94 —	95 94	70 81
	81  55	59	$\frac{67}{76}$	$\frac{87}{75}$	84	84	97 84	93 82	92 80	90 83	87 88	<del></del>	87 75
	69 55	77 69	86 77	90 84	91 86	90 90	91 90	91 92	92 92	94 93	100 95	93 96	78 76
	75 85	74 91	73 94	86 95	94 95	95 93	96 93	92 96	90 100	95 97	95 95	96 95	82 90
	78	75 —	82	92	93	94	86	86	<del></del> 87	90	92	$\frac{-}{94}$ }	82
	72	76	82	85	86	86	87	88	88	90	90	89	79
	In. •444 •617	In. •443 •528	In. •425 •488	In. 376 456	In. •349 •434	In. 334 335	In. 319 418	In. '319 '410	In. •333 •410	In. •341 •405	In. •351 •377	In. 338 382	In. •409 •484
	634	401	· 552	460	421	409	·415 ·529	·409 ·520	 •400 •494	-408 •499	·407 ·487	$\{\frac{-415}{483}\}$	·509 ·562
	.584 .643	.580 .622	611 562	558 553	*573 *540 *564	518 535 551	· 545 · 567	·519 ·549	501 511	·509	489 524	.493 .524	.581 .604
	647 657 618	638 707 614	602 642 582	573 595 570	*561 *563	576 541	·568 ·549	·553 ·546	554 575	·533 ·577	·521 ·563	·527 ·561	634 619
	• <b>5</b> 99	557	577	570	570	·561	•620	600	582	· <sub>582</sub>	575	$-\frac{1}{574}$	•596
	.746 .487	.713 .440	.682 .421	·649 ·416	.609 .408	.607 .405	.606 .401	·597 ·386	·593 ·356	*528 *342	330	*523 *325	.676 .507
	·464 ·589	·442 ·589	·409 ·585	·389 ·588	356 593	·343 ·559	*338 *556	337 485	·329 ·482	*327 *463 *578	*355 *460 *579	*348 *456 *601	374 528 617
	.593 .851	1863	.603 .769	.600 .751	.603 .761	·597 ·757	·599 ·658	·611 ·599	.636	.620	.610	$\frac{.615}{615}$	.718
	.747 .705	644	·610 ·692	·592 ·697	·602 ·697	·628 ·687	·642 ·683	·616 ·673	618 647	·622 ·671	·621 ·648	·612 ·649	.713 .714
ŀ	661 440	'703 '628 '428	692 608 417	573 443	587 393	579 375	·579 ·377	·594 ·352	·590 ·346	·617 ·333	.606 .319	·635 ·321	.669 .446
	525 527	·494 ·522	·441 ·573	421 533	·408 ·544	400 553	·401 —	·401	*392	*378 	377	$\frac{.383}{.415}$	·456 ·552
	280	281	317	292	287	269	·588 ·267	·629 ·263	633 253	*593 *256	·460 ·248	220	*306
	401	·390 ·364	358 359	·343 ·344	*336 *341	*308 *345	*303 *345	*307 *359	294 359	297 345	·298 ·332 ·407	281 326	*339 *358 *479
-	'305	001					*498	*455	439	415	407	•403	11 113
	.498 .520	· 479 · 506	•465 •475	·493 ·474	•525 •447	*513 *424	.413	*378	*394	*348	*322	321	'450
	<b>.</b> 498	479	·465							*348  *346	·322 ·341	$\left\{\begin{array}{c} \cdot 321 \\ \cdot \overline{344} \end{array}\right\}$	'450 '428

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Gö	rs of Notinge Time.	Mean }	0	1	2	3	4	5	6	7	8	9	10	11
$\mathbf{T}$	rs of N oront Time.	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
		$ \begin{pmatrix} 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \end{pmatrix} $	93 87 84 84 87 79	89 78 77 77 79 77	74 68 78 77 66 70	78 69 75 80 66 66	72 65 68 77 67 71	70 63 68 69 67 70	68 65 66 71 68 68	70 63 64 71 68 69	69 61 63 65 61 70	65 58 64 61 69 67	73 64 60 66 64 77	69 64 60 66 71 76
he Air.	ï	9 10 11 12 13 14	96 97 98 97 96 97	96 97 97 94 93 97	97 97 92 97 67 92	94 90 96 88 65 87	93 86 94 84 82 84	89 82 98 80 83 85	86 79 91 78 73 83	84 80 88 82 73 81	83 78 88 79 74 86	82 77 92 79 78 82	81 81 88 75 79 84	80 82 84 74 81
Humidity of the	AUGUST	16 17 18 19 20 21 22	96 97 85 91 87 74	91 94 89 84 -81 70	85 93 79 76 83 71	76 90 71 61 66 64	67 89 65 58 63 52	75 92 61 53 73 49	75 96 56 51 64 47	74 91 60 48 57 46	67 82 53 50 58 45	65 92 55 49 69	71 91 55 48 69 41	69 91 60 45 84 47
		23 24 25 26 27 28 29	83 88 79 94 91 93	78 86 82 92 88 87	72 81 78 89 78 82	69 82 75 83 78 84	70 73 74 83 69 78	74 67 75 85 65 67	75 69 67 80 61 68	77 66 65 79 60 61	78 62 64 75 69 62	84 59 60 75 76 62	77 59 61 71 74 67	77 61 64 77 74 70
		30 31	96 -95	92 91	88 85	83 71	76 72	75 67	69 67	70 64	70 63	72 68	72 74	83 75
Hou	irly N	Means	90	87	81	77	74	73	71	70	68	69	70	72
		2 3 4 5 6 7	In. '359 '373 '419 '437 '486 '391	In. '439 '342 '472 '472 '490 '387	In. '447 '421 '551 '532 '494 '408	In. '491 '484 '534 '585 '536 '425	In. '498 '465 '500 '574 '618 '481	In. '512 '455 '532 '536 '613 '544	In. '507 '473 '531 '555 '620 '539	In. 539 462 519 559 605	In. '502 '447 '548 '541 '568 '519	In, '512 '447 '558 '490 '615 '498	In. 562 501 535 514 542 545	In. '480 '521 '527 '507 '508
Vapour,	T.	8 9 10 11 12 13 14 15	540 577 612 449 549 610	549 610 625 469 592 663	565 638 650 561 622 689	· 587 · 677 · 643 · 602 · 606 · 712	· 592 · 719 · 642 · 674 · 669 · 762	607 716 698 668 668 759	·633 ·699 ·694 ·662 ·634 ·770		-661 -712 -648 -673 -670 -743	-679 ·675 ·594 ·664 ·635 ·783	·654 ·685 ·606 ·574 ·646 ·735	·641 ·673 ·595 ·601 ·649 ·729
Tension of the Vapour,	AUGUST	16 17 18 19 20 21 22	*634 *579 *376 *281 *358 *315	.674 .727 .410 .300 .395 .322	.683 .745 .390 .326 .437 .359	·671 ·748 ·377 ·288 ·408 ·372	·625 ·763 ·365 ·302 ·426 ·331	759 7707 349 293 467	747 ·741 ·347 ·286 ·463 ·335	·745 ·670 ·377 ·278 ·413 ·341	·709 ·669 ·346 ·289 ·421 ·353	705 682 364 305 351 358	·650 ·656 ·329 ·292 ·478 ·330	·749 ·674 ·312 ·275 ·435 ·382
		23 24 25 26 27 28 29	332 348 322 377 397 381	*382 *395 *377 *438 *399 *358	·408 ·419 ·478 ·500 ·380 ·341	·412 ·485 ·511 ·539 ·392 ·483	·392 ·471 ·527 ·560 ·387 ·489	·433 ·468 ·528 ·644 ·373 ·439	466 499 479 590 370 452	498 468 462 635 374 411	*510 *449 *465 *607 *416 *429	· 557 · 428 · 444 · 622 · 434 · 413	510 427 426 591 435 446	*507 *442 *432 *558 *451 *475
		30	·463 ·347	.543 .375	*546 *382	·580 ·324	·569 ·348	·572 ·333	·541 ·346	.557 :346	·544 ·340	·523 ·381	·490 ·394	·522 ·384
Hour	rly M	eans	.432	•469	·499	·518	•529	•539	.538	•537	.230	• 528	521	•521

		HUM	MIDITY O	F THE AL	R, AND T	ENSION O	F THE A	TMOSPHE	RIC VAPO	UR.	<u></u>	
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
63 62 64 73 90 82	74 68 73 78 91 86	82 82 86 81 83 83	80 86 87 83 83 82	80 89 87 79 82 83	76 91 87 81 82 84	77 84 88 84 90	79 88 92 87 91	81 91 91 91 95	85 92 92 92 92 98	90 93 93 93 97	94 91 93 94 96	77 76 78 78 80
85 89 83 81 93 79	85 90 90 90 88 95 81	90 89 92 91 96 89	90 93 96 94 94 93	92 94 95 94 92 93	94 96 96 96 96 97	95 98 97 96 93 94	96 95 98 96 93 92	95 98 97 97 93 95	95 96 96 96 95 96 —	96 96 97 96 95 97 —	95 } 96 98 96 96 97 — 98 }	81 91 90 93 88 86 90
72 95 64 54 89 50	78 93 69 72 88 64	85 93 73 76 84 76	90 93 78 64 83 77	93 85 78 73 88 77	94 88 84 72 91 81	97 97 86 88 75 91 74	97 95 92 84 78 91 — 80	96 96 92 86 84 90	96 92 93 88 87 — 85	97 83 95 85 83 —	97 84 98 88 78 ——————————————————————————————	83 91 74 68 79
76 67 67 79 75 75	88 80 77 83 81 85	91 78 84 84 91 87	91 79 87 84 92 93	94 85 89 77 93 95	93 86 92 85 95 94	93 82 92 91 90 —	93 85 87 94 90 —	88 81 89 96 92 —	90 82 91 91 93 —	94 81 91 90 94 —	95 84 91 86 92 <del></del>	83 76 78 84 82 83
93 81	96 85	97 91	89 92	91 90	88 94	85 95	85 89	84 94	$\begin{array}{c} 95 \\ 92 \end{array}$	94 88	95 89	85 82
76	82	86	87	87	89	89	90	91	92	92	92	82
In. 478 501 541 502 520 533 — 659 644 608 623 721 665 — 744 651 314 318 453 375 — 479 464 423 546 459 459 — 538 392	In.  '485 '477 '549 '502 '538 '509 '604 '634 '567 '594 '682 '657 '678 '619 '308 '366 '427 '402 '454 '429 '418 '518 '395 '433 '519 '358	In.  '446 '449 '495 '486 '533 '472 '603 '625 '543 '603 '669 '641 '639 '580 '303 '341 '405 '377 '415 '380 '402 '506 '436 '420 '483 '340	In415 -404 -437 -470 -523 -445607 -634 -521 -603 -646 -630626 -567 -301 -277 -393 -364 -402 -364 -402 -508 -408 -417 -462 -319	In.  '409 '377 '419 '458 '527 '456  -616 '624 '500 '603 '598 '611 -601 '473 '293 '316 '402 '356 -388 '360 '402 '491 '389 '421 -450 '306	In.  356 381 418 456 520 448  600 626 493 604 596 617 591 472 294 312 389 351 368 365 407 535 376 401 413 315	In350 -366 -416 -474 -574 -517 -585 -626 -480 -582 -588 -607 -589 -425 -295 -329 -393 -303 -353 -354 -398 -526 -357 -463 -385 -308	In.  313  363  411  494  559  525  556  592  476  578  611   589  567  416  278  322  375  316  355  369  525  347   441  376  287	In320 -357 -402 -504 -551519 -552 -584 -478 -566 -616579 -572 -392 -286 -327 -369310 -346 -336 -365 -545 -322417 -359 -283	In. '332 '356 '408 '505 '515 '517 '530 '578 '480 '524 '614 '561 '563 '408 '307 '317 '349 '315 '346 '339 '366 '486 '301 '408 '337 '306	In. '316 '346 '406 '505 '468 '515 '539 '597 '450 '528 '605 '556 '574 '400 '312 '317 '326 '317 '326 '317 '328 '309 '415 '328 '300	In.  318  346  420  489  441   555  612  442  532  614   373  271  334  305   327  329  349  389  315   417  382  323	*652 *589 *329 *308 *402 *343 *416 *404 *422 *529 *384 *423 *476 *339
•523	505	*484	467	*456	450	•448	*438	*433	•426	•420	*415	*484

01	Marris II		HUMII	OITY OF '	THE AIR,	AND TE.		THE AT					
otting Time		0	1	2	3	4	5	6	7	8	9	10	11
rs of I Toron Time	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	$\left(\begin{array}{c}1\\2\\3\\4\end{array}\right)$	89 97 96 86	87 93 97 85	88 90 95 8 <b>5</b>	82 84 94 87	79 80 84 86	77 77 81 86	79 72 81 88	81 72 70 91	67 70 77 88	66 73 78 88	69 74 83 87	74 80 78 88
4	5 6 7 8 9 10	93 96 89 94 89 97	91 91 89 92 95 92	84 84 87 90 76 91	82 75 86 79 77 83	84 72 81 71 72 82	86 72 78 65 70 76	86 76 78 63 71 74	89 80 74 72 64 74	77 83 80 73 67 71	75 82 81 74 69 62	74 83 82 74 73 63	75 85 92 77 74 67
SEPTEMBER.	12 13 14 15 16 17 18	89 88 93 97 93 92	85 86 88 95 89	84 82 79 85 85 83	* 77 82 68 78 80 93	76 80 66 74 83 91	72 78 62 74 78 92	73 76 60 75 78 92	74 77 57 76 77 92	69 64 71 78 76 94	73 63 70 76 76 91	73 72 69 76 73 84	77 62 72 76 73 85
nrr	20 21 22 23 24 25	91 94 95 98 89 87	91 93 95 97 90 89	91 86 88 89 90	89 82 74 87 89 86	87. 76 83 83 90 85	90 79 82 78 89 84	90 73 81 79 86 82	91 67 75 83 87 77	91 67 72 78 87 85	91 64 70 74 90 87	87 67 75 77 90 89	92 71 81 81 92 90
	26 27 28 29 30	96 91 92 90	95 93 88 88	95 86 80 85	96 74 75 81	96 66 78 72	$     \begin{array}{r}                                     $	— 92 59 70 72	94 80 79 66	84 64 76 69	81 63 91 72	81 68 90 72	84 76 89 79
ourly	Means	92	91	87	82	80	78	77	78	76	76	77	80
	$\begin{pmatrix} 1\\2\\3\\4 \end{pmatrix}$	In. 334 336 442 378	In. •342 •398 •534 •377	In392 -468 -552 -374	In. '400 '500 '550 '290	In. '435 '524 '605 '592	In. •445 •527 •644 •398	In. •454 •305 •645 •402	In. •467 •499 •562 •416	In. •419 •532 •637 •412	In. •411 •554 •619 •420	In. •424 •568 •597 •417	In. •451 •561 •478 •425
ur.	5 6 7 8 9 10	321 376 538 337 267 308	343 453 556 330 334 351	371 480 581 334 329 398	·449 ·449 ·597 ·307 ·393 ·446	·474 ·437 ·642 ·307 ·387 ·431	·488 ·436 ·642 ·295 ·381 ·430	·485 ·446 ·652 ·290 ·406 ·401	*507 *475 *617 *369 *361 *405		·489 ·465 ·635 ·379 ·393 ·331	·455 ·464 ·636 ·378 ·414 ·330	.556 .475 .679 .379 .413
SEPTEMBER.	12 13 14 15 16 17 18 19	368 260 210 222 336 421	*344 *260 *239 *265 *334 *444	325 257 245 309 378 464	321 265 242 311 401 469	319 270 252 343 441 482	303 261 255 352 431 481	312 ·262 ·255 ·362 ·424 ·491	314 265 258 367 418	·472 ·253 ·323 ·385 ·394 ·483	·277 ·251 ·325 ·377 ·399 ·478		·268 ·233 ·337 ·361 ·366 ·428
TAT	20 21 22 23 24 25 26	385 352 279 345 368 297	393 375 315 379 369 307	·402 ·383 ·342 ·433 ·369 ·320	399 387 323 460 365 337	394 381 410 464 375 360	·405 ·399 ·405 ·484 ·368 ·376	·408 ·401 ·400 ·485 ·364 ·403	*415 *369 *372 *508 *384 *349	·406 ·369 ·359 ·506 ·381 ·390	·408 ·344 ·346 ·479 ·479 ·387	*389 *337 *379 *495 *389 *384	·418 ·337 ·389 ·502 ·392 ·390
	27 28 29 30	·452 ·289 ·258 ·217	·470 ·320 ·255 ·234	·482 ·338 ·264 ·251	·495 ·313 ·279 ·275	.528 .304 .322 .279	·555 ·304 ·259 ·271	·576 ·299 ·289 ·301	.593 :310 :326 :277	·557 ·273 ·256 ·261	 · 555 · 262 · 287 · 273	.558 .261 .302 .283	542 282 303
ourly	Means	334	.359	.379	385	·414	*407	*405	·411	·416		405	•408

		HU	MIDITY O	F THE A	IR, AND	TENSION	OF THE	ATMOSPH	ERIC VAI	POUR.		
12	13	14	15	16	17	18	19	20	21	22	23	Daily and
6	7	8	9	10	11	12	. 13	14	15	16	17	Means.
80 80 82 87	88 83 81 87	86 88 81 87	90 95 82 89	90 95 84 89	92 97 89 97	92 97 88	92 96 86	95 96 85	95 96 85	95 96 86	95 96 87	85 87 85
78 86 94 76 78 73	88 84 98 78 91 86	92 85 97 83 95 88	95 88 99 84 92 89	95 86 94 94 94 90	96 89 90 95 94 91	90 96 89 90 95 94	90 96 88 90 95 95	. 93 96 88 91 94 95	91 95 89 93 94 95 —	94 95 89 85 94 94 —	91 } 94 89 89 97 94 ————————————————————————————————	95 88 85 88 83 84 84
79 62 84 81 75 84	80 74 91 91 75 88	80 6 78 89 94 75 91	80 83 78 95 79	80 84 82 94 85 92	82 88 85 91 87 91	89 83 87 88 94 90 —	91 85 91 92 95 98 —	94 88 91** 93 95 93 —	96 89 94 95 95 92 —	94 91 94 96 93 —	90 91 95 95 93 — 92	81 80 80 87 83
93 73 91 87 94 91	92 81 93 88 96 92	89 84 95 96 94 95	90 83 95 98 90 94	90 88 97 97 94 94	91 89 95 97 93 87	91 91 99 94 94 	90 93 96 91 95 —	92 94 94 91 95 —	91 94 94 89 92 —	90 93 96 89 88 —	92 94 96 89 88 	91 82 88 88 91 90
89 79 85 79	92 83 86 88	91 85 90 88	77 90 89 82	78 92 90 84	75 97 88 80	77 94 88 85	87 94 89 81	89 95 94 81	93 91 90 88	91 91 94 91	91 90 90 88	88 82 86 80
82	87	88	88	90	90	91	92	92	92	92	92	85
In. 464 533 445 445 457 626 372 400 357 - 262 365 351 359 417	In422 -504 -406 -431447 -457 -614 -360 -372 -335257 -226 -317 -332 -359 -453	In.  *386  *535  *395  *447	In.  '382 '553 '400 '461  '433 '492 '612 '334 '336 '327  '241 '230 '272 '310 '379 '446	In. '375 '509 '401 '464 '430 '498 '452 '334 '330 '326 '236 '234 '273 '316 '372 '445	In.	In.	In 351 - 425 - 375 310 - 385 - 506 - 369 - 276 - 319 397 - 246 - 223 - 253 - 327 - 470	In 350 - 421 - 382 309 - 376 - 502 - 375 - 275 - 311 395 - 254 - 218 - 237 - 327 - 440	In. '356 '397 '382 '303 '360 '510 '374 '269 '303 '398 '258 '214 '231 '322 '431	In350 -418 -384308 -356 -513 -323 -266 -294404 -270 -215 -222 -335 -432	In.  '332 '413 '387  -303  '354 '521 '312 '270 '297  -400  '262 '210 '223 '338 '429  -}	In.
·403 ·312 ·369 ·478 ·397 ·383 —	364 309 353 461 398 385 	360 296 340 477 395 389 	357 293 330 464 382 380 —	· 353 · 296 · 350 · 438 · 388 · 377 —	346 297 322 428 373 347 	*378 *346 *289 *319 *452 *371  *331 *301	378 360 273 297 414 372 - 453 308	*389 *364 *266 *289 *408 *363 — *454 *301	392 351 274 286 392 330 - 467 293	*387 *369 *274 *300 *379 *306 — *452 *288	· 387 } · 361 · 274 · 292 · 368 · 298 · 447 } · 284	*382 *329 *340 *446 *374 *382 *449
276 279 292	·280 ·274 ·270	·269 ·279 ·263	·244 ·260 ·245	·269 ·259 ·260	·265 ·260 ·262	·250 ·260 ·291	·248 ·247 ·290	247 238 287	*250 *234 *296	252 218 304	252 217 270	277 268 273
_				. — —	1	341	·341	*338	.334	*331	327	374

			HUMI	DITY OF	THE AIR,	AND TE	ISION OF	THE ATM	MOSPHER	C VAPOU	JR.		
u s of M so ringe Time.	en SII	0	1	2	3	4	5	6	7	8	9	10	11
urs of M Toronte Time.	o }∐	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	91 91	86 89	77 85	69 69	65 68	64 62	67 59	62 60	64 70	58 72	56 70	62 78
	3 4 5 6 7 8 9	97 96 91 92 96 89	97 96 92 94 96 90	96 96 94 93 96 87	91 92 95 92 94 74	88 94 95 88 92 73	86 96 93 88 89 72	81 89 92 93 89 73	81 89 91 91 95 85	80 87 87 95 94 81	78 84 83 93 96 78	83 87 84 95 96 81	85 90 86 94 84 85
ndity of the Air. OCTOBER.	10 11 12 13 14 15 16	74 83 85 88 90 92	76 85 87 86 86 86	70 88 81 84 80 83	57 88 75 72 81 78	51 85 73 66 72 74	48 78 70 66 75 71	43 85 55 61 73 68	45 82 47 61 75 70	46 89 47 62 70	48 87 50 60 73 70	47 90 61 55 70 72	59 92 49 45 80 74
Humidity	19 20 21 22 23	97 93 90 84 93 97	84 97 91 79 93 94	94 94 84 81 93 96	89 83 76 77 92 94	87 68 79 68 89 75	85 58 73 73 87 70	80 49 67 73 86 81	77 51 64 73 87 83	77 47 45 73 87	78 51 42 73 90 80	78 47 42 73 87 80	81 52 44 75 85 87
	24 25 26 27 28 29 30 31	93 82 49 91 84 84	91 100 47 84 93 94	92 100 47 78 82 96	87 74 67 70 84 92	73 73 64 48 85 88	62 75 63 65 76 77	62 71 70 59 77 76	60 77 65 64 71 75	62 71 65 66 71 81	60 70 73 68 73 80	58 63 64 64 78 84	57 67 72 65 83 84
lourly l	Means	88	88	86	81	76	74	72	72	72	72	72	74
	$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	In. •264 •216	In. •266 •236	In. 263 269	In. 243 257	In. 235 273	In. •248 •259	In. :261 :247	In. :247 :255	In. •249 •307	In. 236 319	In. 229 295	In. •239 •306
	3 4 5 6 7 8 9	·243 ·440 ·418 ·396 ·415 ·226	·277 ·458 ·422 ·399 ·411 ·260	358 465 429 396 414 276	-408 ·477 ·430 ·391 ·414 ·279	416 •473 •426 •389 •426 •296		·417 ·509 ·422 ·399 ·434 ·292	-400 ·507 ·418 ·395 ·422 ·347	393 501 407 410 423 364	369 504 400 407 428 349	-392 ·479 ·405 ·417 ·430 ·360	383 465 413 413 392 368
on of the Vapour. OCTOBER.	10 11 12 13 14 15 16 17	177 215 199 178 149 246	185 230 205 177 148 242	182 248 208 176 157 257	166 260 197 169 167 257	159 269 201 167 161 261	160 256 198 165 197 264	150 255 169 155 191 265	156 245 153 150 198 292	167 253 154 155 194 302	178 249 152 149 197 303	173 256 174 134 182 301	196 262 137 107 196 295
Tension o	17 18 19 20 21 22 23 24	·230 ·244 ·151 ·167 ·210 ·200	·223 ·247 ·162 ·165 ·211 ·192	· 283 · 269 · 190 · 186 · 210 · 212	314 ·278 ·221 ·200 ·208 ·243	358 237 255 194 209 221	*379 *218 *254 *216 *206 *229	·409 ·198 ·238 ·214 ·201 ·280	·415 ·199 ·239 ·207 ·208 ·283	·411 ·194 ·186 ·205 ·213 ·265	·408 ·204 ·173 ·209 ·224 ·277	397 176 164 208 222 272	· 391 · 185 · 150 · 210 · 212 · 267
	25 26 27 28 29	·289 ·134 ·059 ·127 ·134 ·184	284 170 055 125 172 180	· 290 · 180 · 060 · 143 · 164 · 206	·292 ·132 ·108 ·142 ·213 ·259	241 130 111 116 243 282	208 131 114 165 244 276	·205 ·130 ·136 ·150 ·253 ·272	201 133 135 162 244 280	186 122 136 170 246 293	163 120 154 173 246 285	141 105 130 159 258 290	127 1 5 139 153 241
	30					1		1		1			

·		HU	MIDITY O	F THE A	IR, AND T	rension (	OF THE A	TMOSPHI	ERIC VAP	OUR.		
12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
6	7	8	9	10	11	12	13	14	15	16	17	Means.
76 83	88 90	90 88	88 90	92 89	88 90	89	92	93	89	88	$\frac{88}{97}$	78 83
90	91	93	91	95	95	99 94	97 94	95 96	96 96	97 96	97 <i>\$</i> 96	
92 87	92 88	95 95	96 96	96 95	97 94	96 92	96 92	95 95	9 <b>5</b> 9 <b>5</b>	94 94	92 94	90 93 02
88	88	96	96	96	92	90	91	92	90	87	96	92 92 88
80 90	80 88	74 81	73 84	72 81	78 81	85	85 —	83	89	93	94	
${64}$	$\frac{}{70}$	$\frac{-}{79}$	<del>-</del> 84	85	94	84 93	84 91	85 94	82 91	83 93	$\begin{bmatrix} \overline{76} \\ 84 \end{bmatrix}$	82 70
93	94	92	94	97	93	89	86	87	87	83	88	88
59 58	66 75	72 80	78 84	80 92	86 92	88 88	86 84	89 83	88 89	89 87	89 92	88 73 75 79
77	81 82	83 85	8 <b>5</b> 8 <b>4</b>	85 84	86 87	86	88	73	75	75	78	
74 —						92	94	94	94	95	97 }	82
86 71	84 62	85 66	$\begin{array}{c c} 72 \\ 73 \end{array}$	81 76	87 89	88 88	87 90	88 87	84 92	90 91	93 89	$\frac{85}{73}$
50	50	57	71	68 75	76	86	82	83	86	86	85	70 80
78 89	76 89	77 90	75 91	93	86 92	91 91	93 80	93 93	93 92	93 92	$\begin{array}{c c} 93 \\ 94 \end{array}$	90
87	97	94	95	90	85	96	96	93	93	93	$\frac{1}{92}$	88
71	73	73	85	85	81	79	78	74	77	87	83	75 65
46 80	48 99	50 91	51 78	56 74	57 80	57 82	54 81	53 82	53 77	52 78	50 84	75 65 72
65 83	70 85	$\begin{array}{c} 72 \\ 86 \end{array}$	84 94	82 73	84 92	84 91	77 93	81 93	84 93	84 94	78 96	74 85
84	82	83	90	88	93	_					$\frac{1}{98}$ }	87
77	80	82	84	84	87	85 88	87 87	94 87	95 	99	88	81
	i i	1	! 			<u> </u>		<u> </u>		<u> </u>		
in. 251	In. •244	In. •240	¹n. •215	In. 201	In, 222	In. •217	·In. ·208	In. 214	In. 219	In. •213	In. 212	In. 235
275	*273 —	·260	*283 —	·281	·259	$\frac{-}{297}$	$\cdot \frac{-}{294}$	273	$\frac{-}{273}$	263	$\cdot \frac{-}{261} \}$	•272
397	400	.407 .459	·397 ·458	$\overset{\boldsymbol{\cdot}}{389}00000000$	$\begin{array}{c} 387 \\ 441 \end{array}$	·394 ·440	·392 ·440	385 435	·394 ·435	·396 ·429	·422 ·418	·385 ·461
.455 .420	.451 .420	435	•430	•431	423	<b>'4</b> 13	•409	413	'410	•406	.408	'418
420 370	*420 *369	$\frac{428}{320}$	*419 *285	`415 `269	·401 ·277	·395 ·282	$\begin{array}{c} •405 \\ •274 \end{array}$	·401 ·257	·395 ·259	·382 ·250	·417 ·248	·404 ·354
357	.342	*336	*349	*327	*318	•225	$\frac{-}{218}$	213	•208	$\frac{-}{212}$	}}	•292
201	•196	•218	•217	$\frac{-}{212}$	•210	209	•204	215	·211	227	'218	191
'265 148	*265 *158	·255 ·158	·257 ·159	*258 *160	$^{\circ}255$	·242 ·159	·222 ·166	·216 ·173	·210 ·176	·200 ·184	·206 ·185	·244 ·172
121	143	142	145	147	$^{`147}_{`233}$	134	·128 ·236	$^{`127}_{`211}$	.140 .215	·140 ·215	·147 ·217	148 197
185 300	·208 ·329	·209 ·332	·211 ·322	$^{\circ}224 \\ ^{\circ}324$	*332	•233 —				_	$\frac{21}{215}$	273
422	385	·381	.336	*330	337	·231 ·329	·223 ·310	$^{224}_{301}$	$^{:216}_{:268}$	$^{\circ}_{250}^{212}$	247	*338
219	182	185	183	.180	174	.167	·163 ·146	·152 ·144	·158 ·152	$\begin{array}{c} \cdot 157 \\ \cdot 152 \end{array}$	·154 ·166	·197 ·177
148 215	139 210	156 209	·177 ·202	·166 ·204	164 209	·160 ·214	<b>·</b> 216	'212	<b>·</b> 212	:210	212	'204
$\frac{221}{257}$	·218 ·239	·219 ·231	$^{:218}_{:222}$	·218 ·207	·217 ·198	·216	·179	'191 —	·181	·185	201	208
						305	305	·294 ·127	·293 ·130	·293 ·139	$\left\{\begin{array}{c} -289 \\ 129 \end{array}\right\}$	·253
147 069	·145 ·067	144 068	154 066	154 1067	145 067	·138 ·067	135 061	*061	.061	.060	.059	.099
`145 `146	179 153	161 152	137 148	·133 ·137	·128 ·139	129 139	·125 ·127	127 131	121 135	$^{:122}_{:132}$	125 126	124 142
*232	•222	'221	208	170	187	181	179	174	173	176	182	207
·238 —	·243 —	*214 —	209	190	196	•293	•295	.308	.319	•324	$\left\{ \begin{array}{c} \overline{\cdot_{323}} \end{array} \right\}$	*259
	254	•252	*246	•240	•239	239	•233	230	•229	•228	•230	247

			-	HUM	IDITY OF	THE AII	R, AND TI	ENSION O	F THE AT	гмозрне	RIC VAPO	UR.		
Hours Göt Ti	of M tinge ime.	lean }	0	1	2	3	4	5	6	7	8	9	10	11
Hours To		Iean }	18	19	20	21	22	23	0	1	2	3	4	5
	٠	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \end{pmatrix}$	100 98 96 97 90 92	100 98 96 97 90 94	98 98 91 94 80 94	97 96 93 68 79 83	94 91 94 75 74 82	94 89 93 79 74 79	93 86 95 78 67 80	92 86 95 78 59 80	93 85 95 76 67 81	93 85 95 78 58 79	93 88 96 72 60 79	97 91 97 79 69 93
ıe Air.	SR.	8 9 10 11 12 13	98 98 79 78 92	100 97 79 78 88 91	100 97 77 76 88 91	93 97 80 76 83 82	100 95 87 79 80 79	100 85 68 79 72 73	92 78 68 75 74 73	98 81 65 73 70 74	99 72 65 73 67 81	98 69 66 71 69 80	98 64 72 73 72 83	93 70 71 77 73 81
Humidity of the Air.	NOVEMBER.	14 15 16 17 18 19 20	90 96 80 98 79 100	86 100 78 100 79 100	87 98 82 100 81 100	84 94 84 100 78 92	80 85 82 100 80 94	81 86 78 100 80 90	89 90 69 100 88 85	78 90 82 100 81 85	67 86 87 100 73 84	64 87 76 100 82 84	67 83 74 100 78 87	75 82 87 100 81 93
		21 22 23 24 25 26 27	100 98 100 97 98 91	100 98 100 97 99 91	100 100 100 100 100 94 89	98 100 100 96 92 88	94 100 100 90 92 98	91 100 100 90 91 90	88 96 89 87 92 93	83 96 91 93 94 84	82 96 93 95 94 90	82 96 97 94 90 94	86 94 100 94 87 96	89 92 100 93 89 90
		28 29 30	100 97	100 100	100 94	100 94	100 92	100 89	100	100 87	100 86	100	100 73	100 78
Hour	ly M	Ieans	94	94	93	90	89	87	85	84	84	83	83	86
		1 2 3 4 5 6	In. '327 '348 '296 '256 '188 '163	In. '333 '348 '298 '252 '187 '154	In. '339 '358 '367 '281 '188 '172	In. '350 '367 '380 '233 '196 '172	In. 365 372 375 258 202 178	In. '377 '386 '366 '299 '206 '179	In. '398 '385 '395 '291 '193 '179	In. '394 '410 '395 '288 '182 '179	In. '387 '379 '401 '279 '193 '181	In. 369 372 391 269 171 181	In. '352 '371 '393 '253 '170 '184	In. '341 '349 '383 '250 '176 '197
of the Vapour.		7 8 9 10 11 12 13 14	·292 ·360 ·174 ·161 ·163 ·180	300 359 176 165 152	305 385 175 161 159	·292 ·396 ·187 ·165 ·179 ·183	305 305 410 202 172 183 183	311 345 163 175 172	312 303 166 169 177 183	328 293 160 166 172	329 267 158 166 161 205	*328 *262 *159 *161 *169 *195	330 267 168 164 168 197	321 227 162 168 166 192
Tension of the	NOVEMI	15 16 17 18 19 20 21	· 206 · 150 · 244 · 263 · 156 · 108	· 202 · 150 · 241 · 264 · 154 · 108	·204 ·168 ·252 ·264 ·144 ·114	· 203 · 199 · 265 · 266 · 133 · 119	· 204 · 204 · 279 · 270 · 134 · 136	· 208 · 220 · 282 · 272 · 130 · 139	·219 ·249 ·264 ·273 ·138 ·137	196 260 299 272 128 142	·174 ·269 ·303 ·276 ·121 ·143	167 277 286 284 132	170 257 278 299 123 141	184 248 300 307 124 143
		22 23 24 25 26 27 28	·209 ·259 ·330 ·240 ·141 ·122	·212 ·262 ·302 ·240 ·139 ·127	·212 ·269 ·307 ·242 ·133 ·130	·226 ·285 ·311 ·251 ·131 ·133	239 302 334 240 131 143	· 257 · 327 · 349 · 240 · 131 · 140	·263 ·343 ·317 ·226 ·132 ·142	·262 ·354 ·325 ·230 ·137 ·149	·249 ·351 ·328 ·228 ·137 ·160	246 358 323 223 132 163	·238 ·351 ·327 ·221 ·125 ·160	·232 ·356 ·319 ·209 ·120 ·151
		29 30	.073 .102	.073 .104	·074 ·110	.075 .118	·078 ·119	.085 .121	·085 ·123	.086 .124	·091 ·126	·093 ·115	·093 ·103	.086 .106
lourl	y Me	eans	.212	211	•219	224	231	*233	•233	235	*233	*230	•227	•224

			H	UMIDITY	OF THE	AIR, AND	TENSION	OF THE	ATMOSP	HERIC VA	POUR.	4	
	12	13	14	. 15	16	17	18	19	20	21	22	23	Daily and
	6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
	100 93 97 83 76 96	96 95 96 84 79	98 95 96 76 78 98	98 95 97 79 85 97	96 95 97 72 79 97	97 97 89 64 81 96	96 96 89 65 86	.96 96 88 82 89	97 97 91 88 93	97 97 94 88 93	99 98 97 90 93	100 97 98 90 93 —————————————————————————————————	96 93 94 81 79
	93 66 71 76 75 86	98 83 75 74 77 86	98 79 77 78 80 88	96 62 68 80 85 89	96 61 76 80 86 91	96 56 86 80 85 95	96 96 64 79 80 85	97 97 67 88 80 83	95 97 71 82 84 79	95 96 74 80 85 79	96 97 76 79 79 82	97 73 78 89 86 — }	97 76 76 78 80 86
	81 82 89 100 78 91	92 85 88 100 86 95	90 87 85 100 86 93	92 82 94 99 89 89	94 82 93 87 96 96	86 79 89 87 95 93	94 86 85 85 88 99	94 86 86 88 82 100	94 92 87 89 82 100	93 94 82 95 83 100	94 90 87 97 80 100	90 } 98 78 98 83 100 — }	85 87 85 95 87
	94 95 95 94 93 90	98 94 94 93 100 95	96 94 98 98 100 95	94 94 99 98 100 92	92 93 96 95 100 92	94 96 94 94 100 94	98 100 100 95 99 100	98 96 100 97 94 100	100 94 100 98 94 100	100 94 100 98 97 100	100 97 100 98 87 94	100 } 97 100 98 90 91 — }	93 97 97 94 95
5	100 84	100 85	100 82	100	100 87	100 94	100 100 81	100 100 85	100 100 100	100 100 100	100 100 100	100 } 97 100	100 89
	88	90	90	90	90	89	90	91	92	93	93	93	89
	In, '318 '338 '395 '230 '176 '180	In. '321 '332 '357 '218 '172 '158	In.	In. 351 369 383 185 173	In. 333 356 381 184 168	In. 340 350 314 160 173	In. 338 341 308 159 176 273	In. 356 338 305 185 177 271	In. 338 341 282 185 178 274	In337 -356 -277 -177 -174278	In.	In. '349 '312 '253 '191 '168	In. '350 '359 '347 '228 '180 '198
	321 205 161 162 168 207	328 218 167 157 167 211	328 202 167 163 172 218	322 176 151 166 176 219	321 165 165 166 179 224	322 153 179 166 176 225	333 168 166 168 176	335 157 177 162 176	*335 *155 *169 *168 *172	353 165 166 168 175	*354 *170 *162 *152 *180	367 168 160 167 185	324 249 168 165 172
	190 244 289 301 119	204 258 284 302 127	196 260 275 302 124 165	191 242 293 339 127 171	180 242 286 286 132 166	166 261 278 269 125 158	210 166 260 265 263 124	*211 *165 *262 *270 *226 *122	·211 ·200 ·262 ·267 ·216 ·121	205 157 266 274 208 116	203 153 260 277 177 116	·205 } ·159 ·238 ·268 ·176 ·109 ·211 }	186 238 276 266 128
	236 353 290 211 122	243 354 269 205 124	·237 ·350 ·272 ·206 ·125 ·159	241 350 275 206 121	·239 ·351 ·255 ·194 ·120 ·157	·244 ·353 ·250 ·181 ·116	184 267 352 252 185 112	184 252 346 252 165 116	197 252 349 250 164 121	206 252 357 248 166 122	209 257 347 247 136 118	*211 } *254 *347 *248 *135 *125 — }	·242 ·334 ·291 ·206 ·126
.	084 111	·081 ·117	.081 .118		·085 ·142	·156 	·076 ·093 ·138	·075 ·103 ·144	100 143	·072 ·097 ·132	.070 .103 .135	·069 } ·101 ·135	·129 ·087 ·124
	220	219	•219	•222	217	*212	•214	•213	•212	•212	207	207	•220

		Marian, Marian Charles	HUM	IDITY OF	THE AIR	R, AND TE	ENSION O	F THE AT	rmosphei	RIC VAPO	UR.		
Hours o Götti Ti	of Mean ingen	О	1	2	3	4	5	6	7	8	9	10	11
Hours o	of Mean ronto ime.	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1\\2\\3\\4\\5 \end{pmatrix}$	100 100 94 100	99 100 94 100	75 100 95 100	68 100 94 97 —	69 94 94 96	66 91 91 97	68 90 89 100	68 89 92 100	74 79 94 97	62 86 86 92	79 91 91 89	75 97 90 92
	6 7 8 9 10 11	93 91 89 86 100 100	100 91 88 90 100 100	93 96 86 92 100 100	91 74 79 91 100 99	94 74 81 100 100 97	94 79 79 100 100 93	99 79 77 100 82 78	96 77 78 100 79 73	95 78 83 100 82 75	97 78 85 100 83 72	97 91 85 100 83 81	100 94 88 100 76 84
Humidity of the Air.	12 13 14 15 16 17 18 19	86	99 95 97 94 98 100	97 97 97 79 91 85 100	99 97 85 91 81 100	99 97 71 91 63 100	99 97 79 91 79 100	96 95 87 91 77 99	97 97 67 86 86 95	99 98 70 83 85 99	99 97 71 83 86 89	100 97 67 95 87 88	100 100 77 85 91 88
Hum	20 21 22 23 24 25°	100 95 98 88	93 100 96 100 93	90 98 98 98 96 93	100 100 100 100 100 88	100 98 98 98 93 94	98 98 98 98 98 82	94 98 90 93 77	91 92 93 93 93 85	95 92 87 100 79	75 90 87 99 79	84 90 87 88 83	100 90 78 87 86
	26 27 28 29 30 31	98 93 97 90 100	100 95 96 93 100	100 95 93 92 100	100 93 92 92 99	93 86 88 93 95	80 86 81 92 99	92 90 83 95 95	92 99 87 90 97	92 95 86 93 99	92 95 87 95 99	92 95 87 95 99	97 99 88 99 99
Hourly	y Means	95	97	94	93	91	90	89	88	89	87	89	91
	$\begin{pmatrix} 1\\2\\3\\4\\  \end{pmatrix}$	In. 180 205 179 143	In. 188 201 179 141	In. 159 200 181 141	In. 151 206 179 147	In. 156 204 179 147	In. 167 205 178 161	In. 155 209 173 169	In. 168 207 177 169	In. 187 184 171 164	In. 164 198 155 159	In. 185 202 159 154	In. 172 197 154 158
	5 6 7 8 9 10	137 169 191 193 320	147 169 186 198 307	137 171 191 191 308 201	149 156 192 199 309 204	163 166 214 214 321 206	158 183 225 225 223 316 199	174 179 230 230 288 164	176 184 238 234 278 162	182 190 250 243 288 167	·180 ·191 ·250 ·263 ·255 ·161	180 208 246 269 243 172	170 192 250 277 217 163
Tension of the Vapour. DECEMBER.	12 13 14 15 16 17 18	·217 ·172 ·170 ·081 ·091 ·087	-215 -172 -161 -081 -096 -056	206 177 132 1079 1088	·208 ·182 ·145 ·079 ·087 ·106	208 182 124 084 073	210 183 141 087 096 136	· 208 · 181 · 159 · 090 · 103 · 147	208 183 125 089 122 158	· 204 · 184 · 130 · 091 · 128 · 168	·195 ·183 ·133 ·093 ·131 ·157	196 183 120 107 133	192 187 127 100 131 168
Tensi	20 21 22 23 24 25 <sup>a</sup>	· 081 · 077 · 113 · 100 · 104	*081 *074 *112 *102 *107	.078 .071 .114 .108 .107	*082 *075 *119 *109 *110	.084 .083 .122 .106 .116	*084 *095 *128 *119 *098	.083 .098 .120 .121 .093	.084 .096 .122 .124 .102	· 087 · 098 · 118 · 132 · 096	·071 ·102 ·119 ·133 ·096	· 074 · 107 · 119 · 119 · 099	108 105 117 101
	26 27 28 29 30 31	183 157 215 237 269	·081 ·165 ·219 ·234 ·265	·078 ·166 ·214 ·233 ·267	·081 ·174 ·221 ·252 ·269	*088 *170 *230 *259 *280	·080 ·171 ·220 ·265 ·297	·099 ·177 ·230 ·285 ·285	· 096 · 189 · 234 · 282 · 285	100 186 231 283 292	103 190 232 275 285	·102 ·190 ·234 ·275 ·285	109 199 234 273 282
Hourly	Means	164	•159	157	.161	.166	170	171	•173	175	172	174	172

<sup>&</sup>lt;sup>a</sup> Christmas Day.

1			HU	MIDITY (	OF THE A	IR, AND	TENSION	OF THE A	ATMOSPH	ERIC VA	OUR.		
	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
	6	7	8	9	10	11	12	13	14	15	16	17	Means.
	77 97 92 92 100 92 100 81 92 	82 97 94 95 — 80 80 93 100 80 90 — 99 98 89 90 76 89 — 100 92 83 88 90 — 100 92 93	82 95 94 95 80 100 95 100 76 94 99 99 82 89 70 86 98 93 75 90 87 98 97	82 94 91 95  95 100 95 100 82 94  99 99 78 90 95 84  98 100 83 93 92  100 89 98	98 94 90 94 	97 96 92 94 	100 99 93 — 100 82 100 94 100 83 — 100 99 98 92 95 — 98 100 96 89 95 — 98 99 99 98	100 95 89 — 100 86 100 81 100 85 — 99 95 100 98 100 100 89 99 95 100 98 100 98 100 98 100 98 100 98 100 98 100 98 100 98 100 98 100 98 100 98 100 100 100 100 100 100 100 10	100 94 96 91 85 95 77 99 91 99 95 100 91 98 100 98 92 83 — 100 97 94	100 93 100 90 89 95 80 100 91 ——————————————————————————————————	99 94 99 92 90 95 79 100 100 99 95 84 93 95 69 100 98 89 94 86 — 91 95	100 95 100 95 100 95 96 86 83 100 100 100 95 94 98 92 98 92 98 92 94 82 98 95 97 98 99 98 99 99 99 99 99 99 99	84 94 93 96 91 90 86 98 88 92 98 97 85 90 87 95 96 95 90 92 90 96
	92 99 99	93 99 99	93 99 99	97 100 100	97 99 100	97 99 99	95 100 99	95 100 99	92 100 100	90 99 99	88 99 99	88 99 100	91 96 99
	92	91	91	93	94	95	96	96	95	95	93	95	92
	In. 1711 201 153 159 — 144 186 252 277 214 154 — 187 185 126 099 133 172 — 075	In. 174 201 150 169 144 144 246 285 206 142 186 183 108 103 171 073 119	In. 172 199 149 176 136 177 248 285 197 143 179 185 117 103 103 171 1070 120	In. 172 192 145 183 151 180 249 295 204 145 179 185 099 103 117 163 075 130 088	In. 197 190 144 181 — 154 235 248 289 202 145 — 172 183 114 101 103 159 — 075 129	In. '205 '184 '144 '180 '159 '178 '246 '322 '193 '156 '172 '185 '104 '097 '099 '171 '077 '128 '099	In. '216 '185 '142 '146 '153 '186 '246 '314 '193 '242 '170 '185 '102 '099 '101 '106 '077 '129 '091 '121	In. 217 182 138 143 156 184 216 319 193 235 170 181 099 105 076 136 089 119	In. 211 179 145	In. '209 '179 '147 '131 '167 '178 '199 '293 '187 '235 '170 '181 '080 '090 '089 '102 '073 '117 '093 '110	In.	In.  205  181  143   139  168  181  191  314  194   234  170  174  089  090   090  111  095  105	In. 183 195 159 155 159 182 225 264 243 187 190 181 121 093 103 132 077 106 105 116
	104 118 102 — 1111 199 235 269 275	. 108 . 118 . 103 	*082 *121 *097 — *106 *200 *228 *273 *266	125 101 - 122 190 229 265 267	119 104 — 127 197 227 264 278	121 105 — 136 201 227 260 275	· 075 · 137 · 206 · 234 · 260 · 285		-078 ·139 ·205 ·233 ·260 ·297		.081 .149 .208 .236 .249 .305	$ \begin{array}{c}  - \\  \cdot 084 \\  \cdot 153 \\  \cdot 213 \\  \cdot 236 \\  \cdot 264 \\  \cdot 308 \end{array} $	*096 *116 *190 *229 *263 *283

				HUM	IDITY OF	THE AIR	R, AND T	ENSION O	F THE A	TMOSPHE	RIC VAPO	OUR.		
Hours Göt T	of A tinge	lean en	0	1	2	3	4	5	6	7	8	9	10	11
To	s of Noront Fime.		18	19	20	21	22	23	0	1	2	3	4	5
		$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	100	99	100	100	100	100	99	100	99	97	93	93
		3 4 5 6 7 8 9	95 91 98 100 100 100	95 99 99 98 98 98	91 99 97 100 98 97	87 77 99 98 98 98	87 85 99 98 100 95	85 92 100 98 98 95	85 82 99 100 98 95	83 78 87 98 100 95	81 88 90 100 100 89	84 93 88 100 98 80	79 98 87 100 98 82	85 100 84 100 98 86
of the Air.	JARY.	10 11 12 13 14 15	97 100 100 83 100 100	96 100 100 83 100	100 98 100 97 100 100	100 95 100 80 100 99	100 94 100 78 100 100	100 95 95 85 100 100	100 95 98 98 100 100	100 91 91 89 100 100	100 91 96 88 100 100	100 97 90 92 100 98	100 98 85 93 100 87	41 100 98 95 100 84
Humidity of the	- 1	17 18 19 20 21 22 23	81 69 100 78 79 98	81 100 100 78 80 100	86 64 100 79 80 94	90 89 100 74 72 89	89 84 100 74 72 90	73 82 95 64 60 87	73 82 92 64 51 79	83 76 92 75 48 81	69 82 92 68 50 77	70 71 88 71 63 77	82 76 87 79 62 77	85 86 100 85 79 91
		24 25 26 27 28 29 30	100 100 95 99 81 96	100 98 97 100 80 96	100 100 96 100 80 79	92 93 98 100 83 92	80 74 98 100 78 76	80 82 99 100 81 75	83 87 100 98 80 73	82 86 100 100 80 74	81 82 100 99 80 75	81 84 100 100 82 72	87 86 100 99 99 83	86 90 100 100 99 84
		31	99	97	100	99	98	98	97	97	98	96	70	59
Hour	ly M	eans	94	95	94	92	90	89	89	88	88	87	88	89
	ſ	1	In. 308	In. 318	In. 314	·319	In. 314	In. 328	In. 332	In. 332	In. •343	In. 329	In. •348	In. *351
		2 3 4 5 6 7 8 9	178 181 131 080 085	178 195 139 076 089	176 180 142 075 088 168	·180 ·131 ·149 ·075 ·091 ·170	184 145 152 075 094 167	186 146 163 079 098 172	187 127 177 177 084 105	190 117 174 085 111 182	187 128 179 085 112 173	193 133 192 087 111 150	179 130 176 087 110	184 120 149 085 110
Tension of the Vapour.	ARY.	10 11 12 13 14 15	·029 ·072 ·080 ·159 ·216 ·245	·027 ·072 ·070 ·163 ·217 ·243	*029 *090 *068 *182 *221 *255	·032 ·094 ·089 ·163 ·223 ·253	1036 1096 107 166 223 272	1044 105 116 179 227 281	107 130 203 227 292	*044 *109 *135 *194 *230 *289	·049 ·113 ·136 ·194 ·231 ·294	1049 121 134 203 231 316	119 117 203 231 279	117 116 207 232 238
Tension of		17 18 19 20 21 22 23	145 117 062 129 183	143 139 062 132 183	122 1081 1063 1133 1183 1093	·123 ·113 ·072 ·143 ·181 ·093	116 102 085 157 201	· 097 · 097 · 085 · 143 · 181 · 110		115 1089 1095 177 140 118	· 097 · 093 · 103 · 171 · 131 · 118	102 081 104 186 144 127	115 081 106 188 122 125	116 1087 1119 186 142
	6 6 6 6 6 6 6 6 7	24 25 26 27 28 29	·121 ·150 ·216 ·225 ·140 ·139	·116 ·151 ·218 ·223 ·144 ·157	·118 ·164 ·218 ·228 ·143 ·137	136 177 224 236 147 162	133 156 224 246 151 134	138 185 225 256 163	146 195 230 262 163	144 197 234 258 166 132	151 200 240 244 166 137	151 205 243 247 167 132	·157 ·198 ·245 ·236 ·187 ·149	150 189 247 230 186
	(8	31	187	.188	.199	•207	•208	•211	215	•219	•222	•229	·166	•126
ourly	Mea	ans	148	150	149	153	156	159	163	·164	•165	168	164	159

The color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the
6
S5   S0   S1   79   79   79   775   79   85   87   88   81   81   84   85   92   97   98   98   98   99   99   99   96   96
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$
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$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
'124     '138     '137     '129     '136     '135     '119     '127     '106     '106     '102     '105     '1       '153     '150     '148     '146     '145     '143     '141     '140     '141     '140     '140     '140     '140     '140     '140

			<u> </u>	HUM	IIDITY OI	THE AII	R, AND T	ension o	F THE A	rmosphe	RIC VAPO	OUR.			
] G	rs of Notting Time.	Mean }	0	. 1	2	3	4	5	6	7	8	9	10	11	1
Hou		Mean }	18	19	20	21	22	23	0	1	2	3	4	5	
Humidity of the Air.	FEBRUARY.	1 2 3 4 4 5 6 6 7 8 9 10 11 12 13 14 4 15 16 17 18 19 20 21 22 23 24 25 26	68 100 100 100 84 ——————————————————————————————————	71 100 100 92 87 — 100 98 97 92 100 98 — 100 89 83 100 96 99 — 75 97 98 76 94 100	70 100 100 90 89 — 85 95 92 98 97 98 — 100 88 86 92 89 98 — 75 95	68 87 100 88 88  83 92 77 96 100 95  81 77 86 83 65 83 65 83 65 83 83 65 83 83 83 83 83 84 85 85 86 87 87 87 87 87 87 87 87 87 87	63 83 75 85 85 85 -78 91 79 93 87 80 -74 86 74 86 74 85 -66 95 71 69 89	66 777 68 85 85 -78 86 70 94 87 73 -72 77 71 77 70 87 -61 91 66 64 88 67	76 78 81 83 85 73 92 71 91 95 75 63 59 68 76 64 82 57 92 54 70 91 64	79 72 72 93 79 78 88 76 91 76 70 —64 74 68 75 63 80 — 53 81 74 75 93 57	74 70 70 95 80 77 81 66 80 73 71 63 66 71 79 79 79 78 78 88 88 67	68 72 73 99 84 	70 75 78 99 80 — 88 87 65 90 66 83 — 69 77 78 83 78 82 — 48 97 82 77 74 68	86 90 85 98 89 	
		$\begin{bmatrix} 27 \\ 28 \end{bmatrix}$	81	84	79	99	91	100	100	91	88	94	94	80	
Ноц	ırly N	/Ieans	92	93	91	85	80	78	77	76	75	77	79	84	
Tension of the Vapour.	FEBRUARY.	1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	In102 -116 -167 -183 -134109 -107 -123 -103 -050 -081111 -100 -099 -119 -112 -171 -171 -174 -160 -089 -073 -084	In. 107 119 152 176 135 — 116 108 121 098 047 084 — 106 085 114 116 112 177 — 165 172 163 096 070 084	In. 109 120 153 176 135 102 108 129 095 048 087 114 094 123 129 127 183 165 178 178 100 073 105	In	In. 107 162 156 202 131 1098 117 127 081 054 088 129 104 147 167 151 178 162 199 149 098 091 131	In. 1111 155 156 205 134 102 114 124 084 059 088 142 117 149 155 148 190 157 204 136 097 094 118	In. 121 159 193 201 134 — 101 128 138 084 071 090 — 139 100 147 165 140 193 — 162 213 111 104 102	In. 120 151 183 216 122 110 131 146 087 060 095 146 142 147 165 142 192 158 203 163 115 108	In.  '118 '144 '182 '212 '126 '114 '127 '132 '078 '060 '100 '148 '122 '150 '173 '160 '188 '168 '191 '151 '126 '115 '132	In111 -155 -185 -219 -130127 -129 -137 -089 -060 -104153 -119 -157 -171 -160 -186151 -213 -146 -118 -103 -137	In	In. 127 174 181 216 130 130 127 088 071 112 158 127 161 165 167 174 171 206 130 100 146	
		$\begin{bmatrix} \tilde{27} \\ 28 \end{bmatrix}$	127	133	131	128	 156	116	.181	109	·176	-198 -198	199	•174	
Hou	rly M	eans	.119	•119	•123	•129	.133	134	•137	•141	<b>.</b> 141	·144	•145	•145	

		н	UMIDITY	OF THE	AIR, AND	TENSION	OF THE	ATMOSP	HERIC VA	APOUR.		
12	13	14	15	16	17	18	19	20	21	22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
89 95 99 97 92 —	93 97 89 98 95 —	94 99 95 99 97 —	97 82 95 100 93 —	100 100 95 100 95 —	100 100 95 100 93 —	100 100 97 88 — 83 100	100 100 97 85 — 84 100	95 100 98 83 — 86 100	92 100 100 87 — 88 100	92 100 100 84 — 91 100	97 100 99 76 — 92 100	84 91 90 96 88
92 78 100 93 96	92 72 100 98 100	92 82 100 93 100	90 87 100 88 100 —	87 79 100 93 100 — 85	100 75 98 94 100	100 77 96 90 — 94	100 81 100 88 — 95	100 89 100 90 — 84	100 81 100 90 — 84	100 87 100 94 — 86	98 86 100 90 — 100 }	93 79 96 89 89
73 78 95 89 88 74	86 91 97 98 96 75	81 84 98 100 100 71	89 100 100 100 71	87 100 100 100 73	99 78 100 100 100 89	96 91 100 93 100 — 82	98 95 100 97 99 —	100 95 100 100 98 — 83	87 95 100 89 100 — 79	84 95 100 90 100 — 76	89 78 100 100 99 ————————————————————————————	83 82 88 91 87 83
68 100 87 96 97 90	61 100 89 80 95 85	64 100 91 84 100 91	60 100 89 91 100 77	79 100 97 77 100 81	82 100 98 75 100 82	88 100 75 87 100 —	87 100 81 85 100 —	94 100 93 84 100 —	94 100 97 87 100 —	96 100 80 93 100 —	96 95 83 81 100 — }	72 96 84 79 94 84
79	86	100	97	94	100	89	91	80	86	86	96	90
88	90	92	91	92	94	93	93	94	93	93	93	87
In. 130 178 176 213 128 - 101 128 146 085 077	In. '122 '182 '156 '207 '131 '099 '128 '134 '083 '081 '101	In. '110 '183 '165 '194 '130 '094 '128 '151 '082 '079 '099	In. 106 164 159 194 126 101 128 156 081 073	In. 103 181 151 186 127 - 100 126 141 081 076	In. 104 185 149 180 127 102 132 129 071 077 089	In. 106 187 146 153 — 110 199 128 125 064 075 — 138	In. 109 187 148 143 108 099 122 122 063 076 130	In. 110 187 148 138 110 095 111 133 059 077 129	In. 1111 180 158 142 - 1111 099 105 125 055 078 - 133	In. 116 178 166 137 113 102 119 128 053 081 113	In. 119 175 174 121	In. 113 163 165 184 125 104 121 132 078 068
150 124 149 157 158 167 - 155 202 142 127 105 155 - 162	162 135 144 151 162 169 - 142 197 138 098 103 141 - 168	145 125 140 150 164 166 147 194 140 103 101 146 186	141 117 142 144 162 165 - 141 194 138 113 097 131 - 180	141 114 139 143 169 168 - 170 186 143 094 095 134 - 165	-148 -103 -135 -135 -169 -195167 -192 -144 -091 -097 -133167	138 139 109 133 124 169 188 177 186 109 099 094 142	130 137 110 130 122 163 — 180 174 186 117 1991 1993 — 1092 135	129 134 108 134 119 164  188 168 186 124 085 092  086 111	133 125 108 131 106 165 — 174 165 185 122 083 091 — 084 109	113 108 107 124 103 164 170 177 099 079 088 104 111	115 } 113 097 122 119 160 - 190 } 168 170 101 069 085 - 130 } 112	136 112 139 142 153 179 162 192 140 101 094 119
143	.139	•138	135	•134	<b>134</b>	•129	•127	125	123	•121	122	•133

			HUMI	DITY OF	THE AIR,	AND TE	nsion of	THE AT	MOSPHER	IC VAPOU	JR.		
ours of Göttin Time	Mean ) igen e.	О	1	2	3	4	5	6	7	8	9	10	11
Toror Time	Mean }	18	19	20	21	22	23	0	1	2	3	4	5
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{pmatrix}$	100 100 100 94	100 100 100 97	100 100 100 100	100 94 100 97	98 100 100 88	91 81 100 88	83 94 100 84	82 87 97 80	72 100 94 89	98 98 87 97	75 97 89 95	88 100 74 94
	6 7 8 9 10 11	91 100 83 95 90 100	100 97 75 97 93 100	91 96 79 98 93 90	84 84 78 98 91 74	82 85 73 96 81 70	88 78 70 81 97 68	82 76 64 85 70 78	80 70 71 79 68 88	84 74 76 76 74 70	65 70 76 76 62 68	71 63 86 79 72 70	74 77 94 81 64 79
Humidity of the Air.		87 94 100 100 83 80	86 89 100 100 82 84	73 80 100 91 73 58	79 86 93 90 85 62	84 77 91 84 85 64	66 82 79 74 80 65	74 88 87 73 75 63	87 85 100 74 74 73	83 87 70 72 65 79	94 76 73 72 67 90	81 91 70 77 68 93	84 100 68 68 70 94
Hun	19 20 21 22 23 24 25	100 86 90 83 84 86	100 92 90 81 77 86	100 93 83 74 71 76	99 94 76 78 72 71	84 88 72 71 65 79	88 73 71 61 77 82	82 66 77 76 82 85	96 72 77 75 85 82	99 65 77 76 77 81	100 65 75 76 79 74	97 60 80 75 81 74	99 66 79 76 88 76
	26 27 28 29 30 31	94 96 97 80 96	94 91 94 75 93	96 90 86 75 86	96 65 75 69 82	96 67 73 74 77	61 63 70 74 73	62 64 71 76 73	59 64 68 80 78	61 65 65 71 82	65 73 48 68 87	66 69 48 69 90	68 72 53 72 95
Hourly	/ Means	92	92	87	84	82	77	77	79	77	77	77	80
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \end{pmatrix}$	In. '074 '069 '107 '098	In. •067 •071 •108 •098	In. •072 •080 •104 •106	In. '076 '083 '107 '110	In. :080 :095 :111 :115	In. '084 '080 '120 '114	In. *087 *098 *126 *113	In. •092 •102 •128 •106	In. '084 '116 '134 '117	In. :105 :112 :128 :118	In. '084 '110 '124 '110	In. •090 •102 •100 •100
Ir.	5 6 7 8 9 10	105 101 178 123 087	113 110 171 122 1090	109 127 188 129 089	108 149 189 133 094 108	115 168 199 135 094 113	128 164 202 116 119	123 176 187 125 101 148	129 172 208 120 108 164	149 187 213 120 134 137	117 181 245 123 108 134	128 161 217 125 120 138	139 188 201 122 107
Tension of the Vapour.	10	*116 *073 *055 *080 *110 *089	117 1068 1057 1084 114 107	*099 *068 *062 *088 *103 *089	106 1074 1062 103 116 106	108 1072 1069 1103 1116 1115	*099 *075 *063 *100 *112 *124	101 1082 1079 103 107 123	121 080 093 117 106 148	118 1079 1070 112 1094 157	120 166 074 115 099 170	104 1074 1070 121 101 172	· 106 · 075 · 066 · 108 · 103 · 168
Tens	19 20 21 22 23 24 25	139 214 154 162 132 183	148 220 163 160 140	173 219 164 152 150	*184 *239 *161 *158 *159 *185	169 248 158 161 154 188	175 230 157 147 182 195	168 220 171 188 195 202	191 244 171 192 205 198	·201 ·226 ·169 ·184 ·176 ·208	·208 ·225 ·169 ·188 ·185 ·214	·209 ·202 ·177 ·181 ·192 ·213	·212 ·206 ·168 ·183 ·199 ·218
	26 27 28 29 30 31	178 144 176 153 204	178 149 198 167 216	181 170 224 178 232	163 141 224 174 270	167 165 237 189 290	132 173 235 190 314	154 188 257 200 334	152 180 263 201 352	159 196 303 194 393	164 212 225 198 468	158 199 233 205 455	 154 208 256 210 441
lourly	Means	126	131	135	140	·146	146	154	161	164	•169	162	162

		HU	MIDITY O	F THE AI	R, AND T	ENSION (	OF THE A	TMOSPHE	ERIC VAP	OUR.		·
12	13	14	15	16	17	18	19	20	21	22	23	Daily and
6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
84 100 76 97	82 100 84 97	93 100 85 100	100 100 88 100	100 100 91 98	100 100 91 100	100 100 85 — 100	100 100 88 — 100	100 100 91 — 100	100 100 90 — 91	100 100 89 — 76	100 100 95 — 86 }	94 98 91 94
74 72 97 77 70	93 79 99 90 78 87	95 81 99 83 84 84	100 79 99 86 95 87	100 79 100 88 95 99	96 76 99 84 100 81	100 79 99 84 100	100 79 97 85 100	100 74 83 78 100	100 77 87 83 100	100 79 85 89 100	100 80 88 97 100	90 79 86 86 87
90 	98 93 80 61 94 80	85 93 83 70 96 84	88 100 97 69 97 80	95 100 96 74 97 91	98 100 96 73 95 91	100 100 100 100 100 75 86	77 98 100 100 85 85	80 94 100 100 85 100	78 93 100 100 87 94	79 94 100 100 80 91	87 } 93 100 100 82 86	83 87 92 90 78 83
99 72 85 76 90 81	99 71 88 74 85 82	99 75 96 84 82 87	100 78 88 90 88 92	100 88 90 91 84 91	100 86 91 89 84 93	93 100 90 89 87 83 —	99 100 92 86 87 83 —	100 98 91 94 89 88 —	100 93 90 89 81 86 —	100 90 89 86 89 83 72	$ \begin{array}{c} 100 \\ 90 \\ 89 \\ 82 \\ 84 \\ 86 \\ \hline 72 \end{array} $	96 80 84 80 82 80
75 78 57 78 59	80 80 64 82 99	88 84 70 86 100	86 84 77 87 100	88 85 80 89 89	88 78 83 92 89	12 100 89 91 93 88	87 96 96 94 88	89 86 94 96 86	88 98 90 98 88	89 92 96 99 83	91 100 90 96 84	82 80 77 82 88
82	85	88	90	92	91	92	92	91	91	90	91	86
In. '080 '095 '095 '100	In. •075 •093 •099 •097	In. '079 '093 '091 '101	In. '068 '096 '091 '101	In. '081 '095 '092 '101	In. *080 *098 *090 *099	In. •065 •103 •089	In. '051 '105 '091	In. '060 '108 '104	In. '069 '111 '104	In. '070 '111 '104	In	In. '077 '097 '106 '106
136 175 201 117 107	137 186 200 133 109	122 184 197 121 107 140	115 185 196 125 110	115 1186 200 122 109 160	111 181 194 115 113	111 102 183 189 113 113 	115 103 183 175 113 106 	120 103 178 138 1091 103 	104 104 178 137 1096 1099	*092 *102 *180 *131 *093 *096 —	109 3 109 3 178 132 1098 100 100 117 3	117 169 187 118 105
.084 .064 .071 .095 .101 .172	105 1060 1067 1092 1120 1140	*088 *060 *068 *102 *113 *149	·088 ·062 ·074 ·101 ·113 ·140	.090 .062 .071 .108 .107	· 090 · 062 · 069 · 106 · 100 · 153	172 1090 1062 1071 1107 1094 —	. 085 . 060 . 070 . 118 . 087 	.081 .058 .069 .116 .096	. 079 . 057 . 067 . 117 . 096 . —	.079 .058 .073 .110 .095 	· 077 · 056 · 076 · 111 · 094 ·	*098 *071 *069 *105 *104 *138
216 185 172 166 185 221	216 163 171 155 168 223		*213 *164 *164 *155 *179 *237	· 207 · 109 · 164 · 149 · 174 · 232	·205 ·164 ·169 ·142 ·177 ·235	160 165 139 180	164 162 137 181	·215 ·156 ·172 ·138 ·185	258 155 167 130 182	*252 *147 *165 *135 *180 —	250 147 160 130 184 	*202 *191 *166 *158 *175
162 210 250 212 407	163 206 210 204 367	171 211 201 208 343	164 194 194 190 1338	154 213 188 215 287	152 208 182 214 225	158 163 207 176 214 196	150 144 204 173 213	148 138 203 164 213 180	142 138 210 160 211 179	140 138 195 161 208 166	140 ) 138 186 153 200 167	157 191 210 200 292
157	152	150	150	146	•143	•140	135	134	134	.131	130	146

				нимп	OITY OF	THE AIR,	AND TE	NSION OF	THE AT	MOSPHER	IC VAPOI	JR.		
urs o Götti Tir	f Me ngen	ean }	0	1	2	3	4	5	6	7	8	9	10	11
ours c		an )	18	19	20	21	22	23	0	1	2	3	4	5
		1	78	90	85	85	82	82	79	78	78	74	71	72
		3	88	88	83	79	78	79	76	74	75	79	70	69
	1	4 5	87 100	90 90	93 78	93 69	92 57	92 53	94 71	$\begin{array}{c} 94 \\ 72 \end{array}$	98 75	94 73	94 65	96 66
		6	78 73	84 69	68 60	65 53	59 62	58 65	68 64	64 59	$\begin{array}{c} 64 \\ 62 \end{array}$	62 57	62 57	49 59
		7 8	80	78	56	54	50	55	54	55	54	51	51	50 —
	ı	9 10	86	77 56	56 51	60 45	57 47	62 44	55 52	50 51	47 61	<b>52</b> <b>6</b> 3	52 62	54 65
H.	- 1	$\begin{vmatrix} 11 \\ 12 \end{vmatrix}$	68 93	83	67	66	63	64	68	58	57	57	60	69
e l	ا د	13 14	7 <b>5</b> 90	69 91	68 89	65 86	66 75	$\begin{array}{c} 72 \\ 72 \end{array}$	84 69	73 74	82 79	82 79	82 80	88 82
- 1	APRIL	15 16	72 —	67	75 —	61 —	52	47 —	45 —	44	43	38	41	35 —
Humidity	₹	17 18	$\begin{array}{c} 72 \\ 55 \end{array}$	65 59	64 63	59 61	57 61	52 60	49 65	66 64	$\begin{array}{c c}61\\92\end{array}$	67 100	68 100	67 98
Hun Hun		19 20	96 87	99 78	86 51	64 63	$\begin{array}{c} 68 \\ 64 \end{array}$	66 66	64 69	70 60	60 71	70 68	67 70	67 67
ļ	ļ	21a	$\frac{3}{76}$	$\frac{76}{76}$	73	$\frac{66}{67}$	$\frac{31}{70}$	$\frac{66}{67}$	$\frac{30}{61}$	$\frac{60}{62}$	68	$\frac{\frac{3}{72}}{72}$	66	$\frac{67}{65}$
	1	22 23											_	
		$\begin{bmatrix} 24 \\ 25 \end{bmatrix}$	61 87	61 76	$\begin{array}{c} 61 \\ 72 \end{array}$	$\begin{array}{c} 71 \\ 73 \end{array}$	$\begin{array}{c} 72 \\ 64 \end{array}$	71 63	55 60	50 63	50 65	48 74	50 70	44 79
		$\frac{26}{27}$	86 96	70 71	66 76	$\begin{array}{c} 61 \\ 71 \end{array}$	$\frac{64}{70}$	66 65	$\frac{62}{63}$	60 87	$\begin{array}{c} 54 \\ 52 \end{array}$	55 46	59 47	58 51
		28 29	79 99	38 83	$\begin{array}{c} 72 \\ 74 \end{array}$	74 74	68 68	63 65	64 60	53 56	47 48	$egin{array}{c} 52 \ 44 \end{array}$	64 38	$\begin{array}{c} 68 \\ 42 \end{array}$
		30				<u>-</u> 67	65	<u></u> 64	<u> </u>	64		<u> </u>	64	65
lour	ly M	eans	82	75	70	0,	00	04	00	04	O <del>T</del>	00	04	00
	1	(1	In. 151	·In. 176	In. 165	In. 165	In. 165	In. 179	·In. ·170	In. 167	In. 168	In. 163	In. 150	In. •149
		3	166	201	•209	·211	$\cdot \overline{222}$	228	220	$\cdot \overline{221}$	$\cdot \frac{-}{224}$	$\frac{-}{234}$	•232	227
		5	·238 ·184	·249 ·170	·255 ·157	·268 ·147	·271 ·135	.271 .136	·284 ·202	*285 *193	*318 *198	*300 *190	·283 ·168	·278 ·176
		6 7	128 152	.159 .159	150 157	177 159	·172 ·196	180 201	*210 *192	$^{\circ}_{173}^{202}$	·202 ·181	$\frac{203}{174}$	·209 ·169	·174 ·175
		8 9	133	157 —	·155	170 —	·167	·187	•193 —	`195 —	·214	·210	204	202
		10 11	`198 `214	.230 .189	·229 ·188	*303 *164	· 276 · 173	*341 *167	*313 *191	*305 *185	·279 ·219	·286 ·216	·294 ·202	·279 ·210
apour.		$\begin{vmatrix} 12 \\ 13 \end{vmatrix}$	·168 ·165	196 161	186 163	·219 ·156	$\frac{225}{169}$	·234 ·179	·245 ·208	·236 ·197	·238 ·205	$^{226}_{202}$	·231 ·199	·241 ·206
e Vs	<u>H</u>	14	·202 ·181	213 192	·213 ·228	·226 ·215	·208 ·208	203	·208 ·203	·245 ·198	<b>*2</b> 38	<b>·2</b> 39	•238	·224 ·152
Tension of the V	APRIL	15 16	·139	137				200		<u> </u>	*195 —	173	180	
sion	7	17 18	.108	112	140 128	134 126	144 129	138 135	138 127	195 115	182 148	181 161	·189 ·167	190 164
Ten		19 20	·138 ·133	°169 °138	156 122	·122 ·159	·144 ·173	142 185	155 219	160 197	·145 ·244	160 245	•153 •234	·160 ·224
		21ª 22 23	·200	.201	206	197	203	199	•207	218	•234	226	•220	•24]
		24 25	·129 ·137	132 149	136 154	178	193	196	157	139	137	133	134	118
		26	164	151	154	186 151	172 182	175	180 186	193 180	196 180	208 172	·203 ·190	181
- 1		27 28	158 185	165 121	207 188	·213 ·198	.220 .195	·229 ·191	·221 ·187	184 163	·204 ·159	*189 *183	184 213	182
	-	29	·267	*239	211	·201	'196	196	197	192	168	160	·138	144
	ĺ	(30		ļ	Į.				1	1	1	1	1	

a Good Friday.

13				HUI	MIDITY O	F THE AI	R, AND T	ENSION (	OF THE A	TMOSPHI	ERIC VAP	OUR.		
The color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the color of the	-	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   Taylor   T	-	6	7	8	9	10	11	12	13	14	15	16	17	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	60/66	73 94 63 47 64 59	73 94 84 55 65 66 53 73 68 91 87 45 74 84 73 68 79 73 51 64 84	72 93 84 64 81 79	76 89 81 64 81 73 63 69 66 88 86 55 71 92 74 76 78 78 71 88	75 86 86 86 76 73 81 67 90 86 57 70 94 73 74 57 64 74 86 79 90		69 88 88 70 79 93 70 68 91 96 — 65 56 86 91 — 65 56 86 91 59 80 80	73 90 87 78 78 78 87 61 75 88 92 88 — 69 75 62 99 — 56 — 77 94 82	73 94 89 73 79 84 61 88 87 94 71 72 68 87 100 64 68 77 76 89 88	78 96 93 73 77 — 91 63 90 82 94 71 — 73 68 86 80 — 72 88 79 91 91 99	75 96 90 74 78 86 77 96 74 94 72 73 66 88 87 71 74 92 86 97 88	80 100 89 83 84 	76 93 79 67 69 68 62 67 72 83 82 57 65 80 79 69 67 68 72 73 72 78
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		42 —		57 —		<u> </u>		80	78	80		80	76 }	
168		67	71	74	75	77	79	79	80	81	82	83	85	73
186   196   193   188   185   186   182   181   177   174   173   174   171   186	BOX 7.7.7.	·158	159	164	164	170	· 168	181 219 190 147 153 155 221 236 210 257 198 199 165 135 127 136 224 121 127 160 162 181 265 7174	168 221 181 140 158 151 207 224 194 251 199 179 164 172 095 141 200 130 131 180 146 183 265	171 1219 182 139 153 155 195 196 174 196 174 158 154 124 138 163 140 189 207	176 176 1225 181 143 153 131 195 231 177 221 203 175 146 117 120 209 154 131 158 140 193 265	177 1224 176 138 155 132 188 195 187 203 174 148 135 119 128 156 133 155 142 192 263	$\begin{bmatrix} -1 \\ 171 \\ 228 \\ 172 \\ 135 \\ 166 \\ 131 \\ -1 \\ 180 \\ 203 \\ 197 \\ -1 \\ 154 \\ 190 \\ 124 \\ 144 \\ 140 \\ 190 \\ 264 \\ -1 \\ \end{bmatrix}$	166 220 230 163 170 165 192 260 206 224 191 209 176 157 133 146 194 186 147 176 165 191 217

				ними	OITY OF T	THE AIR,	AND TEN	NSION OF	THE AT	MOSPHERI	C VAPOU	JR.		
ours of Götti Tin	nger	n }	0	1	2	3	4	5	6	7	8	9	10	11
ours o Toro Tin	nto		18	19	20	21	22	23	0	1	2	3	4	5
		1 2 3 4 5 6 7 8 9	80 98 88 83 89 96 — 84 82	81 98 87 73 84 87 — 66 65	80 94 76 68 85 84 — 61 67	82 81 75 59 79 79 ———————————————————————————	78 77 68 60 77 74 — 57 62	77 82 66 58 72 72 	74 81 60 62 72 72 	86 81 59 62 68 72 — 52 59	92 78 52 64 66 75 	91 77 54 69 68 72 	93 73 50 72 67 71 	92 73 41 80 83 73 
e Air.		10 11 12 13 14	94 93 65 76	89 93 62 79	79 84 59 86 —	69 77 59 87	72 76 52 97	73 67 50 98	73 70 46 98	74 75 45 87	74 83 45 87	72 84 54 77	74 81 56 83	76 72 59 75
Humidity of the	MAY.	15 16 17 18 19 20 21	76 99 97 94 90 100	65 90 84 86 87 100	54 80 82 82 81 99	55 74 80 70 78 93	55 79 75 69 75 84	58 83 72 61 74 87	61 86 69 62 73 85	59 77 67 56 75 92	61 74 70 56 74 95	67 77 66 52 73 93	68 79 63 54 91 96	90 89 62 59 93 98
		22 23 24 25 26 27	87 82 99 90 77 81	74 83 97 92 68 80	71 77 92 87 61 75	78 67 95 83 59 72	96 66 92 81 56 70	73 66 90 75 62 74	72 68 69 74 63 74	72 70 71 72 69 68	72 72 64 70 57 64	72 73 58 54 51 57	72 76 62 38 51 58	73 73 74 57 51 60
		28 29 30 31	92 93 63	87 77 63	89 58 58	89 57 55	83 50 51	87 51 52	— 89 50 37	81 41 44	79 47 36	80 49 37	91 50 39	77 50 40
Hour	ly N	Means	87	81	77	73	72	70	69	68	67	66	68	70
		$ \begin{pmatrix} 1\\2\\3\\4\\5\\6 \end{matrix} $	In.	In. '219 '262 '327 '251 '432 '438	In. '228 '277 '320 '272 '444 '472	In. '260 '294 '332 '281 '492 '478	In. *258 *311 *337 *282 *507 *472	In. '262 '311 '338 '282 '509 '514	In.	In. '266 '322 '300 '267 '498 '528	In. •266 •320 •277 •269 •450 •577	In. •284 •303 •313 •282 •477 •525	In. '302 '292 '291 '275 '478 '479	In. •296 •298 •243 •300 •460 •495
Vapour.		7 8 9 10 11 12 13 14	216 241 289 287 175	204 251 293 293 287 181 185	214 292 280 272 182 210	· 248 · 298 · 265 · 269 · 198 · 214	·233 ·290 ·279 ·273 ·190 ·239	·231 ·309 ·283 ·255 ·196 ·262	·248 ·317 ·292 ·261 ·182 ·276	241 324 309 258 181 286	235 314 321 280 186 265	231 305 305 280 221 238	·253 ·326 ·309 ·287 ·232 ·228	· 248 · 289 · 308 · 265 · 242 · 200
Tension of the	MAY.	1	*185 *340 *259 *343 *398 *481	*206 *348 *322 *406 *411 *481	*210 *336 *338 *414 *463 *550	*224 *332 *349 *416 *491 *629	*237 *374 *353 *428 *513 *595	*269 *402 *372 *396 *559 *608	267 413 369 421 550 686	264 387 379 407 544 632	*252 *367 *406 *439 *569 *662	*244 *365 *393 *413 *514 *613	· 245 · 393 · 375 · 421 · 540 · 584	· 297 · 405 · 351 · 446 · 592 · 616
		22 23 24 25 26 27 28	'400 '372 '403 '395 '292 '298	*316 *353 *406 *421 *279 *313	*309 *337 *431 *438 *269 *354	*390 *285 *482 *458 *274 *384	*438 *280 *552 *518 *279 *386	*389 *280 *571 *526 *331 *405	377 291 480 534 387 401	*380 *305 *532 *523 *433 *407	*382 *327 *485 *540 *370 *401	*384 *364 *463 *472 *313 *354	*364 *371 *506 *363 *294 *373	395 370 486 462 300 357
		29 30 31	.455 .380 .177	*493 *377 *188	·493 ·328 ·180	.519 .328 .188	*581 *296 *188	·508 ·322 ·201	·629 ·324 ·154	·621 ·269 ·186	·594 ·257 ·153	·631 ·244 ·162	·669 ·232 ·176	·657 ·216 ·186
Нои	rly l	Means	.306	320	*330	*347	359	*366	*373	*372	*369	*359	*358	*362

			HU	MIDITY O	F THE AI	R, AND T	TENSION (	OF THE A	TMOSPHI	ERIC VAP	OUR.		
1	12	13	14	15	16	17	18	19	20	21	22	23	Daily and Monthly
	6	7	8	9	10	11	12	13	14	15	16	17	Means.
8	98 72 62 79 82 84	97 77 68 77 86 87	97 83 80 77 78 88	94 84 84 79 83 78	98 89 85 80 88 78	99 93 91 77 87 77	100 73 92 79 87	100 75 87 80 88	98 80 87 80 100	99 91 86 88 100	98 89 89 91 97	97 89 93 96 97	90 83 74 75 83
	60 79 80 63 61 81	64 79 75 57 64 83	63 91 78 53 63 85	64 95 81 56 69 84	58 97 83 55 69 83	53 99 85 57 63 83	91 54 99 89 58 63	79 74 100 94 59 74	74 76 100 94 62 70	85 81 100 97 64 69	79 83 100 96 62 83	79 } 76 93 96 62 79 ———————————————————————————————————	63 80 82 69 62 82
	88 88 64 64 93 95	96 93 71 70 100 98	93 97 76 73 96 98	96 78 85 77 93 100	100 83 89 78 97 100	97 79 91 90 98 100	71 97 83 89 91 100 —	71 100 85 97 95 100 —	70 100 93 96 95 100 —	78 100 94 96 95 100 	74 100 94 96 97 100 —	78 } 99 87 97 95 100	80 85 80 76 89
	77 74 72 54 49 65 77	81 70 76 60 57 73 —	90 68 79 62 67 75 —	79 69 82 64 53 86 —	79 64 86 66 64 86 —	89 64 86 61 70 82 —	96 80 83 72 73 — 92 86	92 85 94 72 74 — 99 86	91 91 96 83 79 — 97 86	92 89 96 92 74 — 96 88	83 97 97 80 76 — 97	82 95 91 90 77 — 96 }	81 76 83 72 64 78
	49 45	53 47	61 76	61 82	64 87	65 76	62 69	70 79	62 80	59 84	69 84	75 82	59 61
	72	76	79	79	81	81	82	85	87	89	89	88	77
	In. 294 284 290 310 418 446	In. '264 '266 '276 '314 '395	In. •252 •252 •280 •326 •439 •482	In.	In. '237 '232 '253 '331 '390 '417	In.	In. 233 237 266 317 379	In. 223 244 242 310 377	In. '213 '236 '240 '311 '364	In. 216 231 239 325 349	In. •212 •211 •229 •327 •326	In. '213 '227 '224 '315 '316 189	In. '247 '268 '280 '297 '426 '405
	243 316 302 234 234 196	·239 ·310 ·286 ·209 ·215 ·210	·222 ·332 ·286 ·189 ·185 ·219	 ·223 ·330 ·282 ·191 ·177 ·220	215 330 280 181 173 220	·207 ·321 ·289 ·180 ·147 ·219	*282 *204 *291 *296 *180 *141	196 232 272 305 180 142	*180 *218 *298 *303 *177 *138	186 208 303 304 175 140	185 210 302 300 163 149 —	189 } 200 268 300 162 154 157	*226 *301 *294 *229 *182
	284 381 315 458 586 602	309 369 313 417 521 609	·281 ·344 ·316 ·374 ·428 ·543	·292 ·299 ·320 ·354 ·457 ·450	301 280 312 346 472 466	299 255 305 351 472 500	187 304 246 309 343 464	167 316 228 315 338 458	148 319 219 306 334 456	150 319 223 286 334 450	315 208 279 341 434	*317 *204 *279 *349 *443	·273 ·322 ·330 ·387 ·491 ·548
	380 360 436 389 287 408	·364 ·319 ·431 ·371 ·291 ·395	·364 ·308 ·406 ·338 ·282 ·326	314 322 381 293 210 335	322 301 392 291 247 332	-372 •295 •384 •262 •250 •323	*489 *368 *345 *367 *287 *252	*488 *379 *359 *369 *280 *252	. 483 .375 .398 .367 .300 .252	*477 *373 *389 *351 *306 *242	·461 ·351 ·431 ·351 ·258 ·242	·439 } ·350 ·413 ·369 ·280 ·246 — }	*368 *341 *433 *388 *286
	666 204 194	·592 ·203 ·198	•504 •212 •265	*464 *210 *267	·450 ·222 ·247	*398 *223 *230	*408 *358 *197 *246	*407 *353 *199 *218	'403 '347 '186 '206	'400 '331 '174 '209	305 317 187 202	*382 } *314 *198 *205	.498 .250 .201
.	352	•339	*324	*309	*305	· <b>3</b> 00	296	.291	288	*285	•276	278	*328

			HUMI	DITY OF	THE AIR	, AND TE	NSION OF	THE AT	MOSPHER	IC VAPO	UR.	*	
ours of M Göttinge Time.	dean }	0	1	2	3	4	5	6	7	8	9	10	11
ours of v Toront Time	lean }	18	19	20	21	22	23	0	1	2	3	4	5
	$\left(\begin{array}{c}1\\2\\3\end{array}\right)$	73 83 89	56 77 92	51 74 92	47 74 90	42 71 88	36 67 87	37 62 85	29 60 83	48 58 78	54 58 77	57 63 81	57 64 83
	4 5 6 7 8 9	92 88 72 71 89 87	81 83 67 70 77 92	83 81 63 66 100 62	84 78 61 66 81 62	80 75 57 75 74 67	75 72 56 74 72 68	73 64 56 75 66 69	86 65 51 74 62 71	83 61 49 77 60 67	86 62 49 75 61 77	69 57 50 71 63 72	75 55 49 80 72 72
Humidity of the Air. JUNE.	- 1	66 61 81 90 79 89	57 45 79 81 72 83	48 46 80 83 66 77	45 38 76 82 62 76	38 36 71 75 58 72	34 34 63 48 69 68	37 30 67 46 47 68	39 28 80 41 63 72	39 23 70 36 58 78	44 26 59 34 56 66	42 27 66 31 62 75	40 27 69 31 60 71
Humic	18 19 20 21 22 23 24	99 95 90 91 99 83	98 93 89 86 100 75	83 83 92 79 100 65	85 77 89 81 99 57	86 79 76 85 96 45	85 86 76 80 94 42	84 89 71 78 84 36	73 82 69 73 80 31	82 80 65 75 54 30	85 78 62 72 63 32	82 77 59 72 49 26	84 87 61 78 65 25
	25 26 27 28 29 30	91 88 99 78 89	78 87 100 74 82	68 79 94 72 81	74 74 96 74 81	70 75 89 73 79	66 77 90 71 71	64 75 73 70 69	60 77 75 72 52	58 71 69 71 57	55 72 73 71 62	58 72 67 66 60	59 71 59 72 61
Hourly I	Means	85	80	76	73	70	68	64	63	61	62	61	63
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	In. •230 •280 •560	In. •205 •329 •560	In. •204 •359 •560	In. *197 *390 *581	In. *182 *411 *583	In. •174 •423 •581	In. *189 *418 *590	In. •156 •419 •580	In. *254 *417 *575	In. •287 •409 •571	In. •313 •398 •577	In. •338 •425 •565
	4 5 6 7 8 9	396 291 230 276 373 445	397 304 234 311 401 481	*464 *303 *236 *342 *540 *395	·472 ·305 ·244 ·361 ·497 ·435	*468 *289 *252 *438 *482 *507	·479 ·289 ·266 ·449 ·492 ·485	·478 ·283 ·287 ·437 ·485 ·488	*438 *292 *276 *435 *472 *517	*419 *266 *278 *449 *473 *511	·496 ·276 ·284 ·460 ·492 ·534	-473 •256 •272 •481 •518 •476	·419 ·232 ·268 ·452 ·526 ·519
Tension of the Vapour. JUNE.	11 12 13 14 15 16 17 18	·222 ·192 ·237 ·474 ·621 ·571	201 155 235 531 624 647	178 176 278 640 644 675	173 152 314 668 659 665	161 162 310 702 667 717	144 164 341 564 766	164 157 333 578 593 740	174 154 363 549 706 692	176 127 378 510 686 688	-201 ·141 ·366 ·492 ·681 ·695	-193 -148 -408 -433 -655 -679	179 145 401 423 655 696
Tensi	19 20 21 22 23 24 25	*574 *526 *438 *416 *518 *407	596 571 497 432 544 407	592 592 489 512 572 390	·664 ·598 ·517 ·551 ·584 ·346	·676 ·638 ·478 ·539 ·625 ·304	708 630 463 531 672	711 ·674 ·464 ·541 ·636 ·269	*680 *615 *466 *550 *665 *243	·651 ·605 ·440 ·528 ·497 ·239	659 579 436 518 486 260	·676 ·597 ·443 ·509 ·384 ·203	·648 ·456 ·443 ·476 ·434 ·197
	26 27 28 29 30	·494 ·453 ·682 ·401 ·433	544 533 667 443 447	.580 .573 .689 .503 .540	.615 .608 .706 .564 .551	633 626 677 559 571	.628 .626 .657 .538 .575	.643 .649 .535 .551 .541	·629 ·675 ·544 ·578 ·489	·613 ·654 ·516 ·586 ·520	*589 *638 *554 *590 *563	·608 ·657 ·508 ·570 ·543	*59 <b>5</b> *552 *441 *573 *568
Iourly I	Means	*413	`434	*463	•478	*487	*488	*478	475	•464	•471	•461	*447

			HU	MIDITY O	F THE A	IR, AND T	ENSION (	OF THE A	TMOSPHI	ERIC VAP	OUR.		·
	12	13	14	15	16	17	18	19	20	21	22	23	Daily and
	6	7	8	9	10	11	12	13	14	15	16	17	Monthly Means.
	60 66 84	59 74 84	71 81 90	75 79 94	79 84 95	84 82 97	90 80 —	88 90 —	88 92 —	85 93 —	83 93 —	88 93	64 76 87
	85 56 50 79 76 74	82 59 44 82 72 59	77 62 53 88 59 67	78 64 55 88 58 75	90 65 54 90 57 77	89 90 56 93 56 73	81 84 90 59 94 60	82 96 88 66 95 61	83 90 86 77 95 59	83 94 89 69 97 82	90 96 96 73 97 82	$   \begin{array}{c}     97 \\     91 \\     97 \\     74 \\     97 \\     82 \\     \hline     79   \end{array} $	84 74 59 82 70
	41 32 70 39 58 78	45 39 84 41 67 81	51 40 84 71 68 87	71 41 84 72 86 80	69 57 86 75 88 89	64 77 87 82 89 89	75 84 78 87 84 90	74 86 86 87 80 91	76 72 87 92 77 96	79 72 80 94 58 95	81 72 80 91 76 96	79 71 79 95 87 96 —	55 50 79 63 74 83
	82 89 54 75 67 28	88 89 61 78 69 36	92 94 65 82 76 45	94 96 65 79 78 46	90 96 83 81 85 56	85 97 89 87 82 64	96 86 92 93 89 87 —	98 93 95 90 100 87 —	99 94 96 90 94 88 —	99 93 96 94 96 91 —	99 95 92 96 97 92 —	97 96 95 90 	88 89 78 83 82 57
}- :	64 78 66 79 71	71 80 70 82 74	79 94 73 95 79	81 98 77 97 72	85 97 77 95 88	87 96 79 93 86	94 98 89 97 94	96 100 87 97 98	95 100 90 96 96	96 100 93 95 88	96 100 96 96 88	97 98 91 86 86	77 86 82 82 78
	65	68	74	76	76	83	86	89	89	89	90	90	75
	In. 303 424 547	In. •288 •437 •485	In. •266 •440 •500	In. •239 •392 •486	In. •255 •439 •476	In. •267 •463 ••449	In. •264 •470	In. •260 •470	In. •249 •444	In. •247 •464 —	In. •227 •490	In. •236 •533	In. •243 •423 •511
	385 232 270 393 509	·378 ·227 ·221 ·398 ·447 ·414	·328 ·229 ·235 ·403 ·373 ·402	*326 *233 *218 *400 *366 *417	·338 ·207 ·214 ·398 ·348 ·362	-323 265 216 389 334 315	*429 *297 *254 *225 *390 *341	·431 ·298 ·238 ·238 ·355 ·336	·431 ·283 ·230 ·254 ·345 ·318	*425 *280 *227 *237 *338 *387	*375 *284 *264 *244 *323 *378 —	*344 } *288 *288 *248 *325 *385 *224 }	*384 *262 *248 *390 *428
I	178 159 419 493 729 651			210 170 365 547 602	·196 ·207 ·355 ·535 ·604 ·557	·193 ·233 ·353 ·572 ·595 ·552	· 262 · 213 · 234 · 342 · 582 · 575	*248 *198 *237 *335 *623 *546	·240 ·192 ·230 ·329 ·602 ·540	*234 *192 *205 *312 *517 *507	193 203 340 552 478	199 198 198 361 585 482	187 179 348 553 620
	.607 .521 .387 .457 .436 .206	*598 *502 *396 *463 *409 *237	*572 *513 *370 *446 *403 *234	*564 *508 *360 *427 *397 *226	.543 .492 .384 .430 .402 .229	 •523 •465 •379 •430 •377 •247	*547 *525 *425 *363 *445 *400	*545 *513 *422 *358 *470 *405	. 556 . 488 . 385 . 361 . 473 . 403	·571 ·472 ·371 ·366 ·478 ·403	*522 *478 *385 *371 *512 *395	*519 } *476 *400 *386 *508 *390	*591 *520 *419 *485 *477
	.502 .580 .474 .579 .585	*481 *641 *485 *542 *559	*471 *665 *472 *568 *566	·453 ·634 ·450 ·461 ·523		·499 ·570 ·416 ·410 ·578	*443 *497 *573 *415 *405 *563	*442 *496 *632 *390 *389 *550	*423 *477 *623 *395 *362 *528	*431 *428 *621 *397 *344 *468	*428 *428 *632 *392 *368 *413	*432 } *466 *676 *379 *370 *341	535 613 512 487 526
	445	•429	•424	*404	*405	401	•403	•401	*391	*382	.381	*386	•434

<u> </u>		<u> </u>		DI	RECTIC	N AND FO	RCE OF	THE WIND					
Mean Gö		0h.		1 <sup>h</sup> .		2h.		3h.		4h.		5h.	
Time	e. ]	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	$\begin{bmatrix} 1\\2\\3 \end{bmatrix}$	E. - N.W.	lbs. 1.5 0.0 0.5	E. N.W.	lbs. 1.5 0.0 0.2	E. W.N.W.	lbs. 1.5 0.0 0.2	E. N.W. by W.	lbs. 1.5 0.0 0.2	S.W. by S.	1 bs. 1 5 0 5 0 0	E. S.W. by S. W. by S.	lbs. 1.5 2.0 0.2
	4 5 6 7 8 9	S.W. N. by E. E. S.W.	0.2 0.2 3.0 0.0 0.0 0.5	S.W. N.E. E. W.S.W.	0.2 0.2 3.0 0.5 0.0 0.5	N.N.E. E. W.S.W. S.W. by W.	0.0 0.2 2.5 0.5 0.0 0.5	S.W. by S. E.N.E. E. by N. W.S.W. N.W. by N. S.W. by W.	0.2 0.2 2.0 0.5 0.5	S.W. N.E. E. W. by S. W.N.W. S.W. by W.	0.2 0.2 1.0 0.5 0.5	W. by S. N.E. E. W. by S. N.N.W. S.W. by W.	0.2 0.2 1.0 0.5 0.5 1.0
JANUARY.	11 12 13 14 15 16 17	S.W. N. by W. N.	0.0 0.0 1.0 0.0 0.2 0.2	S.W. S.S.W. N. by W. N. by W.	0.0 0.0 1.0 0.2 0.2 0.2	N.N.W. N.W. S.W. S.S.W. N. by W. N. by W.	0'2 0'2 1'0 0'2 0'2 0'2	N.N.W. N. S.W. S. by W. N.N.E. N.	0.5 0.2 1.0 0.2 0.2 0.2	N.N.W. W. S.W. by W. S. by W. N. by W. N. by W.	0.5	N.N.W. W.N.W. S.W. by W. S. by W. N. by W. N. by N.	0.5 0.2 0.2 0.2 0.2 1.0
J.	18 19 20 21 22 23 24	N. by W. N. by E. N.N.E. N.N.W.	0.5 0.5 1.0 0.0 0.0	N. by W. N. by E. N.E. N.N.W.	0.2 0.2 1.0 1.5 0.0 0.2	N. by W. N. by E. N.E. N.N.W. W. by S. S.W.	0.5 0.5 1.0 0.5 0.5	N.E. N.N.W. S.W.	0.5 0.0 1.0 0.0 0.5	N. N. E. N. N. W.	0.5 0.0 1.0 2.2 0.0 0.2	N. by W. N.N.E. N.N.W. S.W. S.W.	0.5 0.0 1.0 2.5 0.2 0.5
	25 26 27 28 29 30 31	E.S.E. E. N. by W.	0.0 0.0 0.0 0.2 0.2 3.0	S.W. E. by S. N. by W.	0.0 0.0 0.2 0.2 0.0 3.5	S.W. E.S.E. N. by W.	0.0 0.0 0.2 0.2 0.0 3.5	N. S.W. by W. E.S.E. N. by W.	0.0 0.2 0.5 0.2 0.0 3.5	S.W. by W. E.S.E. N. by W.	0.0 0.0 0.2 0.2 0.0 2.5	W. by S. E.S.E. N. by W.	0.0 0.0 0.2 0.0 5.0
(continue	ed)	· · · · · · · · · · · · · · · · · · ·						·					
Mean Gö Tim		12h.		13h.		14h.	<u> </u>	15h.		16h.		17h.	
	1 2 3 4 5 6 7 8 9 10	E. W. by N. — — — E.N.E. N.W. W.N.W. — S.W.	Bs.   1.5   1.0   0.0	E. W. by N.  E.N.E. S.W. W.N.W. W.N.W. S.W.	lbs. 1 '0 0 '5 0 '0 1 '5 0 '2 0 '2 1 '0	E. W. — E.N.E. S.W. W.N.W. W.N.W. W.S.W.	Force.	E. W. — E.N.E. S.W. — N.W. by W. S.W.	Bis.   O'5   O'5   O'0   O'0   O'2   O'2   O'5   O'2   O'5   O'2   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5   O'5	E. W. — E.N.E. S.W. — S.W.	Force.	E.S.E. W. — E.N.E. S.W. — S.W.	lbs. 0.5 1.0 0.0 
JANUARY.	12 13 14 15 16 17 18	N.W. by N.  W. N. by W. N. by W.	0.2 0.0 0.0 0.2 0.5 2.0	N.W N. by W. N.N.W.	0.5 0.0 0.0 0.0 0.5 2.5	N.N.W. S.W.  N. by W. N.W. by N.	-	N.W. by N. S.W. S.S.W. N. N.W.	0.2 1.5 0.2 0.0 0.5 0.5	N.W. S.W.	0.5 0.0 0.0 0.0 0.0	N.W. — W.N.W. N. by W.	0.2 0.0 0.0 0.2 0.5 0.0
j	19 20 21 22 23 24 25	N. by W. N.W. by N. S.W.	1.0 0.0	N.E. — N. N.W. by N. — S.W. —	1.0 0.0	N.N.E. E. by N. N. N.W. by N. S.W.	0.5 0.5 3.0 1.5 0.0 1.0	N.N.E. E. by N. N. by W. N.W. by N. W.S.W. S.W.	0.2 0.2 2.5 1.5 0.2 1.5	N. by E. N.N.E. N. by W. N.W. by N. W.S.W. S.W.	0.2 0.2	N. by E.  N.N.W. N.W. by N. W.S.W. S.W	0.2 0.0 2.5 0.5 0.5 0.5
	26 27 28 29 30 31	E. by N. N.E. by N.	0.0 0.0 0.0 0.2 0.0 0.2	N.E. by E. S.S.W. E. by N. N.N.E.	0°5 0°2 0°0 0°2 0°0 0°2	N.N.E. S.S.W. E. N.N.E.	0°5 0°2 0°0 0°2 0°0	S.W. E.S.E. N.W.	0.0 0.2 0.0 0.5 0.2 0.0	S.W. by W. E.S.E. N.N.W.	0.0 0.5 0.0 0.2 0.5 0.0	N.N.E. S.W. by W. N. by W.	0°2 0°5 0°0 3°0 0°0

		<del></del>	<del></del>	DIRE	CTION	AND FORC	E OF T	HE WIND.		·			
6 <sup>h</sup> .		7 <sup>h</sup> .		8h.		9 <sup>h</sup> .		10h.		11 <sup>h</sup> .			Göttinge ime.
E. S.W. by S. W. by S.	lbs. 1.5 2.5 0.2	E. S.W. W.	lbs. 1.5 1.0 0.2	E. S.W. W.N.W.	lbs. 1.5 0.5 0.2	E. S.W. W.N.W.	lbs. 1.5 0.5 0.2	E. S.W.	lbs. 2°5 0°5 0°2	E. S.W. by W.	lbs. 2 0 0 2 0 0 0	$\begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$	
W. N.E. E. W. by S. N.N.W. W.S.W.	0.2 0.2 1.0 0.5 0.5 1.5	W. N.E. by N. E. W. N.W. by W. W.S.W.	0.2 0.5 1.0 1.5	S.S.W. E.N.E. E. W. N.W. by W. S.W.	0.2 0.5 0.5 0.5 0.2 1.0	S. by W. N.E. by E. E. W. by N. W.S.W. S.W.	0.2 0.5 0.5 1.0 0.2 2.0	E.N.E. N.N.E. W. by N. W.S.W. S.W.	0.0 0.5 0.5 1.0 0.2 2.5	E.N.E. N. by E. W. by N.	0.0 1.0 0.2 1.0 0.0 2.5	4 5 6 7 8 9	
N.W. W. by N. W.S.W. S. by W. N.N.W.	0.2 0.5 0.5 0.2 0.2 2.5	N. W. W.S.W. S. by W. N.N.W. N.N.W.	0.2 0.5 0.5 0.2 0.2 2.5	N. by W. W. by S. S.W. N. by W. N. hy W.	0.2 0.5 0.5 0.5 0.2 2.0	N. W. W. S.W. N. by W. N.N.W.	0.2 0.5 0.2 0.2 0.5 1.5	N.W. by N. W. by N. W.S.W. S.W. N.	0.2 0.5 0.2 0.2 0.5 2.5	N.W. by N. W. by S.  N. N. N.N.W.	0.2 0.2 0.0 0.0 0.0 0.5 2.5	11 12 13 14 15 16 17 18	JANUARY.
N.E. by N. N.W. by N. S.S.W. S.W.	0.2 0.0 1.0 2.5 0.2 0.5	N.N.E. N.W. by N. S.S.W. S.W.	0.2 0.0 0.5 2.5 0.2 1.5	N. by E.  N. N.N.W. S.W. by S. S.W.	0.2 0.0 0.5 1.5 0.2 2.5	N. by E. N. by W. N.W. S.S.W. S.W.	0.2 0.0 0.5 2.0 0.2 1.5	N. by W. N.W. S.W. S.S.W.	0.0 0.0 0.5 2.5 0.2 1.0	N.E. N. by W. N.W. S.S.W.	0.2 0.0 1.0 3.5 0.0 1.0	19 20 21 22 23 24 25	J
W. by S. E.S.E. N.	0.0 0.0 0.5 0.2 0.0 1.0	S. W. by S. E.N.E.	0.0 0.2 0.5 0.2 0.0 0.5	S. by W. W.S.W. E. N. by E.	0.0 0.2 0.2 0.2 0.0 0.5	S. by W. W.S.W. E. by N.	0.0 0.2 0.2 0.0 0.5	S.S.W. S.W. E. by N. N.N.E.	0.0 0.2 0.2 0.0 0.0 0.5	S.W. E. by N. N.E.	0.0 0.0 0.2 0.2 0.0 0.2	26 27 28 29 30 31	
18 <sup>h</sup> •		19 <sup>h</sup> .		20h.		21 <sup>h</sup> .		22 <sup>h</sup> .		23h.			Götting
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		lime.
E.S.E. W.	lbs. 0.2 1.0	w.n.w.	lbs. 0.0 3.0		lbs. 0'0 2'0	N.W.	1 bs. 0 0 1 0	N.W.	1bs. 0°0 1°0	N.W.	0.0 1.0	$\begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$	
E.N.E. W.S.W.	0.0 0.0 4.0 0.2 0.0 0.0	N.N.E. E.N.E. W. by S.	0.0 0.2 4.0 0.2 0.0 0.0	N. by E. E.N.E. W.S.W.	0.0 0.2 4.0 0.2 0.0 0.0	N. by E. E.N.E. S.W.	0.0 0.2 3.5 0.2 0.0 0.0	N. by E. E.N.E. W. by S. N.W. S.W.by W.	0.0 0.2 3.5 0.2 0.2 0.5	S.W. N. by E. E.N.E. W. by S. S.W. by W.	0.2 0.2 3.5 0.2 0.0 0.2	4 5 6 7 8 9	
N.W. by N. N.W. S.W.  N. by W. N. by W.	0.5 0.2 0.2 0.0 0.2 0.5	N.W. by N.	0.5 0.0 0.0 0.0 0.0 0.2 0.0	N.N.W. S.W. by S. N. by E. N. by W.	0'5 0'0 1'5 0'0 0'2 0'2	N. by W. S.W. by S. N.W. N. N. by W.	0.5 0.0 1.5 0.2 0.2 0.2	N. by W. S.W. by S. W.N.W. N. by E.	0.5 0.0 2.0 0.2 0.2 0.0	S.W. W. by S. N. by W.	0.0 0.0 0.0 2.0 0.2 0.2 0.2	11 12 13 14 15 16 17	JANUARY.
N. by E. N. by E.	0.2 0.2 2.0 0.0	N. N. E. N. by W.	0.5 0.2 0.5 2.5 0.0 0.0	N. N. N.N.E. N. S.W. by W.	0.2 0.2 0.5 1.5 0.0 0.2	N. by W. N. by E. N.N.E. N.N.W. — S.W.	0.2 0.2 0.5 2.5 0.0 0.5	N. by W. N. by E. N.N.E. N. W.S.W.	0°2 0°3 0°5 1°5 0°0 0°5		0°2 0°2 1°0 1°0 0°0 0°2	18 19 20 21 22 23 24	JA
N.N.W. S.W. by W.	0.5	<u> </u>						, —					

				DIRECT	TION AND F	ORCE (	OF THE WIN	ID.				
Mean Göttingen	Oh.		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> ,	
Time.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction	Force.	Direction.	Force.	Direction.	Force
EEBRUARRY.  1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	W. W. S. W	lbs.	W. N.N.W.  N.N.W.  N. by E.  E. S.W.  N.N.W.  N.E. by N.	lbs.	W. by S.  W. by S.  W. by S.  N.N.W.  N.E.  E.  S W.  W.  N.W.  N.E. by N.	lbs.	W.S.W. S.W. W. N.W. by W. S. N.N.W. N.E.  E. by N. E.S.E. W. N.W. N.W. N.W. N.W. N.W.	lbs.	S.W. S.W. by W. W.S.W. N.W.  S.S.W.  N.N.W.  E.N.E.  W. by S.  S.S.E.  E. by S.  E.S.E.  W.S.W.  N.N.W.  N.N.W.  N.N.W.  N.N.W.  N.E. by E.	0°2 2°5 0°0 0°2 0°0 0°5 0°0 0°2 0°0 0°0 2°0 3°0 0°5 0°2 0°5 0°2 0°2	S.W.  S.S.W.  W.N.W.  S. by W.  N.N.W.  N.E.  W.N.W.  E.S.E.  N.W. by N.  E.S.E.  W.S.W.  N.W.  N.W.  N.W.  N.W.  N.W.  N.W.  N.W.  N.W.  N.W.  N.W.  N.W.  N.W.	lbs.
(continued)												l
Mean Göttingen	12h.		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .	
Time.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
EEBRUARY.  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	S.S.W. W. by S. S.W. N.W. S. N.W.  H. N.E. H. E.N.E. N.N.E. E. S.W. W. N.W. S.W.	lbs.	S.S.W. W. S.W. N.W. S. N.W.  E.N.E. E.N.E. E.N.E. E.N.E. E.N.E. W. by S. W.N.W. N.W.	lbs 0'2 0'5 1'0 1'0 0'2 3'0 0'0 1'0 0'5 0'0 3'0 0'5 0'0 2'0 1'0 0'5 0'0	S. by W. W. by S. S.W. W.N.W. S. by E. N.W.  E.N.E.  E.N.E.  S.W.  W. by W.  E.S.E.  S.W.  W. by S.  W.N.W.	1bs.  0'2 0'2 2'0 0'5 0'2 4'5 0'0 1'5 0'5 0'0 4'0 0'0 1'5 0'5 0'0 0'5 0'0 0'5 0'0	S. W. by S. S.W.  N.W.  E.N.E.  E.N.E.  E.N.E.  W.S.W.  W. by S.	lbs. — 0'2 0'2 1'5 0'0 0'0 5'0 0'0 0'5 0'0 0'0 0'5 0'0 0'0	S. by W. W.N.W. S.W. W. N.W.  E.N.E.  E.N.E.  E.N.E.  E.N.E.  N.S.W.	lbs.	S. N.W. S.W. by W. by S. N.W. E.N.E. E.N.E. E.N.E. W. by S.	lbs.

				DIRE	CTION	AND FORCE	OF TI	IE WIND.					
6h.		7 <sup>h</sup> .		8h.		9h.		10h.		11h.		Mean G	öttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Ti	me.
S.S.W. S.S.W. W.N.W.	1bs. — 0.2 0.0 0.5 3.0 0.0 0.5	S. W. S. by W. W.N.W. S. S.S.W.	1bs. — 0.2 0.0 0.5 2.5 0.2 1.0	S.S.W. S. W.N.W. S. S.W. by S.	1bs. — 0°5 0°0 0°5 2°5 0°2 1°5	S.W. S. by W. W.N.W. S. S.W.	lbs.  0.2 0.0 0.5 1.5 0.2 0.5	S.S.W. S.S.W. W.N.W. S.S.E. S.W.	lbs.  0 2 0 0 3 0 1 5 0 2 0 5	S.S.W. W. by S. S.S.W. W.N.W. S.	lbs.  0.2 0.2 2.5 2.0 0.2 0.2	1 2 3 4 5 6 7	
N.N.W. E. N.E. W.N.W. E.	1:0 0:2 0:5 0:0 0:2 0:2	N.N.W. E. N.E. W. W.N.W. E.	1:0 0:2 0:5 0:2 0:2	N.N.W. E. N.E. by N. W.N.W.	1°0 0°2 0°5 0°2 0°0 0°0	N.N.W. E. N.E. by N. W.S.W. W.S.W.	0.5 1.0 0.2 0.2 0.2 0.2	N.N.W. E. N.N.E. W.S.W. W.	0.2 1.0 0.5 0.2 0.2 0.2	N. E. N. — N.E.	0.2 1.0 0.5 0.0 0.0 2.0	8 9 10 11 12 13 14 15	FEBRUARY.
E.S.E.  W.N.W. E. by S. S.W.	0.5 0.0 0.2 3.5 1.0 2.5	E. by S.  W.N.W. E. E.S.E. S.S.W.	0.5 0.0 0.2 3.5 0.2 3.0	E. — N. E. E. by S. S.W. —	0.2 0.0 0.2 3.5 0.2 3.0	E. N. E.N.E. S.W.	0.5 0.0 0.2 3.5 0.0 3.0	E. S. E.N.E. W.S.W.	0.5 0.0 0.2 4.5 0.0 2.0	N.E. N.E. E. S.W.	0.2 0.0 0.0 4.5 0.0 2.5	16 17 18 19 20 21 22	FEBR
S.W. W. by S. W. W.N.W. — N.E.	1.0 0.5 0.2 0.2 0.0 1.5	S.W. by S. W. by N. W. W.N.W. — N.E. by E.	2:5 1:5 0:2 0:2 0:0 1:5	S.W. W. by N. W. N. S.W. E.N.E.	2.5 1.0 0.2 0.2 0.2 1.5	S.W. W. by N. W. N. — E.N.E.	2.5 1.5 0.2 0.2 0.0 1.0	W.S.W. W. by N. N. N. S.W. E.N.E.	3.0 1.5 0.2 0.2 0.2 0.2 -	W.S.W. W.N.W. — N.N.W. S.W. E.N.E.	2.5 2.5 0.0 0.2 0.2 0.2	23 24 25 26 27 28 29	
						1	× .	1		a oh		3	
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Föttingen ime.
	lbs.		lbs.		lbs.		lbs.		lbs.		lbs.	-  -	
S. N.W. S.W. by W		N.W. W.S.W. — W. E. by N. — — — — — — — — — — — — — — — — — —		N.W. by W. W.S.W.  W.  N.E. by N.	0.0 1.5 2.5 0.0 0.0 0.0 0.5 0.0 0.0 0.0 0.0	N.W. by W. W.S.W. N.E. by E. N.N.W. N.E.	1.5 0.0 0.2 1.0 0.0 0.5 0.0 0.0 0.0	W.N.W. W. by S.  N.N.W. N.E. by E.  N.W. by W.	0.0 1.5 1.0 0.0 0.0 0.0 0.5 0.0 1.0 0.0 0.0 0.0 0.0	W	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15	FEBRUARY.
N.E. N. by W. E. by S.  N.E. by N.  N.E. by N.	0.2 0.0 5.0	N.E. by N.  E. by S. S.W. by W.  W. by S.  N.N.E.  N.E.	0°2 0°0 0°0 5°5	N.E. by N.  E. by S. W.S.W.  N.N.E.  N.E.	0.0 0.0 0.0 5.0 0.2 	N E. by S. W.S.W N N. N.E N. N.E.	0°2 0°0 0°0 4°5 0°2 — 0°0 0°2 0°0 1°0 1°0	N. by E.  E. by S. W.S.W.   N.E. by N.  N.N.E.	0.2 0.0 0.0 4.5 0.2  0.0 0.0 0.0 0.0 1.0  0.2	N. by E.  E. by S. S.W. by W    N.E	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	16 17 18 19 20 21 22 23 24 25 26 27 28	FEBR

			DII	RECTIO	N AND FOR	CE OF	THE WIND.					
Mean Göttingen	Oh.		1 <sup>h</sup> .		2h.		3h.	<del></del>	4h.		5h.	
Time.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
MARCH.  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	N.E. by N.  W.  N. by W.  E.N.E.  W.N.W.  W.N.W.	lbs.	N.E. by N.  W.  N. by W.  S.W.  W. by N.  N.W.  N.E.	lbs	N.E. S.W. W	lbs.	N.E. by E. N.E. by N. S.W. by S. W. E.N.E.  N.E. by N. E.N.E.  S.W. by S.  W. N.N.W.  E. by N. N.N.W.	lbs.  0'5 0'2 0'5 0'2 1'0 0'0 0'2 0'2 0'0 0'0 0'0 0'2 1'5 0'5 0'0 0'2 1'5	N.E. by E. E. S.S.W. W. by N. E. S.S.W. E. E. W.S.W. W. N.N.W. S.W. by W. E. by N. E. by S. W. by N.	lbs.	N.E. by E. E. S.S.W. W. by N. E. by N. E. E. E. W.S.W. W. N.N.W. S. E. by S. E. S.E. N.W.	1bs.  0'5 0'2 0'5 0'2 1'0 0'0  0'2 0'2 0'2 0'5 0'5 0'5 0'5 0'5 0'2 1'5
23 24 25 26 27 28 29 30 31	E. by N. E.N.E. S.S.E. S.W. by W.	0.5 0.0 1.0 0.0 0.2 0.2  0.0 0.0	E.N.E. E.N.E. S. S.W. by W	0.5 0.0 1.0 0.0 0.5 0.2  0.0 0.0	E.N.E. E.N.E. E.N.E. S. W.N.W. N.W. by W.	0.5 0.2 1.0 0.0 0.5 0.0 	E.N.E. E.N.E. S. by E. S. W. W.N.W. N.W.	0.2 0.5 0.5 0.5 0.5 0.2 0.2	E.N.E. E. by N. E.N.E. S.S.E. S.S.W. S.W. W. N.N.W.	0.2 0.5 0.5 0.5 0.2  0.2 0.2	E. by N. E.N.E. E.N.E. S.S.E. S.S.W. W.S.W. — W.N.W. N.N.W.	0.2 1.0 0.2 0.5 0.5 0.5 
Mean Gottingen	12h.	<del></del>	13h.		14h.		. 15h.		16b.		17 <sup>h</sup> .	
Time.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
MARCH.  MARCH.  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	E. by S. S.W.  E. by S.  W.S.W.  E. by N.	lbs.	W.S.W.  E. by S.  W. by S.  W. by S.  E. by N.  W. by S.  W. by S.  W.N.W.	lbs.	E. by S.  W. by S.  E.N.E.  W.N.W.	lbs. — 0'0 0 0'0 0'0 0'0 0'0 0'0 0'0 0'0 0'0	N.W. by N.  E. W.S.W.  N.E. W.N.W.	lbs.  0'0 0'0 0'0 0'2 0'0 0'0 0'2 0'0 0'0 0'	N.W.	1bs. — 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.5 — 0.0 0.2 0.0 0.0 0.2 0.0 0.0 0.0 0.0 0.0	N.W. N.E.  E.  S.W. by W.  W. by N.	1bs. — 0.00 0.00 0.20 0.00 0.20 0.00 0.00 0

				DII	EECTIO.	N AND FOR	OM OF	THE WIND.					
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .	-	10 <sup>h</sup> .		11 <sup>h</sup> .		Mean G	öttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Ti	me.
N.E. by E. E. by S. S.W. by S. S.W. E. by N. S. by E.	lbs.  0.5 0.2 0.5 0.2 0.5 0.2 0.5 0.2	E. by N. E. S.S.W. S.S.W. E. by N. S.S.E.	lbs.  0.5 0.2 0.2 0.2 0.2 0.2 0.2	E.S.E. S.E. by S. S. by W. W.N.W. E. E.S.E.	$0.2 \\ 0.5$	E. by S. S.S.E. S. by W. S.W. by W. E.S.E.	lbs.  0.5 0.2 0.5 0.2 0.5 0.2 0.0 0.5	E. by S. S.S.E. S. by W. W. —————————————————————————————————	lbs.  0.5 0.2 2.5 0.2 0.0 0.5	E. by S. S.W. W.N.W. E.S.E.	1bs. — 0.2 0.0 2.0 0.2 0.2 0.0 0.0	1 2 3 4 4 6 7	
S.S.W. E. E. E. W.S.W.	0.2 0.2 0.2 0.2 0.2 0.0 1.5	S. by W. E. by S. ————————————————————————————————————	0.2 0.2 0.2 0.0 0.0 1.5	S.S.W. E. by S. ————————————————————————————————————	0°2 0°2 0°2 0°0 0°0 1°0	S.S.W. E. by S. ————————————————————————————————————	0·2 0·2 0·2 0·0 0·0 1·0	S.S.W. E. E.N.E. E. W.S.W.	0·2 0·2 0·2 0·2 0·0 2·0	E.N.E. W.S.W.	0.0 0.0 0.2 0.0 0.0 0.5	8 9 10 11 12 13 14 15	Э <b>н.</b>
W. N.W. E. S.E. by E. W. by N.	0.5 0.5 0.0 0.2 0.2 1.5	N.W. N.W. by W.	1.0 0.2 0.0 0.0 0.0	N.N.W. W.N.W. — — N.N.W.	1.0 0.5 0.0 0.0 0.0	N.N.W. N.W. — — N.W.	1.0 0.5 0.0 0.0 0.0 1.5	N.N.W. S.S.W. E. —————————————————————————————————	1.0 0.2 0.2 0.0 0.2 1.5	N. by W. E. W.N.W.	1.0 0.0 0.2 0.0 0.0 1.5	16 17 18 19 20 21	MARCH
E. E.N.E. S.E. by S. S.S.W. S.W.	0.2 1.0 0.0 0.5 0.5	E.N.E. S. S.E. S. by W.	0.0 0.5 0.2 0.2 0.0	E. by N. ———————————————————————————————————	0.2 1.0 0.0 0.2 0.5 0.2	E. by S. S.S.W. S.W. by S.	0.0 1.0 0.0 0.5 0.2 0.5	E. by S. E. by S. S.W.	0.0 0.0 0.2 0.0 0.2	E. by N. S. W. by S.	0.0 3.0 0.0 0.2 0.0 0.2	23 24 25 26 27 28 29	
S.W. S.S.E.	0.2	S. by W. S.S.E.	0.2	S.W. by S. S.S.E.	0.2	S.W. S.S.E.	0.2	S.W. S.S.E.	0.2	w. —	0.0	30 31	)
18h.	l "	19 <sup>h</sup> .	1	20h.	1	21h.	T	22h.		Direction.		Mean G	löttingen ime.
Direction.	Force.	Divoction	Force.	Direction.	Force	Direction.	Force.			l Direction			
	lbs	Direction.		-	lbs.			Direction.	Force.		Force.	<u> </u>	
S.W. by S. W.N.W.	1bs 0.0 0.2 0.0 0.2 0.0		Ibs.  0.0 0.0 0.0 0.0 0.0 0.0		lbs.  0.0 0.0 0.0 0.0 0.0 0.0	W.S.W. W. by N.	1bs. — 0.0 0.0 0.2 0.2 0.0 —	W. by N.	lbs 0.0 0.0 0.2 0.2 0.0		lbs.  0'0 0'0 0'2 0'0 0'0	1 2 3 4 5 6 7	
S.W. by S. W.N.W.	0.0 0.2 0.0 0.2 0.0	N.E. by N.	lbs.	N. by E.  N.E. by N.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	W.S.W. W. by N. N. by W.	lbs.	W. by N	lbs.	W	1bs 0.0 0.0 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14	
S.W. by S. W.N.W.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.E. by N.	lbs.	N. by E.  N.E. by N.	0.0 0.0 0.0 0.0 0.0 0.0 0.5 0.0 0.0 0.0	W.S.W. W. by N.  N. by W.  N.E. by N.  W. by S.  N.W.  W.	lbs.	W. by N.  N.  S.W. by W.  N.W.  W.	lbs.	W. by S. N.W.	lbs.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	MARCH.
S.W. by S. W.N.W. N. W.N.W. N.N.W. N.E. by N.		N.E. by N.  W. N.W. N.N.E.	lbs.	N. by E.  N.E. by N.  W. N.W.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	W.S.W. W. by N.  N. by W.  N.E. by N.  W. by S.  N.W.  W.	lbs.	W. by N	lbs.	W. by S. N.W.	lbs.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	

			<del></del>	DI	RECTIO	N AND FOR	CE OF	THE WIND.					
Mean Go	öttingen	0h.		Iħ.		2h.		3h.	-	4h.		5h.	
Tin		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	$\begin{pmatrix} 1\\2\\3\\4\\ \end{pmatrix}$	N.N.E. N.N.E.	lbs. 0°0 0°2 0°2 0°0	N.E. N.E. by E. E.	lbs. 0°0 0°2 0°2 0°2	E. by N. E. by S. E.	lbs. 0°0 0°2 0°5 0°2	S.E. E. E. E.	lbs. 0°2 1°0 0°5 0°5	E.S.E. E. by N. E. E.	lbs. 0.5 1.0 0.2 0.5	S.E. E. by S. E. E.	lbs. 0 ' 5 0 ' 5 0 ' 2 0 ' 5
	5 6 7 8 9	N. by W. W. by S.	0.2 0.0 2.2 0.0	N. by W. W. by S.	0.0 0.0 3.0 0.0	N. by E. W. S.W.	0.5 0.0 3.0 0.5	W.S.W. S. by W.	0.5 0.0 3.0 0.5	E. W. by S. S.	0.5 0.0 2.5 0.5	E. W.S.W. S.	0.2 0.0 2.5 0.5
	11 12 13	N. by E.	$\begin{array}{ c c }\hline 0 & 0 \\ \hline 0 & 2 \\ \hline \end{array}$	 N.	0.0	N. by W.	0.0	S.W. by S. N.N.W.	$\frac{0.2}{0.2}$	S.W. by S. N.W. by N.	1.0	W.S.W. N. by W.	2.5
APRIL.	14 15 16 17 18	N.N.W. — N.W.	0.0 2.5 0.0 0.0 0.5	S.W. by W. N.N.W. — W.N.W.	0.2 2.5 0.0 0.0 0.5	S.W. by S. N.N.W. E. by S. W.S.W.	0.2 3.0 0.0 0.2 0.5	S.S.W. N.N.W. S. by E. E.S.E. S.S.E.	0.2 2.5 0.2 0.2 0.2	S.S.W. N. by W. S. by E. E.S.E. S.W. by S.	1.0 2.0 0.2 0.2 0.5	S.S.W. W.N.W. E.S.E. E.S.E. S.S.W.	2.0 1.5 0.5 0.2 0.5
	19 20 21 22 23 24 25	E. N.N.E. ——————————————————————————————	0.0 0.0 0.2 0.2 0.0 0.5	E. by N.  E.S.E.	0.0 0.0 0.2 0.0 0.0 0.5	S.W. by S.  E.N.E.  N.E. by N.  E.	0.2 0.0 0.2 0.2 0.0 0.5	S. E. E.S.E. E.	0.5 0.0 0.2 0.2 0.0 0.5	S. S. W. by S. E. E. E.	0°2 0°2 0°2 0°2 0°0 0°2	S. S.S.W. E. E.N.E.	0.2 0.2 0.2 1.0 0.0 0.0
	26 27 28 29 30	N.E. by N. E. by N. E.N.E.	0.0 0.5 5.0 0.5 0.5	E.N.E. E.N.E. E.N.E.	0.0 0.5 1.0 0.2	N. by E. E. E.N.E. E. by S.	0.2 1.0 1.0 0.2	S.E. by S. E.N.E. E.N.E. E. by S.	0.2 1.0 1.0 0.2	S. by W. E.N.E. N.E. by E. E.N.E.	0°2 1°5 1°0 0°2	S. by E. E. by N. N.E. by E. E. by N.	0.2 2.5 1.0 0.2
(continu	red)	<u> </u>											
Mean G	öttingen	12h.		13h.		14h.		15h.		16h.		17h.	
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	$\left(\begin{array}{c}1\\2\\3\\4\\5\end{array}\right)$	E.N.E.	1bs. 0°0 0°0 0°0 0°2	E.N.E.	1bs. 0'0 0'0 0'0 0'2	  E.N.E.	lbs. 0°0 0°0 0°0 1°5	E. by N.	1bs. 0.0 0.0 0.0 0.5	– E. by N. E.N.E.	lbs. 0.0 0.0 0.2 0.2	 E. by N.	1bs. 0.0 0.0 0.2 0.0
	6 7 8 9 10	E.N.E. S.W. W.1 E.	0°2 0°5 1°5 0°2	E.N.E. S.S.W. W. by N.	0°2 1°5 0°2 0°0	E. by N. S.S.W. — N.E.	0.5 2.0 0.0 0.2	E. by N. S.W. N.E.	0.2 0.0 0.0	E. by N. W. N.E.	1.0 1.0 0.0 0.2	E.N.E. W. by S.	1.0 1.5 0.0 0.0
APRIL.	11 12 13 14 15 16 17 18	W N.W. by W. W.S.W. S. by E. E. by N. N.W.	2.5 2.0 2.0 0.2 0.2 0.2 2.5	W. S.W. S.S.E	1.5 0.0 1.0 0.2 0.0 0.0 3.5	W	1.0 	W.N.W.	0.2	N.W.by N.  S.W.  S.W. by S.	0.5 	N.W. by N	0.2 0.0 0.0 0.0 0.0 0.0
	19 20 21 22 23 24 25 26	S.W. N.N.W. E.N.E. E.N.E.	0.5 2.0 0.0 0.2 0.0 0.2	S.W. N.N.W.	0.5 1.0 0.0 0.0 0.0 0.0	N. by W. S.W.	0.0 0.2 0.0 0.0	S.W. E.N.E. E. N.E. by E.	0.2 0.2 0.0 0.2 0.0 0.2	E. by S. E. by N. N.E. by E.	0.0 0.2 0.0 0.2 0.0 0.2	N.E. E.N.E. E.N.E.	0.0 0.2 0.0 0.2 0.0 0.2
	27 28 29 30	S.S.W. E. E. by N. E.	0°2 3°0 0°2 0°2	E. by N.	0.0 2.2 0.0 0.0	E. N.E.	0.0 2.0 0.5 0.0	N.W. by N. E. N.E. —	0.5 2.0 0.5 0.0	N. by W. E. N.E.	0.5 1.0 0.5 0.0	N. by W. E. — —	0.5 0.0 0.0 0.0

			1	<del></del>			ON AND FO		71223	•	7			
	6 <sup>h</sup> .		7 <sup>h</sup> .		8h.		9 <sup>h</sup> .		10h.	·	11 <sup>h</sup> .			Göttingen
Dire	ection.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Time.
E. k	oy E. oy S. E. E.	lbs. 0.5 0.5 0.2 0.5	S.S.W. E. E. E.	1bs. 0 2 1 0 0 2 0 5	S. by W. E. E. E.	lbs. 0'2 0'5 0'2 0'2	S. by W. E. by S. E. N.E. by E.	lbs. 0°2 0°5 0°2 0°2	S. by E. E. E. E. by N.	lbs. 0'2 0'5 0'2 0'2	E. E.N.E.	lbs. 0°0 0°2 0°0 0°2	1 2 3 4	
S. b W.S	by S. by E. S.W. by E.	0.5 0.2 3.0 0.5	E. by N. S.W. W.S.W. S.E.	0.2 0.2 0.2 0.2 0.2	E. S.W. by S. W. S.E. by S.	0.5 0.5 0.5 0.5	E. S.S.W. W. E.S.E.	0.5 0.5 3.0 0.5	E. by N. S.W. W. E. by S.	0.5 1.5 2.5 0.5	E. by N. S.W. W. E.	0.2 1.5 2.5 0.5	5 6 7 8 9	
w.	by S.	4.0	₹ W.	5.2	$\overline{\mathbf{w}}$ .	5.2	$\overline{\mathbf{w}}$ .	5.2	W. by S.	4.0	$\overline{\mathbf{w}}$ .	3.0	10 11	
S.S N.M E. U E.S	.W. S.W. N.W. by S. S.E. . by S.	2.0 1.0 1.0 0.5 0.2 0.5	N.N.W. S.S.W. N.N.W. E.S.E. E.S.E. S.S.W.	2.5 1.0 1.0 0.5 0.2 1.0	N.N.W. S.W. by W. W. E.S.E. E. by S. S.S.W.	3.0 0.5 1.0 0.5 0.2 1.5	N.W. W.S.W. W. by S. E. by S. E. by S. S. by W.	3.0 2.0 1.0 0.5 0.2 1.0	N.W. W.S.W. S. by W. E. E. by S. S. by W.	3.0 1.5 0.5 0.5 0.2 0.2	N.N.W. W.S.W. S. by W. E. E.	2·5 2·0 0·2 0·5 0·2 0·0	12 13 14 15 16 17	APRIL.
S.W. N.E.	by E. by S. E. by E. by E.	0.2 1.0 0.2 1.0 0.0 0.2	S. W. by S. E. by S. E.N.E. — E.	0.2 0.5 0.2 1.0 0.0 0.2	S. W. E.S.E. E.N.E.	0.2 2.0 0.2 1.0 0.0 0.2	S.W. by S. N. by W. E. by S. E.N.E.	0.5 3.0 0.2 1.0 0.0 0.2	S.W. N.N.W. E. by S. E.N.E.	1.0 2.5 0.2 0.2 0.0 0.2	S.W. N.N.W. E.N.E. E.N.E.	1'0 3'0 0'0 0'2 0'0 0'2	19 20 21 22 23 24 25	
E.I N.E.	S.E. N.E. by E. by S.	0.2 2.5 1.0 0.2	S. N.E. by E. E.N.E E. by N.	0.2 2.5 1.0 0.2	S.S.E. E.N.E. E.N.E. E. by N.	0.5 2.0 1.0 0.5	S.S.W. E. by N. E.N.E. E.	0.2 2.0 1.0 0.2	S.S.W. E. N.E. by E. E.	0.2 2.5 1.0 0.2	S.S.W. E.N.E. E.N.E. E.	0'2 3'5 0'5 0'2	26 27 28 29 30	
	18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .	· · · · · · · · · · · · · · · · · · ·	23h.		Mean	Göttinge
Dire	ection.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Time.
E.N. W.S.	N.E. S.W. Dy N. W. N.E.	lbs.   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N.N.E.  E.N.E. W.S.W.  E. N.W.  N.W.  E. E.N.E.  N. by E.  N.E. by E. N.N.E. E.N.E.	lbs.   0 0 0   0 2   0 0 0   0   0   0   0	N.N.E.  N.E. W.S.W.  E.  N.W.byW.  N.  N. by E.  E.  N.N.E.  N.E.	lbs.   0 0 0   0 2   0 0 0   0   0 0   0   0	N.E. by N. E.N.E.  W.S.W.  L. by S.  N.W. N.W.  W. by S.  E.  N.W. by S.  E.  N.W. by N.  N. by E.  N.E.  N.E.  N.E.	lbs.   0		lbs.   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N.N.E.  N. W. by S.  N.W. N.W.  N.N.W.  E.  E. by N.  N.N.E. N.E. by E.	lbs.   0 · 2   0 · 0   0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0       0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0       0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0       0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0       0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0     0 · 0       0 · 0     0 · 0       0 · 0     0 · 0       0 · 0       0 · 0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	APRIL.

				I	IRECTI	ON AND FO	RCE O	F THE WIN	D.				
Mean Gö		Oh.		1 <sup>h</sup> .		2 <sup>h</sup> .		3h.		4 <sup>h</sup> .		5 <sup>h</sup> .	
Time	e. ]	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	E.N.E.	lbs. 0°2 0°0	N.E.	0°2 0°0	N.E. by E. N. by E.	0°2 0°2 —	E.N.E. N.E.	lbs. 0 · 5 0 · 2	E. by N.	1bs. 0.5 0.0	E. by N. S. by E.	lbs. 1 ° 0 0 ° 2
	4 5 6 7 8 9	E.N.E.	0.0 0.0 0.2 0.0 0.0 0.5	S.W. ———————————————————————————————————	0.2 0.0 1.0 0.2 0.2 1.0	E. by N. E.N.E. N.E. E.N.E.	0.0 0.0 1.5 0.2 0.2 1.5	E. by N. N.E. E. by N.	0.0 0.0 1.0 0.2 1.0 2.5	S.S.W. S.W. by S. E. E. by N. N.E. E.N.E.	0.2 0.5 1.5 0.5 1.5 2.5	S.S.W. S.W. by S. E. by N. E. E. by N.	0.2 0.2 0.5 0.5 1.0 2.5
MAY.	10 11 12 13 14 15 16	N.N.W. N.W. by N. E.N.E. N. by W.	2·5 0·2 0·2 0·0 2·5 0·0	N. by W. N.W.  N.W.  N.W.	2·5 0·2 0·0 0·0 1·0 0·0	N. by W. N.N.W.	2·5 0·2 0·0 1·0 0·0	N.N.W. N.W. S. N. by W. E. by S.	1.5 0.5 0.2 0.0 0.5 0.2	N.W. N.W. S. E. by S. N.W. by W. E. by S.	0.5	N.W. S.S.E. S. by W. E. by S. N.W. S.E.	1.5 0.2 0.2 0.5 0.5 0.5
Ā	17 18 19 20 21 22 23	N.N.W. N.N.W. W. by N. E. by N.N.E.	1.0 0.2 0.2 0.5 0.0 0.2	N.N.W. N.N.W. W. by N. E. by N.	2:5 0:2 0:2 0:5 0:0	N.N.W. N. by W. W. by N. E.S.E.	2.5 0.2 0.5 0.5 0.0 0.2	N.W. N.N.W. W. by N. E. E. E.S.E.	3.0 0.5 1.0 0.5 0.2 0.2	N.N.W. N.N.W. W.N.W. S.E. E. by S.	2.5 0.5 2.5 0.2 0.2 0.0	N.N.W. S. by W. W. S.S.E. E.	3.5 0.5 2.5 0.5 0.2 0.0
	24 25 26 27 28 29 30 31	N.W.	0.0 0.0 0.2 0.0 0.0	W.N.W.	0.0 0.0 0.0 0.0 0.0	N.W. W.N.W.	0.5 0.0 0.0 0.0 0.0	w.s.w. w.	0.2 0.0 0.5 0.0 0.0 0.0	S.W. W. by S. S.E. by S.	0.2 0.0 0.5 0.2 0.0 0.0	S.W. S.W. W. by N. S.E. by E. E.S.E.	0.2 0.2 1.0 0.2 0.0 0.0
(continue	ed)		<u>                                     </u>				<u> </u>		1	<u> </u>		!	
Mean Gö		12 <sup>h</sup> .		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .	
Time	e. [	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	<u>s.</u>	lbs. 0°0 0°2	<u>s.</u>	lbs. 0°0 0°2	_	0.0 0.0		0.0 0.0	W. by N.	lbs. 0°0 0°2	_ _ _	0.0 0.0
	4 5 6 7 8 9	S.S.E. — — E.N.E. E.N.E.	0.2 0.0 0.0 0.0 0.5 3.0	S.S.E. — — E.N.E. E.N.E.	0.2 0.0 0.0 0.0 0.2 2.5	E.N.E. E.N.E.	0.0 0.0 0.0 0.0 0.2 1.5	E. by N. E.N.E.	0.0 0.0 0.0 0.0 0.2 1.0	E.N.E. N.E.	0.0 0.0 0.0 0.0 0.2 0.5	  E.N.E. N.N.E.	0.0 0.0 0.0 0.0 0.2 0.2
MAY.	10 11 12 13 14 15 16 17	N.W. S.W. S.S.W. N.N.E. S.	1:0 0:0 3:0 0:5 0:2 0:2	W.N.W. S.W. S.W. N. S.	0.2 0.0 2.0 0.5 0.2 0.2	W.N.W. S.W. N. by E.	0.2 0.0 0.0 0.5 0.2 0.0	s.w. s.w. n.	0.0 0.0 0.2 0.5 0.2 0.0	S.W. S.W.	0.0 0.0 1.0 0.2 0.0 0.0	S.W. S.W.	0.0 0.0 0.5 0.2 0.0 0.0
V	18 19 20 21 22 23 24	N.N.W. S.W. by W. N.W. E. by S. N.W. by W.	2.2 0.2 0.0	N.N.W. N.N.W. N. by W.  N.W.	0.5 0.2 1.0 0.0 0.0 0.5	N. by W.	0.0 0.0 0.2 0.0 0.0 0.2	N. by W.  N.E	0.0 0.2 0.0 0.0 0.0 0.2 0.0	N. by W.	0.0 0.2 0.0 0.0 0.5 0.0	N. by W. N.W. E.N.E.	0.0 0.2 0.2 0.0 0.5 0.0
	25 26 27 28 29 30 31	W S. by E	0.0 0.0 0.2 0.0 0.0 0.2	N.N.W.	0.0 0.0 0.2 0.0 0.0	E. by N.	0.0 0.0 0.0 0.0 0.0 0.2 0.0	s.w.	0.5 0.0 0.0 0.0 0.0 0.0	S.W.	0.0 0.0 0.0 0.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0

				DIRI	ECTION	AND FORCE	E OF T	HE WIND.					
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .			Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	T	ime.
E. by N. S. by W.	lbs. 1 ° 0 0 ° 2	E. by N. S. by W.	lbs. 0.5 0.2	E.N.E. S.S.W.	lbs. 0.5 0.2	E.N.E. S.S.W.	lbs. 0°2 0°2	s.s.w.	lbs. 0'0 0'2	<u>s.</u>	lbs. 0.0 0.2	1 2	
S.S.W. W. E. E. E.N.E.	0.2 0.2 0.5 0.2 1.0	S. by W. W. by S. E. E. E. by N.	0°2 0°5 0°5 0°5 1°5	S. by W. S.W. E. E.	0.2 0.2 0.2 0.5 2.5	S. by W. S.W. E. E. by N. E.	0°2 0°2 0°2 0°5 1°5	S. by W. E. E. by N. E. by N.	0.2 0.0 0.2 0.2 1.5	S.S.E. E. by N. E.N.E.	0°2 0°0 0°2 0°0 1°0	3 4 5 6 7 8	
E.N.E. — N.W.	2.5	E.Ň.E. — N.W.	3.5	E.N.E. N.N.W.	3.2	E.N.E.	$\frac{3.5}{2.5}$	E.N.E. N.N.W.	3.5 - 2.5	E.N.E. — N.N.W.	4.0	9 10 11	
S. S.S.W. S.E. by E. N.W. S.S.E.	0.5 2.0 0.2 0.2 0.2	S. S.W. S.E. S.W. by S. S.	0.5 2.5 0.2 0.5 0.2	S. W. S. by W. S.W. by S. S.	0°2 3°0 1°5 0°5 0°2	S.E. S.W. S.W. by S. S.S.W.	0°2 3°0 2°5 0°2 0°2	S.E. S. W. S.W. by S. S.S.E. S.	0.2 3.0 1.5 0.2 0.2	S.W. S.S.W, N. by E. S.	0.0 3.5 1.0 0.2 0.2	12 13 14 15 16	MAY.
N.N.W. S. by W. W. by N. S. by E. E. W.S.W.	4.0 0.5 3.5 0.5 0.5 0.5	N.N.W. S. by W. N.W. by W. S.E. E. W.	5.0 0.5 3.5 0.5 0.5 1.5	N.N.W. S. by W. W.N.W. S.E. by S. E. W.N.W.	3.5 0.5 3.5 0.5 0.2 1.0	N.W. S.S.E. N.W. S.E. by S. E. by S. W.N.W.	3.0 0.5 4.0 0.5 0.2 2.0	N.W. S.S.E. N.W. E.S.E. E. W.N.W.	2.5 0.2 4.0 0.2 0.2 1.5	N.N.W. S. by W. N.N.W. E. by S. E. by N. N.W.by W.	2·5 1·0 3·5 0·2 0·2 0·5	17 18 19 20 21 22 23	, A
S.W. S.E. W. S.E. by S. S.E.	0.5 0.5 1.0 0.5 0.5 0.0	S.W. S.E. W.N.W. S.E. by S. S.E.	0.2 0.2 1.0 0.2 0.2 0.0	S.W. W.N.W. S.E. by S. E.	0.5 0.0 1.0 0.5 0.5 0.0	N.W. by W. E. by S.	0.0 0.0 1.0 0.0 0.2 0.0	N.W. S.E. by S. E. by S.	0.0 0.0 0.5 0.2 0.2	W. by N. E. by S. S. by E.	0.0 0.0 0.2 0.0 0.2 0.2	24 25 26 27 28 29 30 31	
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18h.		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .			Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		me.
N.N.E. N.E. by E.	lbs. 0°0 0°0 0°0 0°0 0°0 0°2 0°2	S.E. by E.  N. by E.  N. E. by E.	lbs. 0°0  0°0 0°0 0°2 0°0 0°2 0°5		lbs. 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.5		1bs. 0.0		lbs. 0.0 - 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.N.E.  E.N.E.	1bs. 0.0 0.0 0.0 0.2 0.0 0.0 0.5	1 2 3 4 5 6 7 8	,
N. by W.  S.W. W.S.W.	1.0 0.0 0.0 0.5 1.5 0.0	N.N.W. — S.W. by W.	1.5 0.0 0.0 0.5 0.0	N. by W. W. E.N.E. S.W. by S.	1.5 0.2 0.2 0.5 0.0 0.0	N.N.W. W. by N. S.W. by S.	0.5 0.2 0.0 0.2 0.0 0.0	N.N.W. W. by N. S.W. by S. N.	0.5 0.2 0.0 0.2 2.0 0.0	N.N.W. N.N.W. — — N.	1.5 0.2 0.0 0.0 1.5 0.0	9 10 11 12 13 14 15	MAY.
N. — — — — — — — — — — — — — — — — — — —	0.5 0.0 0.0 0.0 0.0 0.0	N.N.E.	0.0 0.0 0.0 0.2 0.0 0.0	W.N.W.  E.N.E.  N.W.	0.0 0.0 0.2 0.0 0.2 -	W.N.W.  E.N.E.  N.W.	0.0 0.0 0.2 0.0 0.0 0.2 	W.N.W.  N. by W W.	0.0 0.0 0.2 0.0 0.0 1.2 	N.N.W. W.N.W. E. by N. N.N.E.	0.5 0.0 0.2 0.2 0.0 0.2 -	17 18 19 20 21 22 23 24	M
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				D	RECTI	ON AND FO	RCE OF	THE WINI	).				
	fötting en	Ob.		1h.		2h.		3h.		4h.		5h.	
Tir	me.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	$   \left\{     \begin{array}{c}       1 \\       2 \\       3 \\       4 \\       5 \\       6 \\       7   \end{array} \right. $	  N. by W. N.W.	lbs. 0'0 0'0 0'0 0'0 0'0 0'5	E. by S. N. by W. N.W.	lbs. 0'2 0'0 0'0 0'2 0'2 0'5	E. S.S.W. E. by S. N.N.W. N.W.	lbs. 0'2 0'0 0'2 0'2 0'2 1'0	E by N. S.W. N.W.	lbs. 0'2 0'0 0'2 0'0 .0'0 1'5	E.N.E. S.W. by S.  N.W. by N.	lbs. 0.5 0.0 0.2 0.0 0.0 0.0	E. by N. S.S.W. N.N.W. N.W. by W.	Ibs. 0.5 0.0 0.2 0.0 0.2 1.0
	8 9 10 11 12 13 14	N.N.E. N. by W. N.E. E.N.E.	0.0 0.0 0.2 0.2 0.2	N.E. by N. N.E. E. by N.	0.0 0.0 0.0 0.2 0.5 0.5	S.S.W. N.E. by N. E.N.E. E.N.E.	0'0 0'0 0'2 0'2 1'0 0'5	S.S.W. E. by N. E. E.	0.0 0.0 0.2 0.5 1.0 0.2	E. E.S.E. S.S.W. E. E.	0.2 0.2 0.2 0.5 0.5	E. by S. S.E. S.S.W. E. by S. E.	0.2 0.2 0.2 0.2 0.5 0.5
JUNE	15 16 17 18 19 20 21	N. by E.	0.0 0.0 0.0 0.0 0.0	N. by E.	0.0 0.2 0.0 0.0 0.0 0.0	E.N.E.	0.0 0.0 0.0 0.0 0.0 0.0	S.W. E.S.E. S.E. by S. — N.N.W.	0.2 0.2 0.2 0.0 0.0 1.0	S.S.W. E.S.E. S. by E. S.S.E. N. by W.	0.2 0.5 0.2 0.2 0.0 1.5	S.S.W. S.E. by E. S. by E. S.S.E. W.S.W. N. by W.	0.2 0.5 0.2 0.2 0.5 1.5
	22 23 24 25 26 27 28	N.W. N.N.W. N.N.W.	1.0 0.5 0.2 0.0 0.0	N.W. N.N.W. — — W.N.W.	1.0 0.5 0.0 0.0 0.0 0.2	N.W. by N. N.N.W. N. by W. N.N.W. E.S.E.	1.0 0.5 0.2 0.2 0.0 0.2	N.W. by N. N. by W. N.N.W. N.N.W. E. by S.		N. by W. N. N.N.W. N.N.W.	2.5 0.5 0.2 0.5 0.0 0.2	N. N.N.W. N.N.W. N.N.W.	2:5 1:0 0:2 0:5 0:0 0:2
	$\begin{bmatrix} 29\\30 \end{bmatrix}$	E. by N.	0.0 0.0	E.N.E. E.N.E.	0·2 0·2	E.N.E. E. by N.	0.5 0.5	E.N.E. E.	0.2 0.2	E. by S.	0.2	E. E.	0.2 0.2
(continu	ued)										'		
Mean Gö Tin		12h.		13 <sup>h</sup> .		. 14 <sup>h</sup> .		15 <sup>h</sup>		16 <sup>h</sup> .		17 <sup>h</sup> .	
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
JUNE.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	E. by S. S. by W. S.W. N. by E. N.N.W.  E. N.E. by E. N.N.W.  W.N.W.  W.N.W.  W.N.W.  W.N.W.  E. N.W. by N. N.W.  L.  N.W. by N.  N.W. by N.  N.W. by N.  E. by N.  E. by N.  E. by N.  E. by N.	lbs. 0'2 1'5 0'2 0'0 0'0 0'0 0'0 0'0 0'0 0'5 0'2 0'5 2'0 0'0 0'5 2'0 0'0 0'5 2'0 0'0 0'0 0'2 0'5 2'0 0'0 0'2 0'5 2'0 0'0 0'0 0'2 0'2 0'2	E. by S. S.W. S. N.N.W.  E. N.N.W.  N. by W. N.N.W.  N.W.  N.W.  E. by N. E. by N. E. by N.	lbs. 0 ' 2 1 ' 0 0 ' 2 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 1 ' 0 1 ' 0 0 ' 2 1 ' 0 0 ' 2 0 ' 0 0 ' 2 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0 ' 0 0	W. by N. 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	6 <sup>h</sup> .		7 <sup>h</sup> .		8h.		9 <sup>h</sup> .		10h.		11 <sup>h</sup> .		Mean	Göttingen
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		lime.
	E. by N. S. by W. S.W. E. by N. N. by W. W. by N.	1 bs. 1 0 0 5 1 5 0 2 0 2 0 5	E. S.S.E. S.W. by W. E. by S. N.	lbs. 1	E. S.S.W. S.W. by W. E.S.E. N.W. by N.	lbs. 1 ° 0 1 ° 0 2 ° 5 0 ° 2 0 ° 0 1 ° 0	E. S. by W. S.S.W. E. by S. S.S.W. N.W. by N.	lbs. 1 '0 1 '0 3 '0 1 '0 0 '2 0 '5	E. S.S.W. S. by W. E. S.S.W. N.W. by N.	lbs. 0.5 0.5 0.2 1.0 0.2 0.5	E. by S. S. by W. S. S.S.W. S.S.W. N.W. by N.	lbs. 0'2 1'0 0'2 0'2 0'2 0'2 0'5	1 2 3 4 5 6	
	S.E. S.E. S.S.W. E. E.	0.5 0.5 0.5 0.0 1.0 0.5	S.E. S.E. S.S.W. E. E.	0.5 0.5 0.5 0.0 1.0 0.5	S.E. by S. S.E. S.S.W. E. by N. E. E.	0.2 0.2 0.2 0.2 0.5 0.5	S.E. by S. S.E. by S. S. by W. E. by S. E. E.N.E.	0.2 0.2 0.2 0.2 0.5 0.5	S.E. by S. S.E. by S. S. E.S.E. E. by N. E. by N.	0.2 0.2 0.2 0.2 0.2 0.2	S.E. by S. S. E. E.N.E.	0°2 0°0 0°2 0°0 0°5 0°2	7 8 9 10 11 12 13 14	,
	S.S.W. S.E. by S. S. by E. S.S.E. W by S. N.W. by N.	0°2 0°5 0°2 0°2 1°0 2°5	S.S.W. S.S.E. S. by E. W. by S. N.N.W.	0°2 0°2 0°0 1°0 2°5	S.S.W. S.S.E. S. by E. W. N.N.W.	0.2 0.2 0.2 0.0 1.5 1.5	S.S.W. S.E. S. by E. W.N.W. N.W. by N.	0.2 0.2 0.2 0.0 1.5	S.S.W. S.E. — N.W. N.N.W.	0°2 0°2 0°0 0°0 1°5 2°5	N.N.W.  W.N.W. W. by N. N.N.W.	0.5 0.0 0.0 0.2 1.0 2.0	15 16 17 18 19 20 21	JUNE.
	N. by E. N. by W. N.W. N.N.W. N.W. by W. E.	2.5 2.5 0.2 0.5	N. by W. N. by W. N. W. W. N.W. by W. —	2.5 2.0 0.2 0.5 0.2 0.0	N. N.N.W. N. by W. S. by W. N.W. by W. E.	2:0 1:0 0:5 0:2 0:2 0:2	N. by W. N.W. W.N.W. S. by W. W. E.N.E.	2'0 1'0 1'5 0'2 0'2 0'2	N.N.E. N.W. N.W. by N. S.W.	1.0	N.N.E. N.W. N.N.W.	0.2 1.0 1.0 0.0 0.0 0.2	22 23 24 25 26 27 28	ACTORIS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRACTORISMOS CONTRA
	E. E.	0.2 1.0	E. E.	0.2 1.2	E. by N.	1.0 1.2	E. by N. E. by S.	0.2 1.2	E.S.E. E. by N.	0.5	E. by S. E.N.E.	0.2 0.2	29 30	
	18 <sup>h</sup> .		19 <sup>h</sup> .		20h.		21 <sup>h</sup> .		22 <sup>h</sup> .		23h.		1	
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		öttingen me.
# 1	  N.W. by W.	lbs. 0.0 0.0 0.0 0.0 0.0 0.5	N. by W. W.N.W.	1bs. 0.0 0.0 0.0 0.0 0.2 0.5	N.N.W. W.N.W.	Ibs. 0'0 0'0 0'0 0'2 0'2	N.N.W. W.N.W.	lbs. 0'0 0'0 0'0 0'2 0'2	N.N.W. W.N.W.	Ibs. 0'0 0'0 0'0 0'2 0'5	N. by W. W.N.W.	lbs. 0°0 0°0 0°0 0°2 0°2	1 2 3 4 5 6	
The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	N.N.E. — — N.E. E.N.E.	0°2 0°0 0°0 0°0 0°5 0°2	N.N.E. — N.E. E. by N.	0°2 0°0 0°0 0°5 0°2	N. by E.  N. N. W. N. E. by N. E. by N.	0.0 0.0 0.2 0.2 0.5	N. by E.  N.N.W. N.E. E. by N.	0°2 0°0 0°0 0°2 0°5 1°0	N.N.W. N.E.	0.0 0.0 0.0 0.2 0.5 0.0	N.N.E. N.N.W. N.E.	0.0 0.0 0.2 0.2 0.5 0.0	7 8 9 10 11 12 13	
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	N. by W.  N.W. N.N.W.	0.0 0.5 0.0 0.0 0.2 0.2	N.N.E N.E. by N.	0.0 0.2 0.0 0.0 0.0	N.E. by N.	0.0 0.0 0.2 0.0 0.0	N.W.	0.0 0.0 0.0 0.0 0.0	N.N.W.		N.N.E.	0.0 0.2 0.0 0.0 0.0 0.5	14 15 16 17 18 19 20	JUNE.
	N.N.W. N.W. by N. N.W.	1.0 0.0 0.5 0.0 0.2 0.0	N.N.W. N.E. by N. N.N.W.	1.0 0.2 0.2 0.0 0.0 0.0	N.N.W. N. by N. N.N.W. N.N.W.	0.0	N.W. N. by W. N. by W. N.W. by N. N.N.W.	0.0	N.N.W. N.N.W. N.N.W. N.W. by N. N.N.W.	0.0 -	N.N.W. N.N.W. N.N.W N.W. by N.	1.5 0.5 0.2 0.2 0.0 0.0	21 22 23 24 25 26 27	
	N.E	0.0 0.0 0.5	N.E. E.N.E. —	0.5 0.5 0.0		0.0 0.0 0.0		0.0 0.0 0.0	N.E	0.0 0.0 0.0		0.0 0.0 0.0	28 29 30	

· · · · ·				DI	RECTIO	ON AND FOI	RCE OF	THE WIND			-	<u> </u>	<del></del>
Mean Gött Time.		O <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
Time.		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \end{pmatrix}$	N. by W.	lbs. 0 ° 0 1 ° 0 0 ° 0	N.E. by E. N. E. by S.	lbs. 0.5 1.0 0.2 0.0	E.N.E. N. E.	lbs. 0°2 2°5 0°2 0°0	E. by N. N. by W. E. by S.	lbs. 0.5 1.5 0.2 0.0	E.S.E. N. by E. E. by S. E.S.E.	lbs. 0.5 1.0 0.2 0.2	E. N.E. by N. E.S.E. E.S.E.	lbs. 0°2 0°5 0°5
	5 6 7 8 9 10	w.n.w. w. — w.s.w.	0.2 0.0 0.2 0.0 0.0 0.0	N.W. W. W.S.W. S.W.	0.2 0.0 0.2 0.0 0.2 0.2	N.N.W. N. N.W. W.S.W. W.S.W. S.W. by W.	1.0 0.5 0.5 0.2 0.2	W.N.W. N. by W. W. S.W. by S. S.S.W. S.S.W.	1.0 0.2 0.2 0.2 0.2 0.2	S.S.W. N. S.W. by W. S.W. by S. W. by S. W. S.W.	0.5 0.2 0.2 0.2 0.2 1.5	S. by W. N.N.W. S.W. by S. W. S.S.W.	0.5 0.5 0.5 0.0 0.5 1.5
JULY.	12 13 14 15 16 17 18	N.W. byW.	0.2 0.0 0.0 0.0	N.W. N.N.W. N.W. —	0.5 0.5 0.2 0.0 0.0 0.0	N.W. by W. N. by W. N.W. by N. N.N.W.	0.2 0.2 0.5 0.2 0.0 0.0	W. by N. N.W. N. by W. N. —	1.0 0.5 1.5 0.2 0.0 0.0	N.W. N.W. N.N.W. N.N.E. S. by E. S. by E.	1.5 0.5 2.0 0.2 0.2 0.2	N.W. N.W. N.W. by N. S.S.E. S.E. by S.	1.5 0.5 1.5 0.2 0.2 0.2
	19 20 21 22 23 24 25	E. by N.	0.0 0.2 0.0 0.0 0.0 0.0	N.N.W.	0.0 0.0 0.0 0.0 0.0 0.0 0.0	S.E.  E. by S. N.N.W.	0.0 0.2 0.0 0.0 0.2 0.2	E.S.E. S.E. E.N.E. N.N.W.	0.2 0.2 0.0 0.0 0.0 0.2 0.2	S.E. E.N.E. W.	0.0 0.2 0.2 0.0 0.2 0.2	S.E. by S. S.E. S.E. E. N.N.W.	0.2 0.2 0.2 0.0 1.0 0.2
	26 27 28 29 30 31	E.N.E. N.E. — —	0.0 0.0 0.0 0.0 0.0	N.E. by E. N.E. S.S.W.	0.5 0.5 0.0 0.5 0.0	E. by S. E. by N. S.W. N.N.W.	0.5 0.2 0.0 0.5 0.2	E. by N. S. by W. S.S.W. N. by W.	0.2 0.2 0.5 0.5 0.5	E. E.S.E. S. S.S.W. N.N.W.	0.5 0.5 0.5 0.5 0.5	E. by S. E.S.E. S.S.W. S.W. by S. N.N.W.	0°5 0°5 0°5 0°5
(continue	۲۱	12h.		13h.		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .	
Mean Gött Time.	tingen }	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	1 2 3 4	——————————————————————————————————————	lbs. 0°0 0°0 0°2	——————————————————————————————————————	lbs. 0°0 0°0 0°0 0°2		lbs. 0°0 0°0 0°0		lbs. 0.0 0.0 0.0	——————————————————————————————————————	lbs. 0.0 0.0 0.0		lbs, 0.0 0.0
	5 6 7 8 9 10	N.W. byW. N.N.W.  N.W. byW. S.S.W.	1.0 0.0 0.0 5.5 0.2	N.N.W. N.N.W. — N.W. S.W.	0.5 0.5 0.0 0.0 2.5 0.2	N.N.W.  S.W. W. by N.	0.5 0.0 0.0 0.0 0.5 0.5	S.W. W.	0.0 0.0 0.0 0.0 0.5 0.5	N.N.W.	0.2 0.0 0.0 0.0 0.5 0.5	N.N.W. — S.S.W. W.N.W.	0°2 0°0 0°2 0°0 0°2
JULY.	12 13 14 15 16 17 18	S.W. N.W. N.N.W. E.	0.2 1.5 0.5 0.0 0.2 0.2	N.W. by N. N.W. N.W. by N. E.	1:0 1:0 0:2 0:0 0:0	N.W. by W.	0.0 0.0 0.0 0.0 0.0	N.W. byN.	0.0 0.0 0.0 0.0 0.0 0.0	N.W. by N. N.E. by N.	0.5 0.0 0.0 0.5 0.5 0.0	 N.W. by W.  N.E. by N. 	0.0 0.2 0.0 0.0
	19 20 21 22 23 24 25 26	E. by N.  S.S.E. N.N.W.	0.2 0.2 0.0 0.2 0.2 0.0	E. by N. E. by N. S.S.E. N.N.W.	0.5 0.5 0.5 0.5 0.5 0.5 0.0	E. by N.  N.W.	0.0 0.2 0.0 0.0 0.5 0.0	   N.W. W.N.W.	0.0 0.0 0.0 0.0 0.0 0.2 0.2		0.0 0.0 0.0 0.0 0.2 0.0	   N.W. by N.	0.0 0.0 0.0 0.0 0.0
	26 27 28 29 30 31	S.W. by S. W.N.W. N.N.W.	0.0 0.0 0.5 1.0 0.2	S.W. by S. W.N.W. N. by W.	0.0 0.0 0.2 0.5 0.2		0.0 0.0 0.0 0.0		0.0 0.0 0.0 0.0		0.0 1.0 0.0 0.0 0.0	S. by W. N.W. N. by W.	0.6

				DIRI	ECTION	AND FORC	E OF T	HE WIND.					
6h.		7 <sup>h</sup> .	, -	8h.		9h.		10h.		11h.		Mean	Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	[	Time.
E. by S. S.S.E. E.S.E. E.S.E.	lbs. 0°2 0°5 0°2 0°2	E.S.E. S.S.E. E.S.E.	lbs. 0.5 0.5 0.5 0.0	E. by S. S. by E. E.S.E. E. by S.	lbs. 0.5 0.5 0.5 0.2	E. by S. S. E.S.E. E. by S.	1bs. 0°2 0°2 0°2 0°2	S.E. by E. S. E.S.E. E.	lbs. 0°2 0°2 0°2 0°2	E.N.E. S. E.	lbs. 0°2 0°2 0°0 0°2	1 2 3 4	
S. by W. S.S.E. S.W. by S. N.N.W. S.W. W. by S.	0.5 0.2 0.2 0.2 1.5 2.5	N.W. by W. S. S.S.W. S.S.W. N.W. by W. W. by S.	1.0 1.0 0.2 1.5 0.5 3.0	N.N.W. S. by W. S.S.W. N.W. S. by E. W.S.W.	1:0 1:0 0:5 0:5 0:2 2:5	N.N.W. N.N.W. S. by W.	1.0 1.0 0.2 0.0 0.0	W.N.W. N.W. by N. S. by W. S.W. by S. S.W. by S.	1.5 1.5 0.2 0.2 0.0 0.5	W.N.W. N.W. W. by S. S.S.W.	1.0 1.0 0.0 0.0 4.0 0.2	5 6 7 8 9 10	
W.N.W. N.W. by N. S.S.W. E.S.E. S. by W.	1.5 0.5 1.5 0.2 0.2 0.2	W. by N. N.N.W. N.N.W. S.S.W. S.E. S.S.E.	1 5 0 5 2 0 0 2 0 2 0 2	W.N.W. N.N.W. N.N.W. S. by W. S.E. S.E.	1.5 0.5 1.5 0.2 0.2 0.2	W. by N. N.W. N. by E. S.S.W. S.E. E.	1.5 0.5 1.5 0.2 0.2 0.2	W. by S. N.W. N.W. E. by S. E. by S.	0.5 1.0 1.0 0.0 0.2 0.2	S.W. N.N.W. N.W. by N. — E. S.E.	0.0 0.5 0.5	12 13 14 15 16 17	JULY.
S.E. by S. S.E. by E. S.E. N.E. N.W. by N.	0.5 0.2 0.2 0.0 0.5 0.2	S.E. E. by S. S.E. by S. M. by W. N.N.W.	0.5 0.2 0.2 0.0 1.5 0.5	S.E. E. S.E. N. W.N.W.	0.5 0.2 0.2 0.0 1.5 0.5	S.E. by S. E. S.E. — N.N.W. W.N.W.	0·2 0·2 0·2 0·0 1·5 0·2	S.E. by S. E. S. by E. N.W. by N. S.S.W.	0.2 0.2 0.0 0.2 1.0 0.2	E.S.E. E. by N. S.S.E. N.N.W.	0.2 0.5 0.0 0.2 1.5 0.0	19 20 21 22 23 24 25 26	
E.S.E. E.S.E. S. by W. S.W. by S. N.N.W.	0.5 0.5 1.0 0.5 0.5	E.S.E. S.E. S. by W. S.W. N.N.W.	0.5 0.5 1.0 1.5 0.5	E.S.E. E.S.E. S. by W. W.S.W. N.N.W.	0.5 0.5 1.0 2.0 0.2	E.S.E. S.E. by S. S. by W. W.S.W. N. by E.	0.5 0.5 0.5 2.0 2.5 0.5	E. E.S.E. S.S.W. W. by S. N. by W.	0.2 0.2 1.0 1.5 0.2	E. E. S.E. S.W. by S. W. N.N.W.	0°2 0°3 0°5 1°0 0°2	26 27 28 29 30 31	
18 <sup>h</sup> .		19h.	· · · · · · · · · · · · · · · · · · ·	20h.		21h.		22h.		23h.		] ,,,	
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Göttingen Fime.
	0.0 0.0 0.0	N. by E. N.W.	lbs. 0.5 0.0 0.2	N. by W. N.W.	lbs. 0°5 0°0 0°2	N. by W.	lbs. 0.5 0.0 0.2	N. by W.	Ibs. 0.5 0.0 0.2	N. by W.	1bs. 0.5 0.0 0.0	$\begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \end{bmatrix}$	
Selection N.W.	0.0 0.0 0.0 0.0 0.0 0.0 0.0	S.W. by W.	0.0 0.0 0.0 0.0 0.0 0.2 - 0.0 0.0	W.N.W.	0.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0 0.0	W.N.W.  W. by N.   W.N.W.	0.2 0.0 0.2 0.0 0.0 0.0 0.0	W.N.W. W. by N.  N.W. N.W.	0.2 0.0 0.2 0.0 0.0 0.2 	5 6 7 8 9 10 11 12 13	
	0.0 0.0 0.0 0.0	N.N.W. — — —	0.0 0.2 0.0 0.0	N.N.W.	0.0	N.N.W. N.W. by N. — —	0.0 0.2 0.0 -	<del></del> ·	0.0 0.0 0.0	N.W. by N. — — — —	0.5 0.0 0.0	14 15 16 17 18	JULY.
N.W. by N.	0.0 0.0 0.0 0.0 0.0 0.0	— — — —	0.0 0.0 0.0 0.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0	E.N.E.	0.0 0.0 0.0 0.2 0.0 0.0	— — — —	0.0 0.0 0.0 0.0 0.0	E. by N.   N.N.W.	0.0 0.2 0.0 0.0 0.0 0.2	19 20 21 22 23 24	
S. by W. N.W. N. by W.	0.0 0.0 0.0 0.5 0.2 0.2	E.N.E.  N.W.	0.0 0.2 0.0 0.0 0.2 0.0	E.N.E,  N.W.	0.0 0.2 0.0 0.0 0.5 0.0	E.N.E.  E.N.E.  N.W.	0'0 0'2 0'0 0'0 0'0 0'2 0'0	N.E. — — N.W.	0.0 0.2 0.0 0.0 0.0 0.2 0.0	N.E.  N.W. N. by W.	0.0 0.2 0.0 0.0 0.2 0.2	25 26 27 28 29 30 31	

				DI	RECTIO	ON AND FOL	RCE OF	THE WIND					
Mean Gö		O <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
Time	e. ]	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
·	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	N. by W.	lbs. 0°2	N. by W.	lbs. 0 2	N. by E.	lbs. 0'2	N. by E.	0.5	N. by W.	1bs. 0'2	N.N.W.	1bs. 0.5
	3 4 5 6 7 8	N.E. by N.   N.N.W.	0.2 0.0 0.0 0.0 0.2 0.0	N.E. by N. S.S.W.	0°2 0°0 0°0 0°0 0°0	N.E. by N. S.W. — — — —	0.5 0.0 0.0 0.0 0.0	S.W. by S. N.N.W.	0.0 0.5 0.0 0.2 0.0 0.0	S.E. by S. S. by W. N.E.	0.2 0.5 0.0 0.2 0.0 0.0	N.W. by S. S.S.E.	0.0 0.5 0.2 0.0 0.0
ST,	9 10 11 12 13 14 15	N.N.W. — S.W. —	0.0 0.0 0.0 0.0 0.0 0.0	N. by W.	0.2 0.0 0.0 0.2 0.0 0.0	N.N.W. N.N.E. S.S.W.	0.2 0.5 0.0 0.0 0.0	N. by W. E.N.E. S.S.W. N. by W. N.W. by N.	1.0 0.2 0.2 0.0 0.2	N. E.N.E. S.W. S.W. N. by W. S.W. by S.	1.5 0.2 0.5 0.2 0.2 0.2	N.N.W. E. S.S.W. S.W. S. by W. S. by W.	0.5 0.2 0.5 0.2 0.2 0.2
AUGUST.	16 17 18 19 20 21 22	N.E.	0.0 0.0 0.2 0.0 0.0	N. by W. E.S.E.	0.2 0.0 0.2 0.0 0.0 0.0	N. E. E.S.E. —	0.2 0.2 0.0 0.0 0.0	N. E.N.E. E. by S. —	0.5 0.2 0.5 0.0 0.0	S.E. by S. S.E. by E.	0.5 0.2 1.0 0.0 0.2 0.0	N. S.E. by E. E.N.E. S.E. N.E. by N.	0.5 0.2 1.0 0.0 0.2 0.2
	23 24 25 26 27 28 29	N.N.E.	0.0 0.0 0.0 0.0 0.0	N.N.E.	0.0 0.5 0.0 0.0 0.0 0.0	N.E. by E.  N.E. by N.  N.E. by N.	0°2 0°2 0°0 0°2 0°0	E. by N. E. by S.  E.N.E. E.	0.5 0.5 0.0 0.0 0.5 0.5	E. by N. E. E.S.E. S.E. by S. E. E. by S.	0·2 0·2 0·2 0·2 0·2 0·2 0·2	E. S.E. by E. E.S.E. S.E. by S. E. by S. E. by S.	0·2 0·2 0·2 0·2 0·2 0·2
	30 31	s.w.	0.5	s.w.	0.5		0.0	s.w.	0.2	S.W. by S.	0.2	S.W. by S.	0.2
(continu	ued)	<u> </u>	<u>.</u>									- 1-1	
Mean Go Tim		Direction.	Force.	Direction.	Force.	Direction.	Force.	15 <sup>h</sup> .  Direction.	Force.	16 <sup>h</sup> .  Direction.	Force.	Direction,	Force.
	- l	Direction.	lbs.	Direction.	lbs.	Direction.	lbs.		lbs.	Direction.	lbs.	Direction	lbs.
	1 2 3 4 5 6 7 8	S.S.W. S.W. by S. W. by S.	0.0 0.5 0.2 0.0 0.0 0.0	S.W. W.	0.0 0.0 0.5 0.5 0.0 0.0	S.W. W.	0.0 0.0 1.0 0.2 0.0 0.0	N.N.W S.W E. by N.	0'2 	S.W	0.0 0.0 0.5 0.0 0.0 0.0 0.0	S.W E.N.E.	0.0 0.0 0.5 0.0 0.0 0.0 0.0
AUGUST.	9 10 11 12 13 14 15 16	N.N.W. E.S.E. S.S.W.	1.0 0.2 1.5 0.0 0.0 0.5	N.N.W. S.S.W. N. by W. S.W. by W.	0.5 0.0 0.5 0.2 0.0 0.5	N.N.W. S.W. ———————————————————————————————	0.5 0.0 0.5 0.0 0.0 0.5	N.N.W	1.0 0.0 0.0 0.0 0.0 0.0	N.N.W.	1.0 0.0 0.0 0.0 0.0 0.0	N.N.W  S.E.	0.2 0.0 0.0 0.0 0.0 0.5
AUG	17 18 19 20 21 22 23	N. by W.	0.0 0.0 0.0 0.0	N. by W.	0.2 0.0 0.0 0.0 0.0	N. by W.	0.0 0.0 0.0 0.0	N by W.	0.2 0.0 0.0 0.0 0.0	N.N.W.	0.0 0.0 0.0 0.0 0.2	N. by W.	0.2 0.0 0.0 0.0 0.0
	24 25 26 27 28 29 30	E. by S.	0.0 0.0 0.0 0.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0	E.N.E.	0.0 0.2 0.0 0.0 0.0	E.N.E. N.E.	0.0 0.2 0.2 0.0 0.0 0.0	E.N.E. N.E. N.E.	0.0 0.2 0.2 0.2 0.0 0.0

			····	DIR	ECTION	AND FORC	E OF T	HE WIND.	- 11			3	····
6 <sup>h</sup> •	<u> </u>	7 <sup>h</sup> .	1	8h.	-,	9 <sup>h</sup> .		10 <sup>h</sup> .		11h		Mean	Göttinger
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Cime.
N. by W.	lbs. 0 2	S.S.E.	lbs. 0°2	S.	1bs. 0°2	s.	lbs. 0°2	s.	1bs. 0.2	S.	lbs. 0'2	$egin{bmatrix} 1 & 1 \\ 2 & 2 \end{bmatrix}$	)
S. by E. S.S.W. S.S.W. S. by E. E.	0.5 0.5 0.5 0.0 0.0 0.5	S. by E. S.S.W. S.S.W. S. by W. E.	0.2 0.2 0.2 0.2 0.0 0.0	S. S.S.W. S.S.W. S. by W.	1.0 0.2 0.2 0.2 0.0 0.2	S.S.W. S.S.W. S.S.W. S. by W. E. by S.	1.0 0.2 0.2 0.2 0.0 0.2	S.S.W. S.S.W. S.W. by S. S.S.W.	1:0 0:2 0:5 0:0 0:0	S.S.W. S.S.W. S.W. by S.	0.5 0.2 0.5 0.0 0.0	3 4 5 6 7 8	
N. by W. S.E. by E. S.S.W. S.S.W. S. by W.	0.5 0.2 0.5 0.2 0.2 0.2	N.W. S.E. by S. S.S.W. S.S.E. S.	0·2 0·2 0·5 0·2 0·5 0·2	N. by W. S.E. S. S. by E. S. S.S.S.E.	0.5 0.2 1.0 0.2 0.5 0.5	N.W. by N. S.E. S. by W. S. by E. S.	0 5 0 2 1 0 0 2 0 2 0 2 0 5	N.W. by N. E.S.E. S S.W. S. by E. S. S. by W.	0.2 1.0 0.2 0.2 0.5	N.N.W. E.S.E. S.S.W.	1.0 0.2 1.5 0.0 0.0 0.5	9 10 11 12 13 14 15 16	UST.
N.N.W. S.S.E. E. S.E. S.E. by S.	0.5 0.2 1.0 0.0 0.2 0.2	N. by E. S.E. by S. E. S.E. S.E. by S.	1.0 0.2 0.2 0.0 0.2 0.2	N.E. by N. S.E. by S. E. by S. S.E. S.E. by S.	0.5 0.0 0.2 0.2 0.2	N by W. S.E. by S. E. — S.E. by S.	1.5 0.2 0.5 0.0 0.0 0.2	N.N.W. S. by E. E. S.E. by S.	0.5 0.2 0.2 0.0 0.0 0.0	N.N.W. S. by E. E.N.E. — S.E. by E.	1:0 0:2 0:2 0:0 0:2 0:0	17 18 19 20 21 22 23	AUGUST.
E. by S. E.S.E. S.S.E. E.S.E. E.S.E. E.S.E.	0'2 0'2 0'2 0'2 0'2 0'2	E.S.E. E.S.E. S.S.E. E.S.E. E.S.E. S.E.	0.2 0.2 0.2 0.2 0.2 0.2	S.E. by E. E.S.E. S.E. E.S.E. E. by S. W.	0.2 0.2 0.2 0.2 0.2 0.2 1.0	S.E. by E. E.S.E. E.S.E. E.S.E. E.S.E. N.W.	0.2 0.5 0.2 0.2 0.2 0.2 1.0	E. by S. E. E.S.E. E.S.E. W.N.W.	0·2 0·2 0·2 0·0 0·2 0·2	E. by S.  N.N.E. E.N.E.	0.0 0.2 0.0 0.0 0.2 0.2 0.2	23 24 25 26 27 28 29 30	
s.s.w.	0.2	S.W. by S.	1.0	S.W. by S.	1.0	S.W. by S.	1.0	S. by W.	0.2	s.s.w.	0.2	31 /	
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Mean	Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Γime.
N.E. S.W. S.W. S.W. S.W. S.W. S.W. S.W. S	1bs.  0.2 0.0 0.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	S.W. S. by W.	lbs.	N.E. by N.	ibs. — 0·2 0·0 0·0 0·0 0·0 0·0 0·0 0·0 0·0 0·0	N. by E.  S.W.  N. by E.  N.E.	lbs.	N.N.E.  N.N.E.  N.N.E.  N.E.  N.E.	lbs.	N. N.E.  N. by W.  N. by E.  N. by E.  N. E.  N.E.  N.E.  N.E.  N.E.	lbs.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	AUGUST.

ngen {	Oh.  Direction.  W. by S.  N.E. E. by S. S.E.  N. N.N.W. N. by E.  N.  N.W. S.E.  N.  N.W. N. by E.  S.W. S.W.	Force.    lbs.   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Direction.	Box   O	2b.  Direction.  W.S.W. S.W. S.W.  N. E.N.E. E. by S. S.E. by S. S.E. by S.  N. N. by E.  N.N.W. N. by E.  S.S.W. N. hy W.	Force.     1bs.   0 0 0 0 0 0 0 2 0 2 0 0 5 0 0 0 0 0 0 0	S. by S.  S. W. by W. S.W. by S.  S.S.E. N. by E. E. by N. E. by S. S.E. by S. S.W.  S.W. by E. N. by E. N. by E. N. by E. N. by E. N. by E. N. by E. N. E. N. by E. N. E. N. by E. N. E. N. E. N. by E. S.E. by N. S. S. S. W. W. S. W. W. S. W.	Force.   lbs.   0 0 0   2   0 0 0   2   0 0   2   1 0   0 0   2   1 0   0 0   2   0 0 0   2   0 0 0 0   2   0 0 0 0	4b.  Direction.  S. by W.  S.W. S.S.W. S. by E. N.E. E. by N. E.S.E. S.S.W.  S.W. by S. N. S. N. by E. E. by N. S. S. N. by E. E. by N. S. S. S. S. S. S. S. S. S. S. S. S. S.	Force.   lbs.   0 0 0   2   0 0 0 2   0 0 5   2 0 5   1 0 0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0 0 2   0	W. S. by W. S.W. by S. S.W. S.S.W. S. by W. N.N.E. E. by N. E. by S. S.E. by S. S.E. by S. S.E. by S. E.S.E. S. by W. N. by E. S. by E. S. by E. S. by E.	Force.
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	W. by S.  N.E. E. by S. S.E.  N. N.N.W. N. by E.  N.  N. S.E.  N. S.E.  N. S.E.  N. S.E.  N. S.E.  N. S.E.  N. S.E.  N. S.E.  N. S.E.  N. S.E.  N. S.E.  N. S.W.	lbs. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 0 0 5 0 0 5 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	W.S.W.  N.N.W. N.E. E. by S. S.E. by S.  N.N.W. N.N.W. N. by E.  N.  N.W. N. by N.  N.W. D.  N.W. N. by N.  N.W. N. by N.  N.W. N. by N.	lbs. 0'0 0'0 0'0 0'0 0'2 0'0 0'2 0'5 0'2 0'0 0'5 0'0 0'2 0'0 0'0 0'0 0'0 0'0 0'0 0'0 0'0	W.S.W. S.W.  N. E.N.E. E. by S. S.E. by S. W.S.W. N. by E.  N.N.W. N. by E.  N. by W. S.S.W. N.	lbs. 0'0 0'0 0'0 0'2 0'2 0'2 0'5 0'5 0'5 0'2 0'0 0'2 0'0 0'2 0'0 0'2 0'2 0'0 0'2 0'0	S. by S.  S. W. by W. S.W. by S.  S.S.E. N. by E. E. by N. E. by S. S.E. by S. S.W. S.W. by E. N. by E. N. by E. N. E. N. by E. N. E. N. by E. N. E. N. E. N. E. N. E. N. E. N. E. N. E. N. E. N. E. N. 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E. S. E. S. S. W. S. W. S. W. S. W. S. W. S. S. W. S. S. W. S. S. W. S. S. W. S. S. W. S. S. W. S. S. W. S. S. S. W.	lbs, 0'0   0'2   0'0   0'2   0'5   2'5   1'0   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2   0'2	W. S. by W. S.W. by S. S.W. S.S.W. S. by W. N.N.E. E. by N. E. by S. S.E. by S. S.E. by S. S.E. by S. S.E. by S. E.S.E. S. by W. N. S. S.E. by S. E.S.E. S. by W.	lbs. 0'2 0'2 0'5 - 0'5 3'0 0'5 3'0 0'5 0'2 0'5 0'2 0'5 0'2 0'5 0'2 0'2 0'2 0'5 0'2 0'2 0'5
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	W. by S.  N.E. E. by S. S.E.  N. N.N.W. N. by E.  N.  N.W. by N.  N.E.  S.W.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	W.S.W.	0.0 0.0 0.0 0.0 0.0 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.0	S.W.   N. E.N.E. E. by S. S.E. by S. W.S.W. N. by E N. by E N. by W. S.S.W. N. by W.	0.0 0.0 0.0 0.2 0.2 0.5 0.2 0.0 0.2 0.2 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.0	S.W. by W. S.W. by S. S.S.E. N. by E. E. by N. E. by S. S.W. S.W. by S. N. by E. S.E. by E. N. by E. N.E. by N. S. by E. N.E. N.E. by N. S. by E. S.S.W.	0.0 0.2 0.0 0.2 0.2 1.0 2.5 1.0 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0	S.W. S.S.W. S. by E. N.E. E. by N. E.S.E. S.S.E. S.S.W. S.W. by S. N. S. N. by E. E. by N. S.S.W.  N. by E. E. by N. S.S.W.	0.0 0.2 0.0 0.2 0.5 1.0 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0	S. by W. S.W. by S. S.W. S.S.W. S. by W. N.N.E. E. by S. S.E. by S. S.S.W.  N. S. S.E. by S. S.E. by S. S.E. by S. S. by W. N. S. S.E. by S. E.S.E. S. by W.	0.2 0.2 0.5 0.5 3.0 0.5 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	E. by S. S.E.  N. N.N.W. N. by E.  N. N.W. by N.  S.W.	0.0 0.5 0.5 0.2 0.0 0.0 0.5 0.0 0.2 0.0 0.2 0.0 0.0 0.2 0.0 0.0	N.E. E. by S. S.E. by S.  N.N.W. N.N.W. N. by E.  N.  N.W.  N.  N.  N.  N.  N.  N.  N.	0.0 0.2 0.5 0.2 0.0 0.0 0.5 0.0 0.2 0.0 0.0 0.2 0.2 0.0 0.2 0.2 0.0	N. E.N.E. E. by S. S.E. by S. W.S.W. N. by E. N.N.W. N. by E. N. by W. S.S.W. N. by W.	0°2 0°5 0°5 0°2 0°0 ———————————————————————————————	N. by E. E. by N. E. by S. S.E. by S. S.W. S.W. by E. S.E. by E. N. by E. N.E. W. by N. S. by E. N.E. by N. S. by E. S.S.W.	0°2 1°0 2°5 1°0 0°2 0°2 0°5 1°5 0°2 0°2 0°2 0°2 0°2 0°2 0°2 0°2	N.E. E. by N. E.S.E. S.S.E. S.S.W.  S.W. by S. N. S. N. by E. E. by N. S.S.W.  N. S.S.W.  S.S.W.  S.S.W.	0°5 2°5 1°0 0°2 0°2 1°0 0°2 0°2 0°2 0°2 0°2 0°2 0°2 0°2 0°2	N.N.E. E. by N. E. by S. S.E. by S. S.S.W.  S.W. N. S. S.E. by S. E.S.E. S. by W. N. D. by E. S. by E.	0.2 0.5 3.0 0.5 0.2 0.2 1.0 1.5 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2
14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	N. N. N. N. N. N. N. N. N. N. N. N. N. N	0.5 0.0 0.2 0.2 0.0 0.0 0.0 0.0 0.2 0.2 0.2	N.N.W. N. by E. N. N. by E. N. N. N. by N. N.W. by N. N.N.E.	0.5 0.0 0.2 0.2 0.0 	N. by E.  N.N.W. N. by E.  N. by W.  S.S.W. N.	1.5 0.0 0.2 0.2 0.0 - 2.0 0.0 0.2 0.2 0.2	N. by E. S.E. by E. N. by E. N.E. W. by N.  N.E. by N. S. by E. S.S.W.	1.5 0.2 0.2 0.2 0.2 0.2 	N. S. N. by E. E. by N. S.S.W.  N. S. by E. S. by W.	1.0 1.0 0.2 0.2 0.2 0.2 0.2 - 1.0 0.2 0.2	N. S. S.E. by S. E.S.E. S. by W. N. by E. S. by E.	1.0 1.5 0.2 0.2 0.2 0.2 0.5 0.5
21 22 23 24 25 26 27 28	N	0.0 0.0 0.5 0.5 0.0	 N.W. by N. N.N.E. 	2:0 0:0 0:0 0:2 0:2 0:0	s.s.w.	0°0 0°2 0°2	S. by E. S.S.W.	0.5	S. by E. S. by W.	1.0 0.2 0.2	S. by E.	0.5
28						0.0	N.E.	0.2	W. by S. E.N.E. S.W. by W.	0°2 0°2 0°2	W. by S. E. W.	$0.2 \\ 1.5 \\ 0.2$
30	S.W. by S.	0.2	S.W. by S. S.W. by S.	0.0 0.2 0.2	S.W. by S. S.W. by S.	0.0 0.2 0.2	S.W. by S. S.S.W.	0°0 0°2 0°5	S.S.W. S.W.	0.0 0.5 1.0	S.W. by S. S.S.W.	0.5 0.5 0.5
<i>l</i> )			1		1		ł		1		1	
tingen	12h.		13b.	 I	14h.	1	15h.		16h.	<u></u>	17h.	
1 2 3	S.W. S. by E. S.S.W.	lbs. 0 2 0 2 0 0 0 5	S.W. by W. S. by E.	lbs. 0 2 0 2 0 0 0 0	S.W. by W. S. by E.	lbs. 0°2 0°2 0°0 0°0	W.S.W. S. by E.	0.0	Direction. S.W. by S.	Ibs. 0°0 0°2 0°0 0°0	W.N.W. S.W. by S.	Ibs. 0 2 0 0 0 0 2
5 6 7 8 9 10 11 12	S.W. N. E. E.	0°2 0°2 0°5 1°5 0°2 0°0 0°0	N. E. —	0.5 0.0 0.5 1.0 0.0 0.0 0.0	N.W. N.N.E. E.	0.0 0.5 0.2 1.0 0.0 0.0	N.W. by N. N.N.E. E.	0.0 0.5 0.2 1.0 0.0 0.0 0.0	N.N.W. E.N.E. E.	0.0 0.2 0.2 0.0 0.0 0.0 0.0	N.N.W. N.E. by N. E. —	0.2
14 15 16 17 18 19 20	w. S.S.W. S.W.	0.5 0.0 0.5 0.0 0.0 0.5 -	S. by W.  S. W.  S. W.	0'2 0'0 0'5 0'0 0'2 - 0'0	W.N.W. S.S.W. — — — — — — — —	0.5 0.0 0.0 0.0 0.0	N.W. by W. S.W. — — — — — —	0.2 0.0 0.5 0.0 0.0 0.0	— — — —	0.2 0.0 0.0 0.0 0.0	N.W. N.N.W. — — — —	0.0
22 23 24 25 26 27	N. by E. N.N.W.	0.0 0.0 0.2 1.0 0.0 -	N. by E. N.N.W.	0.0 0.0 0.2 1.0 0.0 -	N. by E. N.W. by N. ————————————————————————————————————	0.0 0.0 0.2 1.0 0.0 —	N.N.E. N.W.	0.0 0.0 0.0 0.0 0.0	N.E. by N. N.W.	0.0 0.0 0.2 0.5 0.0 -	N.E. by N. N.W. — S.W. by W.	0. 0. 0. 0.
	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 23 22 24 25 29 29 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	2 S. by E. 3 S.S.W. 5 N. 6 S.W. 8 N. 9 E. 10 E. 11 ———————————————————————————————————	1     S.W.     0°2       2     S. by E.     0°0       3     —     0°0       4     S.S.W.     0°5       5     N.     0°2       6     —     —       7     S.W.     0°2       8     N.     0°5       9     E.     1°5       10     E.     0°2       11     —     0°0       12     —     0°0       13     —     —       14     W.     0°5       15     —     0°0       16     S.S.W.     0°5       17     —     0°0       18     —     0°0       19     S.W.     0°5       20     —     0°0       21     —     0°0       22     —     0°0       23     —     0°0       24     N. by E.     0°2       25     N.N.W.     1°0       26     —     —       27     S.S.W.     0°5	1         S.W.         0°2         S.W. by W.           2         S. by E.         0°2         S. by E.           3         —         0°0         —           4         S.S.W.         0°5         N.N.W.           5         N.         0°2         N.N.W.           6         —         —         —           7         S.W.         0°5         N.           9         E.         1°5         E.           10         E.         0°2         —           11         —         0°0         —           12         —         0°0         —           12         —         0°0         —           12         —         0°0         —           13         —         —         —           14         W.         0°5         W.           15         —         —         —           16         S.S.W.         0°5         S. by W.           20         —         —         —           21         —         0°0         —           22         —         0°0         —           24	1         S.W.         0'2         S.W. by W.         0'2           2         S. by E.         0'2         S. by E.         0'2           3         —         0'0         —         0'0           4         S.S.W.         0'5         —         0'0           5         N.         0'2         N.N.W.         0'2           6         —         —         —         —           7         S.W.         0'2         —         0'0           8         N.         0'5         N.         0'2           9         E.         1'5         E.         1'0           10         E.         0'2         —         0'0           11         —         0'0         —         0'0           12         —         0'0         —         0'0           12         —         0'0         —         0'0           13         W.         0'5         W.         0'2           14         W.         0'5         W.         0'2           15         —         0'0         —         0'0           16         S.S.W.         0'5         S.W.	1       S.W.       0°2       S.W. by W.       0°2       S.W. by W.         2       S. by E.       0°2       S. by E.       0°2       S. by E.         3       —       0°0       —       0°0       —         4       S.S.W.       0°5       —       0°0       —         5       N.       0°2       N.N.W.       0°2       —         6       —       —       0°0       N.W.       N.W.         8       N.       0°5       N.       0°2       N.N.E.         9       E.       1°5       E.       1°0       E.         10       E.       0°2       —       0°0       —         11       —       0°0       —       0°0       —         12       —       0°0       —       0°0       —         12       —       0°0       —       0°0       —         12       —       0°0       —       0°0       —         14       W.       0°5       S. by W.       0°5       S.S.W.         15       —       0°0       —       —       —         16       S.S.W.       0°5	1       S.W.       0°2       S.W. by W.       0°2       S.W. by W.       0°2         2       S. by E.       0°2       S. by E.       0°2       S. by E.       0°2         3       —       0°0       —       0°0       —       0°0         4       S.S.W.       0°5       —       0°0       —       0°0         5       N.       0°2       N.N.W.       0°2       —       0°0         6       —       —       —       0°0       —       0°0         7       S.W.       0°2       —       0°0       N.W.       0°5         8       N.       0°5       N.       0°2       N.N.E.       0°2         9       E.       1°5       E.       1°0       E.       1°0         10       E.       0°2       —       0°0       —       0°0         11       —       0°0       —       0°0       —       0°0         12       —       0°0       —       0°0       —       0°0         16       S.S.W.       0°5       S.W.       0°5       S.S.W.       0°5         17       —       0°0       — <td>1         S. W.         0'2         S. W. by W.         0'2         S. W. by W.         0'2         S. W. by W.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         <t< td=""><td>1         S.W.         0°2         S.W. by W.         0°2         S.W. by W.         0°2         S.W. by W.         0°2         S.W. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°3         0°3         S. by E.         0°3         S. by E.         0°3         S. by E.         0°3         S. by E.         0°3         N.W. by E.         0°3         N.W. by E.         0°3         N.W. by N.         0°5         N.W. by N.         0°5         N.W. by N.         0°5         N.W. by N.         0°3         N.W. by W.         0°2         N.W. by W.         0°3         N.W. by W.         0°3         N.W. by W.         0°3         N.W. by W.         0°3&lt;</td><td>1         S.W.         0°2         S.W. by W.         0°2         S.W. by W.         0°2         S.W. by W.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by S.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by S.         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —</td><td>1         S.W.         0'2         S.W. by W.         0'2         S.W. by W.         0'2         W.S.W.         0'2         S.W. by S.         0'2           3         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —</td><td>  S.W.   S.W.   S. by E.   O'2   S.W. by W.   O'2   S.W. by W.   O'2   S.W. by E.   O'2   S.W. by E.   O'2   S.W. by E.   O'2   S.W. by E.   O'2   S.W. by S.   O'3   S.W. by S.   O'4   S.W. by S.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'</td></t<></td>	1         S. W.         0'2         S. W. by W.         0'2         S. W. by W.         0'2         S. W. by W.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'2         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E.         0'0         S. by E. <t< td=""><td>1         S.W.         0°2         S.W. by W.         0°2         S.W. by W.         0°2         S.W. by W.         0°2         S.W. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°3         0°3         S. by E.         0°3         S. by E.         0°3         S. by E.         0°3         S. by E.         0°3         N.W. by E.         0°3         N.W. by E.         0°3         N.W. by N.         0°5         N.W. by N.         0°5         N.W. by N.         0°5         N.W. by N.         0°3         N.W. by W.         0°2         N.W. by W.         0°3         N.W. by W.         0°3         N.W. by W.         0°3         N.W. by W.         0°3&lt;</td><td>1         S.W.         0°2         S.W. by W.         0°2         S.W. by W.         0°2         S.W. by W.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by S.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by S.         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —</td><td>1         S.W.         0'2         S.W. by W.         0'2         S.W. by W.         0'2         W.S.W.         0'2         S.W. by S.         0'2           3         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —</td><td>  S.W.   S.W.   S. by E.   O'2   S.W. by W.   O'2   S.W. by W.   O'2   S.W. by E.   O'2   S.W. by E.   O'2   S.W. by E.   O'2   S.W. by E.   O'2   S.W. by S.   O'3   S.W. by S.   O'4   S.W. by S.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'</td></t<>	1         S.W.         0°2         S.W. by W.         0°2         S.W. by W.         0°2         S.W. by W.         0°2         S.W. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°2         S. by E.         0°3         0°3         S. by E.         0°3         S. by E.         0°3         S. by E.         0°3         S. by E.         0°3         N.W. by E.         0°3         N.W. by E.         0°3         N.W. by N.         0°5         N.W. by N.         0°5         N.W. by N.         0°5         N.W. by N.         0°3         N.W. by W.         0°2         N.W. by W.         0°3         N.W. by W.         0°3         N.W. by W.         0°3         N.W. by W.         0°3<	1         S.W.         0°2         S.W. by W.         0°2         S.W. by W.         0°2         S.W. by W.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by S.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by E.         0°2         S.W. by S.         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —         0°0         —	1         S.W.         0'2         S.W. by W.         0'2         S.W. by W.         0'2         W.S.W.         0'2         S.W. by S.         0'2           3         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —         0'0         —	S.W.   S.W.   S. by E.   O'2   S.W. by W.   O'2   S.W. by W.   O'2   S.W. by E.   O'2   S.W. by E.   O'2   S.W. by E.   O'2   S.W. by E.   O'2   S.W. by S.   O'3   S.W. by S.   O'4   S.W. by S.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'5   S.W.   O'

				DIRI	ECTION	AND FORC	E OF T	HE WIND.					
6 <sup>հ</sup> .		7 <sup>h</sup> .	····	8h.		9h.		10h.		11 <sup>h</sup> .		] Mean G	
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Ti	me.
W. by N. S.E. by S. S.W. by S. S.S.W. S.W.	lbs. 1 '0 0 '2 0 '2 0 '2 0 '5	S.W. by S. S.E. S.W. S.W. by S. S.W.	lbs. 0.5 0.2 0.5 0.2 0.5	S.W. S.E. S.W. by S. S.S.W. S.W.	lbs. 1.0 0.2 0.5 0.5	S.W. E.S.E. S.W. by S. S.S.W.	lbs. 1°0 0°2 0°5 0°2 0°0	S.W. E.S.E. S.W. by S. S.S.W.	lbs. 1'0 0'2 0'5 0'2	S.W. E.S.E. S.S.W.	lbs. 0°2 0°2 0°0 0°5 0°0	1 2 3 4 5	
S. by W. N.N.E. E. by N. E. S.E. by S.	0.2 0.2 2.5 1.0 0.2 0.0	S.S.W. N.E. E. by N. E. S.E. by S. E. by N.	1.0 0.2 1.0 1.0 0.2 0.5	S.W. by S. E. E. by N. E. S.	1.0 0.2 1.0 1.0 0.0 0.2	S.W. by S. N. by E. E. by N. E. S.	1.0 0.2 1.5 1.0 0.0 0.2	S.W. N.E. by N. E. E. —	1 0 0 5 2 0 1 0 0 0	S.W. N. by E. E.N.E. E. S.S.W.	0.5 0.5 1.5 0.2 0.2 0.0	6 7 8 9 10 11 12 13	Ŗ.
S.W. by S. N.N.W. S. E. E.S.E. S. by W.	0.5 1.0 0.2 0.2 0.2 0.2	S.W. by S. N.N.W. S. E.S.E. S.E. S. by W.	0.5 1.0 0.2 0.2 0.5 0.5	S.S.W. N.W. S.S.E. E.N.E. E.S.E. S. by W.	1.0 1.5 0.2 0.2 0.5 0.5	S.W. by S. N.N.W. S.S.E. S.E. S.S.W.	0°2 0°0 0°2 0°5	N.W. by N. S.S.E. — S.S.W.	0.0 1.0 0.2 0.0 0.0 0.5	S.W. N. S.S.E.  S.W.	0.5 0.2 0.2 0.0 0.0 0.0	15 14 15 16 17 18 19 20	SEPTEMBER.
S. by E. S. by W.	0.2 0.2 0.0 0.0 2.5 0.2	N.N.W. S. by E. S. N. by W. E. S. by W.	0.2 0.2 0.2 0.5 2.5 0.5	N. by E. S. N. by W. E.N.E. S.	0.2 0.0 0.5 1.0 1.0 0.2	S. by W. N.E. by N. E.N.E.	0.2 0.0 1.0 0.2 0.5 0.2	N. by W.  N.N.E.  N.E. by N.  S.W.	0.2 0.0 0.0 0.5 0.5 0.2	N. by E. N. S.W. by W.	0.0 0.0 0.0 0.2 0.5 0.2	21 22 23 24 25 26 27	
S. W. S.S.W.	0.2 1.0 0.2	S. W. S.S.W.	0.2 0.5 0.5	S.W. by S. S.S.W.	0.2 1.0 0.2	S. W. by S. S.S.W.	0°2 0°5 1°5	S.S.W. S.W. by S. S.W. by S.	0.5 0.5 5.0	S.S.W. S.S.W. S.W.	0.5 0.5 5.0	28 29 30	
18h.		19 <sup>b</sup> .	·	20h.	<del></del>	21h.		22h.		23 <sup>h</sup> .		Mean G	öttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Ti	me.
S.W. by S.	lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	S.S.E.  N.N.W. N.N.E.  N.N.W.  N. by E.  W. by N.  N.E. by E.  N.W.  S.W. by S.  N.W.	lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	   W. by S   N.N.W.   N.N.E.   E   E   N.N.W.     N. by E   N.W.     S.W. by S	lbs.   0.0   0.0   0.0   0.5   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	S.W. by S.  N. by W. N.N.E. E.  N.N.W.  N. by E.  N.N.W.  S.W. by S.	lbs.   0 · 0   0 · 0   0 · 5   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0  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0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0   0 · 0	S.W	lbs.   0.0   0.0   0.0   0.5   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	W. by S.	lbs.   0.0   0.0   0.0   0.5   0.5   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	1 2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	SEPTEMBER.

	دا				LUDOLIO		- OL	THE WIND.		4 <sup>h</sup> .		e h	
Mean Gö Time		Oh. Direction.		1 <sup>h</sup> .		2 <sup>h</sup> . Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force
	1 2 3	N.N.W. N. by W.	Ibs. 0.2 0.5 0.0	N.N.W. N. by W.	lbs. 1.0 0.5 0.0	N.W. N. by W.	lbs. 0.5 0.5 0.0	N.N.W. N. by W. N.E.	lbs. 0 · 2 0 · 2 0 · 2	N. by W. E.	1bs. 0°2 0°2 0°2	N. by W. N. by W. S.E. by S.	lbs. 0'2 0'2
	4 5 6 7 8 9	N.W.	0.0 0.0 0.0 0.0 0.0	N.W. by W.	0.2 0.0 0.0 0.0 0.0 0.0	N.W. by W.	0.2 0.0 0.0 0.0 0.0 0.0 0.2	S.S.W. S.S.W. N.N.E.	0.0 0.0 0.2 0.0 0.2 0.2	S.S.W. S.E. S. W.N.W.	0.2 0.2 0.5 0.0 0.2 0.2	S. by E. E.S.E. S. by E. S.E. by E. W.N.W. E.	0.2
OCTOBER.	11 12 13 14 15 16 17	S.E. by E. N.N.W.	0.0 0.0 0.0 0.0 0.2 0.2	S.E. N. by W.	0.2 0.0 0.0 0.0 0.5 0.2	S.E. N. by W.	0.2 0.0 0.0 0.0 0.5 0.2	S W.N.W. S.E. by E. N. by W.	0.5 0.0 0.0 0.2 0.2 0.2	S. N.E. by N. S. by W. N.W. by W. S.E. by E.	1.0 0.2 0.2 0.2 0.2 0.0	S. by W. N. by E. S. by W. N.W. by W.	0.0
0	18 19 20 21 22 23 24 25	S.S.E. S.S.W.	0.0 0.2 0.0 0.2 0.0 0.0	S. by E. S.S.W.	0.0 0.5 0.0 0.2 0.0 0.0	S. by W. S.S.W. W.S.W.	0.0 1.0 0.0 0.2 0.0 0.2	W. by S. S.W. W. S.W. S.W. S.W.	0.2 0.2 0.5 0.2 0.0 0.0	S.W. by S. S.W. by S. W.N.W. N. by W. S.E. S.S.W.	0.5 0.2 0.2 1.0 0.2 0.5	S.S.W. S.W. by S. S.W. N. by W. S. by E. W.N.W.	0 : 0 : 0 : 2 : 0 : 2 : 1 : 6 : 1 : 6
No	26 27 28 29 30 31	S.S.W. W. by N. N. by W. N.N.E.	0.0 0.2 0.0 0.2 0.2 0.2 1.0	N.N.W. W. by N. N.E.	0.0 1.0 0.0 0.2 0.0 1.0	N.N.W. N.W. by W. W. by N. N.N.W. N.E.	0.0 0.5 1.0 0.2 0.2 1.0	W.N.W. N.N.W. W. by N. N. by W. N.E. by N.	0.0 0.5 1.0 0.5 0.2 1.5	W.N.W. N.W. W. N. by E. N.E. by N.	0.0	N.W. by W. N.W. W. N. by W. N. by W. N.E. by N.	0.0 0.2 0.2 0.2 0.2 2.0
(continu													
Mean Gö Time		12h.		13h.		14 <sup>h</sup> .		15h.		16 <sup>h</sup> .		17 <sup>h</sup> .	
	· [	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force
	$\left( egin{array}{c} 1 \ 2 \ 3 \ 4 \end{array}  ight)$	E.N.E. N.	0.2 0.0	E.N.E. N. —	0.2 0.0	N.E. N.	1.0 0.5 0.0	N.E. by N. N. N.E.	1.0 0.2 0.3	N.E. —	0.0 0.0 1.2	N.E. by N. —	0.0
	5 6 7 8 9	S.S.E. S.W. by S. E. by N. N.N.W.	0.0 0.2 0.5 0.2 2.5 0.0	S.S.E. S.W. E. by N.	0.0 0.2 0.5 0.2 2.5 0.0	S.W. E. by N. N. by E.	0.0 0.0 0.2 0.2 1.0 0.0	S.W. E. by N. N.N.E.	0.0 0.0 0.2 0.2 0.5 0.0	S.W. E. by N. N.N.E.	0.0 0.0 0.2 0.2 0.0 0.2	  N.W. by N.  E. by S.	0.0 0.0 0.0 0.0 0.0
OCTOBER.	11 12 13 14 15 16 17	W.S.W. N.N.W.  W. by S. N.W.	1.0 4.0 0.0 0.0 0.2 0.2	S.W. by W. N.N.W. — — — —	1.2 3.2 0.0 0.0 0.0	N. by W. N. W. by N. N. W. N. W.N.W.	1.5 2.0 0.2 0.2 0.2 0.0	N. by W. W. by N. N.E. by N. W.N.W. N.W. by N.	1.0 2.0 0.0 0.2 1.5 0.2	N. by W. N.W. by W.  W.N.W.  W.N.W.  N.W. by N.	0.5 1.5 0.0 0.0 1.5 0.2	W. by N. W. by S. W.N.W. N.W. by N.	0.0
)	18 19 20 21 22 23 24	S.W. W. W. N.W. by W. S.W. W.N.W.	0.2 0.5 0.2 0.5 0.2 0.5 0.2	S.W. W. W. by S. — W.N.W.	0.5 0.5 0.5 0.0 0.0 0.0	W.S.W. W. by N. W. by S.	0.2 0.2 0.2 0.0 0.0 0.0	W.S.W. W. by N. W.S.W. W.S.W. N.W. by W.	0.2 0.2 0.2 0.0 0.2 0.0	w.s.w. w.s.w. w.s.w.	0.2 0.0 0.2 0.0 0.2 0.0	s.w. w.s.w.	0. 0. 0. 0. 0.
	25 26 27 28 29 30 31	S. by W. N.W. N.N.W. N.N.E. E: by N.	0.2 1.0 0.0 0.2 0.2 5.0	S.S.W. N.W. — N.N.E. E. by N.	0.2 0.2 0.0 0.0 0.2 3.5	S.S.W. N.W. — N.E. by N. E. by N.	0.2 0.5 0.0 0.0 0.2 3.5	S.S.W. N. by W. N.W. by N. N.E. N.E.	0.2 0.2 0.0 0.2 1.0 3.5	S. N.N.W. — N. by W. N.E. N.E.	0.2 0.5 0.0 0.2 0.5 3.5	S.S.W. N. by W. — N. by W. N.E. N.E.	0. 0. 0. 0. 0. 4.

				DIR	ROTION	AND FORC	E OF 1	HE WIND.					
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .		Mean G	öttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		me.
N. by W. N. by W. S. by E.	lbs. 0°2 0°2 0°2	N. by W. N. by W. S.E. by S.	lbs. 0 2 0 2 0 2	E. by N. N.W. by N. S.E.	lbs. 0 2 0 2 0 2	E. by N. N.N.W. E.S.E.	Ibs. 0°2 0°2 0°2	N.E. N.N.W. S.E. by E.	lbs. 0°2 0°2 0°2	E.N.E. N. by W.	lbs. 0°5 0°2 0°0	1 2 3	
S.S.W. E.S.E. S. E.N.E. W. by N. S.W.	0.2 0.2 0.5 0.5 0.2 0.2	S. E.S.E. S. E.N.E. W. by N.	0.5 0.2 0.5 0.5 0.2 0.2	S. E.S.E. S.S.W. N.E. by E. N.N.W. S.E.	0.5 0.2 0.5 0.5 0.5 2.5 0.2	S.W. S.E. S.S.W. N.E. by E. N.N.W. S.E.	0.2 0.5 0.5 0.2 3.0 0.2	S.E. by S. S.S.W. E.N.E. N.N.W. S.E. by E.	0.0 0.2 0.5 0.2 3.0 0.2	S.S.E. S.W. by S. E. N.N.W.	0.0 0.2 0.5 0.2 2.0 0.0	4 5 6 7 8 9	
S. N. S. by W. W. by N.	0.5 0.5 0.2 0.5 0.0	S. N. S. by E. N.W. by W.	0.5 1.0 0.2 0.2 0.5 0.0	S. N. S.S.E. N.W. by N. S. by E. N.W. by N.	0.5 2.5 0.2 0.2 0.5 0.2	S. N. by W. S.E. W. by S. S. N.W. by N.	0.5 3.5 0.2 0.2 0.2 0.2	S. by W. N. by W. E.S.E. W.S.W.  N.W.	0.5 4.5 0.2 0.2 0.0 0.2	S. by W. N. by W. E.S.E. W.S.W. N.W.	0.5 5.0 0.2 0.0 0.2 0.2	11 12 13 14 15 16 17 18	OCTOBER.
S.W. by S. W.S.W. by W.S.W. N. by W.	1.0 0.2 1.5 2.5 0.0 2.5	W.S.W. S.S.W. W. by S. N. by W. S. W. by N.	1.0 0.5 1.0 2.5 0.2 2.5	W.S.W. W. by S. W.N.W. N. W.S.W.	1.0 2.0 1.0 2.5 0.5 2.5	S.W. W. by S. W.N.W. N.	0.5 1.5 0.5 2.5 0.0 2.0	S.W. W.S.W. W. by S. N.W. by W. S.W. by W. N.W. by N.	0.2 1.0 0.5 2.0 0.5 1.5	S.W. W. by N. 	0.2 0.5 0.0 1.5 0.5 1.0	19 20 21 22 23 24 25	0
E. by S. W. by S. I.W. by W.	0°2 0°2 0°2 0°2	E. by S. W.N.W. N.N.W. W.	0.2 0.2 0.2 0.5	E.S.E. N.W. by W. N.W. W.	0.2 0.2 0.2 0.5	E. by S. N.W. by N. W. by N. N.W. by N.	0.2 0.5 0.2 0.5	E. by S. N.N.W. N.N.W.	0°2 1°0 0°2 0°0	E.S.E. N.N.W.	0°2 1°0 0°0 0°0	26 27 28 29	
	0.5	N. by E. N.E. by N.	0.2 2.2	N. by E. N.E.	0.2 0.2	N. by E. N.E.	0.5	N.E.	0°2 3°5	N.N.E. E. by N.	0°2 5°0	30 31	Готг
W.N.W. N. by E. N.E.	0.5	N. by E.	0.5	N. by E.	0.2	N. by E.						30	lov.
N. by E.	0.5	N. by E.	0.5	N. by E.	0.2 0.2	N. by E. N.E.	2.0					30 31 1 N	öttinge
N. by E. N.E.	0°2 2°0 	N. by E. N.E. by N.	0°2 2°5 —	N. by E. N.E.	0.5 3.0 — Force.	N. by E. N.E.	2.0 Force.	N.E	3°5	E. by N.	5.0	30 31 1 N	
N. by E. N.E.  18 <sup>h</sup> .  Direction.	0°2 2°0 	N. by E. N.E. by N.	O'2 2'5 	N. by E. N.E. —	0.2	N. by E. N.E.  21 <sup>h</sup> .  Direction.	2.0	N.E	3.2	E. by N.	Force.    bs.   0.2   0.0	30 31 N N N N N N N N N N N N N N N N N N	öttinge
N. by E. N.E.  18 <sup>h</sup> .  Direction.	O 2 2 2 0   Force.   Ibs. O 5	N. by E. N.E. by N.  19 <sup>h</sup> .  Direction.	0°2 2°5    Force.   lbs.   0°5	N. by E. N.E.  —  20 <sup>h</sup> .  Direction.	Force.    bs. 0.2	N. by E. N.E.  21 <sup>h</sup> .  Direction.  N.N.E.   N.W. by W. S.S.W	Force.    Ibs.   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0	N.E	3°5 — Force.  lbs. 0°2	23h.  Direction.  N.N.E.  N.W.	Force.   lbs.   0.2   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	30 31 N 1 N 1 N 1 N 1 N 1 N 1 N 1 N 1 N 1	öttinge
N. by E. N.E.  18th.  Direction.  N.E. by N.  S.S.W.  S.E. by S.	Force.   Ibs.   0.5   0.0   0.0   0.5   0.0	N. by E. N.E. by N.  19 <sup>h</sup> .  Direction.  N. by E.  — — — — — — S.S.W. S.E. —	Force.    bs.   0.5   0.0     0.0   0.2     0.0   0.0     0.2   0.0     0.0   0.0     0.2   0.0     0.5   0.0     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5     0.5   0.5	N. by E. N.E.  20h.  Direction.  N. by E.   N. by E.   S.	Force.    bs.   0.0   0.0   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.	N. by E. N.E.  21 <sup>a</sup> .  Direction.  N.N.E.   N.W. by W. S.S.W.	2·0	N.E.  22h.  Direction.  N. by E.   N.W.	Force.    Ibs. 0 2 0 0 - 0 0 2 0 0 0 2 0 0 0 2 0 0 0 0	23h.  Direction.  N.N.E.  N.W.	Force.   lbs.   0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	30 31 1 N Mean G T 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	öttinge ime.
N. by E. N.E.  18th.  Direction.  N.E. by N.  S.S.W.  S.E. by S.  W. by N.	Force.   lbs.   0.5   0.0   0.5   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	N. by E. N.E. by N.  19 <sup>h</sup> .  Direction.  N. by E.  S.S.W. S.E.  S.S.E.  W. by N. N.E. by N.	Force.    bs.   0.5   0.0   0.0   0.2   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.5   0.2   0.2   0.2   0.5   0.2   0.5   0.2   0.5   0.2   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.	N. by E. N.E.  20 <sup>h</sup> .  Direction.  N. by E.  N.W. by W.  S.  S.S.E.  W. by N. S.E. by S.	O · 5   3 · 0	N. by E. N.E.  21 <sup>h</sup> .  Direction.  N.N.E.  N.W. by W. S.S.W.  W. S.E. by S. N.W. by W.  S.S.W.  W.S.S.W.	2.0	N.E	3.5   Force.	23h.  Direction.  N.N.E.  N.W.  S.E. by S.	Force.   lbs.   0.2   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.5	30 31 1 N Mean G T 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	öttinge
N. by E. N.E.  18th.  Direction.  N.E. by N.  S.S.W.  S.E. by S.  W. by N.  W. by S.  S.W.  W. S.W.	Force.   Ibs.   0.5   0.0   0.0   0.5   0.0   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.2   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	N. by E. N.E. by N.  19 <sup>h</sup> .  Direction.  N. by E.  S.S.W. S.E.  S.S.E.  W. by N. N.E. by N. N.W.  W.S.W.	Force.    bs.   0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0	N. by E. N.E.  20h.  Direction.  N. by E.  N.W. by W.  S.  S.S.E.  W. by N. S.E. by S. N.W. by W.  W.S.W.	O · 5   3 · 0	N. by E. N.E.  21 <sup>a</sup> .  Direction.  N.N.E.  N.W. by W. S.S.W.  W. S.E. by S. N.W. by W.  S.S.W.  W. S.S.W.	2.0	N.E	3.5	23h.  Direction.  N.N.E.  N.W.  S.E. by S.  N.W.  S.S.W.	5.0	30 31 N 1 N 1 N 1 N 1 N 1 N 1 N 1 N 1 N 1	öttinge ime.

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	۲۱	O.L		1 h		2h.		3h.		4 <sup>h</sup> .		5h.	
Iean Göt Tim		Oh. Direction.	Force.	1 <sup>h</sup> . Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force
	2 3 4 5 6 7	N.E. S.W. by S. — N. N.	lbs. 3.0 0.2 0.0 0.2 0.2 0.2	N.E. N.W. by S. — N.	lbs. 2.5 0.2 0.0 0.0 0.2 0.0	N.E. N.W. by S. N.W. by W. N. N. N.E. by N.	lbs. 2 · 5 0 · 2 0 · 2 0 · 2 0 · 2 0 · 2 0 · 2	E.N.E. S.W. by S. N.W. N. by E. N.E. by N.	lbs. 1'0 0'2 0'5 0'2 0'0	E.N.E. S.W. by W. N.N.W. N. by E. N.E. N.E. by N.	lbs. 0°5 0°2 1°0 0°2 0°2 0°2	E.N.E. S.S.W. N.N.W. E.S.E. N.E. by E. E.N.E.	bs. 0'5 0'5 0'5 0'5 0'2 0'2
ER.	8 9 10 11 12 13 14	E.N.E. N. by E. E. by N.	0'0 0'0 0'2 0'5 0'0 0'2	N.N.E. E. by S.	0.0 0.0 0.0 0.5 0.0 0.5	E.N.E. N. by E. E.	0.0 0.0 0.2 0.5 0.0 0.2	N.N.E. N. by E. E.N.E. E. by S.	0.0 0.0 0.2 0.5 0.2 0.2	N. by E. N. E.N.E. E. by N.	0.0 0.0 0.2 0.5 0.2 0.5	S.S.E.  N. by E.  N. by E.  E. by N.  E.N.E.	0.2 0.2 0.3 0.3 0.3 0.3
NOVEMBER	15 16 17 18 19 20 21	W.N.W. S.W.	0.0 0.0 0.0 0.0 2.0 0.2	N. E. by S. ———————————————————————————————————	0.5	N. by E. E.S.E. N. by E. N.W. by W. S.W.	0·2 0·2 0·0 0·2 2·5 0·2	E. by S.  N. by E.  N.W. S.W.	0.0 0.5 0.0 0.2 2.0 0.2	E.S.E. S.W. by W. N.N.W. N.N.W. S.W.	0.0 1.0 0.5 0.2 2.5 1.0	E.N.E. E.S.E. W. by S. N. W. by N. W.S.W.	0.2 0.3 1.3 0.2 1.0
	22 23 24 25 26 27 28	W. by N.  N.N.E.  W.N.W.  W.S.W.	0.5 1.0 2.0 0.0	W. by N.  N.N.E.  W.N.W.  S.W.	0.5 1.5 1.0 0.0	W. by N. W. N.N.E. W. by N. S.W. S.W.	0.2 0.2 0.5 1.5 0.5 0.5	W.N.W.  N.N.E.  W.  S.W.  S.W. by W.	0.2 0.0 1.5 3.0 0.5 0.2	W. by N. W. N. W.N.W. W.S.W. S.W. by W.	0.2 0.2 2.5 3.0 0.2 0.2	W.S.W. W. N. W. S.W. S.W. by W.	0.8 0.2 2.8 4.0 0.2 0.8
	29 30	N. by E.	0.2	N. by E.	0.5	_	0.0	_	0.0	_	0.0	N. by E.	0.9
(continu	ued)	12h.		13h.		14h.	<u> </u>	15h.		16h.	· · · · · ·	17h.	· <del></del>
Mean Ge Tin		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force
	$\begin{pmatrix} 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \end{pmatrix}$	 N.W. by N E. N.E. E.	0.5 0.5 0.5	N.W. by N. N.E. N.E. E.	0°2 0°5		0.5 0.5 0.5	S.S.W. N. by W. N. by E. ————————————————————————————————————	lbs. 0'0 0'2 0'2 0'2 0'0 0'5	W. by N. N. by W. N. by E. E.N.E.	lbs. 0'0 0'2 0'2 0'2 0'0 0'5	N. by W. N. by E. N.N.E. E.N.E.	lbs. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
IBER.	8 9 10 11 12 13 14 15	E.N.E. N. by W. N. by W. E.N.E.	0.0 0.2 0.2 0.0 0.5	E.N.E. N. by E. E.N.E.	0.0 0.5 0.2 0.0 0.0	E.N.E.  N.N.E.  E.  E.N.E.	0'0 1'0 0'2 0'0 0'5	E.N.E. N. by W. E. by S. E.N.E.	0'0 1'5 0'2 0'0 0'5 1'0	E.N.E. N.E. by N. E. by N. E.N.E.	0.0 2.0 0.2 0.0 0.5 1.0	E.N.E. N. E. E.N.E.	0° 0° 0° 0° 1° 1° 1° 1° 1° 1° 1° 1° 1° 1° 1° 1° 1°
NOVEMBER.	16 17 18 19 20 21 22	E. by N. W.N.W. N. by W. W. by S. S.S.W.	0.0 0.2 0.2 3.0 0.5 0.5	E. by N. N.N.W. W.S.W. S.S.W.	0.0 0.2 0.0 3.5 0.2 0.2	E. by N.  N.N.W.  W.S.W.  S.S.W.	0.0 0.2 0.0 3.0 0.2 0.5	E. by N.  N.W.  S.S.W.	0.0 0.2 0.0 3.0 0.0 0.5	E. by S. E. N.W. S.W.	0.2 0.2 0.0 3.5 0.0 0.5	E. by S. E. N.W. W. by N.	0.0
	23 24 25	S.W. by S. N. by W. N. by W.		S.W. by S. N.N.W. N. by W.	0.5 0.5 3.0	W.S.W. N. by W. N.N.W.	0°2 0°2 3°5	 N.N.W.	0.0 0.0 5.0		0.0	S.W. N.W. by W.	0.

Sh.   Sh.   Sh.   Sh.   Sh.   Sh.   Sh.   Sh.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   Force.   Direction.   For	Mean Göttinger Time.
N.E. by E.   O'5	Time.  2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
N.E. by E.   0'5   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'0   N.W. by N.   0'2   N.W. by N.   0'2   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.W. by N.   0'5   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'2   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N.E.   0'5   N	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
S. by E. 0'2	9 10 11 12 13 14 15 16 17 18 19
E. by N. 0 2	19
W.N.W.       0.5 N.W. by W.       0.5 N. by W.       0.2 N. by S.       0.2 W. by S.       0.2 S.W.       0.2 S.W. by S.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N. by W.       0.2 N	20 21 22
N. by E. 0 2 N. by W. 1 5 N.N.W. 1 5 N.W. by W. 1 5 N.W. 1 10 N. by W. 1 0  18h. 19h. 20h. 21h. 22h. 23h.	23 24 25 26 27 28 29
	30
Direction. Force. Direction. Force. Direction. Force. Direction. Force. Direction. Force.	Mean Göttinger
,	Time.
	12 13 14 15 16 17 18 19 20 21 22 23 24 25

		. Superior of the		DI	RECTI	ON AND FO	RCE OF	THE WIND	).				
Mean G	öttingen	Oh.		I <sup>h</sup> .		2h.		3h.		4 <sup>h</sup> .		5 h.	
Tin		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	/ 1 2 3 4 5 5	E. by N. W.S.W. S.W. by W.	lbs. 0°0 1°5 3°0 2°0 0°0	E.N.E. W.S.W. W.S.W.	lbs. 0°0 2°0 2°5 2°5 0°0	E.N.E. W.S.W. W.S.W.	lbs. 0'0 2'0 3'0 3'0 0'0	N.E. by N. E. W.S.W. W. by S.	1bs. 0°2 2°0 3°0 2°5 0°0	N.E. by N. E. S.W. W. by S.	1bs. 0°2 2°0 3°0 3°0 0°0	N.E. E. S.W. W. by S.	lbs. 0'2 1'0 3'0 3'0 0'0
	6 7 8 9 10 11 12	E. by S. W.N.W. N.N.W. W.S.W. N. by W.	0.5 0.2 0.2 2.5 0.2 0.0	E. by S.  N. W.S.W. N.N.W.	0.5 0.0 0.2 3.0 0.2 0.0	E. by S. N.N.W. W.S.W. N. by W.	0.5 0.0 0.2 3.0 0.2 0.0	E.S.E.  N.N.W. W. by S.  N. by W.	0.5 0.0 0.2 2.0 0.0 0.5	E.S.E. N.N.W. N. by W. W. by S.	0.5 0.5 0.0 0.0 0.5	E.S.E. N.W. N.N.E. S.W. by W. N.N.W. N.N.W.	0.2 0.2 0.2 1.0 1.5 0.5
DECEMBER	13 14 15 16 17 18 19 20	N.N.W.  N.E. by N.  W.N.W.	0.0 0.0 0.0 1.0 0.0 0.0	N.N.W.  N.E. by N.  W.N.W.	0.0 0.0 0.0 1.0 0.0 0.0	N.N.W.  N. by E.  N.E. by N.  N.W. by W.	1'0 0'0 0'2 1'0 0'0 0'2	N.N.W.  N.E. by N. N.E. by N. N. by E. N.W. by W.	1.0 0.0 0.2 0.2 0.2 0.2	N.N.W. W. N.E. N.E. N.W. by N.	2.0 0.2 0.2 0.5 0.0 2.0	N.N.W. W. E.N.E. N.E. N. by E. N.W.	1.5 0.2 0.2 .1.0 0.2 1.5
	21 22 23 24 25	N.N.W. N.E. S.S.E.	0.5 0.5 0.0 0.2	N.N.W. N.E. S.S.E.	1.0 0.2 0.5	N.N.W. N.N.E. S. by E.	0.2 0.5 0.0 0.2	N.N.W. N. by W. S. by E.	1.2 0.2 0.0 0.5	N.N.W. N.N.E. S. by E.	2.0 0.5 0.0 0.2	N.W. N. S. by E.	1.2 0.2 0.0 0.5
	26 27 28 29 30 31	E. by S.	0.0 0.0 0.0 0.5 0.0	N.N.W. E. by S.	0.0 0.2 0.0 0.2 0.0	W.N.W. N. by W.	0.5 0.0 0.0 0.0 0.0	N. by W. N.E. S. S.E.	0.0 0.2 0.2 0.2 0.2	N. by W. E. by N. S.W.	0.0 0.2 0.5 0.2 0.0	N. by W. E. S.W.	0.0 
(continu	ued)			1		1	·	1		1		,	
Mean G	$     \text{ottingen }      \begin{cases}         \\         \\         \\         $	12h.		13h.		14h.		15h.		16h.		17h.	
	$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{pmatrix}$	E. W. by S. N.W. N.N.E.	lbs. 0°5 0°0 2°5 0°5 0°5	E. W. by S. W. by N.	lbs. 2.5 0.0 2.5 0.2 0.0	E. by N. W. by S. W.	lbs. 2.5 0.0 2.5 0.2 0.0	E. by N. W. by S. W.S.W.	lbs. 2.5 0.0 3.5 0.2 0.0	E. by N. W. W.S.W. N.N.E.	lbs. 3 · 5 0 · 0 2 · 0 0 · 2 0 · 2	E. by N. S.W. S.W. by W. W.S.W. N.N.E.	Ibs. 5.0 0.5 2.5 0.2 0.5
	6 7 8 9 10 11 12	S.E.  N. N.W. by N. N.W.	0.2 0.0 0.0 0.2 0.2 0.2	E. by S. N. by E.  N. by W. N.W. by N. N. by W.	0.2 0.2 0.0 0.2 0.2 0.2 0.5	E. by S. N. by E. N.N.W. N.N.W. N.N.W.	0.2 0.2 0.0 0.2 0.2 0.2 1.0	N.N.E. N.N.W. N.W. N.W.	0.0 0.0 0.2 0.2 0.5 0.5	N.E. N.N.W. N.W. N.W.	0.0 0.0 0.2 0.2 0.2 0.5	E. by S.  N.E. N.W. by N. N.W.	0.2 0.0 0.2 0.2 0.2 0.2 0.2
DECEMBER.	15 16 17 18	N.W. by W. N.E. N.E. N.E.	0.5 0.0 1.0 0.2 0.0 1.5 -	N.W. by W. N.E. by E. N.E. W.N.W.	0.5 0.0 1.5 0.2 0.0 1.0	N.W. by W. E. by N. N.E. W.N.W.	0.5 0.0 2.0 0.2 0.0 1.5 -	E. by N. N.E. W.N.W.	0.0 0.0 1.5 0.2 0.0 1.0	N.E. N.N.E. W.N.W.	0.0 0.0 1.0 0.2 0.0 1.0	N.E. N.N.E. N.W. W.N.W.	0.0 0.0 0.5 0.2 0.2 1.0
	22 23 24 25 26 27 28	S.S.W. N.N.W.	0.0 0.0 0.0 - 2.0 - 0.2	W.S.W. S.S.W. N.W.	0.0 0.0 0.2 - 1.5	W.S.W. S.S.W.	0.0 0.0 0.2 1.0	S.W. by W. S.W. by S.	0.0 0.0 0.2 - 0.2	S.W. S.S.W.	0.0 0.0 0.2 - 0.2	s.w. s.s.w.	0.0 0.0 0.2 
	28 29 30 31	S.W.	1.2 0.5 0.0	E. S.W.	3.0 1.5 0.2 0.0	N.W. by W. E. S.W.	2°0 2°0 0°2 0°0	N.W. by W. E. N.E.	1.0 3.0 0.0 0.2	N.W. by W. E. —	0.2 2.5 0.0 0.0	N.W. E. — N.E. by N.	0.2 2.5 0.0 0.2

				DIRE	CTION	AND FORCE	OF TE	IE WIND.				<del></del>	
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10h.	e e e e e e e e e e e e e e e e e e e	11h.		Mean	Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Time.
N.E. E. S.W. W. W. by N.	lbs. 0°2 0°5 3°0 2°5 0°2	E. by S. S.W. by W. W. by N. W.	lbs. 0°2 0°0 3°0 2°0 0°2	E.N.E. E. by N. W. by S. W. W. by S.	lbs. 0°2 0°2 3°5 0°5 0°2	E.N.E. E.N.E. W.S.W. W. by S.	lbs. 0°2 0°2 2°5 0°2 0°0	E.N.E. W. by S. N.W. by W.	lbs. 0 · 2 0 · 0 2 · 0 0 · 2 0 · 0	E. W. by S. N.W.	lbs. 0 · 2 0 · 0 2 · 5 1 · 0 0 · 0	1 2 3 4 5	
E.S.E. N.N.W. N.N.W. S.W. by W. N.W. N.N.W.	0.2 0.2 0.2 0.5 1.5 0.5	E.S.E. N.N.W. N.N.W. W.S.W. N.W.	0.2	E. N.N.W. N.W. by N. W.S.W. N.W. by W. N.N.W.	0.2	E. N.N.W. — N.W. by W. N.N.W.	0.2 0.2 0.0 0.0 0.5 0.5	E.S.E. — — N.W. by W. N.W.	0.2 0.0 0.0 0.0 0.5 1.0	S.S.E.  N. by E.  N.W. by N.  N.W.	0.2 0.0 0.0 0.2 0.2 0.5	6 7 8 9 10 11 12	
N.N.W. W.N.W. E. N.E. by E. N. by E. N.W. by N.	1:0 0:2 0:2 0:5 0:2 2:0	N.N.W. E. N.E. by E. N. N.W.by N.	1.5 0.0 0.5 0.5 0.2 2.0	N.W. W.S.W. E. by N. N.E. W. by N.	1.5 0.2 0.5 0.2 0.2 2.5	N.W. N.W. by N. E. by N. N.E. W. by N.	1.5 0.2 0.5 0.2 0.2 2.5	W.N.W. E.N.E. N.E. N.W.	1.0 0.0 1.0 0.2 0.0 2.0	N.W. byW.  N.E.  N.E.  N.W. byW.	0'5 0'0 1'0 0'2 0'0 1'0	13 14 15 16 17 18 19	DECEMBER.
N.W. N. by W. S.W. by W.	0.2 0.5 0.0 0.2	N.W. — S.W. by W.	0.5 0.0 0.0 0.5	N.W.byW.	0.5 0.0 0.0 0.5	N.W. — S.W. by W.	0.2 0.0 0.0 0.2	N.W. — S.W. by W.	0.5 0.0 0.0 0.0		0.0 0.0 0.0 0.0	20 21 22 23 24 25	
S.W. by S.  N.W. by N. E. by S. S.W. by W.	0.5 - 1.5 1.5 0.2 0.0	S.W. by S.  N.N.W. E.S.E. W.S.W.	0.2 1.0 0.2 1.0 0.0	S.S.W.  N.W. by N. E. by S. W.S.W. N.E. by E.	0 5 	S.S.W.  N.N.W. E. S.W. N.E. by N.	1.5 	S.S.W.  N.N.W. E. by S. S.W. N.E. by E.	1.5 	S.S.W.  N.N.W. E. by N. S.W.	2·5 0·2 1·5 0·2 0·0	26 27 28 29 30 31	
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .		Moon	Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Cime.
E. by N. W. by S. W.S.W. W.S.W.	Ibs. 5.5 0.5 1.5 0.2	E. by N. W. by S. W.S.W. W. by S.	$\begin{bmatrix} 2.0 \\ 0.5 \end{bmatrix}$	E. by N. S.W. by W. W.S.W. W. by S.	lbs. 4.0 2.0 1.5 0.2	E. by N. S.W. W.S.W. W. by S.	lbs. 4.5 1.0 1.5 0.2	E. by N. W.S.W. W.S.W.	lbs. 4.0 2.5 1.5 0.0	E. W.S.W. W.S.W.	lbs. 2.5 2.0 2.0 0.0	1 \ 2 \ 3 \ 4 \ 5	
E.S.E.  N.E. N.W. by N. N.W.	1.5 0.0 0.0 0.2 0.2 0.2	E. by S.  N. by E.  N.E.  N.N.W.  N. by E.	1.0 0.0 0.2 0.2 0.5 0.5	E. by S.  N. by W.  N.E.  N.N.W.  N. by W.	0.5 0.0 0.2 0.2 0.2 0.2	E. by S.  N. by W.  N.E. by E.  N.N.W.  N. by W.	1.0 0.0 0.2 0.2 0.2 0.2	E. by S.  N. E.N.E. N.N.W.	1.0 0.0 0.2 0.2 0.2 0.0	E. by S. W.N.W. N. E. N. by W.	1.0 0.2 0.2 1.0 0.2 0.0	6 7 8 9 10 11 12	
N.E. N.N.E. N.W.	0.0 0.0 0.0 0.5 0.2 0.2	N.E. N.W.	0.0 0.0 0.0 1.5 0.0 0.2	N.E. N.W.	0.0 0.0 0.0 1.5 0.0 0.2	N.E. W.N.W.	0.0 0.0 0.0 1.5 0.0 0.2	N.E. W.N.W.	0.0 0.0 0.0 1.5 0.0 0.2	N.N.W. N.N.W. N.E. by N. W.N.W.	0.2 0.0 0.2 1.0 0.0 0.2	13 14 15 16 17 18 19	DECEMBER.
W.S.W.	0.5 0.0 0.0 0.0 1.0	W.S.W. N.E. by N.	0.5 0.0 0.0 0.0	W.S.W. N.E. by N.	0.5 0.0 0.0 0.0	W. N. by E.  N.W.	0.5 0.5 0.0 0.0 - 0.2	W.N.W. N. by E.	0.2 0.5 0.0 0.0 - 0.0	W.N.W. E. by <b>N</b> .	0.0 0.0 0.0 - 0.0	20 21 22 23 24 25	-
N. by W.	0.0 0.2 1.5 0.0 0.2	N.E. by N. E. N.	0.0 0.2 2.5 0.0 0.2	E. N.	0.0 0.0 2.5 0.0 0.2	E. N.	0.0 0.0 2.0 0.0 0.0	E. N.	0.0 0.0 1.5 0.0 0.2	E. by S. N.	0.0 0.0 1.0 0.0 0.0	26 27 28 29 30 31	

				DI	RECTIO	ON AND FOR	RCE OF	THE WIND					
Mean Go	ottingen	Oh.		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
Time	e. [	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	$\begin{pmatrix} 1\\2\\3 \end{pmatrix}$	N. W.S.W.	lbs. 0°2 1°5	N. S.W.	lbs. 0'2 1'0	W. by S.	lbs. 0 0 2 0	N. by E. S.W. by S.	lbs. 0°2 1°5	N. by E. S.W. by W.	lbs. 0°2 2°0	N. by E. S.W. by W.	1bs. 0°2 2°0
٠	5 6 7 8	E. by N. W.S.W.	2·0 4·5 0·0 0·0 3·5	E. by S. S.W.  S.W. by W.	2.5 5.5 0.0 0.0 4.0	E. by S. S.W. by W.	3.5 6.5 0.0 0.0 3.0	E. S.W. by W. N. by W. S.W. by W.	3.5 5.5 0.0 0.5 3.5	E. W. by S. N.N.W. S.W. by W.	3.0 5.0 0.0 1.0 3.5	E. S.W. by W. N.W. N.W. by N. W.S.W.	3.0 5.0 0.2 1.5 5.0
	9 10 11	W. by S.	0.0	W. by S.	$\frac{0.0}{0.2}$	W. by S.	0.0	W. by N. W. by N.	$\begin{array}{c} 0.3 \\ \hline 0.2 \end{array}$	W. by S.	0.5	W. S.W. by W.	$\begin{bmatrix} 0.5 \\ \hline 2.0 \end{bmatrix}$
ARY.	12 13 14 15	S.W. by W. S. E.	0.5 0.2 0.0 1.5	S.W. by W. S. E.	0.5 0.0 0.0 2.0	W.S.W. S. ——————————————————————————————	0.5 0.0 0.0 2.5	W.S.W. S. E. by S.	1.0 0.2 0.0 1.5	W.S.W. S.W. by S. — E. by S.	1.5 0.2 0.0 0.5	W.S.W. S.W. E.S.E.	1.5 0.2 0.0 0.5
JANUARY.	16 17 18	W.N.W. S. by W.	$\begin{array}{c c} 0.5 \\ \hline 0.5 \end{array}$	W.N.W.  S.S.W.	2.0	N.W. by W. S.W. by S.	$\frac{2.5}{0.2}$	N.W. by W.	$\frac{0.0}{2.0}$	W.N.W. — —	$\frac{0.0}{2.0}$	W. by S.	$\frac{0.0}{5.0}$
. 3	19 20 21 22 23	W.N.W. W.S.W. W. by N. W.S.W. S.W.	1 · 5 0 · 5 0 · 2 1 · 0 1 · 0	N.W. W.S.W. W. by N. W. by S. S.W. by W.	1.5 0.5 0.5 2.0 1.0	N.W. W.S.W. W. by N. W. by S. S.W. by W.	2.0 0.5 1.0 1.5 0.5	W. by N. W.S.W. W. by N. W. by S. W.S.W.	2.0 0.5 3.0 2.0 1.0	W. W.S.W. W. by N. W. by S. W.S.W.	3.0 0.2 3.0 1.5 2.0	W. by S. W.S.W. N.W. S.W. by W. W.	3.0 0.5 2.5 1.0 2.5
	24 25 26 27 28	E.N.E. N. by E.	0.0 2.2 0.0	E. N. by W.	0.0 2.0 0.2 0.0	E. by S. N. by W.	0.0 2.0 0.0 0.0	N.E. E. by S. N.W. by N.	0.5 1.0 0.5 0.0	E. by S. N.N.W.	0.5 0.5 0.5 0.0	E.N.E. S. N.N.W.	0.2 0.2 0.2 0.3 0.0
	29 30 31	N.N.W.	 3.0 0.0	N.N.W.	$\frac{-}{3.0}$	N.N.W.	0°0 2°5 —	N.N.W.	0.0 2.2 —	N.N.W.	0.0 5.0	N.E. N. by W. —	0.5 3.0 —
(continue	ed)			1						,			
Mean Gö Time		12 <sup>h</sup> .		13b.	<del></del>	14h.		15h.		16 <sup>h</sup> .		17 <sup>h</sup> .	
	$egin{pmatrix} 1 \ 2 \end{bmatrix}$	E.N.E. S.W. by W.	lbs. 1.5 0.2	E.N.E. W.S.W.	lbs. 1.5 0.2		lbs. 2'0 0'2	Direction. E.N.E.	lbs. 2°0 0°0	Direction. E.	lbs. 2.0 0.0	Direction. E.	lbs. 2 5 0 0
	3 4 5 6 7 8 9	E. S.W. W.N.W. S.W. W.	2.5 2.0 0.0 2.5 1.0 0.5	W.S.W. E. S.W. W.N.W. S.W. W.S.W.	2.0 1.5 0.0 2.5 1.0 1.0	W.S.W. E. S.W. W. by N. S.W. W.S.W.	1.0 2.0 0.0 2.5 2.0 1.5	E. W.S.W. N.E. W. by N. W.S.W. W.S.W. W.S.W.	0.5 1.5 0.2 2.5 1.5	S. W.S.W. N.N.E. W. by N. S.W. W.S.W.	1.0 1.5 0.2 2.5 1.0 1.0	S. W.S.W. N. by E. W. by N. W.S.W. W.S.W.	4.0 1.5 0.5 1.5 1.5
JANUARY.	10 11 12 13 14 15 16	W. by S. S.W. S.E. by S. W.N.W.	2:0 0:0 1:0 0:0 0:2 3:5	W. by S. S.W. S.W. by S. W.N.W.	1.5 0.0 0.2 0.0 0.2 3.5	w. s.w	2:0 0:0 0:2 0:0 0:0 3:0	W.S.W. S.W. by W. W. by N.	1.5 0.0 0.2 0.0 0.0 2.0	W.S.W. S.W. by W.  W. by N.	1:0 0:0 0:2 0:0 0:0 2:5	W.S.W. S.W. by W. N.N.E. W. by N.	1.0 0.0 0.2 0.0 0.5 1.5
JAN	17 18 19 20 21 22 23	W. by N. W. W.S.W. N. by W. S.W. by W.	0.5 1.0 1.0 0.2 2.5 0.0	W. by N. W. S.W. W.S.W.	0.5 0.2 1.5 0.0 3.0 0.0	N.W. by W. W. W.S.W. W.S.W.	2:0 0:2 1:0 0:0 2:0 0:0	W. by N. S.W. by W. W.S.W. W. by S. W. by S.	1:0 1:0 1:0 0:5 2:0 0:0	W. by N. S.W. by W. W.S.W. W.S.W. S.W.	1.5 1.5 0.5 0.5 2.5	W. by N. S.W. by W. W.S.W. W.S.W. W.S.W.	0.2 1.5 0.5 1.0 2.0 0.0
	24 25 26 27 28 29 30 31	E. N.W. — N.E. N. by W.	0.2 0.5 0.0 0.0 1.0 1.5	N.W. by N. N.E. N. by W.	0.2 0.5 0.2 0.0 1.0 1.5	E. N.W. N.  N.N.E. N.N.W.	0.2 0.5 0.2 0.0 1.0 2.0	E. N.W. — N.N.E. N.N.W.	0·2 0·5 0·0 0·0 0·5 1·5	E. N.W. — N. by E. N.W. by N.	0.2 0.2 0.0 0.0 0.0 2.0 1.5	E. by N. N.W. N.N.E. N. by E. N.W. by N.	0.5 0.2 0.0 0.2 0.5 0.5

	·			DIR	ECTION	AND FOR	CE OF	THE WIND.					
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> •		9 <sup>h</sup> .		10h.		11 <sup>h</sup> .			Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		lime.
N.N.E. S.W. by W.	1bs. 0'2 2'0	N.E. by N. S.W. by W.	lbs. 0°2 1°5	N.E. S.W. by W.	1bs. 0.2 1.0	N.E. S.W.	lbs. 0 2 1 5	N.E. S.W. by S.	0°2 1°5	E.N.E. S.W.	lbs. 1.0 0.2	1 2 3	
W.S.W. N. N.W. W.S.W.	2.5 3.5 0.2 2.5 6.5	W.S.W. N.W. W.S.W.	2.5 3.5 0.0 2.5 4.5	S.W. N.W. S.W. by W.	3.0 3.0 0.0 3.5 3.0	E. S.W. N.W. W.S.W.	3.0 3.0 0.0 3.5 2.5	E. by S. S.W.  N.W. S.W. by W.	3.0 0.0 3.0 3.0	E. W.S.W. W.N.W.	2.5 2.5 0.0 2.5	4 5 6 7	
w.s.w.	$\begin{array}{c c} 0.2 \\ \hline 2.5 \end{array}$	w.s.w.	$\begin{array}{c c} \hline 0.5 \\ \hline 2.0 \\ \hline \end{array}$	W.S.W.	1.0	W. by N. W.	$\frac{1.0}{1.0}$	W. by N. W.S.W.	2.2 1.0 - 0.2	S.W. by W. W. by N. W.S.W.	2.0 0.2 - 1.2	8 9 10 11	
W. S.W. by S. E.S.E. N.W. by W.	2.5 0.2 0.0 0.2	W. S.W. S.W. by W. S.S.W. W.N.W.	2:0 0:2 0:2 0:2 3:5	W. S.W. by S. W.S.W. S. by W. N.W.	1.5 0.2 0.2 0.2 0.2 3.5	W. S.W. by S. W.S.W. S. N.W.	$ \begin{array}{ c c c c c } \hline 0.5 \\ 0.2 \\ 0.2 \\ 0.2 \\ 4.5 \\ \end{array} $	W. 5. W. W. by S. S.W. by S. W.S.W. E.S.E. W.N.W.	0 3 0 2 0 2 0 2 0 2 4 0	S.W. by S. — W.N.W.	0.0 1.2 0.0 0.0	12 13 14 15 16	JANUARY.
W. W.S.W. N.W. by N. W.S.W. W.N.W.	0.0 3.0 1.5 1.5 2.0	W.N.W. S.W. by W. N.N.E. W.S.W. W. by N.	0.0 2.5 1.5 1.0 1.5 3.0	W.S.W. W. by N. S.W. E. W. by S. W. by N.	0.5 2.5 1.0 1.5 1.0 2.0	W. by S. W. by N. S. W. by S. W. by S. W. by S. W. by N.	2.0 2.5 1.0 1.0 1.5 1.5	W. W. by N. W.S.W. N. by W. W.S.W. W. S.W. W. by N.	1.5 2.5 0.5 0.5 1.0	W. by S. W. by N. W.S.W. N. by W. S.W.	0.5 1.5 0.5 0.2 1.5 0.0	17 18 19 20 21 22 23	JAN
E.N.E. S. N.N.W. N.E. N.W.	0.5 0.5 1.0 0.0 0.2 2.5	E. by S. N.W. by W. N. by W. E.N.E. N.E. by E. N.W. by N.	0.2 0.5 1.0 0.2 0.5 2.0	E. by N. N.W. by N. N. by W. E. by N. N.W. by N.	0.2 0.5 1.0 0.0 1.0 2.0	E. by S. N.N.W. N. by W. 	0.5 0.5 0.0 2.0 2.0	E. by S. N.W. by N. N. by W. N.E. N. by W.	0.5 0.5 0.5 0.0 1.5 0.5	E. by S. N.W. N. N. N.E. N. by W.	0.5 0.5 0.2 0.0 1.0 0.5	24 25 26 27 28 29 30	
					<del></del>			l —		l —	—	31 /	1
18 <sup>h</sup> -		19 <sup>h</sup> .		20h.		21h.		22h.	Suddier#	23h.	_	Mean	Göttingen
18 <sup>h</sup> .	Force.	19 <sup>h</sup> . Direction.	Force.	20h.	Force.	21h. Direction.	F ce.	22 <sup>h</sup> .  Direction.	Force.	23h. Direction.	Force.	Mean	Göttingen Fime,
	Force.	·	Force.	l	Force.	·	F ce.		Force.		1	Mean 1	Göttingen Fime,
Direction.	lbs.	·	lbs.	Direction.	lbs.	Direction.	1bs. 1 5	Direction.	lbs. 1'5 	Direction.	Force.    lbs.   2 · 0	1 2 3 4 5 6 7 8	Göttingen Fime,
S.E. S.W. by S. W. by N. N. by E. W. by N.	lbs. 1°0 - 0°0 3°5 1°5 0°5 1°0	Direction.  N.E. by N. S.W. by S. W.N.W. N. W.	1bs. 0.0  0.2 3.0 1.0 0.2 0.5	Direction.  W. E. S.W. by S. W. by N. N. by E. W.	lbs. 1 · 5  0 · 2 3 · 0 1 · 0 0 · 2 0 · 5	Direction.  W.S.W. E. S.W. by S. W. by S. N. by E. W. by S.	lbs. 1.5  0.5 3.5 1.0 0.2 3.0	Direction.  W.S.W. E. S.W. by S. W. by S. N. W.S.W.	lbs. 1'5 	S.W. E. by N. S.W. N. S.W. S.W.	Force.    lbs.   2.0	Mean   1   2   3   4   5   6   7   8   9   10   11   12   13   14   15	Time,
S.E. S.W. by S. W. by N. N. by E. W. by N. W.S.W. S.W.	lbs.   1 · 0	Direction.  N.E. by N. S.W. by S. W.N.W. N. W.S.W. W.S.W. W.S.W. W.S.W. W.S.W.	lbs.   0°0     -	Direction.  W E. S.W. by S. W. by N. N. by E. W. W.S.W W.S.W S.W.	1 bs. 1 · 5	Direction.  W.S.W. E. S.W. by S. W. by S. N. by E. W. by S. W. by S. W. by S. W. by S.	1bs. 1 · 5 0 · 5 3 · 5 1 · 0 0 · 2 3 · 0 0 · 5 0 · 0 1 · 0 0 · 2 0 · 0 0 · 2 0 · 5 0 · 2 1 · 5 0 · 2 1 · 5 3 · 5	Direction.  W.S.W. E. S.W. by S. W. by S. W. S.W. W. by S. S.W. by S. E.	1bs. 1 5 2 0 3 5 0 2 0 2 3 5 0 5 0 5 0 0 5 0 0 5 0 0 5	S.W. E. by N. S.W. N. S.W.by W. W. by S. S.W. by W. S.S.W. E. by S.	Force.   lbs.   2 · 0	Mean  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	JANUARY.
S.E. S.W. by S. W. by N. N. by E. W. by N. W.S.W.  S.W.  E.S.E. W.N.W. S.W. by W. W.S.W. W.S.W.	lbs. 1 ' 0	Direction.  N.E. by N. S.W. by S. W.N.W. N. W.S.W. W.S.W. W.S.W. S.W. N. by W. E.S.E. W.N.W. W.S.W. W.S.W. W.S.W.	lbs.   0.0	Direction.  W E. S.W. by S. W. by N. N. by E. W. W.S.W W.S.W S.W S.E. by E. N.W. by W. W.S.W. W.S.W. W.S.W. W.S.W. W.S.W.	lbs.   1 · 5	Direction.  W.S.W. E. S.W. by S. W. by S. W. by S. W. by S. W. by S. W. S.W. E. N. by W. S.E. N.W. W.S.W. W.S.W. W.S.W. W.S.W.	1bs. 1 · 5 0 · 5 3 · 5 1 · 0 0 · 2 3 · 0 0 · 5 0 · 0 1 · 0 0 · 2 0 · 0 0 · 2 0 · 0 0 · 2 0 · 5 0 · 2 1 · 5	Direction.  W.S.W. E. S.W. by S. N. W.S.W. W. by S. S.W. by W. S.W. by W. S.W. by W. S.E. by S. N.W. by W. W.S.W. W. by N. W.S.W.	lbs. 1.5 2.0 3.5 0.2 0.2 3.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 1.5	S.W. E. by N. S.W. by W. W. by S.  S.W. by W. S.S.W. E. by S. W. by N. S. by E. W.N.W. W.S.W. W.S.W. W.S.W.	Force.    lbs.   2·0	Mean  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Time,

			D	IRECTI	ON AND FO	RCE OF	THE WINI	).				
Mean Göttingen	Oh.	•	]h.		2h.		3h.		4h.		5h.	
Time.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Fore
$ \begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \end{pmatrix} $	W.N.W. N. by W.	lbs. 0'0 0'0 0'0 5'5 0'2 0'2	N.W. by W.	lbs. 0'0 0'0 0'0 4'5 0'0 0'0	E. by N. N.W. by W.	lbs. 0'0 0'0 0'2 6'0 0'0	E. by S. E.N.E. N.W. N.	lbs. 0'0 0'2 0'2 4'0 0'5 0'2	E.S.E. E.N.E. N.W. N. by E. N.N.W.	lbs. 0'0 0'2 0'2 3'0 0'2 0'2 0'2	E.S.E. E. by N. N.W. N. by E. N. by W.	1bs. 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FEBRUARY.  8 9 10 11 12 13 14 15 16 17	W. by S. N.W. — W. by N.	0.5 0.5 0.0 0.0 0.2 0.0	S.W. N.W. by W. — —	0.0 0.0 0.0 0.0	S.W. N.W. by W. N.	0.5 0.5 0.0 0.0 0.0	S.W. W. N. by W. S.W. by S.	0.5 0.2 0.0 0.2 0.0 0.2	W.S.W. W. N.N.W. N. by W. S.W. by W.	0.5 0.2 0.2 0.0 0.0 0.0	S.W. W.S.W. W. by N.	0.5 0.5 0.0 0.5 0.0
E H 15 16 17 18 19 20 21	N. by W. E.N.E. N.N.E. E.N.E.	0.2 0.0 0.2 0.0	N. by W. N.E. N.N.W.  E.	0.5 1.0 0.2 0.0 0.0 1.0	N. by W. E. by S. N.N.W. — E.N.E.	2.0 1.0 0.5 0.0 0.0	N.N.E. E. by N. N.N.E. E. by N.	1.5 1.0 0.0 0.2 0.2 0.5	N. E.N.E. S.W. E.S.E. N.N.E. E.N.E.	1.0 0.5 0.5 0.2 0.5	N.N.E. N.E. S.W. S.E. N.N.E. N.E. by E.	1.0 0.5 0.5 0.2 0.2 0.5
22 23 24 25 26 27 28	N.N.E. N. by W. N.E. N.N.E. E.	0.2 0.2 0.0 0.2 0.2 4.0	N. by W.  N.E.  N.N.E.  E.	0.0 0.2 0.0 0.2 0.2 4.5	N.E. N.E. N.N.E. E.	0.0 0.2 0.0 0.2 0.2 4.5	N.N.E. N.E. by E. N.N.E. E.	0·2 0·2 0·0 0·2 0·2 5·5	N.N.E. N.E. by E. E.S.E. E.	0.2 0.2 0.0 0.2 0.2 5.0	N. by W.  N.E. by N. E. by S. E. —	0°2 0°2 0°2 0°2 5°5
(continued)												
$egin{array}{ll}  ext{Mean G\"{o}ttingen} \  ext{Time.} \end{array}$	12h.	Force.	13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> . Direction.	Force
( 1 2 3 4 5 6 7 8 9 10 11	S.E. N.N.W. W.N.W.  W. by N. W. by S. N. by W.	lbs. 0.0 0.2 12.0 1.5 0.0 0.0	S.E. N.W. N.W. by W. N. by E.  N.W. by N.  W. by S. N. by W. W.N.W.	Ibs. 0'0 0'2 9'0 2'0 0'2 0'0	S.W. by S. S.E. N.W. N.W. by W. W. by E.  W. by S. N. by W. W.N.W.	Ibs. 0 2 0 2 10 0 1 0 0 0 0 0 0 0 0 0 2 1 0 0 0 0	S.W. by S.  N.W. N.W. by W.  E. by S. E. N.N.W.  N. by W.  W.N.W.	Ibs. 0'2 0'0 12'0 0'2 0'0 - 0'5 0'2 0'0 0'2 0'0 0'2 0'5 - 0'5	N.W. N.W. N. by W.  E. by N.  W.S.W. N.N.E.	Ibs. 0'0 0'0 6'0 0'2 0'2 0'0 0'5 0'0 0'0 0'0	S. N.W. N.W. by W. N. by W. E. by N.  W.S.W.  N.E.	lbs. 0'2 0'0 8'0 0'2 0'2 0'0

_					DIRI	ECTION	AND FORCE	E OF T	HE WIND.	9 <u>, S, 2 · · · · · · · · · · · · · · · · · · </u>		<u>,</u>		
	6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .			Föttingen
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	T	ime.
	E. by S. E.S.E. E.N.E. W.N.W. N. by W. N. by W.	lbs. 0°2 0°2 0°2 1°5 0°2 0°2	E. by S. E.N.E. N.W. N. by W. N. by W.	lbs. 0°0 0°2 0°2 2°0 0°2 0°2	S. by W. E.S.E. N.N.W. N.W. S.W. N. by W.	lbs. 0 ' 2 0 ' 2 0 ' 5 2 ' 5 0 ' 2 0 ' 2	S. by W. E.S.E. N.N.W. N.W.	lbs. 0 · 2 0 · 2 3 · 0 2 · 5 0 · 0 0 · 2	S.S.W. E.S.E. N.W. W. by N. — N. by E.	lbs. 0 2 0 2 4 0 2 0 0 0 0 0 2	S.S.W. S.E. N.N.W. W.N.W.	lbs. 0 2 0 2 5 5 1 5 0 0	1 2 3 4 5 6	-
3	S.W. W.S.W. N. by W. W.	0.2 0.2 0.2 0.5 0.0 0.0	S.W. by S. W. by S. S.W. by W. W. by S. S.S.W. W.S.W.	0·2 0·2 0·2 0·5 0·2 0·2	S.W. W. by S. S.W. W. by S. S. by W. W.S.W.	0.2 0.2 0.2 1.0 0.2 1.0	S.W. W.S.W. S.W. W. by S. N. by W. W. by S.	0.2 0.2 0.2 1.0 0.2 0.5	S.W. W.S.W. S.W. by W. S.W. by W. N. by W. W. by S.	0.2 0.2 0.5 1.0 0.5 1.0	S.W. by W. W.S.W. N. by W. W. by S.	0.0 0.0 0.2 0.5 2.0 0.2	7 8 9 10 11 12 13 14	ARY.
	N. E. S.W. by W. S. by W. N.N.E. E. by N.	1.5 0.2 0.5 0.2 0.2 1.0	E. by N. S. by W. S. by W. E. by N.	1.5 3.0 1.0 0.2 0.0 1.0	N. E. W.S.W. S.S.E. E. E. by N.	1.0 3.0 1.0 0.2 0.2 1.0	N. E.N.E. W. S.E. by S. E. by N.	0.5 2.0 1.0 0.2 0.0 0.5	N.N.E. E. by N. W. E. by S. E. by N.	0°2 2°0 1°0 0°2 0°0 0°5	N.N.E. E.N.E. W. E. E.N.E.	0.2 1.0 0.5 0.2 0.0 0.5	15 16 17 18 19 20 21	FEBRUARY.
	N. E.S.E. E.N.L. E. by N. E.	0.2 0.0 0.2 0.2 0.5 5.5	N.N.E. E.S.E. E.N.E. E. by N. E.	0.2 0.0 0.2 0.2 1.5 5.0	E. by S. E. by S. E. by N. E.	0.2 0.0 0.2 0.2 1.0 3.5	N. E. by S. E.S.E. E.N.E. E.	0.2 0.0 0.2 0.2 1.5 3.0	N, by E. E. S.E. by S. E. by N. E. —	0.2 0.2 0.2 0.2 1.5 1.5	E. by N. E. —	0.2 0.0 0.2 0.0 2.5 1.5	22 23 24 25 26 27 28	
												11		,
	18h.	· 	19 <sup>h</sup> .	<u> </u>	20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23h.			löttin gen me.
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	J	
	 N.W. N.W. by W. N.	1bs. 0°0 0°0 5°0 0°2 0°2	S.S.E. N.W. byW. N.W. N. by W.	lbs. 0.0 0.2 7.0 0.2 0.2	E.S.E. W.N.W. N.W. by N. N. by W.	lbs. 0.0 0.2 5.0 0.5 0.2	 W.N.W. N.W. by N. 	1bs. 0°0 0°0 4°0 0°2 0°0	W.N.W. N.W. by N.	1bs. 0°0 0°0 4°0 0°2 0°0	W.N.W. N.N.W.	1bs. 0.0 0.0 5.0 0.2 0.0	1 2 3 4 5 6	
	N.E. S.E. —	0.0 0.5 0.0 0.0 0.0	N.N.E.	0.0 0.0 0.0 0.0	N. by E.	0.0 0.0 0.0 0.0 0.2	N.W. by W.	0.0 0.5 0.0 0.0 0.0 0.0	N.N.W. —————————————————————————————————	0.0 0.5 0.0 0.0 0.0 0.0	N.W. byW.	0.0 0.0 0.0 0.0	7 8 9 10 11 12 13	RY.
	N.E. N.N.W. E.N.E.	0.0 1.5 0.5 0.0 0.2 0.0	E.N.E.	0.0 1.5 0.0 0.0 0.2 0.0	E. by N. E. N.E. E. by S.	0.0 0.2 0.0 0.0 0.0	E. by N. E. by S.	0.0 3.0 0.0 0.0 0.5 0.5	E. by N. E. by S.	0.0 0.0 0.0 0.2 0.2	N.N.W. E.N.E. — — — E.N.E.	0.2 1.0 0.0 0.0 0.0 0.5	14 15 16 17 18 19 20	EEBRUARY.
	N.N.E.  N.E.  E.  N.W. by W.	0.5 0.0 0.0 0.2 0.0 3.5 1.5	N.N.E.  N.E. by E.  E.  W.N.W.	0.5 0.0 0.0 0.5 0.0 3.5 	N.N.E.  E.N.E.  E.  W.N.W.	0.5 0.0 0.0 0.5 0.0 3.5 	N.N.E N.E E N.W. by W.	0.2 0.0 0.0 0.2 0.0 3.5 -	N.N.E.  N.E.  E.  N.W by W.	0.2 0.0 0.0 0.2 0.0 4.0 	N.N.E.	0.2 0.0 0.0 0.2 0.0 4.0 	21 22 23 24 25 26 27 28	

			,, <u></u> ,,,	DI	RECTIO	N AND FOI	RCE OF	THE WIND	•	1		1	
Mean Göt		Oh.		1 <sup>h</sup> .		2h.		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	<del></del>
Time	е.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
•	$ \begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \end{bmatrix} $	W. — N.W.byN. E. —	lbs. 0°5 0°0 0°0 0°2 0°2 0°0	W.N.W. S. by E. N.E. by N.	lbs. 0°5 0°0 0°2 0°0 0°2 0°0	W.N.W.  S. by E.  N.W.by N.  N.	lbs. 1 '0 0 '0 0 '2 0 '2 0 '2 0 '0	N.W. by W. W.N.W. S.S.E. N.W. N.	lbs. 1 · 5 0 · 2 0 · 2 0 · 2 0 · 2 0 · 2 0 · 2	N.W. W.N.W. S.E. by S. N.N.W. E. by N.	1bs. 3 0 0 2 0 2 0 2 0 2 0 0 2 0 5	N.W. W.N.W. S.E. by S. N. by W.	1bs. 2 · 5 0 · 5 0 · 2 0 · 2 0 · 0 0 · 5
	7 8 9 10 11 12 13	N.N.E. N.W. by N. N. by W. N. by W. N. by W.	0.0 0.2 0.2 0.2 0.2 0.2	N.E. N.W. by N. N. by W. N.	0.0 0.5 0.2 0.0 0.2 0.2	E. N.E. S.W. by W. N. by W. N.	0·2 0·5 0·2 0·0 0·2 0·2	E. by N. W.S.W. W. S. W. N. by W.	0:5 1:5 0:2 0:2 0:2 0:0	N.W. E. W.S.W. N.	0.5 2.5 0.2 0.2 0.2 0.0	W.N.W. E. S.W. by W. N. by E. N. by E.	0.5 1.5 0.5 0.2 0.2 0.0
MARCH.	14 15 16 17 18 19 20	W. by S. W. by N. W. — E.N.E.	0.5 0.2 0.2 0.0 0.0 0.0	S.W. by W. W.N.W. W. — E.N.E.	0.2 0.2 0.0 0.0 0.0	S.W. by W. W.N.W. W. S.W. E.N.E.	1.5 0.5 0.5 0.2 0.0 0.2	W.S.W. N.W. by W. W. by S. N. by E. E.	2.0 0.2 1.0 0.0 0.2 0.2	W.S.W. W.N.W. W. by S. W.S.W. N. by E. E.	1.5 0.2 1.0 0.2 0.2 0.2	W. by S. W. by N. S.S.W. S.W. S.S.E. E.	1.0 0.2 0.5 0.2 0.2 0.5
	21 22 23 24 25 26 27	N.E. W. W.N.W. N.N.W. N.N.W.	0.5 0.0 0.2 0.5 0.5 4.5	N.E. S.E. by S. W.N.W. W.N.W. N.N.W. N.N.W.	0.5 0.2 0.5 0.5 0.5 4.0	E. by N. W.N.W. W.S.W. N.W. N.W. by N.		E. by N. E.S.E. W.N.W. W. N.W. by N. N.W. by N.	0.2 0.2 0.5 2.0 1.0 5.0	E. W.N.W. W. N. N.W. by N.	0.2 0.0 0.5 2.0 1.0 5.0	E. S. W. W. N. by W. N.W. by N.	0.2 0.2 0.5 2.0 1.5 6.0
	28 29 30 31	E. by N. E.N.E.	0.5 0.5 0.0	E.N.E. N.E. N.	0.2 0.2 0.5	N.E. E.N.E. N. by W	0.2 0.2 1.0	 E. N.	0.0 1.0 1.2	E.S.E. E.N.E. N. by W.	0.2 0.5 0.5	E.S.E. E. N. by W.	0.2 0.2 0.5
(continu	ued)	11		I .	<del></del>	1		1		1		F .	
Mean Gö Tim		12h.	Fanas	13h.		14 <sup>h</sup> .	<del>`</del>	15h.		16 <sup>h</sup> .		17h.	Tomas
,	1 2 3 4 5 6 7 8 9	Direction.	Force.   lbs.   2°5   0°0   0°0   0°0   1°5	W. W. E. by N. N. E. W.N.W.	Ibs.   1.0   0.0   0.0   0.0   1.5	N.N.E. E. N.W. by W.	Ibs. 0.5 0.0 0.0 0.2 0.0 2.0 0.5 2.5 1.5	W.  W.  E. by N.  N. E. N. by W.	Ibs. 0.5 0.0 0.0 0.0 0.0 2.0 0.2 2.5 2.0	W.  W.  E.  N.  E. by S.  N. by W.	Borce.	W.N.W. N. by W. E. by N. E.N.E. N. by W.	Ibs.   0.5   0.0   0.2   0.0   0.0   1.0
MARCH.	11 12 13 14 15	N.N.E. S.W. by S. W.N.W. W.S.W.	0.2 0.2 0.2 - 1.5	N.N.E. N. N.N.W. W. by S.	$\begin{array}{ c c c c }\hline 0.2 \\ 0.2 \\ 0.2 \\ \hline 0.2 \\ \hline \end{array}$	N. by W.	0.0 0.2 0.2 - 0.2	N. by W. N. by W. W. by S.	0.2 0.0 - 0.5	N. by W. N. by W.	0.0 0.0 0.2	N. by W. N. — —	0.0 0.0 0.0
MAI	16 17 18 19 20 21	N.W. by N. S.S.W. N.W. S.E. by E.	1.0 2.0 0.5 0.0	W.N.W. S.W. by S. N.W. by W.	0.0	W.N.W. S.W. N.W. by W.	1.5 0.5 1.0 0.0 0.0	W.N.W. W.S.W. N.N.W. N.N.W.	0.5 0.2 0.2 0.0 3.0	W. by N. W.S.W. N.N.W. E. by N. N.N.W.	0.2 0.2 0.2 0.2 3.0	W. W.S.W. W.N.W. E. by N. N.N.W.	0.2 0.2 0.2 0.2 2.5
	21 22 23 24 25 26 27 28	S.E. by S. W. S. by W. W.N.W. N.N.W.	0.2 0.5 0.5 0.5 2.5	S. W.N.W. N. by W. N.W. by W.	0.0 0.0 0.2 0.2 3.0 2.0	S. by E. S.S.W. W.N.W. N. W.by W.	0.5 0.0 0.5 0.5 0.5 3.0 3.0	S. by E. W. S.S.W. - N. by W. W.N.W.	0.2 1.0 0.2 0.0 4.0 2.5	W. by N. S.S.W. N. by W. W.N.W.	0.0 1.0 0.2 0.0 4.0 0.5	W. by S. S.E. by S. N. by W. W.N.W.	0.0 1.0 0.2 0.0 4.0
	28 29 30 31	N. E.S.E. N.	1.0 1.0 0.5	N. by E. E.S.E. N.	$\begin{array}{c} - \\ 0.5 \\ 1.5 \\ 0.2 \end{array}$	N.N.E. E.S.E. N.	0.2 1.5 0.2	N.E. N.E.	0.2 1.2 0.0	N.E. N.E.	0.2 0.5 0.0	E.N.E. N.E. by N.	0.5

	· · · · · · · ·	1		DIR	ECTION	AND FORC	E OF T	HE WIND.					
6 <sup>h</sup> ·	<del></del>	7h.		8h.		9h.		10h	•	1111	•	Mean	ı Göttinger
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Time.
W.N.W. W.S.W. S.S.E. N.W. by N S. E.	lbs. 2 · 5 0 · 2 0 · 2 0 · 2 0 · 2 0 · 5	W. by N. W.S.W. S.E.  E. by N.	lbs. 2 '8 0 '2 0 '2 0 '0 0 '0 0 '0	W. by N. W. by S. E. N.N.W. E. by N.	lbs. 2 · 5 0 · 2 0 · 2 0 · 2 0 · 0 0 · 5	W. by N. S.W. E. by S. W.N.W. S. E.	lbs. 2 · 5 0 · 2 0 · 2 0 · 2 0 · 2 0 · 2 0 · 5	W.N.W. S.W. E. by S. N.W. S. by E. E. by N.	lbs. 2 · 5 0 · 2 0 · 2 0 · 2 0 · 2 1 · 5	W.N.W. S.W. S.S.E. E. by N.	lbs. 2 · 5 0 · 2 0 · 0 0 · 0 0 · 2 1 · 5	1 2 3 4 5 6	•
W.N.W. E. W.S.W. N. by E. N. by E. N.W. by N	1.0 1.5 2.0 0.2 0.2 0.2	N. by W. E. by N. W.S.W. N.N.E. N.W. by N. N. by W.	1.0 2.0 2.0 0.2 0.2 0.5	N. by E. E. by N. W. N.N.E. N. by E. N. by W.	1.5 3.0 3.5 0.2 0.2 0.5	N. E. W. N.N.E. S.S.W. S.S.W.	0.5 1.5 3.5 0.2 0.2 0.5	N. E. by N. W. N.N.E. S.W. by S. S.W. by S.	0.5 1.0 3.5 0.2 0.2 0.5	N. E. W. N.N.E. S.W. by S. S.W.	1'0 2'0 3'0 0'2 0'2 0'2	7 8 9 10 11 12 13	
W.N.W. W. by S. S.S.W. S.S.W. S.S.E. E.	1.0 0.5 1.0 0.2 0.2 0.5	W. by S. N.W. S.S.W. S. by W. S. by E. E.	0.5 0.5 1.5 0.2 0.2 0.2	W.S.W. W. S.S.W. S. S.S.E. E.N.E.	1.5 0.5 1.0 0.2 0.2 0.2	W.S.W. W.N.W. S.S.W. S. by E. N.E. by N.	1.0 1.0 1.0 0.2 0.0 0.2	W.S.W. N.W. S.S.W. N.W. S.S.E. N.E. by N.	1.5 1.0 1.0 0.2 0.2 0.2	W.S.W. N.W. by N. S.S.W. N.W. by W. S.E. by E.	1.0	14 15 16 17 18 19 20 21	MARCH.
E. S.S.W. W. by N. W. by N. N.W. by N.	0.5 0.5 0.5 2.0 1.0 6.0	E. S.W. W.N.W. W. N.W. by N. S.S.W.	0.5 0.2 0.5 2.5 1.0 6.0	E. W. by S. W.S.W. W. N.W. by N. W.S.W.	0.5 1.0 0.5 1.0 1.0 4.5	E. W. by N. S.W. by W. W. by N. N.W. by N. N.N.W.	0.5 1.0 0.5 1.0 2.0 4.0	W.S.W. W. by N. N.N.W. N.W.	0.5 0.0 0.5 1.0 2.5 4.5	E. W. by N. S.W. by S. W.N.W. N. by W. N.W.	0.2 0.2 0.5 0.5 3.0 4.5	22 23 24 25 26 27	
N. by W. E. N. by W.	2.5 1.0 1.0	N. E. by S. N. by W.	2.2 2.0 1.0	N. E. by S. N. by W.	2.5 1.5 0.5	N. E. by N. N. by W.	2.5 1.5 1.5	N. E. by N. N.	2.5 1.5 0.5	N. E.N.E. N.	2.2 1.0 0.5	28 29 30 31	
18h.		19h.	•	20h.		21h.		22h.		23h.		Mean	Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		l'ime.
W.N.W.  E. by S.  W.  N. by W.  N.E. by E.	lbs. 0°2 0°0 0°0 0°2 0°2 0°2 0°2 0°2 0°5	N.W. N.W. E. by N. W. N. by E.	lbs. 1 '0 0 '0 0 '2 0 '0 0 '2	W.N.W. W. by S. N.W.  E. by N.  W.  N. by E.	lbs. 1 ' 5 0 ' 2 0 ' 2 0 ' 0 0 ' 2	W.N.W. W. by N. N.W. W. W. W. W. W. W. W. W. W. W. W. W.	lbs. 1 '0 0 '2 1 '0 0 '0 0 '0	W.N.W.  N.N.W.   N. by E.  N. by E.	0.0 0.0 0.0 0.0	N.W. by N	lbs. 0.0 0.0 0.2 0.0 0.0 0.0 0.0 0.0 0.2 0.0	1 2 3 4 5 6 7 8 9	
N. by W. N. W.N.W.		N.W. by N. N. by W. N. N. N.W.	0.2 0.2 1.5 - 1.5	N.N.W. N. by W. N. W. by N.	0.5 0.5 1.0 	N.N.W. N. by W. N. W.	0.5 0.5 - 2.0	N.N.W. N. by W. N. W.	0.5 0.5 0.5	N. by W. N. by W. N. W. by S.	0°2 0°2 0°5	10 11 12 13 14	Ŀ
W. W. W. W. S. W. W. N. W. E. by N.	0.0 0.2 0.2 0.2 0.2	W. by S. W. W. N.W. E. by N.	0.2 0.2 0.0 0.2 0.2	W. by S. W. W. N. W. E. by N.	0.2 0.2 0.0 0.2 0.2 0.2	W. by S. W. N.N.W. E. by N.	0.2 0.2 0.0 0.2 0.2 0.2	W. by S. W. N.N.W. E.N.E.	0.2 0.2 0.0 0.2 0.2	W. W. — E.N.E.	0.5 0.5 0.0 0.0 0.0	15 16 17 18 19 20	MARCH.
N.E. W. S.E. N. by W.	1'0 0'0 2'0 0'5 0'0 5'0	N.E. W. by S. E. by S. N. by W.	1'0 0'0 1'0 0'2 0'0 4'5	N.E. S. by E. W.N.W. E. N. by W.	1.0 0.2 0.5 0.2 0.0 6.5	N.E. S. by E.; W.N.W. E. N.N.W. N. by W.	1.0 0.2 0.5 0.2 0.5 5.5	N.E. S. by E. W.N.W. E. N.N.W. N. by W.	<b>I</b>	N.E. — W. by N. N.N.E. N.N.W. N.W. by N.	1.0 0.0 0.5 0.5 0.5 4.5	21 22 23 24 25 26	
S.E. E.N.E. N.E. by N.	0.5 0.2 0.5 0.0	S.E. E.N.E. N.N.E.	0.2 0.2 0.5 0.0	E.S.E. N. by E.	0.2 0.0 0.2 0.0	E. by N. N. N.	1.0 0.0 0.2 0.0	E.N.E.  N.	0.5 0.0 0.2 0.0	E.S.E. N. by E.	0.2 0.0 0.0	27 28 29 30 31	

				D	RECTI	ON AND FO	RCE OF	THE WIND	).				
	öttingen	0h.		1h.		2h.		3h.		4h,		5h.	
Tin	me.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	$\begin{pmatrix} 1\\2\\3 \end{pmatrix}$		lbs. 0.0 —		0.0 	_	lbs. 0.0	E.S.E. S.W. by S.	lbs. 0°2 — 0°2	S.E	lbs, 0°2 — 0°0	S.S.E. S. by W.	lbs. 0°2 - 0°2
	4 5 6 7 8 9 10	E. by N. W.S.W. E. N.N.W. W.S.W.	0.0 1.0 0.2 0.2 0.2 0.2	E. by N. W. E. N.N.W. W.N.W.	0.0 0.5 0.5 0.2 0.5 0.5	N.E. E. W.N.W. E. N.N.W. N.W. by W.	0.2 0.2 1.5 0.2 1.0 2.5	E.S.E. E. by S. N.W. by W. S.E. N.N.W. W.N.W.	0.2 0.2 1.0 0.2 0.5 3.0	E. S.E. E. by S. N.W. by W. M.N.W. W.N.W.	0.2 0.2 2.0 0.0 0.2 3.5	E. by S. W.N.W. S.S.W. W.N.W.	0.2 0.2 1.5 0.0 0.2 3.5
APRIL.	11 12 13 14 15 16 17	E N.W W. by N.	0.2 0.0 0.0 0.2 0.0 1.0	E. S.W. by S. W.N.W. N.W. by W. N.W.	0.2 0.2 0.0 0.5 0.2 1.0	W.N.W. S.W. by S. N.W. W. by N. N.W.	1.5 0.2 0.0 1.5 0.2 3.0	N.W. by W. S.W. by S. S.S.W. N.N.W. S. N.W. by W.	2.5 0.2 0.2 1.5 0.2 2.5	N.W. by W. S.W. by S. S.S.W. N. by W. S. by W. N.W.	3.0 0.2 0.5 0.5 0.5 2.0	N.W. S. by W. S. by W. N. by W. S. by W. W.N.W.	3.5 0.2 0.5 1.0 1.5 2.5
	18 19 20 21 22 23 24 25	W.S.W.  S.E.  N.E. by N.  N.N.E.	0.2 0.0 0.0 0.2 0.2 0.2	W.S.W.  S.E.  N.E. by N.  N.	0.2 0.0 0.0 0.2 1.0 0.2	W.S.W.  N.E. by E.  N.E. by N.  N.E. by N.  N.E. by N.	0.5 0.0 0.5 0.5 1.0 0.5	W.S.W. W. by N. N. by E. E.S.E.	0.2 0.0 0.2 0.2 0.5 0.5	W.S.W. S.E. N.W. N. by E. N.N.E. S.E. by E.	0.2 0.2 1.0 0.2 0.5 0.5	S.W. S.E. by S. W. by S. N. N. by E. S.E.	0°2 0°2 1°0 0°2 0°5 0°5
	26 27 28 29 30	W. — — N.N.W.	0.5 0.0 0.0 0.0 0.5	N.W. — N.N.W.	0.0 2.0 0.0 0.0 0.0	N.N.W. W.N.W. N.N.W.	0.0 3.0 0.5 0.0 0.0	N.N.W. S.E. by S. N.W.	0.0 3.5 0.2 0.0 1.0	N.N.W. S.S.E. N. by W. N.W.	0.0 3.0 0.2 0.5 2.0	S.S.W. N.N.W. S.E. by E. E.N.E. N.W.	0.2 3.0 0.2 0.2 1.5
(continu	ued)	12հ.		13h.		14 <sup>h</sup> .		1 %		T.O.			
Mean G Tin	Höttingen }	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	• 16h.	Force.	Direction.	Force.
	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	E.	lbs. 0°2	E.	Ibs. 0`2	E.S.E.	lbs. 1 ° 0	E.S.E.	lbs. 1 5	E. by S.	lbs. 1.5	E.S.E.	Ibs. 1'0
	$\begin{bmatrix} 2 \\ 3 \\ 4 \end{bmatrix}$		0.0	_	0.0		0.0		0.0	_	0.0	_	0.0
	5 6 7 8 9	E. by N. W. N. by W. S.S.W. N.N.W.	1.0	E. W. N. by W. S.W. by S. N.W. by N.	0.2 3.0 0.0 2.5 0.5 1.0	E. W. N.W. by N. S.W. N.N.W.	0.2 0.5 0.0 1.0 0.5 1.0	E. by N. W. S.S.E. N.N.W. S.W. N.W.	1.0 1.5 0.2 1.0 0.2 0.2	E. by N. W. by S. N. by W. S.W.	1.0 1.5 0.0 1.5 0.2 0.0	E. by N. W. by S. N. by W. S.W.	1.5 1.0 0.0 1.5 0.2 0.0
APRIL.	11 12 13 14 15 16 17 18	N.N.W. S.W. by S. E. by N. N.N.W. S.E. by S. W.N.W.	2.5 0.5 0.2 1.0 0.2 2.0	N.W.  E. by N. N. by W. E.S.E. W.N.W.	0.2 0.0 0.2 1.0 0.2 2.0	N.W. N. by E. N. by W. E. N.W.	0.2 0.0 0.2 0.5 0.5 2.5	N.N.W. N. by W. N. N. N.W.	0.0 0.0 0.2 0.2 0.2 2.5	N. by W. N. by W. N.W.	0.0 0.0 0.2 0.2 0.0 3.5	N.N.W. N. by W. N.W.	0.0 0.0 0.2 0.2 0.0 3.0
	19 20 21 22 23 24	S.S.W. W.S.W. N.E. by N. S.	$\begin{bmatrix} 0.0 \\ 0.5 \end{bmatrix}$	W.S.W. N.E. by N.	0.0 0.0 0.2 0.2 0.0 0.0	S.W. W. by S. N.E. by N.	0.5 0.0 0.5 0.5 0.0 0.0 0.0	  N. N.N.E. 	0.0 0.0 0.2 1.0 0.0 0.0	E. by S. N. N.N.E.	0.0 0.2 0.2 1.0 0.0 0.0	E. by S. S.S.E. N. by E. E.	0.0 0.2 0.2 0.5 0.2 0.0
	25 26 27 28 29 30	S.S.W. N.N.W. E. N.W. by W.	0.2 2.5 0.2 0.0 2.5	N.N.W. E. N.W. by N.	0.0 1.0 0.2 0.0 1.0	N.N.W. E. —	0.0 0.2 1.2 0.0 0.0	N.N.W. E.N.E.	0.0 0.2 0.2 0.0 0.0	N.N.W. E.N.E.	0.0 0.2 0.2 0.0 0.0	S.W. N.N.W. E.N.E.	0.2 0.2 0.5 0.0 0.0

-					DIR	ECTION	AND FORC	E OF T	HE WIND.		<del> </del>			• .
	6 <sup>h</sup> ·		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11h.	,		Göttingen
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	] T	ime.
**	S.E. by E.	lbs. 0°2	E. by S.	lbs. 0'2	E.	lbs. 0°2	E. by S.	lbs. 0 2	E. by S.	lbs. 0 2	E.	lbs. 0 2	$egin{array}{c} 1 \\ 2 \end{array}$	<del>-</del> ·
N.M.	S. by W.	0.5	_	0.0	_	0.0	_	0.0	_	0.0		0.0	$\begin{bmatrix} 2\\3\\4 \end{bmatrix}$	
december 10	E. by S. W. w. by S. S.S.W. N.W.	0.2 0.2 2.0 0.2 0.5 3.0	E. by S. E. by S. W.N.W. S.E. by S. S.S.W. N.W. by N.	0.2 0.2 1.5 0.2 0.5 3.0	E.S.E. E. by S. W. by N. S.S.W. N.N.W.	0.2 0.2 1.0 0.0 0.5 2.5	E. by S. E. by S. W. S. by W. N.N.W.	0.2 0.2 1.0 0.0 0.2 2.5	E. E.S.E. S.W. N. S. by W.	0.2 0.2 0.5 2.0 0.2 2.0	E. by N. W. W. by S. N. by W. S.S.W. N.W.	0°2 4°0 0°2 1°5 1°0 2°5	5 6 7 8 9	
	N.W. by W. S. S. by W. N.N.W. S. N.W.by W.	3.5 0.2 0.5 0.5 1.5 2.0	N.W. S. S.S.E. N.N.W. S. by E. N.W.by W.	3.5 0.5 0.5 0.5 1.5 2.0	W.N.W. S. by W. E.S.E. N. S. by W. N.W.	4.0 1.5 0.5 0.5 2.5 2.0	N.W. by W. S.S.W. E.S.E. N. S.S.W. W.N.W.	1.5 0.5 1.0 2.0 2.0	N.W. by N. S.S.W. E. by S. W.S.W. S.W. by S. W.N.W.	3.5 1.5 0.5 0.5 1.0 1.5	N.W. S.S.W. E.S.E. N.N.W. S.W. by S. W.N.W.	3.5 1.5 0.5 0.5 0.2 2.0	11 12 13 14 15 16 17	APRIL.
	S.W. S.E. by S. W.S.W. N.N.E. N. by W. S.E. by S.	0°2 0°2 1°0 0°2 1°0 0°2	S.W. W.S.W. N.N.E. N. S.E.	0.5 0.0 1.0 0.2 0.2 0.5	S.W. W.S.W. N.N.E. N.E. S.E.	1.0 0.0 1.0 0.5 0.2 0.2	S.W. S.E. W.S.W. N.E. N.W. S.S.E.	0.5 0.2 1.0 0.5 0.2 0.2	S. by W. W.S.W. N.E. S. by E.	0·2 0·0 0·5 0·2 0·2	S.S.W. W.S.W. N.E. by N. S.	0.5 0.0 0.5 0.5 0.5 0.5	19 20 21 22 23 24 25	
	S.S.W. N. by W. S.E. by E. E.N.E. N.W. by W.	0.2 3.0 0.2 0.2 1.5	S. N. by W. E. E. W. by N.	0.2 2.5 0.2 0.2 2.0	S. N. by W. E. by S. N.E. by N. N.W.	0.5 3.0 0.5 0.5 3.0	S. N.N.W. E. N.E. by N. N.W.	0.2 2.5 0.2 0.2 2.0	N. by E. N. by W. E.N.E. S.S.E. N.W.	0°2 2°5 0°2 0°2 2°0	N.N.W. E. by N. — N.W. by N.	0.0 2.5 0.2 0.0 2.5	26 27 28 29 30	
	18h.		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .			Göttingen
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	<u> </u>	ime.
	w.n.w.	Ibs. 0.2		lbs. 	_	0.0		lbs. 0.0	<del></del>	0.0		1bs. 	$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	
	N. by W. E. by N. W. by S. E.N.E. N. by W. S.W.	1.0 1.5 1.0 0.2 1.5 0.2	N. by W. E. by N. W. by S. E. by S. N.N.W.	1:0 1:0 0:5 0:2 1:5 0:0	N. by W. E. by N. W. by S. N.N.W.	0.2 2.0 0.5 0.0 1.0 0.0	E. by N. W. by S. N.E. N.N.W.	0.0 1.0 0.5 0.2 1.0 0.0	E. W. by S. N.E. by E. N.N.W. S.W.	0.0 1.5 0.5 0.2 0.2 0.2	E. by N. W.S.W. N.E. by E.	0.0 1.0 0.2 0.2 0.0 0.0	3. 4 5 6 7 8 9	
	N.W. by N.  N.N.W. N. by W.  —	0.0 0.2 0.0 0.2 0.0 0.2	N.W. N. by W. N.W. N.N.W.	0.0 0.2 2.0 1.0 0.2 0.0	S.E. by E.  N. by W.  N.W.  N.N.W.	0.2 0.0 2.0 1.5 0.2 0.0	E. by S.  N.N.W.  N.W.  —	0.0 0.0 1.0	E. N.W. by N. N.W. N.N.W. W.N.W.	0.0	N.W. by N. N.W. W.	0.5 0.0 0.5 0.0 1.0	11 12 13 14 15 16 17	APRIL.
	W. E. E.N.E. N. by E. E.N.E.	0.5	E.S.E. E.N.E. N.E. by N.	0.0	E. by S. N. by E. N.E. by N.	0.0	N.E. E.S.E. N.E. by N.	0.2 0.2 0.0	W. by S. S. by W. N.E. by N. E.S.E. N.E. by N.	0.0	W.S.W. S.E. N.E. by N. N.N.E.	0.2 0.0 0.0 0.2 0.5 0.2	18 19 20 21 22 23 24	A
	S.W. by S. S.W. by S. N.N.W. E.N.E.	0.2 0.2 0.2 0.2 0.2 0.0 0.0	N.W. N.N.W.	0.0 0.2 0.2 0.0 0.0 0.0	N. by W	0.0 0.2 0.0 0.0 0.0 0.0	N. N. W. —	0.0 0.0 1.0	S.W. by S. N. N.W. by W.	0.2 0.2 0.0 0.0 1.5 0.0	S.W. N. — N.N.W.	0.2 0.2 0.0 0.0 0.0 0.5 0.0	24 25 26 27 28 29 30	

						N AND FOR				1			
Mean Gö Tim		O <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .	<del>:</del>	4 <sup>h</sup> .		5 <sup>h</sup> .	
1,1111	ë. [	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	( 1	N.N.W.	1bs. 0.2	N. by W.	lbs. 0°2	N. by W.	lbs. 0°2	s.	lbs. 0'2	s.	lbs. 0'5	s.	lbs. 0.5
	$\begin{bmatrix} 2 \\ 3 \end{bmatrix}$	W. by N.	0.5	w.s.w.	0.5	w.s.w.	1.5	$\overline{\mathbf{w}}$ .	3.0	w.	3.0	w.	2.5
	4 5	_	0.0		0.0	<u> </u>	0.0	S.W. by S.	0.5	S. by W. S.W. by S.	0.5 0.5	S.S.W.	0.5
	6 7	<u> </u>	0.0		0.0		0.0	$\overline{\mathbf{w}}$ .	0.0	$\overline{\mathbf{w}}$ .	0.0	E. by S.	0.0
	8		0.0	_	0.0	E.N.E.	0.5	E.N.E.	0.2	N.E. by E.	0.2	N.E.	0.2
	9 10	_	0.0		0.0	<u> </u>	0.0	E. by N.	1.0	E. by S.	0.2	E.	0.5
	11 12	S.E. by S.	0.0		0.0	s.e.	0.0	S.E. E.	0.5	E. E.	0.2	E. E.	$0.5 \\ 0.5$
	13 14	N.E. by E.		N.E. by E.	0.0	N.E. by E. E. by N.	0.5	E.N.E. E. by <b>N</b> .	0.2	E. E.	1.0 0.2	E. E.S.E.	0.2
•	15		0.0		0.0	- by 11.	0.0	- D. D. T.	0.0		0.0	_	0.0
MAY.	$\begin{array}{c} 16 \\ 17 \end{array}$	_	0.0		0.0	_	0.0	_	0.0		0.0	_	0.0
24	18 19		0.0		0.0	_	0.0	_	0.0	_	0.0 0.0	_	0.0
	20 21	<u> </u>	0.0		0.0	_	0.0	_	0.0	E. by N.	0.0	E. by S. E.	$0.5 \\ 0.2$
	22	s.s.w.	0.2	S.S.W.	0.2	s.s.w.	0.5	S.S.W.	0.5	s.s.w.	0.5	s.w.	0.2
	23 24	_	0.0		0.0	N.W.	0.5	N.W.	0.5	N.W.	0.5		0.0
	25 26	W. by N.	0.0	S.E. W. by N.	0.5	S.E. W.N.W.	0.2	S.E. N.W. by W.	0.2	N.W. by W.	0.2	S. by W.	0.2
	27 28		0.0		0.0	<u> </u>	0.0		0.0	E.S.E.	0.0	E.S.E.	0.5
	29 30	E. by N.	0.2	_	0.0		0.0	E.N.E.	0.5	E.N.E.	0.2	E.N.E.	0.5
	31	E. by N.	2.2	E.N.E.	2.2	N.E. by E.	2.2	E.N.E.	3.0	E.N.E.	3.0	E.N.E.	2.2
(continu	ued)	ıl .	,	T		·		<u> </u>					
Mean G Tir	öttingen   ne.	12h	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force
	<u>l</u>	Direction.	lbs.	1	lbs.	Direction.	lbs.	<u> </u>	lbs.		lbs.		lbs.
	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$		0.0		0.0		0.0	E.	0.5	E.	0.2	E.N.E.	0.5
	3	U XX7 1 NT	1 1 1 5	1 337 NT 337	1.0	1 137 37 377		1					
	4	W. by N. S. by W.	1.5	W.N.W. S. by W.	1.0	W.N.W. S. by W.	0.2	_	0.0		0.0	_	
	4 5	S. by W.	0.2	S. by W.	0.2	S. by W.	0.0		0.0		0.0		0.0
	4 5 6 7	S. by W. S. E. by N.	0°2 0°5 0°0 0°2	S. by W. S. —	0.0 0.0 0.0	S. by W.	0.0 0.0 0.0		0.0 0.0 0.0 0.0	N.N.W.	0.0 0.0 0.0 0.2	N. by W.	0.0 0.0 0.0
	4 5 6 7 8 9	S. by W. S. E. by N. N.	0.2 0.5 0.0 0.2 1.5	S. by W. S N.	0.5 0.0 0.0 5.0	S. by W	0.2 0.0 0.0 0.0 2.5	N. by E.	0.0 0.0 0.0 1.2	N.N.W. N. by E.	0.0 0.0 0.0 0.2 1.5	N. by E.	0.0 0.0 0.0 0.2 1.0
	4 5 6 7 8 9 10	S. by W. S. E. by N. N. S. by E.	0°2 0°5 0°0 0°2 1°5 — 0°2 0°0	S. by W. S. —	0°2 0°0 0°0 2°0 — 0°2 0°0	S. by W N	0.2 0.0 0.0 0.0 2.5 - 0.0 0.0	N. by E.	0.0 0.0 0.0 1.2 	N.N.W. N. by E.	0.0 0.0 0.0 0.2 1.5 	N. by W. N. by E.	0.0 0.0 0.0 0.0 0.0 0.0
	4 5 6 7 8 9 10	S. by W. S. E. by N. N.	0.2 0.5 0.0 0.2 1.5 	S. by W. S. N. S. by E.	0.2 0.0 0.0 0.0 2.0 - 0.2	S. by W N	0.2 0.0 0.0 0.0 2.5 - 0.0 0.0 0.0	N. by E.	0.0 0.0 0.0 0.0 1.5 - 0.0 0.0 0.0 0.0	N.N.W. N. by E.	0.0 0.0 0.0 0.2 1.5 -	N. by E.	0.0 0.0 0.0 0.2 1.0 0.0 0.0 0.0
	4 5 6 7 8 9 10 11 12 13 14	S. by W. S. E. by N. N. S. by E. E. by N.	0.2 0.5 0.0 0.2 1.5 	S. by W. S. N. S. by E.	0.2 0.0 0.0 2.0 0.2 0.2 0.0 0.0 0.0 0.0	S. by W N	0.2 0.0 0.0 0.0 2.5 - 0.0 0.0 0.0 0.0	N. by E.  E.N.E.	0.0 0.0 0.0 0.0 1.5 - 0.0 0.0 0.0 0.2 0.0	N.N.W. N. by E.	0.0 0.0 0.0 0.2 1.5 	N. by E   N.E	0.0 0.0 0.0 0.2 1.0 0.0 0.0 0.0 0.0
AX.	4 5 6 7 8 9 10 11 12 13 14 15 6	S. by W. S. E. by N. N. S. by E. E. by N.  E. S. E.	0.2 0.5 0.0 0.2 1.5 	S. by W. S. N. S. by E.  E.S.E.	0.2 0.0 0.0 0.0 2.0 0.2 0.0 0.0 0.0 0.0	S. by W.	0.2 0.0 0.0 0.0 2.5 	N. by E.  E.N.E	0.0 0.0 0.0 0.0 1.5  0.0 0.0 0.2 0.0 0.0	N.N.W. N. by E.  E.N.E.	0.0 0.0 0.0 0.2 1.5 	N. by E.  N.E	0.0 0.0 0.0 0.0 1.0 0.0 0.0 0.0 0.0 0.0
MAY.	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	S. by W. S. E. by N. S. by E. E. by N. E. S. E. E. E.	0.2 0.5 0.0 0.2 1.5 	S. by W. S. N. S. by E.  E.S.E. E.	0.2 0.0 0.0 0.0 2.0 0.0 0.0 0.0 0.0 0.0	S. by W.	0.2 0.0 0.0 0.0 2.5  0.0 0.0 0.0 0.0 0.0 0.0 0.0	E.N.E.	0.0 0.0 0.0 0.0 0.0 1.5 0.0 0.0 0.0 0.0 0.0 0.0	N.N.W. N. by E.  E.N.E	0.0 0.0 0.0 0.0 0.2 1.5 	N. by E.  N.E	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
MAY.	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	S. by W. S. E. by N. S. by E. E. by N. E. S.E. E. E. E.	0.2 0.5 0.0 0.2 1.5 	S. by W. S. N. S. by E. E.S.E. E. W.N.W.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	S. by W.  N.  N.  S.E. by S.  E.  N.N.W.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N. by E.  E.N.E N.W. by N.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.N.W. N. by E. ————————————————————————————————————	0.0 0.0 0.0 0.0 0.2 1.5  0.0 0.0 0.2 0.0 0.0 0.0 0.0 0.0	N. by E.  N.E	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
MAY.	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	S. by W. S. E. by N. S. by E. E. by N. E. S.E. E	0.2 0.5 0.0 0.2 1.5 	S. by W. S. N. S. by E. E.S.E. E. W.N.W.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	S. by W.  N.  N.  S.E. by S.  E.  N.N.W.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0	E.N.E.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.N.W. N. by E.  E.N.E	0.0 0.0 0.0 0.0 0.2 1.5  0.0 0.0 0.2 0.0 0.0 0.0 0.0 0.0	N. by E.  N.E	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
MAY.	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	S. by W. S. by N. N. S. by E. E. by N.  E.S.E.  E.  IIIIIIIIIIIIIIIIIIIIIIIII	0.2 0.5 0.0 0.2 1.5 	S. by W. S. N. S. by E. E.S.E. E. W.N.W.	0.2 0.0 0.0 0.0 2.0 0.0 0.0 0.0 0.0 0.0	S. by W.  N.  N.  S.E. by S.  E.  N.N.W.  W. by N.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0	E.N.E.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.N.W. N. by E.  E.N.E.  N.W. by N.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N. by E.  N.E N.W. by N.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
MAY.	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	S. by W. S. by N. N. S. by E. E. by N.  E.S.E.  E.  W.	0.2 0.5 0.0 0.2 1.5 	S. by W. S. N. S. by E. E.S.E. E. W.N.W. W. by N. W.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0	S. by W.    N.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N. by E.  E.N.E.   N.W. by N.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.N.W. N. by E.  E.N.E.  N.W. by N.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N. by E.  N.E N.W. by N N.W. by N.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
MAY.	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	S. by W. S. E. by N. S. by E. E. by N.  E.S.E.  E.  W. S.S.E. E.	0.2 0.5 0.0 0.2 1.5 	S. by W. S. N. S. by E. E.S.E. E. W.N.W. W. by N. S.S.E. E.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0	S. by W.    N.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N. by E.  E.N.E.  E.N.E.  W. by N.  W. by S.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.W. by E.  E.N.E.  N.W. by N.  N.W. by N.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N. by E.  N.E N.W. by N N.W.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
MAY.	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26	S. by W. S. E. by N. S. by E. E. by N.  E.S.E.  E.  W. S.S.E.	0.2 0.5 0.0 0.2 1.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	S. by W. S. N. S. by E. E.S.E. E. W.N.W. W. by N. S.S.E.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	S. by W.    N.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N. by E.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.N.W. N. by E.  E.N.E N.W. by N.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N. by E.  N.E N.W. by N N.W. by N.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0

				DIRE	CTION	AND FORC	E OF T	HE WIND.					
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11h.		Mean (	Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	∫ T	ime.
s.	lbs. 0.5	S.E. by S.	lbs. 0'2	S. by E.	lbs. 0°2		0.0		lbs.		0.0	1	) .
W. S. by E. S. by E. S.S.E. E. by S. N.E.	2.5 0.2 0.2 0.2 0.2 0.2	W.N.W. S. by E. S.S.E. E.S.E. E. by S. E.N.E.	2·0 0·2 0·2 0·2 0·2 0·2	W.N.W. S. by E. S.E. by S. E.S.E. E. by S. N.N.E.	2·5 0·2 0·2 0·5 0·5	W. by N. S. S.E. by S. E.S.E. E. N.E.	3.0 0.2 0.2 0.2 0.5 0.5	W.N.W. S. by W. S.E. by S. E. by S. E. by N. N.	2.5 0.2 0.2 0.2 0.5 0.5	W.N.W. S. by W. S. by E. E. by N. N. by W.	2·5 0·2 0·5 0·0 0·2 2·0	2 3 4 5 6 7 8	
E. E. E. E. E. E. E. E. E.	0.2 0.2 0.2 1.0 0.5 0.5	E. by S. E.N.E. E. by S. E.S.E. E. by S.	0.2 0.2 0.2 0.5 0.5 0.5	E. by S. E. by S. E.N.E. E. by S. E.S.E. E. by S.	0.2 0.2 0.5 0.5 0.5 0.2	E. by S. E. by S. N.E. by E. E. by S. E.S.E. E.S.E.	0.2 0.2 0.5 0.2 0.2 0.2	E. by S. E. by S. E.N.E. — E.S.E.	0.2 0.2 1.0 0.0 0.0 0.0	E. by S. E. E. E.S.E.	0.5 0.0 1.0 0.0 0.0 0.0	9 10 11 12 13 14 15	MAY.
E. by N. E. by S. E.S.E. S. by W.	0.2 0.0 0.2 0.2 0.0 0.2	E. by S.  E.S.E. E. S.	0.5 0.0 0.0 0.2 0.2 0.2	E. by S. E.S.E. E. S.	0.5 0.5 0.0 0.5 0.5 0.5	E. E.S.E. — — E. S.	0.5 0.5 0.0 0.0 0.5 0.5 0.5	E. by N. S.	0.5 0.0 0.0 0.0 0.5 0.5	E	0.5 0.0 0.0 0.0 0.0 0.0	17 18 19 20 21 22 23	M.
S. by E. E.S.E. S.E. by E.	0.0 0.2 0.5 0.2 0.2 0.0	E. S. by E. E. S.E. N.E. by E.	0.0 0.2 0.5 0.2 0.2 0.2	W.S.W. E. S. by É. E. E.S.E. N.E. by E.	0°2 0°3 0°3 0°2 0°3	W.S.W. S. by W. S. by E. E. by S. E.S.E.	0°2 0°5 0°5 0°2 0°2 0°0	S.S.E. S. by E. E. E.S.E. N. by W.	0.0 0.2 0.2 0.2 0.2	S.S.E. S.S.E. E. N. by W.	0.0 0.2 0.2 0.0 0.0 0.5	24 25 26 27 28 29 30	
E.N.E.	2.2	E.N.E.	2.2	E.N.E.	2.2	E.N.E.	2.2	E.N.E.	2.2	E.N.E.	2.2	31	) 
18 <sup>h</sup>		19h.		20h.		21 <sup>h</sup> .		22h.		23h.		Mean C	löttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		me.
N. by N.  N.E. by N.  N.W. by N.  W.N.W.  E. by N.  E. by E.	Ibs.	N.N.E.  N.E.  N.E.  N.N.W.  S.S.E.  W.N.W.  E. by N.  E. hy E.	lbs.	N.E. by N.  N.E. by N.  N.E.  N.N.W.  S. by W.  W.N.W.  N.E. by E.  E. by N.  N.E. by E.	lbs.	S.W. by S.  N.E.  N.N.E.  N.N.W.  S.S.W.  W.N.W.  L. by E.  E. by N.  N.E. by E.	lbs.	N.E. by E. N.N.W. S.S.W. W.N.W. L. by E. W.N.W. S.S.W.	lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.0   0.5   0.0   0.0   0.5   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	N.E. by E.  S.S.W.  S.S.W.  S.S.W.  C.  W.N.W.  N.E. by E.  E. by N.	lbs.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	MAY.

			DIR	ECTION	N AND FORC	E OF	THE WIND.					V
Iean Göttingen	0 <sup>h</sup> .		1 <sup>h</sup> .		$2^{ m h}$ .		3h.		4h.		5 <sup>h</sup> .	
Time.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
1 2 3 4 5	 N.W. W.	Ibs. 0°0 0°0 0°2 0°2	   W.N.W.	lbs. 0°0 0°0 0°0 0°0	W.N.W. — N.W. N.W. by W.	lbs. 0°0 0°2 0°0 0°2 0°5	W.N.W.  W. W. by N.	1bs. 0 0 0 2 0 0 1 5 0 5	S.S.E.  W.N.W. W. by N.	Ibs. 0'2 0'0 0'0 0'5 0'5	S. by E. N.W. W. W. by N.	lbs. 0°2 0°2 0°0 0°5
6 7 8 9 10 11	s.s.w. S.	0.0 0.0 0.0 0.5 0.5 0.0	s.s.w. s.	0.0 0.0 0.0 0.2 0.2 0.0	S. by W.	0.0 0.0 0.0 0.0 0.2 0.2	S.W. by S. S. by W. S.W. by S.	0.2 0.0 0.0 0.2 0.5 0.2	S.S.W. S. S. S. S. S.W. by S.	0.2 0.0 0.0 0.2 0.5 0.2	S.S.E.  E. by N. S.S.W. S. S. by W.	0.2 0.0 0.2 0.5 0.5
HA 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	W. by N. N.W.	0.0 0.0 0.0 0.0 0.0	W.N.W. W.N.W. N.W. E.	2.5 1.0 0.2 0.0 0.2 0.0	W.N.W. W.N.W. W.N.W. E.	2.5 1.5 0.2 0.0 0.2 0.0	W. W.N.W. W.N.W. — E. —	2.0 3.0 0.2 0.0 0.2 0.0	W. W.N.W. N.W. S.S.W. E. S.S.W.	2.5 2.0 0.2 0.2 0.2 0.2	W. by N. W.N.W. W.N.W. S.S.W. E. S.S.W.	2.5 2.5 0.5 0.2 0.2 1.0
20 21 22 23 24 25 26	W. by N.	0.0 0.0 0.0 0.0 0.0	E.N.E. —————————————————————————————————	0.0 0.2 0.0 0.0 0.0 0.0	S.W. by W. E.S.E. N.W. S.W. by S.	0°2 0°2 0°2 0°0 0°0 0°2	S.S.W. N.W. by N. S.W. S.S.W. S.S.W.	0.5 0.0 0.5 0.5 0.5 0.5 0.5	S.S.W. S.S.W. S.W. S.S.W. S.S.W.	0.5 0.0 0.5 0.5 0.5 0.5 0.5	S.W. by S. S.E. by E. S.S.W. S.W. S.S.E. S.S.W.	0°2 0°2 0°2 0°2 0°3
27 28 29 30	  N.	0.0 0.0 0.0		0.0 0.0 0.5	N.N.W.	0.5 0.0 0.5	N.W. W.	0.2 0.0 0.5	N.W. by N. E. by S.	0.2 0.0 0.5	N.W. by N. E.S.E.	0.5 0.0 0.5
(continued)	101								3.0h		1 100	
Iean Göttingen     Time.	Direction.	Force.	13h.  Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	17h. Direction.	Force
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S. E. W. N.W. by N. E.S.E. S. by W. S. by E. W.N.W. N.W. by W. E. by N	lbs. 0'2 0'2 0'2 1'0 0'5 - 0'2 0'0 1'5 0'2 2'0 0'2 - 3'0	W. S. W. by S. N.W. by N. S. by E. W. N.W. W. by N. E. by N. E. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. S. by N. 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E. by N.	lbs. 0°2 0°2 0°0 0°2	N.N.W.	lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	N.N.W W.N.W	lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	N.W	lbs.   0 * 5

					DIR	ECTION	AND FORC	E OF T	HE WIND.					
	6 <sup>h</sup> .	<del></del>	7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup> .		11 <sup>h</sup> .	and the second second	Mean G	öttingen
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		me.
	 S.S.E. W. E.S.E.	lbs. 0'0 0'0 0'2 1'5 0'2	S. E.S.E. W. S. by E.	lbs. 0°0 0°2 0°2 2°5 0°2	S. E.S.E. W. S.	Ibs. 0.0 0.2 0.2 2.5 0.5	S.W. S. E.S.E. W.N.W. S.	lbs. 0°2 0°2 0°2 2°5 0°2	S.W. by W. S. E. by S. W.N.W. N.E. by N.	Ibs. 0°2 0°2 0°2 2°5 0°5	W.S.W. S. E. W. N.W. by N.	lbs. 0°2 0°2 0°2 1°5 0°5	1 2 3 4 5	
ź	S.S.E. S.E. S. by W. S.W. S.	0.5 0.0 0.5 0.5 1.0 0.5	S.S.E. S.E. S.S.W. S.W. by S. S.	0.2 0.0 0.2 0.5 0.5	S.S.E. S.E. S.S.W. W.S.W.	0°2 0°0 0°2 0°2 0°5 0°2	S. by W. S.S.W. S.S.E.	0.0 0.0 0.2 0.2 0.5 0.2	S.E. S.S.W. S. by W. S.S.W. S.S.E.	0°2 0°0 1°0 0°2 0°5 0°2	E.S.E. S.W. by S. S. by W. S.W. by W. S. by E.	0.2 0.0 1.0 0.2 1.0 0.2	6 7 8 9 10 11 12 13	
	W.N.W. W.N.W. W.N.W. S.S.W. E. by S. S.W.	3.5 2.0 0.5 0.2 0.2 1.0	W.N.W. W. N.W. S. by W. E. N.N.W.	3.5 1.5 0.5 0.2 0.5 2.5	N.W.by W. W. by N. N.W. by N. S. by W. E. by N. N.N.W.	3°0 1°5 0°5 0°2 0°5 1°0	W.N.W. W.N.W. N.W. by W. S. by W. E. by N. N. by W.	3°5 1°5 0°5 0°2 0°5	W.N.W. W.N.W. N.W. S. by W. E. by N. N.N.W.	5.0 1.0 0.5 0.2 0.5 0.2	N.W. N.W. N.W. S. by W. E. by N. S.S.W.	4·2 1·0 0·2 0·2 0·2 0·2	13 14 15 16 17 18 19 20	JUNE.
	S.W. S.S.W. S.S.E. S.S.W.	0.2 0.0 0.2 0.2 0.2 0.5	S.W. S. by W. S.W. S.S.E. S.S.W.	0°2 0°0 0°2 0°2 0°2 0°5	S.W. by W. S.W. by S. S.W. by S. S.S.E. S.S.W.	0°2 0°0 0°2 0°2 0°2 0°5	S.W. by W. S.E. S.W. by S. S.W. by S. S.E. by S. S.S.W.	0.2 0.2 0.2 0.2 0.2 0.5	S.W. by W. S.S.W. S.W. by S. S.W. by S. S.S.W.	0.2 0.2 0.2 0.2 0.0 0.5	S. by W. S.W. by S. E. S.W.	0.0 0.2 0.2 0.0 0.2 1.0	21 22 23 24 25 26	
	N.W. by W. N. S.E.	0.2 0.2 0.2	W. by N. N.N.W. S.E.	$0.5 \\ 0.5 \\ 0.5$	N. by W. S.W. by W. S.E.	0°2 0°2 0°2	N. S.S.W. S.S.E.,	0.5 0.2 0.2	N. S.S.W. S.S.E.	0.2 0.5 0.5	N. by W. S.S.W. S.S.E.	0.5 0.5 0.5	27 28 29 30	
						1		·					<u> </u>	
	18h.	Force	19h.	Force	20h.	Force	21h.	Force	22h.	Force	23h.	Force	Mean Go	ottingen me.
	N .W	Force.	N.W. S. W.N.W. W. N. by W. N.W. by W. N. by W. N. by W. N. by W. N. by W. N. by W. N. by W.	Torce.   Ibs.   O'2   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0	N.W. by W. N.W. by W. N.W. by W. N.W. by W. N.W. by W. N. by W. N. by W. N. by W. N. by W. N. by W.	Ibs.   O'2   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0	W.N.W.  S. W.N.W.  W.N.W.  N.E.	Ibs.   0°2   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0	W.N.W. S. W.N.W. W. N.W.	Ibs.   0°2   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0	N. by E.  S.  W. by N.  W. by N.	Ibs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	JUNE.

				DI	RECTIO	N AND FO	RCE OF	THE WIND	).			<del></del>	·
Mean Gö	ttingen	O <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
Time		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	1 2 3 4 5 6 7 8 9	    	1bs. 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.N.E.	1bs. 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.N.E.	1bs. 0.2 0.0 0.0 0.0 0.0 0.0 0.0	E.N.E  S.S.W E.	1bs. 0°0 0°2 0°0 0°0 0°0 0°2 0°0 0°2	E. E.S.E. — S.S.E. — S. by W. S. by E. E. by S.	1bs. 0.2 0.2 0.0 0.2 0.2 0.2 0.2 0.2	E.S.E. E.S.E. S. by E. S. by W. S. by E. E.S.E.	lbs. 0'2 0'0 - 0'2 0'0 0'2 0'2 0'2 0'2
JULY.	10 11 12 13 14 15 16 17	N.W. N. by W.	0.0 0.0 0.0 0.2 0.0 0.0 0.0	E. N.N.W. N. by W.	0.0 	S.E. N.N.W. N. S.W. S.W.	0.0 0.2 0.2 0.2 0.0 0.2 0.5	S.E. N.N.W. — S. by W. S.W.	0.0 0.2 0.2 0.0 0.0 0.2 1.0	S.E. N.W. N. S.S.W. S.W. by S.	0.0 	S. by E. N.N.W. S.E. by S. S. S. by W. S.S.W.	0.0 0.2 0.2 0.2 0.2 1.5
;	18 19 20 21 22 23 24 25		0.0 0.0 0.0 0.0 0.0 0.0	N. by W.	0.0 0.0 0.0 0.0 0.0	S. N.N.W. S.E. by S.	0.0 0.0 0.2 0.2 0.0 0.2	S. by W. S.W. by S. S.S.W. N.N.W. S.W. S.E. by S.	0.2 0.2 0.2 0.5 0.2 0.2	S. by W. S.S.W. S.W. by S. N. S. by E. E.S.E.	0.2 0.2 0.2 0.5 0.5	S. S.W. S.S.W. N.N.W. S. by E. E.S.E.	0.5 0.5 0.5 0.5
	26 27 28 29 30 31	N. by E.   	2'0 0'2 0'0 0'0 0'0	N. by E. E.S.E.	1.0 0.2 0.0 0.2 0.0 0.0	N. by E. S.S.E.	2:0 0:2 0:0 0:2 0:0	N. E. by S. E. by N. S.E. by S. S.W. E. by S.	2:0 0:5 0:2 0:2 0:2 0:2	N. E.S.E. S.E. S.S.E. S.S.W. S.S.E.	2.0 0.2 0.2 0.2 0.2 0.2	N.N.W. S.E. by S. S.E. S.S.E. — S.S.E.	1.5 0.2 0.2 0.2 0.0 0.0
(continu	ued)	l		1	···	l .					· · · · · · · · · · · · · · · · · · ·		
Mean Gö Time		12h.		13h.		14 <sup>h</sup> .	T.	15h.	1	16 <sup>h</sup> .	TR	17 <sup>h</sup> .	T
	1 2 3 4 5 6 7	S. by E.	Ibs. 0.0 0.0 0.2 —	Direction.  S. by E.	lbs. 0.0 0.0 0.2	S. by E.	lbs. 0'0 0'0 0'2	E. by S.	Ibs. 0.0 0.2 0.0 —	E. by S.	lbs. 0°2 0°2 0°0	E.N.E.	lbs. 0°2 0°0 0°0
JULY.	8 9 10 11 12 13 14 15 16 17	N. — — — — — — — — — — — — — — — — — — —	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.5 0.0 0.2 0.5 0.0	N	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.5 0.0 0.2 0.5 0.0	N. — — — — — — — — — — — — — — — S. by W. S.S.W. S. by W.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.2 0.2	N.N.W.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.N.W.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
	18 19 20 21 22 23 24 25 26 27 28 29 30 31	S.S.W. E. N.W. E.N.E. N. by E. S.S.E. S.E. by S. E. by S. W. by N.	0.2 0.5 0.0 0.5 0.0 0.2 0.5 0.2 0.0 0.2 0.5 0.0 0.2	S.W. S.E. N.W. E.N.E. N. by E. S.E. by S. E. by S. W. by N.	0.2 0.2 0.0 0.2 0.0 0.2 0.0 0.0 0.2 0.0 0.2 0.0 0.2 0.0 0.2	S.W. S.E. N.W. —————————————————————————————————	0.2 0.2 0.0 0.2 0.0 0.0 0.0 0.0 0.0 1.0 0.2	S. by E.  E.N.E.  S.S.W.	0.0 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.0 0.0	S.W	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	s.w.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

		1		1511012	OTION	AND FORCE	1 O.F. I.I.	III WIND,					
6 <sup>h</sup> .		7h.		8h.		9h.		10h.		11h.			- Göttinger
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	] T	ime.
E.S.E. E.S.E.	1bs. 0'2 0'2 0'0	E.S.E. E.S.E. S.S.E.	1bs. 0°2 0°2 0°2	E.S.E. E.S.E. S. by E.	lbs. 0°2 0°2 0°2	E.S.E. S. by E.	lbs. 0'2 0'0 0'2	E.S.E. S. by E.	lbs. 0°2 0°0 0°2		lbs. 0'0 0'0 0'2	1 \ 2 3	
S. by W. S. by W. S.E. by E. E.S.E. E. by N.	0.5 0.0 0.5 0.5 0.5 0.5 0.5	S. by W. S. by W. S.E. by E. S.E. by E.	0.2 0.0 0.2 0.2 0.2 0.2	S. by W.  E.S.E.  E. by N.	0.5 0.0 0.0 0.2 0.2 0.2	S. by W.  E. E. by S. E. by N.	0.5 0.0 0.0 0.0 0.2 0.2 0.2	E. by S. E. by N.	1.0 0.0 0.0 0.2 0.2 0.2	N. by W.	0.0 0.0 0.0 0.0 0.0	4 5 6 7 8 9	
S. N.N.W. S.S.E. S. S. S.S.W.	0.2 0.5 0.2 0.2 0.2 0.2 1.5	S. N.N.W. S. S. S. S. S.S.W.	0·2 1·5 0·2 0·2 0·5 2·5	S. N. by W. S. by W. S.S.E. S. by W. S.S.W.	0.2 1.5 0.2 0.5 2.0 1.5	S. N. by W. S. by W. S. by W. S. S. by W. S.W.	0.2 2.0 0.2 1.0 2.0 3.0	S. S. W. S. by W. S. W. S. W.	0.2 1.5 0.5 0.5 1.5 0.2	N.N.W. S. S. S.S.W.	0.0 1.0 0.2 0.5 0.5 0.0	11 12 13 14 15 16 17	JULY.
S. S.W. S. by W. N.W. S. by E. E.S.E.	0.5 0.2 0.2 0.5 0.2 0.2	S. S.S.W. S. N.W. S. E.S.E.	1.0 0.2 0.5 1.5 0.2 0.2	S.S.W. S.S.W. S. N.W. S. by E. E. by S.	0.5 0.2 0.2 1.0 0.2 0.2	S.S.W. S.S.W. S.W. by S. N.W. S. by E. E. by S.	0.2 0.2 0.2 0.2 0.5 0.2 0.2	S.W. S.S.W. S.W. W.N.W. S. by E. E. by S.	0.2 0.2 0.5 0.5 0.2 0.2	S.S.W. N.E. N.N.W. E.N.E.	0.2 0.5 0.0 1.0 0.0 0.2	18 19 20 21 22 23 24	
N. S.S.E. E. by S. S.E. by S. S.E. S. by E.	1.5 0.2 0.2 0.2 0.2 0.2	N. S.S.E. E.S.E. E.S.E. S.E. W.	1.0 0.2 0.2 0.2 0.2 0.2	N. S.S.E. E. by N. E.S.E. S.E. S.W. by W.	0.5 0.2 0.2 0.2 0.2 0.2 0.2	N. S.S.E. E. by S. S.E. by S. S.W.	1.0 0.2 0.2 0.0 0.2 0.2	N. by E. S.S.E. E. S.E. S.E. S.E. S.W.	1.5 0.2 0.2 0.2 0.2 0.2 0.2	N. by E. S.S.E. E. by S. S.E. by S. S.E. by S. W.	1.0 0.2 0.2 0.2 0.5 0.5	25 26 27 28 29 30 31	·
		1		,	•							) .	
18h.		19h.		20h.	· · · · · · · · · · · · · · · · · · ·	21h.		22h.		23h.			Föttinge ime.
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	] -	
LE. by E.	lbs. 0°2 0°0	N.E. by E.	lbs. 0°2 0°0	N.E. by E.	1bs. 0 2 0 0	N.E. by E.	1bs. 0.2 0.0	N.E. by E.	lbs. 0°2 0°0	_	0.0 0.0	1 2 3	
N.N.W.  S.W.		S.S.W. N.N.W.		N.W.		N. by W.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.W. by W. N. by W.  S.  H.  H.  H.  H.  H.  H.  H.  H.  H	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.W. N. by W.    N. by E.		3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	JULY.

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Mean Gö		Oh.		1h.		2h.	<del></del>	3h.		4 <sup>h</sup> .	<del></del>	5 <sup>h</sup> .	<del>,</del>
Tim	ie.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	/ 1 2 3 4 5 6 7	E. by S.	1bs. — 0.0 0.0 0.0 0.2 0.0 0.2		1bs. — 0.0 0.0 0.0 0.0 0.0 0.0 0.2	N.N.E. N.N.E.	lbs.   -	S.E. by S. E. by S. N.N.E.	lbs.	S.S.E. S. by E. E. by S. E.	1bs. — 0.0 0.2 0.2 0.2 0.2 0.2	S.W. S.S.E. S. by E. E. by S. E.S.E. E.	1bs. 0.2 0.2 0.2 0.2 0.2 0.2 0.2
JST.	8 9 10 11 12 13 14	E	0.0 0.0 0.0 0.0	E	0.0 0.0 0.0 0.0 0.0	E. by N.	0.0 0.0 0.0 0.0 0.0	E. by N.	0.5 0.0 0.0 0.0 0.5 0.0	E. E. S.S.E. S.W. by S.	0.5 0.0 0.0 0.0 0.2 0.2	E. by S. E. S.E. S.S.E. S.W. by S.	0.5 0.0 0.0 0.0 0.5
AUGUST.	15 16 17 18 19 20 21 22	W. by N. N.W. by W.	0°0 0°0 0°0 0°2 0°2	W.N.W.  W. by N. W.N.W.	0.0 0.0 0.2 0.2 0.5	N.W. N.W. W. by N. W.N.W.	0.0 0.0 1.0 0.2 0.2 0.2	N.W. W.N.W. W.S.W. W.N.W.	0.0 0.0 1.0 0.5 0.2 0.2	W.S.W. W.N.W. N.W. by W. S.W. by W. W. by N.	0.2 0.0 1.0 1.5 0.5	S.S.W. W.N.W. N.W. by W. S.W. by W. N.W.	0°2 0°0 1°0 1°0 0°5 2°0
	23 24 25 26 27 28 29	N.N.W.	0.5 0.0 0.0 0.0 0.2 0.0	W. by N.	0.5 0.0 0.0 0.0 0.5 0.0	E. by S.	0.5 0.0 0.0 0.0 0.5 0.0	E.S.E. E. N.W.	0°2 0°0 0°0 0°2 0°2 0°0	E.S.E. S.S.E. N.N.W.	0°2 0°0 0°0 0°2 0°5 0°0	E.S.E. E.S.E. S. by W. N.N.W.	0.0 0.0 0.2 0.5 0.5
	$\left \begin{array}{c} 20\\30\\31 \end{array}\right $		0.0	E.S.E.	0.5	S.S.E. N.W. by N.	0.2	S. by E. N.N.W.	0°2 0°5	S. by W. N.N.W.	0.2 0.2	S.S.W. N.N.W.	$\begin{array}{c} 1.0 \\ 0.2 \end{array}$
(continu	ed)											l	
Mean Gö Tim		12h.		13h.		14h.		15h,		16 <sup>l</sup>		17h.	<u>.</u>
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	1 2 3 4 5 6 7	S.S.E	0°2 0°0 0°2 0°0 1°0 0°0	S.S.E. N. by W.	0°2 0°0 0°2 0°0 0°2 0°0	S.S.E. N. by W.	0.0 0.0 0.2 0.0 0.2 0.0	N. by W.	0.0 0.0 0.0 0.0 0.0 0.2 0.0	E. N. by W.	0.0 0.0 0.0 0.0 0.2 0.2	   E.N.E. N.	0.0 0.0 0.0 0.2 0.2 0.0
ST.	8 9 10 11 12 13 14 15	E. by S. S.S.W. E. by S.	0.2 0.2 0.0 0.2 0.2 0.0	S.E. by S. S.S.W. E. by S.	0.0 0.2 0.0 0.2 0.2 0.2 0.0	S.E. by S. ————————————————————————————————————	0.0 0.2 0.0 0.0 0.0 0.2 0.0	——————————————————————————————————————	0.0 0.0 0.0 0.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0	— — — —	0.0 0.0 0.0 0.0 0.0
AUGUST.	16 17	N.W. by W. W. by N. W.N.W. W.N.W.	0.0	N.W. by W. W. by N. W. by N.	0.0 0.0 0.5 0.2 0.0	N.W. by W.  W.		N.W. by N. N.W. by W. N.W.	0.0 1.5 0.2 0.0 0.2 0.0	N.N.W. W. W. by N.	0.0 0.5 0.0 0.2 0.2 0.0	 N.N.W. — W. by N. — —	0.0 0.2 0.0 0.0 0.0
	23 24 25 26 27 28 29	S.S.W. S.S.W.	0.0 0.0 0.0 1.0 0.2 0.0	S.S.W.	0.0 0.0 0.0 0.0 0.0	S.S.W.	0.0 0.0 0.0 0.0 0.2 0.0 0.0	s.s.w.	0.0 0.0 0.0 0.0 0.2 0.0 0.0	E.N.E. — S.S.W. —	0.2 0.0 0.0 0.2 0.0 0.0	E.N.E. — S.S.W.	0.0 0.0 0.0 0.0
	30	W.N.W. S.E. by S.	0.5 0.5	w. <u>n</u> .w.	0.0		0.0	_	0.0		$\frac{0.0}{0.0}$	 	$\frac{0}{0}$ .

					DIRE	CTION	AND FORCI	OF TI	HE WIND.					
	6 <sup>h</sup> .	1	7 <sup>h</sup> .	<u>,                                      </u>	8 <sup>h</sup> .	·	9 <sup>h</sup> .		10 <sup>h</sup>		11 <sup>h</sup> .			Göttingen
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Time.
	S.W. by S. S.S.E. S. by E. E. S.S.E. S.E.	1bs. 0'2 0'2 0'2 0'2 0'2 0'2 0'2	S. S. S. E. S. by E. E. S. E. S. E.	1bs. — 0'2 0'2 0'2 0'2 0'0 0'2	S. S. by E. S. by E. E.S.E. S.S.E. S.E.	lbs.  0'2 0'2 0'2 0'2 0'2 0'2 0'2 0'2	S. by E. S. by E. E. — S.E.	lbs.  0'2 0'2 0'2 0'2 0'2 0'0 0'0 0'2	S. by E. S. by E. E. — S.E.	lbs. 0'2 0'2 0'2 0'2 0'2 0'0 0'0	S. S. S.S.E. E. by S. N.W.	lbs.  0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.0	1 2 3 4 5 6 7	
	E. E.S.E. — S.E. —	0'2 0'2 0'0 0'0 0'2 0'0	E. by N. E.S.E. S.S.E. E. by S.	0.2 0.2 0.0 0.2 0.2 0.0	E.S.E. E.S.E. ——————————————————————————	0'2 0'2 0'0 0'0 0'5 0'0	E. by S. S. by E.	0.2 0.0 0.2 0.0 0.5 0.2	E. by S. S. by E.	0.2 0.0 0.2 0.0 0.5 0.5	E. S.E. by S. W.N.W. E. by S. S. by E.	0·2 0·2 0·0 0·2 0·2 0·2 0·2	8 9 10 11 12 13 14	ST.
	S.S.W. S.S.W. N.W. by W. N.W. by W. S.W. W.N.W.	0.5 0.5 0.5 1.0 1.0 2.0 2.0	S.S.W. S.S.W. N.W. W.N.W. W. N.W. by N.	0°2 2°0 1°0 1°0 2°0	S.S.W. S.W. by W. N.W. W. by S. W. N.N.W.	0.2 0.2 2.0 1.5 2.0 1.0	S.S.W. S.W. by S. N.W. W.N.W. N.W. by W. N.N.W.	0°2 0°2 2°0 1°5	S. by W. S.W. by S. N.W. W.N.W. N.W.by W.	0.5 0.5 3.0 2.0 0.5 1.0	S.W. by S. N.W. by W. W. by N. N.W. W.N.W.	0.0 0.2 2.0 1.5 0.5 0.5	15 16 17 18 19 20 21	AUGUST.
	E.S.E. E.S.E. S. by E. N.	0.2 0.0 0.2 0.5 0.5	S.E. by S. E.S.E. S. by E. N.	0.2 0.0 0.2 0.2 0.5 0.0	S.E. by S. E.S.E. S.S.E. S.S.W.	0.2 0.0 0.5 0.2 0.5 0.0	S.E. by S. S. by E. E. by S. S.S.E. S.S.W.	0.2 0.2 0.5 0.2 0.5 0.0	S.E. by S. S. by E. E. by S. S. S.S.W.	0.2 0.2 0.2 0.5 0.2 0.0		0.0 0.0 0.0 1.0 0.2 0.0	23 24 25 26 27 28 29	
	S. by W. N.N.W.	0.5	S. by W. N.N.W.	1.0	S. by W. N.N.W.	1.0 0.5	S.S.W. S.E. by S.	1.0 0.5	S.W. by S. S.E. by S.	1.0	W.N.W. S.E. by S.	0.2	30 31	
İ	18h.		19 <sup>h</sup> .	1	20h.		21 <sup>h</sup> .		22h.		23h.			Göttingen lime.
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	J	
ACTION TO STANFORM TO STANFORM	N.E. by E. N. E. H. N.W. by N. W. by N. H. N.N.E.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.E. N.N.E.  E.   N.W.  W. by N.   N.N.W.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	N.E. N.N.E.  E.  N.W.  N.W.  N.W.		N.E. N.N.E. E.  N.W. by N.  W. by N.  N.N.W.	0.0 0.0 0.0 0.0 0.5 0.2 0.0 0.0 0.0 0.0 0.0	N.E. N.N.E. E. by N.   N.W. by N.  W. by N.  N.N.W.		E. by S.  N.N.E.  E. by N.  N.W.  N.W.  N.W. by W.  N.N.W.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	AUGUST.

			<del></del>	D	IRECTI	ON AND FO	RCE OI	THE WINI	).				
Mean G	ottingen ]	Oh.		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
Tim	ie.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	$\begin{pmatrix} 1\\2\\3\\4\\5\end{pmatrix}$	· — — — — — — — — — — — — — — — — — — —	lbs. 0'0 0'0 0'0	S. by E.	lbs. 0'0 0'0 0'2 0'0	S. by E. N. by E.	lbs. 0'0 0'0 0'2 0'2 —	E. by S.  E.N.E.	lbs. 0°2 0°0 0°0 0°5	E.S.E. S.S.W. E. by N.	lbs. 0'2 0'0 0'2 0'5	S.S.E. S. by E. S.S.W. E.	lbs. 0°2 0°2 0°2 1°0
	6 7 8 9 10	E. N.W. by W.	0.0 0.0 0.2 0.0 0.0	E. by S. W.N.W.	0.0 0.0 0.2 0.0 0.0	E. by S. E. by S. W.N.W.	0.0 0.5 0.2 0.0 0.0	S.W. E. by N. S.E. W. 	0.2 0.5 0.2 0.2 0.0 0.5	S.S.W. E. by N. S. N.N.W. S.S.E. E.	0.5 0.5 0.5 0.2 0.2 0.5	S. by W. E.N.E. S. N.W. S.S.E. E.	0.5 1.0 1.0 0.2 0.2 0.5
SEPTEMBER.	12 13 14 15 16 17 18 19	N.W. N.W. by N. — — N.E.	0.2 0.2 0.0 0.0 0.0	N.W. N.W. by N. N.W. E.N.E. N.E. by E.	0.5 0.2 0.2 0.0 0.2 0.5	N.W. N.W. by N. N.W. N.N.W. E. by N. N.E.	1:0 0:5 0:2 0:2 0:2 0:5	W.N.W. N.W. by N. N.W. N.N.W. E. by N. N.E. by E.	1.5 1.0 0.2 0.2 0.5 0.5	N.W. by W. N.W. by N. W.N.W. S. E. E.N.E.	1.5 1.5 0.2 0.2 0.5 0.5	N.W. N.W. by N. W.N.W. S.S.E. E. E.N.E.	2:0 2:0 0:2 0:2 0:5 0:2
	20 21 22 23 24 25 26	N.N.W. N. by E. N.E. by E. N.N.E.	0.0 0.2 0.2 0.0 0.5 0.5	N.W. by N. N. by E. E. N. by E.	0.0	N. by W. N. by E. S.S.W. E. N.E. by E.	0.0 0.2 0.2 0.2 0.5 0.5	E.N.E. N. by W. W. by N. S.S.W. E. by N. N.N.E.	0.2 0.2 0.2 0.2 0.5 0.5	N.E. N. by W. S.S.W. S. by W. E. by N. N.E. by N.	0.2 0.2 0.5 0.2 0.5 0.2	N. by E. N.W. by N. S. S.S.W. E. by N. N.E. by E.	0·2 0·2 0·5 0·5 0·5
,	27 28 29 30	S.S.W. W. by S. W. W.N.W.	0.5 0.5 0.5 0.5 0.5	N. by E. W.S.W. W. by S. W.N.W.	0.5 0.5 0.5 0.5 0.5	N.E. W.S.W. W. W. by N.	0.2 0.2 0.2 0.2	N.E. W.N.W. W.S.W.	0.2 0.2 0.5 0.5	N.E. W.N.W. S.W. W.N.W.	0.5 0.2 0.5 0.5	S. by E. W. by N. W. W. by N.	0.2 0.5 0.5 0.5
(continu	red)		<del></del>			İ	<del></del>	1		i		1	
Mean Gö Tim		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	16 <sup>h</sup> .	Force.	Direction.	Force.
	$\begin{pmatrix} 1\\2\\3\\4\\5 \end{pmatrix}$	N. by W. E. by S.	lbs. 0°0 0°0 2°5 1°0	N.N.W. E. by N.	lbs. 0°0 0°0 1°5	S. by E. N.N.W. E. by N.	lbs. 0°0 0°2 0°5 0°5	N.N.W. E. by N.	lbs. 0°0 0°0 0°5 0°5	N.N.W. E. by N.	lbs. 0°0 0°0 0°2 0°5	N.N.W. E. by N.	lbs. 0 0 0 0 0 0 0 2 0 2 0 2
	$\begin{bmatrix} 6 \\ 7 \end{bmatrix}$	S.E. by E. E. by N. S.W. by W. S. by W.	0.2 0.5 1.0 0.5 0.0 0.0	E. by N. S.S.W. S. by W.	0.0 0.2 0.2 0.0 0.0 0.0	E.N.E. S.S.W. S.W. by S. N.E. by N.	0.0 0.5 0.2 0.5 0.2	S.S.W. S.W. by S.	0.0 0.0 0.5 0.2 0.0 0.0	N.W. S.W. by S.	0.0 0.0 1.5 0.2 0.0 0.0	N.N.W.	0.0 0.0 2.5 0.0 0.0 0.0
SEPTEMBER.	13 14 15 16 17 18	N.W. N.W. by N. — E.N.E. E.N.E.	0.0 0.2 0.2	N.W. N.W. by N. — W.N.W. E.	0.0 0.0 0.2 1.0	N.W. N.W. by N. — W.N.W. E. by N.	1.5 0.2 0.0 0.0 0.2 0.5	N. by W. N.W. N.N.W. E.N.E. E.N.E.	0.5 0.2 0.2 0.0 0.2 0.2 0.2	N. by W. N.W. N.N.W. E.N.E. E.N.E.	0.2 0.2 0.2 0.0 0.2 0.2	N.W. by W. N.W. N.N.W. E. by N. E.N.E. E.N.E.	0.2 0.5 0.2 0.2 0.2 1.0 0.5
	19 20 21 22 23 24 25 26	N.E. N. S. by E. S.S.E. E. by N. E. by N.	0 2 0 5 0 2 0 2 0 2 0 2 0 2	E. by N. E. by N.	0.0 0.2 0.0 0.0 0.0 0.2 0.2	N. N. E. by N. E.N.E.	0·2 0·2 0·0 0·0 0·0 0·2 0·2	N.N.W. N. — N.E. E. by N.	0.2 0.2 0.0 0.0 0.0 0.2 0.2	N.N.W. N. by W.   N.E. by N. E. by N.		N.N.W. N. by W.   N.E. by N. E. by S.	0.2 0.2 0.0 0.0 0.0 0.2 0.2
	27 28 29 30	W. W.	0.0 0.2 0.0	w. —	0.0 0.2 0.0	W. by N. W. —	0.2 0.2 0.0 0.0	N.W. W.	1.0 0.5 0.0 0.0	N.W. by W.	0.0 0.0 0.0 0.0	W.N.W. N.W. by W.	0.2 0.0 0.0

				DIRI	ECTION	AND FORC	E OF T	HE WIND.		,			
6h.		7 <sup>h</sup> •		8h.		9h.		10 <sup>b</sup> .		11h.	-	Mean G	öttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		ime.
S.S.E. S. by E. S.S.W. E.	lbs. 0'2 0'2 0'2 1'0	S. by E. S. by E. S.S.W. E.	lbs. 0°2 0°2 0°5 0°5	S. by E. S. by E. S.S.W. E. by N.	lbs. 0°2 0°2 0°2 0°5	S. by E. S. by E. S.W. by S. E. by N.	lbs. 0°2 0°2 0°2 0°5	S. by E. S. by E. N.W. by W. E. by S.	lbs. 0°2 0°2 2°0 0°5	N.N.W. E. by S.	lbs. 0'0 0'0 2'0 1'0	1 2 3 4	
S. by W. E. by N. S. by E. W.S.W. S.S.E. E.	0.2 1.0 1.0 0.2 0.2 0.5	S. E.N.E. S. S.S.E. S.S.E. E.	0.2 1.0 1.0 0.5 0.2 0.5	S. N.E. by E. S. by E. S.E. by S. E.	0°2 1°0 0°5 0°5 0°2 0°5	S.E. by E. E.N.E. S. S. S.S.E. E.	0'2 2'0 0'5 0'5 0'2 0'5	S.E. by E. E.N.E. S. by W. S.E. by S.	0°2 1°0 0°2 0°2 0°0 0°5	S.E. by E. E.N.E. S. by W.	0.5 1.0 2.0 0.0 0.0 0.0	5 6 7 8 9 10 11	
N.W. by W. N.W. W. by S. S. N.E. by E. E.N.E.	1.5 1.5 0.5 0.2 0.5 0.2	W.N.W. N.W. S. by W. S. E. by N.	1.5 1.5 0.2 0.2 0.5 0.2	N.W. by W. W.N.W. S. by W. S. E. by N. N.E.	1.5 1.5 0.2 0.2 0.5 0.5	N.W. W.N.W. S. by W. S. by E. E.N.E. N.E. by E.	1.0 1.5 0.2 0.2 1.0 0.2	N.W. by W. N.W. S. by W. S. by E. E.N.E. E.N.E.	2.0 1.5 0.5 0.2 1.0 1.0	N.W. N.W. by N. — E.N.E. E.N.E.	2.0 1.0 0.0 0.0 0.5 1.0	12 13 14 15 16 17 18	SEPTEMBER.
N.N.E. N. S. by W. S.W. by S. E. by N. E.N.E.	0.2 0.5 0.5 0.2 0.5 0.2	N.E. by N. N.N.W. S. by W. S.S.W. E.S.E. E. by S.	0.2 0.5 0.5 0.2 0.5 0.5	N.N.E. N.W. by W. S. by W. S. by W. E. E. by N.	0.2 0.5 0.5 0.2 0.5 0.5	N.E. by N. N.W. by W. S. by W. S. by W. E.S.E. E.	0.2 0.5 1.0 0.2 0.2 0.2	N.E. by N. N.N.W. S.S.W. S. by W. E. E.	0.2 0.5 0.5 0.2 0.2 0.2	N.E. N.N.W. S. by W. E. by N. E. by N.	0.5 0.0 0.0 0.2 0.2 0.2	19 20 21 22 23 24 25	
S.S.E. N.W. W. by S. W.S.W.	0.5 0.5 0.5 1.0	N.E. by E. N.W. by W. S.W. by S. W.	1.0	S.S.W. N.W. by N. N.W. by N. S.W. by W.	0.2 1.0 1.0 0.5	S.W. N.W. by N. W. W.N.W.	0.5 1.0 1.0 0.5	S.W. by S. N.W. by W. N.W. by W. W.	0.5 1.0 0.5 0.5 0.5	W.N.W. W. W. by S.	0.0 1.0 0.5 0.5	26 27 28 29 30	
18 <sup>h</sup> .		19h.		20h.		21h.		22h.		23%.		],,	
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Mean G	ime.
N.N.W.	1bs. 0.0 0.0 0.2 		lbs. 0.0 0.0 0.2 		lbs. 0°0 0°0 0°2 —	N.N.E.	lbs. 0°0 0°0 0°2	N.N.E.	lbs. 0°0 0°0 0°2 —	N.N.E.	lbs. 0°0 0°0 0°2 —	1 2 3 4 5	
N.N.W.	0.0 0.0 0.0 0.0	N.W. by W.	0.0 0.0 0.0 0.0 1.0 0.0	E. by N. N.W. by W. — — —	0.0 0.2 0.0 0.0 0.0	N.W. by W.	0.0 0.0 0.0 0.0 0.0	N.W. by W.	0.0 0.0 0.2 0.0 0.0	E. by N. N.W. by W. — — —	0.0 0.0 0.0 0.0 0.0	6 7 8 9 10 11 12	
N.W. N.N.W. E. by N. E.N.E.		N.W. by N. N.W. E. by N. E.N.E.		N.W. by N. N.W.  E.N.E.	0.2 0.0 0.0 1.0	N.W. by N.  N. E.N.E.	0.2 0.0 0.2 0.0	N.W. by N.  N. E.N.E.	0.5 0.0 0.5 0.0 0.5	N.W. by N.  N. E.N.E.	0.5 0.0 0.5 0.0 1.0	13 14 15 16 17 18	SEPTEMBER.
E. by N. N.N.W. N.N.W. E.	0.5 0.2 0.2 0.0 0.5 0.0	E. N.N.W. N. by W. E.	0.2 0.2 0.0 0.2 0.0	E. by N. N.W. by W. N.N.W.  E. by N.	0.5 0.2 0.0 0.0 0.5 0.0	E. by N. N. W. by W. N. by W.  E. by N. N.E. by N.	0.2 0.2 0.2 0.0 1.0 0.5	E. by N. N.N.W. N. N.E. by E. N.E. by N.	0.2 0.5 0.2 0.0 1.0 0.5	N.N.W. N. N.E. by E. N.N.E.	0.0 0.2 0.0 1.0 0.5	19 20 21 22 23 24	32
E. W.N.W.	0.0 1.0 1.0	E.S.E. W.	0.2 0.2 0.0	E.S.E. W.S.W.	0.5 0.5 0.0 0.0	E.S.E. W.S.W. W.	0.2 0.2 0.0	E. by S. W.S.W. W.N.W.	0.5 0.5 0.0 0.0	E. by S. W. by S. W.N.W.	0.2 0.2 0.0	25 26 27 28	

			Dì	RECTIO	ON AND FO	RCE OF	THE WIND					
öttingen ∫	Oh.		] 1h.		2h.		3h,		4h.		5h.	
me.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
$\begin{bmatrix} 1 \\ 2 \end{bmatrix}$	W.N.W. N.N.W.	lbs. 0°1 0°1	W. by N.	lbs. 0.1 0.0	W.N.W.	0.0 0.3	N.N.E.	lbs. 0.7 0.1	N.W. N.W. by W.	1	W.N.W.	0.0 0.0
4 5 6 7 8 9	E.N.E. E. E.N.E.	0.0 0.0 0.2 0.1 0.0	E. by N. E. E.N.E.	0.0 0.0 0.5 0.2 0.1 0.0	E.N.E. E. E.N.E. W. by N.	0.0 0.0 0.3 0.2 0.1	S. S. E.N.E. E. W.	0.1 0.2 0.3 0.0 0.1	S.W. by S. S. by E. E.N.E. E. E.N.E. W. by S.	0°1 0°5 0°4 0°3 0°1 0°2	S. by E. S.W. by S. E. by N. E. N. W.S.W.	0.1 0.3 0.2 0.3 0.1 0.3
11 12 13 14 15 16	W.N.W. W. by S. N.N.W. S. by E.	0.0 0.0 0.5	W.N.W. W. by S. N.W. by N.	0°3 0°0 0°7 0°1 0°0 0°4	W.N.W. S.E. W. by S. N.W. S. by E.	0.2 0.1 0.6 0.1 0.0 0.5	N.W. by W.  W. N.W. by N.  S.	0.5 0.0 0.6 0.2 0.0 0.5	W.N.W.  W. by S. N.W. by W.  S. by W.	0.8 0.0 1.0 0.3 0.0 0.7	N.N.W. S.S.E. N.W. by W. N.N.W. S. by E.	0.6 0.1 0.9 0.4 0.0 0.5
18 19 20 21 22 23	N. by E. N.E. by N.	0.0 0.0 0.0 0.1 0.5 0.0	N.E.  N. by E.  N. by E.	0.0 0.1 0.0 0.0 0.0	N. by E. N. by E.	0.0 0.1 0.0 0.0 0.0	N. by W.	0.0 0.1 0.0 0.0 0.0	W.S.W. S.W. E. by S. N. S.W. by W.	0.0 0.1 0.1 0.1 0.4 0.1	E. by S. S.W. by W. S. by W. E.S.E. N. by E. W.N.W.	0'1 0'2 0'4 0'1 0'2 0'2
25 26 27 28 29 30	N.W. by N. W. by N. N. — — N.N.E.	0.5 0.1 0.0 0.0 0.0	N.W. W. — W.S.W. N.N.E.	0.5 0.1 0.0 0.0 0.1 0.1	N.W. by W. W.N.W. N.	0·3 0·2 0·1 0·0 0·0	W.N.W. N.N.W. N.W.	0.0 0.0 0.0	W.N.W. N. N.W. by N. S.S.W. S.S.W.	0.8 0.5 0.3 0.1 0.1	W. by S. N. N. by W. S.W. by S. S.W. by S.	1.0 0.4 0.1 0.2 0.3 0.0
ued)					<u> </u>	<u> </u>				i		
öttingen 📗	12h.		13 <sup>h</sup> .		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .	
ne.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	_	0.0 0.0		0.0 0.0	— —	0.0 0.0	N. by W.	0°0 0°1		0.0 0.0	N. by E. N.	0'1 0'1 —
4 5 6 7 8 9	E. by N. E. N.N.W.	0.0 0.0 0.6 0.4 0.2 0.0	E.S.E. E. E. by N. N.W. by N.	0.0 0.1 0.3 0.5 0.4 0.0	E. E. E. N.N.W.	0'0 0'1 0'2 0'1 0'8 0'0	E. by N. E. E. N. N.W.		E.N.E. E. E. by S. N. by W. N.W. by W.	0.0 0.3 0.2 0.4 0.6 0.1	E. by N. E. E. by N. N.N.W. N.W. by W.	0.0 0.3 0.4 0.2 0.5 0.6
11 12 13 14 15 16	W.N.W. N.W. S.E. by E.	0.0 0.0 0.2 0.4 0.0 0.1	W. by N. N.N.W. S.S.E. S.E.	0.0 0.0 0.2 0.7 0.1 0.1	N. by W. N. by W. W. by N. N. S. by W. S.E. by E.	0'1 0'1 0'2 0'2 0'2 0'1		0.1 0.1 0.1 0.1 0.0	S. s.s.w.	0.0 0.0 0.0 0.0 0.0	S.W. by W. W. S. by E. S.W. by S.	0.0 0.1 0.1 0.0 0.1
18 19 20 21 22 23	W. by S. N.E. by E.	0.4 0.0 0.0	S. by W. W. by S. N.E. by E.	0.0 0.1 0.4 0.0 0.0	N.W. by W.	0.5 0.0 0.1 0.6 0.1 0.0	N.E.	0.0 0.0 0.0 0.0 0.0	N.W. N. by W. N.E. by N.	0.0 0.0 0.1 0.6 0.0 0.0	W.N.W.  N. N.E. by N.	0.3 0.0 0.1 0.5 0.0 0.0
24 25 26 27 28 29 30 31	W.N.W. N. S. by E. S.S.W.	0.5 0.6 0.0 0.3 0.1	W.N.W. N. S. S.W. by S.	0.1 0.6 0.0 0.3 0.0 0.1	W. by N. N. S. by W. W.N.W.	0'1 0'2 0'0 0'1 0'0 0'1	W. by N. N. —	0.0 0.0 0.0 0.0 0.1 0.1	W. N. —	0.0 0.0 0.0 0.0 0.0	W. N. 	0.1 0.1 0.0 0.0 0.0 0.0
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	Direction.     Direction.	Direction.   Force.	Direction   Force   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Directio	Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   District   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direc	Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Dire	Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Direction   Every   Dire	Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Direction   Dire	Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   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Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Direction   Force   Dire		Stringen	

				DIR	ECTION	AND FORC	E OF T	HE WIND.					
6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .		9 <sup>h</sup> .		10 <sup>h</sup>		11h	•		Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	<u> </u>	Cime.
N.W.	0.7 0.0	N.W. by W. N.N.W.	lbs. 0.7 0.1	N.W. N. by W.	lbs. 0.5 0.1	N.W. by W.	lbs. 0.3 0.1	N.W. S.	lbs. 0°3 0°2	N.N.W.	0°2 0°0	$egin{array}{c} 1 \\ 2 \\ 3 \end{array}$	
S.S.E. S.W. by S. E. by N. E.N.E. N. W. by S.	0°1 0°2 0°5 0°1 0°1	E.S.E. S.S.W. E. by N. S.W.	0°1 0°4 0°4 0°2 0°0 0°2	E.S.E. S. E.N.E. E. by N. S.W. by S.	0°1 0°5 0°6 0°4 0°0 0°2	E. by S. S. by E. E. by N. E. S.W.	0.2 0.2 0.6 0.2 0.0 0.4	E. by S. S.S.E. E. by N. E. by N. S.S.W.	0.1 0.2 0.6 0.2 0.0 0.2	E. by S. E. by N. E. N. by W. S.W. by S.	0.1 0.0 0.4 0.3 0.1 0.3	3 4 5 6 7 8 9	
N.W. S. W. N.W. S.S.W. S.E. by S.	0.8 0.4 0.8 0.1 0.1 0.6	W. by N. S.S.W. W. by N. N.W. by N. S. by W. S.E.	0°3 0°4 0°9 0°4 0°1 0°5	W.N.W. S.E. W.S.W. N.W. by N.	0.2 0.2 1.0 0.4 0.0 0.4	W. S.E. by E. W. by S. N.N.W. S. by E. S.E.	0.2 0.1 0.9 0.3 0.1 0.4	W.N.W. S.E. by E. W.N.W. N.N.W.	0.5 0.1 0.6 0.3 0.0 0.2	W. by S. E.S.E. W.N.W. N.W. S.E. by E.	0·1 0·1 0·3 0·0 0·2	11 12 13 14 15 16	OCTOBER.
S.S.E. W. by S. S.S.W. N.E. by E. N. S.S.W.	0°2 0°2 0°5 0°1 0°5 0°2	S.E. by S. W. S.S.W. E.N.E. N.E. S.S.W.	0.2 0.2 0.8 0.1 0.2 0.5	S. by W. W.S.W. W. by S. E.N.E. N. by E. S. by W.	0.6 0.3 0.5 0.2 0.2 0.4	S.S.W. W.S.W. W.S.W. N.E. by E. N. by E. S. by W.	0.4 0.3 0.5 0.4 0.1 0.2	S.S.W. W. by S. W. by S. E.N.E.	0.3 0.2 0.5 0.3 0.0 0.2	S.W. by S. W. by N. W. by S. E.N.E. N. by E. S.S.W.	0.2 0.3 0.2 0.3 0.1 0.1	17 18 19 20 21 22 23	00
N.W. by W. N. S.S.W. S. by W. S.W. by S.	1.0 0.3 0.0 0.5 0.4 0.1	S.S.W.	0.9 0.6 0.0 0.2 0.5 0.0	W. by N. N. S.S.W. S. S.	1.2 1.0 0.2 0.3 0.5 0.0	W. by N. N.N.W. S.W. by S. S. S. by E.	1.0 0.7 0.1 0.3 0.1 0.0	W.N.W. N. by E. W. S. by E.	1·1 0·8 0·2 0·4 0·0 0·0	N.W. N. W. S. by E. S.	1.4 0.7 0.1 0.2 0.1 0.0	24 25 26 27 28 29 30 31	
18 <sup>h</sup> .		19 <sup>h</sup> .		20 <sup>h</sup> .		21 <sup>h</sup> .		22 <sup>h</sup> .		23 <sup>h</sup> .			öttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	T	ime.
N. by E.	lbs. 0°1		o.o		0.0	N.	1bs. 0.1	N.	1bs. 0°2	N.	lbs. O'1	1	
E.N.E. E. by S. E. by N. N.W. by N. W. by N. S.W. by W.  S. by E.  W. by N.	0°1 0°0 0°2 0°0 0°4  0°0 0°1 0°0 0°0 0°6 0°0	E. by N. E. by N. N.W. by N. W.N.W. S.W. by W.  S. by W.  W. by W.  N. by W.	0.0 0.0 0.4 0.3 0.2 0.1 0.4 0.0 0.2 0.0 0.0 0.4 0.0 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	E. by N. E. by N. E. by N. W. W. W. W. S.S.W. W. D. W. by N.  N.N.W. N.E. by N.	0.0 0.0 0.3 0.2 0.2 0.1 0.2 0.0 0.3 0.0 0.0 0.0 0.0 0.1 0.0 0.1 0.0 0.1 0.1	N.E. by E. E. by N. E. E.N.E. W. by N. W.S.W. S.S.W. W. by S. N.E. by N.	0·1 0·0 0·3 0·2 0·2 0·0 0·3 0·0 0·4 0·0 0·6 0·0 0·6 0·0 0·6 0·0	E. by S. E. by N. E.N.E	0.0 0.0 0.4 0.2 0.3 0.0 0.4 0.1 0.0 0.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0	E. by N. E. by N. E. N.E.  W.N.W.  W.S.W. N.W. by N.  S.S.W.  E.N.E.  N.E.	0.0 0.0 0.5 0.3 0.2 0.0 0.4 0.0 0.2 0.0 0.7 0.1 0.0 0.0 0.0 0.0 0.0 0.0	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	OCTOBER.
N.E. W. N.	0.0 0.0 0.0 0.0 0.0 0.0 0.0	N.E. W. by N. N.	0.0 0.0 0.0 0.0 0.0 0.0	N. by E. W. by N. N.	0·1 0·2 0·2 0·0 0·0 0·0	N.N.W. W. by N. N. W. by N.	0.5 0.5 0.0 0.0 0.0 0.0	N.N.W. W. by N. N. — —	0.1 0.1 0.0 0.0 0.0 0.0 0.0	N.N.W. N. ——————————————————————————————	0.1 0.0 0.2 0.0 0.0 0.0	23 24 25 26 27 28 29 30 31	

	- 11				1			THE WIND.					
ean Göt Time		O <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
		Direction.	Force.	Direction.	Force.	Direction.	lbs.	Direction.	Ibs.	Direction.	lbs.	Direction.	Force
	$egin{pmatrix} 1 \ 2 \ 3 \end{bmatrix}$		0.0 0.0 0.0		0.0 0.0 0.0	E. by N.	0.0 0.5 0.0	s.w. 	0.0 0.0	— —	0.0 0.0 0.0	S.W.	0.0
	4 5 6	W.S.W. W.S.W. N. by W.	0.2 0.2 0.3	w. <u>s.</u> w.	0.0 0.5 0.0	w.s.w.	$0.0 \\ 0.5 \\ 0.0$	W. W. N. by W.	0°2 0°2 0°2	W.N.W. W.S.W. N. by W.	0.5 0.5 0.5	S.W. by S. N.W. by W. N.	0.5
	7 8 9 10	W. by S.	0.0	N.E. S. by W. W. by S.	$\begin{array}{c} -0.2 \\ 0.2 \\ 0.5 \end{array}$	E. by N. S.W. by W. W.S.W.	0.2 0.2 0.5	N.E. by N. S.S.W. W.S.W.	0.5 0.5	E.N.E. S.W. W.S.W.	$0.2 \\ 0.2 \\ 0.5$	N.W. W.N.W.	0.0 1.9
ER.	11 12 13	W. by N. W.S.W. W.N.W.	0.2	W. by S. W. S. W. W.N.W.	0.2 0.2 0.2	W. by S. W.S.W. N.W.	$0.5 \\ 0.2 \\ 0.2 \\ 0.2$	W. by S. W.S.W. N.W.	0.5 0.5 0.5	W. by S. W.S.W. N.	$0.2 \\ 0.2 \\ 0.2$	W. W.S.W. N.	0.2
NOVEMBER.	14 15 16	<u>w</u> .	0.5	w. <u>n.</u> w.	0.0	w.n.w.	0.0	N.W.	0.0 0.0	N.W. S.	1.0 0.5	N.W. by W. S.S.E.	1.5 0.2
NO	17 18 19 20	E. / N.W. by W.	0.0 0.2 1.2 0.0	E.N.E. N.N.W.	0.0 0.2 1.0 0.0	E.N.E. N.N.W. N. by E.	0.0 0.5 0.5	E.N.E. N.W. N.E. by E.	0.0 0.2 1.5 0.2	E.N.E. N.W. N.N.E.	0.0 0.2 1.5 0.2	E. by N. N.W. by N. E. by N.	0.0 1.8 0.0
	21 22 23 24	E.N.E.	0.0	<u>—</u> E.	0.0 0.2 0.0	E. by N.	0.0 0.2 0.0	E.N.E.	0.0 0.2 0.0	E.N.E.	0.0 0.5 0.0	N. by W. E. by S.	0.5
	25 26 27	N.W. by N. W. by S.	0.0 2.0 0.5	N.N.W. S.W. by S.	0.0 2.0 0.2	N. by W. S.W.	0.0 1.0 0.2	W.N.W. S.W. by W.	0.0	S. by W. W.N.W. W.S.W.	0.2 0.5 1.0	W. N.W. S.W. by W.	0.5
	28 29	N.N.W.	0.5	N.N.W.	0.5	N.N.W.	$\frac{-}{0.2}$	<u>N</u> .	0.5	N.W. by N.	0.5	N.N.W.	0.5
	30	S.S.E.	0.2	E.S.E.	0.5	E.S.E.	0.5		0.0	S.E. by E.	0.5	S.E. by E.	0.5
(continu	ued)				0.5				0.0		0.3		0.2
(continu Mean Gö Tim	ued)	S.S.E.		E.S.E.	Force.	E.S.E.		15 <sup>h</sup> .	O'0	S.E. by E.	0°2	S.E. by E.	0°2
Nean Gö	$ \frac{\text{ded}}{\text{dettingen }} \begin{cases} 1 \\ 2 \\ 3 \\ 4 \end{cases} $	Direction.	Force.   lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	Direction.	Force.   lbs.   0.0   0.0   0.0   0.0	14 <sup>h</sup> .  Direction.	Force.	15 <sup>h</sup> .  Direction.	Force.   lbs.   0.0   0.0   0.0   0.0   0.0	16 <sup>h</sup> .  Direction.	Force.   lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	Direction.  N.W. by W.	Ibs. 0.0
Nean Gö	titingen lee.    1 2 3 4 5 6 7	12h.	Force.   lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	Direction.  Direction.  N.W. by W	Force.	14 <sup>h</sup> .  Direction.   W.N.W.	Force.	Direction.  W.	Force.	16 <sup>h</sup> .  Direction.	Force.   lbs.   0.0   0.0   0.0   0.2   0.0	17 <sup>h</sup> .  Direction.  N.W. by W. N.W. by N.	Ibs. 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0
Mean Gö Tim	titingen {	12 <sup>h</sup> .   Direction.	Force.   lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.2   0.2   0.2   0.2   1.0   0.2   1.0   0.2   0.2   1.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	13h.  Direction.  N.W. by W  E.N.E.  W. W. W. by S.	Force.    lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.5   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0	14 <sup>h</sup> .  Direction.  W.N.W.  W.N.W.  W. by S. W.S.W.	Force.     Ibs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2	15 <sup>h</sup> .  Direction.  W.  E. by S. W.S.W. W. W. by S. W. by S.	Force.    Ibs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0	16h.  Direction.  W.N.W.  E. W.S.W. W.S.W. W. by S. W. by S.	Force.   lbs.   0.0   0.0   0.0   0.0   0.2   0.0   0.2   1.0   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2	N.W. by W. N.W. by N.  E. W.S.W. W.S.W. W. by S.	Force   Ibs.   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   O'(   )   ) )))))))))))))))))))))
Mean Gö Tim	titingen lee.      1	12h.   Direction.	Force.   lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	N.W. by W E.N.E. W. W.	Force.	14 <sup>h</sup> .  Direction.  W.N.W W. by S.	Force.	15h.  Direction.	Force.    Ibs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0	16h.  Direction.  W.N.W.  E. W.S.W. W.S.W. W.S.W.	Force.   lbs.   0.0   0.0   0.0   0.2   0.0   0.2   1.0   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2	Direction.  N.W. by W. N.W. by N.  E. W.S.W. W.S.W.	Ibs. 0.00 0.00 1.00 0.00 0.00 0.00 0.00 0.
Mean Gö	titingen fee.  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	12 <sup>h</sup> .   Direction.	Force.   lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.2   0.2   0.2   0.5   0.5   1.0   1.0   0.5   1.0   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5	N.W. by W  E.N.E.  W. W. by S. E.S.E.  N.N.W. S.W.	Force.    lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.5   0.2   0.2   1.5   0.5   0.2   0.5   0.2   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0	14h.  Direction.  W.N.W.  W.N.W.  W.S.W. E. by S.  W.N.W. S.W. by W. N.E. by E. E.S.E. N.N.W. S.E.	Force.	15h.  Direction.  W.  E. by S. W.S.W. W. by S. W. by S. E. by S.  N.W.	Force.   lbs.   0.0   0.0   0.0   0.0   0.2   0.0   0.2   0.2   0.2   0.2   0.5   0.5   0.5   0.2   0.2   0.5   0.5   0.2	16h.  Direction.  W.N.W.  E. W.S.W. W.S.W. W. by S. W. by S. E. by S.	Force.   lbs.   0.0   0.0   0.0   0.2   0.0   0.2   0.2   0.2   0.2   0.0   0.0   0.0   0.0   0.0   0.5   0.2   0.2   0.2   0.5   0.2   0.2   0.2   0.2   0.2   0.3   0.2   0.3   0.2   0.3   0.2   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3   0.3	17h.  Direction.  N.W. by W. N.W. by N.  E. W.S.W. W.S.W. W. by S. E. by S. W. by N.	Force   Ibs.   O' (0   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1   O' (1
Mean Gö Tim	titingen fee.  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	12h.   Direction.	Force.   lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.2   0.2   1.0   0.0   0.2   1.5   0.2   0.2   1.5   0.2	N.W. by W  E.N.E.  W. W. by S. E.S.E.  N.N.W. S.W. S.E. by E.  N.W. by N	Force.	14h. Direction.  W.N.W.  W.N.W.  W. by S. W.S.W. E. by S. W.N.W. S.W. by W. N.E. by E. E.S.E. N.N.W.	Force.	15h. Direction.  W.  E. by S. W.S.W. W. by S. E. by S.  N.W.  W.S.W. N.N.W. S.E.  N.E. by E.  E. by N.  N.E. by E.	Force.   lbs.   0.0   0.0   0.0   0.0   0.2   0.0   0.2   0.2   0.2   0.2   0.5   0.5   0.5   0.5   0.2   0.2   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5   0.5	16h.  Direction.  W.N.W.  E. W.S.W. W.S.W. W. by S. W. by S. E. by S. W. by N.  W. N.N.W.	Force.    lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0	17h.  Direction.  N.W. by W. N.W. by N.  E. W.S.W. W.S.W. W. by S. E. by S.  W.S.W. N.E. E.S.E. E.N.E. E. by S. N.N.W. N.N.W.	Force   Ibs.   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O'C   O

<del>, ,</del>						11112 101101		HE WIND.		<del>-</del>	,		
6h•		7h.		8h.		9h.	,	10h.		11h.			Göttinger
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Time.
S.S.W. S.W. by S. S.S.W. W. by S. N.	lbs. 0°2 0°0 0°2 0°2 1°0 0°2	S. by W. S.S.W. S. N.W. by W.	lbs. 0 ' 2 0 ' 0 0 ' 2 0 ' 2 1 ' 5 0 ' 0	S.S.W. S.E. by E. S.W. by W. S.S.W. N.W. N.W.	lbs. 0°2 0°2 0°2 0°2 1°0 0°2	S. by W.  S. by W.  S. by W.  N.W. by W.	lbs. 0 2 0 0 0 0 0 2 1 0 0 0	S.S.W. S.W. S. W.N.W. N.E. by E.	lbs. 0°2 0°0 0°2 0°2 2°0 0°2	N.W. by W. S.S.E.	lbs. 0'0 0'0 0'0 0'0 0'0 1'5	1 2 3 4 5 6	
N.E. by N. N.W. W.N.W. W. by S. W.S.W. N. by W.	0.2 1.5 0.5 0.2 1.0 0.2	E. by N. W.N.W. W.N.W. W.N.W. W. by S.	0·2 1·0 0·5 0·2 1·0 0·0	W.N.W. N.W. W. by N. W. by S. S.E. by S.	0.0 0.5 0.5 0.2 1.5 0.2	W.S.W. W.N.W. W. W.S.W. E.S.E.	0.0 0.2 0.2 0.2 1.5 0.2	W. by S. W. W. S.W.	0.0 0.2 0.2 0.2 1.0 0.0	W.S.W. W. W. S.W. by W. S.E. by E.	0.0 0.2 0.5 0.2 1.5 0.2	7 8 9 10 11 12 13	BER.
N.W. S.E. by S. W. E. by N. N.N.W. E. by S.	1.5 0.2 0.2 0.2 1.5 0.2	N.W. by N. S.E. by S. E.N.E. N.N.W. E. by N.	1.5 0.2 0.0 0.2 1.5 0.2	N.W. by N. S. E. N.N.W. E.S.E.		N.W. by N. S.S.W.  E. by N. N.N.W. S.E.		N.W. by N. S.W.  N.N.W. E.		N.W. by N. S.W. N.N.W. N. by W. E. by S.	1.0 1.0 0.0 0.2 1.5 0.2	15 16 17 18 19 20 21	NOVEMBER.
E. W. N.W. by W. W.S.W.	0.0 0.2 0.0 0.2 1.0 0.5	E.S.E. S.W. by W. W.N.W. W.S.W.	0.0 0.2 0.0 0.2 1.0 1.0	E.S.E. S.W. W.N.W. W. by S.	0.2 0.0 0.0 0.5 1.0 1.5	S.E. by S. S.W. by W. N.W. by W. W.S.W.	0.2	S.S.E. S.W. by W. N.W. by W. S.W.	0.0 0.2 0.0 0.5 0.5	S. by W. W.S.W. N.W. S.W.	0.0 0.2 0.0 0.5 0.2 1.5	22 23 24 25 26 27 28	
		! —			0.0	S.S.E.	0.5	S. by E.	$\frac{0.2}{}$		$\frac{0.0}{}$	29	
N.N.W. E.	0.5	N. E.	0.5	S.E. by E.	0.2	E.S.E.	0.2	S.E.	0.5	E.S.E.	0.5	30	
		N. E.	0.5	S.E. by E.		E.S.E.		S.E. 22h.			0.5	30	Göttinger
<b>E.</b>		E.	0.5			E.S.E.		S.E.		E.S.E.	0.5	30 y	Göttingen Time.
E	0.5	19h.	Force.	20%.	Force.	E.S.E.	0.5	S.E.	0°2   Force.	E.S.E.	Force.	30 y	Time.

				D	IRECTI	ON AND FO	RCE OF	THE WINI	Э.			T	
Mean Gö	ttingen [	Oh.		1h.		2h.		3h.		4h.		5h.	
Tim	ie.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	1 2 3 4 5	S. N. by W. N.W. by W.	lbs. 0.5 0.0 0.2 0.5	S. — W.N.W.	lbs. 0.5 0.0 0.0 0.2	S. by W. N. by W.	lbs. 0.5 0.0 0.2 0.0	S.S.W. N.W. N. by W. S. by W.	lbs. 0.5 0.2 0.2 0.2	S.S.W. N.N.W. N.N.W. E. by N.	lbs. 0°5 0°2 0°2 0°2	S.S.W. N.N.W. N.N.W. S.S.E.	Ibs. 0 · 5 0 · 2 0 · 2 0 · 2
	6 7 8 9 10	S.S.W. E.S.E. E.N.E. S.W. by W.	0.0 0.5 0.2 0.2 0.2	s.s.w. s. s. s.w.	0.0 0.2 0.2 0.0 0.2 0.0	S. by E. S.W. E. by S.	0.0 0.0 0.2 0.0 0.2 0.2	S.W. by S. S. by W. N.E. by E. W.	0.0 0.2 0.2 0.0 0.0 0.2	S.W. S.S.W. S. by W. — W.S.W.	0.2 0.2 0.0 0.0 0.0	W.S.W. by S. S. E. by N. W. by S.	0.2 0.2 0.2 0.2 0.0 0.0
DECEMBER.	12 13 14 15 16 17 18	N.N.E. N. by E. N.E.	0.0 0.5 0.5 1.0 0.5 0.5	W.N.W. N.E. by N. N. by W. N.	0.2 0.2 0.5 0.5 0.0 0.0	W.N.W. N.E. by N. N. by W. N.N.E.	0.2 0.2 1.0 0.5 0.0	N. by E. N. by E. N. by E. N. N. N.	0.0 0.2 0.5 0.2 0.5 0.2	N.E. N.E. N.N.E. N.	0.0 0.2 0.5 0.5 1.5 0.2	N. by E. N.E. N.N.E. N. S.W. by W.	0.0 0.2 0.2 0.5 2.5 0.2
A	19 20 21 22 23 24 25 a	N.N.W. W.S.W. S.W. by S. W. by N.	0.5 0.0 0.2 0.2 0.5	N. by W. N.W. by W. W.S.W. S.W. W. by S.	0.5 0.2 0.2 0.5 0.5	N. by W. N.W. by W. W.S.W. S.W. W.S.W.	0.5 0.2 0.2 0.5 0.5	N. by W.  S.W. W. by S.	0.5 0.0 0.0 0.2 0.5	N.N.W. S.W. N.W.	0.5 0.0 0.0 1.0 0.2	N.N.W.  S.W. N.W. by W.	0.2 0.0 0.0 0.2 0.2
	26 27 28 29 30 31	w. s.w. s.w.	0.0 1.2 1.5 0.0 0.2 0.0	W. S.W.byW. S.S.W. S.S.W. N.E.	0.2 1.5 0.2 0.2 0.2	W. S.W. S.S.W. S.S.W.	0.2 0.5 0.2 0.2 0.0	W. S.W. S.S.W. S.W. by S.	0.2 0.5 0.2 0.2 0.0	W. S.W. S.S.W. S.W. by S.	0.2 2.0 0.2 0.2 0.2	S.W. by S. S.S.W. S.W. by S. E. by N.	0.0 1.5 0.2 0.5 0.2
(continu	(ed)	II.				1				Ĭ			
Mean G		12h.		13h.		14h.		15h.		16h.		17h.	
		Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	$\begin{pmatrix} 1\\2\\3\\4\\5 \end{pmatrix}$	N.W. S.S.W.	1.0 1.0 0.0	N.W. S. by W.	0.0 0.0 1.2 1.2	N.N.W. S.	0.0 0.0 0.2 1.2	E. N.W. by N. S.	0 2 0 0 0 5 1 5	 N.W. S. by W.	0.0 0.0 0.2 1.2	N.W. S.W. by S.	0.0 0.0 0.2 1.2
	6 7 8 9 10 11 12	S.W. by W. S.W. by W.	0.0 0.0 0.5 0.0 0.2 0.0	S. by E. S.W.	0.2 0.0 0.2 0.0 0.0 0.0	S.W. by W. S.S.W.	0·2 0·0 0·2 0·0 0·0	S.S.W. S. by E.	0.0 0.0 0.2 0.2 0.0 0.0	S. by W. S.W. by W.	0.5 0.0 0.5 0.0 0.0 0.0	S.W. by W. E.N.E.	0.2 0.0 0.0 0.2 0.0 0.2
DECEMBER,	13 14 15 16 17 18 19	N. by W. N.N.E. N. by E. N. by W. S.W.	0.2 0.2 0.2 0.0 0.2 1.5	N.N.W. N. N. by E. N. by W. S.W. by W.		N.N.W. N. N.N.E. N. S.W. by W.	0.2 0.2 0.2 0.0 0.5 1.5	N. by W. N. by E. N.N.E. N. by E. S.W.	0°2 0°3 0°5 0°0 0°2 0°5	N. N. W. N.E. by N. — S. W. by W.	0.2 0.2 1.0 0.0 0.0 0.0	N. by E. N. N.E. by N.  S.W. by W.	0.2 0.2 1.0 0.0 0.0 0.0
·	20 21 22 23 24 25 a	N. by W. S.W. N.W. S.W. by W. N.W.	0.5 2.0 1.5 0.5 0.2	N. S.W. N.W. S.W. by W. N.W.	0.2 1.5 1.5 0.5 0.2	S.W. N.W. S.W. by W. W.N.W.	0.0 2.0 1.0 0.5 0.2	S.W. by S. W. W.S.W. W. by N.	0.0 2.5 0.5 0.5 0.2	S.S.W. W. S.W. by W. W.N.W.	0.0 2.5 0.5 1.0 0.2	N. S.W. W. by N. W.S.W. W.N.W.	0.2 2.5 0.2 1.0 0.2
	26 27 28 29 30 31	s.s.w.	1.0 0.0 0.2 0.0 0.0	s.s.w.	1.0 0.0 0.5 0.0 0.0	s.s.w.	1.0 0.0 0.2 0.0 0.0	s.s.w.	1.0 0.0 0.5 0.0 0.0	s.s.w.	1.0 0.0 0.5 0.0 0.0	s.  	0.0 0.0 0.0 0.0

<sup>&</sup>lt;sup>a</sup> Christmas Day.

	وروایش طباع کا دید			DIR	ECTION	AND FOR	CE OF T	THE WIND.	· 1 · 1 · · · · · · · · · · · · · · · ·	o anno di nazione di nazione di nazione di nazione di nazione di nazione di nazione di nazione di nazione di n			
6 <sup>h</sup> .		7 <sup>n</sup> .		8h.	Typic disconnected days of	9 <sup>h</sup> .		10 <sup>h</sup>	•	11 <sup>h</sup>		Mean	Göttinger
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		ime.
S.S.W. N.W. by N. N. by W. S.	lbs. 0°5 0°2 0°5 0°2	S.S.W. N.N.W. N. by W. S. by E.	lbs. 0.5 0.2 1.0 0.2	S. N.W. by N. N.N.W. S.S.E.	1.0	S. by W. N.N.W. N.N.W. S.	lbs. 0°2 0°2 1°0 0°2	S.W. N.N.W. S.S.W.	lbs. 0'2 0'0 1'0 0'5	N.W. S.S.W.	1bs. 0.0 0.0 1.0 0.5	1 2 3 4	
W.S.W. S.S.W. S.S.W. E. by N. S.W. by W.	0'2 0'2 0'5 0'2 0'2 1'0	W. by S. S.S.W. E.N.E. S.W. W. by N.	0.2 0.0 0.5 0.2 0.5 1.0	S. by W. S.W. by S. N.E. by E. S.W. W. by S.	0.2 0.0 0.5 0.2 0.2 0.5	S.W. by S. E. S.W. by W. W. by S.	0'0 0'0 1'0 0'2 0'2 0'5	E.S.E. S.W. E. by N. W.S.W. W. by S.	0.0 0.2 1.0 0.2 0.2 0.5	s.w. w.s.w.	0.0 0.0 0.5 0.0 0.2 0.0	5 6 7 8 9 10 11 12	
N. by E. N. by E. N.E. N. S.W. by W.	0.0 0.2 0.2 0.2 1.5 0.2	N.E. by N. N. N. N.N.E. N. S.W. by S.	0.2 0.2 0.2 0.2 1.0 0.5	N. by E. N. N.N.E. N. S.W. by S.	0.0 0.2 0.2 0.2 0.5 0.5	N. by E. N. N. N. S.W. by S.	0.0 0.2 0.2 0.0 0.0 0.5	N.N.E. N. by E. N.N.E.	0.0 0.2 0.5 0.2 0.0 0.5	N.N.E. N. by E.	0.0 0.2 0.2 0.0 0.0 0.5	13 14 15 16 17 18	DECEMBER.
N. S.W. by W. S.W. by S. N.W.	0.2 0.5 0.0 4.5 1.0	N.N.W. S.W. by W. N.W. S.W. N.W. by W.	1.0 0.5 0.2 2.0 0.5	N. S.W. by W. N.W. S.W. N.W.	1.0 1.5 0.2 2.0 0.2	N.N.W. S.W. by S. N.W. S.W. by W. N.W.	0.5	N.W. S.W. by S. N.W. W. by S. N.W.	1:0 1:0 0:2 0:5 0:2	N. by W. S.W. N.W. S.W. by W. N.W.	1 ° 0 1 ° 5 1 ° 5 0 ° 5 0 ° 2	20 21 22 23 24 25 a	
W. S.W. S.W. S.W. by S. E. by S.	0'2 2'5 1'5 1'0 0'2	S.W. by W. S.W. S.S.W. S.W. by S.	0.5 2.0 0.5 0.5 0.0	S.W. by W. S.W. S.S.W. S.S.W.	0°2 1°0 0°2 0°5 0°0	S.S.W. S.W. S.S.W. S.W. by S.	0.5 1.0 0.2 0.2 0.0	S.S.W. S.W. S.S.W. S.W. by S.	1'0 1'0 0'5 0'2 0'0	S. S.W. S.S.W.	1.0 0.2 0.2 0.0 0.0	26 27 28 29 30 31	
18 <sup>h</sup> .		19 <sup>h</sup> .		20h.		21 <sup>h</sup> .		22h.		23h.		<u>η</u>	
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Föttinger lime.
 N.N.W.	lbs. 0°0 0°5	 N.N.W.	lbs. 0°0 0°5	M.W. by N.	lbs. 0°0 0°0 0°5	 N.W. by W.	lbs. 0°0 0°2	N. by W. N.W. by W.	lbs. 0°0 0°2 0°2	N. by W. N.W. by W.	lbs. 0°0 0°2 0°2	$\begin{bmatrix} 1\\2\\3\\4 \end{bmatrix}$	
W.N.W. S. by W.	0.2 0.5 0.0 0.0 0.0	W.N.W. S. W. by N.	0.5 0.0 0.2 0.0 0.0	W.N.W. S. N.W. S.W.	0.2 0.5 0.0 0.2 0.2 0.0	N.W. by W. S. by W. — — —	0.2 0.5 0.0 0.0 0.0	N.W. by W. S. by W. S. S.W. S.W.	0.2 0.5 0.0 0.0 0.2 0.2	N.W. by N. S.S.W. N.N.E.		5 6 7 8 9 10	
N. N. by W. N.E. by N.	0.0 0.2 0.2 1.0 0.0 0.0	N. by E. N.W. by N. N. by E. N. by E	0.0 0.2 0.2 0.5 0.2 0.0	N. by E. N. by W. N. by E. N. by W.	0.0 0.2 0.2 1.0 0.2 0.0	N. by E. N. by E. N. by W. —	0.0 0.2 0.2 1.0 0.5 0.0	N. by E. N. by E. N. N.E.	0.0 0.2 0.0 0.5 0.5 0.0	N.N.E.  N. by E.  N.E. by N.	0.0 0.2 0.0 0.5 0.2 0.0	$egin{array}{c c} 12 \\ 13 \\ 14 \\ 15 \\ 16 \\ 17 \end{array}$	DECEMBER.
S.W. by S. W. by N. W.S.W.	0.0 0.0 0.0 2.0 0.2 0.2	N.E. by N. S.W. by S. W.S.W. W.S.W.	0.0 0.2 1.5 0.2 0.2	N. by W. N.N.E. W.S.W. W.S.W. W. by N.	0.2 0.2 1.0 0.2 0.2	N. by W. N.N.E. W.S.W. W.S.W. W. by N.	0.2 0.2 0.2 0.2 1.5	N.N.W. N. by E. W.S.W. W.S.W. W. by N.	0.5 0.2 0.2 0.2 1.0	N.W. by N. W.S.W. W.S.W. W. by N.	0.5 0.0 0.2 0.2 1.0	18 19 20 21 22 23 24	DE
s.w.	0.0	S.W. S.W. by W.		s.w. s.s.w.	0.0	W. S.W. by W. S.S.W.		w. s.w. s.s.w.	0.2 1.5 0.2 0.0 0.0 0.0	W. S.W. S.S.W.	0.2 1.5 0.2 0.0 0.0 0.0	25 a 26 27 28 29 30 31	

	····			DI	RECTIO	ON AND FOR	RCE OF	THE WIND.		1			
	öttingen	O <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3h.		4 <sup>h</sup> .	<del></del>	5 <sup>h</sup> .	
Tin	ne.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force
		_	lbs.	S.E. by E.	lbs. 0°2	E.S.E.	lbs. 0°2	S.E. by E.	lbs. 0°2		0.0		lbs.
	2 3 4 5 6 7 8	S.W. by S. N.W. N.W. by N. S. by W.	0.5 1.0 0.0 0.5 0.0 0.5	N.W. by N. S. by W.	0.5 1.0 0.0 0.5 0.0 0.5	S.W., N.W. S.E. N.W. by N.	1.0 0.5 1.0 0.2 0.0 0.5	S.W. by S. N.W. E.S.E. N.W. by W. N.N.E. S.W.	$0.5 \\ 0.5$	S.W. by S. N.N.W. S.E. by S. N.W. by W. N.E. by N. S.W.	1.0 1.5 1.0 0.2 0.2 0.2	S.W. by S. N.W. S.E. by S. N.W. by W. N.E.	0.0
RY.	9 10 11 12 13 14 15	N. S.W. N.W. S.E. by S.	0.2 0.2 0.2 0.2 0.0 0.0	N. S.W. S.E. by S.	0.5 0.5 0.0 0.0 0.0 0.0	N. by E. S.S.W. S.S.E.	0.5 0.0 0.0 0.0 0.0	S. by W. S.S.E.	0.5 3.0 0.0 0.5 0.0 0.0	S.S.W. S.S.E.	0.5 0.0 0.0 0.0 0.0	N. S.S.W. S.S.E. S.E. by E. S. by E.	0°2 2°0 0°2 0°2 0°2
JANUARY.	16 17 18 19 20 21 22 23	N.W. W. by S. S.W. by S. S.W. N.N.W.	1'0 1'0 0'0 0'2 1'5 0'2	N.W. W. by N. S.S.W. S.W. N.N.W.	2.0 2.0 0.0 0.2 1.5 0.2	N.W. W. by N. S. by W. S.W. by W. N.N.W.	2:0 5:0 0:0 0:2 0:2 0:2	N.W. by W. W. by N. S. by W. W.S.W.	1.5 2.5 0.0 0.5 0.5	N.W. by W. N.W. by N. S. by W. W.S.W.	1.5 3.5 0.0 0.5 1.0 0.0	N.W. by W. N.W. S. by W. W. E.S.E.	1.0 3.0 0.0 0.3 1.5 0.2
	23 24 25 26 27 28 29 30	E.N.E. E. by N. W. by S.	0.0 0.0 0.0 1.0 0.0	N.E. E. by N. W.S.W. N.W.	0.2 0.0 0.2 0.0 0.2 0.2	E. by N. E. by N. W.S.W. N.W. by N.	0.2 0.0 0.2 0.0	E. by N. E. by N. S.W. N.W. by N.	0.2 0.0 0.2 0.0 0.5 0.2	E. by N. S.W. N.W.	0°2 0°0 0°2 0°0 0°5 0°5	E. by N. S.S.W. N.W. by N.	0.0 0.0 0.0 0.0
	31	E.	2.0	E.N.E.	0.2	E.	0.2	E. by S.	0.2	E. by S.	0.5	E. by S.	0.5
(contin	ued)	1		1		1		1		1		1	
Mean G Tir	löttingen	12 <sup>h</sup> .		13h.		14 <sup>h</sup> .	1	15 <sup>h</sup> .		16 <sup>h</sup> .		17h.	
<del></del>	l	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force
	1 2 3 4 5 6 7 8 9	N.N.W. S.S.W. N. by W. W. by N. S.S.E. N.W. by W.	2.5 0.2 0.5 5.5 0.0 0.2 0.5	N.N.W. S.W. N. W. by S. S.S.E. N.N.W.	2·0 1·0 0·5 4·0 0·0 0·2 0·2	S.W. by W. N. W. by N. S.S.E. N.	1.0 0.5 0.2 3.0 0.0 1.0 0.2	S.W. by W. N. by E. N.W. by N. S.E. by S. N.	1.0 	N.N.W. S.W. by W. N. by E. N.W. by N. S. by E. N. by W.	1.0 0.5 0.5 2.5 0.0 1.5 0.5	N.N.W. W.S.W. N.N.E. N.W. by N. S. by E. N. by W.	1.0 0.2 0.2 1.7 0.0 1.0
JANUARY.	10 11 12 13 14 15 16	W.S.W. E. by N. N.W. by W.	0.0 0.2 0.0 0.0 0.2 1.5	W.S.W. E.S.E. E. by N. N.W. by W.	0.0 0.5 0.2 0.0 0.2 0.2	W.S.W. E.S.E. W.N.W.	0.0 0.5 0.2 0.0 0.0 0.0	N. W.S.W. E.S.E.  W.N.W.	0.5 0.5 0.0 0.0 0.0	W.S.W. E.S.E. W.N.W.	0.0 0.5 0.2 0.0 0.0 0.0	N. W.S.W. E.S.E. — W.N.W.	0. 0. 0. 0. 0.
JANI	17 18 19 20 21 22 23	S.S.W. W.N.W. S.S.E. S.S.W. N.W. by N. E. by N.	0.2 1.5 0.2 0.2 2.0 0.5	S.W. by W. N.W. S. N.W. by N. E.N.E.	0°2 1°5 1°0 0°0 2°0 0°5	S.W.by W. N.W. S. N.W. by N. E.N E.	0.2 1.5 1.0 0.0 2.0 0.5	S. by W N.W. S. by E. N.W. N.E. by E.	0.5 1.0 1.0 0.0 1.5 0.5	S.W. N.W. S. by E. N.W. N.E. by E.	0°2 1°0 1°0 0°0 1°5 0°2	S.S.W. N.W. S. S.W. by S. N.W. N.E. by N.	0. 1. 0. 1. 0.
	23 24 25 26 27		0.0 0.0 0.0 0.0	— — —	0.0 0.0 0.0 0.0		0.0 0.0 0.0 0.0		0.0 0.0 0.0 0.0	S.W. by S.	0.0 0.0 0.0 0.0	S.W. by S.	0. 0. 0.
	28 29 30	w.n.w.	0.0	W.N.W.	0.0 0.5	s. w.n.w.	0.5	W. by N.	0.0	W. by N. W.N.W.	$\begin{array}{c c} 2.0 \\ 0.5 \end{array}$	W.N.W.	0.

					DIRE	CTION	AND FORC	E OF T	HE WIND.					
	6 <sup>h</sup> .		7 <sup>h</sup> .		8h.		9 <sup>h</sup> .		10h.		11 <sup>h</sup> .			Göttingen
i	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		lime.
		0.0	s.s.w.	lbs. 0'2	s.s.w.	lbs. 0'2	S.S.W.	1bs. 0.2	w.s.w.	lbs. 0 2	w.s.w.	lbs. 0°2	$\begin{vmatrix} 1 \\ 2 \end{vmatrix}$	
	S.W. by S. N.W.	0°5 2°0	S.S.W. N.W. by N.	0.2 2.0	S.S.W. N.N.W.	0.5 $2.0$	S.S.W. N. by W.	0.5	S.S.W. N. by W.	0.2	S.W.	0.2 0.2	3 4	
	S.S.E. N.N.W.	0.5	S.S.W.	0.0	S.W. by W.	0.0	w.ś.w.	0.0	W. by N.	0.0 5.0	W. by N.	0.0 6.0	5	
	N.E. —	0.0	N.E.	0.0	N.E. S.W.	0.5	N.E. N.W.	0.2 0.2	N.E. N.W.	0.2	N.W. by W.	0.0	7 8	
	N. S.W.	0.5	N.N.W. S.W.	0.5	N. by W. S.W.	0.2 1.5	N. by W. S.W. by W.	0.5 1.0	N. by W. W.S.W.	0.2 0.5	w.s.w.	0.0 0.5	9 10 11	
	S.S.E.	0.0	N.E. S.S.E.	0.5	E. by N. S.S.E.	0.5	S.E. S.S.E.	0.5	S.S.E.	0.0		0.0	12 13	
	S.E. by E.	0.5	S. by W.	$\begin{array}{ c c }\hline 0.0\\0.2\\0.2\\\end{array}$	<u> </u>	0.0	S.E.	0.5		$\begin{array}{c} 0.0 \\ 0.0 \\ \end{array}$	N.W. by W.	0.0	14 15	RY.
	N.W. by N.	0.2	W.N.W.	$\frac{0.5}{0.5}$		0.0	N.W. by W.	<u> </u>	W. by N. S.S.W.	$\frac{0.5}{0.5}$	S. by W.	$\frac{1}{0.2}$	16 17	JANUARY.
	N.W.	4.0	N.W. by N. S.E. by S.	4.0 0.5	W.N.W. S.E. by S.	3.0	N.W. S.S.E.	3.0	W.N.W. S.S.E.	3.0	W.N.W. S.E. by S.	3.0	18 19	JAL
	S. by W.	$\begin{array}{c c} 0.5 \\ 2.0 \end{array}$	S. by W.	0.5	S. by W.	0.5	S. by W.	0.5	S. by W.	0.2	N.W.	0.0	20 21	
	S.E. by S.	0.5	W. by N. S.E.	2.2 0.2	N.N.W. S.E.	2.2 0.5	N.W. S.E.	3.0	N.W. S.E.	3.0	E.S.E.	3.0 0.5	$ \begin{array}{c c} 21 \\ 22 \\ 23 \end{array} $	
	E.	0.0	E.	0.0	E.	0.0		0.0	E.	0.0	_	0.0	23 24 25	
	E.N.E.	0.5	E.N.E. S.W.	$0.2 \\ 0.2 \\ 0.2$	E.N.E. S.W.	$\begin{array}{c c} 0.0 \\ 0.2 \\ 0.2 \end{array}$	E.N.E. S.W. by S.	0.5	E.N.E. S.W. by S.	0.5	_	0.0	26 27	
	S.S.W. N.W. by N.	0.2	S.S.W. N.W. by <b>W</b> .	0.5	S.S.W. N.W.	$0.2 \\ 0.5$	S.S.W. N.W.	0.5	S. W. by S. S. by W. N.W. by W.	0.5	S. by W. W.N.W.	0.2	28 29	
	E. by S.	0.5	E.	$\frac{0.3}{0.5}$	E.	$\frac{0.5}{0.5}$	E.	$\frac{0.5}{0.5}$	S.W. by W.	l —	w.s.w.	1.2	30 31	)
	· <del></del>		<del></del>				<del>`</del>							
	1 Qh		10h		20h		21h		291	<u> </u>	23h		<u> </u>  1	
	18 <sup>h</sup> .	Force	19 <sup>h</sup> .	Force	Direction.	Force.	21 <sup>h</sup> .	Force.	22h.	7	23h.			Göttingen Time.
	18h.	Force.	19 <sup>h</sup> .	Force.	20h.	Force.	21 <sup>h</sup> .	Force.	22 <sup>h</sup> . Direction.	Force.	23h. Direction,	Force.		
	Direction. S.W. by W.	lbs	Direction. W.S.W.	1bs. 0.2	Direction. S.W. by W.	lbs	Direction. S.W.	lbs. 0.2	Direction.	Ibs. O'5	Direction. S.W. by S.	lbs.	$\frac{1}{2}$	
	Direction. S.W. by W. W.S.W.	lbs.  0.2 0.2 0.0	Direction. W.S.W. W.	1bs. 0.2 0.2 0.0	Direction. S.W. by W. W.	lbs. — 0.2 0.2 0.0	Direction. S.W.	1bs. 0.2 0.0 0.0	Direction. S.W. by S.	Ibs. 0.5 0.0 0.0	S.W. by S. N.N.W.	Force.   lbs.	$ \begin{array}{ c c } \hline 1 \\ 2 \\ 3 \\ 4 \end{array} $	
	S.W. by W. W.S.W. W.N.W.	1bs. — 0.2 0.2 0.0 1.0 0.0	Direction.  W.S.W. W.	1bs. 0'2 0'2 0'0 1'0 0'0	S.W. by W. W. N.W.	lbs.  0.2 0.2 0.0 1.5 0.0	S.W.	1bs.  0.2  0.0  0.0  1.0  0.0	S.W. by S.	Ibs.  0.5 0.0 0.0 0.5 0.0	S.W. by S. N.N.W.	Force.	1 2 3 4 5 6	
	S.W. by W. W.S.W. W.N.W.	lbs.  0.2 0.2 0.0 1.0 0.0 1.0	Direction.  W.S.W. W. N.W. S.	1bs.  0.2 0.2 0.0 1.0 0.0 0.5	S.W. by W. W. N.W. S.S.W.	lbs.  0.2 0.2 0.0 1.5 0.0 0.5	S.W.  N.W. S.S.W.	lbs.  0.2 0.0 0.0 1.0 0.0 0.5	S.W. by S.  N.W. S. by W.	Ibs.  0.5 0.0 0.5 0.0 0.5 0.0 0.5	S.W. by S. N.N.W. N.W. S.S.W.	Force.	1 2 3 4 5 6 7 8	
	S.W. by W. W.S.W. W.N.W. S. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N.	lbs.  0.2 0.2 0.0 1.0 0.0 1.0 0.5 0.2	Direction.  W.S.W. W. N.W. S. N. by W.	lbs.  0'2 0'2 0'0 1'0 0'0 0'5 0'5 0'5	S.W. by W. W. N.W. S.S.W. N. by W. N. by W.	lbs.  0.2 0.2 0.0 1.5 0.0 0.5 0.5 0.5 0.2	S.W.  N.W. S.S.W.  N. N.	lbs.	S.W. by S.  N.W. S. by W.  N. W.	Force.	S.W. by S. N.N.W. N.W. S.S.W. N. W.	Force.	1 2 3 4 5 6 7 8 9	
	S.W. by W. W.S.W. W.N.W. S. W. N. W. N. W. S. W. N. by W.	lbs.	Direction.  W.S.W. W. N.W. S. N. by W. N. W.S.W.	lbs.	S.W. by W. W. N.W. S.S.W. N. by W. N.	lbs.	S.W.  S.W.  N.W.  S.S.W.  N.  N.	lbs.	S.W. by S.  N.W. S. by W.	Force.	S.W. by S. N.N.W. N.W. S.S.W.	Force.	1 2 3 4 5 6 7 8 9 10 11 12	Time.
	S.W. by W. W.S.W. W.N.W. S. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N.	lbs.	Direction.  W.S.W. W. N.W. S. N. by W. N. W.S.W.	lbs.	S.W. by W. W. N.W. S.S.W. N. by W. N.	lbs.	S.W.  N.W. S.S.W.  N. N.	lbs.	S.W. by S.  N.W. S. by W.  N. W.  N. W. by S.	Force.	S.W. by S. N.N.W. N.W. S.S.W. N. N. N. W. by S. S.E. by S.	Force.	1 2 3 4 5 6 7 8 9 10 11 12 13 14	Time.
	Direction.	lbs.	Direction.  W.S.W. W. N.W. S. N. by W. N. W.S.W.	1bs.  0.2 0.2 0.0 1.0 0.0 0.5 0.2 0.2 0.0 0.0 0.0 0.0 0.0 0.0	S.W. by W. W. S.S.W. N. by W. N.	lbs.	S.W.  N.W. S.S.W.  N. W.	lbs.	S.W. by S.  N.W. S. by W.  N. W. by S. S.E. by S.	Force.	S.W. by S. N.N.W. N.W. S.S.W. N. W. by S. S.E. by S.	Force.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Time.
	Direction.	lbs.	Direction.  W.S.W. W. N.W. S. N. by W. N. W.S.W.  S. by W. N.N.E.	lbs.	S.W. by W. W. S.S.W. N. by W. N. S.S.W. N. by W. N. N. N. N. N. N. N. N. N. N. N. N. N.	lbs.	S.W. S.S.W. N.W. S.S.W. N. N. N. N. N. N. N. N. N. N. N. N. N.	lbs.	S.W. by S.  N.W. S. by W.  N. by S. S.E. by S.  W. by S. N.N.E.	Force.    Ibs.	S.W. by S. N.N.W.  N.W. S.S.W.  N. by S. S.E. by S.  W. by S. N.N.E.	Force.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	
	Direction.	lbs.	N.W. N.W. S. N. by W. N.S.W.  S. by W. N.N.E. S.S.W. S.W. by W.	1bs.  0.2 0.0 1.0 0.0 0.5  0.5 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	S.W. by W. W. S.S.W. N. by W. N. by W. S.S.W. N. by W. N. S.W. S.W. S.W. S.W. S.W.	lbs.	S.W. S.S.W. N. N. N. N. N. N. N. N. N. N. N. N. S.S.W. N. N. S.W. S.W	lbs.	S.W. by S.  N.W. S. by W.  N. W. by S. S.E. by S.  W. by S. N.N.E. S.W. by S.	Force.    Ibs.	S.W. by S. N.N.W.  N.W. S.S.W.  N. by S. S.E. by S.  W. by S.  N.N.E. S.W. by S.	Force.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Time.
	Direction.  S.W. by W. W.S.W.  W.N.W.  S.  N. by W.  N.  W.S.W.  S.S.W.  N.W. S.S.W. S.W. by W.  N.W. by W.	lbs.	Direction.  W.S.W. W. S. N.W. S. N. by W. N. W.S.W. S. by W. N.N.E. S.S.W. S.W. by W. N.W.	1bs.  0.2 0.2 0.0 1.0 0.0 0.5  0.2 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	S.W. by W.  N.W. S.S.W.  N. by W.  S.W. N. by W.  N.  S.W. N. by W.  S.W. S.W. S.W. S.W. S.W. N.W.	lbs.	N.W. S.S.W. N. N. N. N. N. N. S.S.W. N. N. S.W. N. N. S.W. N. N. N. S.W. N. N. N. N. N. N. N. N. N. N. N. N. N.	lbs.	S.W. by S.  N.W. S. by W.  N. W. by S. S.E. by S.  W. by S.  N.N.E. S.W. by S.	Force.	S.W. by S. N.N.W.  S.S.W.  N.  N.  N.  W. by S.  S.E. by S.  W. by S.  N.N.E.  S.W. by S.  S.W.  N.N.E.  S.W. by S.	Force.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Time.
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	1 2 3 4 5 6	S.W. by S. ————————————————————————————————————	1.0 0.0 0.0 0.0 0.0	S.W. by W.  E. by N. W. by N.	1bs. 1 0 0 0 0 0 0 0 2 0 5	S.W. E. W. by N.	lbs. 0.5 0.0 0.0 0.2 0.5	W.S.W. — — E. W. by N.	lbs. 0.2 0.0 0.0 0.2 0.5	W.S.W. E. E. by S. W. by N.	1bs. 0.2 0.2 0.0 0.0 0.2 0.5	W. by S. E. E.S.E. E.S.E. W.N.W.	lbs.  1.5 0.2 0.2 0.2 0.5
Υ.	7 8 9 10 11 12 13	N.W. by N. N.E. by E. W.N.W. N. by W. N. by E. N.E. by N.	2.0 0.2 0.2 2.0 0.5 0.5	N.W. N.E. by E. W.N.W. N. by W. N.N.E. N.N.E.	2:0 0:2 0:2 1:5 0:2 0:2	N.W. by N. N.E. by E. W.S.W. N. by W. N. by E. N. hy E.	2.0 0.2 0.2 2.0 0.2 0.2	N.W. by N. N.E. by E. S.W. N.N.W. N.	2.0 0.2 0.5 2.5 0.5 0.2	N.W. E.N.E. S.W. N.N.W. N.	2.5 0.2 1.5 2.0 0.2 0.2	N.W. by N. E. by N. S.S.W. N. by W. N.	2:0 0:5 2:0 0:2 0:2
FEBRUARY.	14 15 16 17 18 19	N. by W.  S.E. by E. S.E. by E.	0.0 0.2 0.0 0.0 0.2 0.2	N. by W. N. by W. S.E. by E. E. by S.	0.0 0.2 0.2 0.0 0.2 0.2	N. by W.	0°0 0°2 0°0 0°0 0°0	N. by W.	0.0 0.2 0.0 0.0 0.0 0.0	N.E. N. by W.	0.2 0.5 0.0 0.0 0.0 0.2	N. by W. N. by W. — — — E.	0°2 0°2 0°0 0°0 0°2
	20 21 22 23 24 25 26 27	W.N.W. N.W. N.W. by W. N.E. by E. S.E. by E.	1.5 0.0 0.2 1.5 0.2 0.2	W. N.W. N.E. S.E. by E.	1:5 0:0 0:0 0:5 0:2 0:2	W.N.W. W.N.W. N.E. S.E. by E.	1.5 0.0 0.2 0.5 0.2 0.2	W. by N. W.S.W. N.W. E. S.E. by E.	1:0 0:0 0:2 1:0 0:2 0:2	N.W. by W. S.S.E. W. N.W. E. by S. S.W. by S.	1.5 0.2 0.5 1.5 0.2 0.2	N.W. E.S.E. W. N.W. S.E. S.W.	1.5 0.2 1.0 1.5 0.2 0.5
(continu	28 29	S. by E. N.W.	0.2	S.S.E. N.W. by W.	0.2	S.S.E. N. by W.	1:0 0:2	S. by E. N.N.W.	1.2 0.2	S. by E. N. by W.	2.0	S.S.E. N.W. by W.	1°5 0°5
Mean Göt	ſ	12h.		13h.		14 <sup>h</sup> .	. = -= -=	15h.		16 <sup>b</sup> .		17h.	
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.RY.	1 2 3 4 5 6 7 8 9 10 11 12 13	W.N.W. E	1bs.  0.5 0.2 0.0 0.0 1.5 0.0 1.5 0.0 0.0 1.5 0.0	W.N.W. E. W.N.W. W. by S. N. by E. —	1bs.  0'2 0'2 0'0 0'0 1'5 0'0 0'5 0'5 0'0	W.N.W. W.N.W. — — N.W. by N. N. by E.	0.0	E. W.N.W. W. by N.  N.W. N. by E. N.N.E.	lbs.   0°0   0°2   0°0   1°5   1°5	W.N.W. W.N.W. N. by E. N.W. by W. N. by E. N.N.E.	0.2 0.0	E. by N. W. W.N.W. N. by E. N.W. by E. N. by E. N.N.E.	lbs. 0.0 0.2 0.0 0.2 1.0 0.5 0.0 0.5 0.5 0.2
FEBRUARY.	13 14 15 16 17 18 19 20 21 22 23 24	E.N.E.  E.N.E.  W. by W.	0.5 0.0 0.0 0.0 0.0 0.5 0.0 0.2 1.5 1.5	E.N.E.  E.N.E.  W.N.W.  N.	0.5 0.0 0.0 0.0 0.0 0.0 0.5 	N. by W.  E. by N.  N.E.  W.N.W. N.	0.2 0.0 0.0 0.0 0.0 0.5 	N. by W.  E.  N.E.  W. N. by W.	0.2 0.0 0.0 0.0 0.0 0.5  0.0 0.2 1.0 0.5 0.0	E. S.W. by S. W.N.W. N.N.W.	0.0 0.0 0.0 0.0 0.0 0.5 0.2 0.0 0.5 0.5 0.0	E	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0

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	6 <sup>h</sup> .		7 <sup>h</sup> .		8 <sup>h</sup> .	20.50.00	9 <sup>h</sup> .		10h.		11 <sup>h</sup> .			Göttingen
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Time.
	W.  E. by S. W.N.W.	lbs. 1.0 0.0 0.0 0.0 0.2 0.5	W.S.W. S.E. E. by S. W. by N.	lbs. 0.5 0.0 0.2 0.2 0.5	W. by S.  E. by S.  N.W.	1bs. 0.5 0.0 0.0 0.0 0.2 1.0	W. E. S.S.W. E. W. by N.	lbs. 0.2 0.2 0.2 0.2 0.2 1.0	W. — E. N.W.	lbs. 1.0 0.0 0.0 0.0 0.2 1.0	W.N.W. E. — E. W.N.W.	lbs. 0.5 0.2 0.0 0.2 1.5	1 \ 2 3 4 5	
	N.W. E. S.S.W. N. by W. N. by W.	3.0 0.2 2.0 1.5 0.2 0.2	N.W. E. by S. S.W. by S. N. N.W. by N.	2°5 0°5 2°0 1°5 0°2 0°0	N.N.W. E. by N. S.S.W. N. E.N.E.	2.0 0.2 2.5 1.5 0.2 0.0	N. E.S.E. S.S.W. N. N.E. by E. S.S.E.	1.0 0.2 3.0 1.5 0.2 0.2	— N.N.W. — S.W. by W. N. by E. N.N.E. S.S.E.	0.5 0.0 2.0 1.0 0.2 0.2	N. by W. W.S.W. N. by E. S.S.E.	0.5 0.0 2.0 1.0 0.0 0.2	6 7 8 9 10 11 12 13	ŁY.
٠	N. by W. N.N.W. E.S.E. E.	0.2 0.5 0.0 0.2 0.0 0.2	N.E. N.N.W. S.E. by S. S.E. by E. E.	0·2 0·2 0·2 0·2 0·0 0·2	N.E. S.S.W. S.E. by S. S.E. by E. E.	0.5 0.2 0.2 0.2 0.0 0.0	N.E. by N. S.W. by S. S.E. by S. S.E. by E. E.S.E. E. by N.	0.5 0.2 0.2 0.2 0.2 0.5	N. by E. S.W. S.E. by E. E.N.E.	0.5 0.2 0.0 0.2 0.0 0.5	N. by W. S.W. — — — E.N.E.	0.2 0.2 0.0 0.0 0.0 0.5	13 14 15 16 17 18 19 20	FEBRUARY.
	W.N.W. E.S.E. W. by N. N.W. S.E. S.W.	1.5 0.2 1.5 1.0 0.2 0.5	W.N.W. E. by S. W.S.W. N.W. S.E. by S. S.S.W.	1.0 0.2 3.0 1.5 0.2 0.5	W.N.W. E. by S. W. N.N.W. S. by E. S.S.W.	1.0 0.2 3.0 1.0 0.2 0.5	W. E. W. by N. N.N.W. S. by E. S.W. by W.	0.5 0.2 2.0 1.0 0.2 0.2	W. E.N.E. W. N.N.W. S.S.E. W. by N.	0.5 0.2 2.0 1.0 0.2 0.2	E. by N. W. by N. N.N.E. W. by S.	0.0 0.2 2.0 1.0 0.0 0.5	21 22 23 24 25 26 27	
	S.S.E. N.W.	1.0	S.S.E. N.W. by N.	0.5 5.2	S.W. by W. N.W. by N.	0°2 2°5	W.S.W. N.N.W.	0°2 2°5	W.S.W. N.W. by N.	0°2 2°5	W. by N. N.N.W.	0.5 5.0	28 29	
	18h.	· · · · · ·	19 <sup>h</sup> .		20h.		21 <sup>h</sup> .		22h.		23h.	.,	Mean	Göttingen
	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Fime.
	E. by N.  W.  N.W. by N.  N.E.  N.W. by W.  N.N.E.  W. by N.  I.  N.W. by W.  N.N.E.  N.W. by W.  N.N.E.	1bs. 0.0 0.2 0.0 0.2 5.0 0.2 0.0 0.2 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	E. by N.  W.  N.W. by N.  N.E.  N.W. by W.  N. by E.  W. by N.  N. by E.  N.W. by W.  N. by E.  N.W. by W.  N. by E.	lbs. 0.0 0.2 0.0 0.2 0.0 0.2 1.5 0.5 0.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	W. N.W. by N. N.E. N.W. by W. N. N. by E.  E.S.E. W.N.W. N.N.E.  N. by W. W. by N.	lbs.   0.0   0.0   0.0   0.5     -   0.5   0.5   -   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	N. E. by N. W. by S. N.W. by W. N. by E. N. by E. H. W.N.W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. N. W. 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W. N. W. N. W. N. W. N. W. N. W. N. W. N. W.	0.0	N. by E. E. by N. W. by S. N. by W. N.E. E.S.E. N.W. by E. N. by E. N. N. by E. N. N. N. by E. N. N. N. N. N. N. N. N. N. N. N. N. N.	lbs. 0 2 0 2 0 0 0 2 1 5 0 2 2 0 0 0 0 5 0 0 0 0 0 0 0 0 0 0 0	N. by E.  W. by S.  N.N.W.  N.E. by E.  W.N.W.  N. by E.  N.N.E.  W.N.W.  S.E. by E.  W.N.W.  S.E. by E.  W.N.W.  N.W. by E.  N.W. by E.	lbs.   0.2   0.0   0.5     1.0   0.2   0.5     0.5     0.5     0.5     0.0   0.2   0.0     0.2   0.0     1.5   0.0   0.2   0.0     0.2   0.0     0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2   0.2	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	FEBRUARY.

		<del></del>	· · · · · · · · · · · · · · · · · · ·	DI	RECTIO	N AND FOI	RCE OF	THE WIND		1			·····.
Mean_Göt		O <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
Time	· []	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force
	1 2 3 4	N. by E. N.N.W. N.N.E. W. by S.	lbs. 0°2 0°2 0°2 1°0	N. by E. N.N.W. N.	lbs. 0°2 0°2 0°2 0°5	N.N.W. N. by E. N. W. by S.	1bs. 0 2 0 2 0 2 0 2 0 2	N.N.W. N.E. N. W.S.W.	lbs. 0°2 0°2 0°2 0°2	N.N.W. N.E. N. by W. S.W. by W.	1bs. 0°2 0°2 0°2 0°2	N. by W. N.E. S.W. by S.	1bs. 0°2 0°2 0°0 1°0
	5 6 7 8 9 10	W. by S. N. S. N. by W. N.	2.0 0.2 0.2 1.0 0.5 0.0	W. by S. S. N.W. N.	0.5 0.0 0.2 0.5 0.2 0.0	W.S.W. S.W. by S. N.N.W. N.	0.5 0.0 0.2 0.2 0.2 0.0	W. by S. S.W. by S. N. N.N.W.	1:0 0:0 0:2 0:5 0:2 0:0	W. by S. E.S.E. S.S.W. N. by W. N.N.W.	1.5 0.2 0.2 0.5 0.5	W.S.W. S.S.E. S.S.W. N. by W. N.N.W.	1.0 0.2 1.0 0.2 0.2
MARCH.	12 13 14 15 16 17 18	W.N.W. N.W. by W.  N.W. by N.  E.S.E.  N.N.E.	0.0	W. by N. N.W. N.N.W. E.	1:0 0:5 0:2 0:0 1:5 0:0	W.N.W. N.N.W. N. by W. E. N.E. by E.	1.5 0.5 0.2 0.0 2.0 0.2	W.N.W. N.N.W. N. by W. S.W. by S. E. by N. E.	2.0 0.5 0.5 0.2 1.5 0.2	W.N.W. W. by N. N.W. by N. S.W. by S. E.N.E. E.	2.0 1.0 1.0 0.5 1.5 0.2	W.N.W. W. by N. N.W. by W. S.S.W. E.N.E. S.E. by E.	0°5 1°5 0°2
	19 20 21 22 23 24 25	N.W. N.N.W. N. by E. N. by W. E. by N.	0.0 0.5 0.2 0.2 0.2 0.2	N.W. N. N. by E. N.N.E. E. by N.	0.0 0.5 0.2 0.2 0.2 0.2	N.N.W. N. N.N.E. N.N.E. E. by N.	0.0 0.5 0.2 0.2 0.2 0.2	E.N.E. N.N.W. N. by E. N. by E. N.E. by E. E. by N.	0'2 0'5 0'2 0'2 0'2 0'2	E.N.E. N.W. E. by S. N. by E. S.E. by E. E. by N.	0.5 1.0 0.2 0.2 0.2 0.2	E.N.E. N.W. by W. N.E. by N. N.N.E. S.E. E.	0.5 0.5 0.5 0.5 0.5 0.5
	26 27 28 29 30 31	N.N.E.	0.2 0.0 0.0	N. by E.  S.E. by E.	0.2 0.0 0.0 0.2 0.0		0.0 0.0 0.0 0.5 0.0	<u> </u>	0.0 0.0 0.0 0.0	E.S.E. S.S.W. E. by S.	0°0 0°2 0°2 0°5 0°0	N. by W. S. by W. N.E. by E. S.E. by S.	0.2 0.2 0.5 0.5
(continu	ied)	1						1		ı		1	
Mean Go Tim		12h.		13 <sup>h</sup> .		14 <sup>h</sup> .		15h.		16 <sup>h</sup> .		17h.	<del></del>
<del></del>	$\begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix}$	N.W. N.E. by N. N.W. by W.		W.N.W. N.E. by N. N.W. by W. W.S.W.	Ibs. 1.0 0.5 2.5 1.5	N.W. N.E. W.N.W. W.S.W.	lbs. 0°2 1°0 1°5 1°0	N.W. by W. N.E. by N. W.N.W. W.S.W.	lbs. 0°2 1°0 1°5 0°5	W. N.E. W. by N. W.S.W.	Ibs. 0°2 0°5 1°0 1°0	W. N.N.E. W. W.S.W.	1bs. 0°2 1°0 0°5 1°5
	4 5 6 7 8 9 10	S.W. by W. W.N.W. S.W. N.W. by N. N.	0.5 0.2 0.2 0.2 0.2 0.2 0.0	S.W. by W.	0.0 0.0 0.2 0.5 0.2 0.0	S.W. N.N.E. N.N.W.	0'0 0'0 0'2 0'2 0'2 0'0	S.W. by S. N. by E. N.N.W.	0'0 0'0 0'2 0'2 0'2 0'0	S.W. S.W. S.W. N.E. N.W. by N.	0.0 0.2 0.2 0.2	S.W. N.E. N.W. by N.	0.5 0.5 0.0
MARCH.	12 13 14 15 16 17 18 19	W. by N. N.N.W. N. by W. S.	1.5 2.5 1.0 0.5 0.0	N.W. by W. N. by W. N. by W. S. by E.	1'0 2'0 1'0 0'5 0'0	W.N.W. N.N.W. N.N.W. S.S.E.	1.0 2.0 1.0 0.5 0.0 0.0	N.W. by W. N.N.W. N.N.W. S.S.E. N.E. by N.	1.0 1.5 0.5 0.2 0.2	N.W. N.N.W. N.N.W. E.S.E. N.E. by N.	1:0 1:0 0:2 0:2 0:0	N.W. N.N.W. N.W. by N. E.S.E.	0.6
	20- 21 22 23 24 25 26	E. by N.  N. S. E. E. by N.	0.5 0.5 0.0 0.2 0.2 0.2	E. by N. N	0.5 0.0 0.0 0.0 0.0	E. by N.  E. by N.  E. by N.	0.2 0.2 0.0	S.S.E. N. by W. N.W. by W. E. by S.	0°2 0°2 0°0 0°2 0°2 0°0	E.	0.0 0.0 0.0 0.0	W.S.W.	0.0
	27 28 29 30 31	W.N.W. F. by N. S.W. by S.	0.0 0.0 0.2 0.2 0.2	N. by E. E. S.W. by S.	0.0 0.0 0.5 0.5 0.5	N. by E. E. by S. S.S.W.	0.0 0.0 0.2 0.2 0.5	N. S.W.	0.0 0.0 0.0 0.0	N. by W.	0.0 0.0 0.2 0.0 1.2	  N.W. by W.	0.0

				DIRI	ECTION	AND FORC	E OF T	HE WIND.					
6h.		7 <sup>h</sup> .		8h.		9h.		10h		11h		Mean	Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	r [	ime.
N.W. by N. E.N.E. W.S.W. S.W.	lbs. 0°2 0°2 0°2 1°5	W. E.N.E. S.W. by W. S.W.	lbs. 0°2 0°2 0°2 1°5	W. E.S.E. W.S.W. S.W.	lbs. 1.0 0.5 0.2 1.5	W. E. by N. W. S.W.	lbs. 1.0 0.5 1.5 2.0	W. E. by N. W. S.W.	lbs. 1.0 0.5 1.0 2.0	N.W. E. by N. W.N.W. S.W.	lbs. 1'0 1'0 2'0 2'5	1 7 2 3 4 5	
W.S.W. S.E. by S. S.S.W. N. N.N.W. S. by W.	1.0 0.2 1.0 0.5 0.5 0.2	W. by S. S.E. S.W. N. by E. N.W. S. by E.	1.0 0.2 1.0 0.2 0.5 0.5	W. S. S.W. N.E. by N. N.W.by N. S. by E.	1.5 0.2 0.5 0.2 0.5 0.5	W.N.W. S.S.W. S.W. by W. N.E. by E. N.N.W. S.S.E.	0.5	N.W. by W. S.S.W. N.W. N. S.E. by E.	1.0 0.2 3.0 0.2 0.5 0.2	W.N.W. S.S.W. N.W. by N. N. N. S.E.	0.5 0.2 2.0 0.2 0.5 0.5	6 7 8 9 10 11	
W.N.W. W.N.W. N.N.W. S.S.W. E.N.E. S.E. by E.	2.0 1.0 1.5 0.5 1.5 0.2	W. by N. N.N.W. N.N.W. S. by W. E.S.E.	2.0 1.5 2.0 0.5 1.0 0.0	W. by N. N.W. N.N.W. S. by E. E. by S.	2:0 2:0 2:0 0:5 0:5	N.N.W. N.N.W. N.N.W. S. by E. E. by S. E. by S.	1.5 2.0 2.5 1.0 0.5 0.2	W.N.W. N. by E. N. by W. S.S.E. E. by S.	1:5 2:0 2:0 0:5 0:2 0:0	W.N.W. N.W. by N. N. by W. S.S.E. E.N.E.	2.0 2.5 1.5 0.5 0.2 0.0	12 13 14 15 16 17 18	MARCH.
E.N.E. N.W. by W. S.E. by E. S.S.W. S.E. by E. E. by N.	0.2 0.5 0.2 0.2 0.2 0.2	E.N.E. N.W. E.S.E. E. S.E. by E. E.N.E.	0.5 1.0 0.2 0.5 0.2 0.5	E.N.E. N.W. S.E. by S. S.S.E. S.E. E. by N.	1.0 1.5 0.2 0.5 0.2 0.5	E.N.E. W.N.W. S. by W. S.E. E.N.E.	1.5 1.5 0.0 0.2 0.2 0.5	E.N.E. N.W. S. S.E. E. by N.	2.0 1.0 0.0 0.2 0.2 0.2	E.N.E. N. by W. S. E.S.E. E. by N.	1.0 0.5 0.0 0.2 0.2 0.2	19 20 21 22 23 24 25 26	
S.W. S.E. by S. S.S.W. E. by N. S.W. by S.	0.5 0.5 0.5 0.5 0.5 0.5	N.N.W. E.S.E. S.S.W. E. by N. S.W.	0.2 0.2 0.2 0.2 1.5	S.S.E. S.E. by E. W. by S. E. by N. W.S.W.	0.2 0.2 0.5 0.2 1.5	S.S.E. E. S.W. by W. E. W.	0.5 0.5 0.5 0.5 1.0	S.E. by S. S.E. W. by N. E. W.	0°2 0°2 0°2 0°5 0°2	S.E. by E. W. by N. E. W.S.W.	0.2 0.0 0.2 0.5 0.2	27 28 29 30 31	
18h.		19 <sup>h</sup> .		20 <sup>h</sup> .		21h,		22h.		23 <sup>h</sup> .			löttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Ti	me.
N.E. W.	lbs. 0.0 1.0 0.5	N.E. W. by S.	lbs. 0°0 0°2 0°2	N.E. W. by S.	lbs. 0°0 0°2 0°2	N.E. by N. W.S.W.	1bs. 0°0 0°2 0°2	N.E. by N. W.S.W.	1bs. 0.5 0.5	N.E. W.S.W.	lbs. 0°0 0°2 0°5	$\begin{bmatrix} 1 \\ 2 \\ 3 \\ 4 \end{bmatrix}$	
W. by S.  S.W. by W. N.E. N.W. by N.	2.0 0.0 0.0 0.2 0.2 0.2	S.W. S.S.W. N.N.W. N.E.	1.5 0.0 0.2 1.0 0.2 0.0	S.W. by W.  S.S.W. N. by W. N. by E.	1.0 0.0 0.2 1.0 0.2 0.0	W.S.W. N.N.W. S.S.E. N. by W. N. by E.	0.5 0.2 0.2 1.0 0.5 0.0	W.S.W.  S. by W.  N. by W.  N. by E.  —	0.5 0.0 0.2 1.0 0.5 0.0	W. by S. S. N. by W. N. by W.	1.5 0.0 0.2 1.0 0.5 0.0	5 6 7 8 9 10	
W.N.W. N.W. N.N. by N. E. by S. N.N.E.	0.2 0.2 0.2 0.2	W.N.W. N.W. by W. N.N.W.  E. by S. N.N.E.	1'0 0'2 0'2 0'0 0'2 0'2	W.N.W. N.W. N.N.W. E. by S. N.N.E.	$0.2 \\ 0.0 \\ 0.2 \\ 0.2$	W.N.W. N.W. by W. N.N.W.  E. by S. N.N.E.	1.0 0.5 0.2 0.0 0.2 0.2	W.N.W. N.W. by W. N.N.W. E. by S. N.N.E.	1.0	W. by N. N.W. by W. N.N.W.  E.S.E. N.N.E.	0.5 0.5 0.2 0.0 1.5 0.2	12 13 14 15 16 17 18	МАГСН.
S.W. by W.	0.0 0.2 0.0 0.0 0.0 0.0	W E. by S	0.0 0.2 0.0 0.0 0.0 0.0	E. by S.	0.0 0.0 0.0 0.0 0.0 0.0	W	0.0 0.2 0.0 0.0 0.0 0.0	W. by N E N.	0.0 0.5 0.0 0.0 0.0 0.2	N.W. N.N.W. N. by E. N. by W. E. by N.	0.0 0.5 0.2 0.2 1.2 0.2	19 20 21 22 23 24 25	
N. — — — — W.N.W.	0.5 0.0 0.0 0.0 0.0 2.0	N  W.N.W.	0.2 0.0 0.0 0.0	N  W.N.W.	0.2 0.0 0.0 0.0 1.0	N	0.5 0.0 0.0 0.0 0.0	N	0.5 0.0 0.0 0.0 0.5	W.N.W.	1.0 0.0 0.0 0.0 0.0	26 27 28 29 30 31	

	-							THE WINI				1	
Mean Göt		O <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .	1	3 <sup>h</sup> .		4 <sup>h</sup> ,	)	5 <sup>h</sup> .	
Time	· [	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force
(	( 1	W.N.W.	lbs. 2.0	W.N.W.	lbs. 2 0	w.n.w.	lbs. 1.5	W.N.W.	lbs. 2.5	W.N.W.	1bs. 3 0	W.N.W.	1bs. 3'(
	$\begin{array}{c}2\\3\\4\end{array}$	S.W. by S.	0.0	S.W. by S.	$0.0 \\ 0.2$	E. by S. S.S.W.	0.5	E. by S. S.W. by S.	0.5	E.S.E. S.W.	0.2	E.S.E. S.W.	0.5
	5 6		0.0	N	0.0	N. by W.	0.0	N.W.	0.0	N. S.	0.2	N.E. by N.	0.0
	7 8	N. —	0.0	N. —	$0.0 \\ 0.5$	N. —	0.0	N.N.E. S.W. by S.	$0.5 \\ 0.5$	N. S.W. by S.	$0.5 \\ 0.5$	N. by W. S.W. by S.	0.
!	9 10	— —	0.0	 E.	0.0 0.0	E. by N.	0.0	W. E. by S.	0.2	S.W. by S. E. by S.	$\frac{0.2}{0.2}$	S.W. E. by S.	0.5
	11 12 13	E. by N. W. by N.	0.0	$\frac{E}{W}$	0.0	W.	0.0	S.S.W. W.S.W.	0.2 1.5	S.S.W. W.S.W.	0.2	S. W.S.W.	0.
Ë	14 15	N.W. by N. N. by W.	0.5	N.W. by N. N. by W.	$0.2 \\ 0.2$	N. N.N.W.	0.2	N.W. by N. N.N.W.	0.2 0.2	N. N.N.W.	$0.5 \\ 0.2$	N.E. by N. N.W. by N.	0.
APRIL.	16		0.0	N. E.	0.2 2.2	N.N.W. E.	0.2 2.5	N. E. by N.	0.5	N.W. by W. E. by N.	0.2 2.0	N. E.N.E.	0.3
	18 19 20	N. by E.	2.2 0.0	N.N.E.	0.5 0.0	N.N.E.	0.2	N. by E.	0.0	N. by E. S.	0.2	N.N.E. S.	0.
	21 a 22 23	N.N.W.	1.0	w.	0.2	N.W.	0.5	N.W.	0.2	N.W.	0.2		0.0
	24 25	w.n.w.	1.5	W. by N.	$0.0 \\ 1.0$	W. by N.	1.0	W.N.W. S. by W.	1.0 $0.2$	W.N.W. S. by W.	$0.5 \\ 0.5$	W.N.W. S. by E.	1 · (
	26 27	·	0.0		$0.0 \\ 0.0$	N.W. by N.	0.0	N.W.	$0.0 \\ 0.5$	W. by S.	$0.0 \\ 0.2$	S. by E.	0.
	28 29 30		0.0	W. by N.	0.0 5.0	w.n.w.	0.0 2.2	w.n.w.	3.0 0.0	w.n.w.	3.0 0.0	N.W. by W.	3.0
(continu													
Mean Gö		12h.		13h.		14 <sup>h</sup> .		15 <sup>h</sup> .		16 <sup>h</sup> .		17 <sup>h</sup> .	
Tim	ie.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force
		W.N.W.	1bs. 0.5	N.W.	1bs. 0.2	N.W.	lbs. 0°2		0.0	_	0.0	_	1bs.
	$\begin{bmatrix} 2\\3\\4 \end{bmatrix}$	N.N.W.	0.0	N.N.W.	0.0	N.N.W.	0.0	N. by W.	$0.2 \\ 0.0$	N. by W.	$0.2 \\ 0.0$	N. by W.	0°0
	5 6	N. by W.	0.0	N. by W.	1.0 0.0	$\overline{\mathbf{N}}$ .	0.2	N. by W.	$0.0 \\ 0.0$	N. by W.	$\begin{array}{c} 0.0 \\ 0.2 \end{array}$	N. by W.	0.5
	7 8		0.0	_	0.0		0.0	_	0.0	_	0.0		0.0
	9 10 11	s.w.	0.0		0.0	N. by W. N. by W.	$\begin{array}{c} -0.2 \\ 0.2 \\ \end{array}$	N. by W.	0.0 0.0	N. by W.	$\frac{0.2}{0.0}$	N.N.W.	0.0
	12 13	S.W. W.N.W.	0.5	S.W. N.W. by N.	$0.2 \\ 0.5$	N.N.W.	0.0	N.N.E. N.W. by N.	0.5 0.2	W. by N. N.W. by N.	$0.2 \\ 0.5$	S.E. by S. N.W. by N.	0.5
APRIL.	14 15	N. by W.	0.0	N. by W.	0.0 1.0	N. by W.	1.0 0.0	N. by W.	1.0 0.0	N. by W.	1.0	N.N.W.	0.0
API	16 17 18		0.0	 N.E.	$\frac{1.0}{0.0}$	 N.E.	0.0	N.E. by E.	0.0	E.N.E.	0.0	N.E. by N.	0.0
	19 20	S.W. S.W.	0.5 1.2	s.w.	0.0	s.w.	0.0		0.0		0.0		0.0
	21 a 22 23		0.0	_	0.0	N. by W.	0.5	N. by W.	0.2	N. by W.	0.5		0.0
	24 25	W.N.W. E. by N.	$\frac{1.0}{0.2}$	N.W. by W. S.S.W.	0.2	N.W. by N. S.	0.5	N.W. S. by W.	0.5	S.W. by W.	$\frac{0.0}{0.0}$	W. by S.	0.
	26 27	S.Š.E.	0.0	S. S.S.E.	$0.\overline{2}$	S. S.	0.2	S. by W.	$0.0 \\ 0.5$		0.0	_	0.
	28 29 30	N.W. by W.	0.0	N.W. by W.	0.0	N.W. by W.	0.0	E. N.W. by W.	0°2 0°2	E. by N. N.W.	0°2 0°2 —	E. by N.	0.

(,				DIRE	ECTION	AND FORC	E OF T	HE WIND.					
6 <sup>h</sup> .		7 <sup>h</sup> .		8h.		9 <sup>h</sup> .		10 <sup>h</sup> .		11h.			Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		lime.
w.n.w.	lbs. 2.0	W.N.W.	lbs. 2°0	W.N.W.	lbs. 1.5	W.N.W.	lbs. 1.0	N.W.	Ibs. 0.5	W.N.W.	lbs. 0.5	$\begin{pmatrix} 1 \\ 2 \end{pmatrix}$	: 
E.S.E. S.W. S.S.W. S. S.S.W. S.S.W.	0.2 0.2 0.2 0.2 0.5 0.5	E. S.W. by W. S.S.W. S.S.W. S. by W. S.S.W.	0.2 0.2 0.2 0.5 0.5 0.5	E. by N. S.S.W. S.S.W. S. by W. S.S.W.	0°2 0°0 0°2 0°5 0°5 0°5	E.N.E. N.N.W. S.S.W. S.S.W. S. by W.	0.2 0.2 0.2 0.2 0.5 0.5	N. by E. N.N.W. S.W. by S. S.S.W. S.S.W. S.S.W.	0.2 0.2 0.5 0.2 0.2 0.2	N.N.W. S. by W. N. by W. S.S.W. S.S.W.	0.0 0.2 0.5 0.5 0.2 0.2	3 4 5 6 7 8	
S.W. E. by S. S.S.E. W. by S. N.E. by N.	0.2 0.2 0.2 1.0 0.5 0.5	S.S.W. E. by S. S. W.N.W. S.S.E. N.W. by W.	0.2 0.5 0.2 2.0 0.2 0.2 0.5	S.S.W. E. by S. S. by E. W.N.W. S.S.W.	0.5 0.5 0.5 2.0 0.5 1.0	S.S.W. E. by N. S.W. by S. W. by N. S.W. N. by W.	0·2 0·2 0·2 2·5 0·2 1·0	S.W. E S.W. by S. W. by N. S.W. by S. N.	0.2 0.2 0.2 2.5 0.2 1.0	S.W. by S. W. by N. S.S.W. N. by W.	0.2 0.0 0.2 1.5 0.2 1.5	9 10 11 12 13 14 15 16	II.
N. by E. S. by E.	0.2 1.2 0.0 0.2	S. N.E. by N. S.W. by S. S.S.E.	0°2 2°5 0°2 0°2	S.S.E. N.E. S. by W. S.S.E.	0.5 0.5 0.5 0.5 0.5	S.S.E. N.E. S.W. by S. S.	0.2 1.5 0.2 1.5	S. N.E. by E. S.S.W. S.S.W.	0.2 0.5 0.2 2.5	N.E. by E. S.S.W. S.W. by S.	0.0 0.2 1.0	17 18 19 20 20	APRIL.
N.W. W.N.W. S.E. S. by E. N.W. by W.	0.2 1.0 0.2 1.0 0.2 0.0 2.5	S. by W.	0.2 	S. by W.  W. S.E. by E. S. by W. S.S.E. N.E. N.W.	0.5 	S.S.W.	0.5 - 2.0 0.2 0.5 0.2 0.0 3.0	S.S.W.  W.N.W. E.S.E. S.S.E. S.E. N.W.	0.5 	S. W. by N. E.S.E. S.S.E.	0.2  1.0 0.2 0.0 0.0 0.0 2.0	22 23 24 25 26 27 28 29	
18 <sup>h</sup> .	Force.	19 <sup>h</sup> .	Force.	20 <sup>h</sup> .	Force.	21 <sup>h</sup> .	Force.	22 <sup>h</sup> .	Force.	23 <sup>h</sup> .	Force.		Göttingen ime,
	Ibs.		lbs.		lbs.		Ibs.		lbs.		lbs.		
E. by N. S. by E. N.N.W. N. by W.  N. by W.  N.N.E. N.N.E. N.W. by N.  W. by N.  W. by N.	Ibs.	E. by N.  N.N.W.  N. by W.  N. by W.  N.N.W.  N. by W.  N.N.E.  W. by N.  W. by N.  N.N.W.	lbs.	E. by N. N.N.W. N. by W.  N.N.W. N.W. by N. N.W. by N.  N.N.E.  W.N.W. N.W. by N. N.W. by N.	lbs.	E.N.E.    N. by W.	lbs.	E.N.E.	0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	S. by E.  N.  N.  W. by N.  N.N.W.  E.  N.N.W.  W.N.W.	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 20 21 22 23 24 25 26 27 28 29	APRIL.

			D	IRECTIO	ON AND FO	RCE OF	THE WIND	),				
Mean Göttingen	O <sup>h</sup> .		1 <sup>h</sup> .		2 <sup>h</sup> .		3 <sup>h</sup> .		4 <sup>h</sup> .		5 <sup>h</sup> .	
Time.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
$\begin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \end{pmatrix}$	E.N.E.	lbs. 0°2 0°0 0°0 0°0 0°0	E. by N.	1bs. 0°2 0°0 0°0 0°0 0°0	s.s.w.	1bs. 0°0 0°0 0°2 0°0 0°0	S.S.W. E.N.E. S.W. by S.	1bs. 0.0 0.0 0.2 0.2 0.2 0.0	N.E. S.S.W. E.N.E. S.S.W. S.S.W.	lbs. 0'0 0'2 0'2 0'2 0'2 0'2	E. by S. S.E. S.W. E. by N. S. by W. S. by W.	lbs. 0'2 0'2 0'2 0'2 0'5 0'5
7 8 9 10 11 12 13	N. by E. N. by W.	0.0 0.0 0.0 0.2 0.5 0.0	N. by W. N. by W.	0.0 0.0 0.0 0.2 0.5 0.0	S.W. by W.  N. by E. S. by W.	0.0 0.2 0.0 0.2 0.5 0.5	S. by W. S.W. by S. N. by W. N. by W. N. N.W. E. by S.	0·2 0·2 0·2 1·5 0·5 0·2	S.S.W. S. by W. N. N. by E. N.W. by N. S.E.	0.2 0.2 0.2 1.5 0.5 0.5	S.S.W. S. N. N. by E. N.N.E. S.E. by S.	0.2 0.2 0.2 1.5 0.5 1.0
X	N. — — — — — — — — — — — — — — — — — — —	0°2 0°0 0°0 0°0 0°0	— — — — —	0.0 0.0 0.0 0.0 0.0 0.0	w.s.w.  s.s.w. 	0.2 0.0 0.0 0.2 0.0 0.0	S.S.W. N.N.E. S. by W. S.S.W.	0.2 0.2 0.2 0.2 0.0 0.0	S.S.W. N.W. S. by E. S.S.W. S.E.	0.2 0.2 0.2 0.2 0.2 0.2	S. S.S.W. S.S.W. S.E. S.S.W.	0·2 0·2 0·2 0·2 0·2 0·2
21 22 23 24 25 26 27	N. by E. E. —	0.5 0.5 0.0 0.0 0.0 0.0	N.N.E. E. by S. —	0.0	N.N.E. — S.W. by S. N.W. by W.	0.5 0.0 0.0 0.2 0.2 0.0	E.S.E. S.W. N. by W.	0.0 0.2 0.0 0.2 0.2 0.0	S.S.E. S.E. by E. S.W. by W. N.W. by N.	0.2 0.5 0.0 0.2 0.2 0.0	S.S.E. E. S.W. by S. S.W. by S. W. by N. S.S.E.	0°2 0°2 0°2 0°2 0°2
28 29 30 31	  N.N.W.	0.0 0.0 0.0	  N.N.W.	0.0 0.0 1.2	N. by W. N.	0.0 0.5 1.0	N.N.W. N. by W.	0.0 0.2 1.2	N.N.W. N. by W.	0.0 1.0 1.2	N.N.W. N.	0.0 1.0 1.2
(continued)	12 <sup>h</sup> .		105		1.45		1.5h		16 <sup>h</sup> .		17 <sup>h</sup> .	
Mean Göttingen Time.		Foras	13b.	Force	Direction	Foras	15h.	Forgo	<del></del>	Force		Force
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	E.N.E. S. by W. E. S.S.W. N. by W. N.N.W. N.N.W. S. by W. S. L. S. by W. S. S. S. S. S. S. S. S. S. S. S. S. S.	Force.   Ibs.   0.0   0.0   0.0   0.2   2.5   0.0   0.5   0.0   0.0   1.0   0.0   1.0   0.2   0.5   0.0   0.0   1.0   0.2   0.5   0.0   0.0   1.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.2   0.5   0.0   0.5   0.0   0.0   0.5   0.0   0.0   0.5   0.0   0.5   0.0   0.5   0.0   0.0   0.5   0.0   0.5   0.0   0.0   0.5   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	E.N.E. S.S.W. N. by W.  N.E. N.N.W. N.N.W. S.S.W. S.S.W. S.S.W. S.S.W.  E. S.W. by W. N. by E. N. by W.	Force.   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The control   The c	Direction.	Force.	Direction.  E. N. N. N. N. N. N. N. N. W. M. N. W. M. M. M. M. M. M. M. M. M. M. M. M. M.	Force.    Ibs.   0.0   0.0   0.0   0.0   0.0   0.0   0.5   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0	Direction.  E.N.E. S. by E. N. by W. N.N.W.  N. by W.  N.E. by N.  N.E. by N.  N.N.E. E. N. by W.	Force.    lbs.   0 0 0   0 0 0 0 0 0 0 0 0 0 0 0 0 0	S. by E. E. by N. S.S.E. N. by W. N.E. N.N.W. N.E. N.N.E. N.N.E. N.N.E. N.N.E. N.N.E. N.N.E. N.N.E. N.N.E. N.N.E. N.N.E. N.N.E. N.N.E. N.N.E. N.N.E. N.D. by W. N.N.E. N.D. by W. N.N.E. N.D. by W. N.N.E. N.D. by W. N.N.E. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. N.D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. 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D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. D. by W. by W. D. by W. by W. D. by W. by W. by W. by W. by W. by W. by W. by W. by W. by W. by	Force.   Ibs.   O'0   O'0   O'2   O'2   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0   O'0

6 <sup>h</sup> .		7h.		8h.		9h.		10h.		11h.		13	
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Mean G	öttinger me.
E. by S. S.S.E. S.S.W. E. by N. S. S. by E.	lbs. 0°2 0°2 0°2 0°2 0°5 0°5	E. by S. S. S.S.W. N.E. by E. S. by E. S. by E.	lbs. 0°2 0°2 0°2 0°2 0°5 0°5	S. by E. S. E. by N. S. S.E. by S.	lbs. 0°0 0°2 0°2 0°2 1°5 0°2	S. S.S.E. E.N.E. S.S.W. S.S.E.	lbs. 0°0. 0°2 0°2 0°2 1°0 0°2	S. S. E.N.E. S. by W. E. by S.	lbs. 0°0 0°2 0°2 0°2 1°0 0°2	S.E. by E. E. by N. S. E.	lbs. 0'0 0'0 0'2 0'2 2'5 0'2	1 2 3 4 5 6	
S. by W. S. N. N. by E. N. by W. S. by W.	0.2 0.2 0.2 1.0 0.5 0.5	S. by W. S. N. by W. N.N.E. N. by W. W.	0.2 0.2 0.2 1.0 1.0	S.S.W. S. S.E. N. by W. N.	!	S. by W. S. by W. S.E. N. by W. N. by W. N.W. by W.	0°2 2°0 0°2 1°0 1°0 2°0	S.W. by S. S. N.N.E. N. by W. N.W.	0.2 1.5 0.0 0.5 1.0 2.5	S.S.W. S.S.E. N. by W. N.N.W. N.N.W.	0.2 0.2 0.0 0.2 0.5 2.0	7 8 9 10 11 12 13 14	
S.E. S.S.W. S.E. by S. S. by W. E.S.E. S.	0.2 0.2 0.2 0.2 0.2 0.2	E.S.E. S.W. by S. S.S.E. S. S.E.	0.5 0.5 0.5 0.5 0.6 0.6	E.S.E. S.S.W. S.S.E. S.S.E. N.W.	0.2 0.2 0.2 0.2 0.2 0.2	E.S.E. S.S.W. S. by E. S.S.E. S.S.W. S. by E.	0·2 0·2 0·2 0·2 0·2	S.E. S.S.E. N. by W.	0.2 0.0 0.5 0.2 0.2 0.0	S. by W. S.	0.2 0.0 1.5 0.2 0.0 0.0	15 16 17 18 19 20 21	MAY.
S. by E. E. W. S. by W. N.W. by N. S. by W.	0.2 0.2 0.5 0.2 0.2 0.2	S.S.E. N.E. by E. W.S.W. S.S.W. S. S. by E.	0.2 0.2 1.5 0.2 0.2 0.2	S. by E. E. by N. W. S.S.W. S. by E.	0.2 0.5 1.5 0.2 0.2 0.2	S. by E. E.N.E. W.S.W. W. N. E. by S.	0°2 0°5 1°0 0°2 0°2 0°2	E. by S. W. by N. W. N. S.E.	0.0 0.2 1.0 2.0 1.0	E. S.W. by S. N. by E. N. by E.	0.0 1.0 0.5 1.0 0.5 0.5	22 23 24 25 26 27 28	
S.W. N. N. by W.	0.5 0.5 1.5	S.W. W.N.W. N. by W.	0.2 1.5 2.5	S.W. by S. N.W. by W. N. by W.	0.5 2.2 3.0	S.W. by W. N.W. by W. N.	3.0 3.0 3.0	W.N.W. N.W. by W. N.	0.5 3.0 5.2	W. by N. N.W. by W. N.	0.2 3.0 1.2	29 30 31	
18h.	<del></del>	19h.		20h.	····	21h.		22h.		23h.		Mean G	öttinge
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	T	me.
N.N.W. E.N.E. E. by N. S.E. —————————————————————————————————	lbs.   0.0   0.2   0.2   0.2   0.2   0.0   0.0   0.5   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	N.N.W. W.N.W.	lbs.   0 0 0 2 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0	N. by E.  N. N. N.N.W	lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	N. by E.  N. by E.  N. by E.  N. hy E.  N.N.W.	lbs.   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0	S.W.	lbs.   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0   0°0	N.N.W.	lbs. 0'0 0'2 0'0 0'0 0'0 0'0 0'0 0'0 0'2 0'0 0'0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	MAY.
N.N.E.	0.0		0.0		0.0	_  	0.0		0.0	N.N.E.	0.0	18 19 20	F

				DI	RECTIO	ON AND FO	RCE OF	THE WIND	) <b>.</b>	T.		<u> </u>	
Mean Göt		O <sup>h</sup> .		1 <sup>h</sup> .		2h.		3 <sup>h</sup> .	<del> </del>	4 <sup>h</sup> .		5 <sup>h</sup> .	<u></u>
Time	e. [	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.
	$egin{pmatrix} 1 \\ 2 \\ 3 \\ 4 \end{bmatrix}$	N.N.W.	lbs. 0°2 0°0 0°0	N.N.W.	lbs. 0°2 0°0 0°0	W. by S.	lbs. 0°2 0°0 0°0	W.N.W. S. —	lbs. 0°2 0°2 0°0	N.W. S. S.W. by S.	lbs. 1'0 0'2 0'2	N.W. by N. S. S.W.	lbs. 1 '0 0 '2 0 '2
	5 6 7 8 9	W. N. by W. N.	0.0 0.5 0.2 0.0 0.0	N.W. by W. N.N.W. N.	0.0 0.5 0.5 0.2 0.0	N.N.W. N.N.W. N. W.S.W.	0.0 1.0 0.2 0.0 0.2	S.W. by S. N.N.W. N.N.W. N. S.S.W. S.W. by S.	0.5 1.0 0.5 0.2 0.2 0.2	S. N.N.W. N.W. by N. S. S.S.W. S. by W.	0.5 1.5 0.5 0.2 0.2 0.2	S. N.N.W. E. by N. S. S.S.W. S.S.E.	0.2 1.5 0.5 0.2 0.2 0.2
JUNE.	11 12 13 14 15 16	N. by W. N. by W. — — W. by S.	0.5 0.5 0.0 0.0 0.0	N. by W.	0.2 1.0 0.0 0.0 0.5 0.0	N.N.W. N. — W.N.W.	0.2 1.0 0.0 0.0 0.5	N.N.W. N.W. by N. — — W.	1.0 0.5 0.0 0.0 0.5	N. by W. N.N.W.  W. by S. S.S.W.	1:0 1:0 0:0 0:5 0:2	N.N.W. N.N.W. S.S.W.	1:0 1:0 0:2 0:0 0:5
	17 18 19 20 21 22 23 24	E. by N. W. by S.	0.0 0.0 0.0 0.0 0.0 0.0 0.0	——————————————————————————————————————	0.0 0.0 0.0 0.0 0.0	S.S.W. S.W. by S. E. W.	0.0 0.0 0.2 0.0 0.2 0.0	S. by W. S.S.W. S.S.E. S. W. by N.	0.0 0.0 0.2 0.2 0.2 0.2 1.0	S.S.W. S.S.E. S.S.E. N.W. S.S.E. S.S.W. W.N.W.	0.2 0.2 0.2 0.2 0.2 0.2 0.2 1.0	S. by W.  S.S.E. S. by E. W. S.E. by E. S.S.W. W.N.W.	0.2 0.2 0.2 0.2 0.2 0.2 1.0
	25 26 27 28 29 30	——————————————————————————————————————	0.0 0.0 0.0 0.0 0.0	N.N.W.	0.0 0.0 0.0 0.5 0.0	E.N.E.	0.0 0.0 0.0 0.0 0.0	S. by E. S. by E.	0.0 0.2 0.0 0.2 0.0	S.S.E. S. by E.	0·2 0·2 0·0 0·2 0·2	S. by W. S.S.E. S.E. by S.	0.5 0.0 0.5 0.0 0.2
(continue	ed)			1		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·						
Mean Gött Time		12 <sup>h</sup> .  Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	17 <sup>h</sup> .  Direction.	Force.
	1 2 3 4 5 6 7 8	S.W. by W. S.W. N.W. N. N. by W. E. by S.	lbs. 0°0 0°5 0°2	S.W. by W.  N.W. by N. N. N. N. N.	lbs. 0.0 0.2 0.0 0.5 1.0 0.5 0.0	N.N.W. N. by W.	Ibs. 0.0 0.0 0.0 0.5 0.2 0.5 0.0	N.N.W.	lbs. 0'0 0'0 0'0 	N.N.W. N. by W.	lbs. 0°0 0°0 0°0 0°0 ——————————————————————	N.W. N. by W.	lbs. 0.0 0.0 0.0 - 0.2 0.0 0.5 0.0
JUNE.	9 10 11 12 13 14 15 16 17	N.N.W. N. N. W. by N. W. by N.	0.0 0.0 0.0 1.0 0.5 0.5 0.5	N. W. N. W. W. S. W.	0.0 0.2 - 1.0 1.0 0.0	N.N.W.  N.W. N. S.W. by W.	0.2 0.0 	N. by W. E.N.E.	0.2 0.0 0.0 0.2 0.2 0.0 0.0	N. by W.  E.N.E.	0.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0	N. by W.  N.W.  E.N.E.	0.5 0.0 0.5 0.0 0.5 0.0 0.0
	18 19 20 21 22 23 24 25	S. by W. W.N.W. E. by N. W.N.W. W.N.W.	0.0 0.2 0.5 0.2 2.0 0.5	N.W. W.N.W. E.N.E. N.W. by W. W.N.W.	0.0 0.2 0.5 0.2 1.5 0.2	S.W. W.N.W. W. W.	0.0 0.0 0.2 0.2 0.0 1.0 0.2	N.W. by W. W.	0.0 0.0 0.0 0.0 0.0 1.0 0.0	S. by W E.S.E W	0.5 0.0 0.2 0.0 0.0 0.5 0.0	W. by N. S.S.W. — — W.	0.0 0.2 0.0 0.0 0.0 0.0
	26 27 28 29	S.W. by S. S.W. — — — — S.E. by S.	0.5 0.5 0.0 0.0 0.0	S.W. by S W. —	0.5 0.0 0.0 0.0 0.0	W. by S.	0.0 0.5 0.0 0.0 0.0		0.0 0.0 0.0 0.0	N. by W. E.N.E. S.W. by W.	0.0 0.0 0.2 0.2 0.2	  	0.0 0.0 0.0 0.0 0.0

				DIR	ECTION	AND FORC	E OF T	THE WIND.					
6h•	<del></del>	7 <sup>h</sup> .	<del></del>	8h.		9h.		10h.		11h	•	Mean	ı Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		Time.
N. by W. S.S.W. S.W.	lbs. 1 0 0 2 0 2	N.N.W. S. by W. W.S.W.	lbs. 1.0 1.0 0.2	N.W. S. by W. S.W.	lbs. 1.0 1.5 0.5	S. by W. S. by W. S.W.	lbs. 0°2 2°0 0°5	S. S.S.W. S.W.	lbs. 0°2 1°5 0°5	S.W. S.W. by S.	lbs. 0°0 1°0 0°2	$\begin{vmatrix} 1 \\ 2 \\ 3 \\ 4 \end{vmatrix}$	
S.E. by S. N.N.W. N.W. S.S.W. S.S.W. S. by W.	0.2 1.5 0.2 0.2 0.2 0.2	S. N.W. N.W. S.S.W. S. by W. S. by W.	0.5 1.0 1.0 0.2 0.2 0.2	S.W. N.N.W. N.W. S.S.W. S. by W. S. by W.	0.5 1.0 1.0 0.2 0.2 0.2	S. N.N.W. N.N.W. S. S. by W. S.S.W.	0.5 0.5 1.0 0.2 0.2 0.2	S. by W. N. N.N.W.  S.S.W.	0.2 0.5 1.0 0.0 0.0 0.0	S. N. N. — — — S.W. by S.	0.2 2.0 1.0 0.0 0.0 0.2	4 5 6 7 8 9	
N.W. by N. N.W. S.W. by S. N.W. by W. W. by N. S.S.E.	$\begin{array}{c c} 1.5 \\ 0.5 \end{array}$	N.W. N.N.W. S.S.W. W. by N. S.S.W. S.W.	2.0 2.0 0.2 1.0 0.5 0.2	N.W. N.W. 	1.5 2.5 0.0 0.5 0.5 0.0	N.W. by N. N.N.W. S.S.E. W. S.W. by S.	2 0 0 2 1 0 0 5 0 0	N.W. by N. N.N.W. E.S.E. W. by N. S.W. by S. S.E. by E.	1.0 2.0 0.2 1.0 0.2 0.2	N.N.W. N. W.N.W.	1.0 0.0 0.2 0.0 0.0	11 12 13 14 15 16 17	JUNE.
S.W. W. by N. E. by S. S.S.W. W.N.W.	0.0 0.2 0.5 0.2 1.5 1.5	E. by N. W.N.W. E. S.S.W. W. by S.	0.0 0.2 0.5 0.2 1.5 1.5	E.S.E. E.S.E. W.N.W. E. W.S.W.	0.2 0.2 1.0 0.2 3.5 1.5	S.E. E.S.E. N.W. by W. E. W. by S. W.	0.2 4.0 1.0	S.S.E. S.E. by E. W.N.W. E. by S. W. by S. N.W. by W.	0.2 0.2 0.2 0.2 2.5 1.0	W. by N. W.N.W. E. by N. W. by N. W. by N. W. hy N. W. hy N. W. hy N. W. hy N. W. hy N. W. hy hy hy hy hy hy hy hy hy hy hy hy hy	0.0 2.5 0.2 0.2 3.0 0.5	18 19 20 21 22 23 24	
S. by W. S. E. by S.	0.2 0.2 0.0 0.2 0.2	S.E. S.S.W. N.N.W. S. S.E.	0.2 0.5 0.2 0.2 0.2 0.2	S.E. by E. S. by W. N. S. E. by S.	0.2 0.5 0.2 0.2 0.2	S.E. S.S.W. N. S.S.E. S.E.	0.5 0.5 0.5 0.5 0.5 0.2	S.E. S.S.W. N.N.W. S.E. by E.	0.2 1.0 0.2 0.0 0.5	S. by E. S.W. by W. N.N.W. S.E. by E.	0.5 1.0 0.2 0.0 0.2	25 26 27 28 29 30	
18h.		19 <sup>h</sup> .		20 <sup>h</sup> .		21h.		22h.	· .	23h.	-	Mean	Göttingen
Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.	Direction.	Force.		l'ime.
N.N.W. N.W. N. W. N. W. N. by W.  S.W.  W. by S.  W.N.W.	1bs. 0'0 0'0 0'2 0'2 0'0 0'5 0'0 0'2 0'0 0'0 0'0 0'0 0'0 0'0 0'0 0'0 0'0	W.N.W.  N. by W.  W. by N.  W. by S.	lbs.   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	N. by W.  N. by N.  W. by N.  W. by S.  N.  N. by S.	lbs. 0'0 0'0 0'0 0'0 0'0 0'0 0'0 0'0 0'0 0'	N. by W.  W. by S N.W.	lbs.   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	M. by W.  W. N.W.  W. by S.  N.W.	lbs. 0'0 0'0 0'0 0'0 0'0 0'5 0'0 0'0 0'0 0'0	M. W. by W. N. by W. N. N. W.  N. N. W.  N. N. W.  N. W. by W.  N. W. by W.	Ibs. 0.0 0.0 0.5 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	JUNE.

TORONTO, 1846 to 1848.

METEOROLOGICAL JOURNAL.

oronto		Ex	tent of C	loudy Sk	.y.	Max.	Min.	De!
Mean Time.	Weather and Phenomena.	3	9	15	21	Therm.	Therm.	Rain
D.	JANUARY.					0	0	In.
$_{2}^{1}$	Clouded all day; cir., cirstrat., and haze; snow, sleet, and rain Clouded all day; circum. and haze; rain and snow till 13h, when it ceased	1.0	1.0	1.0	1.0	29.0 38.7	$\frac{9.5}{28.7}$	0°25 0°45
3	Cloudy all day: circum, and haze: occasional rain	0.9	1.0	·—		38.5	28.5	-
4	In general clouded cir cum and haze: halo round the moon at 10 <sup>h</sup> , imperfect -	0.8	1.0	$0.0 \\ 0.2$	0.9	36.0	$\frac{28.2}{26.7}$	
5	In general clouded, with circum, and haze, except from 13 <sup>n</sup> to 15 <sup>n</sup> , when it was clear	1.0	1.0	1.0	1.0	$\frac{36.2}{36.2}$	23.0	0.1
6	Clouded all day; circum. and haze; snow and rain mixed from 8h to 17h	. 1.0	1.0	1.0	1.0	34.9	27.7	0.4
7 8	Clouded all day; dense haze; slight rain till 12 <sup>h</sup> ; snow at 16 <sup>h</sup> and 17 <sup>h</sup> Clouded all day; circum. and haze; slight snow occasionally; clouded at 21 <sup>h</sup>	1.0	1.0	1.0	0.5	36.4	33.5	0.1
9	Partially clouded to 1 <sup>h</sup> ; circum., cirstrat., and haze	1.0	1.0	1.0	1.0	33.8	28.0	i
10	Cloudy: circum., cirstrat., and haze; occasional snow	1.0	1.0			30.4	26.1	-
11	Clouded all day: cir-cum, cir-strat, and haze; some slight snow	$\frac{1.0}{1.0}$	$\frac{0.3}{-}$	$\frac{0.3}{1.0}$	1.0	32.5	23 7	· –
12	Clouded till 8h; circum.; cirstrat.; remainder of the day clear		- 1			]	-	_
13 {	Generally clouded; circum., cirstrat., and haze; clear intervals occasionally; imperfect halo round the moon at 10 <sup>h</sup> , diameter 40°	1.0	0.3	1.0	1.0	27.7	9.0	-
14.	Clouded till 4 <sup>h</sup> ; circum., cirstrat., and haze; remainder clear; slight snow from 19 <sup>h</sup> to 22 <sup>h</sup>	1.0	0.0	0.0	0.0	29.5	9.7	
15	Clear till 2h remainder of the day clouded : circum., cirstrat., and haze	0.4	0.8	1.0	1.0	35.2	18.1	-
	Generally clouded; circum., cirstrat., and haze; halo round the moon at 11 <sup>n</sup> and 15 <sup>n</sup> ,	1.0	0.6	1.0	1.0	40.4	18.4	_
16 {	imperfect	1.0	0.3			31.7	11.5	-
17	Generally clouded; circum., cirstrat., and haze Clear at 10 <sup>h</sup> and 11 <sup>h</sup> ; remainder of the day clouded; circum. and cirstrat.; clouded at 18 <sup>h</sup> & 19 <sup>h</sup>	10	U 3	1.0	0.5	$\frac{31}{12}.7$	-1.2	_
18 19	Clouded at 13 <sup>h</sup> to 17 <sup>h</sup> ; circum., cirstrat., and haze; remainder clear	0.1	0.0	1.0	1.0	20.9	0.9	_
20	Clouded all day; circum., cirstrat., and haze	1.0	1.0	1'0	1.0	17.7	5.2	
21	Clouded till 4 <sup>h</sup> ; circum, and haze; remainder clear; snow from 21 <sup>h</sup> to 23 <sup>h</sup>	1.0	0.0	0.0	0.0	25.2	9.5	-
22	Snow from 1 <sup>h</sup> to 4 <sup>h</sup> : afterwards clear	0.0	0.0	0.0	0.1	27.9	1.1	
23	Clear till 14 <sup>h</sup> ; remainder clouded; cirstrat. and haze	0.0	$0.0 \\ 0.0$	1.0	0.7	20.1	-1.3 5.9	-
24	Cloudy; cirstrat. and haze; clouded from 18 <sup>h</sup> to 23 <sup>h</sup> Clouded from 12 <sup>h</sup> to 17 <sup>h</sup> ; cirstrat. and haze; remainder clear; rain from 16 <sup>h</sup> to 17 <sup>h</sup>	0.5	0.0	1.0	1.0	37.0	19.6	-
$\frac{25}{26}$	Clouded from 12" to 17"; cirstrat. and naze; remainder clear; rain from 16 to 17  Clouded till 13h; circum. and haze; misty; remainder clear; slight rain and snow occasionally	1.0	1.0	0.0	0.5	44.0	31.7	0.5
26 27	Generally clear till 6 <sup>h</sup> ; remainder overcast with dense haze	$0.\tilde{2}$	1.0	0.9	1.0	37:3	17.7	_
28	Clouded all day : circum, and haze	1.0	1.0	1.0	1.0	31.7	15.5	_
29	Clouded all day; circum. and haze; slight rain from 2 <sup>h</sup> to 5 <sup>h</sup> , and from 15 <sup>h</sup> to 20 <sup>h</sup>	1.0	1'0	1.0	1.0	38.0	31.5	0'2
30 31	Clouded all day; circum. and haze; slight rain from 18 <sup>h</sup> to 20 <sup>h</sup> Clouded at 9 <sup>h</sup> and 10 <sup>h</sup> , and from 18 <sup>h</sup> to 21 <sup>h</sup> ; clear from 22 <sup>h</sup> to 23 <sup>h</sup>	$\begin{array}{c} 1.0 \\ 0.2 \end{array}$	$0.0 \\ 1.0$	1.0	0.6	37.7 42.0	$\frac{33.2}{17.0}$	0.3
				,				
				1		1 1		
	FEBRUARY.							
1	FEBRUARY.				. —	20.9	8*3	_
$\frac{1}{2}$	Clouded all day : circum., cirstrat., and haze	1.0	1:0	1.0	1:0	22.2	9.1	_
2 3	Clouded all day; circum., cirstrat., and haze Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect	1.0	1.0	0.4	0.3	22·2 32·5	$9.1 \\ 22.5$	
$\frac{2}{3}$	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; cir., cirstrat., circum., and haze; clear	1.0	1.0	0.4	0°3 0°4	22.2 32.5 41.9	$9.1 \\ 22.5 \\ 28.7$	
2 3 4 5	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; cir., cirstrat., circum., and haze; clear  Clouded till 11 <sup>h</sup> ; circum. and cumstrat.; clear	1.0 1.0 1.0 0.7	1.0 1.0 0.7 1.0	0.4	0.3	22.2 32.5 41.9 40.1 40.0	9°1 22°5 28°7 28°1 23°0	
2 3 4 5 6 7	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; cir., cirstrat., circum., and haze; clear  Clouded till 11 <sup>h</sup> ; circum. and cumstrat.; clear  Clouded at 4 <sup>h</sup> , 9 <sup>h</sup> , and 10 <sup>h</sup> ; circum. and haze; clear	1.0 1.0 1.0 0.7 1.0	1.0 1.0 0.7 1.0 0.0	0'4 0'0 0'2 0'4	0.3 0.4 0.0 0.1	22.2 32.5 41.9 40.1 40.0 39.2	9°1 22°5 28°7 28°1 23°0 23°6	
2 3 4 5 6 7 8	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; cir., cirstrat., circum., and haze; clear  Clouded till 11 <sup>h</sup> ; circum. and cumstrat.; clear  Clouded at 4 <sup>h</sup> , 9 <sup>h</sup> , and 10 <sup>h</sup> ; circum. and haze; clear  Clouded at 7 <sup>h</sup> , 12 <sup>h</sup> , and 17 <sup>h</sup> ; circum., cirstrat., and haze; clear	1.0 1.0 1.0 0.7 1.0	1.0 1.0 0.7 1.0 0.0	0'4 0'0 0'2 0'4 	0.3 0.4 0.0 0.1 	22.2 32.5 41.9 40.1 40.0 39.2 40.0	9°1 22°5 28°7 28°1 23°6 23°6 11°0	
2 3 4 5 6 7 8 9	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; cir., cirstrat., circum., and haze; clear  Clouded till 11 <sup>h</sup> ; circum. and cumstrat.; clear  Clouded at 4 <sup>h</sup> , 9 <sup>h</sup> , and 10 <sup>h</sup> ; circum. and haze; clear  Clouded at 7 <sup>h</sup> , 12 <sup>h</sup> , and 17 <sup>h</sup> ; circum., cirstrat., and haze; clear  Clear, except light cir. and strat.; halo round the moon at 12 <sup>h</sup> , diameter 40°, perfect	1.0 1.0 1.0 0.7 1.0 	1.0 1.0 0.7 1.0 0.0 -	0'4 0'0 0'2 0'4 - 1'0 0'0	0°3 0°4 0°0 0°1 	22.2 32.5 41.9 40.1 40.0 39.2 40.0 20.9	9·1 22·5 28·7 28·1 23·6 11·0 10·3	
2 3 4 5 6 7 8 9	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; cir., cirstrat., circum., and haze; clear  Clouded till 11 <sup>h</sup> ; circum. and cumstrat.; clear  Clouded at 4 <sup>h</sup> , 9 <sup>h</sup> , and 10 <sup>h</sup> ; circum. and haze; clear  Clouded at 7 <sup>h</sup> , 12 <sup>h</sup> , and 17 <sup>h</sup> ; circum., cirstrat., and haze; clear  Clear, except light cir. and strat.; halo round the moon at 12 <sup>h</sup> , diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day	1.0 1.0 1.0 0.7 1.0	1.0 1.0 0.7 1.0 0.0	0'4 0'0 0'2 0'4 	0.3 0.4 0.0 0.1 	22.2 32.5 41.9 40.1 40.0 39.2 40.0	9·1 22·5 28·7 28·1 23·0 23·6 11·0 10·3 4·2 4·6	
2 3 4 5 6 7 8 9 10 11 12	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; circum. and cumstrat.; clear  Clouded till 11 <sup>h</sup> ; circum. and cumstrat.; clear  Clouded at 4 <sup>h</sup> , 9 <sup>h</sup> , and 10 <sup>h</sup> ; circum. and haze; clear  Clouded at 7 <sup>h</sup> , 12 <sup>h</sup> , and 17 <sup>h</sup> ; circum., cirstrat., and haze; clear  Clear, except light cir. and strat.; halo round the moon at 12 <sup>h</sup> , diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded till 14 <sup>h</sup> ; circum. and haze; snowing from 18 <sup>h</sup> to 23 <sup>h</sup> Clear till 19 <sup>h</sup> , afterwards clouded; circum. and haze	1.0 1.0 1.0 0.7 1.0 	1.0 0.7 1.0 0.0 - 0.3 1.0 1.0	0'4 0'0 0'2 0'4 - 1'0 0'0 1'0	0°3 0°4 0°0 0°1 	22.2 32.5 41.9 40.1 40.0 39.2 40.0 20.9 16.5 28.0 23.7	9.1 22.5 28.7 28.1 23.0 23.6 11.0 10.3 4.2 4.6 -3.4	
2 3 4 5 6 7 8 9 10 11 12 13	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; cir., cirstrat., circum., and haze; clear  Clouded till 11 <sup>h</sup> ; circum. and cumstrat.; clear  Clouded at 4 <sup>h</sup> , 9 <sup>h</sup> , and 10 <sup>h</sup> ; circum. and haze; clear  Clouded at 7 <sup>h</sup> , 12 <sup>h</sup> , and 17 <sup>h</sup> ; circum., cirstrat., and haze; clear  Clear, except light cir. and strat.; halo round the moon at 12 <sup>h</sup> , diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded till 14 <sup>h</sup> ; circum. and haze; snowing from 18 <sup>h</sup> to 23 <sup>h</sup>	1.0 1.0 1.0 0.7 1.0 	1.0 0.7 1.0 0.0 - 0.3 1.0 1.0 1.0	0'4 0'0 0'2 0'4 	0°3 0°4 0°0 0°1 1°2 1°0 1°0 0°2 1°0	22.2 32.5 41.9 40.1 40.0 39.2 40.0 20.9 16.5 28.0 23.7 24.4	9.1 22.5 28.7 28.1 23.0 23.6 11.0 10.3 4.2 4.6 -3.4 -7.0	
2 3 4 5 6 7 8 9 10 11 12 13 14	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; cir., cirstrat., circum., and haze; clear  Clouded till 11 <sup>h</sup> ; circum. and cumstrat.; clear  Clouded at 4 <sup>h</sup> , 9 <sup>h</sup> , and 10 <sup>h</sup> ; circum. and haze; clear  Clouded at 7 <sup>h</sup> , 12 <sup>h</sup> , and 17 <sup>h</sup> ; circum., cirstrat., and haze; clear  Clouded; circum. and strat.; halo round the moon at 12 <sup>h</sup> , diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded till 14 <sup>h</sup> ; circum. and haze; snowing from 18 <sup>h</sup> to 23 <sup>h</sup> Clear till 19 <sup>h</sup> , afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16 <sup>h</sup> and 17 <sup>h</sup> , diameter 40°, perfect	1.0 1.0 1.0 0.7 1.0 	1.0 1.0 0.7 1.0 0.0 	0'4 0'0 0'2 0'4 	0°3 0°4 0°0 0°1 1°2 1°0 1°0 0°2 1°0	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 35·2	9·1 22·5 28·7 28·1 23·0 23·6 11·0 10·3 4·6 -3·4 -7·0 12·8	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 }	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7h and 8h, diameter 30°, perfect  Clouded till 11h; cir., cirstrat., circum., and haze; clear  Clouded till 11h; circum. and cumstrat.; clear  Clouded at 4h, 9h, and 10h; circum. and haze; clear  Clouded at 7h, 12h, and 17h; circum., cirstrat., and haze; clear  Clouded; circum. and strat.; halo round the moon at 12h, diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded till 14h; circum. and haze; snowing from 18h to 23h  Clear till 19h, afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16h and 17h, diameter 40°, perfect  Clouded; circum., cirstrat., and haze; snow commences at 4h and continues all night	1'0 1'0 1'0 0'7 1'0 	1'0 1'0 0'7 1'0 0'0 	0'4 0'0 0'2 0'4 	0°3 0°4 0°0 0°1 1°2 1°0 1°0 1°0	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 35·2 34·4	9·1 22·5 28·7 28·1 23·0 23·6 11·0 10·3 4·2 4·6 -3·4 -7·0 12·8 15·5	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7h and 8h, diameter 30°, perfect  Clouded till 11h; cir., cirstrat., circum., and haze; clear  Clouded till 11h; circum. and cumstrat.; clear  Clouded at 4h, 9h, and 10h; circum. and haze; clear  Clouded at 7h, 12h, and 17h; circum., cirstrat., and haze; clear  Clear, except light cir. and strat.; halo round the moon at 12h, diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded till 14h; circum. and haze; snowing from 18h to 23h  Clear till 19h, afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16h and 17h, diameter 40°, perfect  Clouded; circum., cirstrat., and haze; snow commences at 4h and continues all night  Overcast; circum., cirstrat., and haze; slight snow from 0h to 10h	1.0 1.0 1.0 0.7 1.0 	1.0 1.0 0.7 1.0 0.0 	0'4 0'0 0'2 0'4 	0°3 0°4 0°0 0°1 1°2 1°0 1°0 0°2 1°0	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 35·2 34·4 25·3	9·1 22·5 28·7 28·1 23·0 23·6 11·0 10·3 4·2 4·6 -3·4 -7·0 12·8 15·5 13·2	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7h and 8h, diameter 30°, perfect  Clouded till 11h; cir., cirstrat., circum., and haze; clear  Clouded till 11h; circum. and cumstrat.; clear  Clouded at 4h, 9h, and 10h; circum. and haze; clear  Clouded at 7h, 12h, and 17h; circum., cirstrat., and haze; clear  Clear, except light cir. and strat.; halo round the moon at 12h, diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded; circum. and haze; snowing from 18h to 23h  Clear till 19h, afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16h and 17h, diameter 40°, perfect  Clouded; circum., cirstrat., and haze; snow commences at 4h and continues all night  Overcast; circum., cirstrat., and haze; slight snow from 0h to 10h  Clouded; circum, cirstrat.; slight fall of snow from 2h to 12h	1'0 1'0 1'0 0'7 1'0 1'0 1'0 0'6 0'9 1'0 1'0 1'0	1'0 1'0 0'7 1'0 0'0 	0'4 0'0 0'2 0'4 	0°3 0°4 0°0 0°1 1°2 1°0 1°0 1°0	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 25·3 27·7 30·9	9·1 22·5 28·7 28·1 23·0 23·6 11·0 10·3 4·2 4·6 -3·4 -7·0 12·8 15·5 13·2 18·9 4·0	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; cir., cirstrat., circum., and haze; clear  Clouded till 11 <sup>h</sup> ; circum. and cumstrat.; clear  Clouded at 4 <sup>h</sup> , 9 <sup>h</sup> , and 10 <sup>h</sup> ; circum. and haze; clear  Clouded at 7 <sup>h</sup> , 12 <sup>h</sup> , and 17 <sup>h</sup> ; circum., cirstrat., and haze; clear  Clouded; circum. and strat.; halo round the moon at 12 <sup>h</sup> , diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded till 14 <sup>h</sup> ; circum. and haze; snowing from 18 <sup>h</sup> to 23 <sup>h</sup> Clear till 19 <sup>h</sup> , afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16 <sup>h</sup> and 17 <sup>h</sup> , diameter 40°, perfect  Clouded; circum., cirstrat., and haze; snow commences at 4 <sup>h</sup> and continues all night  Overcast; circum., cirstrat., and haze; slight snow from 0 <sup>h</sup> to 10 <sup>h</sup> Clouded; circum; cumstrat.; slight fall of snow from 2 <sup>h</sup> to 12 <sup>h</sup> Partially clouded; circum.; cumstrat.; after part of day clear  Clouded; circum., cirstrat., and haze; halo round the sun at 21 <sup>h</sup> and 23 <sup>h</sup> , diameter 30°  Clouded; circum., cirstrat., and haze; halo round the sun at 21 <sup>h</sup> and 23 <sup>h</sup> , diameter 30°	1'0 1'0 1'0 0'7 1'0	1'0 1'0 0'7 1'0 0'0 	0'4 0'0 0'2 0'4 	0°3 0°4 0°0 0°1 1°2 1°0 1°0 1°0 1°0 0°8 1°0 1°0	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 25·3 27·7 30·9 27·2	9.1 22.5 28.7 28.1 23.0 23.6 11.0 10.3 4.2 4.6 -3.4 -7.0 12.8 15.5 13.2 18.9 4.0 a 5.4	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; cir., cirstrat., circum., and haze; clear  Clouded till 11 <sup>h</sup> ; circum. and cumstrat.; clear  Clouded at 4 <sup>h</sup> , 9 <sup>h</sup> , and 10 <sup>h</sup> ; circum. and haze; clear  Clouded at 7 <sup>h</sup> , 12 <sup>h</sup> , and 17 <sup>h</sup> ; circum., cirstrat., and haze; clear  Clear, except light cir. and strat.; halo round the moon at 12 <sup>h</sup> , diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded till 14 <sup>h</sup> ; circum. and haze; snowing from 18 <sup>h</sup> to 23 <sup>h</sup> Clear till 19 <sup>h</sup> , afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16 <sup>h</sup> and 17 <sup>h</sup> , diameter 40°, perfect  Clouded; circum., cirstrat., and haze; snow commences at 4 <sup>h</sup> and continues all night  Overcast; circum., cirstrat., and haze; slight snow from 0 <sup>h</sup> to 10 <sup>h</sup>	1'0 1'0 1'0 0'7 1'0 0'0 1'0 0'0 1'0 0'6 0'9 1'0 1'0 0'0 1'0 1'0 1'0 1'0	1'0 1'0 0'7 1'0 0'0 	0'4 0'0 0'2 0'4 	0'3 0'4 0'0 0'1	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 35·2 34·4 25·3 27·7 30·9 27·2 29·6	9·1 22·5 28·7 28·1 23·0 23·6 11·0 10·3 4·2 4·6 -3·4 -7·0 12·8 15·5 13·2 18·9 4·0 a 5·4 a 7·0	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; cir., cirstrat., circum., and haze; clear  Clouded till 11 <sup>h</sup> ; circum. and cumstrat.; clear  Clouded at 4 <sup>h</sup> , 9 <sup>h</sup> , and 10 <sup>h</sup> ; circum. and haze; clear  Clouded at 7 <sup>h</sup> , 12 <sup>h</sup> , and 17 <sup>h</sup> ; circum., cirstrat., and haze; clear  Clouded; circum. and strat.; halo round the moon at 12 <sup>h</sup> , diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded till 14 <sup>h</sup> ; circum. and haze; snowing from 18 <sup>h</sup> to 23 <sup>h</sup> Clear till 19 <sup>h</sup> , afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16 <sup>h</sup> and 17 <sup>h</sup> , diameter 40°, perfect  Clouded; circum., cirstrat., and haze; snow commences at 4 <sup>h</sup> and continues all night  Overcast; circum., cirstrat., and haze; slight snow from 0 <sup>h</sup> to 10 <sup>h</sup> Clouded; circum; cumstrat.; slight fall of snow from 2 <sup>h</sup> to 12 <sup>h</sup> Partially clouded; circum.; cumstrat.; after part of day clear  Clouded; circum., cirstrat., and haze; halo round the sun at 21 <sup>h</sup> and 23 <sup>h</sup> , diameter 30°  Clouded; circum., cirstrat., and haze; halo round the sun at 21 <sup>h</sup> and 23 <sup>h</sup> , diameter 30°	1'0 1'0 1'0 0'7 1'0 0'0 1'0 0'6 0'9 1'0 1'0 1'0 1'0 1'0	1'0 1'0 0'7 1'0 0'0 	0'4 0'0 0'2 0'4 	0'3 0'4 0'0 0'1  1'2 1'0 1'0 0'2 1'0 1'0 1'0 0'8 1'0 0'4	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 35·2 34·4 25·3 27·7 30·9 27·2 29·6 29·8	9·1 22·5 28·7 28·1 23·0 23·6 11·0 10·3 4·2 4·6 -3·4 -7·0 12·8 15·5 13·2 18·9 4·0 22·7	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 }	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7h and 8h, diameter 30°, perfect  Clouded till 11h; cir., cirstrat., circum., and haze; clear  Clouded till 11h; cir., cum. and cumstrat.; clear  Clouded at 4h, 9h, and 10h; circum. and haze; clear  Clouded at 7h, 12h, and 17h; circum., cirstrat., and haze; clear  Clouded; circum. and strat.; halo round the moon at 12h, diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded till 14h; circum. and haze; snowing from 18h to 23h  Clear till 19h, afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16h and 17h, diameter 40°, perfect  Clouded; circum., cirstrat., and haze; snow commences at 4h and continues all night  Overcast; circum., cirstrat., and haze; slight snow from 0h to 10h  Clouded; circum; cumstrat.; slight fall of snow from 2h to 12h	1'0 1'0 1'0 0'7 1'0 0'0 1'0 1'0 0'6 0'9 1'0 1'0 1'0 1'0 1'0 1'0 1'0	1'0 1'0 0'7 1'0 0'0	0'4 0'0 0'2 0'4 	0°3 0°4 0°0 0°1 1°2 1°0 0°2 1°0 1°0 1°0 0°8 1°0 1°0 0°4 1°0	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 35·2 34·4 25·3 27·7 30·9 27·2 29·6 29·8 33·9	9.1 22.5 28.7 28.1 23.0 23.6 11.0 10.3 4.2 4.6 -3.4 -7.0 12.8 15.5 13.2 18.9 4.0 22.7 13.3	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7h and 8h, diameter 30°, perfect  Clouded till 11h; cir., cirstrat., circum., and haze; clear  Clouded till 11h; circum. and cumstrat.; clear  Clouded at 4h, 9h, and 10h; circum. and haze; clear  Clouded at 7h, 12h, and 17h; circum., cirstrat., and haze; clear  Clouded; circum. and strat.; halo round the moon at 12h, diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded till 14h; circum. and haze; snowing from 18h to 23h  Clear till 19h, afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16h and 17h, diameter 40°, perfect  Clouded; circum., cirstrat., and haze; snow commences at 4h and continues all night  Overcast; circum., cirstrat., and haze; slight snow from 0h to 10h  Clouded; circum.; cirstrat., at fler part of day clear  Clouded; circum., cirstrat., and haze; halo round the sun at 21h and 23h, diameter 30°  Clouded; circum., cirstrat., and haze; halo round the sun at 21h and 23h, diameter 30°  Clouded; circum. and haze; snowing most part of the day  Clear from 9h to 12h; overcast from 18h to 23h  Overcast from 0h to 3h; cirstrat., circum., and haze; clouded from 20h to 23h	1'0 1'0 1'0 0'7 1'0 0'0 1'0 0'6 0'9 1'0 1'0 1'0 1'0 1'0	1'0 1'0 0'7 1'0 0'0 	0'4 0'0 0'2 0'4 	0'3 0'4 0'0 0'1  1'2 1'0 1'0 0'2 1'0 1'0 1'0 0'8 1'0 0'4	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 35·2 34·4 25·3 27·7 30·9 27·2 29·6 29·8	9·1 22·5 28·7 28·1 23·0 23·6 11·0 10·3 4·2 4·6 -3·4 -7·0 12·8 15·5 13·2 18·9 4·0 22·7 13·3 13·1 10·1	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 23 24 25	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7h and 8h, diameter 30°, perfect  Clouded till 11h; circirstrat.; circum., and haze; clear  Clouded till 11h; circum. and cumstrat.; clear  Clouded at 4h, 9h, and 10h; circum. and haze; clear  Clouded at 7h, 12h, and 17h; circum., cirstrat., and haze; clear  Clouded at 7h, 12h, and 17h; circum., cirstrat., and haze; clear  Clouded; circum. and strat.; halo round the moon at 12h, diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded till 14h; circum. and haze; snowing from 18h to 23h  Clear till 19h, afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16h and 17h, diameter 40°, perfect  Clouded; circum., cirstrat., and haze; snow commences at 4h and continues all night  Overcast; circum., cirstrat., and haze; slight snow from 0h to 10h  Clouded; circum; cirstrat., slight fall of snow from 2h to 12h  Partially clouded; circum.; cumstrat.; after part of day clear  Clouded; circum, cirstrat., and haze; halo round the sun at 21h and 23h, diameter 30°  Clouded; circum, cirstrat., and haze; halo round the sun at 21h and 23h, diameter 30°  Clouded; circum, cirstrat., and haze; halo round the sun at 21h and 23h, diameter 30°  Clouded; circum, cirstrat., and haze; halo round the sun at 21h and 23h, diameter 30°  Clouded; circum, cirstrat., and haze; halo round the sun at 21h and 23h, diameter 30°  Clouded; circum, cirstrat., circum, cirstrat.; circum, and haze; clear	1'0 1'0 1'0 0'7 1'0 0'0 1'0 1'0 0'6 0'9 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0	1'0 1'0 0'7 1'0 0'0	0'4 0'0 0'2 0'4 	0°3 0°4 0°0 0°1	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 35·2 34·4 25·3 27·7 30·9 27·2 29·6 29·8 33·9 26·9 27·0 21·2	9·1 22·5 28·7 28·1 23·0 23·6 11·0 10·3 4·2 4·6 -3·4 -7·0 12·8 15·5 13·2 18·9 4·0 22·7 13·3 13·1 10·1 0·2	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 23 24 25 26	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7h and 8h, diameter 30°, perfect  Clouded till 11h; cir., cirstrat., circum., and haze; clear  Clouded at 4h, 9h, and 10h; circum. and haze; clear  Clouded at 7h, 12h, and 17h; circum., cirstrat., and haze; clear  Clouded at 7h, 12h, and strat.; halo round the moon at 12h, diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded; circum. and haze; snowing from 18h to 23h  Clear till 19h, afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16h and 17h, diameter 40°, perfect  Clouded; circum., cirstrat., and haze; snow commences at 4h and continues all night  Overcast; circum., cirstrat., and haze; slight snow from 0h to 10h  Clouded; circum; cumstrat.; slight fall of snow from 2h to 12h  Partially clouded; circum.; cumstrat.; after part of day clear  Clouded; circum., cirstrat., and haze; halo round the sun at 21h and 23h, diameter 30°  Clouded; circum., cirstrat., and haze; halo round the sun at 21h and 23h, diameter 30°  Clouded; circum. and haze; snowing most part of the day  Clear from 9h to 12h; overcast from 18h to 23h  Overcast from 0h to 3h; cirstrat., circum., and haze; clouded from 20h to 23h  Clouded at 12h; circum., cir., and haze; snow squalls  Clouded from 9h to 14h; circum., cirstrat., and haze; snowing slightly  Generally clear; light circum., cirstrat., and haze; snowing slightly  Generally clear; light circum., dispersed from 18h to 23h	1'0 1'0 1'0 0'7 1'0 0'0 1'0 1'0 0'6 0'9 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0	1'0 1'0 0'7 1'0 0'0	0'4 0'0 0'2 0'4 	0°3 0°4 0°0 0°1	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 35·2 34·4 25·3 27·7 30·9 27·2 29·6 29·8 33·9 26·9 27·0 21·2 17·8	9·1 22·5 28·7 28·1 23·0 23·6 11·0 10·3 4·2 4·6 -3·4 -7·0 12·8 15·5 13·2 18·9 4·0 22·7 13·3 13·1 10·1 0·2 -11·7	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 23 24 25 26 27	Clouded all day; circum., cirstrat., and haze Clouded; circum. and cirstrat.; lunar halo at 7 <sup>h</sup> and 8 <sup>h</sup> , diameter 30°, perfect  Clouded till 11 <sup>h</sup> ; cir., cirstrat., circum., and haze; clear  Clouded at 4 <sup>h</sup> , 9 <sup>h</sup> , and 10 <sup>h</sup> ; circum. and haze; clear  Clouded at 7 <sup>h</sup> , 12 <sup>h</sup> , and 17 <sup>h</sup> ; circum., cirstrat., and haze; clear  Clear, except light cir. and strat.; halo round the moon at 12 <sup>h</sup> , diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded till 14 <sup>h</sup> ; circum. and haze; snowing from 18 <sup>h</sup> to 23 <sup>h</sup> Clear till 19 <sup>h</sup> , afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16 <sup>h</sup> and 17 <sup>h</sup> , diameter 40°, perfect  Clouded; circum., cirstrat., and haze; snow commences at 4 <sup>h</sup> and continues all night  Overcast; circum., cirstrat., and haze; slight snow from 0 <sup>h</sup> to 10 <sup>h</sup>	1'0 1'0 1'0 0'7 1'0 0'0 1'0 1'0 0'6 0'9 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0	1'0 1'0 0'7 1'0 0'0	0'4 0'0 0'2 0'4 	0'3 0'4 0'0 0'1	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 25·3 27·7 30·9 27·2 29·6 29·8 33·9 27·0 21·2 17·8 10·9	9·1 22·5 28·7 28·1 23·0 23·6 11·0 10·3 4·2 4·6 -3·4 -7·0 12·8 15·5 13·2 18·9 4·0 22·7 13·3 13·1 10·1 0·2 -11·7 -16·4	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 23 24 25 26	Clouded all day; circum., cirstrat., and haze  Clouded; circum. and cirstrat.; lunar halo at 7h and 8h, diameter 30°, perfect  Clouded till 11h; cir., cirstrat., circum., and haze; clear  Clouded at 4h, 9h, and 10h; circum. and haze; clear  Clouded at 7h, 12h, and 17h; circum., cirstrat., and haze; clear  Clouded at 7h, 12h, and strat.; halo round the moon at 12h, diameter 40°, perfect  Clouded; circum. and haze; snowing slightly all day  Clouded; circum. and haze; snowing from 18h to 23h  Clear till 19h, afterwards clouded; circum. and haze  Clouded; circum. and haze; halo round the moon at 16h and 17h, diameter 40°, perfect  Clouded; circum., cirstrat., and haze; snow commences at 4h and continues all night  Overcast; circum., cirstrat., and haze; slight snow from 0h to 10h  Clouded; circum; cumstrat.; slight fall of snow from 2h to 12h  Partially clouded; circum.; cumstrat.; after part of day clear  Clouded; circum., cirstrat., and haze; halo round the sun at 21h and 23h, diameter 30°  Clouded; circum., cirstrat., and haze; halo round the sun at 21h and 23h, diameter 30°  Clouded; circum. and haze; snowing most part of the day  Clear from 9h to 12h; overcast from 18h to 23h  Overcast from 0h to 3h; cirstrat., circum., and haze; clouded from 20h to 23h  Clouded at 12h; circum., cir., and haze; snow squalls  Clouded from 9h to 14h; circum., cirstrat., and haze; snowing slightly  Generally clear; light circum., cirstrat., and haze; snowing slightly  Generally clear; light circum., dispersed from 18h to 23h	1'0 1'0 1'0 0'7 1'0 0'0 1'0 1'0 0'6 0'9 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0	1'0 1'0 0'7 1'0 0'0	0'4 0'0 0'2 0'4 	0°3 0°4 0°0 0°1	22·2 32·5 41·9 40·1 40·0 39·2 40·0 20·9 16·5 28·0 23·7 24·4 35·2 34·4 25·3 27·7 30·9 27·2 29·6 29·8 33·9 26·9 27·0 21·2 17·8	9·1 22·5 28·7 28·1 23·0 23·6 11·0 10·3 4·2 4·6 -3·4 -7·0 12·8 15·5 13·2 18·9 4·0 22·7 13·3 13·1 10·1 0·2 -11·7	

<sup>&</sup>lt;sup>a</sup> Taken from the lowest reading of the Standard Thermometer.

Toronto Mean	Weather and Phenomena,	E	xtent of	Cloudy S	ky.	Max.	Min.	Rain.
Time.		3	9	15	21	Therm.	Therm.	Kam.
D. 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	MARCH.  Partially clouded till 7h; cir., cirstrat., and haze; afterwards clear - Clouded from 4h to 10h; cir., cirstrat., and haze; clear; halo round the moon, diameter 40°- Clouded from 21h to 23h; cumstrat., circum., and cirstrat.  Nearly clear till 8h, then clouded; circum., cirstrat., and haze Clouded till 3h; circum., cirstrat., and haze; cleared up  Clouded; circum. and haze; snow from 0h to 3h  Clear till 5h; clouded; circum., cirstrat., and haze Clear, except light cirstrat. round horizon  Clear till 6h; clouded; circum., cirstrat., and haze; halo round the moon from 9h to 15h, diameter 30°  Clouded; circum., cumstrat., cirstrat., and haze; slight rain at 2h, 3h, and from 12h to 17h Clouded; circum. and haze; rain; mist rising from the ground  Clouded; circum. and haze; slight snow from 4h to 9h  Clouded till 3h; circum., cumstrat., and haze; clear  Clouded ald day; circum., cumstrat., and haze; faint streamers in N. at 9h Clouded ald day; circum., cumstrat., and haze  Clouded at 6h, 13h, 15h, and 17h; circum., cirstrat., and haze; halo round the sun at 1h, diameter 35°  Clouded; circum., cirstrat., and haze; rain from 5h to 11h; solar halo, diameter 30°  Clouded; circum., cirstrat., and haze; rain from 5h to 3h  Clouded; circum. and haze; rain Clouded; circum. and haze; rain from 5h to 8h  Clouded; circum. and haze; rain from 5h to 8h  Clouded; circum. and haze; rain from 5h to 8h  Clouded; circum. and haze; rain from 5h to 8h  Clouded; circum. and haze; rain from 5h to 8h  Clouded; circum. and haze; rain from 5h to 8h  Clouded; circum. and haze; rain from 5h to 8h	0.2 0.5 0.4 0.1 1.0 1.0 0.0 0.0 0.0 1.0 1.0	0.0 0.7 0.0 1.0 0.0 1.0 0.0 1.0 1.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 1	0.0 0.0 0.3 1.0 0.3 1.0 0.2 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0		20.7 27.4 30.4 38.9 43.9 31.0 31.2 46.2 38.1 40.8 40.7 44.1 45.4 40.0 38.9 35.2 36.4 40.7 49.6 48.1 38.4 40.7 47.4 47.4 47.4 47.4 47.4 47.4 47	0 10·0 8·3 9·3 14·6 26·9 8·8 10·8 22·7 28·3 24·7 28·8 33·0 34·2 28·4 22·8 20·4 20·8 27·7 27·2 24·1 24·2 34·1 37·3 35·2 35·3 33·8 31·7 19·7 28·2	In
21 22 23 24 25 26 27 28 29	Clear and clouded alternately; circum. and cumstrat.; auroral light in N. at 12 <sup>h</sup> {  Clouded from 6 <sup>h</sup> to 9 <sup>h</sup> ; cir. and haze; clear	0.0 1.0 1.0	0.0 0.0 0.0 0.0 0.0 1.0 1.0 0.0 1.0 0.0 1.0 1	0.0 0.0 0.0 0.0 1.0 1.0 1.0 0.4 0.3 0.0 0.4 1.0 0.2 0.0 1.0 0.8 1.0 0.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 1	0.0 0.0 0.0 0.5 1.0 1.0 0.6 0.7 	43 · 9 43 · 1 43 · 0 46 · 3 50 · 4 50 · 4 50 · 4 50 · 4 50 · 1 43 · 2 49 · 1 43 · 8 56 · 0 36 · 6 39 · 3 45 · 7 47 · 0 58 · 0 55 · 5 56 · 5 56 · 6 56 · 6 56 · 6 57 · 8 58 · 6 59 · 8 51 · 6 59 · 8 51 · 6 51 · 6 52 · 6 53 · 6 54 · 6 55 · 6 56 · 6 57 · 6 58 · 6 59 · 8 51 · 6 51 · 6 52 · 7 53 · 7 54 · 6 56 · 6 57 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7 58 · 7	26·7 25·7 29·5 30·5 31·7 44·1 33·4 24·2 36·1 35·9 31·2 24·4 26·9 29·4 33·5 40·2 29·2 41·8 42·2 43·7 50·0 40·7 41·0 36·2	0·19 0·06 

Coronto		E	xtent of (	Cloudy Sl	ky.	Max.	Min.	
Mean Time.	Weather and Phenomena.	3	9	15	21	Therm.		Rain
D.	MAY.						0	In.
1	Clouded all day; circum., cirstrat., and haze; rain from 0h to 15h -	1.0	1.0	1.0	1.0	59.0	50.8	0.15
$\left\{\begin{array}{c}2\\3\end{array}\right\}$	Clouded; circum., cumstrat., and haze; auroral light at 12h	0.4	0.5	0.4	1.0	58.0 63.0	51.0 42.7	-
ر م	Clouded; cirstrat. and haze; solar halo; lunar halo at 9h, diameter 40°; auroral light \		0.4	0.0		1	Ī	_
4 {	in N. from $9^h$ to $11^h$	0.4			1.0	64.0	39.8	_
5 6	Clouded; circum., cirstrat., and haze; squall, lasting only a few minutes  Clear	0.0	0.0	$\frac{0.0}{1.0}$	0.4	67.6 64.8	40°0 51°0	_
7	Clouded; cir., circum., and haze till 10h; afterwards clear	1.0	0.7	0.3	1.0	57.5	41.3	_
8 {	Clouded; circum, cirstrat., and haze; rain from 9h to 17h; solar halo, diameter 35°, perfect and very bright	1.0	1.0	1.0	1.0	57.8	47.8a	0.19
9 }	Clouded; circum. and haze; rain	1.0	1.0	_	_	62.4	53.9 a	1.48
10 子	· ·			0.0	1.0	59.3	54.5	
$\begin{array}{c} 11 \\ 12 \end{array}$	Clouded; circum. and cirstrat.; clear; auroral light at 10 <sup>h</sup> Clear; clouded at 15 <sup>h</sup> , 16 <sup>h</sup> , and 17 <sup>h</sup> , with circum. and haze	$0.1 \\ 0.1$	0.3	$1.0 \\ 1.0$	$\begin{array}{c c} 0.3 \\ 1.0 \end{array}$	57.6 48.5	33.8	_
13	Clouded; circum. and haze; showers of rain	1.0	1.0	1.0	0.8	64'0	38.6	0.0
14 15	Clouded; circum., cirstrat., and haze; rain from 13 <sup>h</sup> to 17 <sup>h</sup>	0.8	1.0	1.0	0.8	71.7	54.0 49.8	0.3
16 א		0.6	0.0	_		62.8	49 8	1 0
$17 \ $	Clear; clouded; circum. and haze; rain			1.0	0.4	64.0	43.0	
18 19	Clouded; after part clear	$\frac{0.0}{0.0}$	$0.0 \\ 0.0$	0.0	0.0	69.4 56.0	52°0 34°9	_
20	Clear	0.6	0.0	0.0	0.0	56.3	37.7	_
$\begin{array}{c} 21 \\ 22 \end{array}$	Clear	$\frac{0.4}{1.0}$	$\begin{bmatrix} 0.5 \\ 1.0 \end{bmatrix}$	0.0	$0.4 \\ 0.4$	66.5 51.6	34'3 33'1	0.2
$\left. \begin{array}{c} 23 \\ 24 \end{array} \right\}$	Clouded; circum., cumstrat., and haze; sheet lightning in S. and S.W.; auroral light in N. from 12 <sup>h</sup> to 16 <sup>h</sup>	1.0	0.5	$\frac{1}{0.4}$	1.0	58.6 70.8	44.2 47.0	0.10
25	Clouded; circum. and haze; rain from 1 <sup>h</sup> to 2 <sup>h</sup> ; sheet lightning from 9 <sup>h</sup> to 14 <sup>h</sup>	1.0	0.4	0.9	0.0	68.3	51.1	_
$\begin{array}{c} 26 \\ 27 \end{array}$	Clouded; circum.; sheet lightning from 9 <sup>h</sup> to 14 <sup>h</sup> in S.E. and S. and W.  Clouded; circum. and cumstrat. dispersed	0.6 0.2	0.4   0.2	$0.3 \\ 0.3$	$0.1 \\ 0.6$	74°3 77°0	57.0 56.8	_
28	Clouded; circum, and cumstrat, dispersed	0.6	0.3	0.2	0.0	79.7	54.8	-
29 30 ๅ	Clouded; circum., cumstrat., and haze; lightning, thunder, and rain from 10h to 17h	0.8	$\begin{bmatrix} 1.0 \\ 0.7 \end{bmatrix}$	1.0	1.0	73.6 71.8	51.2 59.3	0.03
31 }	Clouded; circum. and cumstrat.; auroral light in N. at 10h, 13h, and 14h {	_	_	0.0	1.0	74.8	54.0	
			ļ					
	JUNE.			Ĺ				<i>i</i> 5
1	Clouded; circum., cum., and cumstrat.; heavy showers; loud thunder	0.9	0.7	1.0		77.0	~ ~	0.17
2	Clouded; circum. and haze; rain	0.9	0.0	0.0	1.0	75°3   74°5	55.7 60.1	0.1
3 4	Clouded; circum., cirstrat., and haze; thunder and rain Clouded; circum., cirstrat., and haze; drizzling rain; distant thunder	0.3	1.0	1.0	1.0	69.5	48.9	0.5
5	Clouded; circum., cum., and haze; clear; rain -	1.0	$\begin{vmatrix} 1.0 \\ 0.2 \end{vmatrix}$	$0.3 \\ 1.0$	1.0 0.4	72.6 71.0	59.7 53.9	0.17020
$\left. egin{array}{c} 6 \\ 7 \end{array}  ight\}$	Clouded to 5h; circum. and cum.; clear; slight rain -	1.0	0.0			61.3	42.5	_
8	Clear	$\phantom{00000000000000000000000000000000000$	<u></u>	0.1	0.3	59.7	39.1	
9	Clear and unclouded	0.0	$\begin{bmatrix} 0.0 \\ 0.0 \end{bmatrix}$	$\begin{vmatrix} 0.0 \\ 0.0 \end{vmatrix}$	$\begin{bmatrix} 0.0 \\ 0.0 \end{bmatrix}$	64.0 68.5	42.5 43.5	_
10 11	Clouded; circum., cir., and haze; lunar halo from 12 <sup>h</sup> to 14 <sup>h</sup> Clouded; circum. and haze till 8 <sup>h</sup> ; hazy round horizon	0.0	1.0	1.0	1.0	71.4	44.5	
12	Hazy round horizon	0.0	$\begin{array}{c} 0.0 \\ 0.0 \end{array}$	$\begin{bmatrix} 0.0 \\ 0.0 \end{bmatrix}$	0.8 0.0	76°2 71°1	52.6 49.0	_
$\left. \begin{array}{c} 13 \\ 14 \end{array} \right\}$	Clouded; circum., cirstrat., and haze	1.0	0.4	—		64.0	51.8	_
15	Clouded; circum., cirstrat., and haze	0.7	1.0	1.0	$0.6 \\ 0.8$	67.4 72.8	53.5 56.3	_
16	Clear till 17h; clouded; circum.; clear spaces	0.0	0.7	0.0	0.0	78.7	56.9	_
17 18	Clouded; circum., cir., and haze; sheet lightning in S.S.W. and N.W. horizons from 12 <sup>h</sup> to 14 <sup>h</sup> Clouded; circum., cirstrat., and haze; thunder and lightning and heavy rain	0.2	0.8	1.0	0.8	70.8	49.7	
19	Clouded; cumstrat. and circum.; heavy rain; rainbow in E., and sheet lightning -	$\begin{array}{c c} 0.9 \\ 0.4 \end{array}$	$\begin{array}{c c} 0.3 & \\ 0.7 & \\ \end{array}$	1.0	1.0	77.6 78.0	58.9 62.2	0.06
$\left. egin{array}{c} 20 \ 21 \end{array}  ight\} \left $	Clouded; circum, and cumstrat.; rain	1.0	1.0			81.0	58.9	
22	Clouded; circum., cirstrat., and haze; slight fall of rain	1.0	0.8	1.0	0.4	62.5 58.4	49.7 48.7	0.15
'	Generally clear	0.0	0.0	0.0	0.0	70.0	50.2	_
23	Clear all day -	0.0	0.0	0.0	0.0	75.5	57.0	
$\begin{bmatrix} 24 \\ 25 \end{bmatrix}$	Clear all day - Clouded at 9 <sup>h</sup> , 15 <sup>h</sup> , and 17 <sup>h</sup> ; cir., cirstrat., circum., and haze	0.0			1	00.0		
24 25 26	Clear all day - Clouded at 9 <sup>h</sup> , 15 <sup>h</sup> , and 17 <sup>h</sup> ; cir., cirstrat., circum., and haze Clouded; cir., cirstrat., and haze	$\begin{vmatrix} 1.0 \\ 0.0 \\ 0.0 \end{vmatrix}$	1.0	1.0	1.0	80.2	63.0	
24 25 26 27	Clouded at 9 <sup>h</sup> , 15 <sup>h</sup> , and 17 <sup>h</sup> ; cir., cirstrat., circum., and haze Clouded; cir., cirstrat., and haze	0.0		- 1.0 1.0	1.0 1.0	84.2 81.0	63.0 63.0 59.5	
24 25 26	Clouded at 9h, 15h, and 17h; cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., cir., c	$\begin{bmatrix} 1.0 \\ 0.0 \end{bmatrix}$	1.0	1.0	1.0	84.2	63.0 63.0	

 $<sup>^{\</sup>mathrm{a}}$  Taken from the lowest reading of the Standard Thermometer.

Toronto		Ex	tent of C	loudy Sk	у.	Max.	Min.	
Mean Time.	Weather and Phenomena.	3	9	15	21	Therm.	Therm.	Rain.
D.  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	JULY.  Clear till 18h; clouded; cumstrat, and circum.  Clear till 18h; clouded; circum, and cirstrat.  Clouded till 11h; circum, cirstrat, and haze; clear  Clouded till 3h; circum, cirstrat, and cir.; clear; sheet lightning in S. horizon at 14h - {  Clouded; cir., cirstrat, and haze; solar halo, diameter 35° -    Clear till 14h; clouded; circum, and haze  Clouded till 7h; circum, cirstrat, and haze; slight rain  Clear till 18h; clouded; circum, cirstrat, and haze; distant thunder and rain  Clouded; circum.; cumstrat, heavy squall of wind and rain and hail at 0h and 4h; sheet lightning and distant thunder  Clouded till 12h; circum, cirstrat, and haze; rain; distant thunder  Clear till 18h; clouded; circum, and cirstrat.; heavy rain and sudden squall  Clear, except circum, and cumstrat.  Clear, except circum, and cumstrat.  Clear to 14h; clouded; circum, and cirstrat.  A few clouds round horizon; circum, and cumstrat.  Clear; a few circum, and cirstrat. round horizon  Clouded; circum. and cirstrat.; rain from 14h to 17h  Clouded; circum, and haze; rain; auroral light in N. at 10h  Clear till 17h; clouded; circum, and cumstrat.  { Clear till 18h; clouded; circum, and cumstrat.  Clear till 17h; clouded; circum, and cumstrat.  Clear till 18h; clouded; cirstrat. and haze  Clouded; circum, and cirstrat.; sheet lightning; slight rain  Clouded; circum, cum, and cirstrat.; heavy rain; sheet lightning and thunder  Clouded; circum, cum, and cirstrat.; heavy rain; sheet lightning and thunder  Clouded; circum, and cirstrat.; sheav rain; sheet lightning and thunder  Clouded; circum, and cirstrat.; heavy rain; sheet lightning and thunder	0.2 0.7 0.0 0.8 0.7 0.3 0.7 0.6 0.8 0.9 0.7 0.2 0.9 0.7 1.0 1.0 1.0 1.0 0.6 0.7 0.6 0.7 0.6 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7	0'7 '0'0 1'0 0'2	0.0 0.0 0.4 	0.5 0.2 0.7 0.0 0.4 0.9 0.0 0.0 0.9 0.2 0.8 0.6 1.0 0.1 0.2 0.5 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	83·1 79·2 77·0 75·8 80·1 86·8 82·3 78·2 81·4 81·1 94·6 87·6 65·7 76·5 77·6 76·5 77·0 76·8 81·8 81·8 81·8 75·7 76·5 77·0 76·8 81·8 81·8 81·8 81·8 81·8 81·8 81·8 8	62:6 63:4 57:0 54:2 61:5 61:8 55:7 55:1 58:6 67:7 68:8 54:5 44:5 61:2 57:0 59:7 56:4 61:2 57:7 55:5 61:2 61:3 61:3 61:3 61:3 61:3 61:3 61:3 61:3	In. 0'01
1 } 3 4 5 6 7 8 } 10 11 12	Generally clear  Generally clear  Clouded from 13¹ to 15⁵; afterwards clear  Clear to 14ʰ; clouded; circum., cirstrat., and haze  Clouded to 14ʰ; clouded; cir., cirstrat., and haze  Clouded all day; cir., circum., and haze  Clouded till 11ʰ; cir. cum., cirstrat., and haze; rain at intervals; vivid lightning; thunder {  Clouded; circum. and haze till 4ʰ; clear  Generally clear  Clouded; circum., cumstrat., and haze  Clouded; circum., cum., and haze; heavy shower of rain; lightning and thunder; auroral light in N; lunar halo at 15ʰ  Clouded; cir. and circum. dispersed; clear  Clear; sheet lightning; auroral light in N. at 13ʰ and 15ʰ  Generally clear  Clear, except circum. and cirstrat. dispersed round horizon  Clouded; circum., cirstrat., and haze  Clouded; circum., cirstrat., and haze; rain  Generally clouded; circum.; cirstrat.; a few clear spaces  Clouded; circum., cirstrat., and haze; rain; cleared up  Unclouded  Unclouded  Partially clouded; cir. and cirstrat. to 7ʰ; clear  Clouded; circum. and cirstrat.; solar halo; lightning, thunder, and rain from 14ʰ to 16ʰ  Clouded; circum. strat. and circum.; aurora at 10ʰ; sheet lightning  Clouded; cir., cirstrat., and haze; storm, lightning, thunder, and rain, from 0ʰ to 3ʰ  Generally clear	0°1	0.0 0.0 0.0 0.0 0.0 1.0 1.0 1.0		0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.5 0.0 0.0 0.6 0.0 0.6 0.5 1.0 0.0 0.6 0.5 1.0 0.0 0.6 0.5 0.6 0.5	76.3 77.2 77.0	53.5 56.5 58.5 65.0 61.4 62.0 65.8 67.0 62.5 53.2 7 66.0 61.5 57.8 67.6 59.5 49.6 61.8 57.3 62.4 56.0 55.9 52.0 55.9 57.7 61.0 69.7 69.7 69.7 69.7	0.04 0.06 0.16

<sup>&</sup>lt;sup>a</sup> Taken from the highest reading of the Standard Thermometer. <sup>b</sup> The Max. Therm. for this month are the highest readings of the Standard Thermometer.

Toronto		Ex	tent of C	loudy Sk	y.	Max.	Min.	
Mean Time.	Weather and Phenomena,	3	9	15	21	Therm.	Therm.	Rain.
D.  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	Clouded till 12 <sup>h</sup> ; circum., cum -strat., and haze; lightning, thunder, and rain  Clear all day  Clouded; circum., cumstrat., and haze; auroral light in N. at 11 <sup>h</sup> Clouded all day; cirstrat., cir., and haze; rain  Clouded; circum. and cumstrat.; clear  Clouded; circum. and cumstrat.; rain  Clouded; circum. and cumstrat.; clear, brilliant aurora from 9 <sup>h</sup> to 17 <sup>h</sup> Generally clear; auroral light in N. from 13 <sup>h</sup> to 15 <sup>h</sup> Generally clear; sheet lightning and thunder from 7 <sup>h</sup> to 13 <sup>h</sup> Clouded; circum. and cumstrat.; rain greater part of day  Clouded; circum. and haze; rain ceased at 8 <sup>h</sup> Clear to 17 <sup>h</sup> ; clouded; circum and cumstrat.	0'1 1'0 0'9 1'0 0'1 0'8 0'1 0'2 1'0 0'1 0'8 0'0 0'8 1'0 0'8 1'0 0'8 1'0 0'8 1'0 0'7 0'0	0.0 1.0 1.0 0.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.8 1.0 0.8 1.0 0.8 0.3 1.0 0.2 0.6 1.0 0.6 1.0 0.0 0.0 1.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 1.0 0.8 0.3 0.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0	81·2 84·3 82·2 74·8 78·2 79·6 74·1 83·4 70·5 65·5 68·4 79·6 82·2 66·4 66·0 63·6 67·4 72·6 70·7 61·3 55·2 59·2 67·9	60.5 65.0 69.0 66.8 70.0 60.0 64.8 60.0 51.2 57.7 58.5 66.1 60.3 64.0 54.7 44.1 52.0 56.2 46.2 46.8 51.2 38.3 43.6 59.2 49.0 45.7 37.3 51.2 54.9	0.10 0.25 1.80 0.07 0.14 0.14 0.15 0.15 0.15 0.16 0.16 0.16 0.16 0.16 0.16 0.16 0.16
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Nov. 1 }	OCTOBER.  Clouded; cumstrat., cirstrat., and circum.; rain at 7h and 12h Clouded; circum. and haze; rain; auroral light in N. at 8h and 9h  Clouded; circum. and cumstrat.; lunar halo at 8h and 9h  Clear all day  Clear from 13h to 17h; clouded; detached circum. Clouded; circum. and haze; sheet lightning and rain from 7h to 12h  Clouded; circum. strat., circum., and haze; rain, thunder, and lightning  Clouded till 8h; cumstrat. and circum.; rain; aurora from 11h to 15h  Generally clear; aurora from 14h to 16h  Clouded; circum., cirstrat., and haze; rain Clouded; circum., cirstrat., and haze; rain Clouded; circum., cirstrat.; rain Clouded; circum., cirstrat.; rain Clouded; circum., cirstrat., and haze; rain, lightning, and thunder  Clouded; circum., cirstrat., and haze; snow  Clouded; circum., cir., and haze; alear of day Clouded; circum., cir., and haze; alear of day Clouded; circum., cirstrat., and haze; afew clear spaces Clouded; circum. and haze; clear  Clouded; circum. and haze; clear  Clouded; circum. and haze; rain from 10h to 14h  Clouded; circum. and haze; rain Clouded; circum. and haze; rain Clouded; circum. and haze; rain Clouded; circum. and haze; rain Clouded; circum. and haze; rain Clouded; circum. and haze; rain Clouded; circum. and haze; rain Clouded; circum. and haze; rain Clouded; circum. and haze; rain Clouded; circum. and haze; rain Clouded; circum. and haze; rain Clouded; circum. and haze; rain Clouded; circum. and haze; rain	1'0 0'3 0'6 0'0 0'5 0'8 1'0 1'0 0'4 0'7 1'0 0'8 1'0 1'0 0'8 1'0 0'4 0'9 0'8 0'1 1'0 1'0 1'0	1'0 0'1 1'0 0'0 0'7 1'0 1'0 0'0 0'0 1'0 1'0 1'0 0'2 0'6 0'1 0'3 0'6 0'2 0'2 0'9 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0	1.0 0.1 	1.0 0.4 	69.5 54.2 54.6 55.5 65.5 66.2 69.2 64.4 70.1 48.4 53.8 49.1 52.0 58.6 241.1 48.4 43.5 43.7 44.5 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1 43.1	50.0 45.0 37.5 40.3 39.5 40.3 39.5 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3 40.3	0·07

Toronto	Word and 1 Di	Ex	tent of C	loudy Sk	у.	Mon	Min	D.
Mean Time.	Weather and Phenomena.	3	9	15	21	Max. Therm.	Min. Therm.	Rain.
D.  2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 24 25 26 27 28 29 30	NOVEMBER.  Clouded; circum. and cirstrat.; rain at intervals Clear Clear all day Clear  Clouded; circum. and cirstrat.; raining most part of the day  Clouded; circum., cirstrat., and haze; thick fog Clouded; circum., cirstrat., and haze; slight rain Clouded; circum., cirstrat., and haze; rain most part of the day  Clouded in day; circum., cirstrat., and haze; slight rain Clouded; circum., cirstrat., and haze; slight rain Clouded; circum., cirstrat., and haze; slight rain Clouded; circum., cirstrat., and haze; slight rain Clouded; circum., cirstrat., and haze; showers Clouded all day; circum., cirstrat., and haze; rain Clouded all day; rain Clouded; circum., and cumstrat.; a few clear spaces Clouded; circum., and cirstrat.; slight rain at 9h and 11h  Clouded; circum., cirstrat., and haze; sleet and rain Clouded; circum., cirstrat., and haze; snow; lunar halo, diameter about 45° Clouded; circum., and cirstrat., snow; lunar halo, diameter about 45° Clouded; circum. and haze; a few particles of snow Clouded; circum. and haze; a few particles of snow Clouded; cirstrat., circum. and haze; rain from 10h to 15h  Clouded; cirstrat. and haze; imperfect halo round the moon at 5h  Clouded; circum. and haze; imperfect halo round the moon at 5h  Clouded; circum. and haze; imperfect halo round the moon at 5h  Clouded; circum. and haze; imperfect halo round the moon at 5h	1'0 1'0 0'0 0'0 0'1 1'0 1'0 1'0 1'0 1'0	1'0 1'0 0'0 0'0 0'0 1'0 1'0 1'0 1'0 1'0	0'4 1'0 0'0 0'0 0'0 1'0 1'0 1'0 1'0 1'0 1'0	1'0 0'4 0'0 1'0 0'7 1'0 1'0 1'0 1'0 1'0 0'5 0'5 1'0 0'2 1'0 1'0 1'0 1'0	\$\\ \frac{49.0}{53.3}\$ \$\\ 53.10\$ \$\\ 50.00\$ \$\\ 50.90\$ \$\\ 51.22\$ \$\\ 55.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$ \$\\ 48.60\$	341.2 40.5 35.7 29.7 34.1 48.7 45.3 49.5 50.5 41.8 42.6 41.2 39.0 41.7 39.8 34.6 33.4 32.1 19.3 18.0 29.5 26.0 24.7	In. 0 · 29
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 } 25 27 28 29 30 31	DECEMBER.  Clouded all day; circum. and haze; rain from 14h to 17h In general clouded; circum. oirstrat., and haze; rain Generally clouded; circum. and cumstrat.; particles of snow Clouded; circum. cir., and haze; lunar halo, diameter 40°, perfect Clouded; circum, cir., and haze; rain from 8h to 13h Clouded; circum, cumstrat., and haze Clouded; circum, cumstrat., and haze Clouded; circum, cumstrat., and haze; snow Clouded; circum, cumstrat., and haze; snow Clouded; circum, cumstrat., and haze; at intervals nearly clear, then suddenly clouded Clouded till 12h; cumstrat., circum, and haze; slight snow  Clear; strat. in horizon Clear; strat. in horizon Clear; strat. in horizon Clear greater part of day; clouded at 21h Clouded till 4h; cimstrat., cirstrat. and haze; clear Clouded; cumstrat., cirstrat., and haze; clear Clouded till 18h; cimcum. and haze; clear Clouded till 19h; clouded; cir., circum, and haze; snow at 16h and 17h Clouded till 11h; cumstrat., circum, and haze; snow at 19h and 10h Clear to 12h; clouded; circum. and haze; auroral light in N. at 10h and 11h Clouded; circum., cirstrat., and haze Clouded; circum., cirstrat., and haze Clouded; circum., cirstrat., and haze Clouded; circum., cirstrat., and haze Clouded; circum., cirstrat., and haze Clouded; circum., cirstrat., and haze Clouded; circum., cirstrat., and haze Clouded; circum., cirstrat., and haze Clouded; circum., cirstrat., and haze Clouded; circum., cirstrat., and haze Clouded; circum., cirstrat., and haze Clouded; circum., cirstrat., and haze; rain Clouded all day; circum., cirstrat., and haze; rain	1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0 1'0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1.0 1.0 0.1 1.0 1.0 0.8 1.0 0.1 	1.0 1.0 0.1 1.0 1.0 0.6 1.0 0.1 0.1 0.0 0.3 1.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	28 · 8 32 · 8 49 · 2 33 · 7 34 · 0 33 · 6 39 · 9 37 · 4 31 · 8 29 · 2 21 · 6 20 · 0 23 · 0 26 · 9 27 · 8 29 · 6 27 · 5 25 · 8 23 · 6 35 · 6 36 · 0 35 · 4 49 · 1 35 · 4 39 · 9	13·3 24·7 33·1 25·0 29·1 23·5 34·6 30·9 28·1 23·2 16·1 16·0 11·2 7·9 10·9 21·3 12·5 25·0 23·7 18·9 13·4 30·8 14·9 29·7 31·0 18·3 27·7 33·2	0·49 0·50 0·14 0·05 0·05 0·25

Toronto Mean	Wash 1 Di	Ex	tent of (	Cloudy Sl	cy.	Max.	Min.	
Time.	Weather and Phenomena.	3	9	15	21	Therm.		Rain.
b.  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	JANUARY.  Clouded all day; circum. and haze; rain from 3h to 11h  Clouded; dense circum., cir., and haze; lunar halo, diameter 40°, bright and perfect  Clouded is to 18h; circum., cirstrat., and haze; rain and sleet; remainder clear  Partly clouded; cir. and circum.; lunar halo, diameter 35°, perfect  Clouded all day; circum., cir.strat., and haze; snow at 16h and 17h  Clouded to 8h; circum. and cumstrat.; snow; remainder partly clear  Clouded; circum., cumstrat., and haze; clear  Clouded ill 11h; circum., cirstrat., and haze; clear  Clouded fon 13h to 23h; circum., cirstrat., and haze; remainder of the day clear  Clouded from 13h to 23h; circum., cirstrat., and haze; remainder of the day clear  Clouded all day; circum., cumstrat., and cirstrat.; rain  Clouded all day; cumstrat. and circum.; rain; sheet lightning in S.W.  Clcuded; circum. and cumstrat.; snow; clear from 5h to 12h  Clouded; circum., cirstrat., and haze  Clear; some circum. and cumstrat. dispersed  Clear; cir.; lunar halo at 6h and 7h  Partly clouded; circum., cirstrat., and haze; halo and parhelia round the sun at 3h  Partly clouded; circum., cirstrat., and haze  In general clouded; circum. and cirstrat.; snow at 16h and 17h  Clouded; circum., cirstrat., and haze  In general clouded; circum. and cirstrat.; snow at 16h and 17h  Clouded all day; circum. and haze; rain  Nearly clear; circum. and haze; rain  Nearly clear; circum. and haze  In general clouded; circum. and haze; slight snow  Clouded all day; circum. and haze; slight snow  Clouded all day; circum., cirstrat., and haze; lunar halo at 8h, diameter about 35°	1'0 1'0 0'9 1'0 1'0 0'9 1'0 1'0 0'3 	1'0 1'0 0'2 1'0 0'1 0'2 1'0 0'0 0'0 1'0 0'0 0'0 1'0 0'0 0	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1.0 0.1 1.0 0.1 1.0 1.0 1.0 1.0	0 40°1 36°0 35°6 41°8 37°6 33°6 28°8 11°4 20°1 16°2 14°9 23°9 35°4 39°7 42°4 28°2 234°5 11°8 21°3 14°2 22°0 32°6 27°8 28°0 33°8 16°0 22°3 32°4 22°0	34.7 31.9 32.1 24.3 32.9 24.4 7.5 9.1 9.3 2.7 11.1 12.4 31.7 33.9 31.8 3.1 10.0 3.1 11.9 21.2 15.9 24.6 12.7 2.9 16.3 17.4 2.9	In. 0 · 40 — 1 · 10 — — — — — — — — — — — — — — — — — —
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 }	FEBRUARY.  Generally clouded; circum., cumstrat., and haze; snow from 1h to 15h; clear  Generally clear  Clouded from 3h to 15h; circum. and haze; snow from 1h to 15h; clear  Generally clear  Clouded from 2h to 14h; circum. and cirstrat.; remainder of the day clear  Clear to 11h; remainder of the day clouded; circum. and haze  Mostly clouded; circum., cirstrat., and haze; snow from 10h to 14h  Generally clouded; cumstrat. and circum.  Mostly clouded; circum. and cumstrat.; snow at intervals  Mostly clouded; cumstrat. and circum.; snow from 11h to 15h  Generally clouded; cumstrat., circum., and haze; snow at 16h and 17h  Clouded all day; circum. and cumstrat.; snow from 12h to 15h  Mostly clouded; circum. and haze; snow; hail; rain from 19h to 23h  Clouded all day; circum. and haze; snow; hail; rain from 19h to 23h  Clouded all day; circum., cirstrat., and haze  Clouded all day; circum., cirstrat., and haze; snow occasionally  Clouded all day; circum., and haze; snow nearly all day  Clouded all day; circum. and haze; snow nearly all day  Clouded till 9h; circum. and haze; snow nearly all day  Clouded till 9h; circum. and haze; snow from 13h to 17h  Generally clouded; circum. and haze; snow from 13h to 17h  Generally clouded; circum. and haze; snow from 11h to 17h  Generally clouded; circum. and haze; snow from 11h to 17h  Clouded all day; circum. and haze; snow from 11h to 17h  Clouded all day; circum. and haze; snow from 11h to 17h	1.0 0.5 1.0 0.0 1.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0	1.0 1.0 1.0 0.0 0.5 0.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1.0 1.0 0.0 0.0 0.0 0.0 1.0 1.0	0.6 1.0 0.1 0.0 0.0 0.8 0.3 1.0 1.0 0.2 1.0 1.0 1.0 1.0 1.0 0.0 0.3 0.8 0.1 1.0 0.7	24·0 32·4 40·9 37·6 23·4 21·4 27·8 29·0 35·4 32·2 35·0 21·8 26·4 25·2 29·6 29·2 24·0 31·9 34·2 32·3 26·0 20·8 20·0 17·8 22·4 25·9 27·9 33·0	6·1 23·1 37·1 12·2 8·1 11·1 17·7 19·1 26·6 20·9 10·8 10·9 7·8 16·8 22·5 11·1 13·1 126·3 22·1 15·1 14·7 0·0 0·9 15·7 7·0 25·3 26·1	0.55

Toronto Mean	Weather and Pleasurers	Ex	tent of C	loudy Sk	xy.	Max.	Min.	Rain,
Time.	Weather and Phenomena.	3	9	15	21	Therm.		каш,
D.	MARCH.					0	0	In.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 22 23 24 25 26 27 28 29 30 31	Generally clouded; circum. and cumstrat.; light snow Generally clouded; circum. and cumstrat. Clouded till 8h; cir., circum., cirstrat., and haze; remainder of the day clear Clouded to 11h; circum., cirstrat., and haze; remainder of the day mostly clear Clouded to 11h; circum., cir., and haze; remainder of the day nearly clear; halos and parhelia round the sun at 4 p.m. of 6th Clear to 13h; overcast; cir. and haze Clouded all day; circum., cumstrat., and haze Nearly clear to 20h; remainder of the day clouded; circum., cirstrat., and haze Clouded to 6h; cumstrat., circum., and haze; clear Generally clear; clouded from 5h to 14h; circum. and haze  Clear to 12h; remainder overcast; circum. and haze  Clear to 12h; remainder overcast; circum. and haze  Mostly clear; some circum. round horizon Partly clouded to 5h; circum., cumstrat., and haze; remainder quite clear Clear to 2h; remainder clouded; cir., cirstrat., and haze; solar halo at 3h, diameter 35° Clear all day Clear at 9h; remainder of the day clouded; circum. and haze; brilliant aurora at night; lightning at 15h in S.S.W.  Clouded all day; circum., cirstrat., and haze; slight rain most of the day  Clouded circum., cirstrat., and haze; slight rain most of the day  Clouded all day; circum. and haze; slight rain Generally clouded; circum., cirstrat., and haze Generally clouded; circum., cirstrat., and haze Generally clouded; circum., cumstrat., and haze  Partly clouded and clear alternately; cir., circum., and haze  Clear till 4h; remainder clouded; cir., circum., and haze  Clear till 4h; remainder clouded; cir., circum., and haze  Clouded to 20h; circum., cirstrat., and haze; heavy storm; thunder; lightning; snow from 5h to 16h  Clear all day; some cir. and strat.	1'0 0'4 0'8 0'8 0'1 1'0 0'0 1'0 0'0 1'0 0'4 1'0 0'4 0'0 0'7 1'0 1'0 0'4 1'0 0'9 0'2 0'1 1'0 0'0	1'0 1'0 0'0 0'5 1'0 0'0 1'0 0'0 0'8 0'0 0'0 0'8 0'0 1'0 1'0 1'0 1'0 1'0 1'0 0'0	1'0 1'0 0'0 0'0 1'0 1'0 1'0 0'0 1'0 0'0 0	0.2 1.0 0.1 0.1 1.0 0.0 0.8 1.0 0.1 0.0 0.1 0.0 1.0 0.0 1.0 0.1 0.1	28·3 29·0 30·2 35·2 35·2 30·3 35·7 38·3 35·4 25·3 36·3 22·1 26·5 30·3 24·1 23·7 34·3 42·3 36·5 23·7 32·9 40·9 43·6 36·6 26·1 35·4 43·9 27·9	19·2 18·2 20·3 12·9 10·2 23·9 32·1 24·4 18·3 20·8 14·7 5·6 10·5 7·9 7·2 10·5 12·5 26·5 24·1 25·1 18·9 23·2 30·0 30·1 18·0 17·1 30·0 23·0 14·5	0·10 0·55
1 7	APRIL.  Clouded all day; circum., cir., and haze; snow from 6 <sup>h</sup> to 12 <sup>h</sup>	1.0	1.0	<u></u>	1.0	26.6 32.5	9·3 29·0	
$\left\{\begin{array}{c} z \\ 3 \\ 4 \end{array}\right\}$	Clouded to 7 <sup>h</sup> and from 20 <sup>h</sup> to 23 <sup>h</sup> ; cir., circum., and haze; remainder of the day clear -	1.0	0.0	0.0 -	$\frac{1}{1.0}$	37·2 42·1	$\begin{vmatrix} 27.7 \\ 27.7 \\ 28.1 \end{vmatrix}$	
5 6 7 8 9 10 11 12 13 14 15 16 17 18	Clouded all day; cir., cirstrat., and haze; rain at 16h and 17h  Generally clouded; cir., circum., and haze; rain occasionally  Clear to 14h; remainder clouded; cirstrat., circum., and haze; brilliant aurora at night  Clouded till 12h; cir., cirstrat., circum., and haze; solar halo at 2h, diameter 30°, perfect;  rain from 8h to 10h; auroral light in N. at 11h; clear  Partially clouded; cirstrat. and circum.  Clear at 9h; remainder clouded; circum., cumstrat., and haze  Partially clouded; circum., cirstrat., and haze  Clear to 6h; remainder of the day clouded; cirstrat. and haze  Generally clouded; cirstrat. and haze; light rain from 9h to 11h  Clouded to 7h; circum. and cumstrat.; remainder nearly clear  Generally clouded; circum., cirstrat., and haze  Clear from 6h to 14h; remainder of the day clouded; cir., circum., and haze  Clouded and clear alternately; cirstrat. and haze; auroral light in N. from 13h to 16h	1'0 0'7 0'0 1'0 0'6 0'9 	1'0 0'7 0'0 1'0 0'3 0'0 - 0'3 0'8 1'0 0'1 0'8	1.0 0.0 1.0 0.0 1.0 0.5 1.0 0.6 0.0 1.0	1.0 1.0 0.0 0.5 	40.5 41.4 49.7 55.1 59.5 45.9 48.8 41.3 46.7 45.9 38.1 39.8 35.4 31.0	30.9 35.0 39.7 33.7 36.7 27.7 30.3 26.5 29.7 29.7 24.2 30.9 17.4 21.4	0.04
19 20 21 22 23 24 25 26 27 28 4 29 30 {	Clouded and clear atternately; cirstrat. and haze; autoral fight in the first to 10 Clouded all day; circum., cirstrat., and haze; rain; thunder occasionally - Generally clouded; circum., cirstrat., and haze; rain and thunder from 10 <sup>h</sup> to 16 <sup>h</sup> - Clouded all day; cirstrat., cir., and circum.; rain nearly all day - Clouded to 3 <sup>h</sup> ; circum. and cumstrat.; remainder clear - Clear to 11 <sup>h</sup> ; remainder clouded; circum., cirstrat., and cumstrat {  Mostly clouded; cir., cirstrat., and haze - Nearly clear all day  Clouded all day; cirstrat., circum., and haze; sheet lightning and thunder to 7 <sup>h</sup> ; rain from 7 <sup>h</sup> to 9 <sup>h</sup> , and at 12 <sup>h</sup> - Clouded; circum., cirstrat., and haze; rain at 3 <sup>h</sup> - Clear from 10 <sup>h</sup> to 15 <sup>h</sup> ; remainder clouded; circum., cir., and cumstrat.; solar halo at 21 <sup>h</sup> , díameter 25°; imperfect light	1.0 1.0 0.4 0.0 -1.0 0.1 1.0 0.8	0.0 0.4 1.0 0.0 0.0 0.0 0.0 0.0 1.0 0.7 0.8	1.0 1.0 0.0 0.0 1.0 1.0 1.0	1.0 1.0 1.0 0.0 	45.5 45.8 65.1 51.9 45.5 45.1 51.2 59.5 44.1 42.7	29.5 40.7 47.9 35.1 28.1 27.9 42.1 40.7 23.4 34.1	0.15 0.76 1.00 0.07 — — — 0.45 0.33

Toronto	W	E	xtent of (	Cloudy Sl	cy.	Max.	Min.	
Mean Time.	Weather and Phenomena.	3	9	15	21	Therm.		Rain.
D. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 23 24 25 26 27 28 29 30 31	MAY.  Generally clouded; circum. and cirstrat.; slight rain from 9h  Partly clear to 6h; remainder clear  Clouded to 3h; circum. and cumstrat.; remainder of the day clear  Clear all day  Clear all day  Clear to 2h; clouded; cir., cirstrat., and haze; auroral light in N. from 10h to 13h  Clouded to 12h; circum., cir., and haze; clear  Clouded all day; cir. cum., and haze; rain from 9h to 13h  Generally clouded; circum. and haze; slight rain  Clouded to 15h; cirstrat. and haze; drizzling rain  Clear all day  Partly clouded to 3h; cir. and haze; remainder hazy  Clear all day  Clear to 12h; overcast; cir. and haze  Partly clouded from 8h to 16h; cir., cirstrat., and haze; clear  Clear to 16h; clouded; cir. and haze  Overcast all day; cir. and haze; slight rain  Clouded all day; cir. and haze; slight rain  Clouded to 7h; circum. and cirstrat.; partly clear  Clouded to 20h; circum. and cirstrat.; partly clear  Clouded to 20h; circum., cirstrat., and haze; light rain; clear  Clouded all day; circum., cirstrat., and haze; thunder; lightning; constant rain from 13h to 23h  Clouded all day; circum., cirstrat., and haze; thunder; lightning; constant rain from 13h to 23h  Clouded all day; cir. and haze; constant rain to 16h; thunder and lightning at 13h and 14h	1'0	1'0	0.8 0.0 0.0 0.0 0.0 1.0 1.0 1.0 0.4 0.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 1		647.7 47.5 40.1 48.3 54.3 60.6 62.4 62.1 64.3 56.7 61.4 64.3 66.1 61.5 69.5 69.5 65.7 62.7 63.0 68.5 60.8 64.4 66.0 57.8 59.2 72.1 65.4 58.9	26.7 34.5 35.5 35.0 32.1 35.3 37.2 48.9 46.8 45.2 52.3 53.9 53.6 47.7 41.7 42.2 44.1 48.2 48.7 43.5 51.5 51.5 51.5 47.9 37.7 35.9 47.9 47.9 47.9 47.9 47.9 47.9 47.9 47	In.  0.05 0.04 0.32 0.05 0.27 0.19 0.53 0.11 0.05 0.60
1 2 3 4 5 6 7 8 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 4 25 26 27 28 29	JUNE.  Generally clouded; circum., cirstrat., and haze; rain; thunder; lightning; rainbow at 7 <sup>h</sup> Clear to 20 <sup>h</sup> ; remainder clouded; circum.  Generally clouded; slight rain occasionally Nearly clear to 20 <sup>h</sup> ; clouded; circum.  Mostly clear  Nearly clear to 3 <sup>h</sup> ; remainder clouded; circum., cirstrat., and haze  Clouded all day; cumstrat., circum., and haze; slight rain from 10 <sup>h</sup> to 12 <sup>h</sup> ; sheet  lightning in N.  Clouded; cir., cirstrat., and haze; foggy; lightning in N.N.E. from 10 <sup>h</sup> to 13 <sup>h</sup> Mostly clouded; circum., cirstrat., and haze; remainder clear; constant rain from 6 <sup>h</sup> to 11 <sup>h</sup> Mostly clouded; circum., and haze; remainder clear; constant rain from 6 <sup>h</sup> to 11 <sup>h</sup> Mostly clear to 12 <sup>h</sup> ; clouded; circum. and haze; auroral light at 10 <sup>h</sup> and 11 <sup>h</sup> ; rain from 19 <sup>h</sup> to 23 <sup>h</sup> Clear from 9 <sup>h</sup> to 12 <sup>h</sup> ; remainder clouded; circum. and cumstrat.; light rain at 1 <sup>h</sup> and from 18 <sup>h</sup> to 22 <sup>h</sup> Clouded and clear alternately; circum., cumstrat., and cirstrat.  Nearly clear all day  Clear to 20 <sup>h</sup> ; remainder clouded; circum. and cumstrat.  Clouded all day; circum. and eumstrat.; rain from 4 <sup>h</sup> to 9 <sup>h</sup> Clouded to 3 <sup>h</sup> ; cirstrat. and haze; remainder mostly clear; thunder; showers at 0 <sup>h</sup> Generally clouded; circum. and haze; rain at 1 <sup>h</sup> ; lightning  Clouded to 11 <sup>h</sup> ; circum., cirstrat., and haze; remainder clear; thunder; showers occasionally  Generally clear  Clear to 12 <sup>h</sup> ; remainder clouded; circum.; cirstrat.  Clouded to 16 <sup>h</sup> ; circum., cirstrat., and haze; thunder and lightning in S.E. at 10 <sup>h</sup> ; clear-  Generally clouded; circum., cirstrat.; thunder at 5 <sup>h</sup> and 6 <sup>h</sup> Clouded at 5 <sup>h</sup> and 20 <sup>h</sup> ; circum. and cirstrat.; thunder at 5 <sup>h</sup> and 6 <sup>h</sup> Clouded at 5 <sup>h</sup> and 20 <sup>h</sup> ; circum. and haze; remainder clear	1'0 0'1 1'0 0'2 0'1 - 0'2 1'0 0'4 1'0 0'1 - 1'0 0'2 0'5 0'0 1'0 0'8 - 0'7 0'8 0'3 0'0 0'9 0'8 - 0'7	1'0 0'2 1'0 0'0 0'0	0.0 0.0 0.0 1.0 0.0 1.0 1.0 1.0 1.0 0.5 	0.6 1.0 0.6 1.0 0.0 1.0 1.0 0.7 0.0 1.0 0.0 0.0 0.8 1.0 0.1 0.0 0.1 0.0 0.1 0.0 1.0 0.1 0.0 0.1 0.0 0.1 0.0 0.1 0.0 0.1 0.0 0.0	48.2 62.0 62.6 62.1 62.4 63.7 64.4 70.5 61.8 75.2 64.4 66.7 66.6 55.0 54.6 67.9 65.5 67.1 60.2 67.0 68.4 71.1 74.6 75.8	43.8 49.4 45.1 52.7 36.7 49.7 41.5 53.1 53.9 60.7 57.0 46.7 47.7 40.1 43.7 40.2 42.7 56.0 48.7 50.2 49.0 50.1 50.7 50.2 49.0 50.7 50.3 60.7 50.3 60.7 50.3 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7 60.7	0·52 -0·140·02 -0·16 0·21 -0·18 0·16 0·25 0·48 0·13 0·07 0·15

Toronto Mean	Weather and Phenomena,		tent of C	loudy Sk	у.	Max.	Min.	Rain,
Time.	Weather and Phenomena.	3	9	15	21	Therm.	Therm.	Ttain.
D.  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 Aug. 1 }	JULY.  Clear all day  Clear all day  Mostly clouded all day; thunder; slight rain at 6 <sup>h</sup> Overeast, with haze  Generally clouded; cir. and haze  Clouded at 8 <sup>h</sup> and 21 <sup>h</sup> ; cir. and haze; remainder clear  Clouded at 8 <sup>h</sup> and 21 <sup>h</sup> ; cir. and haze; auroral light in N. at 10 <sup>h</sup> Clouded to 11 <sup>h</sup> ; lightning at 11 <sup>h</sup> ; remainder generally clear; auroral light at 13 <sup>h</sup> Generally clouded; cir. and haze  Clouded to 8 <sup>h</sup> ; circum, cirstrat., and haze; clear  Generally clear  Partly clear to 8 <sup>h</sup> and from 14 <sup>h</sup> to 18 <sup>h</sup> ; clouded; cir. and haze  Clear from 9 <sup>h</sup> to 14 <sup>h</sup> ; generally clouded; cir., circum, and haze  Clouded to 14 <sup>h</sup> ; circum. and haze; clear; rain, thunder, and lightning during the day  Clouded all day; circum. and cumstrat.; thunder, lightning, and showers during the day  Partially clouded; circum. and cumstrat.; constant lightning, and rain at 16 <sup>h</sup> Generally clear  Generally clear  Generally clear  Generally clear  Generally clear  Generally clear  Clouded all day; cir. and haze; rain, thunder, and lightning  - {  Generally clear  Generally clear  Generally clear  Mostly clear  Clouded to 8 <sup>h</sup> ; circum., cirstrat., and haze; rain  Partly clouded; circum., cirstrat., and haze; rain  Partly clouded; circum., cirstrat., and haze; rain  Partly clouded to 12 <sup>h</sup> ; cumstrat.; circum., and cum.; clear; light rain  Clouded to 8 <sup>h</sup> ; cum., circum., and cumstrat.; rain; clear	0.0 0.0 0.0 0.2 	0.0 0.0 0.0 0.1 	0.0 0.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 0	0.0 0.0 0.3 1.0 1.0 1.0 1.0 0.8 1.0 0.5 1.0 0.8 1.0 0.3 0.2 1.0 0.3 0.2 1.0 0.1 0.3 0.2 1.0 0.1 0.4	72·1 75·8 78·8 81·3 79·2 81·3 78·2 80·2 81·3 78·4 82·7 76·4 82·8 83·1 76·4 82·8 81·3 80·2 81·3 76·4 82·8 81·3 80·2 81·3 76·4 81·3 80·3 80·3 80·4 80·3 80·3 80·3 80·3 80·3 80·4 80·3 80·3 80·3 80·3 80·3 80·3 80·3 80·3	649.5 53.5 54.5 51.5 55.7 66.3 62.1 61.0 65.2 67.1 64.4 63.5 55.5 50.9 59.0 66.1 70.0 66.5 68.0 48.2 53.0 64.2 55.7 44.0 47.2 55.7 44.0 51.1	In.  0.03 0.75 0.20 0.65 0.84 0.25 0.30 0.25 0.09 0.03
2 3 4 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	AUGUST.  Generally clear Generally clear; aurora from 9h to 14h Clouded and clear alternately; cir., cirstrat., and haze Mostly clouded; cir., cirstrat., and haze; lightning, thunder, rain Clouded; cir., cirstrat., and haze; slightning at 9h and 10h Clouded all day; circum., cirstrat., and haze; slight rain Clouded all day; circum. and haze; nearly clear; rain from 0h to 4h Generally clouded; circum. and haze; hunder at 3h Clouded; circum. and cirstrat.; lightning; rain Clear from 12h to 18h; remainder clouded; lightning in S.W. from 12h to 15h Clouded at 4h and 21h; circum. and cirstrat.; remainder clear; auroral light in N. at 13h Generally clouded; cumstrat. and circum.; lightning; thunder; rain at intervals Clear from 6h to 11h; remainder clouded; circum. and cir. Partly clouded; circum. dispersed; clear Partly clouded; circum. and cumstrat.; slight rain; clear Nearly clear; auroral light in N. at 11h Generally clear to 20h; remainder clouded; cir. and haze Partly clouded; cir. and haze Clear and partly clouded alternately Generally clouded; circum. and haze; rain Clear from 6h to 18h; remainder clouded; cum., circum., and haze; rain Clear from 6h to 10h; remainder clouded; cum., circum., and haze; rain Clear from 6h to 10h; remainder clouded; circum. and haze	0'4 0'1 0'7 0'1 1'0 0'9 0'4 1'0 0'7 0'9 0'6 0'7 1'0 0'7 0'5 0'9 0'2 0'2 0'4 0'3 0'3 0'1 1'0 1'0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.3 0.0 1.0 1.0 1.0 0.1 0.0 0.0 0.0	0.2 0.4 0.3 0.8 1.0 0.7 1.0 0.7 0.4 	74.5 65.7 68.7 68.0	50.0 52.5 51.5 51.0 50.5 52.0 51.7 55.8 46.0 51.5 51.0	0·15 0·03 - 0·31

Toronto		Ex	tent of C	loudy Sk	y.	Max.	Min.	
Mean Time.	₩eather and Phenomena.	3	9	15	21	Therm.	Therm.	Rain.
D.	SEPTEMBER.					. 0	0	In.
$\left\{ \begin{array}{c} 1\\ 2\\ 3\\ 4\\ 5 \end{array} \right\}$	Nearly clear all day  Generally clear to 18 <sup>h</sup> ; clouded  Generally clouded; circum. and cirstrat.; slight rain at 6 <sup>h</sup> Clouded to 12 <sup>h</sup> ; circum. and haze; lightning, thunder, and rain from 10 <sup>h</sup> to 11 <sup>h</sup> ; hurricane {  at Cornwall, Upper Canada, at 21 <sup>h</sup> Mostly clear	0'2 0'1 0'9 1'0 - 0'4 0'8	0.0 0.0 0.8 0.0 0.0	0.0 0.0 1.0 	0.1 1.0 0.0 0.3 1.0	62.4 66.1 71.8 74.5 60.3 69.9 67.4	44.9 49.3 52.2 56.0 57.6 47.3 51.0	0.01 0.21 1.24
7 8 {	Generally clouded; circum. and cirstrat.; clear occasionally Mostly clear all day; circum., cirstrat., and cumstrat.; thunder, lightning, and rain	1.0	1.0	1.0	0.9	65.0	61.9	2.20
9 10 11 12 13	from 6 <sup>h</sup> to 17 <sup>h</sup> Clouded to 5 <sup>h</sup> ; circum., cirstrat., and cir.; quite clear; rain  Clear and fine to 20 <sup>h</sup> ; clouded  Nearly clear to 11 <sup>h</sup> ; remainder clouded; circum. and cumstrat.; slight rain  Clouded all day; cumstrat. and cirstrat.; slight rain	0.0 0.1 0.1	1.0 0.0 0.0	1.0 1.0 0.0	0.0 0.7 - 1.0 1.0	74.5 60.2 63.7 62.8 65.8	49.7 41.3 45.7 47.6 52.9	0.01 0.09 0.01
14 15 16 17 18	Quite clear all day Quite clear Generally clear to 9 <sup>h</sup> ; remainder clouded; circum, and cirstrat. Generally clouded; circum, and cirstrat; rain from 8 <sup>h</sup> to 17 <sup>h</sup> Clouded all day; circum, and cirstrat; rain from 0 <sup>h</sup> to 4 <sup>h</sup>	0.0 0.0 0.0 0.7 1.0	0.0 0.0 0.4 1.0 1.0	1.0 1.0 0.0	1.0 0.0 0.0 0.0	55°1 52°9 57°6 59°4 62°2 61°2	41.0 35.8 35.0 47.7 54.5 52.5	0.25 0.09 0.31
19 } 20 21 22 23 24 25 }	Clouded; circum. and cirstrat.; slight rain  Nearly clear to 20 <sup>h</sup> ; remainder clouded; cumstrat. and circum.  Clouded to 6 <sup>h</sup> ; circum. and cumstrat; clear  Nearly clouded; circum. and cirstrat.; lunar halo at 9 <sup>h</sup> , diameter 40°, imperfect  Clouded all day; circum. and haze; rain from 4 <sup>h</sup> to 14 <sup>h</sup> Clouded all day; circum., cirstrat., and haze; heavy storm of thunder; lightning; rain {	1:0 0:2 0:6 0:7 1:0 1:0	0.7 0.0 0.0 1.0 1.0	1.0 0.0 0.0	0.7 0.6 0.1 1.0	57.7 56.8 62.4 59.8 67.0 55.6	52 5 54 6 51 2 41 8 45 2 54 3 48 7	0.09
26 }	from 12 <sup>h</sup> to 15 <sup>h</sup>	0.6	0.1	0.0	0.0	58.8 59.3	51.0 55.2	0.19
27 { 28 {	clear Clear from 12 <sup>h</sup> to 17 <sup>h</sup> ; remainder clouded; circum. and cumstrat.; lightning, thunder, }	0.8	0.1	0.0	1.0	68.8	46 2	0.04
29 {	and rain at 0 <sup>h</sup> Partly clouded to 15 <sup>h</sup> ; circum, and cumstrat.; thunder; lightning; rain from 0 <sup>h</sup> to 4 <sup>h</sup> ; frost; clear  Generally clouded	0.8	0.3	0.2	0.0	60.0	39.7 37.3	0.11
							0, 0	
$\begin{bmatrix} 1 \\ 2 \\ 3 \end{bmatrix}$	OCTOBER.  Clouded to 5 <sup>h</sup> ; remainder clear  Clouded to 10 <sup>h</sup> ; circum.; remainder mostly clear  {	0.7 0.5	0.0 1.0	$\frac{0.0}{0.0}$	0.0	54.4 53.6 55.9	43.7 36.2 38.5	<u>-</u>
4 . { 5 6 7	Generally clouded; circum. and cirstrat.; lightning; thunder from 9 <sup>h</sup> to 17 <sup>h</sup> ; showers at 17 <sup>h</sup> Mostly clouded; rain most of the day  Clouded; dense; circum. and haze; rain most of day  Clouded; circum. and cirstrat.; slight rain most of day	1.0 1.0 0.8	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	54.4 60.2 64.6 58.4	40°2 52°5 56°0 54°5	0.03 0.76 1.18 0.35
8 9 10 11 12 {	Clouded to 8 <sup>h</sup> ; circum. and haze; clear; aurora at 11 <sup>h</sup> Clouded to 9 <sup>h</sup> ; circum., cirstrat., and haze; slight rain; clear  Clouded; circum. and haze; slight rain  Clouded to 10 <sup>h</sup> and partly to 23 <sup>h</sup> ; circum., cirstrat., and haze; rain to 10 <sup>h</sup> ; auroral light	0.6	0.3	0.0	0.0	56.4 58.7 56.2 57.2	55 1a 40 2 42 2 38 0	0.01
13 14 15 16	in N. from 15 <sup>h</sup> to 18 <sup>h</sup> Clear from 6 <sup>h</sup> to 12 <sup>h</sup> ; remainder partly clouded; circum. and cirstrat.; lightning in E. at 7 <sup>l</sup> Clear from 6 <sup>h</sup> to 13 <sup>h</sup> ; remainder clouded; circum. and cumstrat.; snow; aurora at 12 <sup>h</sup> Clouded to 10 <sup>h</sup> ; circum. and haze; clear; auroral light at 14 <sup>h</sup> Clouded from 3 <sup>h</sup> to 9 <sup>h</sup> ; circum. and haze; remainder partly clear; solar halo at 0 <sup>h</sup> , §		0.0 0.0 0.5 1.0	0°3 0°7 1°0 0°0	0.0 0.3 0.8	50.6 47.5 47.0 40.4 44.0	36.9 37.8 32.0 26.7 37.2	0.26
17 18 19 20 21 22	diameter 25°; rain from 6 <sup>h</sup> to 8 <sup>h</sup> Partly clouded from 3 <sup>h</sup> to 14 <sup>h</sup> ; circum. and haze; clear; slight rain  Clouded to 5 <sup>h</sup> ; circum. and cirstrat.; clear  Clear to 14 <sup>h</sup> ; clouded; cir., cirstrat., and haze  Clouded all day; cir., cirstrat., and haze; rain from 10 <sup>h</sup> to 17 <sup>h</sup> Clouded to 16 <sup>h</sup> ; circum. and haze; rain at 23 <sup>h</sup> ; remarkable appearance of aurora at 16 <sup>h</sup>	0.3 0.8 0.0 1.0	1.0 0.0 0.0 1.0	0.0 0.0 0.0 0.2 1.0 0.4	0.0 1.0 0.0 0.0	55.3 60.0 61.4 54.1 54.0	46'3 36'4 41'0 28'8 30'2	0.14
23 24 25 26 27	Generally clear to 12 <sup>h</sup> ; remainder clouded; dense; cir. and haze; constant rain  Clouded from 0 <sup>h</sup> to 8 <sup>h</sup> and from 16 <sup>h</sup> to 23 <sup>h</sup> ; circum, and cumstrat.  Clear from 4 <sup>h</sup> to 13 <sup>h</sup> ; clouded; slight rain  Clouded to 9 <sup>h</sup> ; circum, and cumstrat.; clear	0.1 0.6 0.3 1.0	0.0	0.0 0.0 0.8 0.8	0.0 0.3 0.0 0.0 -	48.4	37.3 33.3 35.5 45.3 28.4 20.4	0.97
28 29 30 31	Generally clear  Clear from 9 <sup>h</sup> to 15 <sup>h</sup> ; remainder clouded  Clear from 9 <sup>h</sup> to 11 <sup>h</sup> ; remainder clouded; cir., cirstrat., and haze; rain from 13 <sup>h</sup> to 17 <sup>n</sup> -	1.0 0.0 0.0	0.0 0.0 0.1	1.0 0.0 0.0	1.0	35.5 40.8 48.9	24.7 27.3 32.2	

<sup>\*</sup> Taken from the lowest reading of the Standard Thermometer.

Toronto Mean	Weather and Phenomena.	E2	tent of (	Cloudy SI	sy.	Max.	Min.	Rain.
Time.	Weather and I henomena.	3	9	15	21	Therm.	Therm.	
D.	NOVEMBER.					0	0	In.
$\frac{1}{2}$	Generally clouded; cir. and cirstrat.; dense fog Generally clouded; circum. and cirstrat.; lightning; faint aurora	0.3 1.0	1.0	1.0 0.2	1.0	51.0 54.8	47.7 46.4	
3 {	Clouded to 5 <sup>h</sup> , and from 18 <sup>h</sup> to 23 <sup>h</sup> ; circum. and haze; lightning, thunder, and rain from 0 <sup>h</sup> to 5 <sup>h</sup> ; remainder clear	0.1	0.0	0.0 0.1	0.8 0.8	57°9 54°4	45.5 40.3	0.09
4 5 6 7 8	Mostly clear to 20°; encum., remainder clouded:  Clouded to 12 <sup>h</sup> , and from 16 <sup>h</sup> to 21 <sup>h</sup> ; remainder clear; auroral light in N. at 15 <sup>h</sup> and 16 <sup>h</sup> Partly clear to 12 <sup>h</sup> ; remainder clouded; circum., cirstrat., and haze; lightning; thunder { at 16 <sup>h</sup> and 17 <sup>h</sup> Clouded all day; dense haze; rain	0.5 0.8 - 1.0	1.0 0.5 - 1.0	1.0	0.9 1.0	51·1 45·9 38·0 43·7	34·3 29·2 27·8 39·7	0.03
9 10 11 12	Clear to 14 <sup>h</sup> ; remainder clouded; circum. and cumstrat.; aurora at 9 <sup>h</sup> and 10 <sup>h</sup> - Clouded all day; circum. and cumstrat	0.1 1.0 1.0	0.0 1.0 0.0	1.0 1.0 1.0	0.3 0.1 0.0	51.4 55.2 39.7 37.2	47.7 36.7 34.1 30.5	0.06
$\begin{bmatrix} 13 \\ 14 \end{bmatrix}$	Clouded all day; cirstrat., circum., and haze; rain from 9h to 16h on the 13th	1.0	1.0	1.0	$\frac{1.0}{}$	39.4 40.4	33.1 34.7	0.41
15 16 17 18 19 20	Generally clouded; circum. and cumstrat.  Nearly clouded all day; circum., cirstrat., and haze	0.8 1.0 1.0 0.8	1.0 1.0 1.0 0.9 1.0	0.4 1.0 1.0 0.9 0.1	1.0 0.1 1.0 0.1	41.1 41.0 47.7 52.0 49.6 33.1 31.2	36·2 27·2 43·7 42·7 28·2 18·3 27·7	0.17 0.32 — —
21 } 22 23 24 25 {	Nearly clear from 2 <sup>h</sup> to 13 <sup>h</sup> ; clouded; cirstrat. and haze; very slight rain - Clouded all day; cirstrat., circum., and haze; rain - Generally clouded; circum., cirstrat., and haze; slight rain - Clouded all day; circum., cumstrat., and cirstrat.; slight rain; snow; auroral light in N- at 6 <sup>h</sup> and 7 <sup>h</sup>	0°1 1°0 1°0	0.5 1.0 1.0	1.0	1 0 1 0 0 5	42.1 46.2 52.0 49.7	32·3 40·7 46·1 38·9	0°01 0°35 0°25 0°13
26	Partly clear from 5 <sup>h</sup> to 13 <sup>h</sup> ; clouded; circum. and cirstrat.; aurora at 8 <sup>h</sup>	0.8	0.0	1.0	. 1.0	42.0	24.7	
$\left\{ egin{array}{c} 27 \\ 28 \end{array}  ight\}$	Clear from 11h to 13h; clouded; cirstrat., circum., and haze; clear; some snow			0.0	0.6	34.0	$\frac{19.7}{24.7}$	_
29 30	Partly clear; circum., cirstrat., and haze	0.0	0.0	0.0	0.3	24.6 18.3	8.7 11.5	_
				,				
	DECEMBER.							
$\begin{array}{c}1\\2\\3\end{array}$	Clouded all day; circum., cirstrat., and haze; rain from 8 <sup>h</sup> to 17 <sup>h</sup> Clouded all day; circum. and haze; slight rain from 20 <sup>h</sup> to 23 <sup>h</sup> Nearly clouded all day; circum. and haze	1.0 1.0	1.0 1.0	1.0 1.0	1.0 1.0 0.9		22.7 35.0 32.5	0.52 0.11 —
$\left\{ egin{array}{c} 4 \\ 5 \end{array}  ight\}$	Partially clouded; cirstrat., circum., and haze; snow	1.0	1.0	0.6	0.5	33°5 33°2	25°2 26°0	
6 7 8 9 10 11 12	Clouded to 11 <sup>h</sup> ; circum. and cumstrat.; remainder nearly clear  Partly clear; cir. and cirstrat. occasionally  Partly clear from 9 <sup>h</sup> to 12 <sup>h</sup> ; clouded; cir., cirstrat., and haze  Mostly clouded all day; cirstrat. and haze; rain to 8 <sup>h</sup> Clouded all day; circum., cir., and haze; rain from 14 <sup>h</sup> to 17 <sup>h</sup> Partly clear from 3 <sup>h</sup> to 11 <sup>h</sup> ; remainder clouded; circum. and haze; slight rain from 12 <sup>h</sup> to 17 <sup>h</sup>	0.1 1.0 1.0 0.1	1.0 0.1 0.1 1.0 1.0	0.0 0.6 1.0 1.0	0.5 1.0 0.6 1.0 1.0	32.6 33.0 39.4 45.5 46.8 49.6 36.9	23.7 28.2 30.3 35.2 28.0 33.0 26.7	0.05 0.13
13 14 15 16 17	Clouded all day; circum. and haze; rain, snow, and sleet all day  Clouded to 18 <sup>h</sup> ; circum. and haze; slight rain from 1 <sup>h</sup> to 9 <sup>h</sup> ; clear  Clear and fine to 18 <sup>h</sup> ; remainder clouded; circum. and cirstrat.  Generally clouded; circum. and cirstrat.; aurora from 15 <sup>h</sup> to 17 <sup>h</sup> Generally clear; auroral light at 11 <sup>h</sup>	1.0 0.1 1.0 0.6 1.0	1.0 0.0 1.0 0.2 1.0	1.0 1.0 0.0 0.4 0.0	1.0 0.1 0.9 0.7 0.0	42.0 36.3 33.2 33.4 21.4 27.2	33°0 29°9 29°5 12°9 14°9 10°9	0.27 0.11 — —
18 19 }	Clouded all day; circum. and haze; aurora at 17h; great magnetic disturbance{			1.0	1.0	33.6	27.9	
20 21 22 23	Generally clouded; circum. and cirstrat.; clear occasionally  Clouded all day; cir., circum., and cumstrat.; snow from 9 <sup>h</sup> to 15 <sup>h</sup> Clouded all day; circum. and haze; snow to 1 <sup>h</sup> Clouded; circum., cirstrat., and haze; snow to 4 <sup>h</sup>	0.2 1.0 1.0	1.0 1.0 1.0	1.0 1.0 1.0	0.7 1.0 1.0 0.4	33°6 15°9 24°6 24°8 24°4	12.1 9.3 18.1 17.4 20.4	
$\left\{egin{array}{c} 24 \ 25 \ \end{array} ight\}$	Generally clouded; circum., cirstrat., and haze; snow	0.8	1.0	1.0	0.8	$\begin{vmatrix} 22 \cdot 2 \\ 18 \cdot 4 \end{vmatrix}$	15.2	
26 J 27 28 29 30 31	Clouded all day; circum., cirstrat., and haze; snow Clouded all day; circum., cir. strat., and haze Generally clouded; cir. and circum. Clouded all day; cirstrat. and haze Clouded all day; dense haze; drizzling rain	1.0 1.0 1.0 1.0	1.0 1.0 0.4 1.0 1.0	1.0 1.0 1.0 1.0	1.0 1.0 1.0	19.0 28.8 36.4 43.0	5.1 18.2 32.9 36.2	-  -  -

oronto Mean		E	xtent of C	Cloudy Sl	xy.	Max.	Min.	Rain.
Fime.	Weather and Phenomena.	3	9	15	21	Therm.	Therm.	Itam.
D.	JANUARY.	-				0	0	In.
$\left\{ egin{array}{c} 1 \\ 2 \end{array}  ight\}$	Clouded till 12h; circum. and haze; rain; remainder clear	1.0	1.0	0.0	0.1	45°2 51°1	42.2 29.7	0.56
3 4 5 6	Clouded; circum., cirstrat., and haze - Clouded; circum. and cirstrat.; slight snow at 16 <sup>h</sup> and 17 <sup>h</sup> - Clouded till 7 <sup>h</sup> ; circum. and haze; snow; remainder clear; halo round sun at 22 <sup>h</sup> and 23 <sup>h</sup> Mostly clouded; cir. and cirstrat; some slight snow	1.0 1.0 0.1 1.0	1.0 0.1 1.0	1.0 0.0 1.0	1.0 0.2 1.0	35.4 37.6 34.0 36.2	30.7 26.7 17.5 10.5	
7 8 }	Densely clouded; circum. and haze; slight snow	1.0	1.0	1.0	$\frac{-}{1.0}$	14.3 29.6	18.1	_
9 } 10	Clouded till 12 <sup>h</sup> ; circum. and haze; some snow; remainder clear {  Clear till 14 <sup>h</sup> ; remainder clouded; circum., cirstrat., and haze; slight snow	0.2	0.0	0.0	$\frac{1.0}{0.0}$	33.4 13.8	13.0 11.4	_
11 12 13 14	Clouded; circum and haze; slight snow occasionally; auroral light at 17 <sup>h</sup> Clouded; circum and cirstrat	0.9 1.0	1.0 1.0 1.0	1.0 1.0 1.0	1.0 1.0 0.0	$\begin{vmatrix} 1.0 \\ 22.4 \\ 32.4 \\ 36.5 \end{vmatrix}$	$     \begin{array}{r}       -8.9 \\       7.1 \\       20.3 \\       35.2     \end{array} $	0·95
$\frac{15}{16}$ }	Clouded till 5 <sup>h</sup> ; circum., cirstrat., and haze; aurora from 1 <sup>h</sup> to 2 <sup>h</sup> {	0.9	0.5	0.6	$\frac{0.3}{1.0}$	40°2 47°0	36.0 27.7	_
17 18 19 20	Partially clear till 5 <sup>h</sup> ; remainder clouded; cir. and haze; halo round moon from 6 <sup>h</sup> to 9 <sup>h</sup> - Generally clear; slight showers of snow	0°1 0°4 0°5 0°7	1.0 0.3 1.0	1.0 0.0 1.0	0.0 0.1 0.8	32.5 30.9 29.8 28.8	23.2 19.9 5.7 17.6	
$\frac{21}{22}$ $\left\{$	Generally clouded; circum. and cumstrat.; clear spaces occasionally  Clouded all day; circum., cirstrat, and haze; particles of snow	0.9	0.7	-	1.0	$\frac{41.4}{45.0}$	$24.7 \\ 13.6$	_
23 } 24 25	Clear till 11 <sup>h</sup> ; remainder clouded; circum. and cirstrat.  Clouded; cirstrat. and haze; slight rain from 8 <sup>h</sup> to 10 <sup>h</sup> , and from 15 <sup>h</sup> to 17 <sup>h</sup>	0.0	0.0	1.0	1.0	29.2 24.2 32.0	17.0 17.4 24.3	0.01
26 27	Clouded all day; cirstrat. and haze; rain ceased at 10 <sup>h</sup> Clouded all day; circum. and cumstrat	1.0	0.8	1.0	0.9	39·3 40·2	35.0 36.2	0.77
28 {	Mostly clouded till 10h, and at 21h; circum., cirstrat., and haze; remainder clear; auroral light from 8h to 17h; some snow	1.0	0.8	0.0	0.8	41.8	30.1	
${29 \atop 30}$ }	Clouded; circum., cumstrat., and haze; showers of snow; rain from 17 <sup>h</sup> to 22 <sup>h</sup> { Clouded till 4 <sup>h</sup> ; circum., cirstrat., and haze; remainder of day mostly clear	$\frac{1.0}{1.0}$	0.2	0.0	1.0	34.8 31.8 32.0	24.2 21.7 22.5	0 <sup>-</sup> 25
						,		
	FEBRUARY.			-				
1 2 3 4	Clear from 7 <sup>h</sup> to 12 <sup>h</sup> ; remainder clouded; cumstrat. and circum.  Clouded from 11 <sup>h</sup> to 17 <sup>h</sup> ; circum. and haze; remainder of day mostly clear  Clouded from 14 <sup>h</sup> to 21 <sup>h</sup> ; cirstrat. and haze; remainder mostly clear  Clouded; cirstrat. and haze; rain and snow from 0 <sup>h</sup> to 11 <sup>h</sup>	1.0 0.2 0.4 1.0	0.0 0.2 0.1 1.0	0.6 1.0 1.0	0.0 0.5 1.0 1.0	38.5 29.7 35.8 40.8	24.2 17.9 27.0 26.1	<u>_</u>
$\left\{ \begin{array}{c} 5 \\ 6 \end{array} \right\}$	Clouded; circum., cirstrat., and haze; slight snow from 3h to 4h	1.0	1.0	_	_	39.0	26.7	0.41
7 8	Mostly clear; aurora from 9 <sup>h</sup> to 12 <sup>h</sup> Mostly clouded; circum. and cumstrat.; auroral light in N. at 17 <sup>h</sup> and 18 <sup>h</sup>	0.0	$\frac{1.0}{0.0}$	$\begin{bmatrix} 1.0 \\ 0.1 \\ 0.4 \end{bmatrix}$	0.9	28.4	23.9	_
9 10	Mostly clouded; circum., cirstrat., and haze  Mostly clouded from 7 <sup>h</sup> to 10 <sup>h</sup> ; cir-strat., circum., and haze: remainder mostly clear	0.1	1.0	0.4	0.8 0.7 0.1	26.6 27.8 34.2	16.1 17.6 13.4	_
$\begin{bmatrix} 11 \\ 12 \\ 12 \end{bmatrix}$	Mostly clear till 6 <sup>h</sup> ; remainder clouded; cirstrat. and haze; halo round moon at 8 <sup>h</sup> and 9 <sup>h</sup> Mostly clear; cirstrat. and haze	0.0	0.0	1.0	0.6	21.0	0.0	
13 } 14 15 16 17	Mostly clear and fine  Mostly clear and fine; auroral light in N. at 12 <sup>h</sup> and 13 <sup>h</sup> Quite clear, with very little exception	0.4 0.0 0.0	0.7 0.3 0.0	0.7 0.0 0.0 0.8	0.0 0.0 0.0	25·2 31·7 38·2 32·6	11.9 18.2 18.5 19.5	
18 19 )	Quite clear	0.0	0.0	0.0	0.0	36.0 36.2	19.7 19.8	-
20 } 21	Mostly clouded; circum., cirstrat., and haze; rain from 5 <sup>h</sup> to 8 <sup>h</sup> {  Mostly clear till 8 <sup>h</sup> ; remainder clouded; cirstrat. and haze; aurora from 7 <sup>h</sup> to 10 <sup>h</sup> -	$\frac{0.0}{1.0}$	$\frac{1.0}{1.0}$	0.1	0.3	37.4	28.5	0.02
22 {	Clouded all day; cirstrat. and haze; slight rain and snow from 2 <sup>h</sup> to 9 <sup>h</sup> ; aurora from 13 <sup>h</sup> to 14 <sup>h</sup>	1.0	1.0	1.0	0.5	41.2	36°4 29°7	0.08
23 24 25	Partly clouded; circum., cirstrat., and haze; auroral light, streamers, &c., from 8 <sup>h</sup> to 12 <sup>h</sup> - Mostly clouded; circum. and cumstrat., aurora from 8 <sup>h</sup> to 17 <sup>h</sup> - Generally clear	0.2	0.1	1.0 0.2	0.1	40.0 36.5	28.6 22.1	
$\frac{26}{27}$ }	Clear from 12 <sup>h</sup> to 15 <sup>h</sup> ; remainder clouded	0.4	0.6	0.0	0.3	29.8 23.4	10.7 11.4	
28 29	Clouded; circum., cumstrat, and haze; snowing most of the day Generally clouded; cumstrat, circum., and haze; showers of snow and drift	1.0	1'0 0'4	0.0	0.1 1.0 0.1	33.6	22.9 12.6	_

Toronto Mean	Weather and Phenomena	Ex	ctent of C	loudy Sk	y.	Max.	Min.	Dei-
Time.	Weather and Phenomena.	3	9	15	21	Therm.	Therm.	Rain.
D.	MARCH.					0	, o	In,
$\begin{matrix}1\\2\\3\end{matrix}$	Partially clear and partially clouded; circum. and cumstrat.; auroral light in N. at 11 <sup>h</sup> - Clouded all day; circum., cirstrat., and haze; snowing most of the day Clear from 7 <sup>h</sup> to 11 <sup>h</sup> , and at 21 <sup>h</sup> ; remainder clouded, with circum., cirstrat., and haze	1.0 1.0	$0.0 \\ 1.0 \\ 0.0$	1.0 1.0	0.0 1.0	22.2 21.0 20.8	7:3 0:0 14:4	
$\left\{ \begin{array}{c} 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \end{array} \right\}$	Clouded all day; circum. and cirstrat.; showers of snow; squally  Clouded till 2h, and at 13h and 15h; cirstrat. and circum.; aurora at 12h  Clouded till 2h, and from 9h to 14h; cirstrat. and haze; remainder mostly clear  Mostly clouded; circum., cirstrat., and haze; slight rain; auroral light in N. at 9h  Nearly clear from 12h to 15h; remainder clouded; circum. and cumstrat.	1.0 0.4 0.4 1.0 1.0	1.0 0.2 1.0 0.4 1.0	1.0 1.0 0.4 1.0 0.2	1.0 1.0 1.0	26.1 24.2 22.7 32.1 41.1 47.1	16.9 13.0 14.4 15.5 35.7 22.5	0.06
$\left\{ \begin{array}{c} 10 \\ 11 \\ 12 \end{array} \right\}$	Generally clear  Clear till 12 <sup>h</sup> ; remainder mostly clouded; circum. and haze; shower of snow at 13 <sup>h</sup> - {	0.0	0.1	0.0	0.9	28.8 31.4 34.0	15.9 16.1 29.2	  0.58
13 14 15 16 {	Mostly clear  Mostly clear; aurora from 11 <sup>h</sup> to 14 <sup>h</sup> Mostly clear till 15 <sup>h</sup> ; remainder clouded; cirstrat. and haze  Generally clouded; cirstrat. and haze; halo round moon at 8 <sup>h</sup> and 9 <sup>h</sup> , diameter 45 <sup>o</sup> ;  aurora at 16 <sup>h</sup> and 17 <sup>h</sup>	0.2 0.6 0.0 0.8	0.0 0.0 0.0	0.2 0.0 0.2 0.3	0.7 0.2 1.0	39.6 25.0 15.8 17.6	22.9 11.2 3.4 8.0	
17 18 19 20 21 22 23	Clear  Clouded till 11 <sup>h</sup> , and at 21 <sup>h</sup> ; circum. and cirstrat.; remainder of day generally clear; auroral light in N. at 16 <sup>h</sup> and 17 <sup>h</sup> Clouded; cumstrat., circum., and haze; rain from 0 <sup>h</sup> to 8 <sup>h</sup> Mostly clouded till 4 <sup>h</sup> , and at 21 <sup>h</sup> ; cumstrat. and cirstrat.; remainder clear  Clouded; circum. and cumstrat.  Mostly clouded till 1 <sup>h</sup> ; remainder clear  Porticlly clouded; cir. strat. and cir. a curvery from 0 <sup>h</sup> to 18 <sup>h</sup>	0.1 1.0 1.0 0.7 1.0 0.2	0.0 1.0 0.0 1.0 0.0 0.0	0.0 0.0 1.0 0.0 1.0 0.0 0.7	0.1 1.0 0.6 1.0 1.0 1.0	28.5 26.7 34.2 33.9 43.3 49.0 37.0	22.9 16.2 22.4 23.3 33.8 28.6 31.8	0·72
$egin{array}{c} 24 \\ 25 \\ 26 \\ 27 \\ 28 \\ 29 \\ 30 \\ \end{array}$	Partially clouded; cirstrat. and cir.; aurora from 9 <sup>h</sup> to 12 <sup>h</sup> Clouded; circum. and haze; rain at 11 <sup>h</sup> Clouded till 8 <sup>h</sup> ; cir. and cirstrat.; remainder mostly clear; faint auroral light at 16 <sup>h</sup> Generally clouded; cirstrat. and cir.; nearly clear at intervals  Clear  Mostly clouded; cirstrat. and haze  Mostly clouded; circum. and haze; rain from 4 <sup>h</sup> to 11 <sup>h</sup> ; auroral light in N. from 12 <sup>h</sup> to 15 <sup>h</sup>	0.4 1.0 0.6 0.2 0.0 1.0	0.0 0.0 1.0 0.3 1.0	1.0 0.0 0.4 0.0 0.7 0.3	1.0 0.8 0.0 0.3 1.0 1.0	40.6 39.0 43.8 46.2 41.2 45.3 58.6	27.2 33.7 37.8 33.0 26.7 31.3 30.3	0·17 — — —
1 } 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 3 24 25 26	APRIL.  Mostly clouded; cumstrat. and cum.; aurora at night; halo round the sun at 21h, diameter { 45°, perfect } - { Clouded; circum. and haze - Clouded; circum. and haze; rain from 0h to 9h; aurora at 15h and 16h	1.0 1.0 1.0 0.3 1.0 0.3 1.0 0.3 1.0 0.3 1.0 0.3 1.0 0.3 1.0 0.0 0.3 1.0 0.0 0.3 1.0 0.0 0.3	1.0 1.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 1.0 0.0 0.0 0.0 0.0 0.0 0.3 1.0 0.2 1.0 0.8  0.0 0.0 0.0 0.0 0.0 0.0 0.0		1	33.0 27.2 31.7 42.2 30.0 26.5 34.5 22.3 34.9 43.4 30.9 36.4 35.7 33.5 34.1 30.7 32.9 23.8 23.7 33.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 27.2 40.5 20.5 20.5 20.5 20.5 20.5 20.5 20.5 2	0·28

Toronto Mean		Extent of Cloudy Sky.		ky.	Max.	Min.		
Time.	Weather and Phenomena.	3	9	15	21	Therm.	Therm.	Rain.
D. 1	MAY. Clouded till 8 <sup>h</sup> ; cir., cirstrat., and haze; remainder mostly clear; slight rain from 0 <sup>h</sup> to 7 <sup>h</sup>	1.0	0.0	0.7	0.8	52.6	° 33.4	In.
2 {	Mostly clouded till 8h; circum., cirstrat., and haze; remainder almost clear; auroral)	1.0	0.3	0.0	0.7	49.4	34.6	0.11
3	light at 6 <sup>h</sup> } Partly clouded till 8 <sup>h</sup> ; cumstrat. and circum.; remainder clear	0.9	0.0	0.0	0.0	53.7	37.5	_
4 {	Clouded till 13h; cirstrat., circum., and haze; remainder clear; thunder, lightning, and showers of rain from 6h to 12h	1.0	1.0	0.1	0.0	64.2	40.1	
5 {	Mostly clouded from 3h to 10h; circum, and cumstrat.; thunder, lightning, and showers	0.2	0.9	0.0	0.8	58.4	46.7	0.03
6 7	of rain from 5 <sup>h</sup> to 9 <sup>h</sup> Mostly clouded till 6 <sup>h</sup> ; cum. and circum.; distant thunder; remainder mostly clear; halo	0.8	0.0	_		70.6	47.1	0 03
7 }	round the sun at 20 <sup>h</sup> , diameter 40° { Generally clouded till 12 <sup>h</sup> ; cirstrat. and haze; remainder clear; auroral light in N. at }	-	_	0.5	1.0	71.8	47.7	0.09
8 {	12h and 13h	0.2	0.8	0.0	0.5	68.2	36.7	- 1
9 10	Clouded; circum. and cum.; showers of rain, lightning, and thunder from 6 <sup>h</sup> to 10 <sup>h</sup> Generally clouded; cir., circum., and haze; rain from 12 <sup>h</sup> to 17 <sup>h</sup> -	0.7	1.0	1.0	0.5	57.1 62.0	$\frac{39.2}{42.9}$	0.22
i1 {	Generally clouded; cir. and haze; rain from 0 <sup>h</sup> to 5 <sup>h</sup> ; imperfect halo round the moon at 9 <sup>h</sup> ; halo round the sun at 19 <sup>h</sup> , diameter 45°	1.0	1.0	0.3	0.0	55.0	45.5	0.12
12 13 )	Generally clear till 15 <sup>h</sup> ; remainder clouded; circum. and haze	0.1	0.0	0.4	1.0	51.4	41.2	_
14 }	Clouded till 12h; circum. and haze; rain from 0h to 4h; remainder mostly clear	1.0	1.0	0.0	0.6	54.0 47.8	39.0	0.44
15 16	Mostly clouded; cir., circum., and haze; rain occasionally from 3 <sup>h</sup> to 12 <sup>h</sup> Clouded till 9 <sup>h</sup> ; circum., cirstrat., and haze; remainder clear	1.0	0.8	0.0	1.0	56.4 57.2	32.5	0.53
17 18	Generally clear; aurora from 9 <sup>h</sup> to 14 <sup>h</sup>	0.1	0.0	0.0	0.0	59.4	$\frac{46.1}{36.2}$	_
19 {	Generally clouded; circum. and haze; heavy storm of lightning, thunder, and rain between	0.0	0.0	0.1	1.0	64.6	43.7	-
20	3h and 5h	1.0	1.0	1.0	0.9	72.9 $71.7$	48.6 55.5	0.38
21 ·} 22	Generally clouded; circum. and cirstrat.; showers of rain occasionally  Generally clouded; circum., cirstrat., and haze		_	1.0	1.0	73.6	56.5	0.18
23 {	Generally clouded; cir., cirstrat., and haze; storm of lightning, thunder, and rain from 11h to 16h	0.9	0.8	1.0	1.0 0.7	60.6	57.8	-
24 {	Generally clear till 20h; remainder clouded; circum, and cirstrat.; auroral light in N at	- 1		1.0		61.8	51.9	0.12
25	10 <sup>n</sup> and 12 <sup>n</sup> Generally clouded till 15 <sup>n</sup> ; cir. and haze: remainder clear: approval light in N at 12 <sup>n</sup>	$0.2 \\ 0.8$	0.0	0.0	1.0	59.6	53.5	-
26 27	Mostly clear; auroral light in N. from 12 <sup>h</sup> to 15 <sup>h</sup> Generally clear till 21 <sup>h</sup> ; remainder clouded; cumstrat. and circum.; storm of lightning,	0.8	0.0	0.4	0.1	73.8 78.0	50°3 46°5	
28 }	thunder, and rain from 22 <sup>h</sup> to 23 <sup>h</sup>	0.4	0.0	0.1	1.0	66.8	46.7	0.11
29 30	Generally clear Clear till 8 <sup>h</sup> ; remainder mostly clouded; cirstrat. and circum.	0.8	$\begin{bmatrix} 0.0 \\ 0.0 \end{bmatrix}$	0.0	$0.3 \\ 0.0$	70.1	52.5	
31	Mostly clear; auroral light in N. from 9 <sup>h</sup> to 12 <sup>h</sup>	0.1	0.6	0.0	0.6	75.6 67.3	47.7	
	JUNE.				-			
1	Partly clouded till 15 <sup>h</sup> ; circum., cirstrat., and haze; remainder clear  Clouded from 9 <sup>h</sup> to 12 <sup>h</sup> , and at 21 <sup>h</sup> ; cir. and haze; sheet lightning round S. horizon; re-	1.0	0.2	0.3	0.0	57.0	37.5	
2 {	mainter or day clear	0.0	1.0	0.1	1.0	63.8	41.7	
3 4 2	Clouded till 8 <sup>h</sup> ; circum. and haze; remainder clear	1.0	0.0	0.0	0.0	70.0	58.1 54.8	0.76
5 6	Clear and clouded alternately; showers; storm of lightning, thunder, rain, and hail at 5 <sup>h</sup> 30' Mostly clouded till 9 <sup>h</sup> , with circum. and cirstrat.; remainder quite clear	0.3	0.2	0.0	0.8	65.8	47.7	0.30
7 8	Quite clear  Mostly clear till 21 <sup>h</sup> ; remainder clouded; circum., cumstrat., and haze	0.0	0.0	0.0	0.0	67.6 56.4	44.9	
9 10 1	Generally clouded; circum., cumstrat., and haze	$0.4 \\ 0.2$	0.6	0.0	$\frac{0.9}{1.0}$	63.5	47.9 47.7	_
11 }	Mostly clouded till 3h; circum. and haze; remainder clear -	0.4	0.0	0.0	0.0	74.0 71.4	57.5	
12 13	Mostly clear; light cirstrat. in horizon  Mostly clear till 21 <sup>h</sup> ; light cirstrat. in horizon; remainder clouded; circum. and cirstrat.	0.4	0.1	0.0	0.0	63.8	$\frac{50.2}{40.9}$	_
14 15	Mostly clouded till 9h; circum. and cirstrat.; remainder of day clear  Quite clear	$\begin{bmatrix} 0.8 \\ 0.0 \end{bmatrix}$	0.7	$\begin{vmatrix} 0.0 \\ 0.3 \end{vmatrix}$	0.0	56.6	37.4 39.7	
16	Clear till 16 <sup>h</sup> ; remainder clouded; circum. and haze	$0.0 \\ 0.0$	$\begin{bmatrix} 0.0 \\ 0.0 \end{bmatrix}$	0.0	0.0	65.6 92.0	49.7	-
17 } 18 }	Clouded; circum. and haze; distant thunder at 3h	1.0	1.0		_	87.8	65 8 59 0	_
19 20	Generally clouded; cir. and haze; sheet lightning in W. at 9h Generally clouded; circum. and cumstrat; some heavy thunder showers	1.0	1.0	$\begin{vmatrix} 0.8 \\ 0.0 \end{vmatrix}$	$\begin{bmatrix} 1.0 \\ 0.2 \end{bmatrix}$	82·2 76·0	61.0	
21	MOSHY Clouded: CirCini. and cim -strat + a form along and -	0.2	1.0	0.0	0.8	77.6 73.6	58.2 52.0	0.38
22 {	Mostly clouded; cumstrat. and cirstrat.; faint auroral light in N. from 10 <sup>h</sup> to 12 <sup>h</sup> , rain trom 18 <sup>h</sup> to 21 <sup>h</sup>	0.4	1.0	1.0	1.0	$\frac{73}{71} \cdot \frac{6}{2}$	51.2	0 13
23 24 )	Clouded till 8 <sup>h</sup> ; circum. and cumstrat.; remainder of day clear  Generally clear	0.7	0.0	0.0	0.0	71.2	58.2	
$\begin{bmatrix} 25 \\ 26 \end{bmatrix}$	Mostly clouded: cir-cum, cir-strat, and bago wastled	0.1	0.0	0.1	0.8	77.4 73.6	54.5	
27 {	Mostly clouded; circum., cirstrat., and haze until 11 <sup>h</sup> ; remainder mostly clear  Clouded; cum., cumstrat., and haze; thunder, lightning, and slight rain from 6 <sup>h</sup> to 12 <sup>h</sup> , and  from 17 <sup>h</sup> to 22 <sup>h</sup>	1.0	0.8	0.0	0.6	76.5	44.7 56.0	=
28	Generally clouded: cirstrat and circum	1.0	1.0	1.0	1.0	82.0	55.7	0.54
29	Mostly clouded till 8h: circum and cirstrat , nomeinday 6.7	0.8	0.0	0.0	0.0		64.4	-
30 {	Partially clear till 9 <sup>h</sup> ; sheet lightning and some slight rain from 8 <sup>h</sup> to 12 <sup>h</sup> ; remainder of day clouded; circum. and cumstrat.	0.3	1.0	0.3	1.0	71.8	50.0	0.02
	-)				_ ~ ~	, , ,	00 0	0 00

Toronto	Weather and Phenomena.			loudy Sk	у.	Max.	Min.	
Mean Time.	Weather and Phenomena.	3	9	17ª	21	Therm.		Rain.
. D. 1	JULY.	0.0	0.0	_	_	。 78·0	51.5	In.
2. 3	Generally clouded; cirstrat. and haze; some rain and occasional thunder  Mostly clouded till 3h; circum. and cum.; remainder clear; aurora at 10h and 11h  Clouded till 4h are circum.	0.2	0.2	0.0	0.0	$\begin{array}{c} 66 \ 6 \\ 64 \ 6 \end{array}$	45°4 54°9	0.16
4 5 6	Clouded till 4 <sup>h</sup> ; cir., circum., and haze; remainder mostly clear; aurora from 10 <sup>h</sup> to 12 <sup>h</sup> - Clear	0.8 0.8	0.0	$\begin{bmatrix} 0.0 \\ 0.4 \\ 0.8 \end{bmatrix}$	0.8 0.0 0.9	70.7 70.6 72.3	49°1 44°1 48°7	
7 8 7	Mostly clouded; circum. and cirstrat	0.8	0.2	0.9	1.0	72.0 66.2	58.0 57.0	
9 <i>{</i> 10 <i>{</i>	Generally clouded; circum., cumstrat., cirstrat.; showers of rain, with thunder and lightning	0.9	-   0.5	$\begin{vmatrix} 1.0 \\ 1.0 \end{vmatrix}$	$\frac{1.0}{1.0}$	60.4 64.9	55.9	0.28
11 12 13 14	Mostly clouded; circum. and cirstrat.; brilliant aurora from 9 <sup>h</sup> to 11 <sup>h</sup> Mostly clouded; circum. and cumstrat.; distant thunder; some slight rain Nearly clear; some slight circum. and cirstrat. round horizon Mostly clouded till 4 <sup>h</sup> ; circum. and cirstrat.; showers; remainder clear	0.8 1.0 0.3 0.7	0.7 0.7 0.1 0.0	1.0 0.7 0.1 0.0	1.0 0.4 0.2 0.0	69.5 75.1 76.8 82.2	61.2 61.5 59.7 61.2	0.14
$\left\{\begin{array}{c}15\\16\end{array}\right\}$	Partially clouded; circum. and cum.	0.6	0.5	0.0	0.8	80°9 74°2	57°4 52°7	
17 {	Clouded till 11 <sup>h</sup> ; cirstrat., circum., and haze; showers; sheet lightning; lunar rainbow at 15 <sup>h</sup> 20", perfect	0.9	0.6	0.4	0.3	61.7	45.7	0.58
18 19 20 21	Clear from 9 <sup>h</sup> to 11 <sup>h</sup> ; remainder partly clouded; circum. and cumstrat.  Mostly clouded; cir., circum., and cirstrat.; remainder nearly clear  Mostly clouded; circum., cirstrat., and haze -  Clouded; circum. and cirstrat.; showers during the day; steady rain from 12 <sup>h</sup> to 17 <sup>h</sup>	0.8 1.0 0.7 1.0	0.0 1.0 0.0	0.2 0.3 1.0 1.0	0.6 0.7 1.0 1.0	72·2 78·5 79·2 81·5	49.2 57.5 57.1 63.3	0.53
$\left\{ egin{array}{c} 22 \ 23 \end{array}  ight\}$	Mostly clouded till 17h; cirstrat. and haze; remainder clear; showers of rain from 8h to 9h	1.0	0.5	0.7	0.0	77.1 69.0	64.7 57.7	0.08
24 25 26 27 28	Clouded; circum. and cirstrat.; slight rain during the night  Mostly clouded; circum. and haze	0.8 0.7 0.8 0.2 0.3	1.0 0.4 1.0 0.1 0.4	1.0 0.7 1.0 1.0	1 0 0 9 1 0 0 4 0 6	72.4 75.0 75.4 72.8 76.2	55.0 60.6 54.2 64.3 51.7	0·29 0·05 —
$\left\{ \begin{array}{c} 29 \\ 30 \end{array} \right\}$	Partially clouded; cirstrat. and circum	0.3	0.0	1.0	0.7	76°1 73°6	51.7	_
31 {	Mostly clouded till 9 <sup>h</sup> ; circum. and cirstrat.; remainder clear; showers of rain; sheet lightning at night	0.6	0.9	0.0	0.1	72.8	65.6	0.18
	AUGUST.							
1 2 3 {	showers during the night	0.5 0.7 1.0	0.0 0.7 1.0	1.0	1.0	73.6 73.1 77.2	52.2 49.7 52.5	0.53
4 5 }	Mostly clouded; circum., cirstrat., and haze; showers between 6 <sup>h</sup> and 7 <sup>h</sup>	0.8	0.6	0.6	1.0	73.7	63.3	0.31
6 5	Partially clear; circum. and haze general	0.0	0.0	0.1 0.0 0.7	0.0 0.0 0.0	71.8	51.8 48.7 48.9	_
8 9 10	Mostly clear; misty at 16 <sup>h</sup> and 17 <sup>h</sup> Mostly clear: some light circum, occasionally	0.4 0.5	0.0	0.0	0.0 0.2	79.1	53.0 58.8	_
11 {	Mostly clouded; cirstrat. and circum.; distant thunder in N.W. at 4 <sup>h</sup> ; slight rain between 6 <sup>h</sup> and 7 <sup>h</sup>	0.5	0.8	0.7	0.2	84.9	63.3	
$\left\{\begin{array}{c}12\\13\\14\end{array}\right\}$	Mostly clear; some cum. and circum	0.3	0.1	0.5	0.3	81.5	63.5 63.2	
15 16 {	Clouded; circum. and cirstrat.  Clouded; circum., cirstrat., and haze; some slight rain and distant thunder during the day; rain at night	1.0	1.0	1.0	1.0	87.0 78.6	1	
17 - 18	Clouded; cumstrat. and circum.  Mostly clouded till 3 <sup>h</sup> ; cumstrat. and circum.; remainder clear	1.0	1°0	1.0	0.5	77.8 66.0	62.5 59.8	
$\left[\begin{array}{c}18\\19\\20\end{array}\right]$	Generally clear till 9h; remainder clouded; cir. and haze	0.2	0.0	1.0	1.0	74.0 73.8	56.2 51.9	
21 22 23	Clear; aurora from 9 <sup>h</sup> to 11 <sup>h</sup> Partially clouded; cirstrat. and haze  Generally clouded; cirstrat., cir., and cumstrat.; some rain during the night  Generally clouded; circum. and cirstrat.; halo round the sun at 21 <sup>h</sup> and 22 <sup>h</sup> , diam. 40°, perfect	0.4 0.6 0.4 0.7	0.0 0.4 0.6 0.9	1.0 0.8 0.0	0.1 0.3 0.1	73°1 71°4	55°5 53°6 59°1	_
$\left\{egin{array}{c} 24 \\ 25 \\ 26 \\ 27 \end{array}\right\}$	Mostly clouded; cirstrat. and haze  Mostly clear; very bright perfect halo round the sun at 1 <sup>h</sup> 30' of the 27th, diameter about { 40°; sky hazy; sun shining dimly	0.0	0.0	$\begin{array}{ c c }\hline 1.0\\\hline 0.0\\\hline 1.0\\ \end{array}$	0.7	74.4 75.4	60 0 58 5	
28 {	Clouded till 4 <sup>h</sup> ; cirstrat., circum., and haze; thunder in S.W. and N.W. at 2 <sup>h</sup> and 3 <sup>h</sup> ; aurora from 10 <sup>h</sup> to 11 <sup>h</sup>	1.0	0.5	0.0	0.0	1	1	ı
29 30 31	Clear all day Generally clear till 17 <sup>h</sup> ; remainder clouded; circum. and cirstrat. Clear from 9 <sup>h</sup> to 12 <sup>h</sup> ; remainder clouded; circum. and cirstrat.	0.1 0.3 1.0	0.0	0.0 0.4 1.0	1.0	76.4	53.7	7

<sup>&</sup>lt;sup>a</sup> In the last column under the head of Clouded Sky the 17<sup>h</sup> has been substituted for the 15<sup>h</sup>, commencing with the new system of observation on 1st July, 1848.

Toronto	Weather and Phenomena.	Ex	ctent of C	loudy Sk	y.	Max.	Min.	Pa:-
Mean Time.	Weather and Phenomena.	3	9	17	21	Therm.		Rain.
<b>D.</b>	SEPTEMBER.  Generally a few clear spaces till 17 <sup>h</sup> ; remainder clouded; circum. and cirstrat	0.0	0.8	0.7	1.0	° 76.7	62.6	In.
$\left\{\begin{array}{c}2\\3\end{array}\right\}$	Clear till 9h; remainder clouded; cum. and circum.	0.3	0.0	1.0	0.8	71.0 73.4	58.0 51.0	_
4 5 6	Mostly clear from 4 <sup>h</sup> to 11 <sup>h</sup> ; remainder clouded; circum. and haze; aurora at 10 <sup>h</sup> - Quite clear	0.3 0.1 0.2	0.0 0.0 0.0	0.0 0.0 0.8	0.0 0.0 0.8	77.4 80.4	59.2 58.5	_ _
7 8	Generally clear	0.0	0.0	0.0	0.1	73.4 68.0 68.0	48.2 40.1 49.7	
$\binom{9}{10}$ }	Clear at 4 <sup>h</sup> and 15 <sup>h</sup> ; remainder mostly clouded; circum. and cirstrat.; lightning, thunder, and rain during the night	0·7	0.0	0.6	1.0	73·8 65·0	45.6 38.7	0.13
11 {	Clouded; circum. and cirstrat.; thunder, lightning, and showers of rain during the day and night	1.0	1.0	1.0	0.8	69.2	54.7	0.54
$12$ $13 \begin{cases}$	Mostly clouded till 3 <sup>h</sup> ; cir., cir., strat., and circum.; remainder clear - Generally clear till 4 <sup>h</sup> ; remainder clouded; cir., cirstrat., and haze; commenced rain at 17 <sup>h</sup> ; halo round the sun at 4 <sup>h</sup> , diameter 40°, perfect; halo round the moon at 9 <sup>h</sup> , 10 <sup>h</sup> , and	0.0	0.1	0.0	1.0	65.4 59.6	48.9 37.2	
14	11 <sup>n</sup> , diameter 40°, perfect Clouded all day; rain at intervals, accompanied by lightning and thunder	1.0	1.0	0.6	1.0	60.4	47.0	1.00
$egin{array}{c} 15 \\ 16 \\ 17 \end{array} \}$	Clouded till 2 <sup>h</sup> ; circum. and cumstrat.; remainder clear; boards white with frost Mostly clear till 3 <sup>h</sup> ; remainder clouded; circum. and haze; rain	0.4 0.1	1.0 0.0	$\frac{1.0}{0.0}$	$\frac{1.0}{0.0}$	58.3 57.4 55.4	50°2 35°1 46°7	0:60
18 19	Clouded all day	1.0	1.0 1.0	1.0	0.9	60.7 61.9	52·4 50·7	0.62
20 21 22	Mostly clouded; circum. and cirstrat.; some rain; aurora at 9 <sup>h</sup> - Partially clear; circum. general; some showers of rain; hoar frost	0.8 0.9	0.6 0.5	$\begin{array}{c} 1.0 \\ 0.2 \end{array}$	0.0	63.8 59.4	51.7 40.7	0 · 22 0 · 07
$\left\{egin{array}{c} 22 \ 23 \ 24 \end{array} ight\}$	Generally clear	0°3 0°4	0.0	0.8	$\frac{0.5}{0.8}$	52.4 48.2 60.8	36.2 30.9 46.8	1
$\begin{array}{c} 25 \\ 26 \end{array}$	Partially clouded till 2 <sup>h</sup> ; cir-cum. and cumstrat.; remainder mostly clear  Mostly clear	0.2 0.2	0.0	0.0	0.4 0.1	55.8	42·3 30·2	
27 28 29	Clouded; cirstrat., circum., and haze  Clouded; cumstrat. and circum.; slight rain  Generally clouded; circum. and cirstrat.; aurora from 9 <sup>h</sup> to 11 <sup>h</sup> ; rain	1.0	1.0	0.6	1.0	47.9 54.4	28·1 34·0	0.20
30	Mostly clouded; circum., cirstrat., and haze; aurora from 9 <sup>h</sup> to 11 <sup>h</sup> -	1°0 0°7	0.8 0.8	<del></del>	0·7 —	59.0 59.0	44.3 35.2	0.16
	OCTOBER.							
$egin{array}{c} 1 \\ 2 \\ 3 \end{array}$	Generally overcast; circum. and cirstrat Clouded; cirstrat. and haze; slight rain from 0 <sup>h</sup> to 9 <sup>h</sup> Mostly clouded; cirstrat. and haze	1.0	1.0	1.0	1.0	49.0	39.2 44.1	0.23
4 5	Clouded; circum., cirstrat., and haze  Mostly clouded; circum., cirstrat., and haze	0.8 1.0	1.0	1.0	1:0	51.8 57.8	47.7 51.5	<del></del>
6	Densely clouded all day; circum., cirstrat., and haze	1.0	0.5 1.0	1.0	1.0	58.5 57.7	46.7	_
7 8	Mostly clouded; circum., cirstrat., and haze; rain from 5 <sup>h</sup> to 8 <sup>h</sup> Partially clouded; circum. and cumstrat.; aurora at night	. 1.0	1.0	<u> </u>	0.0	52.0 61.0	46.6 40.2	0.22
9 10	Clear till 4 <sup>h</sup> ; remainder clouded; circum., cumstrat., and haze  Mostly clear -	0.0	0.0	0.0	0.4	50.0	31.3	-
11 12	Mostly clear  Mostly clear	0.0	0.0	0.4	0.0	57.4 54.6	49.5 24.5	
13	Partially clouded; cir., circum., and cirstrat.	0.8	$0.0 \\ 0.4$	$\begin{array}{c} 1 & 0 \\ 0 & 1 \end{array}$	0.4	48.4	31.4 39.5	-
$\begin{array}{c} 14 \\ 15 \end{array}$	Clouded till 3 <sup>h</sup> , with circum. and cirstrat.; remainder of day clear  Quite clear till 17 <sup>h</sup> ; remainder clouded; circum., cirstrat., and haze	0.6	0.0	_	_	48.0	33.9	
16 {	Clouded all day; circum., cirstrat., and haze; slight rain from 6h to 10h, and some during)	7.00		0.0	1.0	61.0	36.7	-
10 \ 17	the night Clouded all day; cumstrat. and circum.	1.0	1.0	1.0	1.0	58.6	46.2	0.59
18 {	Clouded all day; cumstrat., cirstrat., circum., and haze; auroral light through the clouds at night	1.0	1.0	1.0	1.0	61.8	36.7	
19	Clouded all day; cirstrat. and haze	1.0	1.0	1.0	1.0	36.6	i .	-
$\frac{20}{21}$	Clouded all day; circum., cirstrat., and haze  Mostly clouded; cirstrat., circum., and haze	1.0	1.0	0.9	0.5	44.0	34.8	
22	Mostly clouded; circum., cirstrat., and cumstrat.	1.0	0.4	<u> </u>		46.5	36.2	-
23	Mostly clouded; cir., circum., and haze; aurora at 9h	0.8	1.0	1.0	0.2	47.5	26.7	_
O 1	Mostly clouded; circum. and cumstrat; rain  Mostly clouded; cirstrat. and haze; aurora from 9 <sup>h</sup> to 12 <sup>h</sup> ; rain from 15 <sup>h</sup> to 17 <sup>h</sup>	0.9	0.4	0.3	0.5	46.5	40.7	0.27
$\frac{24}{25}$		0.9	1.0	1.0	0.8	54.7	35.6	0.06
$\begin{array}{c} 25 \\ 26 \end{array}$	Clear from 9 <sup>h</sup> to 11 <sup>h</sup> , and at 21 <sup>h</sup> ; remainder clouded; circum. and cumstrat.	_	0.0	7 • ^			1 0-	1
25 26 27	Clear from 9 <sup>h</sup> to 11 <sup>h</sup> , and at 21 <sup>h</sup> ; remainder clouded; circum. and cumstrat.  Clear till 17 <sup>h</sup> ; remainder clouded; cirstrat. and haze	1.0	0.0	0.0	0.0	51.0	37.9	
25 26 27 28	Clear from 9 <sup>h</sup> to 11 <sup>h</sup> , and at 21 <sup>h</sup> ; remainder clouded; circum. and cumstrat.  Clear till 17 <sup>h</sup> ; remainder clouded; cirstrat. and haze  Clouded all day; cirstrat. and haze	_	1.0 0.0 0.0	0.0	1.0	$\begin{vmatrix} 51.0 \\ 47.0 \\ 51.2 \end{vmatrix}$	37.9 34.8 38.2	_
25 26 27	Clear from 9 <sup>h</sup> to 11 <sup>h</sup> , and at 21 <sup>h</sup> ; remainder clouded; circum. and cumstrat.  Clear till 17 <sup>h</sup> ; remainder clouded; cirstrat. and haze	0.0 1.0	0.0	0.0	1.0	47.0	34.8	1

Toronto Mean	Wastan and Discourse	E	xtent of C	Cloudy SI	ky.	Max.	Min.	Rain.
Time.	Weather and Phenomena.	3	9	17	21	Therm.		Kain.
р.	NOVEMBER.					0	0	In.
1	Mostly clear; some cumstrat. and cirstrat. round horizon	0.4	0.1	0.4	0.1	46.6	37.8	_
2	Nearly clear at 9h; remainder clouded; cumstrat., circum., and cirstrat.	1.0	0.4	1.0	1.0	44.3	31.9	_
3	Clouded; circum., cirstrat., and haze	1.0	1.0	1.0	1.0	38.9	31'6	
4 5	Clouded; circum., cumstrat., and haze; rain till 17h	1.0	1.0			43.2	39.2	0.41
6	Mostly clouded; circum. and cumstrat.	<u> </u>	0:0	1.0	1.0	49.0	35.7	
7	Mostly clouded; cirstrat. and haze Mostly clouded; cirstrat. and haze; some particles of snow	$0.9 \\ 0.3$	$0.3 \\ 0.8$	$\frac{1.0}{0.8}$	$\frac{1.0}{1.0}$	40.0	32·3 26·9	
8	Mostly clouded till 9 <sup>h</sup> ; cirstrat. and haze; remainder clear; some snow from 6 <sup>h</sup> to 9 <sup>h</sup>	1.0	1.0	0.1	0.0	35.7	$\frac{20.9}{24.8}$	_
. 9	Mostly clouded; cirstrat. and haze	0.8	0.0	1.0	1.0	33.6	$\frac{27}{20} \cdot 1$	
10	Clouded all day; cirstrat. and haze; some faint auroral light at 11 <sup>h</sup>	1.0	1.0	1.0	1.0	28.0	15.9	
11	Clouded all day; circum. and cirstrat.; some slight snow	1.0	1.0			29.4	25°I	
12	Clouded all day; cirstrat. and haze			1.0	1.0	31.6	25.2	
13	Clouded all day; cirstrat. and haze; some very slight snow at 11h	1.0	1.0	1.0	1.0	27.6	25.5	
14 15	Clouded all day; cir. cum, and haze; slight rain at 10 <sup>h</sup> and 11 <sup>h</sup>	1.0	1.0	1.0	1.0	34.5	31.9	0.03
16	Clear at 9h and 10h; remainder clouded; circum. and haze	$\frac{1.0}{0.9}$	$\begin{array}{c c} 1.0 \\ 0.4 \end{array}$	$\begin{bmatrix} 0.0 \\ 0.0 \end{bmatrix}$	$\frac{1.0}{0.7}$	40.6	33.2	_
17	Clouded till 4 <sup>h</sup> ; remainder partly clear; circum, and haze; auroral light from 10 <sup>h</sup> - Mostly clouded; circum, and cirstrat.; very brilliant aurora at night	1.0	1.0	1.0	0.1	$\frac{39.2}{43.2}$	$\frac{35.4}{28.7}$	
18	Mostly clouded; circum. and cumstrat.; some slight appearance of aurora at night	1.0	0.4		<del></del>	37.7	26.1	_
19	Clouded all day; some slight auroral light at night	_		1.0	1.0	33.4	26.2	
20	Clouded all day; some slight auroral light at night  Mostly clear	0.0	0.0	0.6	1.0	33.0	30.5	
21	Generally clear; aurora from 7 <sup>h</sup> to 11 <sup>h</sup> ; moderately bright	0.1	0.0	0.0	0.5	38.8	21.7	
22 {	Clouded from 2 <sup>h</sup> to 10 <sup>h</sup> , and at 21 <sup>h</sup> ; circum. and cirstrat.; remainder mostly clear; faint auroral light from 9 <sup>h</sup> to 11 <sup>h</sup>	1.0	0.9	0.0	1.0	41'1	27.7	
23 {	Clear from 9 <sup>h</sup> to 11 <sup>h</sup> ; remainder clouded; cirstrat., circum., and haze; faint auroral light at 11 <sup>h</sup>	0.8	0.0	1.0	1.0	40.8	26.9	
24	Clouded all day; circum., cirstrat., and haze; constant light rain till 8h	1.0	1.0	1.0	1.0	43.0	29.8	0.89
25	Clouded all day; circum, and cum,-strat.; rain and sleet till 4h	1.0	1.0	_		44.6	32.7	0.22
26	Clouded all day; cir-cum. and cumstrat; aurora from 10h to 12h -			1.0	1.0	38.1	28.7	
$\begin{array}{c} 27 \\ 28 \end{array}$	Mostly clouded; cirstrat. and circum.; faint auroral light at night Mostly clouded; cumstrat. and cirstrat	0.7	$\begin{array}{c c} 0.4 \\ 0.9 \end{array}$	1.0	1.0	30.8 32.4	20.6	_
	Clouded; cirstrat. and haze; rain from 2 <sup>h</sup> to 11 <sup>h</sup> ; heavy squall of wind at 16 <sup>h</sup> ; wind \						. [	<u> </u>
29 {	continuing high	1.0	1.0	1.0	1.0	41.0	35.7	0.45
30	Clouded all day; circum. and haze	1.0	1.0	1.0	1.0	41.4	29.5	
	DECEMBER.							
$egin{array}{c} 1 \ 2 \end{array}$	Clouded all day; circum. and cumstrat.; snow from 3h to 9h; turned to rain	1.0	0.6	1.0	0.8	38.0 38.0	$\begin{array}{c} 23.7 \\ 22.2 \end{array}$	0.50
3	Mostly clouded; circum. and cumstrat.; rain	0.8		1.0	1.0		33.5	0.78
4	Clouded; circum., cirstrat., and haze; slight snow at 17h	1.0	1.0	1.0	1.0	38.2	28.9	
5	Clouded; circum, cirstrat., and haze; snow at intervals	1.0	1.0	1.0	1.0	38.0	28.9	· l
6	Clouded; cirstrat. and haze; drizzling rain, freezing as it falls from 2 <sup>h</sup>	1.0	1.0	1.0	1.0	31.1	26.2	0.25
7	Clouded; circum. and haze; drizzling most of the day	1.0	1.0	1.0	0.8	29'0	26.2	0.39
8	Partly clear; circum. and cirstrat. general	0.0	1.0	0.3	1.0	35.0	30.7	
9 10	Clouded; cirstrat. and haze; sleet and rain from 9h	1.0	1.0	1.0	$\frac{1.0}{1}$	48.8 34.4	27.7 31.8	0.25
11	Mostly clouded; some rain	$\frac{1.0}{1.0}$	1.0	1.0	1.0	46.6	26.2	0.32
$\frac{11}{12}$	Mostly clouded; cirstrat., cumstrat., and haze	1.0	1.0	0.4	0.7	30.1	23.2	_
13	Mostly clear : cumstrat. round horizon	0.0	0.3	0.5	0.8	30.6	22.2	
14	Clear from 2 <sup>h</sup> to 4 <sup>h</sup> ; remainder clouded; circum. and haze	0.0	1.0	0.8	0.1	34.2	27.7	
15	Clouded from 10 <sup>h</sup> to 21 <sup>h</sup> ; circum. and cirstrat.; remainder clear; slight snow at 19 <sup>h</sup>	0.0	0.0	1.0	1.0	42.0	32.2	_
16	Mostly elouded; circum. and cumstrat	0.9	0.9	$\frac{1}{1}$	1.0	35.6	27.5	
$\begin{bmatrix} 17 \\ 18 \end{bmatrix}$	Clouded; cirstrat. and naze  Clouded; circum. and cumstrat.; faint appearance of auroral light at 10 <sup>h</sup> and 11 <sup>h</sup>	1.0	0.9	1.0	1.0	43.9	$\begin{vmatrix} 32.7 \\ 31.7 \end{vmatrix}$	
1.0	Clouded: dense: circum, and haze	0.4	1.0	1.0	1.0	41.7	$\frac{31}{32.7}$	
		1.0	1.0	1.0	1.0	48.6	21.9	_
19 20	Clouded; cir. and haze	101			1.0	29.0	19.3	_
19 20 21	Clouded; dense; circum. and haze	1.0	1.0	1.0				1
19 20	Clouded; cir. and haze		1.0	0.6	1.0	20.6	8.1	
$ \begin{array}{c} 19 \\ 20 \\ 21 \\ 22 \\ \end{array} $ $ \begin{array}{c} 23 \\ \end{array} $	Clouded; dense; haze; snowing and drift - Mostly clouded; circum. and haze; snowing and drift till 3h - Mostly clouded; circum. and cirstrat.; some slight snow from 19h, which turned to rain at 21½h -	1.0		— 0.6	1.0	12.8	1.1	
$egin{array}{c} 19 \\ 20 \\ 21 \\ 22 \\ 23 \end{array} \Big\{ \Big  $	Clouded; dense; haze; snowing and drift  Mostly clouded; circum. and haze; snowing and drift till 3h  Mostly clouded; circum. and cirstrat.; some slight snow from 19h, which turned to rain  at 21½h  Clouded: circum, and haze; rain, which ceased at 2h	0.9 	1.0	1.0 - 0.6	1.0	12.8 25.6	18.0	0.24
19 20 21 22 23 23 { 24 25	Clouded; dense; haze; snowing and drift  Mostly clouded; circum. and haze; snowing and drift till 3h  Mostly clouded; circum. and cirstrat.; some slight snow from 19h, which turned to rain at 21½h  Clouded; circum. and haze; rain, which ceased at 2h  Clouded; circum. and cumstrat.	1.0 0.9	1.0	0.6 - 1.0	1.0 - 1.0	12.8 25.6 33.0	1.1 18.0 23.6	0.24
19 20 21 22 23 { 24 25 26	Clouded; dense; haze; snowing and drift  Mostly clouded; circum. and haze; snowing and drift till 3h  Mostly clouded; circum. and cirstrat.; some slight snow from 19h, which turned to rain at 21½h  Clouded; circum. and haze; rain, which ceased at 2h  Clouded; circum. and cumstrat.	1.0 1.0 0.9 - 1.0 1.0	1.0 1.0 1.0	1.0 - 0.6	1.0 - 1.0	12.8 25.6 33.0 36.6	1.1 18.0 23.6 21.0	0.24
19 20 21 22 23 { 24 25 26 27	Clouded; dense; haze; snowing and drift  Mostly clouded; circum. and haze; snowing and drift till 3h  Mostly clouded; circum. and cirstrat.; some slight snow from 19h, which turned to rain at 21½h  Clouded; circum. and haze; rain, which ceased at 2h  Clouded; circum. and cumstrat.  Mostly clouded; circum. and cumstrat.  Clouded till 11h; circum. and cirstrat; snow from 0h to 10h; cleared up	1.0 1.0 1.0 1.0 1.0	1.0 0.6 1.0	0.0 - 1.0 - 0.0	1.0 - 1.0 - 1.0	12.8 25.6 33.0 36.6 24.3	1'1 18'0 23'6 21'0 15'5	0.24
19 20 21 22 23 { 24 25 26 27 28	Clouded; dense; haze; snowing and drift  Mostly clouded; circum. and haze; snowing and drift till 3h  Mostly clouded; circum. and cirstrat.; some slight snow from 19h, which turned to rain at 21½h  Clouded; circum. and haze; rain, which ceased at 2h  Clouded; circum. and cumstrat.  Mostly clouded; circum. and cumstrat.  Clouded till 11h; circum. and cirstrat; snow from 0h to 10h; cleared up  Clear till 3h; remainder clouded; circum. and cirstrat	1.0 1.0 0.9 - 1.0 1.0	1.0 1.0 1.0	1.0 - 0.6	1.0 - 1.0	12.8 25.6 33.0 36.6 24.3 33.1	1.1 18.0 23.6 21.0 15.5 15.7	0.24
19 20 21 22 23 { 24 25 26 27	Clouded; dense; haze; snowing and drift  Mostly clouded; circum. and haze; snowing and drift till 3h  Mostly clouded; circum. and cirstrat; some slight snow from 19h, which turned to rain at 21½h  Clouded; circum. and haze; rain, which ceased at 2h  Clouded; circum. and cumstrat.  Mostly clouded; circum. and cumstrat.  Clouded till 11h; circum. and cirstrat; snow from 0h to 10h; cleared up  Clear till 3h; remainder clouded; circum. and cirstrat	1.0 1.0 1.0 1.0 1.0	1.0 1.0 0.6 1.0 1.0	0.6  1.0  0.6	1.0 0.0 1.0 - 1.0	12.8 25.6 33.0 36.6 24.3 33.1	1'1 18'0 23'6 21'0 15'5	0.24

LONDON:
Printed by George E. Eyre and William Spottiswoode,
Printers to the Queen's most Excellent Majesty.
For Her Majesty's Stationery Office.