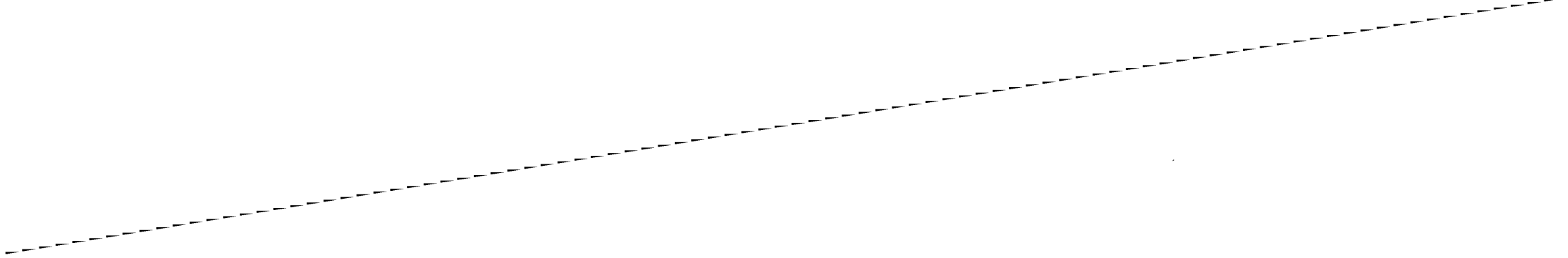

# RESULTS

OF THE

# MAGNETICAL AND METEOROLOGICAL OBSERVATIONS

MADE AT

## THE ROYAL OBSERVATORY, GREENWICH,

IN THE YEAR

## 1908:

UNDER THE DIRECTION OF

SIR W. H. M. CHRISTIE, K.C.B., M.A., D.Sc., F.R.S.,
ASTRONOMER ROYAL.

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# ERRATA.

## MAGNETICAL AND METEOROLOGICAL OBSERVATIONS.

### 1867 RESULTS.

Page (clxxxvi), Column 21, line 16, *for* 571, *read* 512.
line 32, *for* 9192, *read* 9133.

### 1869 RESULTS.

Page (lxviii), Column 21, line 11, *for* 260, *read* 160.
line 32, *for* 7877, *read* 7777.

### 1871 RESULTS.

Page (liv), Column 21, line 13, *for* 334, *read* 234.
line 32, *for* 7253, *read* 7153.
Page (lxvi), Column 21, line 11, *for* 112, *read* 172.
line 31, *for* 5674, *read* 5734.

### 1874 RESULTS.

Page (xliv), Column 21, line 11, *for* 304, *read* 404.
line 31, *for* 7774, *read* 7874.
Page (l), Column 21, line 13, *for* 337, *read* 437.
line 32, *for* 8848, *read* 8948.

### 1907 INTRODUCTION.

Page xxxii, Table at foot, *for* 1906, *read* 1907.
Page lix, line 27, *for* (cviii) and (cix), *read* (cxiii) and (cxiv).

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# RESULTS

OF

# MAGNETICAL AND METEOROLOGICAL OBSERVATIONS.

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1908.

# GREENWICH MAGNETICAL AND METEOROLOGICAL OBSERVATIONS, 1908.

## INTRODUCTION.

### § 1. *Personal Establishment and Arrangements.*

During the year 1908 the personal establishment in the Magnetical and Meteorological Department of the Royal Observatory consisted of Walter William Bryant, Superintendent, aided by one Established Computer, David J. R. Edney, and four Computers. The Computers employed during the year were : — Wilfred C. Parkinson, Edward Kirby, William H. Timbury, Arthur E. Loomes, and Ernest L. Richardson.

Mr. Bryant controls and superintends the whole of the work of the Department. The routine magnetical and meteorological observations are in general made by the Computers.

### § 2. *General Description of the Buildings and Instruments of the Magnetical and Meteorological Observatory.*

The Magnetical and Meteorological Observatory was erected in the year 1838. Its northern face is distant about 170 feet south-south-east from the nearest point of the South-East Dome and about 20 feet south of the new Altazimuth Pavilion. On its east stands the New Library (now used as a store-room), erected at the end of the year 1881, in the construction of which non-magnetic bricks were used, and every care was taken to exclude iron. The Magnetical and Meteorological Observatory

is based on concrete and built of wood, united for the most part by pegs of bamboo; no iron was intentionally admitted in its construction, or in subsequent alterations. Its form is that of a cross, the arms of the cross being nearly in the direction of the cardinal magnetic points as they were in 1838. The northern arm is longer than the others, and is separated from them by a partition, and used as a Computing Room; the stove which warms this room, and its flue, are of copper. The remaining portion, consisting of the eastern, southern, and western arms, is known as the Upper Magnet Room. The upper declination magnet and its theodolite, for determination of absolute declination, were formerly placed in the southern arm, an opening in the roof allowing circumpolar stars to be observed by the theodolite, for determination of its reading for the astronomical meridian. Both the magnet and its theodolite were supported on piers built from the ground. In the eastern arm is placed the Thomson electrometer for photographic record of the variations of atmospheric electricity; its water cistern rests on four glass insulators supported by a platform fixed to the western side of the southern arm, near the ceiling. The Standard barometer is suspended near the junction of the southern and western arms. The sidereal clock, Grimalde and Johnson, no longer in use since the removal of the upper declination magnet and its theodolite, is fixed at the junction of the eastern and southern arms, and there is in addition a mean solar chronometer, M$^{c}$Cabe No. 649, for general use.

Until the year 1863 the horizontal and vertical force magnets were also located in the Upper Magnet Room, the declination magnet being up to that time employed for photographic record of the variations of declination, as well as for absolute measure of the element. But experience having shown that the horizontal and vertical force magnets were exposed in the upper room to large variations of temperature, a room known as the Magnet Basement (in which the variations of temperature are very much smaller) was excavated in the year 1864 below the Upper Magnet Room, and the horizontal and vertical force magnets, as well as a new declination magnet for photographic record of declination, were mounted therein. The Magnet Basement is of the same dimensions as the Upper Magnet Room. The lower declination magnet and the horizontal force and vertical force magnets, as now located in the Basement, are used entirely for record of the variations of the respective magnetic elements. The declination magnet is suspended in the southern arm, immediately beneath the position formerly occupied by the upper declination magnet; the horizontal and vertical force magnets are placed in the eastern and western arms respectively, in positions nearly underneath those which they occupied when in the Upper Magnet Room. All are mounted on or suspended from supports carried by piers built from the ground. A photographic barometer is fixed to the northern wall of the Basement, and an apparatus for photographic registration of earth currents is

placed near the southern wall of the eastern arm. A mean solar clock of peculiar construction for interruption of the photographic traces at each hour is fixed on the north side of the central pier. Another mean solar clock for general use is attached to the western wall of the southern arm. For better ascertaining the variations of temperature of the Basement, a Richard metallic thermograph was added in February 1886. It is placed on the pier carrying the horizontal force magnet, and gives a continuous register of temperature on a scale of 5° to 1 inch, the scale for time being 24 hours to $5\frac{1}{3}$ inches. On the northern wall, near the photographic barometer, is fixed the Sidereal Standard clock of the Astronomical Observatory, Dent 1906, communicating with the chronograph and with clocks of the Astronomical Department by means of underground wires. This clock is placed in the Magnet Basement because of its nearly uniform temperature.

The Basement is warmed, when necessary, by a gas stove (of copper), and ventilated by means of a large copper tube nearly two feet in diameter, which receives the flues from the stove and all gas-lights, and passes through the Upper Magnet Room to a revolving cowl above the roof. Another gas stove provided with the object of maintaining a higher temperature during the winter, and so rendering the Basement temperature more uniform throughout the year, is placed near the middle of the western wall of the western arm. Each of the arms of the Basement has a well window facing the south, but these wells are usually closely stopped up with bags packed with straw or jute.

A platform erected above the roof of the Magnet House is used for the observation of meteors. A rain gauge is placed on a table on this platform, and there are also thermometers (placed in a louvre-boarded shed or screen, with free circulation of air) for observation of the temperature of the air in an exposed situation at a height of 20 feet above the ground. A wooden stand on which the nephoscope can be mounted for occasional observations was placed there in May 1904.

To the south of the Magnet House, in what is known as the Magnet Ground, is an open shed, on the west side of the earth thermometers, consisting principally of a roof supported on four posts, under which is placed the photographic dry-bulb and wet-bulb thermometer apparatus. On the roof of this shed were fixed an ozone box and a rain gauge, of which the former was removed on 1906 October 22, and mounted on the Stevenson screen in the Magnetic Pavilion enclosure. About 20 feet south of the southern arm of the Magnet House are placed the earth thermometers, the upper portions of which, projecting above the ground, are protected by a small wooden hut,

and at about the same distance south east of the southern arm of the Magnet House is situated a Stevenson screen containing dry-bulb, wet-bulb, and maximum and minimum thermometers, and a few feet further east there were two rain gauges, both of which were removed at the end of 1906 February, being replaced by a single new one.

The Magnet Ground is bounded on its western side by a range of seven rooms formerly known as the Magnetic Offices.

In the South Ground stands the new Observatory Building erected in the years 1891 to 1898, and on the north side of the Magnetical Observatory stands the new Altazimuth Pavilion erected in 1894 to 1895. In both of these buildings considerable masses of iron have been introduced.

The Magnetic Pavilion, in an enclosure in Greenwich Park, at a distance of about 350 yards from the Observatory, on the East side, was completed at the end of 1898 September, and the instruments for absolute determinations of magnetic declination, dip and horizontal force are installed there. The greatest care was taken to exclude all iron in building the Magnetic Pavilion, and the site was selected so that there should be no suspicion of magnetic disturbance from iron in the neighbourhood. The revolving stand carrying the thermometers used for ordinary eye observations, the thermometers for solar and terrestrial radiation, and the standard rain gauge, were moved to an open position in the Magnetic Pavilion enclosure at the beginning of 1899, a Stevenson screen was added on 1900 March 31, and an additional rain-gauge on 1908 January 1.

The Anemometers are fixed above the roof of the Octagon Room (the ancient part of the Observatory) :—Osler's, for continuous record of direction and pressure of wind, and amount of rain, above the north-western turret, and Robinson's for continuous record of velocity, above the small wooden building on the southern side of the roof of the Octagon Room. Since 1896 February 6 the sunshine instrument has also been mounted on the building which carries the Robinson Anemometer.

Regular observation of the principal magnetical and meteorological elements was commenced in the autumn of the year 1840, and has been continued, with some additions to the subjects of observation, to the present time. Until the end of the year 1847 observations were in general made every two hours, but at the beginning of the year 1848 these were superseded by the introduction of the method of photographic registration, by which means a continuous record of the various elements is obtained.

For information on many particulars concerning the history of the Magnetical and Meteorological Observatory, especially in regard to alterations not recited in this volume, which have been made from time to time, the reader is referred to the Introductions to the Magnetical and Meteorological Observations for preceding years, and to the Descriptions of the Buildings and Grounds, with accompanying Plans, given in the volumes of Astronomical Observations for the years 1845 and 1862.

## § 3. *Subjects of Observation in the year* 1908.

The observations comprise determinations of absolute magnetic declination, horizontal force, and dip; continuous photographic record of the variations of declination, horizontal force, and vertical force, and of the earth currents indicated in two distinct lines of wire; eye observations of the ordinary meteorological instruments, including the barometer, dry and wet-bulb thermometers, radiation and earth thermometers, and of thermometers placed on the roof of the Magnet House; continuous photographic record of the variations of the barometer, dry and wet-bulb thermometers, and electrometer (for atmospheric electricity); continuous automatic record of the direction, pressure, and velocity of the wind, and of the amount of rain; registration of the duration of sunshine, and amount of ozone; observations of some of the principal meteor showers; general record of ordinary atmospheric changes of weather, including numerical estimation of the amount of cloud, special cloud observations in connection with the International Balloon ascents, and occasional phenomena.

From the beginning of the year 1885, Greenwich civil time, reckoning from midnight to midnight, and counting from 0 to 24 hours, has been employed throughout the magnetical and meteorological sections. In previous years the time used throughout the magnetic section was Greenwich astronomical time, reckoning from noon to noon; and generally in the meteorological section, Greenwich civil time, reckoning from midnight to midnight.

## § 4. *Magnetic Instruments.*

DECLINATION MAGNET FOR ABSOLUTE DETERMINATIONS. — For determination of magnetic declination in the Magnetic Pavilion, the hollow cylindrical magnet, Elliot No. 75, has been mounted in conjunction with the theodolite formerly used with the upper declination magnet in the Observatory, the aperture of the viewing telescope being reduced to that of the magnet collimator (0·3 inch) and a low-power eye-piece being provided. Since 1899 January 1 regular observations of declination have been made in the Magnetic Pavilion (alternating during 1899 with

determinations with the upper declination magnet in the Magnet House) to determine the correction required to the results found at the latter site, representing the effect of the iron in the Observatory Buildings. This correction was found to be $-10'{\cdot}8$. The upper declination magnet, formerly employed until the end of the year 1898 for the determination of absolute declination, was finally dismounted at the end of the year 1900.

The theodolite, by which the position of the declination magnet is observed, is by Troughton and Simms. It is planted about 2 feet south of the magnet. The radius of its horizontal circle is 8·3 inches, and the circle is divided to $5'$, and read, by three verniers, to $5''$. The theodolite has three foot-screws, which rest in brass channels let into the capping stone cemented to the concrete pier which rises from the ground. The length of the telescope is 21 inches, and the aperture of its object-glass 2 inches: it is carried by a horizontal transit-axis $10\frac{1}{2}$ inches long, supported on Y's carried by the central vertical axis of the theodolite. The eye-piece has one fixed horizontal wire and one vertical wire moved by a micrometer-screw, the field of view in the observation of stars being illuminated through the pivot of the transit-axis on that side of the telescope which carries the micrometer-head. The value of one division of the level is $1''{\cdot}15$. By opening the North door of the Magnetic Pavilion observations of circumpolar stars can be made for determination of the reading of the horizontal circle of the theodolite corresponding to the astronomical meridian. For these observations a Sidereal Chronometer, Parkinson and Frodsham No. 3719, is kept in the Pavilion.

The inequality of the pivots of the axis of the theodolite telescope was determined on 1898 November 25 and 1898 December 5, and the correction was found to be $-6^{\text{div}}{\cdot}0$, which is equivalent to $-6''{\cdot}9$.

The value in arc of one revolution of the telescope-micrometer is $1'.34''{\cdot}2$.

The adopted reading for the line of collimation of the theodolite telescope throughout the year was $100^{\text{r}}{\cdot}280$.

The effect of the plane glass in front of the box of the declination magnet was found to be insensible.

The error of collimation of the magnet collimator is found by observing the position of the magnet, first with the collimator in the usual position with its scale direct, then with the collimator with its scale reversed, repeating the observations several times. This value was found from twenty-five determinations during the first six months of the year to be $+0'.56''{\cdot}9$, and from twenty-six determinations during the remainder of the year to be $+0'.38''{\cdot}9$.

The effect of torsion of the silk suspending thread is eliminated by turning the torsion-circle until the brass torsion weight inserted in place of the magnet rests in the plane of the magnetic meridian. The weight is inserted usually about once a week, and whenever the adjustment is found not to have been sufficiently close, the observed positions of the magnet are corrected for displacement of the magnet from the meridian by the torsion of the thread. Such correction is determined experimentally, with the magnet in position, by changing the reading of the torsion-circle by a definite amount, usually 90°, thus giving the suspension thread that amount of azimuthal twist, and observing, with the theodolite, the change in the position of the magnet thereby produced, from which is derived the ratio of the couple due to torsion of the thread to the couple due to the earth's horizontal magnetic force. This ratio for the old thread was found from the mean of six determinations to be $\frac{1}{857}$. On February 10 the thread gave way and was replaced by a new one, for which the ratio was found from the mean of the first eight determinations to be $\frac{1}{871}$. After April 1 the ratio was found from the mean of nineteen determinations to be $\frac{1}{674}$, and after September 1 from the mean of fourteen determinations to be $\frac{1}{895}$. On December 5 the thread gave way and was replaced by a new one, for which the ratio was found from the mean of four determinations to be $\frac{1}{1035}$.

The reading of the azimuthal circle of the theodolite corresponding to the astronomical meridian was determined by observations of Polaris taken once every week when practicable.

In regard to the manner of making observations with the declination magnet:—The observer, on looking into the theodolite telescope, sees the image of the scale of the magnet collimator vibrating alternately right and left. At the pre-arranged time of observation, by means of the tangent screw, the vertical wire carried by the telescope-micrometer is made to bisect the central division of the scale: repeating the operation if found necessary. The verniers of the theodolite-circle are then read. The mean circle-reading being adopted, and corrected for collimation of the magnet, the concluded circle-reading corresponding to the position of the magnet is found. The difference between this reading and the adopted reading of the circle for the north astronomical meridian gives, when (as is usually the case) no correction for torsion of the skein is necessary, the observed value of absolute declination, afterwards used for determining the value of the photographed base line on the photographic register of the lower declination magnet. The times of observation of the declination magnet are usually $9^h$, $12^h$ (noon), $15^h$, and $21^h$ of Greenwich civil time, reckoning from midnight.

LOWER DECLINATION MAGNET.—The lower declination magnet suspended in the Magnet Basement is used simply for the purpose of obtaining photographic register of the variations of magnetic declination. It is by Troughton and Simms, and is 2 feet long, $1\frac{1}{2}$ inches broad, and $\frac{1}{4}$ inch thick.

The magnet is suspended by a skein of silk passing over two brass suspension pulleys carried by a small pier built on crossed slates resting on brick piers rising from the ground. The length of free suspending skein is about 6 feet. The position of the azimuthal plane in which the brass torsion bar rests, when substituted for the magnet, is examined from time to time, and adjustment made as necessary, to keep this plane in or near the magnetic meridian. The suspension skein gave way on October 2, and a new one was fitted on October 5.

The magnet is enclosed in a double rectangular wooden box (one box within another), covered externally and internally with gilt paper, placed upon the pier; and to destroy the small accidental vibrations to which the magnet would be otherwise liable, it is encircled by a damper consisting of a copper bar, about 1 inch square, which is bent into a long oval form, the plane of the oval being vertical; a lateral bend is made in the upper bar of the oval to avoid interference with the suspension piece of the magnet. The effect of the damper is to reduce the amplitude of the oscillation after every complete or double vibration of the magnet in the proportion of 5 : 2 nearly.

In regard to photographic arrangements, it may be convenient, before proceeding to speak of the details peculiar to each instrument, to remark that the general principle adopted for obtaining continuous photographic record is the same for all instruments. For the register of each indication a cylinder of ebonite is provided, the axis of the cylinder being placed parallel to the direction of the change of indication to be registered. If, as is usually the case, there are two indications whose movements are in the same direction, both may be registered on the same cylinder: thus, the movements in the case of magnetic declination and horizontal magnetic force, being both horizontal, can be registered on different parts of one cylinder with axis horizontal: so, also, can two different galvanic earth currents. The movements in the case of vertical magnetic force and of the barometer, being both vertical, can similarly be registered on different parts of one cylinder having its axis vertical, as also can the indications of the dry-bulb and wet-bulb thermometers. In the electrometer, the movement being horizontal, a horizontal cylinder is provided.

The cylinder is in each case driven by chronometer or accurate clock-work to ensure uniform motion. The pivots of the horizontal cylinders turn on anti-friction

wheels; the vertical cylinders rest each on a circular plate turning on anti-friction wheels, the driving mechanism being placed below. A sheet of sensitized paper being wrapped round the cylinder, and held by a slender brass clip, the cylinder thus prepared is placed in position, and connected with the clock-movement: it is then ready to receive the photographic record, the optical arrangements for producing which will be found explained in the special description of each particular instrument. The sheets are removed from the cylinders, and fresh sheets supplied every day, usually at 11 a.m. On each sheet a reference line is also photographed, the arrangements for which will be more particularly described in each special case. All parts of the apparatus and all parts of the paths of light are protected, as found necessary, by wood or zinc casings or tubes, blackened on the inside, in order to prevent stray light from reaching the photographic paper.

In June 1882 the photographic process employed for many years was discarded, and a dry paper process introduced, the argentic-gelatino-bromide paper, as prepared by Messrs. Morgan and Kidd of Richmond (Surrey), being used with ferrous oxalate development until June 1904, when amidol development was substituted. The greater sensitiveness of this paper permits diminution of the effective surface of the magnet mirrors, and allows also the use of smaller gas flames. In the case of the vertical force magnet the old and comparatively heavy mirror has been replaced by a small and light mirror with manifest advantage, as will be seen in the description of the vertical force magnet. The new paper acts equally well at all seasons of the year, and any loss of register on account of photographic failure is now extremely rare.

Referring now specially to the lower declination magnet, there is attached to the magnet carrier, for the purpose of obtaining photographic register of the motions of the magnet, a concave mirror of speculum metal, 5 inches in diameter (reduced by a stop, on the introduction of the new photographic paper, to an effective diameter of about 1 inch), which thus partakes in all the angular movements of the magnet. The revolving ebonite cylinder is $11\frac{1}{2}$ inches long and $14\frac{1}{4}$ inches in circumference. It is supported, in an approximately east and west position, on brass uprights carried by a metal plate, the whole being planted on a firm wooden platform, the supports of which rest on blocks driven into the ground. The platform is placed midway between the declination and horizontal force magnets, in order that the variations of magnetic declination and horizontal force may both be registered on the same cylinder, which makes one complete revolution in 26 hours.

The light used for obtaining the photographic record is that given by a flame of coal gas. A vertical slit, about $0^{in.}3$ long and $0^{in.}01$ wide, placed close to the light, is firmly supported on the pier which carries the magnet. It stands slightly out of the

straight line joining the mirror of the magnet and the registering cylinder, and its distance from the mirror is about 25 inches. The distance of the axis of the registering cylinder from the mirror is 134·4 inches. Immediately above the cylinder, and parallel to its axis, are placed two long reflecting prisms (each 11 inches in length), extending from end to end of the cylinder, and facing opposite ways towards the mirrors carried by the declination and horizontal force magnets respectively. The front surface of each prism is convex, being a portion of a horizontal cylinder. The light of the declination lamp, after passing through the vertical slit, falls on the concave mirror, and is thence reflected as a converging beam to form an image of the slit on the convex surface of the reflecting prism, by the action of which it is reflected downwards to the paper on the cylinder as a small spot of light. The concave mirror can be so adjusted in azimuth on the magnet, that the spot shall fall, not at the centre of the cylinder, but rather towards its western side, in order that the declination trace shall not interfere with that of horizontal force, which is made to fall towards the eastern side of the cylinder. The special advantage of the arrangement here described is that the registers of both magnets are made at the same part of the circumference of the cylinder, a line joining the two spots being parallel to its axis, so that when the traces on the paper are developed, the parts of the two registers which appear in juxtaposition correspond to the same Greenwich time.

By means of a small prism, fixed near the registering cylinder, the light from another lamp is made to form a spot of light on the cylinder in a fixed position, so that, as the cylinder revolves, a reference or base line is traced out on the paper, from which, in the interpretation of the records, the ordinates are measured.

A clock of special construction, arranged by Messrs. E. Dent and Co., acting upon a small shutter placed near the declination slit, cuts off the light from the mirror two minutes before each hour, and admits it again two minutes after the hour, thus producing at each hour a visible interruption in the trace, and so ensuring accuracy as regards time scale. By means of another shutter the observer occasionally cuts off the light for a few minutes, registering the times at which it was cut off and admitted again. The visible interruptions thus made at definite times in the trace obviate any possibility of error being made by wrong numeration of the hourly breaks.

The usual hour of changing the photographic sheet is 11 a.m., but on Sundays, and occasionally on other days, this rule is not strictly followed. To obviate any uncertainty that might arise on such occasions from the interference of the two ends of a trace slightly longer than 24 hours, it has been arranged that one revolution of the cylinder should be made in 26 hours. The actual length of 24 hours on the sheet is about 13·3 inches.

The scale for measurement of ordinates of the photographic curve is thus determined. The distance from the concave mirror carried by the magnet to the surface of the cylinder, in the actual path of the ray of light through the prism, is practically the same as the horizontal distance of the centre of the cylinder from the mirror, 134·4 inches. A movement of 1° of the mirror produces a movement of 2° in the reflected ray. From this it is found that 1° of movement of the mirror, representing a change of 1° of magnetic declination, is equal to 4·691 inches on the photographic paper. A small strip of cardboard is therefore prepared, graduated on this scale to degrees and minutes. The ordinates of the curve, as referred to the base line, being measured for the times at which absolute values of declination were determined, usually four times daily, the apparent value of the base line, as inferred from each observation, is found. The process assumes that the movements of the two declination magnets are precisely similar. The separate base line values being divided into groups, usually monthly, a mean base line value is adopted for use through each group. This adopted base line value is written upon every sheet. Then, with the cardboard scale, there is laid down, conveniently near to the photographic trace, a new base line, whose ordinate represents some whole number of degrees or other convenient quantity. Thus every sheet carries its own scale of magnetic measure. From the new base line the hourly ordinates (see page *xxix*) are measured.

HORIZONTAL FORCE MAGNET.—The horizontal force magnet, for measure of the variations of horizontal magnetic force, was made by Meyerstein of Göttingen, and like the lower declination magnet, is 2 feet long, $1\frac{1}{2}$ inches broad, and about $\frac{1}{4}$ inch thick. For support of its suspension skein, the back and sides of its brick pier rise through the eastern arm of the Magnet Basement to the Upper Magnet Room, being there covered by a slate slab, to the top of which a brass plate is attached, carrying, immediately above the magnet, two brass pulleys, with their axes in the same east and west line; and at the back of the pier, and opposite to these pulleys, two others, with their axes similarly in an east and west line: these constitute the upper suspension piece, and support the upper portions of the two branches of the suspension skein. The two lower pulleys, having their axes in the same horizontal plane, and their grooves in the same vertical plane, are attached to a small horizontal bar which forms the upper portion of the torsion-circle: it carries the verniers for reading the torsion-circle, and can be turned independently of the lower and graduated portion of the torsion-circle, below which, and in rigid connexion with it, is the magnet carrier.

The suspension skein is led under the two pulleys carried by the upper portion of the torsion-circle; its two branches then rise up and pass over the front pulleys of the upper suspension piece, thence to and over the back pulleys, thence descending to a

single pulley, round which the two branches are tied: from this pulley a cord goes to a small windlass fixed to the back of the pier. The effective length of each of the two branches of the suspension skein is about $7^{ft.}\ 6^{in.}$. The distance between the branches of the skein, where they pass over the upper pulleys, is $1^{in.}{\cdot}14$; at the lower pulleys the distance between the branches is $0^{in.}{\cdot}80$. The two branches are not intended to hang in one plane, but are to be so twisted that their torsion will maintain the magnet in a direction very nearly east and west magnetic, the marked end being west. In this state an increase of horizontal magnetic force draws the marked end of the magnet towards the north, whilst a diminution of horizontal force allows the marked end to recede towards the south under the influence of torsion. An oval copper bar, exactly similar to that used with the lower declination magnet, is applied also to the horizontal force magnet, for the purpose of diminishing the small accidental vibrations.

Below the magnet carrier there is attached a small plane mirror, to which is directed a small telescope for the purpose of observing by reflexion the graduations of a horizontal opal glass scale attached to the southern wall of the eastern arm of the basement. The magnet, with its plane mirror, hangs within a double rectangular box, covered externally and internally with gilt paper. The numbers of the fixed scale increase from east to west, so that when the magnet is inserted in its usual position, with its marked end towards the west, increasing readings of the scale, as seen in the telescope, denote increasing horizontal force. The normal to the scale that meets the centre of the plane mirror is situated at the division 51 of the scale nearly, the distance of the scale from the centre of the plane mirror being 90·84 inches. The angle between the normal to the scale, which coincides nearly with the normal to the axis of the magnet, and the axis of the fixed telescope, is about 38°, the plane of the mirror being therefore inclined about 19° to the axis of the magnet.

To adjust the magnet so that it shall be truly transverse to the magnetic meridian, which position is necessary in order that the indications of the instrument may apply truly to changes in the magnitude of horizontal magnetic force, without regard to changes of direction, the time of vibration of the magnet and the reading of the fixed scale are determined for different readings of the torsion-circle. In regard to the interpretation of such experiments, the following explanation may be premised.

Suppose that the magnet is suspended in its carrier with its marked end in a magnetic westerly direction, not exactly west, but in any westerly direction, and suppose that, by means of the fixed telescope, the reading of the scale is taken. The position of the axis of the magnet is thereby defined. Now let the magnet be taken

out of its carrier, and replaced with its marked end easterly. The terrestrial magnetic force will now act, as regards torsion, in the direction opposite to that in which it acted before, and the magnet will take up a different position. But by turning the torsion-circle so as to reverse the direction of the torsion produced by the oblique tension of the two branches of the suspending skein, the magnet may be made to take the same position as before, but with poles reversed, which will be proved by the reading of the scale, as seen in the fixed telescope, being the same. We thus obtain two readings of the torsion-circle corresponding to the same direction of the magnet axis, but with the marked end opposite ways, without, however, possessing any information as to whether the magnet axis is accurately transverse to the magnetic meridian, inasmuch as the same operation can be performed whether the magnet axis be tranverse or not.

But there is another observation which will indicate whether the magnet axis is or is not accurately transverse. Let, in addition, the time of vibration be taken in each position of the magnet. Resolve the terrestrial magnetic forces acting on the poles of the magnet each into two parts, one transverse to the magnet, the other longitudinal. In the two positions of the magnet, marked end westerly and marked end easterly, the magnitude of the transversal force is the same, and the changes which the torsion undergoes in a vibration of given extent are the same, and if there were no other force, the time of vibration would also be the same. But there is another force, the longitudinal force, and when the marked end is northerly this tends from the centre of the magnet's length, and when it is southerly it tends towards the centre of the magnet's length; and in a vibration of given extent this force, in one case increases that due to the torsion, and in the other case diminishes it. The times of vibration will therefore be different. There is only one exception to this, which is when the magnet axis is transverse to the magnetic meridian, in which case the longitudinal force vanishes, and the times of vibration in both positions of the magnet become the same.

The criterion, then, of the position truly transverse to the meridian is this. Find the readings of the torsion-circle which, with the magnet in reversed positions, will give the same readings of the scale and the same time of vibration for the magnet. With such readings of the torsion-circle the magnet is, in either position, transverse to the meridian, and the difference of circle-readings is the difference between the position in which the terrestrial magnetism acting on the magnet twists it one way, and the position in which the same force twists it the opposite way, and is therefore double of the angle of torsion of the suspending lines for which, in either position, the force of terrestrial magnetism is neutralized by the torsion.

The suspension skein now in use was mounted on 1900 July 9.

On 1907 December 31 the following observations were made for determination of the angle of torsion :—

| 1907. Day. | The Marked End of the Magnet. West. Torsion-Circle Reading. | Scale-Reading. | Difference of Scale-Readings for change of 1° of Torsion-Circle Reading. | Mean of the Times of Vibration. | East. Torsion-Circle Reading. | Scale-Reading. | Difference of Scale-Readings for change of 1° of Torsion-Circle Reading. | Mean of the Times of Vibration. |
|---|---|---|---|---|---|---|---|---|
| | ° ′ | div. | div. | s | ° ′ | div. | div. | s |
| Dec. 31 | 146 0 | 46·60 | 8·81 | 21·28 | 230 30 | 46·44 | 8·31 | 20·58 |
| | 147 0 | 55·41 | 7·44 | 21·08 | 231 30 | 54·75 | 7·95 | 20·64 |
| | 148 0 | 62·85 | | 20·95 | 232 30 | 62·70 | | 20·80 |

From these observations it appeared that the times of vibration and scale-readings were sensibly the same when the torsion-circle read 148°.37′, marked end west, and 233°.8′, marked end east, the difference being 84°.31′. Half this difference, or 42°.16′, is therefore the angle of torsion when the magnet is transverse to the meridian.

The value adopted in the reduction of the observations throughout the year was 42°.19′ derived from the determinations made on 1907 December 31 and 1908 December 31.

The adopted reading of torsion-circle, for transverse position of the magnet, the marked end being west, was 146° throughout the year.

The angle through which the magnet turns to produce a change of one division of scale-reading, and the corresponding variation of horizontal force in terms of the whole horizontal force, is thus found.

The length of $30^{div}\cdot85$ of the fixed scale is exactly 12 inches, and the distance of the centre of the face of the plane mirror from the scale, 90·84 inches ; consequently, the angle at the mirror subtended by one division of the scale is 14′.43″·2, or for change of one division of scale-reading the magnet is turned through an angle of 7′.21″·6.

The variation of horizontal force, in terms of the whole horizontal force, producing angular motion of the magnet corresponding to change of one division of scale-

reading = cotan angle of torsion × value of one division in terms of radius. The change of horizontal force corresponding to change of one division of scale-reading was thus found to be 0·002352; and this value has been used for conversion of the observed scale-readings into parts of the whole horizontal force.

In regard to the manner of making observations with the horizontal force magnet, a fine vertical wire is fixed in the field of view of the observing telescope, across which the graduations of the fixed scale, as reflected by the plane mirror carried by the magnet, are seen to pass alternately right and left as the magnet oscillates, and the scale-reading for the extreme points of vibration is easily taken. The hours of observation are usually $9^h\ 30^m$, $12^h\ 30^m$, $15^h\ 30^m$, and $20^h\ 30^m$ of Greenwich civil time (reckoning from midnight).

A thermometer, the bulb of which reaches considerably below the attached scale, is so planted in a nearly upright position on the outer magnet box, that the bulb projects into the interior of the inner box containing the magnet. Readings of this thermometer are usually taken at $9^h$, $10^h$, $11^h$, $12^h$, $13^h$, $14^h$, $15^h$, $16^h$, and $21^h$ Greenwich civil time. An index correction of $-0°{\cdot}3$ has been applied to all readings.

The photographic record of the movements of the horizontal force magnet is made on the same revolving cylinder as is used for record of the motions of the lower declination magnet, and, as described for that magnet, there is also attached to the carrier of the horizontal force magnet a concave mirror, 4 inches in diameter, reduced by a stop since 1882 to an effective diameter of about 1 inch. The arrangements, as regards lamp, slit, and other parts, are precisely similar to those for the lower declination magnet already described, and may be perfectly understood by reference to that description (pages *xi* and *xii*), in which was incidentally included an explanation of some parts specially referring to register of horizontal force. The distance of the vertical slit from the concave mirror of the magnet is about 21 inches, and the distance of the axis of the registering cylinder from the concave mirror is 136·8 inches, the slit standing slightly out of the straight line joining the mirror and the registering cylinder. The same base line is used for measure of the horizontal force ordinates, and the register is similarly interrupted at each hour by the clock, and occasionally by the observer, for determination of time scale, the length of which is, of course, the same as that for declination.

The scale for measure of ordinates of the photographic curve is thus constructed. The distance from the concave mirror to the surface of the cylinder, in the actual path

of the ray of light through the prism, is (as for declination) practically the same as the horizontal distance of the centre of the cylinder from the mirror, or 136·8 inches. But, because of the reflexion at the concave mirror, the double of this measure, or 273·6 inches, is the distance that determines the extent of motion on the cylinder of the spot of light, which, in inches, for a change of 0·01 part of the whole horizontal force, will therefore be 273·6 × tan angle of torsion × 0·01. Taking for angle of torsion 42°.19′, the movement of the spot of light on the cylinder for a change of 0·01 of horizontal force is found to be 2·491 inches; and with this unit the cardboard scale for measure of the ordinates was prepared. The ordinates being measured for the times at which eye observations were made, combination of the measured ordinates with the observed scale-readings converted into parts of the whole horizontal force, gives an apparent value of the base line for each observation. These being divided into groups, mean base line values are adopted, written on the sheets, and new base lines laid down, from which the hourly ordinates (see page *xxix*) are measured, exactly in the same way as described for declination.

The indications of horizontal force are in a slight degree affected by the small changes of temperature to which the Magnet Basement is subject. The temperature coefficient of the magnet was determined by artificially heating the Magnet Basement to different temperatures, and observing the change of position of the magnet thereby produced. This process seems preferable to others in which was observed the effect which the magnet, when enclosed within a copper trough or box, and artificially heated by hot water or hot air to different temperatures, produced on another suspended magnet, since the result obtained includes the entire effect of temperature upon all the various parts of the mounting of the magnet, as well as on the magnet itself. Referring to previous volumes for details, it is sufficient here to state that, from a series of experiments made between January 3 and February 21 of the year 1868, on the principle mentioned, in temperatures ranging from 48°·2 to 61°·5, it appeared that when the marked end of the horizontal force magnet was to the west (its ordinary position), a change of 1° of temperature (Fahrenheit) produced an apparent change of ·000174 of the whole horizontal force, a smaller number of observations made with the marked end of the magnet east, in temperatures ranging from 49°·0 to 60°·9, indicating that a change of 1° of temperature produced an apparent change of ·000187 of horizontal force, increase of temperature in both cases being accompanied by decrease of magnetic force. It was concluded that an increase of 1° of temperature produces an apparent decrease of ·00018 of horizontal force. In the years 1885 and 1886 further observations on the same general plan were made, with the result that the decrease of horizontal force for increase of 1° of temperature was found to be somewhat greater at the higher

than at the lower temperatures. A discussion of all the observations taken in 1885 and 1886, details of which are given at the end of the Introduction for 1886, shows that the correction for reduction to temperature 32° (expressed in terms of the horizontal force) is $(t-32)\times\cdot0000936+(t-32)^2\times\cdot000002074$, in which $t$ is the temperature in degrees Fahrenheit. The decrease of horizontal force for an increase of 1° of temperature would thus be ·00021 at 60°, ·00023 at 65°, and ·00025 at 70°.

VERTICAL FORCE MAGNET.—The vertical force magnet, for measure of the variations of vertical magnetic force, is by Troughton and Simms. It is 1 ft. 6 in. long and lozenge-shaped, being broad at the centre and pointed at the ends; it is mounted on a solid brick pier capped with stone, situated in the western arm of the Basement, its position being nearly symmetrical with that of the horizontal force magnet in the eastern arm. The supporting frame consists of two pillars, connected at their bases, on whose tops are the agate planes upon which rest the extreme parts of the continuous steel knife edge, attached to the magnet carrier by clamps and pinching screws. The knife edge, 8 inches long, passes through an aperture in the magnet. The axis of the magnet is approximately transverse to the magnetic meridian, its marked end being east; its axis of vibration is thus nearly north and south magnetic. The magnet carrier is of iron; at its southern end there is fixed a small plane mirror for use in eye observations, whose plane makes with the vertical plane through the magnet an angle of $52\frac{3}{4}°$ nearly. A telescope, fixed to the west side of the central brick pier, is directed to the mirror for observation by reflexion of the divisions of a vertical opal glass scale fixed to the pier that carries the telescope, very near to the telescope itself. The numbers of this fixed scale increase downwards, so that when the magnet is placed in its usual position with the marked end east, increasing readings of the scale, as seen in the telescope, denote increasing vertical force.

The magnet is placed excentrically between the bearing parts of its knife edge, nearer to the southern side, leaving a space of about 4 inches in the northern part of the iron frame, in which the concave mirror used for the photographic register is planted. Two steel screw stalks, carrying adjustable screw weights, are fixed to the magnet carrier, near its northern side; one stalk is horizontal, and a change in the position of the weight affects the position of equilibrium of the magnet; the other stalk is vertical, and change in the position of its weight affects the delicacy of the balance, and so varies the magnitude of its change of position produced by a given change in the vertical force of terrestrial magnetism.

In the year 1882 Messrs. Troughton and Simms substituted for the old mirror of 4 inches diameter a much lighter mirror of 1 inch diameter, and also lowered the

position of the knife-edge bar with respect to the magnet, so as to permit of a diminution of the adjustable counterpoise weights, which, as well as the mirror, appear to largely affect the temperature-correction of this balance magnet. The use of a smaller and much lighter mirror was rendered possible by the greater sensitiveness of the photographic paper introduced in 1882 June.

The whole is enclosed in a rectangular box, resting upon the pier before mentioned, and having apertures, covered with glass, opposite to the two mirrors carried by the magnet.

A copper "damper," to reduce vibratory disturbances from electric railways or other sources, was applied to the magnet. After some preliminary trials this was made in the form of a flattened ring of round bar copper, half an inch in diameter, closely encircling the magnet and carried over its axis of vibration, and it was mounted on 1902 April 16. It was found that its effect was to reduce the amplitude of oscillation after every complete or double vibration (taking 36 seconds) in the ratio of 10 to 4·3, which is nearly the same as that of the damper for the declination magnet. It was dismounted on 1902 August 13, and since then it has not been found to be required.

The time of vibration of the magnet in the vertical plane is observed usually about once in each week. From 53 observations made during the year this was found to be $17^{s}\cdot645$.

The time of vibration of the magnet in the horizontal plane is determined by suspending the magnet with all its attached parts from a tripod stand, its broad side being in a plane parallel to the horizon, so that its moment of inertia is the same as when in observation. A telescope, with a wire in its focus, being directed to the plane mirror carried by the magnet, a scale of numbers is placed on the floor, at right angles to the long axis of the magnet, so as to be seen, by reflexion, in the fixed telescope. The magnet is observed only when swinging through a small arc. Observations made in the way described on 1908 December 31 gave for the time of vibration of the magnet in the horizontal plane $16^{s}\cdot891$. This value has been used throughout for the year 1908.

The length of the normal to the fixed vertical scale that meets the face of the plane mirror is 186·07 inches, and $30^{div}\cdot85$ of the scale correspond to 12 inches. Consequently the angle which one division of the scale subtends, as seen from the mirror, is $7'.11''\cdot2$, or the angular movement of the normal to the mirror, corresponding to a change of one division of scale-reading, is $3'.35''\cdot6$.

But the angular movement of the normal to the mirror is equal to the angular movement of the magnet multiplied by the sine of the angle which the plane of the mirror makes with a vertical plane through the magnet. This angle, as already stated, is $52\frac{3}{4}°$. Therefore, dividing the result just obtained, 3′.35″·6, by sin $52\frac{3}{4}°$, the angular motion of the magnet corresponding to a change of one division of scale-reading is found to be 4′.30″·9.

The variation of vertical force, in terms of the whole vertical force, producing angular motion of the magnet corresponding to a change of one division of scale-reading = cotan dip $\times \left(\frac{T'}{T}\right)^2 \times$ value of one division in terms of radius, in which $T'$ is the time of vibration of the magnet in the horizontal plane, and $T$ that in the vertical plane. Assuming $T' = 16^s{\cdot}891$, $T = 17^s{\cdot}645$, and dip = 66°.56′.17″, the change of vertical force corresponding to change of one division of scale-reading was found to be 0·0005124, and this value has been used during the year 1908 for conversion of the observed scale-readings into parts of the whole vertical force.

The hours of observation of the vertical force magnet are the same as those for the horizontal force magnet, and the method of observation is precisely similar, the time of vertical vibration being substituted for that of horizontal. The wire in the fixed telescope is here horizontal, and as the magnet oscillates, the divisions of the scale are seen to pass upwards and downwards in the field of view.

As in the case of the horizontal force magnet, a thermometer is provided whose bulb projects into the interior of the magnet box. Readings are taken usually at $9^h$, $10^h$, $11^h$, $12^h$, $13^h$, $14^h$, $15^h$, $16^h$, and $21^h$ Greenwich civil time. An index-correction of $-0°{\cdot}3$ has been applied to all readings.

The photographic register of the movements of the vertical force magnet is made on a cylinder of the same size as that used for declination and horizontal force, driven also by chronometer movement. The cylinder is here placed vertical instead of horizontal, and the variations of the barometer are also registered on it. The slit is horizontal, and other arrangements are generally similar to those already described for declination and horizontal force. The concave mirror carried by the magnet is 1 inch in diameter, and the slit is distant from it about 22 inches, being placed a little out of the straight line joining the mirror and the registering cylinder. There is a slight deviation in the further optical arrangements. Instead of falling on a reflecting prism (as for declination and horizontal force), the converging horizontal beam from the concave mirror falls on a system of plano-convex cylindrical lenses, placed in front of the cylinder, with their axes parallel to that of the cylinder. The

trace is made on the western side of the cylinder, the position of the magnet being so adjusted, that the spot of light shall fall on the lower part of the sheet to avoid interference with the barometer trace. A base line is photographed, and the record is interrupted at each hour by the clock, and occasionally by the observer, for establishment of time scale, in the same way as for the other magnets. The length of the time scale is the same as that for the other magnetic registers.

The scale for measure of ordinates of the photographic curve is determined as follows :—The distance from the concave mirror of the magnet to the surface of the registering cylinder is 100·2 inches. But the double of this measure, or 200·4 inches, is the distance that determines the extent of motion on the cylinder of the spot of light, which, in inches, for a change of 0·01 part of the whole vertical force, will therefore be $= 200{\cdot}4 \times \tan \text{dip} \times \left(\frac{T}{T'}\right)^2 \times 0{\cdot}01$. Using the values of $T$, $T'$, and of dip before given (page *xxi*), the movement of the spot of light on the cylinder for a change of 0·01 of vertical force is thus found to be 5·137 inches, and with this unit the scale for measure of the ordinates was constructed for use during the year. Base line values were then determined and written on the sheets, and new base lines laid down, from which the hourly ordinates (see page *xxix*) were measured, exactly in the same way as was described for declination.

In regard to the temperature-correction of the vertical force magnet, it is only necessary here to say that, according to a series of experiments made 1882 October 17 to 23, in a similar manner to those for the horizontal force magnet (page *xviii*), and in temperatures ranging from 59°·3 to 64°·9, it appeared that an increase of 1° of temperature (Fahrenheit) produced an apparent increase of 0·00020 of vertical force, a value which succeeding experiments have closely confirmed. The value of the coefficient is thus much less than was found in the old state of the magnet with the large mirror, although still not following the ordinary law of increase of temperature producing loss of magnetic power. Further observations made in the years 1885 and 1886, of which particulars are given at the end of the Introduction for 1886, showed that through the range of temperature to which the magnet is usually exposed the increase of vertical force for increase of 1° of temperature is uniformly 0·000212, no term depending on the square of the temperature being here necessary, as in the case of horizontal force.

DIP INSTRUMENT.—The instrument with which the observations of magnetic dip are made is that which is known as Airy's instrument. It was constructed by Messrs. Troughton and Simms, and is mounted in the Magnetic Pavilion on a slate slab supported by a braced wooden stand built up from the ground independently

of the floor. The plan of the instrument was arranged by Sir G. B. Airy so that the points of the needles should be viewed by microscopes, and, if necessary, observed whilst the needles were in a state of vibration; that there should be power of employing needles of different lengths; and that the field of view of each microscope should be illuminated from the side opposite to the observer, in such a way that the needle point should form a dark image in the bright field.

The instrument is adapted to the observation of needles of 9 inches, 6 inches, and 3 inches in length. The main portion of the instrument, that in which the needle under observation is placed, consists of a square box made of gun metal (carefully selected to ensure freedom from iron), with back and front of glass. Six microscopes, so planted as to command the points of the three different lengths of needles, turn on a horizontal axis so as to follow the points of the needles in the different positions which in observation they take up. The needle pivots rest on agate bearings. The object-glasses and field-glasses of the microscopes are within the front glass plate, their eye-glasses being outside, and turning with them on the same axis. Upon the plane side of each field-glass (the side next the object-glass and on which the image of the needle point is formed) a scale is etched, by means of which the position of the needle points is noted. And on the inner side of the front glass plate is etched the graduated circle, $9\frac{3}{4}$ inches in diameter, divided to 10′, and read by two verniers to 10″. The verniers (thin plates of metal, with notches instead of lines, for use with transmitted light) are carried by the horizontal axis, inside the front glass plate, their reading lenses, attached to the same axis, being outside. A suitable clamp with slow motion is provided.

The whole of the apparatus is planted upon a circular horizontal plate, admitting of rotation in azimuth. A graduated circle near the circumference of the plate is read by two fixed verniers.

A brass zenith-point needle, having points corresponding in position to the three different lengths of dip needles, is used to determine the zenith-point for each particular length of needle.

The instrument carries two levels—one parallel to the plane of the vertical circle the other at right angles to that plane—by means of which the instrument is adjusted in level from time to time. The readings of the first-mentioned level are also regularly employed to correct the apparent value of dip for any small outstanding error of level; the correction seldom exceeds a very few seconds of arc.

Observations are made only in the plane of the magnetic meridian, and the following is a description of the method of proceeding. The needle to be used is first magnetised by double touch, giving it nine strokes on each of its sides: it is then placed in position in the instrument, the microscope scale-readings are taken, and the verniers of the vertical graduated circle are read: the readings of the level parallel to the plane of this circle are also read. The instrument is then reversed in azimuth, and a second observation made. The needle pivots are then reversed on the agate bearings, and two observations in reversed positions of the instrument again made. The needle is then removed from the instrument and re-magnetised, so as to reverse the direction of its poles, and four more observations are made in the way just described. The mean of the eight partial values of dip thus found, corrected for error of level, gives the final value of dip which appears in the printed results.

The needles in regular use in 1908 are of the ordinary construction; they are the 3-inch needles, $D_1$ and $D_2$. The pivot of $D_2$ was broken on 1907 February 19, a new spindle was fitted by Messrs. Simms, and the needle adjusted by Mr. Dover on 1907 March 18, but it appeared from the separate observations obtained during 1908 that a further adjustment was necessary, and this was made by Mr. Bryant on 1909 January 21.

DEFLEXION INSTRUMENT.—The observations of deflexion of a magnet in combination with observations of vibration of the deflecting magnet, for determination of the absolute measure of horizontal magnetic force, are made with a *Unifilar Instrument*, Gibson No. 3, which, with the exception of some slight modification of the mechanical arrangements, is similar to those issued from the Kew Observatory. The instrument is adapted to the determination of horizontal force in British (foot-grain-second) measure. It is mounted in the Magnetic Pavilion on a slate slab in the same way as the Dip instrument.

The deflected magnet, used merely to ascertain the ratio which the power of the deflecting magnet at a given distance bears to the power of terrestrial magnetism, is 3 inches long, and carries a small plane mirror, to which is directed a telescope fixed to, and rotating with, the frame that carries also the suspension piece of the deflected magnet: a scale fixed to the telescope is seen by reflexion at the plane mirror. The deflecting magnet is a hollow cylinder 4 inches long, containing in its internal tube a collimator, by means of which in another apparatus its time of vibration is observed. In observations of deflexion the deflecting magnet is placed on the transverse deflexion rod, carried by the rotating frame, at the distances 1·0 foot and 1·3 foot of the engraved scale from the deflected magnet, and with one end towards the deflected magnet. Observations are made at the two distances mentioned, with the deflecting magnet both east and west of the deflected magnet, and also with its poles in reversed

positions. The fixed horizontal circle is 10 inches in diameter: it is graduated to 10′, and read by two verniers to 10″.

It will be convenient in this case to include with the description of the instrument an account of the method of reduction employed, in which the Kew precepts, and generally the Kew notation, are followed. Previous to the establishment of the instrument at the Royal Observatory, the values of the various instrumental constants, as determined at the Kew Observatory, were kindly communicated by the late Professor Balfour Stewart, and these have been since used in reduction of all observations made with the instrument at Greenwich.

The instrumental constants as thus furnished are as follows:—

The increase in the magnetic moment of the deflecting magnet produced by the inductive action of unit magnetic force in the English system of absolute measurement = $\mu$ = 0·00015587.

The correction for decrease of the magnetic moment of the deflecting magnet required in order to reduce to the temperature 35° Fahrenheit = $c$ = 0·00013126 $(t-35)$ + 0·000000259 $(t-35)^2$; $t$ representing the temperature (in degrees Fahrenheit) at which the observation is made.

Moment of inertia of the deflecting magnet = $K$. At temperature 30°, log. $K$ = 0·66643; at temperature 90°, log. $K$ = 0·66679.

The distance on the deflexion rod from $1^{ft}\cdot0$ east to $1^{ft}\cdot0$ west of the engraved scale, at temperature 62°, is too long by 0·0034 inch, and the distance from $1^{ft}\cdot3$ east to $1^{ft}\cdot3$ west is too long by 0·0053 inch. The coefficient of expansion of the scale for 1° is ·00001.

The adopted value of $K$ was confirmed in the year 1878 by a new and entirely independent determination made at the Royal Observatory, giving log. $K$ at temperature 30° = 0·66727.

Let $m$ = Magnetic moment of deflecting or vibrating magnet.
$X$ = Horizontal component of Earth's magnetic force.

Then, if in the two deflexion observations, $r_1$, $r_2$, be the apparent distances of centre of deflecting magnet from deflected magnet, corrected for scale-error and temperature (about 1·0 and 1·3 foot),

$u_1$, $u_2$ the observed angles of deflexion,

$$A_1 = \tfrac{1}{2}\, r_1^3 \sin u_1 \left\{ 1 + \frac{2\mu}{r_1^3} + c \right\}$$

$$A_2 = \tfrac{1}{2}\, r_2^3 \sin u_2 \left\{ 1 + \frac{2\mu}{r_2^3} + c \right\}$$

$P = \dfrac{A_1 - A_2}{\dfrac{A_1}{r_1^2} - \dfrac{A_2}{r_2^2}}$ [$P$ being a constant depending on the distribution of magnetism in the deflecting and deflected magnets],

we have, using for reduction of the observations a mean value of $P$:—

$\dfrac{m}{X} = A_1\left(1 - \dfrac{P}{r_1^2}\right)$, from observation at distance $r_1$.

$\dfrac{m}{X} = A_2\left(1 - \dfrac{P}{r_2^2}\right)$, from observation at distance $r_2$.

The mean of these is adopted as the true value of $\dfrac{m}{X}$.

In calculating the value of $P$ as well as the values of the four factors within brackets, the distances $r_1$ and $r_2$ are taken as being equal to 1·0 ft. and 1·3 ft. respectively. The expression for $P$ is not convenient for logarithmic computation, and, in practice, its value for each observation has, since the year 1877, been calculated from the expression $\dfrac{\text{Log. } A_1 - \text{Log. } A_2}{\text{modulus}} \times \dfrac{r_1^2 \times r_2^2}{r_2^2 - r_1^2} = (\text{Log. } A_1 - \text{Log. } A_2) \times 5{\cdot}64.$

For determination, from the observed vibrations, of the value of $mX$:—let $T_1$ = time of vibration of the deflecting magnet, corrected for rate of chronometer and arc of vibration,

$\dfrac{H}{F}$ = ratio of the couple due to torsion of the suspending thread to the couple due to the Earth's magnetic force. [This is obtained from the formula $\dfrac{H}{F} = \dfrac{\theta}{90° - \theta}$, where $\theta$ = the angle through which the magnet is deflected by a twist of 90° in the thread.]

$$\text{Then } T^2 = T_1^2 \left\{ 1 + \frac{H}{F} + \mu\frac{X}{m} - c \right\}$$

$$\text{and } mX = \frac{\pi^2 K}{T^2}.$$

The corrected time of vibration of the deflecting magnet, printed in the tables of results, is the mean of 100 vibrations observed immediately before, and of 100 vibrations observed immediately after the observations of deflexion, corrected for temperature, rate of chronometer, semi-arc of vibration, induction, and torsion force.

From the combination of the values of $\dfrac{m}{X}$ and $mX$, $m$ and $X$ are immediately found. The computation is made with reference to English measure, taking as units of length and weight the foot and grain, but it is desirable to express $X$ also in metric measure. If the English foot be supposed equal to $\alpha$ times the millimètre, and the grain equal to

$\beta$ times the milligramme, then, for reduction to metric measure, $\frac{m}{X}$ and $mX$ must be multiplied by $\alpha^3$ and $\alpha^2\beta$ respectively, or $X$ must be multiplied by $\sqrt{\frac{\beta}{\alpha}}$. Taking the mètre as equal to 39·37079 inches, and the gramme as equal to 15·432349 grains, the factor by which $X$ is to be multiplied in order to obtain $X$ in metric (millimètre-milligramme-second) measure is $0{\cdot}46108 = \frac{1}{2{\cdot}1689}$. The values of $X$ in metric measure thus derived from those in English measure are given in the proper table. Values of $X$ in terms of the centimètre and gramme, known as the C.G.S. unit (centimètre-gramme-second unit), are readily obtained by dividing those referred to the millimètre and milligramme by 10.

EARTH CURRENT APPARATUS.—For observation of the spontaneous galvanic currents, which, in some measure, are almost always discoverable in the earth, and which are occasionally very powerful, two insulated wires having earth connexions at Angerstein Wharf (on the bank of the River Thames near Charlton) and Lady Well for one circuit, and at the Morden College end of the Blackheath Tunnel and the North Kent East Junction of the South-Eastern Railway for the other circuit, have been employed. The connecting wires, which are special and used for no other purpose, pass from the Royal Observatory to the Greenwich Station of the South-Eastern Railway, and thence, by kind permission of the Directors of the South-Eastern Railway Company, along the lines of the Railway to the respective earths, in each case a copper plate. The direct distance between the earth plates of the Angerstein Wharf—Lady Well circuit is 3 miles, and the azimuth of the line, reckoning from magnetic north towards east, 49°; in the Blackheath—North Kent East Junction circuit the direct distance is $2\frac{1}{2}$ miles, and the azimuth, from magnetic north towards west, 47°. The actual lengths of wire in the circuitous courses which the wires necessarily take in order to reach the Observatory registering apparatus are about $7\frac{1}{2}$ miles and 5 miles respectively. The identity of the four branches is tested from time to time as appears necessary.

In each circuit at the Royal Observatory there is placed a horizontal galvanometer, having its magnet suspended by a hair. Each galvanometer coil contains 150 turns of No. 29 copper wire, or the double coil of each instrument consists of 300 turns of wire, the resistance, as found by direct measurement, being 7·3 ohms. For registration of the larger earth currents, a portion only of the current is allowed to pass through the galvanometer, while the greater part flows through a shunt, consisting of a short coil of fine copper wire, the resistance of which is 1·33 ohms. The amplitude of the movement, having regard to the diminution of resistance in the circuit due to the shunt, is by this reduced in the ratio of 6·3 to 1 nearly in both circuits. On a few days in each month in former years registers on a large scale, for determination of the small diurnal

inequality in earth currents, were obtained by removing the shunts, but no discussion of these registers has been made, on account of the difficulty of eliminating the effect of certain small dislocations of the Angerstein Wharf—Lady Well register, which occur usually shortly after sunset and before sunrise. It is suspected that these are due to electric lighting in the neighbourhood of the Angerstein Wharf earth plate. The galvanometers are placed on opposite sides of the registering cylinder, which is horizontal. One galvanometer stands towards one end of the cylinder, and the other towards the other end, and each carries, on a light stalk extending downwards from its magnet, a small plane mirror. Immediately above the cylinder are placed two long reflecting prisms, which, except that they are each but half the length of the cylinder, and are placed end to end, are generally similar to those used for magnetic declination and horizontal force, the front convex surfaces facing opposite ways, each towards the mirror of its respective galvanometer. In each case the light of a gas lamp, passing through a vertical slit and a cylindrical lens having its axis vertical, falls upon the galvanometer mirror, which reflects the converging beam to the convex surface of the reflecting prism, by whose action it is made to form on the paper on the cylinder a small spot of light; thus all the azimuthal motions of the galvanometer magnet are registered. The extent of trace for each galvanometer is thus confined to half the length of the cylinder, which is of the same size as those used for the magnetic registers. The arrangements for turning the cylinder, automatically determining the time scale, and forming a base line, are similar to those which have been before described. When the traces on the paper are developed, the parts of the registers which appear in juxtaposition correspond, as for declination and horizontal force, to the same Greenwich time, and the scale of time is of the same length as for the magnetic registers.

Towards the end of the year 1890 serious disturbances began to be experienced in both earth current registers. These interruptions were found in the early part of the year 1891 to be due to the passage of trains on the City and South London Electric Railway, distant about $2\frac{1}{2}$ miles from the nearest earth plate (at the North Kent East Junction of the South-Eastern Railway), and about $4\frac{1}{2}$ miles from the Observatory. The abnormal excursions recorded indicate frequent changes of potential, varying from a small fraction of a volt to one-third of a volt or more, and the amount of change was approximately the same both in the Blackheath—North Kent East Junction circuit, which is perpendicular to the course of the electric railway, and in the Angerstein Wharf—Lady Well circuit, which is parallel to the line of railway, with one earth plate (Angerstein Wharf) near the river. Recently, however, the former circuit shows less disturbance, owing probably to alterations in the working of the Electric Railway. At night when the trains are not running, the interruptions entirely cease.

## § 5. *Magnetic Reductions.*

The results given in the Magnetic Section refer to the civil day, commencing at midnight.

Before the photographic records of magnetic declination, horizontal force, and vertical force are discussed, they are divided into two groups—one including all days on which the traces show no particular disturbance, and which, therefore, are suitable for the determination of diurnal inequality; the other comprising days of unusual and violent disturbance, when the traces are so irregular that it appears impossible to treat them except by the exhibition of every motion of each magnet through the day. Following the principle of separation hitherto adopted, there are three days, September 11, 12 and 29, in the year 1908 which are classed as days of great disturbance. Days of lesser disturbance are March 26–27, 27–28; May 25–26; August 8–9, 21–22; September 28 and 30. When two days are mentioned, it is to be understood that the reference is usually to one set of photographic sheets extending from noon to noon, and including the last half and the first half respectively of two consecutive civil days.

Through each photographic trace, including those on days of lesser disturbance, a pencil line was drawn, representing the general form of the curve without its petty irregularities. The ordinates of these pencil curves were then measured, with the proper pasteboard scales, at every hour, the measures being entered in a form having double argument—the vertical argument ranging through the 24 hours of the civil day ($0^h$ to $23^h$), and the horizontal argument through the days of a calendar month; the means of the numbers standing in the vertical columns giving the mean daily value of the element, and the means of the numbers in the horizontal columns the mean monthly value at each hour of the day. Tables I. and II. contain the results for declination, Tables III. to VI. those for horizontal force, with corresponding tables of temperature, and Tables VII. to X. those for vertical force, with corresponding tables of temperature. In the formation of diurnal inequalities it is unimportant whether a day omitted be a complete civil day, or the parts of two successive civil days making together a whole day, although in the latter case the results are not available for daily values. September 11, 12 and 29 were omitted on account of great disturbance in the formation of these Tables, and from other causes there are omitted in Tables I. and II. for declination, September 4 and 5 and October 3 to 9 inclusive, in Tables III. to VI. for horizontal force, September 4 and 5 and December 31, and in Tables VII. to X. for vertical force, June 11, December 30 and 31.

Table XI. gives the collected monthly values for declination, horizontal force, and vertical force, and Table XII. the mean diurnal inequalities for the year.

The temperature of the horizontal and vertical force magnets was maintained so nearly uniform through each day, that the determination of the diurnal inequalities of horizontal and vertical force should possess great exactitude. By means of the additional stove placed in the western arm of the Basement, as mentioned on page *v*, the temperature of the Basement has also been kept nearly constant throughout the year, the endeavour being to keep the temperature as near to 67° as possible. In years preceding 1883 the results for horizontal and vertical force were given uncorrected for temperature, leaving the correction to be applied when the results for series of years are collected for discussion; but from the beginning of the year 1883 it has been considered desirable to add also, in Tables III., V., VII., and IX., results corrected for temperature, in order to render them more immediately available. In Tables XI. and XII., only results corrected for temperature are given. The corrected mean daily and mean hourly values of horizontal force given in Tables III. and V. respectively are obtained by applying to the uncorrected values the correction $(t-32) \times \cdot0000936 + (t-32)^2 \times \cdot000002074$ (page *xix*), where $t$ is the temperature in degrees Fahrenheit; and to those of vertical force, Tables VII. and IX., the correction $-(t-32) \times \cdot000212$ (page *xxii*). The corrections applied are founded on the daily and hourly values of temperature given in Tables IV., VI., VIII., and X.

In regard to the formation of the tables of temperature, the hourly readings of the Richard Thermograph were entered into a form having double arguments as for the magnets, the mean hourly values deduced therefrom giving for each month the variation through the day, and the mean daily values the variation through the month. To adapt these to represent the temperature within the horizontal and vertical force magnet boxes respectively, the monthly means of the thermograph-readings at $9^h$, $10^h$, $11^h$, $12^h$, $13^h$, $14^h$, $15^h$, $16^h$, and $21^h$ were compared with the corresponding means of the eye readings of the thermometers whose bulbs are within the respective magnet boxes, giving corrections to the thermograph-readings at these hours, which were very accordant, and from which, by interpolation, corrections were obtained for the remaining hours. The nine daily observations gave also the means of reducing the daily thermograph values to the temperature of the interior of the respective magnet boxes. The results are given in Tables IV., VI., VIII., and X.

In order to economise space, the daily values, as exhibited in Tables III. and VII., both uncorrected and corrected, have been diminished by constants. The division ═══ in these Tables and in Table XI. indicates that the instrument has been disturbed for experiment or adjustment, or that for some reason the continuity of the values has been broken, the constants deducted being different before and after each

break. In the interval between two breaks the values of $u$ and $c$ are each comparable throughout, remarking only that in certain cases it is to be understood that the values are to be taken 1000 greater or less for comparison with adjacent values. See, for example, $c$ in Table III. on October 10, which should be taken as 1025 for comparison with the adjacent values, and similarly in other cases. The excess of the value of $c$ above that of $u$ on any day (supposing $c$, when the smaller value, to be increased by 1000) shows the correction for temperature that has been actually applied. In Tables II., V., IX., and XII. the separate hourly values of the different elements have been simply diminished by the smallest hourly value.

The variations of declination are given in the sexagesimal division of the circle, and those of horizontal and vertical force in terms of ·00001 of the whole horizontal and vertical forces respectively taken as units. In Tables XI. and XII. they have been also expressed in terms of ·00001 of Gauss's absolute unit, as referred to the metrical system of the millimètre-milligramme-second.

The factors for conversion from the former to the latter system of measures are as follows:—

For variation of declination, expressed in minutes, the factor is

$$\text{H.F. in metrical measure} \times \sin 1' = 1{\cdot}8528 \times \sin 1' = 0{\cdot}0005390.$$

For variation of horizontal force, the factor is

$$\text{H.F. in metrical measure} = 1{\cdot}8528,$$

and for variation of vertical force

$$\begin{aligned}\text{V.F. in metrical measure} &= \text{H.F. in metrical measure} \times \tan \text{dip},\\ &= 1{\cdot}8528 \times \tan 66°.56'.17'' = 4{\cdot}3518.\end{aligned}$$

The measures as referred to the millimètre-milligramme-second system are readily convertible into measures on the centimètre-gramme-second (C.G.S.) system by dividing by 10.

Table XIII. exhibits the diurnal range of declination and horizontal force on each separate day, as determined from the 24 hourly ordinates of each element measured from the photographic register (as explained on page *xxix*), and the monthly means of these numbers, the results for horizontal force being corrected for temperature. The first portion of Table XIV. contains the difference between the greatest and least hourly mean values in each month, for declination, horizontal force, and vertical force, as extracted from Table II. and columns $c$ of Tables V. and IX. In the second portion of the table there are given for each month the numerical sums of the deviations of the 24 hourly values from the mean, taken without regard to sign.

The magnetic diurnal inequalities of declination, horizontal force, and vertical force, for each month and for the year, as given in Tables II., V., and IX., have been

treated by the method of harmonic analysis, and the results are given in Tables XV. and XVI. The values of the coefficients contained in Table XV. have been thus computed, 0 representing the value at $0^h$ (midnight), 1 that at $1^h$, and so on.

$$m = \frac{1}{24}(0+1+2 \ldots\ldots 22+23).$$

$$\begin{aligned}
12\,a_1 = {} & 0-12+\{(1+23)-(11+13)\}\cos 15^\circ+\{(2+22)-(10+14)\}\cos 30^\circ \\
& +\{(3+21)-(9+15)\}\cos 45^\circ+\{(4+20)-(8+16)\}\cos 60^\circ \\
& +\{(5+19)-(7+17)\}\cos 75^\circ.
\end{aligned}$$

$$\begin{aligned}
12\,b_1 = {} & 6-18+\{(5+7)-(17+19)\}\sin 75^\circ+\{(4+8)-(16+20)\}\sin 60^\circ \\
& +\{(3+9)-(15+21)\}\sin 45^\circ+\{(2+10)-(14+22)\}\sin 30^\circ \\
& +\{(1+11)-(13+23)\}\sin 15^\circ.
\end{aligned}$$

$$\begin{aligned}
12\,a_2 = {} & (0+12)-(6+18)+\{(1+11+13+23)-(5+7+17+19)\}\cos 30^\circ \\
& +\{(2+10+14+22)-(4+8+16+20)\}\cos 60^\circ.
\end{aligned}$$

$$\begin{aligned}
12\,b_2 = {} & (3+15)-(9+21)+\{(2+4+14+16)-(8+10+20+22)\}\sin 60^\circ \\
& +\{(1+5+13+17)-(7+11+19+23)\}\sin 30^\circ.
\end{aligned}$$

$$12\,a_3 = (0+8+16)-(4+12+20)+\{(1+7+9+15+17+23)-(3+5+11+13+19+21)\}\cos 45^\circ.$$

$$12\,b_3 = (2+10+18)-(6+14+22)+\{(1+3+9+11+17+19)-(5+7+13+15+21+23)\}\sin 45^\circ.$$

$$\begin{aligned}
12\,a_4 = {} & (0+6+12+18)-(3+9+15+21) \\
& +\{(1+5+7+11+13+17+19+23)-(2+4+8+10+14+16+20+22)\}\cos 60^\circ.
\end{aligned}$$

$$12\,b_4 = \{(1+2+7+8+13+14+19+20)-(4+5+10+11+16+17+22+23)\}\sin 60^\circ.$$

The values of the coefficient $c_1$ and of the constant angles $\alpha$ contained in Table XVI. are then determined by means of the following relations :—

$$\frac{a_1}{b_1} = \tan\alpha \qquad\qquad c_1 = \frac{a_1}{\sin\alpha} = \frac{b_1}{\cos\alpha}.$$

Similarly for $c_2$, $\beta$, &c.

Finally, the values of the angles $\alpha'$, $\beta'$, &c. were thus found. Calling the Sun's hour-angle east at mean midnight $= h$, then—

$$\begin{aligned}
\alpha' &= \alpha + h \\
\beta' &= \beta + 2h \\
\&c. &= \&c.,
\end{aligned}$$

a mean value of $h$ for the month being employed.

The values of $a_5$ and $b_5$ for the diurnal inequalities for the year were also calculated, but could not be conveniently included in Table XV. They are as follows :—

| 1908. | $a_5$. | $b_5$. |
|---|---|---|
| Declination ..... | $-0'\cdot08$ | $+0'\cdot01$ |
| Horizontal Force ..... | $-0\cdot3$ | $-1\cdot1$ |
| Vertical Force ..... | $+0\cdot9$ | $-0\cdot7$ |

In order to give some indication of the accuracy with which the results of observation are represented by the harmonic formula, the sums of squares of residuals remaining after the introduction of $m$ and of each successive pair of terms of the expression on page (xii), corresponding to the single terms of the expressions on page (xiii), have been calculated for the mean diurnal inequalities for the year (columns 1, 2, and 3 of Table XII.). The respective sums of squares of residuals are as follows :—

SUMS OF SQUARES OF RESIDUALS OF DIURNAL INEQUALITIES.

| For the Year 1908. | Declination. | Horizontal Force. | Vertical Force. |
|---|---|---|---|
| Sums of Squares of Observed Values (Table XII.) ..... | 273·10 | 377289·0 | 25813·0 |
| Sums of Squares of Residuals after the introduction of $m$ ..... | 119·37 | 64997·2 | 4660·6 |
| ,, ,, $a_1$ and $b_1$ | 46·61 | 15853·7 | 2449·0 |
| ,, ,, $a_2$ and $b_2$ | 7·07 | 2744·5 | 426·1 |
| ,, ,, $a_3$ and $b_3$ | 0·82 | 456·8 | 65·6 |
| ,, ,, $a_4$ and $b_4$ | 0·10 | 24·0 | 22·6 |
| ,, ,, $a_5$ and $b_5$ | 0·03 | 7·4 | 7·1 |

The unit in the case of horizontal and vertical force being ·00001 of the whole horizontal and vertical forces respectively, it thus appears that there would be no advantage in carrying the approximation (Table XV.) beyond the determination of $a_4$, $b_4$.

As regards Magnetic Dip, the result of each complete observation of dip with each of the needles in ordinary use, is given in Table XVII.; and in Table XVIII., the concluded monthly and yearly values for each needle.

The results of the observations for Absolute Measure of Horizontal Force contained in Table XIX. require no special remark, the method of reduction and all necessary explanation having been given with the description of the instrument employed. The observed result in each month has been also given as reduced to the mean value for the month, by application of the difference between the horizontal force ordinate at the time of observation and the mean value for the month, as obtained from the photographic register.

In order to facilitate the comparison of the diurnal inequalities of magnetism at the different British and other magnetic observatories, an arrangement has been made with the Sub-Committee of the Kew Committee of the Royal Society, by which five quiet days are to be selected at Greenwich in each month of every year for adoption at all these observatories for determination of the monthly diurnal inequalities of declination, horizontal force, and vertical force, thus providing for further discussion results which should be strictly comparable. The particular days selected are given on page (xviii), and the results found for Greenwich are contained in Tables XX., XXI., and XXII., which it is interesting to compare with the values found from the records of all days, as given in Tables II., V., IX., and XII.

No numerical discussion of Earth Current records is contained in the present volume.

In the treatment of disturbed days it was formerly the custom to measure out for each element all salient points of the curves, and to print the numerical values. But, since the year 1882, it has been considered preferable to give instead of these tables reduced copies of the actual photographic curves (reproduced by photo-lithography from full-sized tracings of the original photographs), adding thereto copies of the corresponding earth current curves. In the present year no copies of earth current curves have been given because of the interruption produced by the trains running on the City and South London Electric Railway. The registers thus exhibited are those for the days of disturbance mentioned on page *xxix.*

The list of these days since the year 1889 has been selected in concert with M. Mascart, so that the two Observatories of Val Joyeux (formerly of the Parc Saint Maur) and Greenwich should publish the magnetic registers for the same days of disturbance with a view to the comparison of the results. It is proposed to follow this plan in future years, and if other magnetic observatories should eventually join in the scheme for concerted action, in regard to the publication of their registers, the discussion of magnetic perturbations would be much facilitated.

The plates are preceded by a brief description of *all* other significant magnetic motions (superposed on the ordinary diurnal movement) recorded throughout the year. These, in combination with the plates, give very complete information on magnetic disturbances during the year 1908, affording thereby, it is hoped, facilities for making comparison with solar phenomena.

In regard to the plates, it may be remarked that on each day three distinct registers are usually given, viz.: declination, horizontal force, and vertical force; all necessary information for proper understanding of the plates being added in the notes on page (xxxiv).

An additional plate (IV.) exhibits the registers of declination, horizontal force, and vertical force on four quiet days, which may be taken as types of the ordinary diurnal movement at four seasons of the year. These are given for the civil day as exhibiting more clearly the character of the diurnal movement. The earth currents on these days are very small.

The indications of horizontal and vertical force are given precisely as registered; they are therefore affected, slightly as compared with the amount of motion on disturbed days, by the small recorded changes of temperature of the magnets. The recorded hourly temperatures being inserted on the plates, reference to the temperature-correction of the magnets, given at page *xxx*, will show the effect produced. Briefly, an increase of about $4\frac{1}{2}^{\circ}$ of temperature throws the horizontal force curve upward by 0·001 of the whole horizontal force; an increase of about 5° of temperature throws the vertical force curve downward by 0·001 of the whole vertical force.

The original photographs have been reduced in the proportion of 20 to 11 on the plates, and the corresponding scale values are :—

| — | Length in Inches. | | | | | |
|---|---|---|---|---|---|---|
| | Of 1° of Declination. | | Of 0·01 of Horizontal Force. | | Of 0·01 of Vertical Force. | |
| | in. | mm. | in. | mm. | in. | mm. |
| On the Photographs - - | 4·691 | 119·15 | 2·491 | 63·27 | 5·137 | 130·47 |
| On the Plates - - | 2·580 | 65·53 | 1·370 | 34·80 | 2·825 | 71·76 |

The scales actually attached to the plates are, however, so arranged as to correspond with the tables of the magnetic section—that is to say, the units for horizontal force and vertical force are ·00001 of the whole horizontal and vertical forces respectively, the numbers being in some cases increased by 1000 to avoid negative quantities. At the foot of each plate equivalent scales, in C.G.S. measure, are given for each of the magnetic registers. (See page *xxxvi*.)

Since the preceding scale values are not immediately comparable for the different elements, it therefore becomes desirable to refer them all to the same unit, say 0·01 of the horizontal force.

Now, the transverse force represented by a variation of 1° of Declination
= ·0175 of Horizontal Force,
and Vertical Force = Horizontal Force × tan dip [adopted dip = 66°.56′.17″]
= Horizontal Force × 2·3488;

whence we have the following equivalent scale values for the different elements :—

| — | Length of Unit, Equivalent to 0·01 of Horizontal Force. | | | | | |
|---|---|---|---|---|---|---|
| | For Declination Curve. | | For Horizontal Force Curve. | | For Vertical Force Curve. | |
| | in. | mm. | in. | mm. | in. | mm. |
| On the Photographs - - | 2·68 | 68·1 | 2·49 | 63·3 | 2·19 | 55·5 |
| On the Plates - - | 1·47 | 37·4 | 1·37 | 34·8 | 1·20 | 30·5 |

It may be convenient to give also comparative scale values for the different systems of absolute measurement, viz. :—

| | | | | |
|---|---|---|---|---|
| Foot-grain-second, | or British unit, | in terms of which | Mean H.F. for 1908 | = 4·0184 |
| Millimètre-milligramme-second, | or Metric unit, | ,, | ,, ,, | = 1·8528 |
| Centimètre-gramme-second, | or C.G.S. unit, | ,, | ,, ,, | = 0·18528 |

Dividing, therefore, the scale values last given by 4·0184, 1·8528, and 0·18528 respectively, the following comparative scale values for each of the elements on the photographs and on the plates as referred to 0·01 of these units respectively are found :—

| Unit. | Length of 0·01 of Unit. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Declination. | | | | Horizontal Force. | | | | Vertical Force. | | | |
| | On the Photographs. | | On the Plates. | | On the Photographs. | | On the Plates. | | On the Photographs. | | On the Plates. | |
| | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. | in. | mm. |
| British - - - - | 0·67 | 16·9 | 0·37 | 9·3 | 0·62 | 15·7 | 0·34 | 8·7 | 0·54 | 13·8 | 0·30 | 7·6 |
| Metric - - - - | 1·45 | 36·7 | 0·80 | 20·2 | 1·34 | 34·1 | 0·74 | 18·8 | 1·18 | 30·0 | 0·65 | 16·5 |
| C.G.S. - - - - | 14·5 | 367 | 8·0 | 202 | 13·4 | 341 | 7·4 | 188 | 11·8 | 300 | 6·5 | 165 |

The subjoined table gives the values of Magnetic Elements determined at the Royal Observatory, Greenwich :—

| Year. | Declination West. | Horizontal Force, C.G.S. Unit. | Dip. | Year. | Declination West. | Horizontal Force, C.G.S. Unit. | Dip. |
|---|---|---|---|---|---|---|---|
| 1841 | 23.16·2 | ... | ... | 1875 | 19.21·2 | 0·1795 | 67.42·3 |
| 1842 | 23.14·6 | ... | ... | 1876 | 19. 8·3 | 0·1797 | 67.40·9 |
| 1843 | 23.11·7 | ... | 69. 0·6 | 1877 | 18.57·2 | 0·1799 | 67.39·6 |
| 1844 | 23.15·3 | ... | 69. 0·3 | 1878 | 18.49·3 | 0·1801 | 67.38·1 |
| 1845 | 22.56·7 | ... | 68.57·5 | 1879 | 18.40·5 | 0·1803 | 67.36·9 |
| 1846 | 22.49·6 | 0·1731 | 68.58·1 | 1880 | 18.32·6 | 0·1804 | 67.35·6 |
| 1847 | 22.51·3 | 0·1736 | 68.59·0 | 1881 | 18.27·1 | 0·1805 | 67.34·6 |
| 1848 | 22.51·8 | 0·1731 | 68.54·7 | 1882 | 18.22·3 | 0·1804 | 67.34·1 |
| 1849 | 22.37·8 | 0·1733 | 68.51·3 | 1883 | 18.15·0 | 0·1810 | 67.31·6 |
| 1850 | 22.23·5 | 0·1738 | 68.46·9 | 1884 | 18. 7·6 | 0·1812 | 67.29·6 |
| 1851 | 22.18·3 | 0·1744 | 68.40·4 | 1885 | 18. 1·7 | 0·1816 | 67.27·8 |
| 1852 | 22.17·9 | 0·1745 | 68.42·7 | 1886 | 17.54·5 | 0·1816 | 67.27·0 |
| 1853 | 22.10·1 | 0·1748 | 68.44·6 | 1887 | 17.49·1 | 0·1818 | 67.26·4 |
| 1854 | 22. 0·8 | 0·1749 | 68.47·7 | 1888 | 17.40·4 | 0·1820 | 67.25·4 |
| 1855 | 21.48·4 | 0·1756 | 68.44·6 | 1889 | 17.34·9 | 0·1821 | 67.24·1 |
| 1856 | 21.43·5 | 0·1759 | 68.43·5 | 1890 | 17.28·6 | 0·1823 | 67.22·9 |
| 1857 | 21.35·4 | 0·1769 | 68.31·1 | 1891 | 17.23·4 | 0·1825 | 67.21·4 |
| 1858 | 21.30·3 | 0·1762 | 68.28·3 | 1892 | 17.17·4 | 0·1827 | 67.19·9 |
| 1859 | 21.23·5 | 0·1761 | 68.26·9 | 1893 | 17.11·4 | 0·1829 | 67.17·8 |
| 1860 | 21.14·3 | ... | 68.30·1 | 1894 | 17. 4·6 | 0·1829 | 67.17·3 |
| 1861 | 21. 5·5 | 0·1773 | 68.24·6 | 1895 | 16.57·4 | 0·1832 | 67.16·0* |
| | | 0·1757 | 68.15·8 | 1896 | 16.51·7* | 0·1833* | 67.15·0* |
| 1862 | 20.52·6 | 0·1761 | 68. 9·6 | 1897 | 16.45·8* | 0·1836 | 67.13·4* |
| 1863 | 20.45·9 | 0·1763 | 68. 7·0 | 1898 | 16.39·2* | 0·1838 | 67.11·8 |
| 1864 | ... | 0·1765 | 68. 4·1 | 1899 | 16.34·2 | 0·1842 | 67.10·2 |
| 1865 | 20.33·9 | 0·1765 | 68. 2·7 | 1900 | 16.29·0 | 0·1844 | 67. 8·5 |
| 1866 | 20.28·0 | 0·1771 | 68. 1·3 | 1901 | 16.26·0 | 0·1848 | 67. 6·1 |
| 1867 | 20.20·5 | 0·1776 | 67.57·2 | 1902 | 16.22·8 | 0·1850 | 67. 3·4 |
| 1868 | 20.13·1 | 0·1777 | 67.56·5 | 1903 | 16.19·1 | 0·1850 | 67. 0·9 |
| 1869 | 20. 4·1 | 0·1780 | 67.54·6 | 1904 | 16.15·0 | 0·1852 | 66.57·2 |
| 1870 | 19.53·0 | 0·1782 | 67.52·4 | 1905 | 16. 9·9 | 0·1852 | 66.55·9 |
| 1871 | 19.41·9 | 0·1785 | 67.50·2 | 1906 | 16. 3·6 | 0·1852 | 66.55·3 |
| 1872 | 19.36·8 | 0·1787 | 67.47·9 | 1907 | 15.59·8 | 0·1853 | 66.56·0 |
| 1873 | 19.33·4 | 0·1791 | 67.45·6 | 1908 | 15.53·5 | 0·1853 | 66.56·3 |
| 1874 | 19.28·9 | 0·1795 | 67.43·6 | | | | |

* Corrected for the effect of the iron in the new buildings (see p. *vi*).

In 1861 the new Unifilar Apparatus for absolute Horizontal Force and the Airy Dip-Circle were introduced, both sets of apparatus being used in that year. In 1864 the excavation of the Magnetic Basement caused the suspension of complete Declination Observations.

Slight interruptions in the traces on the plates are due to various causes. In the originals there are breaks at each hour for time scale, so slight, however, that in the copies the traces could usually be made continuous without fear of error: in a few cases, however, this could not be done. Further, to check the numeration of hours, the observer interrupts the register at definite times for about five minutes, usually at or near $9^h\ 30^m$, $12^h\ 30^m$, and $20^h\ 30^m$ Greenwich civil time, and at somewhat different times on Sundays.

The original photographic records were first traced on thin paper, the separate records on each day being arranged one under another on the same sheet, and great attention being paid to accuracy as regards the scale of time. Each sheet containing the records for one or more days was then reduced by photo-lithography, in the proportion of 20 to 11, to bring it to a convenient size for insertion in the printed volume.

## § 6. *Meteorological Instruments.*

STANDARD BAROMETER.—The standard barometer, mounted in 1840 on the southern wall of the western arm of the Upper Magnet Room, is Newman No. 64. Its tube is $0^{in}\cdot565$ in diameter, and the depression of the mercury due to capillary action is $0^{in}\cdot002$, but no correction is applied on this account. The cistern is of glass, and the graduated scale and attached rod are of brass; at its lower end the rod terminates in a point of ivory, which in observation is made just to meet the reflected image of the point as seen in the mercury. The scale is divided to $0^{in}\cdot05$, sub-divided by vernier to $0^{in}\cdot002$.

The readings of this barometer, until 1866 August 20, are considered to be coincident with those of the Royal Society's flint-glass standard barometer. It then became necessary to remove the sliding rod for repair of its slow motion screw, which was completed on August 30. Before the removal of the rod the barometer had been compared with three other barometers, one of which, during repair of the rod, was used for the daily readings. After restoration of the rod, a comparison was again made with the same three barometers, from which it appeared that the readings of the standard, in its new state, required a correction of $-0^{in}\cdot006$, all three auxiliary barometers giving accordant results. This correction has been applied to every observation since 1866 August 30.

An elaborate comparison of the standard barometers of the Greenwich and Kew

Observatories, made in the spring of the year 1877, under the direction of the Kew Committee, by Mr. Whipple, showed that the difference between the two barometers (after applying to the Greenwich barometer-readings the correction $-0^{in}\cdot006$) did not exceed $0^{in}\cdot001$. (*Proceedings of the Royal Society*, vol. xxvii. page 76.)

The height of the barometer cistern above the mean level of the sea is 159 feet, being $5^{ft}\cdot\ 2^{in}\cdot$ above Mr. Lloyd's reference mark in Bradley's Transit room adjoining the present Transit-circle room. (*Philosophical Transactions*, 1831.)

The barometer is read at $9^h$, $12^h$ (noon), $15^h$, $21^h$ (civil reckoning) on week days; and at $10^h$, noon, and $20^h$ on Sundays. Each reading is corrected by application of the index-correction above mentioned, and reduced to the temperature 32° by means of Table II. of the "Report of the Committee of Physics" of the Royal Society. The readings thus found are used to determine the value of the instrumental base line on the photographic record.

PHOTOGRAPHIC BAROMETER.—The barometric record is made on the same cylinder as is used for magnetic vertical force, the register being arranged to fall on the upper half of the cylinder, on its eastern side. A siphon barometer fixed to the northern wall of the Magnet Basement is employed, the bore of the upper and lower extremities of the tube being about 1·1 inch, and that of the intermediate portion 0·3 inch. A metallic plunger, floating on the mercury in the shorter arm of the siphon, is partly supported by a counterpoise acting on a light lever, leaving a definite part of its weight to be supported by the mercury. The lever carries at its other end a vertical plate of aluminium, having a small horizontal slit, whose distance from the fulcrum is about eight times that of the point of connexion with the float, and whose vertical movement is therefore about four times that of the ordinary barometric column. The light of a gas lamp, passing through this slit and falling on a cylindrical lens, forms a spot of light on the paper. The barometer can, by screw action, be raised or lowered so as to keep the photographic trace in a convenient part of the sheet. A base line is traced on the sheet, and the record is interrupted at each hour by the clock, and occasionally by the observer, in the same way as for the magnetic registers. The length of the time scale is also the same.

The barometric scale is determined by experimentally comparing the measured movement on the paper with the observed movement of the standard barometer; one inch of barometric movement is thus found = $4^{in}\cdot16$ on the paper. Ordinates measured for the times of observation of the standard barometer, combined with the corrected readings of the standard barometer, give apparent values of the base line,

from which mean values for each day are formed; these are written on the sheets and new base lines drawn, from which the hourly ordinates (see page *lii*) are measured as for the magnetic registers. As the diurnal change of temperature in the Basement is very small, no appreciable differential effect is produced on the photographic register by the expansion of the column of mercury.

DRY AND WET BULB THERMOMETERS.—The Standard dry and wet bulb thermometers and maximum and minimum self-registering thermometers, both dry and wet, are mounted on a revolving frame planned by Sir G. B. Airy. A vertical axis, fixed in the ground, carries the frame, which consists of a horizontal board as base, of a vertical board projecting upwards from it and connected with one edge of the horizontal board, and of two parallel inclined boards (separated about 3 inches) connected at the top with the vertical board and at the bottom with the other edge of the horizontal board: the outer inclined board is covered with zinc, and the air passes freely between all the boards. The dry and wet bulb thermometers are mounted near the centre of the vertical board, with their bulbs about 4 feet from the ground; the maximum and minimum thermometers for air temperature are placed towards one side of the vertical board, and those for evaporation temperature towards the other side, with their bulbs at about the same level as those of the dry and wet bulb thermometers. A small roof projecting from the frame protects the thermometers from rain. The frame is turned in azimuth several times during the day (whether cloudy or clear), so as to keep the inclined side always towards the sun. In 1878 September a circular board, 3 feet in diameter, was fixed, below the frame, round the supporting post, at a height of 2 feet 6 inches above the ground, with the object of protecting the thermometers from radiation from the ground. In the summer of 1886 experiments were made on days of extreme heat, with the view of determining the effect of the circular board in this respect, an account of which will be found at the end of the Introduction to the volume for the year 1887. The effect of radiation with the circular board removed was found to be insensible.

On 1899 January 4 the thermometer stand was moved to the Magnetic Pavilion enclosure, where the thermometers are set up in an open position, about 40 feet south-west of the building.

The corrections to be applied to the thermometers in ordinary use are determined, usually once each year for the whole extent of scale actually employed, by observations

at 32° in pounded ice and by comparison with the standard thermometer No. 515, kindly supplied to the Royal Observatory by the Kew Committee of the Royal Society.

The dry bulb thermometer used throughout the year was Negretti and Zambra, No. 45354. The correction −0°·4 has been applied to the readings of this thermometer. The wet bulb thermometer used throughout the year was Negretti and Zambra, No. 94737. The correction −0°·2 has been applied to the readings of this thermometer.

The self-registering thermometers for temperature of air and evaporation are all by Negretti and Zambra. The maximum thermometers are on Negretti and Zambra's principle, the minimum thermometers are of Rutherford's construction. The readings of Negretti and Zambra, No. 83760, for maximum temperature of the air, required no correction; to those of Negretti and Zambra, No. 38338, for minimum temperature of the air, a correction of +0°·1 has been applied; to those of Negretti and Zambra, No. 102104, for maximum temperature of evaporation, a correction of +0°·1 has been applied; and to those of Negretti and Zambra, No. 98508, for minimum temperature of evaporation, a correction of +0°·1 has been applied.

The dry and wet bulb thermometers are read at $9^h$, $12^h$ (noon), $15^h$, $21^h$ (civil reckoning) on week days, and at $10^h$, noon, and $20^h$ on Sundays. Readings of the maximum and minimum thermometers are taken at $9^h$, $15^h$ and $21^h$ on week days, and at $10^h$ and $20^h$ on Sundays. Those of the dry and wet bulb thermometers are employed to correct the indications of the photographic dry and wet bulb thermometers.

In the year 1887, four thermometers—a dry-bulb and a wet-bulb, with maximum and minimum thermometers for air temperature—were mounted in a Stevenson screen, with double louvre-boarded sides, of the pattern adopted by the Royal Meteorological Society, which is fully described in the *Quarterly Journal* of the Society, vol. x. page 92. The screen is planted in the Magnet ground 20 feet east-north-east of the photographic thermometers, and its internal dimensions are, length 18 inches, width 11 inches, and height 15 inches, the bulbs of the thermometers placed in it being at a height of about 4 feet above the ground. The dry-bulb thermometer is Hicks No. 262495, to the readings of which a correction of −0°·1 has been applied. The wet-bulb is Hicks No. 268525, and the maximum thermometer is Negretti and Zambra, No. 85059, neither of which required correction. To the readings of the minimum thermometer, Negretti and Zambra, No. 68873, a correction of +0°·1 has been applied. The observation of the dry and wet bulb thermometers is omitted on Sundays and a few other days.

Experiments were made in the summer of the year 1887 on days of extreme heat, to determine whether, with the door of the screen open, the thermometers were in any way influenced by radiation from external objects, an account of which will be found at the end of the Introduction to the volume for 1887. The effect of radiation with the door of the screen open was found to be insensible.

At the beginning of the year 1886 three thermometers were mounted on the platform above the Magnet House, in a louvre-boarded shed or screen, so constructed as to give free circulation of air with protection from radiation. The thermometer for eye-observation of the temperature of the air used in the year 1908 was Hicks, No. 268524, to the readings of which a correction of $-0^{\circ}\cdot1$ has been applied. Negretti and Zambra, No. 37467, is a self-registering maximum thermometer, to the readings of which a correction of $-0^{\circ}\cdot4$ has been applied. No. 342663, by Hicks, is a self-registering minimum thermometer, to the readings of which corrections have been applied as follow: below $45^{\circ}$ + $0^{\circ}\cdot1$, $45^{\circ}$ to $55^{\circ}$ + $0^{\circ}\cdot2$, and above $55^{\circ}$ + $0^{\circ}\cdot3$. The bulbs of all these thermometers are 4 feet above the platform, and about 20 feet above the ground. The eye-observation of the thermometer for temperature of the air is omitted on Sundays and a few other days.

On 1900 March 31, an additional Stevenson screen, similar to the screen already mounted in the Magnet ground, was erected in the Magnetic Pavilion enclosure, 15 feet north-east of the open stand. The dry and wet-bulb thermometers mounted in this screen are Negretti and Zambra, Nos. 94713 and 94714, which required no correction to their readings. To the readings of the maximum thermometer, Negretti and Zambra, No. 94859, a correction of $-0^{\circ}\cdot4$ has been applied, and to those of the minimum thermometer, Negretti and Zambra, No. 85080, a correction of + $0^{\circ}\cdot1$ has been applied.

PHOTOGRAPHIC DRY-BULB AND WET-BULB THERMOMETERS.—The apparatus now in use was constructed in the year 1884 by Messrs. Negretti & Zambra from designs furnished by me, and was mounted in the year 1885, but from various causes it was not brought into regular use until 1887 January 1. Until February 1891 it stood nearly in the centre of the South Ground: it was then removed to the Magnet Ground, being placed in the position formerly occupied by the old apparatus, which had been previously dismantled. It is placed under a shed, 8 feet square, standing upon posts about 8 feet high. On 1899 May 16 and 17, the shed was shifted 15 feet westwards. This shed is open to the north, and is generally similar to that provided for the old apparatus, excepting that the roof

inclines somewhat towards the south, and that the protecting boards (fixed as far as necessary on the eastern, southern, and western sides) are double, with spaces between to ensure a free circulation of air while screening the thermometers from the direct rays of the sun. The thermometers are further protected from sky and ground radiation by boards on the thermometer stand as described below. The photographic register is received on paper placed on a vertical ebonite cylinder $11\frac{1}{2}$ inches high and $14\frac{1}{4}$ inches in circumference, and I have arranged that the dry- and wet-bulb traces shall fall on the same part of the cylinder, as regards time scale, a long air-bubble in the wet-bulb thermometer column giving the means of registering the indications of the wet bulb (as well as of such degrees and decades of its scale as fall within the bubble), just below the trace of the dry-bulb thermometer, without any interference of the two records, an arrangement which admits of the time scale being made equal to that of all the other registers. The stems of the thermometers are placed close together, each being covered by a vertical metal plate having a fine vertical slit, so that light passes through only at such parts of the bore of the tube as do not contain mercury. Two gas lamps, each at a distance of 21 inches, are placed at such an angle that the light from each, after passing through its corresponding slit and thermometer tube, falls on the photographic paper in one and the same vertical line. Degree lines etched upon the thermometer stems, and painted, interrupt the light sufficiently to produce a clear and sharp indication on the photographic sheet, the line at each tenth degree being thicker than the others, as well as those at 32°, 52°, 72°, &c. The length of scale is from 0° to 120° for each thermometer, the length of 1° being about 0·1 inch, and the air-bubble in the wet-bulb thermometer is about 12° in length, so that it will always include one of the ten-degree lines. The bulbs, which are 2 inches long and of about $\frac{1}{2}$ an inch in internal bore, are separated horizontally by 5 inches, the tubes of the thermometers having a double bend above the bulbs, which are placed about 4 feet above the ground. The thermometers are carried by a vertical frame with independent vertical adjustment for each thermometer, so that the register in summer or winter can be brought to a convenient part of the photographic sheet. The revolving cylinder is driven by a pendulum clock contained within the brass case covering the whole apparatus, excepting the thermometer bulbs which project below. It makes one revolution in 26 hours, and the time scale is the same as that for all the other registers. As the cylinder revolves, the light passing through the portion of the thermometer tubes not occupied by mercury imprints on the paper a broad band of photographic trace, corresponding to the dry-bulb register, whose breadth in the vertical direction varies with the height of the mercury in the tube, and a narrower band below, corresponding to the wet bulb. When these are developed, the traces are seen to be crossed by thin white lines, the horizontal lines corresponding to degrees, and the vertical lines to hours, the lower

boundary of each trace indicating the thermometric record corresponding to the upper surface of the thermometric column.

The driving clock is made to interrupt the light for a short time at each hour, producing on the sheet the hour lines above mentioned; the observer also occasionally interrupts the register for a short time for proper identification of the hourly breaks.

The bulbs of the thermometers were at first completely protected from radiation by vertical or inclined boards fixed to the thermometer stand, two on the south side, two on the north side, one at the east end, one at the west end, and one below, but with proper spaces for free circulation of air. Experiments made in the summer of the year 1886, an account of which is given at the end of the Introduction for 1887, showed that the north and south boards were unnecessary, and the two south boards and one north board were in consequence removed before commencing regular work with the instrument at the beginning of the year 1887. The south boards were replaced during 1908 as a precaution against indirect effects from the gravel path to the south of the shed.

For a description of the apparatus formerly employed, reference may be made to the Introduction for 1887 and previous years. A comparison of the results given by the old and new apparatus will be found at the end of the Introduction to the year 1887.

RADIATION THERMOMETERS.—These thermometers are placed in the Magnetic Pavilion enclosure, in an open position about 50 feet south-west of the building. The thermometer for solar radiation is a self-registering mercurial maximum thermometer on Negretti and Zambra's principle, with its bulb blackened, and the thermometer enclosed in a glass sphere from which the air has been exhausted. The thermometer employed at the beginning of the year was Negretti and Zambra, No. 99993. On July 2 the outer tube was broken and the thermometer sent for repair, Negretti and Zambra, No. 99989 being issued to replace it. The thermometer for radiation to the sky is a self-registering spirit minimum thermometer of Rutherford's construction, by Horne and Thornthwaite, No. 3120. The thermometers are laid on short grass and freely exposed to the sky; they require no correction for index-error.

EARTH THERMOMETERS.—These thermometers were made by Adie, of Edinburgh, under the superintendence of Professor J. D. Forbes. They are placed about 20 feet south of the Magnet House.

The thermometers are four in number, placed in one hole in the ground, the diameter of which in its upper half is 1 foot and in its lower half about 6 inches,

each thermometer being attached in its whole length to a slender piece of wood. The thermometer No. 1 was dropped into the hole to such a depth that the centre of its bulb was 24 French feet (25·6 English feet) below the surface; then dry sand was poured in till the hole was filled to nearly half its height. Then No. 2 was dropped in till the centre of its bulb was 12 French feet below the surface; Nos. 3 and 4 till the centres of their bulbs were respectively 6 and 3 French feet below the surface; and the hole was then completely filled with dry sand. The upper parts of the tubes carrying the scales were left projecting above the surface; No. 1 by 27·5 inches, No. 2 by 28·0 inches, No. 3 by 30·0 inches, and No. 4 by 32·0 inches. Of these lengths, 8·5, 10·0, 11·0, and 14·5 inches respectively are in each case tube with narrow bore. The length of 1° on the scales is 1·9 inch, 1·1 inch, 0·9 inch, and 0·5 inch in each case respectively. The ranges of the scales are for No. 1, 46°·0 to 55°·5; No. 2, 43°·0 to 58°·0; No. 3, 44°·0 to 62°·0; and for No. 4, 36°·9 to 68°·0.

The bulbs of the thermometers are cylindrical, 10 or 12 inches long, and 2 or 3 inches in diameter. The bore of the principal part of each tube, from the bulb to the graduated scale, is very small; in that part to which the scale is attached it is larger; the fluid in the tubes is alcohol tinged red; the scales are of opal glass.

The ranges of scale having in previous years been found insufficient, fluid has at times been removed from or added to the thermometers as necessary, corresponding alterations being made in the positions of the attached scales. Information in regard to these changes will be found in previous Introductions.

The parts of the tubes above the ground are protected by a small wooden hut fixed to the ground; the sides of the hut are perforated with numerous holes, and it has a double roof; in the north face is a plate of glass, through which the readings are taken. Within the hut are two small thermometers—one, No. 5, with bulb 1 inch in the ground; another, No. 6, whose bulb is freely exposed in the centre of the hut.

These thermometers are read every day at noon, and the readings are given without correction. The index-errors of Nos. 1, 2, 3, and 4 are unknown; No. 6 appears to read too high by 0°·4, but no corrections have been applied. No. 5 was accidentally cracked on 1906 May 30, and the readings after a time were found to be quite erroneous, and another thermometer was substituted for it on 1908 January 1.

OSLER'S ANEMOMETER.—This self-registering anemometer, devised by A. Follett Osler, for continuous registration of the direction and pressure of the wind and of the amount of rain, is fixed above the north-western turret of the ancient part of the observatory. For the direction of the wind a large vane ($9^{ft.}\ 2^{in.}$ in length), from which a vertical shaft proceeds down to the registering table within the turret, gives motion, by a pinion

fixed at its lower end, to a rack-work carrying a pencil. A collar on the vane shaft bears upon anti-friction rollers running in a cup of oil, rendering the vane very sensitive to changes of direction in light winds. The pencil marks a paper fixed to a board moved horizontally and uniformly by a clock, in a direction transverse to that of the motion of the pencil. The paper carries lines corresponding to the positions of N., E., S., and W. of the vane, with transversal hour lines. The vane is 25 feet above the roof of the Octagon Room, 60 feet above the adjacent ground, and 215 feet above the mean level of the sea. A fixed mark on the north-eastern turret, in a known azimuth, as determined by celestial observation, is used for examining at any time the position of the direction plate over the registering table, to which reference is made by means of a direction pointer when adjusting a new sheet on the travelling board. The vane, which had been in use since the year 1841, began in the autumn of 1891 to show signs of weakness; it was taken down in December 1891 and thoroughly repaired. It was satisfactory to find that the anti-friction bearings of the vane, on which the sensitiveness of its motion depends, were in excellent condition, after having been continuously in action for 25 years.

For the pressure of the wind the construction is as follows:—At a distance of 2 feet below the vane there is placed a circular pressure plate (with its plane vertical) having an area of $1\frac{1}{3}$ square feet, or 192 square inches, which, moving with the vane in azimuth, and being thereby kept directed towards the wind, acts against a combination of springs in such way that, with a light wind, slender springs are first brought into action, but, as the wind increases, stiffer springs come into play. For a detailed account of the arrangement adopted, the reader is referred to the Introduction for the year 1866. [Until 1866 the pressure plate was a square plate, 1 foot square, for which in that year a circular plate, having an area of 2 square feet, was substituted and employed until the spring of the year 1880, when the present circular plate, having an area of $1\frac{1}{3}$ square feet, was introduced.] A short flexible snake chain, fixed to a cross bar in connexion with the pressure plate, and passing over a pulley in the upper part of the shaft, is attached to a brass chain (formerly a copper wire) running down the centre of the shaft to the registering table, just before reaching which the chain communicates with a short length of silk cord, which, led round a pulley, gives horizontal motion to the arm carrying the pressure pencil. The substitution, in the year 1882, of the flexible brass chain for the copper wire, has greatly increased the delicacy of movement of the pressure pencil, every small movement of the pressure plate being now registered. The scale for pressure, in lbs. on the square foot, is experimentally determined from time to time as appears necessary; the pressure pencil is brought to zero by a light spiral spring. During the year 1907 a new set of pressure springs was supplied by

Messrs Simms. Advantage was taken of this opportunity to endeavour to simplify the determination of mean pressures by arranging that the scale should change only once, low pressures being represented on twice as large a scale as high ones, and adjusting screws and clamps were also introduced by which the strength could be varied so that the springs could be adjusted to scale, instead of a new scale being determined from time to time.

Whilst the action of the pressure apparatus has been satisfactory for moderate winds, it is believed that the record of occasional very large pressures in years preceding 1882 was due principally to irregular action, in excessive gusts, of the connecting copper wire, but the brass chain being always in tension, the movements of the recording pencil have since been in complete sympathy with those of the pressure plate, and in this condition of the apparatus—that is, since the year 1882—few pressures greater than 30 lbs. have been recorded.

A self-registering rain gauge of peculiar construction forms part of the apparatus : this is described under the heading "Rain Gauges."

A new sheet of paper is applied to the instrument every day at noon. The scale of time is ordinarily the same as that of the magnetic registers, but by means of a special gearing applied to the clock by Mr. Kullberg in 1894 the table carrying the record can either be driven at the usual rate, or 24 times as fast, in order to give a largely increased time scale for the register of wind pressure during gales, the ordinary sheet thus giving a register for 1 hour instead of 24.

ROBINSON'S ANEMOMETER.—This instrument, made by Mr. Browning, is constructed on the principle described by Dr. Robinson in the *Transactions of the Royal Irish Academy*, vol. xxii., for registration of the horizontal movement of the air, and is mounted above the small building on the roof of the Octagon Room. It was brought into use in 1866 October. The motion is given by the pressure of the wind on four hemispherical cups, each 5 inches in diameter, the centre of each cup being 15 inches distant from the vertical axis of rotation. The foot of the axis is a hollow flat cone bearing upon a sharp cone, which rises up from the base of a cup of oil. An endless screw acts on a train of wheels furnished with indices for reading off the amount of motion of the air in miles, and a pinion on the axis of one of the wheels draws upwards a rack, to which is attached a rod passing down to the pencil which marks the paper placed on the vertical revolving cylinder in the chamber below. A motion of the pencil upwards through a space of 1 inch represents horizontal motion of the air through 100 miles. The revolving hemispherical cups are 21 feet above the roof of the Octagon Room, 56 feet above the adjacent ground, and 211 feet above the mean level of the sea.

The cylinder is driven by a clock in the usual way, and makes one revolution in 24 hours. A new sheet of paper is applied every day at noon. The scale of time is the same as that of the magnetic registers.

It is assumed, in accordance with the experiments made by Dr. Robinson, that the horizontal motion of the air is three times the space described by the centres of the cups. To verify this conclusion, experiments were made in the year 1860 in Greenwich Park with the anemometer by Negretti and Zambra, which was in use from 1859 until the introduction of the larger instrument by Browning in 1866 October. The instrument was fixed to the end of a horizontal arm, which was made to revolve round a vertical axis. For more detailed account of these experiments see the Introduction for 1880 and for previous years. With the arm revolving in the direction N., E., S., W., opposite to the direction of rotation of the cups, for movement of the instrument through 1 mile, 1·15 was registered; with the arm revolving in the direction N., W., S., E., in the same direction as the rotation of the cups, 0·97 was registered. This was considered to confirm sufficiently the accuracy of the assumption. The hemispherical cups of the instrument with which these experiments were made were each $3\frac{3}{4}$ inches in diameter, the distance between the centres of the opposite cups being 13·45 inches.

From 1889 April 22 to May 8, both of the above instruments were sent to Mr. W. H. Dines, who kindly tested them on his whirling machine then erected at Hersham. The particulars of these experiments are given at the end of the Introduction for 1889. The results appear to show that the instrumental results in the case of high velocities of the wind are too great for both anemometers, but it has been thought better, for the sake of continuity, not to apply any corrections to the recorded values, which consequently indicate velocities corresponding to three times the space described by the centres of the cups.

RAIN GAUGES.—During the year 1908 eight rain gauges were employed, placed at different elevations above the ground, complete information in regard to which will be found at page (cxiv) of the Meteorological Section.

The gauge No. 1 forms part of the Osler Anemometer apparatus, and is self-registering, the record being made on the sheet on which the direction and pressure of the wind are recorded. The receiving surface is a rectangular opening $10 \times 20$ inches (200 square inches in area). The collected water passes into a vessel suspended by spiral springs, which lengthen as the water accumulates, until 0·25 inch is collected. The water then discharges itself by means of the following modification of the siphon. A vertical copper tube, open at both ends, is fixed in the receiver, with one end just projecting below the bottom. Over this tube a larger tube, closed

at the top, is loosely placed. The accumulating water, having risen to the top of the inner tube, begins to flow off into a small tumbling bucket, fixed in a globe placed underneath, and carried by the receiver. When full, the bucket falls over, throwing the water into a small exit pipe at the lower part of the globe—the only outlet. This creates a partial vacuum in the globe sufficient to cause the longer leg of the siphon to act, and the whole remaining contents of the receiver then run off, through the globe, to a waste pipe. The spiral springs at the same time shorten, and raise the receiver. The gradual descent of the water vessel as the rain falls, and the immediate ascent on discharge of the water, act upon a pencil, and cause a corresponding trace to be made on the paper fixed to the moving board of the anemometer. The rain scale on the paper was determined experimentally by passing a known quantity of water through the receiver. The continuous record thus gives complete information on the rate of the fall of rain, but the record is liable to interruption when the staging is erected for experiments with the Osler Anemometer, as was the case for some weeks during 1908.

Gauge No. 2 is a ten-inch circular gauge, placed close to gauge No. 1, its receiving surface being precisely at the same level. The gauge is read daily at $9^h$ Greenwich civil time. This is also liable to interference, just as No. 1.

Gauges Nos. 3, 4, and 5 are 8-inch circular gauges, placed respectively on the roof of the Octagon Room, over the roof of the Magnetic Observatory, and on the roof of the Photographic Thermometer Shed. All are read daily at $9^h$ Greenwich civil time. No. 5 was moved 28 inches to the East of its old position on November 11.

Gauge No. 6 is an 8-inch circular gauge placed with the receiving surface 5 inches above the ground in the Magnetic Pavilion enclosure, about 10 feet north-west of the thermometer stand, and gauge No. 7, also an 8-inch circular gauge, is similarly placed in the ground south-east of the Magnetic Observatory. No. 8 is a new gauge of the same diameter, but of the modified Snowdon pattern adopted by the Meteorological Office, having its receiving surface 1 foot above the ground. It was brought into use 1908 January 1, being fixed SW by W from No. 6 with a clear space of 6 feet between the rims. No. 6 is the Standard gauge, Nos. 7 and 8 are used as checks on the readings of No. 6. No. 6 is read daily, usually at $9^h$, $15^h$, and $21^h$ Greenwich civil time, and Nos. 7 and 8 at $9^h$ only as a rule.

The height of the Standard gauge above mean sea-level was determined by Mr. H. A. H. Christie on February 26, and was found to be 5 feet 9 inches less than in its old position in the Observatory Grounds, before removal to the Pavilion Enclosure.

The gauges are also read at midnight on the last day of each calendar month.

ELECTROMETER.—The electric potential of the atmosphere is measured by means of a Thomson self-recording electrometer, constructed by White, of Glasgow.

For a full description of the principle of the electrometer, reference may be made to Lord Kelvin's "Report on Electrometers and Electrostatic Measurements," contained in the *British Association Report* for the year 1867. It will be sufficient here to give a general description of the instrument which, with its registering apparatus, is planted in the Upper Magnet Room on the slate slab which carries the suspension pulleys of the Horizontal Force Magnet. A thin flat needle of aluminium, carrying immediately above it a small light mirror, is suspended, on the bifilar principle, by two silk fibres from an insulated support within a large Leyden jar. A little strong sulphuric acid is placed in the bottom of the jar, and from the lower side of the needle depends a platinum wire, kept stretched by a weight, which connects the needle with the sulphuric acid—that is, with the inner coating of the jar. A positive charge of electricity being given to the needle and jar, this charge is easily maintained at a constant potential by means of a small electric machine or replenisher forming part of the instrument, and by which the charge can be either increased or diminished at pleasure. A gauge is provided for the purpose of indicating at any moment the amount of charge. The needle hangs within four insulated quadrants, which may be supposed to be formed by cutting a circular flat brass box into quarters, and then slightly separating them. The opposite quadrants are placed in metallic connexion.

Lord Kelvin's water-dropping apparatus is used to collect the atmospheric electricity. For this purpose a rectangular cistern of copper, capable of holding above 30 gallons of water, is placed near the ceiling on the west side of the south arm of the Upper Magnet Room. The cistern rests on four pillars of glass, each one encircled and nearly completely enclosed by a glass vessel containing sulphuric acid. A pipe passing out from the cistern, through the south face of the building, extends about 6 feet into the atmosphere, the nozzle (about 10 feet above the ground) having a very small hole, through which the water passes and breaks almost immediately into drops. The cistern is thus brought to the same electrical potential as that of the atmosphere near the nozzle, and this potential is communicated by means of a connecting wire to one of the pairs of electrometer quadrants, the other pair being connected to earth. The varying atmospheric potential thus influences the motions of the included needle, causing it to be deflected from zero in one direction or the other, according as the atmospheric potential is greater or less than that of the earth—that is, according as it is positive or negative.

The small mirror carried by the needle is used for the purpose of obtaining photographic record of its motions. The light of a gas lamp, passing through a slit and falling upon the mirror, is thence reflected, and by means of a plano-convex cylindrical lens is brought to a focus at the surface of a horizontal cylinder of ebonite, nearly 7 inches long and 16 inches in circumference, which is turned by clock-work. A second fixed mirror, by means of the same gas lamp, causes a reference line to be traced round the cylinder. The actual zero is found by cutting off the cistern communication, and placing the pairs of quadrants in metallic connexion with each other and with earth. The break of register at each hour is made by the driving-clock of the electrometer cylinder itself. Other photographic arrangements are generally similar to those which have been described for other instruments.

The scale of time is the same as that of the magnetic registers.

Interruptions sometimes occur through cobwebs making connexion between the cistern or its pipe and the walls of the building, and in winter, from the occasional freezing of the water in the exit pipe.

SUNSHINE RECORDER.—Until the end of the year 1886 the instrument with which the record given in the printed volume was made was that presented to the Royal Observatory by Mr. J. F. Campbell, by whom this method of record was devised. This instrument is fully described in the Introductions to previous volumes. Commencing with the year 1887, the record is that of a modification of the Campbell form of instrument, as arranged by Sir G. G. Stokes for use at the observing stations of the Meteorological Office. By employing this instrument, the manipulation of which is more simple, there is the further advantage that the Greenwich results become strictly comparable with those of the Meteorological Office Stations. A very complete account of the Campbell-Stokes instrument is given in the *Quarterly Journal of the Royal Meteorological Society*, vol. vi. page 83. The recording cards are supported by carriers no larger than is required for keeping them in proper position; one straight card serves for the equinoctial periods of the year, and another, curved, for the solstitial periods, the only difference between the summer and winter cards being that the summer cards are the longer: grooves are provided so that the cards are placed in position with great readiness. The daily record is transferred to a sheet of paper specially ruled with equal vertical spaces to represent hours, each sheet containing the record for one calendar month. The daily sums, and sums for each hour (reckoning from *apparent* midnight) through the month, are thus readily formed. The recorded durations are to be understood as indicating the amount of *bright* sunshine, no register being obtained when the sun shines faintly through fog or cloud, or when the sun is very near the horizon. Until 1896 February 5 the instrument was placed on a table

upon the platform above the Magnetic Observatory, about 21 feet above the ground, and 176 feet above mean sea level. On account of the extension of the buildings in the south ground, it was found necessary on 1896 February 6 to remove the sunshine recorder from the roof of the Magnetic Observatory to a commanding position on the stage carrying the Robinson anemometer, on the roof of the Octagon Room, about 50 feet above the ground. A clear view of the sun is obtained in this position from sunrise to sunset, but some inconvenience is caused by the smoke from neighbouring chimneys. Very little record is obtained near to sunrise at any part of the year.

It was pointed out by Mr. Marriott, Secretary of the Royal Meteorological Society, towards the end of 1896, that the record by the Campbell-Stokes instrument exhibited a notable falling off. This, though not very marked till 1896, had certainly begun in 1894, and it was found to be due to opacity in the glass globe, which appears to have deteriorated. On 1897 January 1 a globe of clearer glass, presented to the Royal Observatory in 1881 by the late Mr. Campbell, was substituted for the defective globe.

The deterioration of the old ball is fully discussed by Mr. Curtis in the *Quarterly Journal of the Royal Meteorological Society*, vol. xxiv.

OZONOMETER.—This apparatus was fixed on the roof of the Photographic Thermometer shed, at a height of about 10 feet from the ground. The box in which the papers were formerly exposed is of wood: it is about 8 inches square, blackened inside, and so constructed that there is free circulation of air through the box, without exposure of the paper to light. Since 1901 the papers have been exposed in the Stevenson's screen in the Magnetic Pavilion Enclosure, in order to be at a greater distance from the main buildings, the use of the old Ozonometer box being temporarily discontinued, as a comparison had shown that more ozone was indicated in the new position. On 1906 October 22, the Ozonometer box was removed and placed on the top of the Stevenson's screen in the Magnetic Pavilion Enclosure, and Ozone papers subsequently exposed for purposes of comparison, both in the box and in the screen. The papers exposed at $9^h$, $15^h$, and $21^h$ are collected respectively at $15^h$, $21^h$, and $9^h$, and the degree of tint produced is compared with a scale of graduated tints, numbered from 0 to 10. The value of ozone for the civil day is determined by taking the degree of tint obtained at each hour of collection as proportional to the period of exposure. Thus, to form the value for any given civil day, three-fourths of the value registered at $9^h$, the values registered at $15^h$ and $21^h$, and one-fourth of that registered at the following $9^h$, are added together, the resulting sum (which appears in the tables of "Daily Results of the Meteorological Observations") being taken as the value referring to the civil day on a scale of 0 to 30. The means of the $9^h$, $15^h$, and $21^h$ values, as observed, are also given for each month in the footnotes.

## § 7. *Meteorological Reductions.*

The results given in the Meteorological Section refer to the civil day, commencing at midnight.

All results in regard to atmospheric pressure, temperature of the air and of evaporation with deductions therefrom, and atmospheric electricity, are derived from the photographic records, excepting that the maximum and minimum values of air temperature are those given by eye observation of the ordinary maximum and minimum thermometers at $9^h$ and $21^h$ (civil reckoning), reference being made, however, to the photographic register when necessary to obtain the values corresponding to the civil day from midnight to midnight. The hourly readings of the photographic traces for the elements mentioned are entered into a form having double argument, the horizontal argument ranging through the 24 hours of the civil day ($0^h$ to $23^h$), and the vertical argument through the days of a calendar month. Then for all the photographic elements, the means of the numbers standing in the vertical columns of the monthly forms, into which the values are entered, give the mean monthly photographic values for each hour of the day, the means of the numbers in the horizontal columns giving the mean daily value. It should be mentioned that before measuring out the electrometer ordinates, a pencil line was first drawn through the trace to represent the general form of the curve, in the way described for the magnetic registers (page *xxix*), excepting that no day has been omitted on account of unusual electrical disturbance, as it has been found difficult to decide on any limit of disturbance beyond which it would seem proper, as regards determination of diurnal inequality, to reject the results. In measuring the electrometer ordinates a scale of inches is used, and the values given in the tables which follow are expressed in thousandths of an inch, positive and negative potential being denoted by positive and negative numbers respectively. The scale has not been determined in terms of any electrical unit.

To correct the photographic indications of barometer and dry and wet bulb thermometers for small instrumental error, the means of the photographic readings at $9^h$, $12^h$ (noon), $15^h$, and $21^h$ in each month are compared with the corresponding corrected mean readings of the standard barometer and standard dry and wet bulb thermometers, as given by eye observation. A correction applicable to the photographic reading at each of these hours is thus obtained, and, by interpolation, corrections for the intermediate hours are found. The mean of the twenty-four hourly corrections in each month is adopted as the correction applicable to each mean daily value in the month. Thus mean hourly and mean daily values of the several elements are obtained for each month. The process of correction is equivalent to giving photographic indications in terms of corrected standard barometer, and in terms of the

standard dry and wet bulb thermometers exposed on the free stand. The barometer results are *not* reduced to sea level, neither are they corrected for the effect of gravity, by reduction to the latitude of 45°.

The mean daily temperature of the dew-point and degree of humidity are deduced from the mean daily temperatures of the air and of evaporation by use of Glaisher's *Hygrometrical Tables.* The factors by which the dew-point given in these tables is calculated were found by Mr. Glaisher from the comparison of a great number of dew-point determinations obtained by use of Daniell's hygrometer, with simultaneous observations of dry and wet bulb thermometers, combining observations made at the Royal Observatory, Greenwich, with others made in India and at Toronto. The factors are given in the following table.

TABLE OF FACTORS by which the DIFFERENCE between the READINGS of the DRY-BULB and WET-BULB THERMOMETERS is to be MULTIPLIED in order to PRODUCE the CORRESPONDING DIFFERENCE between the DRY-BULB TEMPERATURE and that of the DEW-POINT.

| Reading of Dry-bulb Thermometer. | Factor. | Reading of Dry-bulb Thermometer. | Factor. | Reading of Dry-bulb Thermometer. | Factor. | Reading of Dry-bulb Thermometer. | Factor. |
|---|---|---|---|---|---|---|---|
| ° | | ° | | ° | | ° | |
| 10 | 8·78 | 33 | 3·01 | 56 | 1·94 | 79 | 1·69 |
| 11 | 8·78 | 34 | 2·77 | 57 | 1·92 | 80 | 1·68 |
| 12 | 8·78 | 35 | 2·60 | 58 | 1·90 | 81 | 1·68 |
| 13 | 8·77 | 36 | 2·50 | 59 | 1·89 | 82 | 1·67 |
| 14 | 8·76 | 37 | 2·42 | 60 | 1·88 | 83 | 1·67 |
| 15 | 8·75 | 38 | 2·36 | 61 | 1·87 | 84 | 1·66 |
| 16 | 8·70 | 39 | 2·32 | 62 | 1·86 | 85 | 1·65 |
| 17 | 8·62 | 40 | 2·29 | 63 | 1·85 | 86 | 1·65 |
| 18 | 8·50 | 41 | 2·26 | 64 | 1·83 | 87 | 1·64 |
| 19 | 8·34 | 42 | 2·23 | 65 | 1·82 | 88 | 1·64 |
| 20 | 8·14 | 43 | 2·20 | 66 | 1·81 | 89 | 1·63 |
| 21 | 7·88 | 44 | 2·18 | 67 | 1·80 | 90 | 1·63 |
| 22 | 7·60 | 45 | 2·16 | 68 | 1·79 | 91 | 1·62 |
| 23 | 7·28 | 46 | 2·14 | 69 | 1·78 | 92 | 1·62 |
| 24 | 6·92 | 47 | 2·12 | 70 | 1·77 | 93 | 1·61 |
| 25 | 6·53 | 48 | 2·10 | 71 | 1·76 | 94 | 1·60 |
| 26 | 6·08 | 49 | 2·08 | 72 | 1·75 | 95 | 1·60 |
| 27 | 5·61 | 50 | 2·06 | 73 | 1·74 | 96 | 1·59 |
| 28 | 5·12 | 51 | 2·04 | 74 | 1·73 | 97 | 1·59 |
| 29 | 4·63 | 52 | 2·02 | 75 | 1·72 | 98 | 1·58 |
| 30 | 4·15 | 53 | 2·00 | 76 | 1·71 | 99 | 1·58 |
| 31 | 3·70 | 54 | 1·98 | 77 | 1·70 | 100 | 1·57 |
| 32 | 3·32 | 55 | 1·96 | 78 | 1·69 | | |

In the same way the mean hourly values of the dew-point temperature and degree of humidity in each month (pages (lxv) and (lxvi)) have been calculated from the corresponding mean hourly values of air and evaporation temperatures (pages (lxiv) and (lxv)).

The excess of the mean temperature of the air on each day above the average of 65 years, given in the "Daily Results of the Meteorological Observations," is found by comparing the numbers contained in column 6 with a table of average daily temperatures found by smoothing the accidental irregularities of the daily means deduced from the observations for the sixty-five years 1841–1905. In this series the mean daily temperature from 1841 to 1847 depends usually on 12 observations daily, in 1848 on 6 observations daily, and from 1849 to 1905 on 24 hourly readings from the photographic record. The smoothed numbers are given in the following table.

ADOPTED VALUES of MEAN TEMPERATURE of the AIR, deduced from the OBSERVATIONS for the Sixty-five Years 1841–1905.

| Day of the Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 38·6 | 39·6 | 40·4 | 45·3 | 49·3 | 57·4 | 61·5 | 62·2 | 59·8 | 54·1 | 47·0 | 40·9 |
| 2 | 38·4 | 39·5 | 40·4 | 45·7 | 49·5 | 57·8 | 61·6 | 62·1 | 59·7 | 53·7 | 46·8 | 40·9 |
| 3 | 38·3 | 39·5 | 40·5 | 46·0 | 49·8 | 58·1 | 61·8 | 62·1 | 59·6 | 53·3 | 46·6 | 41·1 |
| 4 | 38·3 | 39·5 | 40·7 | 46·2 | 50·0 | 58·3 | 62·1 | 62·1 | 59·5 | 53·0 | 46·4 | 41·3 |
| 5 | 38·2 | 39·6 | 40·9 | 46·3 | 50·3 | 58·4 | 62·3 | 62·1 | 59·4 | 52·8 | 46·1 | 41·5 |
| 6 | 38·1 | 39·6 | 41·0 | 46·3 | 50·5 | 58·3 | 62·4 | 62·2 | 59·2 | 52·5 | 45·8 | 41·5 |
| 7 | 38·0 | 39·5 | 41·0 | 46·3 | 50·7 | 58·2 | 62·4 | 62·2 | 59·0 | 52·3 | 45·4 | 41·3 |
| 8 | 37·9 | 39·3 | 41·1 | 46·1 | 51·0 | 58·1 | 62·4 | 62·3 | 58·8 | 52·0 | 45·0 | 41·0 |
| 9 | 37·9 | 39·1 | 41·0 | 46·0 | 51·2 | 58·0 | 62·4 | 62·3 | 58·6 | 51·6 | 44·6 | 40·6 |
| 10 | 37·9 | 38·9 | 40·9 | 45·9 | 51·5 | 58·1 | 62·5 | 62·3 | 58·4 | 51·3 | 44·3 | 40·4 |
| 11 | 37·9 | 38·8 | 41·0 | 45·8 | 51·8 | 58·2 | 62·7 | 62·4 | 58·1 | 50·9 | 44·0 | 40·2 |
| 12 | 37·9 | 38·8 | 41·1 | 45·9 | 52·1 | 58·4 | 62·9 | 62·5 | 58·0 | 50·6 | 43·7 | 40·3 |
| 13 | 38·0 | 39·0 | 41·3 | 46·1 | 52·4 | 58·5 | 63·1 | 62·5 | 57·8 | 50·3 | 43·5 | 40·5 |
| 14 | 38·0 | 39·3 | 41·5 | 46·4 | 52·6 | 58·7 | 63·3 | 62·5 | 57·7 | 50·1 | 43·3 | 40·7 |
| 15 | 38·1 | 39·4 | 41·7 | 46·8 | 52·8 | 58·8 | 63·4 | 62·4 | 57·6 | 49·9 | 43·1 | 40·8 |
| 16 | 38·3 | 39·5 | 41·9 | 47·2 | 53·0 | 58·9 | 63·4 | 62·3 | 57·5 | 49·8 | 42·8 | 40·7 |
| 17 | 38·5 | 39·6 | 42·0 | 47·6 | 53·1 | 59·0 | 63·4 | 62·1 | 57·2 | 49·6 | 42·6 | 40·4 |
| 18 | 38·6 | 39·5 | 42·0 | 48·0 | 53·3 | 59·2 | 63·3 | 61·9 | 56·9 | 49·3 | 42·4 | 40·0 |
| 19 | 38·7 | 39·5 | 41·9 | 48·3 | 53·5 | 59·5 | 63·2 | 61·7 | 56·5 | 49·1 | 42·3 | 39·5 |
| 20 | 38·8 | 39·5 | 41·9 | 48·5 | 53·8 | 59·9 | 63·2 | 61·5 | 56·2 | 48·8 | 42·2 | 39·0 |
| 21 | 38·8 | 39·6 | 41·9 | 48·7 | 54·2 | 60·3 | 63·2 | 61·3 | 55·9 | 48·6 | 42·1 | 38·7 |
| 22 | 38·8 | 39·7 | 42·0 | 48·7 | 54·6 | 60·6 | 63·1 | 61·1 | 55·6 | 48·3 | 42·1 | 38·4 |
| 23 | 38·9 | 39·8 | 42·2 | 48·6 | 54·9 | 60·9 | 63·0 | 60·9 | 55·4 | 48·1 | 42·0 | 38·2 |
| 24 | 38·9 | 40·0 | 42·4 | 48·6 | 55·3 | 61·2 | 62·9 | 60·8 | 55·3 | 47·9 | 42·0 | 38·2 |
| 25 | 39·1 | 40·1 | 42·7 | 48·6 | 55·5 | 61·4 | 62·7 | 60·7 | 55·2 | 47·7 | 41·9 | 38·4 |
| 26 | 39·3 | 40·2 | 43·0 | 48·6 | 55·8 | 61·5 | 62·5 | 60·7 | 55·2 | 47·6 | 41·8 | 38·6 |
| 27 | 39·5 | 40·3 | 43·3 | 48·7 | 56·0 | 61·6 | 62·4 | 60·6 | 55·1 | 47·5 | 41·7 | 38·8 |
| 28 | 39·6 | 40·3 | 43·7 | 48·8 | 56·2 | 61·6 | 62·3 | 60·4 | 54·9 | 47·4 | 41·5 | 38·9 |
| 29 | 39·7 | | 44·1 | 49·0 | 56·4 | 61·6 | 62·3 | 60·3 | 54·7 | 47·3 | 41·2 | 39·0 |
| 30 | 39·7 | | 44·5 | 49·1 | 56·7 | 61·5 | 62·3 | 60·1 | 54·4 | 47·2 | 41·0 | 38·9 |
| 31 | 39·7 | | 44·9 | | 57·1 | | 62·2 | 59·9 | | 47·1 | | 38·7 |
| Means | 38·6 | 39·5 | 41·9 | 47·3 | 53·1 | 59·4 | 62·7 | 61·6 | 57·2 | 50·0 | 43·5 | 39·9 |

The mean of the twelve monthly values is 49°·6.

The daily register of rain contained in column 16 is that recorded by the gauge No. 6, whose receiving surface is 5 inches above the ground. This gauge is usually read at $9^h$, $15^h$, and $21^h$ Greenwich civil time. The continuous record of Osler's self-registering gauge shows whether the amounts measured at $9^h$ are to be placed to the same, or to the preceding civil day; and in cases in which rain fell both before and after midnight, also gives the means of ascertaining the proper proportion of the $9^h$ amount which should be placed to each civil day. The number of days of rain given in the footnotes, and in the abstract tables, pages (lxiii) and (cxiv), is formed from the records of this gauge. In this numeration only those days are counted on which the fall amounted to or exceeded $0^{in.}005$.

The indications of atmospheric electricity are derived from Thomson's Electrometer. Occasionally, during interruption of photographic registration, the results depend on eye observations.

No particular explanation of the anemometric results seems necessary. It may be understood generally that the greatest pressures usually occur in gusts of short duration. The "Mean of 24 Hourly Measures" was in former years the mean of 24 measures of pressure taken *at* each hour, but commencing with 1887 January 1, it is the mean of measures, each one of which is the average pressure during the hour of which the nominal hour is the middle point.

The mean amount of cloud given in the footnotes on the right-hand pages (xxxvii) to (lix), and in the abstract table, page (lxiii), is the mean found from observations made usually at $9^h$, $12^h$ (noon), $15^h$, and $21^h$ of each civil day.

For understanding the divisions of time under the headings, "Clouds and Weather" and "Electricity," the following remarks are necessary:—In regard to Clouds and Weather, the day is divided by columns into two parts (from midnight to noon, and from noon to midnight), and each of these parts is subdivided into two or three parts by colons (:). Thus, when there is a single colon in the first column, it denotes that the indications before it apply (roughly) to the interval from midnight to $6^h$, and those following it to the interval from $6^h$ to noon. When there are two colons in the first column, it is to be understood that the twelve hours are divided into three nearly equal parts of four hours each. And similarly for the second column. In regard to Electricity, the results are included in one column; in this case the colons divide the whole period of 24 hours (midnight to midnight).

The notation employed for Clouds and Weather is as follows, it being understood that for clouds Howard's Nomenclature is used. The figure denotes the proportion of sky covered by cloud, an overcast sky being represented by 10.

| | | |
|---|---|---|
| a | denotes | *aurora borealis* |
| ci | ... | *cirrus* |
| ci-cu | ... | *cirro-cumulus* |
| ci-s | ... | *cirro-stratus* |
| cu | ... | *cumulus* |
| cu-s | ... | *cumulo-stratus* |
| d | ... | *dew* |
| hy-d | ... | *heavy dew* |
| f | ... | *fog* |
| slt-f | ... | *slight fog* |
| tk-f | ... | *thick fog* |
| fr | ... | *frost* |
| ho-fr | ... | *hoar frost* |
| g | ... | *gale* |
| hy-g | ... | *heavy gale* |
| glm | ... | *gloom* |
| gt-glm | ... | *great gloom* |
| h | ... | *haze* |
| slt-h | ... | *slight haze* |
| hl | ... | *hail* |
| l | ... | *lightning* |
| li-cl | ... | *light clouds* |
| lu-co | ... | *lunar corona* |
| lu-ha | ... | *lunar halo* |
| m | ... | *mist* |
| slt-m | ... | *slight mist* |
| n | ... | *nimbus* |
| p-cl | ... | *partially cloudy* |
| prh | ... | *parhelion* |
| prs | ... | *paraselene* |
| r | ... | *rain* |
| c-r | ... | *continued rain* |
| fr-r | ... | *frozen rain* |
| fq-r | ... | *frequent rain* |
| hy-r | ... | *heavy rain* |
| c-hy-r | ... | *continued heavy rain* |
| m-r | ... | *misty rain* |
| fq-m-r | ... | *frequent misty rain* |
| oc-m-r | denotes | *occasional misty rain* |
| oc-r | ... | *occasional rain* |
| sh-r | ... | *shower of rain* |
| shs-r | ... | *showers of rain* |
| slt-r | ... | *slight rain* |
| oc-slt-r | ... | *occasional slight rain* |
| th-r | ... | *thin rain* |
| fq-th-r | ... | *frequent thin rain* |
| oc-th-r | ... | *occasional thin rain* |
| hy-sh | ... | *heavy shower* |
| slt-sh | ... | *slight shower* |
| fq-shs | ... | *frequent showers* |
| hy-shs | ... | *heavy showers* |
| fq-hy-shs | ... | *frequent heavy showers* |
| oc-hy-shs | ... | *occasional heavy showers* |
| li-shs | ... | *light showers* |
| oc-shs | ... | *occasional showers* |
| s | ... | *stratus* |
| sc | ... | *scud* |
| li-sc | ... | *light scud* |
| sl | ... | *sleet* |
| sn | ... | *snow* |
| oc-sn | ... | *occasional snow* |
| slt-sn | ... | *slight snow* |
| so-ha | ... | *solar halo* |
| sq | ... | *squall* |
| sqs | ... | *squalls* |
| fq-sqs | ... | *frequent squalls* |
| hy-sqs | ... | *heavy squalls* |
| fq-hy-sqs | ... | *frequent heavy squalls* |
| oc-sqs | ... | *occasional squalls* |
| t | ... | *thunder* |
| t-sm | ... | *thunder storm* |
| th-cl | ... | *thin clouds* |
| v | ... | *variable* |
| vv | ... | *very variable* |
| w | ... | *wind* |
| st-w | ... | *strong wind* |

The following is the notation employed for Electricity:—

| | |
|---|---|
| N denotes *negative* | w denotes *weak* |
| P ... *positive* | s ... *strong* |
| m ... *moderate* | v ... *variable* |

The duplication of the letter denotes intensity of the modification described—thus, ss is very strong; vv, very variable. 0 indicates zero potential, and a dash, "—," accidental failure of the apparatus.

The remaining columns in the tables of "Daily Results" seem to require no special remark; all necessary explanation regarding the results therein contained will be found in the notes at the foot of the left-hand page, or in the descriptions of the several instruments given in § 6.

In regard to the comparisons of the extremes and means, &c. of meteorological elements with average values, contained in the footnotes, it may be mentioned that comparison is in all cases made with mean values determined from the observations for the sixty-five years 1841–1905.

The tables following the "Daily Results" require no lengthened explanation. They consist of tables giving the highest and lowest readings of the barometer through the year; monthly abstracts of the principal meteorological elements; hourly values in each month of barometer-reading, of temperature of air, evaporation, and dew-point, and of degree of humidity; sunshine results; observations of thermometers in a Stevenson screen in the Observatory Grounds, on the roof of the Magnet House, and in another Stevenson screen in the Magnetic Pavilion Enclosure; readings of the earth thermometers; changes of direction of the wind; hourly values in each month of the horizontal movement of the air derived from Robinson's Anemometer; results derived from the Thomson Electrometer; rain results; and observations of parhelia, paraselenæ, and meteors.

In the tables of mean values of meteorological elements at each hour for the different months of the year, the mean values have, in previous years, been given for the hours $0^h$ to $23^h$ only. But since 1886 the mean for the 24th hour (the following midnight) has been added, thus indicating the amount of non-periodic variation. The monthly means have also been given since 1886 for the 24 hours, $1^h$ to $24^h$, as well as for the hours, $0^h$ (midnight) to $23^h$, which were given in former years.

It may be pointed out that the monthly means, $0^h$ to $23^h$, for barometer and temperature of the air and of evaporation contained in these tables, pages (lxiv) and (lxv), do not in some cases agree with the monthly means given in the daily results

pages (xxxvi) to (lviii), and in the table on page (lxiii), in consequence of occasional interruption of the photographic register, at which times daily values to complete the daily results could be supplied from the eye observations, as mentioned in the footnotes; but hourly values, for the diurnal inequality tables, could not be so supplied. In such cases, however, the means given with these tables are the proper means to be used in connexion with the numbers standing immediately above them, for formation of the actual diurnal inequality.

The table, "Abstract of the Changes of the Direction of the Wind," as derived from Osler's Anemometer, page (xcix), exhibits every change of direction of the wind occurring throughout the year, whenever such change amounted to two nautical points or $22\frac{1}{2}^{\circ}$. It is to be understood that the change from one direction to another during the interval between the times mentioned in each line of the table was generally gradual. All complete turnings of the vane which were evidently of accidental nature, and which in the year 1881 and in previous years had been included, are here omitted. Between any time given in the second column and that next following in the first column, no change of direction in general occurred varying from that given by so much as one point or $11\frac{1}{4}^{\circ}$. From the numbers given in this table the monthly and yearly excess of motion, page (cviii), is formed. By direct motion it is to be understood that the change of direction occurred in the order N, E, S, W, N, &c., and by retrograde motion that the change occurred in the order N, W, S, E, N, &c.

In regard to Electric Potential of the Atmosphere, in addition to giving the hourly values in each month, including all available days, the days in each month have been (since the year 1882) further divided into two groups, one containing all days on which the rainfall amounted to or exceeded $0^{in.}020$, the other including only days on which no rainfall was recorded, the values of daily rainfall given in column 16 of the "Daily Results of the Meteorological Observations" being adopted in selecting the days. These additional tables are given on pages (cviii) and (cix) respectively.

In regard to the observations of Luminous Meteors, it is simply necessary to say that, in general, only special meteor showers are watched for, such as those of April, August, and November. The observers of meteors in the year 1908 were Mr. Edney, Mr. Kirby, Mr. Loomes and Mr. Timbury. Their observations are distinguished by the initials E., K., L. and T. respectively. A few observations taken by Mr. Crommelin, Mr. Bowyer and Mr. Higgitt are distinguished by the initials A.C., W.B. and A.H. respectively.

W. H. M. CHRISTIE.

ROYAL OBSERVATORY, GREENWICH,
1909, *November* 5.

# METEOROLOGICAL TABLES

IN USE FOR THE

## PREPARATION OF THE REGISTRAR GENERAL'S WEEKLY REPORT

*from* 1907.

THE accompanying Meteorological Tables are those now in use for the preparation of the Weekly Report of the Registrar General.

Observations have been continuously furnished to the Registrar General since 1844 January, but from time to time their scope has been varied, and other modifications introduced. A short summary will suffice to indicate the changes leading up to the tables now in use.

Originally observations were taken every two hours, and the daily mean was the actual mean of the twelve observations on the day. Photographic registration was introduced in 1848, and the number of eye-observations reduced, so that tabular corrections became necessary in order to infer the daily means from the observations.

For thirty years, 1848 to 1877, these corrections were taken from a discussion by the late James Glaisher, of the Greenwich observations for the five years 1841 to 1845. For the following twenty-nine years, 1878 to 1906, a fresh set of tables was used, obtained from a discussion of twenty years' photographic observations; and in 1907 the present tables were introduced, based upon fifty years' photographic observations, 1854 to 1903.

Several changes have been made in the "departures from average." Until 1848 June, the average temperature was taken from twenty-five years' observations by Mr Henry, one of the staff, taken at his private residence near Greenwich Park. From that time until the end of 1850, the average was that of the official observations for seven years, 1841 to 1847; from that time until the end of 1852, from those of the ten years 1841 to 1850; from that time until the end of 1856, from all the Greenwich observations for thirty-eight years, 1814 to 1851; and from that time until the end of 1864, from those for forty-three years, 1814 to 1856. From 1865 to 1874, fifty years' observations were used, and from 1875 to 1878, sixty years' observations, 1814 to 1873.

From 1879 to 1892 the average was from twenty years' photographic observations, as used for the inequality tables, and from 1893 to 1906, the smoothed table from the reduction of Greenwich Meteorological Observations, Part III., 1841 to 1890. The table now in use is the corresponding table from Part IV. of the Meteorological Reductions for sixty-five years, 1841 to 1905.

The average daily velocity of the wind was first employed in 1876 April, and was then derived from sixteen years' anemometer registers, 1860 to 1875. The present table is derived from forty years' registers of the same instrument, 1867 to 1906, the registers from 1860 to 1866 having been obtained with a different instrument.

The process of obtaining an approximate value of the daily mean temperature is as follows. The mean of the maximum and minimum readings for the day reckoned from midnight to midnight, corrected according to the table for that purpose, is given a weight of 1. The mean of the four daily eye-observations, similarly corrected by the table for the hours of observation, is given a weight of 2. The weighted mean of these two determinations is entered as the mean daily value for the Registrar General's Report.

TABLE I.—TABLE GIVING FOR EACH MONTH THE CORRECTION APPLICABLE TO THE READING OF THE BAROMETER, AT EACH HOUR OF THE DAY, TO DEDUCE THE MEAN DAILY READING.

The numbers are extracted from the results obtained from the discussion of the Photographic Records, 1854–1903.

| Hour. G.M.S.T. Civil. | Month. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
| | in. | in. | in. | in. | in. | in. | in. | in. | in. | in. | in. | in. |
| Midnt. | −·004 | −·005 | −·010 | −·008 | −·010 | −·007 | −·008 | −·008 | −·006 | −·007 | −·008 | −·003 |
| 1 | ·000 | −·002 | −·007 | − 004 | −·006 | −·004 | −·004 | −·004 | −·003 | −·004 | −·003 | +·001 |
| 2 | +·001 | +·001 | −·002 | +·001 | −·002 | +·001 | ·000 | ·000 | +·002 | +·002 | −·001 | +·001 |
| 3 | +·003 | +·006 | +·004 | +·004 | +·002 | +·004 | +·004 | +·004 | +·006 | +·007 | +·004 | +·002 |
| 4 | +·007 | +·009 | +·007 | +·007 | +·004 | +·004 | +·004 | +·007 | +·010 | +·010 | +·007 | +·006 |
| 5 | +·010 | +·009 | +·007 | +·006 | +·001 | +·001 | +·002 | +·005 | +·009 | +·010 | +·008 | +·009 |
| 6 | +·011 | +·009 | +·005 | +·001 | −·003 | −·002 | −·001 | +·001 | +·004 | +·009 | +·007 | +·008 |
| 7 | +·007 | +·005 | −·001 | −·005 | −·006 | −·007 | −·005 | −·004 | −·002 | +·002 | +·003 | +·005 |
| 8 | −·001 | −·003 | −·005 | −·008 | −·008 | −·010 | −·008 | −·008 | −·008 | −·005 | −·004 | −·002 |
| 9 | −·008 | −·007 | −·009 | −·010 | −·008 | −·009 | −·009 | −·010 | −·012 | −·008 | −·009 | −·009 |
| 10 | −·013 | −·011 | −·011 | −·011 | −·008 | −·009 | −·008 | −·011 | −·013 | −·010 | −·012 | −·015 |
| 11 | −·013 | −·013 | −·010 | −·008 | −·005 | −·008 | −·007 | −·008 | −·009 | −·008 | −·010 | −·012 |
| Noon. | −·004 | −·008 | −·007 | −·004 | −·002 | −·004 | −·004 | −·004 | −·006 | −·002 | −·002 | −·002 |
| 1 | +·006 | +·001 | +·001 | +·001 | +·003 | +·001 | ·000 | ·000 | ·000 | +·006 | +·005 | +·007 |
| 2 | +·010 | +·008 | +·008 | +·007 | +·007 | +·005 | +·003 | +·004 | +·005 | +·010 | +·011 | +·011 |
| 3 | +·008 | +·011 | +·013 | +·013 | +·012 | +·009 | +·008 | +·009 | +·010 | +·012 | +·011 | +·009 |
| 4 | +·006 | +·011 | +·016 | +·016 | +·015 | +·013 | +·011 | +·012 | +·013 | +·012 | +·009 | +·007 |
| 5 | +·003 | +·008 | +·014 | +·015 | +·017 | +·016 | +·015 | +·015 | +·013 | +·007 | +·005 | +·004 |
| 6 | −·001 | +·002 | +·008 | +·013 | +·014 | +·014 | +·014 | +·014 | +·009 | ·000 | +·001 | +·001 |
| 7 | −·004 | −·003 | +·002 | +·006 | +·010 | +·011 | +·011 | +·009 | +·002 | −·004 | −·002 | −·002 |
| 8 | −·006 | −·005 | −·003 | −·003 | +·001 | +·005 | +·004 | ·000 | −·004 | −·007 | −·004 | −·005 |
| 9 | −·006 | −·007 | −·006 | −·008 | −·007 | −·006 | −·005 | −·006 | −·007 | −·011 | −·006 | −·006 |
| 10 | −·006 | −·008 | −·007 | −·010 | −·010 | −·008 | −·008 | −·008 | −·007 | −·011 | −·005 | −·007 |
| 11 | −·006 | −·008 | −·007 | −·011 | −·011 | −·010 | −·009 | −·009 | −·006 | −·010 | −·005 | −·008 |

TABLE II.—TABLE GIVING FOR EACH DAY THE CORRECTION APPLICABLE TO THE MEAN OF THE MAXIMUM AND MINIMUM TEMPERATURES, TO DEDUCE THE CORRECTED MEAN DAILY TEMPERATURE.

The corrections are obtained from a discussion of the Daily Observations, 1841–1905.
(See *Greenwich Meteorological Reductions*, Part IV.)

| Day of Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | +0·4 | 0·0 | −0·5 | −0·7 | −0·8 | −0·7 | −1·1 | −1·2 | −1·1 | −0·8 | −0·1 | +0·4 |
| 2 | ·4 | ·0 | ·5 | ·7 | ·8 | ·8 | ·1 | ·2 | ·1 | ·7 | ·1 | ·4 |
| 3 | ·4 | ·0 | ·5 | ·7 | ·8 | ·8 | ·1 | ·3 | 0·0 | ·7 | ·1 | ·4 |
| 4 | ·4 | 0·0 | ·5 | ·7 | ·8 | ·9 | ·1 | ·3 | ·1 | ·7 | ·1 | ·3 |
| 5 | ·4 | 0·0 | ·5 | ·8 | ·8 | ·9 | ·1 | ·3 | ·1 | ·7 | ·1 | ·3 |
| 6 | ·3 | 0·0 | ·5 | ·8 | ·8 | ·9 | 0·0 | ·4 | ·1 | ·6 | 0·0 | ·3 |
| 7 | ·3 | 0·0 | ·5 | ·9 | ·8 | ·9 | 0·0 | ·4 | ·1 | ·6 | 0·0 | ·3 |
| 8 | ·3 | −0·1 | ·5 | ·9 | ·8 | ·9 | 0·0 | ·4 | ·1 | ·6 | ·1 | ·3 |
| 9 | ·2 | ·1 | ·5 | ·9 | ·8 | ·9 | 0·0 | ·3 | ·1 | ·6 | ·1 | ·3 |
| 10 | ·2 | ·2 | ·5 | ·9 | ·7 | ·9 | 0·0 | ·3 | 0·0 | ·5 | ·1 | ·3 |
| 11 | ·2 | ·2 | ·5 | ·9 | ·7 | ·8 | 0·0 | ·3 | 0·0 | ·5 | −0·1 | ·3 |
| 12 | ·2 | ·2 | ·5 | ·8 | ·7 | ·8 | 0·0 | ·3 | 0·0 | ·5 | 0·0 | ·3 |
| 13 | ·2 | ·2 | ·5 | ·8 | ·7 | ·8 | 0·0 | ·3 | 0·0 | ·4 | 0·0 | ·3 |
| 14 | ·2 | ·2 | ·5 | ·8 | ·8 | ·9 | 0·0 | ·3 | 0·0 | ·4 | 0·0 | ·3 |
| 15 | ·2 | ·2 | ·5 | ·8 | ·8 | ·9 | 0·0 | ·3 | 0·0 | ·4 | +0·1 | ·4 |
| 16 | ·2 | ·2 | ·5 | ·8 | ·8 | ·9 | 0·0 | ·2 | 1·0 | ·4 | ·1 | ·4 |
| 17 | ·3 | ·3 | ·6 | ·8 | ·8 | ·9 | 0·0 | ·2 | 0·9 | ·4 | ·1 | ·4 |
| 18 | ·3 | ·3 | ·6 | ·8 | ·7 | 0·9 | 0·0 | ·2 | ·9 | ·4 | ·1 | ·3 |
| 19 | ·3 | ·4 | ·7 | ·7 | ·7 | 1·0 | 0·0 | ·2 | ·9 | ·4 | ·1 | ·3 |
| 20 | ·3 | ·4 | ·7 | ·8 | ·7 | 0·9 | 0·0 | ·1 | ·9 | ·3 | ·1 | ·3 |
| 21 | ·2 | ·4 | ·7 | ·8 | ·7 | ·9 | ·1 | ·2 | 0·9 | ·3 | ·2 | ·3 |
| 22 | ·2 | ·4 | ·7 | ·8 | ·7 | ·9 | ·1 | ·1 | 1·0 | ·2 | ·2 | ·3 |
| 23 | ·2 | ·5 | ·7 | ·8 | ·8 | ·9 | ·1 | ·1 | 1·0 | ·2 | ·2 | ·3 |
| 24 | ·1 | ·4 | ·7 | ·8 | ·8 | ·9 | ·1 | ·1 | 0·9 | ·2 | ·2 | ·3 |
| 25 | ·1 | ·4 | ·8 | ·9 | ·8 | ·9 | ·2 | ·1 | ·9 | ·1 | ·3 | ·3 |
| 26 | ·1 | ·4 | ·8 | ·9 | ·8 | ·9 | ·2 | ·1 | ·9 | ·1 | ·3 | ·2 |
| 27 | ·1 | ·4 | ·8 | ·9 | ·8 | ·9 | ·2 | ·1 | ·8 | ·1 | ·3 | ·2 |
| 28 | +0·1 | −0·5 | ·8 | ·9 | ·8 | 0·9 | ·2 | ·2 | ·8 | ·1 | ·3 | ·2 |
| 29 | 0·0 | | ·8 | ·8 | ·8 | 1·0 | ·2 | ·2 | ·8 | ·1 | ·3 | ·3 |
| 30 | 0·0 | | ·7 | −0·8 | ·8 | −1·0 | ·2 | ·1 | −0·8 | ·1 | +0·3 | ·3 |
| 31 | 0·0 | | −0·7 | | −0·7 | | −1·2 | −1·1 | | −0·1 | | +0·3 |

TABLE III.—TABLE GIVING FOR EACH MONTH THE CORRECTION APPLICABLE TO THE MEAN READING OF THE DRY BULB THERMOMETER, AT EACH HOUR OF THE DAY, TO DEDUCE THE MEAN DAILY READING.

The numbers are extracted from the results obtained from the discussion of the Photographic Records, 1854–1903.

| Hour. G.M.S.T. Civil. | Month. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
| | in. | in. | in. | in | in. | in. | in. | in. | in. | in. | in. | in. |
| Midnt. | +1·0 | +1·5 | +2·7 | +4·2 | +5·3 | +5·6 | +5·3 | +4·7 | +3·8 | +2·3 | +1·3 | +0·8 |
| 1 | +1·1 | +1·7 | +3·0 | +4·7 | +5·9 | +6·2 | +5·9 | +5·2 | +4·2 | +2·6 | +1·5 | +1·0 |
| 2 | +1·1 | +1·9 | +3·3 | +5·1 | +6·3 | +6·7 | +6·5 | +5·7 | +4·6 | +2·9 | +1·6 | +1·1 |
| 3 | +1·2 | +2·0 | +3·6 | +5·5 | +6·7 | +7·1 | +6·9 | +6·0 | +4·9 | +3·1 | +1·7 | +1·2 |
| 4 | +1·3 | +2·1 | +3·8 | +5·7 | +7·0 | +7·3 | +7·2 | +6·3 | +5·1 | +3·2 | +1·8 | +1·2 |
| 5 | +1·4 | +2·2 | +3·9 | +5·9 | +6·7 | +6·7 | +6·9 | +6·4 | +5·2 | +3·4 | +1·9 | +1·3 |
| 6 | +1·5 | +2·3 | +4·0 | +5·4 | +5·2 | +5·1 | +5·4 | +5·7 | +5·1 | +3·4 | +2·0 | +1·3 |
| 7 | +1·5 | +2·4 | +3·7 | +3·7 | +2·8 | +2·7 | +3·0 | +3·6 | +4·0 | +3·1 | +2·0 | +1·3 |
| 8 | +1·4 | +2·0 | +2·3 | +1·3 | +0·2 | +0·3 | +0·5 | +1·0 | +1·6 | +1·9 | +1·6 | +1·2 |
| 9 | +1·0 | +1·0 | +0·3 | −1·2 | −2·2 | −2·0 | −1·9 | −1·6 | −1·1 | −0·1 | +0·7 | +0·8 |
| 10 | −0·1 | −0·4 | −1·6 | −3·1 | −4·0 | −3·8 | −3·7 | −3·7 | −3·5 | −2·1 | −0·8 | −0·1 |
| 11 | −1·2 | −1·8 | −3·3 | −4·8 | −5·4 | −5·2 | −5·2 | −5·3 | −5·2 | −3·8 | −2·2 | −1·1 |
| Noon. | −2·2 | −3·0 | −4·5 | −6·1 | −6·6 | −6·6 | −6·5 | −6·6 | −6·4 | −4·9 | −3·2 | −2·0 |
| 1 | −2·7 | −3·7 | −5·3 | −6·8 | −7·2 | −7·3 | −7·3 | −7·3 | −7·1 | −5·3 | −3·6 | −2·5 |
| 2 | −2·8 | −3·9 | −5·6 | −7·1 | −7·5 | −7·7 | −7·7 | −7·6 | −7·2 | −5·4 | −3·6 | −2·5 |
| 3 | −2·4 | −3·7 | −5·4 | −6·9 | −7·4 | −7·5 | −7·6 | −7·5 | −6·8 | −4·7 | −3·0 | −2·0 |
| 4 | −1·7 | −3·0 | −4·7 | −6·1 | −6·6 | −6·8 | −6·9 | −6·6 | −5·6 | −3·5 | −2·0 | −1·3 |
| 5 | −1·0 | −1·9 | −3·4 | −4·8 | −5·4 | −5·7 | −5·8 | −5·1 | −3·9 | −2·0 | −1·1 | −0·8 |
| 6 | −0·5 | −0·9 | −1·9 | −3·0 | −3·6 | −4·1 | −4·0 | −3·3 | −1·8 | −0·8 | −0·4 | −0·4 |
| 7 | −0·1 | −0·2 | −0·6 | −0·8 | −1·5 | −2·0 | −1·9 | −1·0 | 0·0 | +0·2 | +0·1 | −0·1 |
| 8 | +0·2 | +0·3 | +0·4 | +0·7 | +0·8 | +0·4 | +0·4 | +1·0 | +1·3 | +0·9 | +0·5 | +0·1 |
| 9 | +0·5 | +0·7 | +1·2 | +2·0 | +2·5 | +2·4 | +2·4 | +2·4 | +2·3 | +1·5 | +0·8 | +0·3 |
| 10 | +0·7 | +1·1 | +1·8 | +2·9 | +3·6 | +3·6 | +3·6 | +3·4 | +3·0 | +1·9 | +1·1 | +0·5 |
| 11 | +0·8 | +1·3 | +2·3 | +3·6 | +4·4 | +4·6 | +4·5 | +4·2 | +3·5 | +2·2 | +1·3 | +0·7 |

The correction required on any particular day in order to deduce the mean daily temperature from a reading at any hour depends not only on the mean correction from Table III. but also on the actual range for the day in question.

The factor by which the actual range is to be multiplied is given in Table IV. The values of the factor are found by dividing the above corrections by the Mean Daily Range for the month (foot of Table IV.) derived from the Photographic Records, 1854 to 1903.

TABLE IV.—TABLE OF FACTORS BY WHICH THE DAILY RANGE MUST BE MULTIPLIED IN ORDER TO DEDUCE THE CORRECTION TO THE DRY BULB AT ANY HOUR.

| Hour. G.M.S.T. Civil. | Month. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
| Midnt. | +·108 | +·135 | +·182 | +·228 | +·261 | +·268 | +·252 | +·235 | +·208 | +·160 | +·117 | +·086 |
| 1 | +·118 | +·153 | +·203 | +·255 | +·291 | +·297 | +·281 | +·260 | +·230 | +·181 | +·135 | +·108 |
| 2 | +·118 | +·171 | +·223 | +·277 | +·310 | +·321 | +·310 | +·285 | +·251 | +·201 | +·144 | +·118 |
| 3 | +·129 | +·180 | +·243 | +·299 | +·330 | +·340 | +·329 | +·300 | +·268 | +·215 | +·153 | +·129 |
| 4 | +·140 | +·189 | +·257 | +·310 | +·345 | +·349 | +·343 | +·315 | +·279 | +·222 | +·162 | +·129 |
| 5 | +·151 | +·198 | +·264 | +·321 | +·330 | +·321 | +·329 | +·320 | +·284 | +·236 | +·171 | +·140 |
| 6 | +·161 | +·207 | +·270 | +·293 | +·256 | +·244 | +·257 | +·285 | +·279 | +·236 | +·180 | +·140 |
| 7 | +·161 | +·216 | +·250 | +·201 | +·138 | +·129 | +·143 | +·180 | +·219 | +·215 | +·180 | +·140 |
| 8 | +·151 | +·180 | +·155 | +·071 | +·010 | +·014 | +·024 | +·050 | +·087 | +·132 | +·144 | +·129 |
| 9 | +·108 | +·090 | +·020 | −·065 | −·108 | −·096 | −·090 | −·080 | −·060 | −·007 | +·063 | +·086 |
| 10 | −·011 | −·036 | −·108 | −·168 | −·197 | −·182 | −·176 | −·185 | −·191 | −·146 | −·072 | −·011 |
| 11 | −·129 | −·162 | −·223 | −·261 | −·266 | −·249 | −·248 | −·265 | −·284 | −·264 | −·198 | −·118 |
| Noon. | −·237 | −·270 | −·304 | −·332 | −·325 | −·316 | −·310 | −·330 | −·350 | −·340 | −·288 | −·215 |
| 1 | −·290 | −·333 | −·358 | −·370 | −·355 | −·349 | −·348 | −·365 | −·388 | −·368 | −·324 | −·269 |
| 2 | −·301 | −·351 | −·378 | −·386 | −·369 | −·368 | −·367 | −·380 | −·393 | −·375 | −·324 | −·269 |
| 3 | −·258 | −·333 | −·365 | −·375 | −·365 | −·359 | −·362 | −·375 | −·372 | −·326 | −·270 | −·215 |
| 4 | −·183 | −·270 | −·318 | −·332 | −·325 | −·325 | −·329 | −·330 | −·306 | −·243 | −·180 | −·140 |
| 5 | −·108 | −·171 | −·230 | −·261 | −·266 | −·273 | −·276 | −·255 | −·213 | −·139 | −·099 | −·086 |
| 6 | −·054 | −·081 | −·128 | −·163 | −·177 | −·196 | −·190 | −·165 | −·098 | −·056 | −·036 | −·043 |
| 7 | −·011 | −·018 | −·041 | −·043 | −·074 | −·096 | −·090 | −·050 | ·000 | +·014 | +·009 | −·011 |
| 8 | +·022 | +·027 | +·027 | +·038 | +·039 | +·019 | +·019 | +·050 | +·071 | +·063 | +·045 | +·011 |
| 9 | +·054 | +·063 | +·081 | +·109 | +·123 | +·115 | +·114 | +·120 | +·126 | +·104 | +·072 | +·032 |
| 10 | +·075 | +·099 | +·122 | +·158 | +·177 | +·172 | +·171 | +·170 | +·164 | +·132 | +·099 | +·054 |
| 11 | +·086 | +·117 | +·155 | +·196 | +·217 | +·220 | +·214 | +·210 | +·191 | +·153 | +·117 | +·075 |
| Mean Daily Range. | 9°·3 | 11°·1 | 14°·8 | 18°·4 | 20°·3 | 20°·9 | 21°·0 | 20°·0 | 18°·3 | 14°·4 | 11°·1 | 9°·3 |

TABLE V.—TABLE GIVING FOR EACH MONTH THE CORRECTION APPLICABLE TO THE MEAN READING OF THE WET-BULB THERMOMETER, AT EACH HOUR OF THE DAY, TO DEDUCE THE MEAN DAILY READING.

The numbers are extracted from the results obtained from the discussion of the Photographic Records, 1854–1903.

| Hour. G.M.S.T. Civil. | Month. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
| Midnt. | +0°7 | +0°9 | +1°7 | +2°5 | +3°0 | +2°9 | +2°5 | +2°2 | +2°0 | +1°4 | +0°8 | +0°6 |
| 1 | +0·8 | +1·1 | +1·9 | +2·8 | +3·3 | +3·3 | +2·9 | +2·5 | +2·2 | +1·6 | +0·9 | +0·7 |
| 2 | +0·8 | +1·2 | +2·1 | +3·1 | +3·7 | +3·6 | +3·3 | +2·9 | +2·5 | +1·8 | +1·1 | +0·8 |
| 3 | +0·9 | +1·3 | +2·3 | +3·3 | +4·0 | +3·9 | +3·5 | +3·1 | +2·7 | +2·0 | +1·2 | +0·9 |
| 4 | +0·9 | +1·4 | +2·4 | +3·5 | +4·1 | +4·0 | +3·8 | +3·3 | +2·9 | +2·2 | +1·3 | +0·9 |
| 5 | +1·0 | +1·5 | +2·5 | +3·6 | +3·9 | +3·7 | +3·5 | +3·4 | +3·0 | +2·3 | +1·3 | +0·9 |
| 6 | +1·1 | +1·6 | +2·6 | +3·3 | +2·9 | +2·6 | +2·6 | +2·9 | +3·0 | +2·3 | +1·4 | +1·0 |
| 7 | +1·0 | +1·6 | +2·3 | +2·1 | +1·3 | +1·2 | +1·2 | +1·5 | +2·2 | +2·1 | +1·4 | +0·9 |
| 8 | +1·0 | +1·4 | +1·4 | +0·4 | −0·2 | −0·1 | −0·1 | +0·1 | +0·6 | +1·1 | +1·1 | +0·9 |
| 9 | +0·7 | +0·7 | 0·0 | −1·0 | −1·5 | −1·3 | −1·2 | −1·2 | −1·0 | −0·3 | +0·4 | +0·6 |
| 10 | −0·1 | −0·3 | −1·2 | −2·0 | −2·4 | −2·1 | −1·9 | −2·0 | −2·2 | −1·6 | −0·7 | −0·1 |
| 11 | −0·9 | −1·3 | −2·1 | −2·9 | −3·1 | −2·7 | −2·5 | −2·6 | −2·9 | −2·4 | −1·6 | −0·9 |
| Noon. | −1·6 | −2·0 | −2·8 | −3·5 | −3·6 | −3·3 | −3·1 | −3·1 | −3·3 | −3·0 | −2·2 | −1·4 |
| 1 | −1·9 | −2·4 | −3·2 | −3·8 | −3·9 | −3·6 | −3·3 | −3·3 | −3·5 | −3·2 | −2·4 | −1·8 |
| 2 | −1·9 | −2·5 | −3·3 | −4·0 | −4·0 | −3·8 | −3·5 | −3·4 | −3·5 | −3·1 | −2·3 | −1·7 |
| 3 | −1·7 | −2·3 | −3·2 | −3·9 | −3·9 | −3·7 | −3·5 | −3·4 | −3·4 | −2·7 | −1·9 | −1·4 |
| 4 | −1·2 | −1·9 | −2·8 | −3·4 | −3·5 | −3·4 | −3·1 | −3·0 | −2·8 | −2·1 | −1·3 | −1·0 |
| 5 | −0·7 | −1·2 | −2·1 | −2·7 | −2·9 | −2·9 | −2·6 | −2·4 | −2·0 | −1·3 | −0·7 | −0·6 |
| 6 | −0·4 | −0·6 | −1·2 | −1·7 | −2·0 | −2·1 | −1·9 | −1·6 | −1·0 | −0·6 | −0·3 | −0·4 |
| 7 | −0·1 | −0·2 | −0·5 | −0·6 | −0·9 | −1·1 | −1·0 | −0·6 | −0·1 | −0·1 | 0·0 | −0·1 |
| 8 | +0·2 | +0·1 | +0·1 | +0·3 | +0·3 | 0·0 | 0·0 | +0·3 | +0·4 | +0·4 | +0·3 | +0·1 |
| 9 | +0·3 | +0·4 | +0·7 | +1·0 | +1·2 | +1·0 | +0·9 | +1·0 | +1·0 | +0·8 | +0·5 | +0·2 |
| 10 | +0·5 | +0·7 | +1·1 | +1·6 | +1·8 | +1·7 | +1·5 | +1·5 | +1·4 | +1·1 | +0·8 | +0·4 |
| 11 | +0·6 | +0·8 | +1·3 | +2·0 | +2·4 | +2·2 | +2·0 | +1·9 | +1·8 | +1·3 | +0·9 | +0·5 |

TABLE VI.—TABLE GIVING FOR EACH MONTH THE CORRECTION APPLICABLE TO THE MEAN TEMPERATURE OF THE DEW POINT, AT EACH HOUR OF THE DAY, TO DEDUCE THE MEAN DAILY VALUE.

The numbers are extracted from the results obtained from the discussion of the Photographic Records, 1854–1903.

| Hour. G.M.S.T. Civil. | Month. | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
| Midnt. | +0°4 | +0°4 | +0°7 | +0°9 | +1°2 | +0°8 | +0°5 | +0°3 | +0°5 | +0°5 | +0°4 | +0°4 |
| 1 | +0·4 | +0·4 | +0·7 | +1·0 | +1·3 | +1·0 | +0·7 | +0·5 | +0·6 | +0·7 | +0·5 | +0·5 |
| 2 | +0·5 | +0·6 | +0·7 | +1·2 | +1·5 | +1·2 | +1·0 | +0·7 | +0·9 | +0·9 | +0·5 | +0·6 |
| 3 | +0·4 | +0·6 | +0·9 | +1·3 | +1·6 | +1·4 | +1·1 | +0·9 | +1·0 | +0·9 | +0·6 | +0·6 |
| 4 | +0·5 | +0·7 | +1·0 | +1·5 | +1·7 | +1·5 | +1·3 | +1·0 | +1·1 | +1·1 | +0·6 | +0·6 |
| 5 | +0·5 | +0·8 | +1·1 | +1·5 | +1·6 | +1·3 | +1·0 | +1·1 | +1·2 | +1·1 | +0·7 | +0·6 |
| 6 | +0·6 | +0·9 | +1·2 | +1·3 | +0·9 | +0·7 | +0·5 | +0·8 | +1·3 | +1·2 | +0·7 | +0·7 |
| 7 | +0·6 | +0·9 | +0·8 | +0·5 | +0·1 | 0·0 | 0·0 | +0·1 | +0·7 | +1·1 | +0·7 | +0·6 |
| 8 | +0·6 | +0·8 | +0·3 | −0·2 | −0·3 | −0·4 | −0·4 | −0·5 | −0·2 | +0·5 | +0·6 | +0·6 |
| 9 | +0·4 | +0·2 | −0·4 | −0·8 | −0·9 | −0·7 | −0·5 | −0·6 | −0·9 | −0·4 | +0·1 | +0·4 |
| 10 | −0·1 | −0·2 | −0·7 | −1·0 | −1·1 | −0·8 | −0·5 | −0·6 | −1·0 | −0·9 | −0·4 | −0·1 |
| 11 | −0·5 | −0·8 | −0·9 | −1·2 | −1·2 | −0·9 | −0·6 | −0·6 | −1·1 | −1·1 | −0·9 | −0·5 |
| Noon. | −0·9 | −1·0 | −0·9 | −1·2 | −1·4 | −0·9 | −0·7 | −0·6 | −0·9 | −1·2 | −1·1 | −0·9 |
| 1 | −1·0 | −1·2 | −1·1 | −1·3 | −1·5 | −0·9 | −0·7 | −0·6 | −0·8 | −1·2 | −1·1 | −1·0 |
| 2 | −0·9 | −1·1 | −1·0 | −1·4 | −1·3 | −0·9 | −0·6 | −0·5 | −0·7 | −1·1 | −1·0 | −0·9 |
| 3 | −0·9 | −1·0 | −1·1 | −1·2 | −1·3 | −0·9 | −0·6 | −0·5 | −0·6 | −1·0 | −0·9 | −0·9 |
| 4 | −0·7 | −0·9 | −0·8 | −1·0 | −1·2 | −0·8 | −0·6 | −0·5 | −0·7 | −0·8 | −0·6 | −0·7 |
| 5 | −0·5 | −0·6 | −0·7 | −0·7 | −0·9 | −0·7 | −0·5 | −0·4 | −0·4 | −0·6 | −0·3 | −0·5 |
| 6 | −0·3 | −0·3 | −0·5 | −0·4 | −0·5 | −0·5 | −0·3 | −0·2 | −0·4 | −0·5 | −0·3 | −0·4 |
| 7 | −0·1 | −0·1 | −0·3 | −0·3 | −0·2 | −0·3 | −0·2 | −0·2 | −0·3 | −0·2 | −0·1 | −0·2 |
| 8 | +0·1 | 0·0 | 0·0 | +0·1 | +0·1 | −0·1 | −0·1 | −0·1 | −0·1 | −0·1 | +0·1 | −0·1 |
| 9 | +0·2 | +0·1 | +0·2 | +0·3 | +0·3 | +0·1 | −0·1 | 0·0 | +0·1 | +0·2 | +0·2 | 0·0 |
| 10 | +0·3 | +0·4 | +0·4 | +0·5 | +0·6 | +0·3 | 0·0 | +0·2 | +0·3 | +0·4 | +0·4 | +0·2 |
| 11 | +0·4 | +0·4 | +0·4 | +0·6 | +0·9 | +0·5 | +0·3 | +0·3 | +0·4 | +0·5 | +0·6 | +0·4 |

TABLE VII.—VALUES OF MEAN TEMPERATURE OF THE AIR, 1841-1905 (see page *lv*).

| Day of Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 38·6 | 39·6 | 40·4 | 45·3 | 49·3 | 57·4 | 61·5 | 62·2 | 59·8 | 54·1 | 47·0 | 40·9 |
| 2 | 38·4 | 39·5 | 40·4 | 45·7 | 49·5 | 57·8 | 61·6 | 62·1 | 59·7 | 53·7 | 46·8 | 40·9 |
| 3 | 38·3 | 39·5 | 40·5 | 46·0 | 49·8 | 58·1 | 61·8 | 62·1 | 59·6 | 53·3 | 46·6 | 41·1 |
| 4 | 38·3 | 39·5 | 40·7 | 46·2 | 50·0 | 58·3 | 62·1 | 62·1 | 59·5 | 53·0 | 46·4 | 41·3 |
| 5 | 38·2 | 39·6 | 40·9 | 46·3 | 50·3 | 58·4 | 62·3 | 62·1 | 59·4 | 52·8 | 46·1 | 41·5 |
| 6 | 38·1 | 39·6 | 41·0 | 46·3 | 50·5 | 58·3 | 62·4 | 62·2 | 59·2 | 52·5 | 45·8 | 41·5 |
| 7 | 38·0 | 39·5 | 41·0 | 46·3 | 50·7 | 58·2 | 62·4 | 62·2 | 59·0 | 52·3 | 45·4 | 41·3 |
| 8 | 37·9 | 39·3 | 41·1 | 46·1 | 51·0 | 58·1 | 62·4 | 62·3 | 58·8 | 52·0 | 45·0 | 41·0 |
| 9 | 37·9 | 39·1 | 41·0 | 46·0 | 51·2 | 58·0 | 62·4 | 62·3 | 58·6 | 51·6 | 44·6 | 40·6 |
| 10 | 37·9 | 38·9 | 40·9 | 45·9 | 51·5 | 58·1 | 62·5 | 62·3 | 58·4 | 51·3 | 44·3 | 40·4 |
| 11 | 37·9 | 38·8 | 41·0 | 45·8 | 51·8 | 58·2 | 62·7 | 62·4 | 58·1 | 50·9 | 44·0 | 40·2 |
| 12 | 37·9 | 38·8 | 41·1 | 45·9 | 52·1 | 58·4 | 62·9 | 62·5 | 58·0 | 50·6 | 43·7 | 40·3 |
| 13 | 38·0 | 39·0 | 41·3 | 46·1 | 52·4 | 58·5 | 63·1 | 62·5 | 57·8 | 50·3 | 43·5 | 40·5 |
| 14 | 38·0 | 39·3 | 41·5 | 46·4 | 52·6 | 58·7 | 63·3 | 62·5 | 57·7 | 50·1 | 43·3 | 40·7 |
| 15 | 38·1 | 39·4 | 41·7 | 46·8 | 52·8 | 58·8 | 63·4 | 62·4 | 57·6 | 49·9 | 43·1 | 40·8 |
| 16 | 38·3 | 39·5 | 41·9 | 47·2 | 53·0 | 58·9 | 63·4 | 62·3 | 57·5 | 49·8 | 42·8 | 40·7 |
| 17 | 38·5 | 39·6 | 42·0 | 47·6 | 53·1 | 59·0 | 63·4 | 62·1 | 57·2 | 49·6 | 42·6 | 40·4 |
| 18 | 38·6 | 39·5 | 42·0 | 48·0 | 53·3 | 59·2 | 63·3 | 61·9 | 56·9 | 49·3 | 42·4 | 40·0 |
| 19 | 38·7 | 39·5 | 41·9 | 48·3 | 53·5 | 59·5 | 63·2 | 61·7 | 56·5 | 49·1 | 42·3 | 39·5 |
| 20 | 38·8 | 39·5 | 41·9 | 48·5 | 53·8 | 59·9 | 63·2 | 61·5 | 56·2 | 48·8 | 42·2 | 39·0 |
| 21 | 38·8 | 39·6 | 41·9 | 48·7 | 54·2 | 60·3 | 63·2 | 61·3 | 55·9 | 48·6 | 42·1 | 38·7 |
| 22 | 38·8 | 39·7 | 42·0 | 48·7 | 54·6 | 60·6 | 63·1 | 61·1 | 55·6 | 48·3 | 42·1 | 38·4 |
| 23 | 38·9 | 39·8 | 42·2 | 48·6 | 54·9 | 60·9 | 63·0 | 60·9 | 55·4 | 48·1 | 42·0 | 38·2 |
| 24 | 38·9 | 40·0 | 42·4 | 48·6 | 55·3 | 61·2 | 62·9 | 60·8 | 55·3 | 47·9 | 42·0 | 38·2 |
| 25 | 39·1 | 40·1 | 42·7 | 48·6 | 55·5 | 61·4 | 62·7 | 60·7 | 55·2 | 47·7 | 41·9 | 38·4 |
| 26 | 39·3 | 40·2 | 43·0 | 48·6 | 55·8 | 61·5 | 62·5 | 60·7 | 55·2 | 47·6 | 41·8 | 38·6 |
| 27 | 39·5 | 40·3 | 43·3 | 48·7 | 56·0 | 61·6 | 62·4 | 60·6 | 55·1 | 47·5 | 41·7 | 38·8 |
| 28 | 39·6 | 40·3 | 43·7 | 48·8 | 56·2 | 61·6 | 62·3 | 60·4 | 54·9 | 47·4 | 41·5 | 38·9 |
| 29 | 39·7 | | 44·1 | 49·0 | 56·4 | 61·6 | 62·3 | 60·3 | 54·7 | 47·3 | 41·2 | 39·0 |
| 30 | 39·7 | | 44·5 | 49·1 | 56·7 | 61·5 | 62·3 | 60·1 | 54·4 | 47·2 | 41·0 | 38·9 |
| 31 | 39·7 | | 44·9 | | 57·1 | | 62·2 | 59·9 | | 47·1 | | 38·7 |
| Means | 38·6 | 39·5 | 41·9 | 47·3 | 53·1 | 59·4 | 62·7 | 61·6 | 57·2 | 50·0 | 43·5 | 39·9 |

Mean Temperature for the Year (Mean of the twelve monthly values) = 49°·6.

TABLE VIII.—SMOOTHED MEAN DAILY HORIZONTAL MOVEMENT OF THE AIR IN MILES, DEDUCED FROM THE RECORDS OF ROBINSON'S ANEMOMETER, 1867–1906.

| Day of Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 315 | 335 | 332 | 304 | 283 | 254 | 247 | 242 | 265 | 265 | 285 | 302 |
| 2 | 312 | 324 | 333 | 303 | 279 | 253 | 250 | 246 | 259 | 270 | 282 | 304 |
| 3 | 310 | 311 | 331 | 305 | 274 | 253 | 254 | 250 | 251 | 273 | 281 | 313 |
| 4 | 310 | 303 | 333 | 311 | 269 | 255 | 257 | 252 | 244 | 272 | 279 | 325 |
| 5 | 314 | 301 | 337 | 315 | 264 | 259 | 258 | 255 | 241 | 271 | 279 | 334 |
| 6 | 315 | 306 | 340 | 320 | 260 | 260 | 258 | 257 | 240 | 268 | 279 | 339 |
| 7 | 312 | 315 | 341 | 321 | 257 | 261 | 257 | 259 | 241 | 263 | 280 | 337 |
| 8 | 307 | 326 | 343 | 318 | 252 | 260 | 254 | 260 | 245 | 258 | 283 | 330 |
| 9 | 300 | 332 | 339 | 313 | 250 | 256 | 252 | 262 | 250 | 256 | 285 | 320 |
| 10 | 294 | 335 | 328 | 305 | 248 | 251 | 250 | 262 | 252 | 256 | 288 | 311 |
| 11 | 291 | 333 | 318 | 296 | 250 | 247 | 248 | 262 | 253 | 257 | 288 | 306 |
| 12 | 293 | 329 | 307 | 289 | 255 | 243 | 245 | 261 | 253 | 261 | 288 | 306 |
| 13 | 298 | 323 | 297 | 285 | 264 | 242 | 243 | 259 | 250 | 267 | 288 | 307 |
| 14 | 305 | 317 | 293 | 283 | 274 | 241 | 240 | 256 | 248 | 271 | 288 | 308 |
| 15 | 311 | 313 | 295 | 283 | 284 | 240 | 239 | 252 | 247 | 273 | 288 | 308 |
| 16 | 314 | 310 | 298 | 283 | 292 | 240 | 238 | 248 | 246 | 270 | 289 | 307 |
| 17 | 313 | 308 | 302 | 284 | 296 | 240 | 238 | 244 | 245 | 265 | 290 | 302 |
| 18 | 312 | 307 | 306 | 285 | 295 | 240 | 239 | 239 | 246 | 257 | 291 | 297 |
| 19 | 310 | 307 | 310 | 286 | 291 | 240 | 241 | 237 | 245 | 250 | 294 | 290 |
| 20 | 309 | 306 | 311 | 287 | 285 | 241 | 244 | 236 | 244 | 246 | 296 | 284 |
| 21 | 311 | 303 | 313 | 288 | 278 | 240 | 247 | 236 | 244 | 247 | 297 | 278 |
| 22 | 315 | 303 | 317 | 287 | 272 | 240 | 250 | 239 | 245 | 252 | 300 | 273 |
| 23 | 320 | 304 | 321 | 286 | 267 | 240 | 252 | 244 | 245 | 259 | 303 | 270 |
| 24 | 326 | 305 | 325 | 284 | 263 | 241 | 252 | 249 | 247 | 269 | 306 | 274 |
| 25 | 333 | 311 | 332 | 284 | 259 | 242 | 250 | 258 | 249 | 278 | 312 | 281 |
| 26 | 339 | 319 | 336 | 283 | 257 | 243 | 248 | 269 | 250 | 286 | 317 | 292 |
| 27 | 344 | 324 | 336 | 285 | 255 | 244 | 244 | 276 | 251 | 291 | 318 | 307 |
| 28 | 348 | 328 | 332 | 286 | 255 | 244 | 240 | 279 | 254 | 293 | 315 | 319 |
| 29 | 351 | | 326 | 287 | 254 | 244 | 237 | 281 | 257 | 292 | 310 | 325 |
| 30 | 351 | | 316 | 286 | 254 | 244 | 238 | 278 | 261 | 290 | 304 | 327 |
| 31 | 344 | | 309 | | 253 | | 239 | 272 | | 287 | | 323 |

ROYAL OBSERVATORY, GREENWICH.

# RESULTS

OF

# MAGNETICAL OBSERVATIONS

(EXCLUDING DAYS OF GREAT MAGNETIC DISTURBANCE),

1908.

## TABLE I.—MEAN MAGNETIC DECLINATION WEST FOR EACH CIVIL DAY.

*(Each result is the mean of 24 hourly ordinates from the photographic register.)*

1908.

| Day of Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 15° | 15° | 15° | 15° | 15° | 15° | 15° | 15° | 15° | 15° | 15° | 15° |
| d | | | | | | | | | | | | |
| 1 | 56·0 | 56·8 | 54·9 | 56·4 | 54·3 | 53·7 | 52·5 | 52·5 | 52·1 | 52·2 | 50·0 | 51·3 |
| 2 | 56·6 | 57·8 | 56·2 | 56·1 | 53·8 | 51·6 | 53·2 | 52·6 | 52·2 | 52·2 | 49·4 | 51·9 |
| 3 | 56·5 | 57·5 | 55·7 | 55·9 | 53·5 | 52·9 | 53·2 | 52·9 | 52·4 | ... | 50·0 | 52·0 |
| 4 | 56·9 | 57·3 | 55·6 | 55·0 | 53·2 | 51·0 | 53·6 | 52·7 | ... | ... | 49·9 | 53·0 |
| 5 | 56·1 | 56·8 | 57·0 | 54·6 | 54·6 | 51·7 | 53·2 | 52·5 | ... | ... | 50·0 | 51·4 |
| 6 | 56·3 | 55·3 | 56·0 | 54·1 | 53·9 | 51·1 | 51·6 | 52·8 | 51·8 | ... | 50·1 | 51·1 |
| 7 | 56·8 | 56·6 | 56·9 | 55·0 | 53·7 | 51·9 | 53·3 | 52·6 | 52·2 | ... | 50·6 | 51·7 |
| 8 | 55·8 | 57·3 | 56·7 | 53·8 | 54·4 | 51·2 | 51·8 | 53·9 | 53·2 | ... | 50·7 | 51·8 |
| 9 | 55·0 | 56·5 | 57·0 | 54·7 | 54·5 | 52·0 | 52·6 | 51·9 | 50·8 | ... | 51·1 | 51·6 |
| 10 | 56·1 | 57·1 | 57·4 | 54·6 | 54·0 | 52·1 | 51·5 | 52·0 | 52·5 | 51·9 | 54·2 | 51·5 |
| 11 | 56·4 | 56·3 | 56·9 | 54·5 | 51·9 | 52·6 | 51·8 | 53·0 | ... | 52·7 | 52·0 | 51·6 |
| 12 | 57·0 | 56·6 | 56·1 | 54·8 | 54·8 | 51·5 | 52·4 | 52·4 | ... | 51·4 | 50·8 | 51·9 |
| 13 | 57·0 | 57·1 | 56·2 | 54·5 | 53·7 | 52·6 | 53·0 | 51·6 | 52·1 | 53·1 | 50·8 | 52·4 |
| 14 | 57·4 | 56·3 | 56·5 | 55·1 | 54·4 | 52·6 | 52·8 | 52·8 | 52·1 | 53·4 | 52·0 | 51·7 |
| 15 | 57·4 | 56·4 | 56·3 | 53·9 | 54·9 | 53·0 | 52·5 | 53·1 | 53·3 | 52·5 | 50·2 | 51·8 |
| 16 | 56·6 | 56·8 | 57·2 | 54·3 | 55·2 | 52·6 | 53·1 | 52·8 | 53·7 | 53·0 | 51·1 | 51·1 |
| 17 | 56·7 | 56·1 | 55·9 | 54·1 | 54·3 | 52·8 | 51·8 | 52·7 | 53·0 | 53·4 | 51·4 | 51·3 |
| 18 | 56·7 | 56·3 | 56·1 | 53·8 | 55·0 | 51·7 | 51·4 | 52·1 | 53·1 | 50·1 | 50·3 | 50·8 |
| 19 | 56·6 | 56·8 | 56·4 | 54·3 | 56·2 | 53·2 | 51·7 | 54·3 | 52·0 | 50·7 | 51·5 | 51·5 |
| 20 | 56·6 | 56·4 | 54·6 | 53·9 | 54·1 | 52·6 | 51·7 | 52·5 | 51·9 | 52·2 | 51·3 | 51·4 |
| 21 | 57·2 | 56·1 | 56·9 | 54·3 | 54·0 | 51·0 | 51·6 | 52·0 | 52·2 | 53·1 | 50·9 | 51·3 |
| 22 | 56·7 | 57·4 | 56·4 | 54·2 | 54·0 | 51·8 | 51·8 | 51·7 | 53·3 | 53·0 | 50·5 | 51·4 |
| 23 | 57·2 | 56·7 | 55·9 | 54·2 | 54·6 | 52·7 | 51·4 | 52·9 | 52·1 | 53·5 | 50·4 | 51·3 |
| 24 | 57·2 | 56·0 | 56·9 | 53·2 | 53·9 | 52·9 | 51·9 | 53·1 | 52·6 | 53·7 | 50·5 | 51·2 |
| 25 | 56·5 | 56·0 | 56·5 | 53·5 | 52·9 | 53·3 | 52·9 | 53·3 | 51·9 | 53·3 | 50·2 | 51·6 |
| 26 | 56·6 | 55·6 | 53·1 | 53·5 | 56·3 | 52·8 | 51·5 | 52·9 | 51·6 | 53·2 | 50·7 | 51·1 |
| 27 | 56·8 | 56·1 | 55·6 | 52·9 | 52·1 | 52·9 | 52·5 | 52·9 | 52·3 | 53·2 | 50·5 | 51·0 |
| 28 | 55·9 | 57·2 | 53·6 | 54·3 | 54·6 | 52·8 | 52·2 | 53·2 | 52·1 | 52·1 | 50·4 | 51·3 |
| 29 | 58·6 | 56·1 | 55·3 | 54·5 | 54·2 | 53·3 | 52·3 | 53·1 | ... | 50·0 | 50·1 | 51·4 |
| 30 | 57·0 | | 56·7 | 55·3 | 54·0 | 52·8 | 52·8 | 52·4 | 49·8 | 50·1 | 50·5 | 51·3 |
| 31 | 57·3 | | 55·7 | | 52·5 | | 52·5 | 52·1 | | 49·5 | | 51·4 |

## TABLE II.—MONTHLY MEAN DIURNAL INEQUALITY OF MAGNETIC DECLINATION WEST.

*(The results in each month are diminished by the smallest hourly value.)*

1908.

| Hour, Greenwich Civil Time. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midn. | 0·3 | 0·7 | 0·6 | 2·9 | 2·7 | 3·8 | 3·2 | 3·3 | 0·8 | 0·7 | 0·3 | 0·3 |
| 1h | 0·7 | 1·1 | 1·6 | 3·1 | 2·7 | 3·6 | 3·2 | 3·5 | 0·9 | 1·1 | 0·7 | 0·7 |
| 2 | 1·0 | 1·6 | 2·0 | 3·2 | 2·6 | 3·7 | 3·1 | 3·3 | 1·0 | 1·5 | 0·9 | 1·1 |
| 3 | 1·3 | 1·9 | 1·6 | 3·1 | 2·7 | 3·3 | 2·9 | 2·8 | 1·3 | 1·6 | 1·5 | 1·3 |
| 4 | 1·3 | 2·0 | 1·3 | 2·8 | 2·4 | 2·5 | 2·4 | 2·3 | 1·3 | 1·6 | 1·8 | 1·4 |
| 5 | 1·2 | 1·9 | 1·3 | 2·5 | 1·6 | 1·4 | 0·9 | 1·1 | 1·2 | 1·5 | 1·9 | 1·4 |
| 6 | 1·3 | 1·7 | 1·5 | 1·6 | 0·8 | 0·6 | 0·3 | 0·2 | 1·0 | 1·4 | 1·9 | 1·3 |
| 7 | 1·4 | 1·5 | 1·1 | 0·6 | 0·0 | 0·0 | 0·0 | 0·0 | 0·4 | 1·1 | 1·7 | 1·1 |
| 8 | 1·4 | 1·1 | 0·2 | 0·0 | 0·3 | 0·0 | 0·1 | 0·4 | 0·0 | 0·1 | 1·5 | 1·1 |
| 9 | 1·6 | 0·7 | 0·2 | 0·8 | 1·8 | 0·9 | 1·0 | 1·9 | 0·9 | 0·1 | 1·4 | 1·3 |
| 10 | 2·4 | 1·5 | 1·9 | 3·2 | 4·2 | 2·9 | 2·8 | 4·1 | 3·0 | 1·4 | 2·2 | 1·9 |
| 11 | 3·2 | 3·4 | 4·8 | 6·4 | 7·1 | 5·7 | 5·3 | 7·1 | 5·9 | 4·0 | 3·7 | 2·9 |
| Noon. | 3·8 | 5·0 | 7·1 | 9·4 | 9·4 | 8·3 | 7·9 | 10·0 | 8·6 | 6·3 | 4·9 | 3·6 |
| 13h | 4·8 | 6·4 | 8·5 | 10·9 | 10·0 | 9·7 | 9·0 | 11·1 | 9·2 | 6·9 | 5·4 | 3·7 |
| 14 | 4·6 | 6·6 | 8·4 | 10·4 | 9·7 | 9·9 | 9·1 | 10·6 | 8·5 | 6·1 | 4·8 | 3·1 |
| 15 | 3·9 | 5·9 | 7·2 | 8·8 | 8·4 | 9·3 | 8·3 | 9·2 | 6·8 | 4·8 | 4·1 | 2·4 |
| 16 | 3·3 | 4·6 | 5·1 | 7·3 | 6·9 | 7·9 | 7·1 | 7·0 | 5·2 | 3·3 | 3·3 | 2·4 |
| 17 | 2·5 | 3·3 | 3·3 | 5·7 | 5·6 | 6·5 | 5·7 | 5·3 | 3·4 | 2·4 | 2·5 | 1·9 |
| 18 | 2·0 | 2·5 | 2·0 | 4·5 | 4·7 | 5·7 | 4·9 | 4·2 | 2·5 | 1·5 | 1·7 | 1·6 |
| 19 | 1·7 | 2·2 | 0·8 | 3·6 | 3·8 | 5·0 | 4·4 | 3·8 | 2·1 | 0·8 | 1·2 | 1·1 |
| 20 | 1·1 | 1·5 | 0·4 | 3·2 | 3·4 | 4·6 | 4·1 | 3·7 | 2·0 | 0·4 | 0·9 | 0·5 |
| 21 | 0·4 | 0·2 | 0·5 | 2·7 | 2·9 | 3·9 | 3·8 | 3·7 | 1·9 | 0·1 | 0·3 | 0·1 |
| 22 | 0·0 | 0·0 | 0·3 | 2·4 | 2·7 | 3·9 | 3·6 | 3·5 | 1·5 | 0·0 | 0·0 | 0·0 |
| 23 | 0·0 | 0·3 | 0·0 | 2·7 | 2·5 | 3·8 | 3·4 | 3·3 | 1·5 | 0·0 | 0·3 | 0·2 |
| Means | 1·88 | 2·40 | 2·57 | 4·24 | 4·12 | 4·45 | 4·02 | 4·39 | 2·95 | 2·03 | 2·04 | 1·52 |

TABLE III.—MEAN HORIZONTAL MAGNETIC FORCE (diminished by a Constant) FOR EACH CIVIL DAY.

*(Each result is the mean of 24 hourly ordinates from the photographic register, expressed in terms of the whole Horizontal Force, the unit in the table being ·00001 of the whole Horizontal Force. The letters* u *and* c *indicate respectively values uncorrected for, and corrected for temperature.)*

1908.

| Day of Month. | January. | | February. | | March. | | April. | | May. | | June. | | July. | | August. | | September. | | October. | | November. | | December. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* |
| d | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 989 | 433 | 731 | 294 | 667 | 227 | 621 | 191 | 015 | 607 | 242 | 850 | 190 | 806 | 206 | 824 | 359 | 931 | 353 | 954 | 158 | 742 | 090 | 674 |
| 2 | 920 | 376 | 760 | 290 | 595 | 175 | 628 | 234 | 986 | 621 | 254 | 882 | 105 | 728 | 250 | 858 | 305 | 901 | 392 | 991 | 164 | 758 | 088 | 648 |
| 3 | 786 | 249 | 755 | 299 | 683 | 251 | 717 | 294 | 070 | 635 | 269 | 894 | 103 | 731 | 253 | 864 | 350 | 922 | 392 | 991 | 181 | 758 | 006 | 581 |
| 4 | 741 | 212 | 717 | 250 | 752 | 271 | 672 | 249 | 078 | 643 | 253 | 888 | 195 | 820 | 265 | 905 | ... | ... | 355 | 942 | 173 | 760 | 938 | 503 |
| 5 | 800 | 250 | 710 | 249 | 840 | 345 | 727 | 297 | 996 | 602 | 184 | 795 | 281 | 889 | 247 | 877 | ... | ... | 375 | 962 | 155 | 744 | 799 | 391 |
| 6 | 894 | 340 | 643 | 235 | 781 | 346 | 667 | 247 | 956 | 588 | 165 | 745 | 194 | 798 | 332 | 936 | 180 | 757 | 314 | 894 | 161 | 743 | 895 | 496 |
| 7 | 805 | 382 | 711 | 271 | 778 | 336 | 633 | 220 | 021 | 586 | 941 | 576 | 187 | 795 | 281 | 885 | 242 | 822 | 278 | 877 | 043 | 627 | 925 | 509 |
| 8 | 713 | 290 | 757 | 322 | 792 | 379 | 645 | 217 | 053 | 645 | 992 | 634 | 177 | 781 | 281 | 892 | 262 | 861 | 287 | 888 | 775 | 340 | 892 | 505 |
| 9 | 684 | 223 | 742 | 310 | 712 | 299 | 618 | 205 | 070 | 650 | 075 | 700 | 205 | 797 | 140 | 756 | 276 | 858 | 393 | 994 | 788 | 365 | 951 | 540 |
| 10 | 710 | 240 | 770 | 352 | 788 | 353 | 683 | 263 | 094 | 676 | 192 | 798 | 284 | 880 | 167 | 799 | 132 | 709 | 429 | 025 | 795 | 341 | 965 | 557 |
| 11 | 765 | 247 | 700 | 268 | 808 | 373 | 703 | 261 | 034 | 578 | 213 | 817 | 310 | 914 | 159 | 753 | ... | ... | 400 | 972 | 870 | 450 | 976 | 546 |
| 12 | 812 | 270 | 737 | 307 | 717 | 309 | 711 | 269 | 017 | 585 | 217 | 806 | 302 | 910 | 095 | 682 | ... | ... | 317 | 913 | 011 | 629 | 964 | 541 |
| 13 | 847 | 303 | 753 | 306 | 727 | 295 | 683 | 265 | 002 | 584 | 209 | 791 | 264 | 868 | 971 | 582 | 910 | 482 | 307 | 903 | 154 | 734 | 889 | 481 |
| 14 | 827 | 350 | 769 | 358 | 690 | 232 | 690 | 265 | 965 | 549 | 178 | 758 | 221 | 820 | 091 | 680 | 965 | 571 | 337 | 919 | 100 | 706 | 936 | 552 |
| 15 | 800 | 353 | 759 | 351 | 635 | 188 | 592 | 181 | 989 | 566 | 171 | 758 | 333 | 915 | 203 | 790 | 135 | 707 | 435 | 019 | 107 | 691 | 949 | 591 |
| 16 | 809 | 403 | 754 | 322 | 603 | 195 | 573 | 169 | 930 | 550 | 159 | 751 | 185 | 784 | 239 | 819 | 117 | 689 | 458 | 047 | 139 | 721 | 005 | 606 |
| 17 | 909 | 486 | 767 | 363 | 566 | 162 | 609 | 174 | 017 | 637 | 262 | 861 | 272 | 859 | 247 | 834 | 059 | 663 | 508 | 097 | 952 | 544 | 065 | 654 |
| 18 | 915 | 478 | 829 | 406 | 586 | 156 | 605 | 175 | 080 | 691 | 210 | 787 | 316 | 900 | 218 | 807 | 174 | 763 | 494 | 081 | 917 | 494 | 062 | 627 |
| 19 | 880 | 422 | 827 | 383 | 576 | 156 | 593 | 146 | 168 | 755 | 168 | 750 | 322 | 911 | 136 | 728 | 267 | 863 | 493 | 073 | 972 | 556 | 030 | 600 |
| 20 | 865 | 430 | 848 | 416 | 550 | 106 | 583 | 129 | 158 | 759 | 164 | 746 | 349 | 936 | 200 | 787 | 263 | 888 | 455 | 032 | 026 | 584 | 008 | 612 |
| 21 | 814 | 360 | 846 | 438 | 510 | 097 | 569 | 156 | 164 | 739 | 115 | 687 | 364 | 948 | 312 | 908 | 296 | 912 | 306 | 888 | 019 | 599 | 040 | 653 |
| 22 | 805 | 340 | 881 | 441 | 551 | 123 | 589 | 178 | 100 | 668 | 079 | 668 | 390 | 977 | 221 | 822 | 284 | 873 | 188 | 741 | 073 | 677 | 027 | 623 |
| 23 | 813 | 371 | 811 | 371 | 600 | 196 | 550 | 130 | 040 | 596 | 102 | 713 | 375 | 983 | 275 | 850 | 314 | 915 | 085 | 674 | 072 | 654 | 047 | 605 |
| 24 | 767 | 342 | 791 | 351 | 715 | 278 | 550 | 101 | 998 | 558 | 218 | 824 | 422 | 040 | 331 | 918 | 320 | 919 | 140 | 693 | 968 | 560 | 954 | 541 |
| 25 | 757 | 296 | 790 | 367 | 689 | 281 | 548 | 120 | 005 | 577 | 228 | 822 | 296 | 926 | 347 | 948 | 381 | 968 | 065 | 616 | 987 | 595 | 982 | 574 |
| 26 | 767 | 337 | 772 | 354 | 634 | 206 | 536 | 111 | 882 | 476 | 181 | 773 | 296 | 916 | 386 | 980 | 344 | 926 | 093 | 680 | 982 | 569 | 946 | 516 |
| 27 | 852 | 453 | 765 | 364 | 492 | 076 | 514 | 137 | 090 | 677 | 192 | 793 | 287 | 905 | 381 | 980 | 363 | 923 | 123 | 686 | 003 | 604 | 917 | 468 |
| 28 | 831 | 415 | 769 | 332 | 503 | 080 | 693 | 275 | 137 | 736 | 259 | 848 | 277 | 900 | 350 | 932 | 320 | 909 | 123 | 719 | 022 | 614 | 902 | 416 |
| 29 | 774 | 332 | 757 | 301 | 510 | 099 | 775 | 367 | 202 | 774 | 238 | 844 | 257 | 873 | 377 | 947 | ... | ... | 185 | 810 | 058 | 647 | 898 | 385 |
| 30 | 724 | 263 | | | 618 | 207 | 850 | 439 | 208 | 812 | 210 | 818 | 258 | 871 | 418 | 988 | 157 | 763 | 233 | 822 | 093 | 711 | 064 | 430 |
| 31 | 749 | 309 | | | 616 | 200 | | | 286 | 873 | | | 250 | 887 | 405 | 980 | | | 165 | 766 | | | ... | ... |

At the end of the year experiments were made for determination of the angle of torsion, thus breaking the continuity of the values.

TABLE IV.—MEAN TEMPERATURE for each CIVIL DAY within the box inclosing the HORIZONTAL FORCE MAGNET.

1908.

| Day of Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | | | | | | | | | | | | |
| 1 | 60·9 | 66·2 | 66·1 | 66·5 | 67·4 | 68·1 | 68·4 | 68·5 | 66·6 | 67·8 | 67·1 | 67·1 |
| 2 | 61·5 | 64·8 | 66·9 | 68·0 | 69·2 | 68·9 | 68·7 | 68·1 | 67·6 | 67·7 | 67·5 | 66·1 |
| 3 | 61·8 | 65·4 | 66·4 | 66·8 | 66·3 | 68·8 | 68·9 | 68·2 | 66·6 | 67·7 | 66·8 | 66·7 |
| 4 | 62·2 | 64·9 | 64·3 | 66·8 | 66·3 | 69·2 | 68·8 | 69·4 | ... | 67·2 | 67·2 | 66·3 |
| 5 | 61·2 | 65·2 | 63·7 | 66·5 | 68·0 | 68·2 | 68·1 | 69·0 | ... | 67·2 | 67·3 | 67·4 |
| 6 | 61·0 | 67·4 | 66·3 | 66·9 | 69·1 | 66·9 | 67·9 | 67·9 | 66·8 | 66·9 | 67·0 | 67·8 |
| 7 | 66·8 | 66·1 | 66·0 | 67·2 | 66·3 | 69·2 | 68·1 | 67·9 | 66·9 | 67·7 | 67·1 | 67·1 |
| 8 | 66·8 | 66·3 | 67·2 | 66·6 | 67·4 | 69·5 | 67·9 | 68·2 | 67·7 | 67·8 | 66·3 | 68·3 |
| 9 | 65·2 | 66·4 | 67·2 | 67·2 | 66·9 | 68·8 | 67·4 | 68·4 | 67·0 | 67·8 | 66·8 | 67·3 |
| 10 | 64·8 | 67·0 | 66·3 | 66·9 | 67·0 | 68·0 | 67·6 | 69·1 | 66·8 | 67·6 | 65·5 | 67·4 |
| 11 | 62·7 | 66·4 | 66·3 | 66·0 | 65·4 | 67·9 | 67·9 | 67·5 | ... | 66·6 | 66·9 | 66·5 |
| 12 | 61·6 | 66·5 | 67·4 | 66·0 | 66·4 | 67·3 | 68·1 | 67·2 | ... | 67·6 | 68·5 | 66·8 |
| 13 | 61·5 | 65·8 | 66·4 | 67·0 | 67·0 | 67·0 | 67·9 | 68·2 | 66·6 | 67·6 | 66·9 | 67·4 |
| 14 | 64·5 | 67·3 | 65·3 | 66·7 | 67·1 | 66·9 | 67·7 | 67·3 | 68·0 | 67·0 | 68·0 | 68·4 |
| 15 | 65·8 | 67·4 | 65·8 | 67·3 | 66·8 | 67·2 | 67·0 | 67·2 | 66·6 | 67·1 | 67·1 | 69·5 |
| 16 | 67·5 | 66·4 | 67·4 | 67·6 | 68·6 | 67·4 | 67·7 | 66·9 | 66·6 | 67·3 | 67·0 | 67·8 |
| 17 | 66·8 | 67·6 | 67·6 | 66·3 | 68·6 | 67·7 | 67·2 | 67·2 | 67·9 | 67·3 | 67·4 | 67·3 |
| 18 | 66·2 | 66·8 | 66·5 | 66·5 | 68·2 | 66·8 | 67·1 | 67·3 | 67·3 | 67·2 | 66·8 | 66·3 |
| 19 | 65·3 | 65·9 | 66·9 | 65·8 | 67·2 | 67·0 | 67·3 | 67·4 | 67·6 | 66·9 | 67·1 | 66·5 |
| 20 | 66·3 | 66·4 | 65·9 | 65·5 | 67·8 | 67·0 | 67·2 | 67·2 | 68·8 | 66·8 | 66·0 | 67·9 |
| 21 | 65·5 | 67·4 | 67·2 | 67·2 | 66·7 | 66·6 | 67·1 | 67·6 | 68·4 | 67·0 | 66·9 | 68·3 |
| 22 | 65·0 | 66·1 | 66·6 | 67·3 | 66·4 | 67·3 | 67·2 | 67·8 | 67·3 | 65·8 | 67·9 | 67·6 |
| 23 | 66·0 | 66·1 | 67·6 | 66·9 | 65·9 | 68·2 | 68·1 | 66·7 | 67·8 | 67·3 | 67·0 | 66·0 |
| 24 | 66·7 | 66·1 | 66·2 | 65·7 | 66·1 | 68·0 | 68·5 | 67·2 | 67·7 | 65·8 | 67·4 | 67·2 |
| 25 | 65·2 | 66·8 | 67·4 | 66·6 | 66·6 | 67·5 | 69·0 | 67·8 | 67·2 | 65·7 | 68·1 | 67·4 |
| 26 | 66·5 | 67·0 | 66·6 | 66·7 | 67·5 | 67·4 | 68·6 | 67·5 | 67·0 | 67·2 | 67·2 | 66·5 |
| 27 | 67·8 | 67·7 | 67·1 | 68·7 | 67·2 | 67·8 | 68·5 | 67·7 | 66·1 | 66·2 | 67·8 | 65·7 |
| 28 | 67·1 | 66·2 | 66·8 | 67·0 | 67·7 | 67·3 | 68·7 | 67·0 | 67·3 | 67·6 | 67·4 | 64·1 |
| 29 | 66·0 | 65·4 | 67·3 | 67·4 | 66·6 | 68·0 | 68·4 | 66·5 | ... | 68·8 | 67·3 | 62·9 |
| 30 | 65·2 | | 67·3 | 67·3 | 67·9 | 68·1 | 68·3 | 66·5 | 68·0 | 67·3 | 68·5 | 57·1 |
| 31 | 66·1 | | 67·1 | | 67·2 | | 69·3 | 66·7 | | 67·8 | | ... |
| Means | 64·76 | 66·38 | 66·55 | 66·83 | 67·19 | 67·80 | 68·02 | 67·65 | 67·29 | 67·20 | 67·19 | 66·62 |

## TABLE V.—MONTHLY MEAN DIURNAL INEQUALITY OF HORIZONTAL MAGNETIC FORCE.

*(The results are expressed in terms of the whole Horizontal Force, diminished in each case by the smallest hourly value, the unit in the table being ·00001 of the whole Horizontal Force. The letters* u *and* c *indicate respectively values uncorrected for, and corrected for temperature.)*

1908.

| Hour, Greenwich Civil Time. | January. | | February. | | March. | | April. | | May. | | June. | | July. | | August. | | September. | | October. | | November. | | December. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* |
| Midnight. | 57 | 64 | 80 | 94 | 117 | 137 | 189 | 208 | 191 | 208 | 170 | 196 | 164 | 184 | 230 | 249 | 214 | 235 | 170 | 184 | 62 | 81 | 13 | 23 |
| 1h | 60 | 65 | 87 | 97 | 117 | 132 | 190 | 206 | 191 | 206 | 165 | 189 | 154 | 171 | 232 | 249 | 209 | 228 | 168 | 180 | 67 | 84 | 20 | 28 |
| 2 | 63 | 68 | 91 | 98 | 127 | 139 | 193 | 207 | 175 | 187 | 156 | 177 | 143 | 158 | 229 | 243 | 213 | 230 | 167 | 179 | 77 | 92 | 36 | 44 |
| 3 | 73 | 75 | 94 | 101 | 139 | 149 | 191 | 200 | 168 | 180 | 153 | 172 | 145 | 160 | 216 | 228 | 221 | 235 | 170 | 179 | 84 | 96 | 43 | 48 |
| 4 | 86 | 88 | 104 | 109 | 141 | 149 | 185 | 192 | 165 | 175 | 149 | 163 | 146 | 156 | 201 | 210 | 225 | 237 | 176 | 183 | 95 | 105 | 53 | 58 |
| 5 | 100 | 100 | 115 | 117 | 145 | 150 | 183 | 187 | 145 | 152 | 140 | 152 | 142 | 152 | 189 | 196 | 218 | 227 | 180 | 184 | 102 | 109 | 61 | 64 |
| 6 | 108 | 108 | 116 | 118 | 137 | 140 | 181 | 183 | 113 | 118 | 122 | 131 | 118 | 126 | 156 | 161 | 189 | 196 | 176 | 180 | 106 | 111 | 69 | 69 |
| 7 | 99 | 101 | 113 | 118 | 120 | 123 | 157 | 159 | 61 | 64 | 91 | 96 | 79 | 84 | 109 | 111 | 149 | 154 | 151 | 153 | 89 | 92 | 67 | 65 |
| 8 | 84 | 86 | 101 | 106 | 83 | 86 | 107 | 107 | 18 | 18 | 53 | 55 | 35 | 38 | 58 | 60 | 98 | 100 | 97 | 97 | 65 | 65 | 48 | 46 |
| 9 | 57 | 57 | 65 | 70 | 33 | 33 | 43 | 43 | 0 | 0 | 15 | 15 | 5 | 5 | 18 | 18 | 41 | 41 | 37 | 37 | 25 | 23 | 36 | 34 |
| 10 | 25 | 25 | 31 | 33 | 7 | 7 | 4 | 4 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 19 | 15 |
| 11 | 3 | 5 | 3 | 5 | 0 | 0 | 0 | 0 | 31 | 31 | 7 | 7 | 16 | 16 | 26 | 28 | 9 | 11 | 7 | 7 | 0 | 0 | 15 | 11 |
| Noon. | 0 | 0 | 0 | 0 | 26 | 29 | 39 | 39 | 77 | 80 | 37 | 39 | 43 | 43 | 90 | 92 | 92 | 97 | 37 | 37 | 4 | 7 | 21 | 14 |
| 13h | 21 | 23 | 32 | 34 | 59 | 64 | 88 | 92 | 114 | 119 | 65 | 72 | 75 | 80 | 149 | 156 | 138 | 150 | 72 | 74 | 26 | 31 | 25 | 21 |
| 14 | 27 | 32 | 46 | 51 | 89 | 97 | 130 | 139 | 141 | 148 | 110 | 122 | 112 | 122 | 200 | 209 | 168 | 182 | 101 | 105 | 32 | 37 | 17 | 15 |
| 15 | 23 | 33 | 54 | 64 | 101 | 111 | 167 | 179 | 173 | 183 | 155 | 169 | 153 | 163 | 230 | 242 | 187 | 204 | 118 | 125 | 35 | 42 | 1 | 1 |
| 16 | 12 | 24 | 52 | 64 | 106 | 118 | 187 | 199 | 213 | 223 | 193 | 210 | 180 | 192 | 248 | 262 | 203 | 222 | 129 | 136 | 29 | 39 | 0 | 0 |
| 17 | 16 | 32 | 41 | 55 | 107 | 122 | 197 | 211 | 247 | 259 | 209 | 228 | 191 | 203 | 260 | 274 | 211 | 232 | 140 | 149 | 38 | 50 | 10 | 13 |
| 18 | 26 | 42 | 54 | 73 | 120 | 140 | 207 | 223 | 250 | 265 | 221 | 242 | 208 | 223 | 270 | 287 | 218 | 239 | 154 | 163 | 50 | 65 | 18 | 21 |
| 19 | 31 | 45 | 59 | 78 | 136 | 160 | 199 | 218 | 250 | 265 | 225 | 246 | 215 | 230 | 276 | 293 | 227 | 251 | 162 | 174 | 60 | 77 | 26 | 29 |
| 20 | 29 | 41 | 60 | 79 | 133 | 160 | 198 | 219 | 246 | 263 | 214 | 238 | 206 | 223 | 277 | 294 | 246 | 270 | 162 | 174 | 67 | 84 | 31 | 34 |
| 21 | 31 | 43 | 57 | 74 | 133 | 157 | 201 | 222 | 234 | 251 | 196 | 220 | 189 | 206 | 272 | 291 | 248 | 272 | 162 | 176 | 66 | 85 | 30 | 30 |
| 22 | 39 | 51 | 62 | 79 | 130 | 152 | 202 | 223 | 217 | 234 | 178 | 202 | 175 | 192 | 261 | 278 | 253 | 277 | 161 | 175 | 63 | 82 | 19 | 19 |
| 23 | 48 | 60 | 72 | 89 | 125 | 147 | 201 | 220 | 207 | 226 | 168 | 192 | 167 | 184 | 245 | 262 | 247 | 268 | 169 | 181 | 62 | 81 | 12 | 12 |
| Means corrected for Temperature. | 52·8 | | 75·3 | | 112·6 | | 161·7 | | 160·9 | | 147·2 | | 138·0 | | 195·5 | | 189·9 | | 134·7 | | 64·2 | | 29·7 | |

## TABLE VI.—MONTHLY MEAN TEMPERATURE at each HOUR of the DAY within the box inclosing the HORIZONTAL FORCE MAGNET.

1908.

| Hour, Greenwich Civil Time. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | For the Year. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight. | 64°·8 | 66°·6 | 66°·9 | 67°·2 | 67°·5 | 68°·3 | 68°·4 | 68°·0 | 67°·6 | 67°·5 | 67°·6 | 67°·0 | 67°·28 |
| 1h | 64·7 | 66·4 | 66·7 | 67·1 | 67·4 | 68·2 | 68·3 | 67·9 | 67·5 | 67·4 | 67·5 | 66·9 | 67·17 |
| 2 | 64·7 | 66·3 | 66·6 | 67·0 | 67·3 | 68·1 | 68·2 | 67·8 | 67·4 | 67·4 | 67·4 | 66·9 | 67·09 |
| 3 | 64·6 | 66·3 | 66·5 | 66·8 | 67·3 | 68·0 | 68·2 | 67·7 | 67·3 | 67·3 | 67·3 | 66·8 | 67·01 |
| 4 | 64·6 | 66·2 | 66·4 | 66·7 | 67·2 | 67·8 | 68·0 | 67·6 | 67·2 | 67·2 | 67·2 | 66·8 | 66·91 |
| 5 | 64·5 | 66·1 | 66·3 | 66·6 | 67·1 | 67·7 | 68·0 | 67·5 | 67·1 | 67·1 | 67·1 | 66·7 | 66·82 |
| 6 | 64·5 | 66·1 | 66·2 | 66·5 | 67·0 | 67·6 | 67·9 | 67·4 | 67·0 | 67·1 | 67·0 | 66·6 | 66·74 |
| 7 | 64·6 | 66·2 | 66·2 | 66·5 | 66·9 | 67·4 | 67·8 | 67·3 | 66·9 | 67·0 | 66·9 | 66·5 | 66·68 |
| 8 | 64·6 | 66·2 | 66·2 | 66·4 | 66·8 | 67·3 | 67·7 | 67·3 | 66·8 | 66·9 | 66·8 | 66·5 | 66·62 |
| 9 | 64·5 | 66·2 | 66·1 | 66·4 | 66·8 | 67·2 | 67·6 | 67·2 | 66·7 | 66·9 | 66·7 | 66·5 | 66·57 |
| 10 | 64·5 | 66·1 | 66·1 | 66·4 | 66·8 | 67·2 | 67·6 | 67·2 | 66·7 | 66·9 | 66·7 | 66·4 | 66·55 |
| 11 | 64·6 | 66·1 | 66·1 | 66·4 | 66·8 | 67·2 | 67·6 | 67·3 | 66·8 | 66·9 | 66·8 | 66·4 | 66·58 |
| Noon. | 64·5 | 66·0 | 66·2 | 66·4 | 66·9 | 67·3 | 67·6 | 67·3 | 66·9 | 66·9 | 66·9 | 66·3 | 66·60 |
| 13h | 64·6 | 66·1 | 66·3 | 66·6 | 67·0 | 67·5 | 67·8 | 67·5 | 67·2 | 67·0 | 67·0 | 66·4 | 66·75 |
| 14 | 64·7 | 66·2 | 66·4 | 66·8 | 67·1 | 67·7 | 68·0 | 67·6 | 67·3 | 67·1 | 67·0 | 66·5 | 66·87 |
| 15 | 64·9 | 66·4 | 66·5 | 66·9 | 67·2 | 67·8 | 68·0 | 67·7 | 67·4 | 67·2 | 67·1 | 66·6 | 66·97 |
| 16 | 65·0 | 66·5 | 66·6 | 66·9 | 67·2 | 67·9 | 68·1 | 67·8 | 67·5 | 67·2 | 67·2 | 66·6 | 67·04 |
| 17 | 65·2 | 66·6 | 66·7 | 67·0 | 67·3 | 68·0 | 68·1 | 67·8 | 67·6 | 67·3 | 67·3 | 66·7 | 67·13 |
| 18 | 65·2 | 66·8 | 66·9 | 67·1 | 67·4 | 68·1 | 68·2 | 67·9 | 67·6 | 67·3 | 67·4 | 66·7 | 67·22 |
| 19 | 65·1 | 66·8 | 67·1 | 67·2 | 67·4 | 68·1 | 68·2 | 67·9 | 67·7 | 67·4 | 67·5 | 66·7 | 67·26 |
| 20 | 65·0 | 66·8 | 67·2 | 67·3 | 67·5 | 68·2 | 68·3 | 67·9 | 67·7 | 67·4 | 67·5 | 66·7 | 67·29 |
| 21 | 65·0 | 66·7 | 67·1 | 67·3 | 67·5 | 68·2 | 68·3 | 68·0 | 67·7 | 67·5 | 67·6 | 66·6 | 67·29 |
| 22 | 65·0 | 66·7 | 67·0 | 67·3 | 67·5 | 68·2 | 68·3 | 67·9 | 67·7 | 67·5 | 67·6 | 66·6 | 67·27 |
| 23 | 65·0 | 66·7 | 67·0 | 67·2 | 67·6 | 68·2 | 68·3 | 67·9 | 67·6 | 67·4 | 67·6 | 66·6 | 67·26 |

## TABLE VII.—MEAN VERTICAL MAGNETIC FORCE (diminished by a Constant) FOR EACH CIVIL DAY.

*(Each result is the mean of 24 hourly ordinates from the photographic register, expressed in terms of the whole Vertical Force, the unit in the table being ·00001 of the whole Vertical Force. The letters* u *and* c *indicate respectively values uncorrected for, and corrected for temperature.)*

1908.

| Day of Month. | January. | | February. | | March. | | April. | | May. | | June. | | July. | | August. | | September. | | October. | | November. | | December. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* |
| d | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 518 | 897 | 639 | 893 | 589 | 843 | 601 | 851 | 613 | 856 | 762 | 020 | 776 | 023 | 831 | 078 | 814 | 080 | 905 | 163 | 781 | 028 | 658 | 914 |
| 2 | 518 | 857 | 596 | 879 | 620 | 861 | 633 | 857 | 643 | 888 | 791 | 036 | 808 | 051 | 820 | 076 | 823 | 087 | 913 | 175 | 778 | 025 | 615 | 883 |
| 3 | 540 | 870 | 611 | 875 | 603 | 869 | 622 | 884 | 614 | 895 | 825 | 070 | 804 | 043 | 826 | 078 | 798 | 071 | 910 | 162 | 757 | 013 | 614 | 861 |
| 4 | 544 | 868 | 603 | 874 | 564 | 909 | 612 | 864 | 632 | 879 | 835 | 072 | 800 | 043 | 839 | 068 | 810 | 064 | 912 | 185 | 756 | 003 | 615 | 867 |
| 5 | 516 | 882 | 600 | 879 | 530 | 894 | 613 | 867 | 662 | 905 | 835 | 095 | 787 | 047 | 850 | 091 | 795 | 049 | 911 | 175 | 760 | 012 | 627 | 874 |
| 6 | 497 | 857 | 630 | 867 | 583 | 843 | 637 | 889 | 702 | 949 | 802 | 077 | 785 | 047 | 835 | 097 | 795 | 047 | 894 | 148 | 736 | 973 | 642 | 898 |
| 7 | 639 | 878 | 627 | 898 | 592 | 856 | 637 | 895 | 646 | 900 | 828 | 065 | 783 | 043 | 837 | 099 | 814 | 072 | 915 | 158 | 734 | 988 | 630 | 892 |
| 8 | 680 | 936 | 622 | 888 | 616 | 840 | 589 | 851 | 670 | 932 | 814 | 047 | 796 | 058 | 838 | 094 | 831 | 081 | 900 | 158 | 744 | 989 | 646 | 864 |
| 9 | 647 | 928 | 635 | 895 | 640 | 881 | 623 | 879 | 665 | 925 | 791 | 047 | 780 | 044 | 846 | 079 | 797 | 065 | 883 | 135 | 722 | 972 | 622 | 888 |
| 10 | 625 | 914 | 647 | 899 | 605 | 865 | 625 | 889 | 666 | 939 | 773 | 029 | 791 | 057 | 901 | 134 | 764 | 011 | 887 | 139 | 682 | 957 | 606 | 860 |
| 11 | 575 | 901 | 649 | 913 | 597 | 857 | 609 | 871 | 623 | 904 | ... | ... | 777 | 039 | 867 | 119 | ... | ... | 869 | 129 | 685 | 926 | 587 | 837 |
| 12 | 531 | 893 | 632 | 903 | 613 | 837 | 608 | 872 | 677 | 933 | 777 | 052 | 805 | 065 | 829 | 093 | ... | ... | 886 | 140 | 702 | 926 | 577 | 829 |
| 13 | 518 | 871 | 619 | 883 | 613 | 875 | 611 | 863 | 681 | 962 | 783 | 043 | 815 | 075 | 851 | 113 | 795 | 028 | 847 | 105 | 681 | 935 | 585 | 828 |
| 14 | 592 | 875 | 635 | 872 | 590 | 863 | 595 | 849 | 680 | 951 | 782 | 038 | 810 | 062 | 818 | 078 | 785 | 045 | 857 | 111 | 711 | 935 | 605 | 844 |
| 15 | 635 | 893 | 645 | 892 | 592 | 852 | 640 | 871 | 680 | 925 | 786 | 052 | 774 | 042 | 799 | 065 | 755 | 030 | 852 | 099 | 697 | 957 | 634 | 815 |
| 16 | 666 | 903 | 623 | 894 | 618 | 853 | 647 | 888 | 710 | 941 | 767 | 023 | 773 | 025 | 795 | 076 | 800 | 052 | 850 | 097 | 680 | 940 | 611 | 865 |
| 17 | 673 | 931 | 631 | 878 | 628 | 871 | 629 | 900 | 718 | 963 | 765 | 025 | 780 | 046 | 805 | 069 | 812 | 051 | 840 | 102 | 720 | 967 | 597 | 861 |
| 18 | 661 | 932 | 632 | 894 | 602 | 864 | 625 | 885 | 723 | 975 | 769 | 044 | 773 | 037 | 819 | 090 | 792 | 046 | 836 | 094 | 691 | 941 | 568 | 824 |
| 19 | 641 | 918 | 620 | 905 | 600 | 847 | 598 | 866 | 720 | 999 | 767 | 033 | 781 | 028 | 811 | 069 | 797 | 051 | 842 | 106 | 696 | 935 | 560 | 822 |
| 20 | 652 | 908 | 630 | 903 | 574 | 832 | 590 | 852 | 745 | 999 | 757 | 028 | 793 | 047 | 828 | 103 | 851 | 063 | 831 | 087 | 649 | 913 | 584 | 808 |
| 21 | 636 | 902 | 648 | 904 | 600 | 835 | 606 | 847 | 723 | 981 | 765 | 044 | 775 | 014 | 864 | 132 | 845 | 101 | 817 | 075 | 648 | 912 | 594 | 829 |
| 22 | 625 | 900 | 638 | 921 | 583 | 833 | 610 | 874 | 721 | 983 | 773 | 041 | 787 | 053 | 845 | 111 | 815 | 071 | 757 | 004 | 658 | 905 | 590 | 844 |
| 23 | 631 | 893 | 632 | 900 | 602 | 845 | 596 | 839 | 684 | 929 | 776 | 030 | 800 | 045 | 847 | 147 | 820 | 082 | 772 | 017 | 645 | 907 | 555 | 817 |
| 24 | 630 | 898 | 635 | 908 | 581 | 862 | 563 | 834 | 707 | 963 | 773 | 018 | 810 | 053 | 837 | 099 | 829 | 085 | 717 | 998 | 648 | 889 | 556 | 791 |
| 25 | 611 | 898 | 638 | 898 | 601 | 861 | 567 | 823 | 706 | 995 | 755 | 021 | 848 | 081 | 852 | 116 | 807 | 059 | 694 | 931 | 664 | 911 | 545 | 788 |
| 26 | 637 | 884 | 637 | 889 | 610 | 857 | 562 | 826 | 673 | 939 | 762 | 028 | 840 | 090 | 837 | 101 | 808 | 070 | 702 | 931 | 650 | 912 | 535 | 789 |
| 27 | 672 | 905 | 642 | 879 | 597 | 847 | 603 | 834 | 726 | 982 | 767 | 033 | 839 | 086 | 853 | 121 | 794 | 075 | 690 | 937 | 649 | 899 | 510 | 781 |
| 28 | 665 | 923 | 608 | 887 | 593 | 847 | 585 | 830 | 754 | 999 | 773 | 046 | 849 | 094 | 855 | 115 | 811 | 069 | 718 | 938 | 648 | 906 | 470 | 751 |
| 29 | 645 | 920 | 579 | 852 | 615 | 871 | 587 | 826 | 724 | 009 | 800 | 060 | 846 | 096 | 827 | 106 | ... | ... | 755 | 992 | 638 | 900 | 430 | 741 |
| 30 | 638 | 923 | | | 622 | 863 | 616 | 882 | 752 | 989 | 806 | 051 | 842 | 092 | 813 | 081 | 869 | 127 | 734 | 973 | 668 | 894 | ... | ... |
| 31 | 635 | 893 | | | 617 | 862 | | | 746 | 023 | | | 847 | 080 | 818 | 076 | | | 769 | 998 | | | ... | ... |

At the end of the year the magnet was readjusted, thus breaking the continuity of the values.

TABLE VIII.—MEAN TEMPERATURE for each CIVIL DAY within the box inclosing the VERTICAL FORCE MAGNET.

1908.

| Day of Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | | | | | | | | | | | | |
| 1 | 61·3 | 67·2 | 67·2 | 67·4 | 67·7 | 67·0 | 67·5 | 67·5 | 66·6 | 67·0 | 67·5 | 67·1 |
| 2 | 63·2 | 65·8 | 67·8 | 68·6 | 67·6 | 67·6 | 67·7 | 67·1 | 66·7 | 66·8 | 67·5 | 66·5 |
| 3 | 63·6 | 66·7 | 66·6 | 66·8 | 65·9 | 67·6 | 67·9 | 67·3 | 66·3 | 67·3 | 67·1 | 67·5 |
| 4 | 63·9 | 66·4 | 62·9 | 67·3 | 67·5 | 68·0 | 67·7 | 68·4 | 67·2 | 66·3 | 67·5 | 67·3 |
| 5 | 61·9 | 66·0 | 62·0 | 67·2 | 67·7 | 66·9 | 66·9 | 67·8 | 67·2 | 66·7 | 67·3 | 67·5 |
| 6 | 62·2 | 68·0 | 66·9 | 67·3 | 67·5 | 66·2 | 66·8 | 66·8 | 67·3 | 67·2 | 68·0 | 67·1 |
| 7 | 67·9 | 66·4 | 66·7 | 67·0 | 67·2 | 68·0 | 66·9 | 66·8 | 67·0 | 67·7 | 67·2 | 66·8 |
| 8 | 67·1 | 66·6 | 68·6 | 66·8 | 66·8 | 68·2 | 66·8 | 67·1 | 67·4 | 67·0 | 67·6 | 68·9 |
| 9 | 65·9 | 66·9 | 67·8 | 67·1 | 66·9 | 67·1 | 66·7 | 68·2 | 66·5 | 67·3 | 67·4 | 66·6 |
| 10 | 65·5 | 67·3 | 66·9 | 66·7 | 66·3 | 67·1 | 66·6 | 68·2 | 67·5 | 67·3 | 66·2 | 67·2 |
| 11 | 63·8 | 66·7 | 66·9 | 66·8 | 65·9 | ... | 66·8 | 67·3 | ... | 66·9 | 67·8 | 67·4 |
| 12 | 62·1 | 66·4 | 68·6 | 66·7 | 67·1 | 66·2 | 66·9 | 66·7 | ... | 67·2 | 68·6 | 67·3 |
| 13 | 62·5 | 66·7 | 66·8 | 67·3 | 65·9 | 66·9 | 66·9 | 66·8 | 68·2 | 67·0 | 67·2 | 67·7 |
| 14 | 65·8 | 68·0 | 66·3 | 67·2 | 66·4 | 67·1 | 67·3 | 66·9 | 66·9 | 67·2 | 68·6 | 67·9 |
| 15 | 67·0 | 67·5 | 66·9 | 68·3 | 67·6 | 66·6 | 66·5 | 66·6 | 66·2 | 67·5 | 66·9 | 70·6 |
| 16 | 68·0 | 66·4 | 68·1 | 67·8 | 68·3 | 67·1 | 67·3 | 65·9 | 67·3 | 67·5 | 66·9 | 67·2 |
| 17 | 67·0 | 67·5 | 67·7 | 66·4 | 67·6 | 66·9 | 66·6 | 66·7 | 67·9 | 66·8 | 67·5 | 66·7 |
| 18 | 66·4 | 66·8 | 66·8 | 66·9 | 67·3 | 66·2 | 66·7 | 66·4 | 67·2 | 67·0 | 67·4 | 67·1 |
| 19 | 66·1 | 65·7 | 67·5 | 66·5 | 66·0 | 66·6 | 67·5 | 67·0 | 67·2 | 66·7 | 67·9 | 66·8 |
| 20 | 67·1 | 66·3 | 67·0 | 66·8 | 67·2 | 66·4 | 67·2 | 66·2 | 69·2 | 67·1 | 66·7 | 68·6 |
| 21 | 66·6 | 67·1 | 68·1 | 67·8 | 67·0 | 66·0 | 67·9 | 66·5 | 67·1 | 67·0 | 66·7 | 68·1 |
| 22 | 66·2 | 65·8 | 67·4 | 66·7 | 66·8 | 66·5 | 66·6 | 66·6 | 67·1 | 67·5 | 67·5 | 67·2 |
| 23 | 66·8 | 66·5 | 67·7 | 67·7 | 67·6 | 67·2 | 67·6 | 65·0 | 66·8 | 67·6 | 66·8 | 66·8 |
| 24 | 66·5 | 66·3 | 65·9 | 66·4 | 67·1 | 67·6 | 67·7 | 66·8 | 67·1 | 65·9 | 67·8 | 68·1 |
| 25 | 65·6 | 66·9 | 66·9 | 67·1 | 65·5 | 66·6 | 68·2 | 66·7 | 67·3 | 68·0 | 67·5 | 67·7 |
| 26 | 67·5 | 67·3 | 67·5 | 66·7 | 66·6 | 66·6 | 67·4 | 66·7 | 66·8 | 68·4 | 66·8 | 67·2 |
| 27 | 68·2 | 68·0 | 67·4 | 68·3 | 67·1 | 66·6 | 67·5 | 66·5 | 65·9 | 67·5 | 67·4 | 66·4 |
| 28 | 67·0 | 66·0 | 67·2 | 67·6 | 67·6 | 66·3 | 67·6 | 66·9 | 67·0 | 68·8 | 67·0 | 65·9 |
| 29 | 66·2 | 66·3 | 67·1 | 67·9 | 65·7 | 66·9 | 67·4 | 66·0 | ... | 68·0 | 66·8 | 64·5 |
| 30 | 65·7 | | 67·8 | 66·6 | 68·0 | 67·6 | 67·4 | 66·5 | 67·0 | 67·9 | 68·5 | ... |
| 31 | 67·0 | | 67·6 | | 66·1 | | 68·2 | 67·0 | | 68·4 | | ... |
| Means | 65·54 | 66·74 | 66·99 | 67·19 | 66·95 | 66·95 | 67·25 | 66·87 | 67·11 | 67·31 | 67·39 | 67·30 |

## TABLE IX.—MONTHLY MEAN DIURNAL INEQUALITY OF VERTICAL MAGNETIC FORCE.

*(The results are expressed in terms of the whole Vertical Force, diminished in each case by the smallest hourly value, the unit in the table being ·00001 of the whole Vertical Force. The letters* u *and* c *indicate respectively values uncorrected for, and corrected for temperature.)*

1908.

| Hour, Greenwich Civil Time. | January. | | February. | | March. | | April. | | May. | | June. | | July. | | August. | | September. | | October. | | November. | | December. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* | *u* | *c* |
| Midnight. | 19 | 14 | 29 | 18 | 31 | 21 | 63 | 54 | 54 | 44 | 63 | 49 | 59 | 46 | 51 | 45 | 34 | 31 | 25 | 14 | 25 | 10 | 21 | 17 |
| 1h | 12 | 7 | 23 | 14 | 23 | 17 | 56 | 50 | 40 | 32 | 57 | 45 | 55 | 44 | 39 | 35 | 26 | 25 | 19 | 8 | 19 | 6 | 15 | 11 |
| 2 | 9 | 7 | 17 | 10 | 17 | 13 | 52 | 50 | 36 | 30 | 56 | 48 | 51 | 43 | 35 | 31 | 20 | 21 | 17 | 9 | 16 | 5 | 13 | 9 |
| 3 | 6 | 6 | 15 | 10 | 12 | 10 | 50 | 50 | 36 | 32 | 55 | 49 | 52 | 46 | 33 | 31 | 17 | 20 | 14 | 6 | 13 | 2 | 10 | 8 |
| 4 | 4 | 4 | 14 | 11 | 13 | 13 | 49 | 51 | 36 | 32 | 56 | 54 | 55 | 51 | 35 | 37 | 16 | 21 | 15 | 9 | 10 | 4 | 9 | 7 |
| 5 | 3 | 5 | 12 | 9 | 14 | 18 | 49 | 53 | 40 | 38 | 59 | 59 | 57 | 55 | 39 | 43 | 19 | 26 | 14 | 10 | 10 | 6 | 8 | 6 |
| 6 | 2 | 4 | 11 | 11 | 14 | 18 | 47 | 53 | 41 | 41 | 56 | 60 | 54 | 54 | 43 | 49 | 24 | 33 | 17 | 15 | 9 | 7 | 6 | 6 |
| 7 | 3 | 5 | 12 | 9 | 21 | 27 | 51 | 57 | 41 | 43 | 53 | 62 | 54 | 56 | 46 | 55 | 28 | 39 | 22 | 20 | 8 | 8 | 6 | 6 |
| 8 | 4 | 4 | 13 | 10 | 25 | 31 | 47 | 53 | 40 | 44 | 47 | 58 | 51 | 55 | 41 | 50 | 30 | 43 | 22 | 20 | 10 | 12 | 5 | 5 |
| 9 | 3 | 5 | 13 | 10 | 20 | 26 | 33 | 41 | 29 | 33 | 37 | 52 | 40 | 46 | 30 | 41 | 18 | 31 | 18 | 18 | 7 | 11 | 2 | 2 |
| 10 | 0 | 0 | 7 | 4 | 8 | 17 | 13 | 21 | 12 | 16 | 20 | 33 | 26 | 32 | 15 | 24 | 5 | 16 | 5 | 3 | 1 | 3 | 0 | 0 |
| 11 | 3 | 3 | 2 | 2 | 0 | 9 | 1 | 7 | 0 | 2 | 3 | 12 | 8 | 12 | 5 | 11 | 0 | 7 | 0 | 0 | 0 | 0 | 2 | 0 |
| Noon. | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 6 | 4 | 4 | 0 | 2 | 0 |
| 13h | 11 | 6 | 4 | 1 | 12 | 10 | 15 | 13 | 23 | 15 | 17 | 11 | 14 | 8 | 15 | 9 | 20 | 15 | 17 | 13 | 15 | 9 | 10 | 6 |
| 14 | 20 | 13 | 15 | 8 | 28 | 26 | 37 | 33 | 44 | 36 | 35 | 27 | 32 | 26 | 39 | 33 | 36 | 31 | 27 | 21 | 29 | 23 | 16 | 12 |
| 15 | 28 | 17 | 25 | 16 | 47 | 43 | 53 | 47 | 61 | 55 | 50 | 40 | 50 | 44 | 59 | 53 | 52 | 47 | 34 | 28 | 37 | 29 | 19 | 17 |
| 16 | 32 | 19 | 35 | 22 | 58 | 52 | 67 | 63 | 72 | 64 | 65 | 53 | 62 | 54 | 73 | 67 | 66 | 58 | 43 | 35 | 43 | 32 | 22 | 18 |
| 17 | 40 | 23 | 38 | 23 | 62 | 52 | 79 | 73 | 84 | 76 | 77 | 65 | 71 | 63 | 80 | 74 | 73 | 65 | 47 | 39 | 50 | 37 | 29 | 25 |
| 18 | 40 | 23 | 45 | 28 | 65 | 53 | 88 | 79 | 90 | 82 | 80 | 66 | 80 | 69 | 82 | 76 | 74 | 66 | 49 | 38 | 47 | 32 | 28 | 24 |
| 19 | 36 | 23 | 45 | 28 | 67 | 50 | 90 | 81 | 89 | 79 | 81 | 67 | 79 | 68 | 76 | 70 | 71 | 66 | 46 | 35 | 43 | 28 | 24 | 22 |
| 20 | 33 | 22 | 43 | 28 | 63 | 46 | 88 | 77 | 83 | 73 | 79 | 62 | 76 | 63 | 72 | 66 | 68 | 63 | 43 | 32 | 39 | 24 | 21 | 19 |
| 21 | 31 | 22 | 41 | 26 | 55 | 38 | 81 | 70 | 79 | 69 | 77 | 60 | 74 | 61 | 65 | 59 | 60 | 57 | 37 | 26 | 36 | 19 | 18 | 18 |
| 22 | 29 | 20 | 38 | 25 | 46 | 31 | 72 | 63 | 72 | 62 | 75 | 58 | 71 | 58 | 59 | 53 | 50 | 47 | 32 | 21 | 29 | 12 | 14 | 14 |
| 23 | 23 | 14 | 32 | 19 | 37 | 25 | 67 | 58 | 66 | 56 | 69 | 55 | 66 | 55 | 54 | 48 | 42 | 39 | 27 | 16 | 26 | 11 | 12 | 12 |
| Means corrected for Temperature. | 11·2 | | 14·3 | | 26·9 | | 49·9 | | 43·9 | | 47·7 | | 46·2 | | 44·2 | | 36·1 | | 18·3 | | 13·7 | | 11·0 | |

## TABLE X.—MONTHLY MEAN TEMPERATURE at each HOUR of the DAY within the box inclosing the VERTICAL FORCE MAGNET.

1908.

| Hour, Greenwich Civil Time. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | For the Year. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight. | 65°·5 | 66°·9 | 67°·3 | 67°·5 | 67°·2 | 67°·4 | 67°·6 | 67°·1 | 67°·3 | 67°·5 | 67°·7 | 67°·4 | 67°·20 |
| 1h | 65·5 | 66·8 | 67·1 | 67·4 | 67·1 | 67·3 | 67·5 | 67·0 | 67·2 | 67·5 | 67·6 | 67·4 | 67·12 |
| 2 | 65·4 | 66·7 | 67·0 | 67·2 | 67·0 | 67·1 | 67·4 | 67·0 | 67·1 | 67·4 | 67·5 | 67·4 | 67·02 |
| 3 | 65·3 | 66·6 | 66·9 | 67·1 | 66·9 | 67·0 | 67·3 | 66·9 | 67·0 | 67·4 | 67·5 | 67·3 | 66·93 |
| 4 | 65·3 | 66·5 | 66·8 | 67·0 | 66·9 | 66·8 | 67·2 | 66·7 | 66·9 | 67·3 | 67·3 | 67·3 | 66·83 |
| 5 | 65·2 | 66·5 | 66·6 | 66·9 | 66·8 | 66·7 | 67·1 | 66·6 | 66·8 | 67·2 | 67·2 | 67·3 | 66·74 |
| 6 | 65·2 | 66·4 | 66·6 | 66·8 | 66·7 | 66·5 | 67·0 | 66·5 | 66·7 | 67·1 | 67·1 | 67·2 | 66·65 |
| 7 | 65·2 | 66·5 | 66·5 | 66·8 | 66·6 | 66·3 | 66·9 | 66·4 | 66·6 | 67·1 | 67·0 | 67·2 | 66·59 |
| 8 | 65·3 | 66·5 | 66·5 | 66·8 | 66·5 | 66·2 | 66·8 | 66·4 | 66·5 | 67·1 | 66·9 | 67·2 | 66·56 |
| 9 | 65·2 | 66·5 | 66·5 | 66·7 | 66·5 | 66·0 | 66·7 | 66·3 | 66·5 | 67·0 | 66·8 | 67·2 | 66·49 |
| 10 | 65·3 | 66·5 | 66·4 | 66·7 | 66·5 | 66·1 | 66·7 | 66·4 | 66·6 | 67·1 | 66·9 | 67·2 | 66·53 |
| 11 | 65·3 | 66·4 | 66·4 | 66·8 | 66·6 | 66·3 | 66·8 | 66·5 | 66·8 | 67·0 | 67·0 | 67·3 | 66·60 |
| Noon. | 65·4 | 66·4 | 66·8 | 67·1 | 66·9 | 66·7 | 67·0 | 66·8 | 67·2 | 67·1 | 67·2 | 67·3 | 66·83 |
| 13h | 65·5 | 66·5 | 66·9 | 67·2 | 67·1 | 67·0 | 67·3 | 67·1 | 67·4 | 67·2 | 67·3 | 67·4 | 66·99 |
| 14 | 65·6 | 66·7 | 66·9 | 67·3 | 67·1 | 67·1 | 67·3 | 67·1 | 67·4 | 67·3 | 67·3 | 67·4 | 67·04 |
| 15 | 65·8 | 66·8 | 67·0 | 67·4 | 67·0 | 67·2 | 67·3 | 67·1 | 67·4 | 67·3 | 67·4 | 67·3 | 67·08 |
| 16 | 65·9 | 67·0 | 67·1 | 67·3 | 67·1 | 67·3 | 67·4 | 67·1 | 67·5 | 67·4 | 67·5 | 67·4 | 67·17 |
| 17 | 66·1 | 67·1 | 67·3 | 67·4 | 67·1 | 67·3 | 67·4 | 67·1 | 67·5 | 67·4 | 67·6 | 67·4 | 67·23 |
| 18 | 66·1 | 67·2 | 67·4 | 67·5 | 67·1 | 67·4 | 67·5 | 67·1 | 67·5 | 67·5 | 67·7 | 67·4 | 67·28 |
| 19 | 65·9 | 67·2 | 67·6 | 67·5 | 67·2 | 67·4 | 67·5 | 67·1 | 67·4 | 67·5 | 67·7 | 67·3 | 67·28 |
| 20 | 65·8 | 67·1 | 67·6 | 67·6 | 67·2 | 67·5 | 67·6 | 67·1 | 67·4 | 67·5 | 67·7 | 67·3 | 67·28 |
| 21 | 65·7 | 67·1 | 67·6 | 67·6 | 67·2 | 67·5 | 67·6 | 67·1 | 67·3 | 67·5 | 67·8 | 67·2 | 67·27 |
| 22 | 65·7 | 67·0 | 67·5 | 67·5 | 67·2 | 67·5 | 67·6 | 67·1 | 67·3 | 67·5 | 67·8 | 67·2 | 67·24 |
| 23 | 65·7 | 67·0 | 67·4 | 67·5 | 67·2 | 67·4 | 67·5 | 67·1 | 67·3 | 67·5 | 67·7 | 67·2 | 67·21 |

TABLE XI.—MEAN MAGNETIC DECLINATION, HORIZONTAL FORCE, and VERTICAL FORCE, in each MONTH.

(*The results for Horizontal Force and Vertical Force are corrected for Temperature.*)

| Month, 1908. | DECLINATION WEST in Arc. | HORIZONTAL FORCE in terms of the whole Horizontal Force (diminished by a Constant). | VERTICAL FORCE in terms of the whole Vertical Force (diminished by a Constant). | DECLINATION diminished by 15° and expressed as Westerly Force | HORIZONTAL FORCE (diminished by a Constant) | VERTICAL FORCE (diminished by a Constant) |
|---|---|---|---|---|---|---|
| | | | | in terms of GAUSS'S METRICAL UNIT. | | |
| January | 15° 56′·7 | 340 | 898 | 3056 | 630 | 3908 |
| February | 15. 56·6 | 333 | 890 | 3051 | 617 | 3873 |
| March | 15. 56·1 | 226 | 858 | 3024 | 419 | 3734 |
| April | 15. 54·4 | 216 | 862 | 2932 | 400 | 3751 |
| May | 15. 54·1 | 645 | 949 | 2916 | 1195 | 4130 |
| June | 15. 52·4 | 779 | 1044 | 2824 | 1443 | 4543 |
| July | 15. 52·3 | 873 | 1055 | 2819 | 1617 | 4591 |
| August | 15. 52·7 | 849 | 1096 | 2840 | 1573 | 4770 |
| September | 15. 52·3 | 820 | 1064 | 2819 | 1519 | 4630 |
| October | 15. 52·2 | 893 | 1079 | 2813 | 1655 | 4696 |
| November | 15. 50·7 | 617 | 946 | 2733 | 1143 | 4117 |
| December | 15. 51·5 | 547 | 837 | 2776 | 1013 | 3642 |
| Means | 15° 53′·5 | ..... | ..... | 2884 | ..... | ..... |
| Number of Column | 1 | 2 | 3 | 4 | 5 | 6 |

The units in columns 2 and 3 are ·00001 of the whole Horizontal and Vertical Forces respectively; in columns 4, 5, and 6 the unit is ·00001 of the Millimètre-Milligramme-Second Unit, or ·000001 of the Centimètre-Gramme-Second (C.G.S.) Unit, in terms of which units the values of the whole Horizontal Force (applicable to columns 4 and 5) are 1·8528 and 0·18528 respectively for the year, and of the whole Vertical Force (applicable to column 6) are 4·3518 and 0·43518 respectively for the year.

HORIZONTAL FORCE.—At the end of the year experiments were made for determination of the angle of torsion, thus breaking the continuity of the values.
VERTICAL FORCE.—At the end of the year the magnet was readjusted, thus breaking the continuity of the values.

TABLE XII.—MEAN DIURNAL INEQUALITIES OF MAGNETIC DECLINATION, HORIZONTAL FORCE, and VERTICAL FORCE, for the YEAR 1908.

(*Each result is the mean of the twelve monthly mean values, the annual means for each element being diminished by the smallest hourly value. The results for Horizontal Force and Vertical Force are corrected for temperature.*)

| Hour, Greenwich Civil Time. | Inequality of | | | Inequality of | | |
|---|---|---|---|---|---|---|
| | DECLINATION WEST in Arc. | HORIZONTAL FORCE in terms of the whole Horizontal Force. | VERTICAL FORCE in terms of the whole Vertical Force. | DECLINATION expressed as WESTERLY FORCE | HORIZONTAL FORCE | VERTICAL FORCE |
| | | | | in terms of GAUSS'S METRICAL UNIT. | | |
| Midnight. | 1′·11 | 147·4 | 29·7 | 59·8 | 273·1 | 129·2 |
| 1h | 1·39 | 145·1 | 23·9 | 74·9 | 268·8 | 104·0 |
| 2 | 1·56 | 144·0 | 22·4 | 84·1 | 266·8 | 97·5 |
| 3 | 1·59 | 144·1 | 21·9 | 85·7 | 267·0 | 95·3 |
| 4 | 1·40 | 144·3 | 23·9 | 75·5 | 267·4 | 104·0 |
| 5 | 0·97 | 141·4 | 26·7 | 52·3 | 262·0 | 116·2 |
| 6 | 0·61 | 129·0 | 28·6 | 32·9 | 239·0 | 124·5 |
| 7 | 0·22 | 102·2 | 31·7 | 11·9 | 189·4 | 138·0 |
| 8 | 0·00 | 64·2 | 31·5 | 0·0 | 118·9 | 137·1 |
| 9 | 0·53 | 23·5 | 25·7 | 28·6 | 43·5 | 111·8 |
| 10 | 2·10 | 0·0 | 13·5 | 113·2 | 0·0 | 58·7 |
| 11 | 4·44 | 2·3 | 4·8 | 239·3 | 4·3 | 20·9 |
| Noon. | 6·50 | 31·9 | 0·0 | 350·3 | 59·1 | 0·0 |
| 13h | 7·45 | 68·5 | 9·1 | 401·5 | 126·9 | 39·6 |
| 14 | 7·13 | 97·1 | 23·5 | 384·3 | 179·9 | 102·3 |
| 15 | 6·07 | 118·5 | 35·7 | 327·1 | 219·6 | 155·4 |
| 16 | 4·76 | 133·0 | 44·1 | 256·5 | 246·4 | 191·9 |
| 17 | 3·49 | 144·5 | 50·7 | 188·1 | 267·7 | 220·6 |
| 18 | 2·63 | 157·4 | 52·4 | 141·7 | 291·6 | 228·0 |
| 19 | 2·02 | 164·4 | 50·8 | 108·9 | 304·6 | 221·1 |
| 20 | 1·63 | 165·5 | 47·3 | 87·9 | 306·6 | 205·8 |
| 21 | 1·19 | 161·1 | 43·1 | 64·1 | 298·5 | 187·6 |
| 22 | 0·97 | 155·9 | 38·1 | 52·3 | 288·9 | 165·8 |
| 23 | 0·98 | 152·4 | 33·4 | 52·8 | 282·4 | 145·4 |
| Means . . . | 2′·53 | 114·1 | 29·7 | 136·4 | 211·4 | 129·2 |
| Number of Column . | 1 | 2 | 3 | 4 | 5 | 6 |

The units in columns 2 and 3 are ·00001 of the whole Horizontal and Vertical Forces respectively; in columns 4, 5, and 6 the unit is ·00001 of the Millimètre-Milligramme-Second Unit, or ·000001 of the Centimètre-Gramme-Second (C.G.S.) Unit, in terms of which units the values of the whole Horizontal Force (applicable to columns 4 and 5) are 1·8528 and 0·18528 respectively, and of the whole Vertical Force (applicable to column 6) are 4·3518 and 0·43518 respectively.

TABLE XIII.—DIURNAL RANGE OF DECLINATION AND HORIZONTAL FORCE, on each CIVIL DAY, as deduced from the TWENTY-FOUR HOURLY MEASURES of ORDINATES of the PHOTOGRAPHIC REGISTER.

(*The Declination is expressed in minutes of arc; the unit for Horizontal Force is ·00001 of the whole Horizontal Force. The results for Horizontal Force are corrected for temperature.*)

1908.

| Day of Month. | January. | | February. | | March. | | April. | | May. | | June. | | July. | | August. | | September. | | October. | | November. | | December. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dec. | H.F. | Dec. | H.F. | Dec. | H.F. | Dec. | H.F. | Dec. | H.F. | Dec. | H.F. | Dec. | H.F. | Dec. | H.F. | Dec. | H.F. | Dec. | H.F. | Dec. | H.F. | Dec. | H.F. |
| d | ′ | | ′ | | ′ | | ′ | | ′ | | ′ | | ′ | | ′ | | ′ | | ′ | | ′ | | ′ | |
| 1 | 3·3 | 118 | 6·6 | 118 | 19·3 | 210 | 14·6 | 338 | 13·3 | 433 | 14·1 | 377 | 9·7 | 304 | 15·2 | 379 | 11·9 | 341 | 9·0 | 349 | 7·4 | 234 | 4·9 | 129 |
| 2 | 5·2 | 213 | 5·2 | 164 | 9·6 | 344 | 14·4 | 382 | 15·4 | 463 | 12·0 | 207 | 12·2 | 274 | 12·3 | 327 | 11·1 | 263 | 8·2 | 207 | 6·1 | 138 | 3·4 | 83 |
| 3 | 4·3 | 239 | 8·1 | 253 | 12·2 | 238 | 15·8 | 302 | 12·6 | 292 | 14·4 | 372 | 11·3 | 279 | 14·2 | 491 | 12·0 | 233 | ... | 262 | 4·5 | 175 | 3·2 | 147 |
| 4 | 5·5 | 193 | 8·6 | 180 | 14·8 | 286 | 13·7 | 317 | 9·5 | 299 | 10·0 | 307 | 10·3 | 350 | 13·8 | 329 | ... | ... | ... | 339 | 3·9 | 95 | 16·4 | 349 |
| 5 | 8·9 | 258 | 14·2 | 208 | 7·0 | 249 | 15·4 | 317 | 8·7 | 232 | 7·2 | 187 | 11·3 | 239 | 10·2 | 322 | ... | ... | ... | 209 | 5·1 | 168 | 13·0 | 334 |
| 6 | 4·6 | 210 | 13·7 | 360 | 12·5 | 223 | 13·0 | 347 | 7·4 | 281 | 8·2 | 140 | 9·5 | 284 | 11·4 | 247 | 10·0 | 316 | ... | 289 | 5·0 | 186 | 8·0 | 155 |
| 7 | 9·7 | 278 | 11·2 | 236 | 9·0 | 222 | 9·0 | 344 | 6·6 | 167 | 8·7 | 257 | 13·2 | 159 | 10·3 | 369 | 9·8 | 224 | ... | 285 | 3·8 | 247 | 3·6 | 136 |
| 8 | 13·3 | 204 | 6·0 | 150 | 12·8 | 234 | 12·9 | 288 | 6·0 | 186 | 8·2 | 174 | 8·7 | 137 | 10·7 | 342 | 9·7 | 386 | ... | 315 | 17·3 | 556 | 3·3 | 158 |
| 9 | 14·7 | 267 | 5·9 | 188 | 8·3 | 377 | 10·0 | 283 | 9·3 | 238 | 8·3 | 358 | 11·7 | 236 | 12·5 | 807 | 14·0 | 254 | ... | 340 | 7·1 | 237 | 4·0 | 92 |
| 10 | 6·5 | 144 | 7·3 | 138 | 5·2 | 103 | 10·5 | 226 | 13·6 | 240 | 11·0 | 244 | 8·8 | 172 | 14·5 | 262 | 15·8 | 710 | 10·4 | 275 | 7·0 | 335 | 3·9 | 90 |
| 11 | 6·4 | 180 | 13·7 | 303 | 6·5 | 161 | 11·0 | 248 | 14·1 | 372 | 11·2 | 205 | 13·3 | 212 | 15·2 | 293 | ... | ... | 11·4 | 257 | 8·2 | 287 | 3·7 | 71 |
| 12 | 3·7 | 126 | 13·6 | 200 | 5·9 | 270 | 12·9 | 236 | 12·5 | 233 | 11·1 | 264 | 9·5 | 179 | 14·3 | 405 | ... | ... | 22·7 | 232 | 8·1 | 248 | 3·2 | 103 |
| 13 | 4·1 | 117 | 4·7 | 134 | 8·5 | 187 | 11·3 | 195 | 12·2 | 232 | 8·0 | 226 | 11·5 | 162 | 11·8 | 496 | 12·8 | 338 | 16·7 | 335 | 6·1 | 175 | 9·1 | 283 |
| 14 | 4·6 | 40 | 6·5 | 115 | 10·6 | 264 | 11·0 | 187 | 12·0 | 302 | 10·6 | 274 | 9·3 | 267 | 10·9 | 446 | 11·2 | 390 | 11·0 | 349 | 8·8 | 170 | 3·0 | 148 |
| 15 | 6·9 | 136 | 4·7 | 105 | 11·6 | 220 | 19·0 | 338 | 12·0 | 258 | 11·0 | 236 | 12·8 | 527 | 12·6 | 337 | 10·8 | 361 | 5·3 | 196 | 10·7 | 187 | 3·8 | 92 |
| 16 | 3·3 | 115 | 7·2 | 238 | 12·0 | 265 | 14·0 | 225 | 13·2 | 302 | 9·1 | 247 | 18·3 | 420 | 11·8 | 281 | 13·9 | 456 | 7·3 | 187 | 4·6 | 172 | 2·8 | 91 |
| 17 | 5·4 | 82 | 7·5 | 135 | 12·8 | 197 | 11·2 | 354 | 11·9 | 334 | 11·9 | 328 | 11·0 | 501 | 12·0 | 224 | 6·5 | 464 | 8·0 | 320 | 21·2 | 550 | 4·5 | 125 |
| 18 | 3·5 | 170 | 7·5 | 122 | 11·2 | 192 | 11·6 | 230 | 12·0 | 379 | 12·5 | 296 | 8·9 | 239 | 10·4 | 284 | 11·5 | 359 | 8·2 | 270 | 12·3 | 298 | 6·3 | 63 |
| 19 | 2·3 | 84 | 10·5 | 150 | 12·7 | 289 | 12·5 | 267 | 12·7 | 281 | 14·0 | 339 | 9·4 | 344 | 11·3 | 628 | 8·5 | 316 | 6·2 | 195 | 6·3 | 175 | 5·5 | 132 |
| 20 | 2·0 | 85 | 7·7 | 168 | 14·5 | 357 | 9·6 | 248 | 9·6 | 213 | 8·0 | 345 | 8·9 | 260 | 11·3 | 427 | 9·3 | 183 | 6·6 | 185 | 4·0 | 182 | 3·8 | 63 |
| 21 | 4·9 | 169 | 5·3 | 157 | 8·6 | 156 | 9·8 | 297 | 13·1 | 231 | 9·0 | 289 | 9·0 | 274 | 16·2 | 238 | 7·9 | 228 | 6·8 | 248 | 4·5 | 162 | 2·9 | 40 |
| 22 | 4·4 | 89 | 11·4 | 354 | 9·2 | 217 | 14·0 | 201 | 9·4 | 236 | 11·8 | 249 | 7·0 | 280 | 13·3 | 335 | 9·0 | 271 | 7·2 | 135 | 3·9 | 152 | 4·6 | 132 |
| 23 | 5·3 | 144 | 12·4 | 277 | 9·0 | 279 | 14·7 | 265 | 9·6 | 481 | 11·2 | 304 | 9·0 | 231 | 9·8 | 260 | 6·7 | 197 | 8·2 | 260 | 3·8 | 111 | 4·0 | 143 |
| 24 | 5·6 | 279 | 12·6 | 172 | 10·5 | 195 | 12·2 | 227 | 10·9 | 303 | 13·5 | 385 | 10·2 | 328 | 10·3 | 399 | 11·7 | 237 | 7·7 | 184 | 7·8 | 145 | 2·0 | 93 |
| 25 | 6·9 | 148 | 5·0 | 95 | 8·8 | 288 | 10·3 | 277 | 13·0 | 405 | 13·1 | 404 | 11·5 | 307 | 13·6 | 312 | 8·8 | 300 | 6·9 | 239 | 5·6 | 150 | 2·7 | 128 |
| 26 | 7·0 | 143 | 6·0 | 155 | 27·1 | 669 | 9·6 | 286 | 20·0 | 730 | 12·3 | 472 | 9·9 | 239 | 12·5 | 286 | 8·7 | 247 | 8·1 | 187 | 4·8 | 137 | 4·7 | 312 |
| 27 | 12·2 | 207 | 5·3 | 180 | 17·5 | 512 | 9·4 | 381 | 11·1 | 504 | 9·2 | 340 | 10·4 | 192 | 10·8 | 247 | 10·8 | 233 | 7·2 | 147 | 4·0 | 115 | 4·0 | 131 |
| 28 | 9·5 | 178 | 9·2 | 145 | 11·0 | 480 | 9·0 | 303 | 14·2 | 253 | 9·5 | 406 | 8·3 | 257 | 13·1 | 350 | 13·3 | 432 | 6·1 | 159 | 7·9 | 215 | 2·6 | 74 |
| 29 | 10·4 | 502 | 10·6 | 230 | 14·8 | 324 | 9·5 | 321 | 11·3 | 394 | 12·8 | 402 | 10·8 | 309 | 13·5 | 307 | ... | ... | 7·3 | 206 | 6·4 | 79 | 4·1 | 139 |
| 30 | 6·4 | 147 | | | 12·6 | 309 | 11·5 | 381 | 10·0 | 367 | 11·0 | 366 | 11·7 | 379 | 12·0 | 369 | 29·1 | 587 | 7·4 | 272 | 2·4 | 83 | 4·4 | 157 |
| 31 | 5·3 | 90 | | | 15·0 | 294 | | | 12·0 | 349 | | | 13·0 | 297 | 9·7 | 312 | | | 14·5 | 448 | | | 4·5 | ... |
| Means | 6·3 | 173 | 8·6 | 187 | 11·6 | 278 | 12·1 | 287 | 11·6 | 322 | 10·8 | 300 | 10·7 | 279 | 12·3 | 358 | 11·4 | 333 | 9·1 | 254 | 7·0 | 205 | 4·8 | 140 |

The mean of the twelve monthly values is, for Declination 9′·69, and for Horizontal Force 259·7.

TABLE XIV.—MONTHLY MEAN DIURNAL RANGE, and SUMS of HOURLY DEVIATIONS from MEAN, for DECLINATION, HORIZONTAL FORCE, and VERTICAL FORCE, as deduced from the Monthly Mean Diurnal Inequalities, Tables II., V., and IX.

(*The Declination is expressed in minutes of arc: the units for Horizontal Force and Vertical Force are ·00001 of the whole Horizontal and Vertical Forces respectively. The results for Horizontal Force and Vertical Force are corrected for temperature.*)

| Month, 1908. | Difference between the Greatest and Least of the 24 Hourly Values. | | | Sums of the 24 Hourly Deviations from the Mean Value. | | |
|---|---|---|---|---|---|---|
| | Declination. | Horizontal Force. | Vertical Force. | Declination. | Horizontal Force. | Vertical Force. |
| | ′ | | | ′ | | |
| January | 4·8 | 108 | 23 | 27·2 | 582 | 173 |
| February | 6·6 | 118 | 28 | 37·0 | 610 | 180 |
| March | 8·5 | 160 | 53 | 53·1 | 944 | 308 |
| April | 10·9 | 223 | 81 | 58·6 | 1418 | 373 |
| May | 10·0 | 265 | 82 | 57·7 | 1744 | 442 |
| June | 9·9 | 246 | 67 | 56·3 | 1577 | 329 |
| July | 9·1 | 230 | 69 | 51·1 | 1455 | 323 |
| August | 11·1 | 294 | 76 | 59·2 | 1873 | 382 |
| September | 9·2 | 277 | 66 | 54·3 | 1568 | 385 |
| October | 6·9 | 184 | 39 | 38·9 | 1188 | 226 |
| November | 5·4 | 111 | 37 | 28·9 | 693 | 230 |
| December | 3·7 | 69 | 25 | 19·6 | 390 | 154 |
| Means | 8′·01 | 190·4 | 53·8 | 45′·16 | 1170·2 | 292·1 |

TABLE XV.—VALUES of the CO-EFFICIENTS in the PERIODICAL EXPRESSION

$$V_t = m + a_1 \cos t + b_1 \sin t + a_2 \cos 2t + b_2 \sin 2t + a_3 \cos 3t + b_3 \sin 3t + a_4 \cos 4t + b_4 \sin 4t$$

(in which $t$ is the time from Greenwich mean midnight converted into arc at the rate of 15° to each hour, and $V_t$ the mean value of the magnetic element at the time $t$ for each month and for the year, as given in Tables II., V., IX., and XII., the values for Horizontal Force and Vertical Force being corrected for temperature).

The values of the co-efficients for Declination are given in minutes of arc : the units for Horizontal Force and Vertical Force are ·00001 of the whole Horizontal and Vertical Forces respectively.

| Month, 1908. | $m$ | $a_1$ | $b_1$ | $a_2$ | $b_2$ | $a_3$ | $b_3$ | $a_4$ | $b_4$ |
|---|---|---|---|---|---|---|---|---|---|
| | DECLINATION WEST. | | | | | | | | |
| January | 1′·88 | − 1′·65 | − 0′·46 | + 0′·24 | + 0′·77 | − 0′·25 | − 0′·08 | + 0′·03 | + 0′·20 |
| February | 2·40 | − 1·88 | − 0·85 | + 0·31 | + 1·57 | − 0·36 | − 0·44 | + 0·15 | + 0·36 |
| March | 2·57 | − 2·57 | − 1·06 | + 1·19 | + 2·02 | − 0·48 | − 0·73 | + 0·22 | + 0·36 |
| April | 4·24 | − 2·33 | − 2·10 | + 1·54 | + 2·15 | − 0·88 | − 0·62 | + 0·38 | + 0·14 |
| May | 4·12 | − 2·47 | − 2·19 | + 1·62 | + 1·60 | − 0·86 | − 0·24 | + 0·20 | − 0·04 |
| June | 4·45 | − 1·61 | − 2·88 | + 1·42 | + 1·84 | − 0·60 | − 0·36 | + 0·10 | + 0·14 |
| July | 4·02 | − 1·58 | − 2·60 | + 1·41 | + 1·57 | − 0·61 | − 0·35 | + 0·01 | + 0·13 |
| August | 4·39 | − 2·38 | − 2·40 | + 2·15 | + 1·65 | − 0·82 | − 0·46 | + 0·02 | + 0·20 |
| September | 2·95 | − 2·68 | − 1·58 | + 1·47 | + 1·33 | − 0·95 | − 0·76 | + 0·25 | + 0·08 |
| October | 2·03 | − 1·96 | − 0·56 | + 0·94 | + 1·53 | − 0·67 | − 0·52 | + 0·42 | + 0·27 |
| November | 2·04 | − 1·80 | − 0·24 | + 0·35 | + 0·92 | − 0·40 | − 0·32 | + 0·21 | + 0·10 |
| December | 1·52 | − 1·23 | − 0·10 | + 0·26 | + 0·62 | − 0·31 | + 0·03 | + 0·29 | + 0·02 |
| For the Year | 2·53 | − 2·01 | − 1·42 | + 1·08 | + 1·46 | − 0·60 | − 0·40 | + 0·18 | + 0·17 |
| | HORIZONTAL FORCE. | | | | | | | | |
| January | 52·8 | + 20·3 | + 26·8 | − 18·8 | + 1·7 | + 7·1 | − 9·4 | + 1·2 | + 5·5 |
| February | 75·3 | + 30·0 | + 18·7 | − 22·4 | + 4·1 | + 11·3 | − 9·0 | − 3·1 | + 7·9 |
| March | 112·6 | + 55·1 | − 14·9 | − 29·7 | + 14·5 | − 0·5 | − 17·8 | − 0·8 | + 8·4 |
| April | 161·7 | + 78·6 | − 36·5 | − 37·8 | + 26·9 | + 11·2 | − 19·9 | + 0·9 | + 8·0 |
| May | 160·9 | + 77·4 | − 83·3 | − 23·6 | + 30·8 | − 9·3 | − 6·6 | + 7·5 | − 2·7 |
| June | 147·2 | + 75·5 | − 63·5 | − 37·3 | + 25·8 | + 2·9 | − 5·6 | + 3·3 | + 3·0 |
| July | 138·0 | + 69·0 | − 60·1 | − 31·6 | + 25·8 | − 2·7 | − 9·9 | + 5·1 | + 0·8 |
| August | 195·5 | + 87·0 | − 82·2 | − 25·8 | + 42·0 | − 4·2 | − 19·7 | + 1·4 | + 7·6 |
| September | 189·9 | + 87·0 | − 48·2 | − 29·4 | + 33·0 | − 5·0 | − 31·8 | + 1·4 | + 6·6 |
| October | 134·7 | + 70·5 | − 10·3 | − 31·4 | + 21·9 | + 3·7 | − 19·7 | + 6·1 | + 8·7 |
| November | 64·2 | + 37·9 | + 11·1 | − 20·2 | + 6·3 | − 2·5 | − 12·3 | + 2·2 | + 6·7 |
| December | 29·7 | + 8·6 | + 20·2 | − 13·4 | + 0·7 | − 6·0 | − 3·7 | + 1·7 | + 6·5 |
| For the Year | 114·1 | + 58·1 | − 26·8 | − 26·8 | + 19·3 | + 0·5 | − 13·8 | + 2·2 | + 5·6 |
| | VERTICAL FORCE. | | | | | | | | |
| January | 11·2 | + 3·4 | − 9·8 | − 3·1 | − 0·7 | + 1·0 | − 0·7 | − 0·6 | − 0·1 |
| February | 14·3 | + 6·6 | − 8·3 | − 5·1 | − 2·5 | + 1·8 | + 0·2 | − 1·0 | − 0·5 |
| March | 26·9 | + 1·2 | − 15·4 | − 12·7 | − 3·0 | + 7·0 | + 0·8 | − 3·0 | + 0·2 |
| April | 49·9 | + 18·3 | − 11·2 | − 19·5 | − 3·0 | + 6·6 | + 0·3 | − 2·6 | + 1·8 |
| May | 43·9 | + 12·9 | − 20·2 | − 18·9 | − 4·4 | + 7·5 | − 2·2 | − 2·5 | + 0·4 |
| June | 47·7 | + 14·8 | − 1·9 | − 18·3 | − 4·7 | + 7·3 | + 0·3 | − 2·9 | − 0·7 |
| July | 46·2 | + 14·6 | − 4·9 | − 18·0 | − 4·7 | + 6·8 | + 0·5 | − 3·2 | − 1·2 |
| August | 44·2 | + 9·6 | − 13·2 | − 20·0 | − 4·1 | + 9·8 | − 0·6 | − 1·8 | − 0·6 |
| September | 36·1 | + 6·5 | − 17·5 | − 16·5 | − 5·3 | + 7·2 | − 1·2 | − 2·8 | + 1·7 |
| October | 18·3 | + 0·4 | − 11·7 | − 9·5 | − 1·0 | + 4·3 | − 1·0 | − 1·0 | + 1·8 |
| November | 13·7 | − 1·2 | − 12·6 | − 7·5 | + 1·5 | + 4·4 | − 0·1 | − 1·4 | + 0·7 |
| December | 11·0 | + 4·0 | − 8·5 | − 3·8 | + 1·3 | + 1·9 | + 0·3 | + 0·3 | + 0·6 |
| For the Year | 29·7 | + 7·6 | − 11·3 | − 12·7 | − 2·6 | + 5·5 | − 0·3 | − 1·9 | + 0·4 |

TABLE XVI.—VALUES of the CO-EFFICIENTS and CONSTANT ANGLES in the PERIODICAL EXPRESSIONS

$$V_t = m + c_1 \sin(t + \alpha) + c_2 \sin(2t + \beta) + c_3 \sin(3t + \gamma) + c_4 \sin(4t + \delta)$$
$$V_{t'} = m + c_1 \sin(t' + \alpha') + c_2 \sin(2t' + \beta') + c_3 \sin(3t' + \gamma') + c_4 \sin(4t' + \delta')$$

(in which $t$ and $t'$ are the times from Greenwich mean midnight and apparent midnight respectively, converted into arc at the rate of 15° to each hour, and $V_t$, $V_{t'}$ the mean value of the magnetic element at the time $t$ or $t'$ for each month and for the year, as given in Tables II., V., IX., and XII., the values for Horizontal Force and Vertical Force being corrected for temperature).

The values of the co-efficients for Declination are given in minutes of arc: the units for Horizontal Force and Vertical Force are ·00001 of the whole Horizontal and Vertical Forces respectively.

| Month, 1908. | $m$ | $c_1$ | $\alpha$ | $\alpha'$ | $c_2$ | $\beta$ | $\beta'$ | $c_3$ | $\gamma$ | $\gamma'$ | $c_4$ | $\delta$ | $\delta'$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | DECLINATION WEST. | | | | | | | |
| | ′ | ′ | ° ′ | ° ′ | ′ | ° ′ | ° ′ | ′ | ° ′ | ° ′ | ′ | ° ′ | ° ′ |
| January | 1·88 | 1·72 | 254. 24 | 256. 40 | 0·81 | 17. 25 | 21. 58 | 0·26 | 251. 34 | 258. 23 | 0·20 | 9. 23 | 18. 29 |
| February | 2·40 | 2·06 | 245. 34 | 249. 3 | 1·60 | 11. 14 | 18. 12 | 0·57 | 219. 43 | 230. 10 | 0·39 | 22. 34 | 36. 30 |
| March | 2·57 | 2·78 | 247. 38 | 249. 48 | 2·34 | 30. 30 | 34. 51 | 0·87 | 213. 32 | 220. 3 | 0·42 | 30. 59 | 39. 40 |
| April | 4·24 | 3·13 | 227. 57 | 228. 0 | 2·64 | 35. 35 | 35. 41 | 1·07 | 234. 52 | 235. 1 | 0·40 | 68. 58 | 69. 9 |
| May | 4·12 | 3·30 | 228. 24 | 227. 32 | 2·28 | 45. 28 | 43. 45 | 0·89 | 254. 18 | 251. 43 | 0·20 | 100. 22 | 96. 56 |
| June | 4·45 | 3·30 | 209. 9 | 209. 14 | 2·32 | 37. 44 | 37. 54 | 0·70 | 239. 4 | 239. 19 | 0·17 | 34. 53 | 35. 13 |
| July | 4·02 | 3·04 | 211. 13 | 212. 35 | 2·11 | 41. 54 | 44. 38 | 0·70 | 239. 52 | 243. 58 | 0·13 | 3. 40 | 9. 8 |
| August | 4·39 | 3·38 | 224. 49 | 225. 47 | 2·71 | 52. 31 | 54. 26 | 0·94 | 240. 37 | 243. 30 | 0·20 | 6. 6 | 9. 56 |
| September | 2·95 | 3·11 | 239. 24 | 238. 10 | 1·98 | 47. 57 | 45. 29 | 1·21 | 231. 15 | 227. 33 | 0·27 | 72. 42 | 67. 46 |
| October | 2·03 | 2·04 | 254. 1 | 250. 32 | 1·80 | 31. 31 | 24. 32 | 0·85 | 232. 15 | 221. 47 | 0·50 | 56. 39 | 42. 42 |
| November | 2·04 | 1·82 | 262. 18 | 258. 37 | 0·99 | 20. 52 | 13. 30 | 0·51 | 231. 44 | 220. 41 | 0·23 | 64. 10 | 49. 26 |
| December | 1·52 | 1·23 | 265. 23 | 264. 20 | 0·67 | 22. 36 | 20. 31 | 0·31 | 276. 14 | 273. 6 | 0·20 | 83. 57 | 79. 46 |
| For the Year | 2·53 | 2·46 | 234. 47 | 234. 47 | 1·82 | 36. 19 | 36. 19 | 0·72 | 236. 2 | 236. 2 | 0·25 | 47. 39 | 47. 39 |
| | | | | | | HORIZONTAL FORCE. | | | | | | | |
| | | | ° ′ | ° ′ | | ° ′ | ° ′ | | ° ′ | ° ′ | | ° ′ | ° ′ |
| January | 52·8 | 33·6 | 37. 11 | 39. 27 | 18·9 | 275. 8 | 279. 41 | 11·8 | 143. 2 | 149. 51 | 5·6 | 12. 1 | 21. 7 |
| February | 75·3 | 35·4 | 58. 5 | 61. 34 | 22·8 | 280. 21 | 287. 19 | 14·4 | 128. 28 | 138. 55 | 8·5 | 338. 47 | 352. 43 |
| March | 112·6 | 57·1 | 105. 7 | 107. 17 | 33·1 | 296. 0 | 300. 21 | 17·8 | 181. 29 | 188. 0 | 8·4 | 354. 53 | 3. 34 |
| April | 161·7 | 86·7 | 114. 55 | 114. 58 | 46·4 | 305. 26 | 305. 32 | 22·8 | 150. 43 | 150. 52 | 8·1 | 6. 14 | 6. 25 |
| May | 160·9 | 113·7 | 137. 6 | 136. 14 | 38·8 | 322. 32 | 320. 49 | 11·4 | 234. 35 | 232. 0 | 8·0 | 109. 28 | 106. 2 |
| June | 147·2 | 98·7 | 130. 6 | 130. 11 | 45·3 | 304. 39 | 304. 49 | 6·3 | 152. 23 | 152. 38 | 4·4 | 48. 3 | 48. 23 |
| July | 138·0 | 91·5 | 131. 3 | 132. 25 | 40·8 | 309. 13 | 311. 57 | 10·2 | 195. 7 | 199. 13 | 5·2 | 81. 13 | 86. 41 |
| August | 195·5 | 119·7 | 133. 22 | 134. 20 | 49·3 | 328. 26 | 330. 21 | 20·2 | 192. 2 | 194. 55 | 7·7 | 10. 17 | 14. 7 |
| September | 189·9 | 99·5 | 118. 58 | 117. 44 | 44·2 | 318. 23 | 315. 55 | 32·2 | 188. 59 | 185. 17 | 6·7 | 11. 50 | 6. 54 |
| October | 134·7 | 71·3 | 98. 19 | 94. 50 | 38·3 | 304. 57 | 297. 58 | 20·0 | 169. 14 | 158. 46 | 10·7 | 35. 3 | 21. 6 |
| November | 64·2 | 39·5 | 73. 42 | 70. 1 | 21·1 | 287. 24 | 280. 2 | 12·6 | 191. 15 | 180. 12 | 7·1 | 18. 13 | 3. 29 |
| December | 29·7 | 22·0 | 22. 54 | 21. 51 | 13·4 | 267. 12 | 265. 7 | 7·1 | 238. 36 | 235. 28 | 6·7 | 14. 24 | 10. 13 |
| For the Year | 114·1 | 64·0 | 114. 48 | 114. 48 | 33·1 | 305. 49 | 305. 49 | 13·8 | 177. 55 | 177. 55 | 6·0 | 21. 55 | 21. 55 |
| | | | | | | VERTICAL FORCE. | | | | | | | |
| | | | ° ′ | ° ′ | | ° ′ | ° ′ | | ° ′ | ° ′ | | ° ′ | ° ′ |
| January | 11·2 | 10·4 | 161. 4 | 163. 20 | 3·2 | 256. 55 | 261. 28 | 1·2 | 124. 33 | 131. 22 | 0·6 | 263. 9 | 272. 15 |
| February | 14·3 | 10·6 | 141. 47 | 145. 16 | 5·7 | 244. 29 | 251. 27 | 1·8 | 82. 21 | 92. 48 | 1·1 | 242. 3 | 255. 59 |
| March | 26·9 | 15·4 | 175. 30 | 177. 40 | 13·0 | 256. 36 | 260. 57 | 7·0 | 83. 8 | 89. 39 | 3·0 | 274. 11 | 282. 52 |
| April | 49·9 | 21·5 | 121. 25 | 121. 28 | 19·8 | 261. 20 | 261. 26 | 6·6 | 87. 14 | 87. 23 | 3·2 | 304. 34 | 304. 45 |
| May | 43·9 | 24·0 | 147. 32 | 146. 40 | 19·4 | 256. 50 | 255. 7 | 7·8 | 106. 34 | 103. 59 | 2·5 | 279. 50 | 276. 24 |
| June | 47·7 | 14·9 | 97. 19 | 97. 24 | 18·9 | 255. 42 | 255. 52 | 7·3 | 87. 18 | 87. 33 | 2·9 | 257. 16 | 257. 36 |
| July | 46·2 | 15·4 | 108. 43 | 110. 5 | 18·6 | 255. 13 | 257. 57 | 6·9 | 85. 49 | 89. 55 | 3·4 | 249. 6 | 254. 34 |
| August | 44·2 | 16·3 | 143. 49 | 144. 47 | 20·4 | 258. 25 | 260. 20 | 9·8 | 93. 39 | 96. 32 | 1·9 | 252. 35 | 256. 25 |
| September | 36·1 | 18·6 | 159. 44 | 158. 30 | 17·4 | 252. 8 | 249. 40 | 7·3 | 99. 25 | 95. 43 | 3·3 | 301. 27 | 296. 31 |
| October | 18·3 | 11·7 | 177. 50 | 174. 21 | 9·6 | 263. 53 | 256. 54 | 4·4 | 102. 59 | 92. 31 | 2·0 | 332. 5 | 318. 8 |
| November | 13·7 | 12·6 | 185. 25 | 181. 44 | 7·6 | 281. 16 | 273. 54 | 4·4 | 90. 39 | 79. 36 | 1·6 | 297. 6 | 282. 22 |
| December | 11·0 | 9·4 | 154. 28 | 153. 25 | 4·1 | 289. 4 | 286. 59 | 2·0 | 82. 23 | 79. 15 | 0·7 | 30. 6 | 25. 55 |
| For the Year | 29·7 | 13·6 | 146. 1 | 146. 1 | 13·0 | 258. 39 | 258. 39 | 5·5 | 92. 49 | 92. 49 | 1·9 | 280. 59 | 280. 59 |

TABLE XVII.—RESULTS of OBSERVATIONS of MAGNETIC DIP made in the MAGNETIC PAVILION in the YEAR 1908.

| Greenwich Civil Time, 1908. | 3-inch Needle. | Magnetic Dip. | Observer. | Greenwich Civil Time, 1908. | 3-inch Needle. | Magnetic Dip. | Observer. | Greenwich Civil Time, 1908. | 3-inch Needle. | Magnetic Dip. | Observer. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| d h | | ° ′ ″ | | d h | | ° ′ ″ | | d h | | ° ′ ″ | |
| Jan. 2. 12 | $D_1$ | 66. 52. 10 | B | May 1. 15 | $D_1$ | 66. 52. 33 | B | Sept. 2. 12 | $D_1$ | 66. 53. 44 | B |
| 4. 13 | $D_2$ | 66. 57. 9 | B | 5. 13 | $D_2$ | 66. 56. 43 | B | 4. 12 | $D_2$ | 66. 54. 30 | B |
| 6. 11 | $D_1$ | 66. 53. 49 | B | 7. 13 | $D_1$ | 66. 53. 57 | B | 7. 16 | $D_1$ | 66. 55. 0 | B |
| 9. 13 | $D_2$ | 66. 57. 36 | B | 9. 12 | $D_2$ | 66. 56. 53 | B | 11. 12 | $D_2$ | 66. 55. 49 | B |
| 13. 13 | $D_1$ | 66. 55. 41 | B | 11. 12 | $D_1$ | 66. 53. 17 | B | 11. 12 | $D_1$ | 66. 54. 34 | B |
| 15. 13 | $D_2$ | 66. 57. 1 | B | 14. 13 | $D_2$ | 66. 58. 37 | B | 14. 12 | $D_2$ | 66. 57. 1 | B |
| 17. 12 | $D_2$ | 66. 56. 51 | E | 18. 12 | $D_2$ | 66. 58. 16 | E | 16. 12 | $D_2$ | 66. 59. 24 | E |
| 20. 12 | $D_1$ | 66. 55. 8 | E | 19. 12 | $D_1$ | 66. 54. 48 | E | 17. 12 | $D_1$ | 66. 54. 47 | E |
| 22. 12 | $D_2$ | 66. 57. 10 | E | 22. 12 | $D_2$ | 66. 58. 1 | E | 22. 12 | $D_2$ | 67. 0. 13 | E |
| 24. 12 | $D_1$ | 66. 55. 39 | E | 26. 12 | $D_1$ | 66. 55. 42 | E | 24. 12 | $D_1$ | 66. 55. 33 | E |
| 28. 12 | $D_2$ | 66. 57. 29 | E | 27. 12 | $D_2$ | 66. 59. 57 | E | 25. 12 | $D_2$ | 67. 0. 9 | E |
| 30. 12 | $D_1$ | 66. 55. 38 | E | 29. 12 | $D_1$ | 66. 54. 50 | E | 29. 12 | $D_1$ | 66. 58. 39 | E |
| Feb. 3. 12 | $D_1$ | 66. 53. 13 | E | June 2. 13 | $D_1$ | 66. 53. 33 | E | Oct. 1. 12 | $D_1$ | 66. 58. 50 | E |
| 5. 12 | $D_2$ | 66. 57. 36 | E | 4. 13 | $D_2$ | 67. 0. 31 | E | 6. 12 | $D_2$ | 66. 59. 11 | E |
| 6. 12 | $D_1$ | 66. 52. 40 | E | 5. 13 | $D_1$ | 66. 53. 12 | E | 7. 12 | $D_1$ | 66. 58. 18 | E |
| 10. 12 | $D_2$ | 66. 56. 50 | E | 9. 15 | $D_2$ | 66. 57. 36 | E | 8. 12 | $D_2$ | 66. 57. 19 | E |
| 12. 12 | $D_1$ | 66. 54. 48 | E | 12. 12 | $D_1$ | 66. 54. 24 | E | 12. 12 | $D_1$ | 66. 57. 29 | E |
| 14. 12 | $D_2$ | 66. 58. 17 | E | 15. 13 | $D_2$ | 67. 0. 18 | E | 15. 12 | $D_2$ | 66. 59. 16 | E |
| 17. 12 | $D_2$ | 66. 56. 57 | B | 17. 13 | $D_2$ | 67. 0. 3 | E | 17. 12 | $D_2$ | 66. 59. 22 | B |
| 19. 13 | $D_1$ | 66. 53. 18 | B | 19. 12 | $D_1$ | 66. 55. 47 | E | 19. 12 | $D_1$ | 66. 55. 10 | B |
| 21. 12 | $D_2$ | 66. 58. 18 | B | 22. 14 | $D_2$ | 66. 59. 3 | B | 22. 12 | $D_2$ | 66. 59. 12 | B |
| 24. 15 | $D_1$ | 66. 55. 11 | B | 25. 12 | $D_1$ | 66. 53. 39 | B | 26. 11 | $D_1$ | 66. 55. 11 | B |
| 27. 11 | $D_2$ | 66. 56. 59 | B | 27. 12 | $D_2$ | 66. 54. 29 | B | 28. 12 | $D_2$ | 66. 56. 0 | B |
| 28. 11 | $D_1$ | 66. 54. 32 | B | 29. 13 | $D_1$ | 66. 55. 30 | B | 30. 12 | $D_1$ | 66. 53. 56 | B |
| Mar. 2. 13 | $D_1$ | 66. 55. 13 | B | | | | | | | | |
| 4. 12 | $D_2$ | 66. 55. 9 | B | July 1. 15 | $D_1$ | 66. 52. 33 | B | Nov. 2. 12 | $D_1$ | 66. 54. 11 | B |
| 6. 12 | $D_1$ | 66. 57. 25 | B | 3. 13 | $D_2$ | 66. 58. 32 | B | 4. 12 | $D_2$ | 67. 0. 24 | B |
| 9. 12 | $D_2$ | 66. 58. 24 | B | 6. 15 | $D_1$ | 66. 52. 12 | B | 6. 15 | $D_1$ | 66. 52. 33 | B |
| 11. 13 | $D_1$ | 66. 56. 26 | B | 8. 15 | $D_2$ | 66. 54. 28 | B | 9. 12 | $D_2$ | 66. 59. 13 | B |
| 14. 12 | $D_2$ | 66. 56. 38 | B | 13. 12 | $D_1$ | 66. 53. 22 | B | 11. 12 | $D_1$ | 66. 55. 49 | B |
| 16. 12 | $D_2$ | 66. 55. 56 | E | 15. 12 | $D_2$ | 66. 57. 55 | B | 14. 12 | $D_2$ | 66. 56. 23 | B |
| 20. 12 | $D_1$ | 66. 57. 43 | B | 17. 12 | $D_2$ | 66. 59. 11 | E | 17. 12 | $D_2$ | 67. 0. 53 | E |
| 23. 12 | $D_2$ | 66. 56. 0 | B | 20. 12 | $D_1$ | 66. 54. 54 | E | 18. 12 | $D_1$ | 66. 53. 3 | E |
| 24. 12 | $D_1$ | 66. 55. 59 | E | 22. 12 | $D_2$ | 67. 0. 31 | E | 20. 12 | $D_2$ | 66. 59. 43 | E |
| 26. 12 | $D_2$ | 66. 56. 1 | E | 23. 12 | $D_1$ | 66. 53. 33 | E | 24. 12 | $D_1$ | 66. 54. 18 | E |
| 30. 12 | $D_1$ | 66. 56. 8 | E | 27. 13 | $D_2$ | 66. 58. 16 | E | 27. 12 | $D_2$ | 66. 59. 53 | E |
| | | | | 29. 12 | $D_1$ | 66. 53. 42 | E | 30. 12 | $D_1$ | 66. 52. 45 | E |
| Apr. 2. 12 | $D_1$ | 66. 54. 45 | E | Aug. 4. 12 | $D_1$ | 66. 54. 58 | E | Dec. 2. 12 | $D_1$ | 66. 54. 7 | E |
| 3. 12 | $D_2$ | 66. 57. 44 | E | 5. 12 | $D_2$ | 66. 59. 49 | E | 4. 12 | $D_2$ | 66. 58. 36 | E |
| 7. 12 | $D_1$ | 66. 55. 2 | E | 7. 12 | $D_1$ | 66. 56. 30 | E | 7. 12 | $D_1$ | 66. 54. 40 | E |
| 9. 12 | $D_2$ | 66. 57. 24 | E | 10. 12 | $D_2$ | 66. 59. 44 | E | 9. 12 | $D_2$ | 66. 59. 14 | E |
| 13. 12 | $D_1$ | 66. 55. 45 | E | 12. 12 | $D_1$ | 66. 53. 30 | E | 11. 12 | $D_1$ | 66. 55. 37 | E |
| 15. 13 | $D_2$ | 66. 57. 5 | E | 14. 12 | $D_2$ | 66. 59. 18 | E | 14. 12 | $D_2$ | 66. 58. 20 | E |
| 16. 13 | $D_2$ | 66. 58. 1 | B | 17. 15 | $D_2$ | 66. 58. 33 | B | 16. 12 | $D_2$ | 66. 57. 51 | B |
| 18. 13 | $D_1$ | 66. 53. 30 | B | 19. 12 | $D_1$ | 66. 57. 28 | B | 18. 13 | $D_1$ | 66. 51. 14 | B |
| 22. 13 | $D_2$ | 66. 55. 35 | B | 21. 12 | $D_2$ | 66. 54. 22 | B | 21. 13 | $D_2$ | 66. 56. 17 | B |
| 25. 12 | $D_1$ | 66. 54. 28 | B | 24. 12 | $D_1$ | 66. 54. 24 | B | 24. 12 | $D_1$ | 66. 52. 21 | B |
| 27. 16 | $D_2$ | 66. 58. 39 | B | 26. 12 | $D_2$ | 66. 57. 20 | B | 28. 12 | $D_2$ | 66. 56. 6 | B |
| 29. 13 | $D_1$ | 66. 52. 57 | B | 28. 12 | $D_1$ | 66. 54. 20 | B | 30. 12 | $D_1$ | 66. 53. 28 | B |

The initials B and E are those of Mr Bryant and Mr Edney.

On February 28 $D_1$ was adjusted by Mr. Bryant to diminish the discordance between the separate readings.

TABLE XVIII.—MONTHLY and YEARLY MEANS of MAGNETIC DIP from OBSERVATIONS made in the YEAR 1908.

Monthly Means of Magnetic Dip.

| Month, 1908. | $D_1$, 3-inch Needle. | Number of Observations. | $D_2$, 3-inch Needle. | Number of Observations. |
|---|---|---|---|---|
| January | 66° 54′ 41″ | 6 | 66° 57′ 13″ | 6 |
| February | 66. 53. 57 | 6 | 66. 57. 29 | 6 |
| March | 66. 56. 29 | 6 | 66. 56. 21 | 6 |
| April | 66. 54. 25 | 6 | 66. 57. 25 | 6 |
| May | 66. 54. 11 | 6 | 66. 58. 4 | 6 |
| June | 66. 54. 21 | 6 | 66. 58. 40 | 6 |
| July | 66. 53. 23 | 6 | 66. 58. 9 | 6 |
| August | 66. 55. 12 | 6 | 66. 58. 11 | 6 |
| September | 66. 55. 23 | 6 | 66. 57. 51 | 6 |
| October | 66. 56. 29 | 6 | 66. 58. 23 | 6 |
| November | 66. 53. 46 | 6 | 66. 59. 25 | 6 |
| December | 66. 53. 35 | 6 | 66. 57. 44 | 6 |
| Means | 66° 54′ 39″ | Sum 72 | 66° 57′ 55″ | Sum 72 |
| Mean Annual Dip | 66° 56′ 17″. | | | |

The monthly means have been formed without reference to the hour at which the observation on each day was made.
In combining the monthly results, to form annual means, weights have been given proportional to the number of observations.
On February 28 $D_1$ was adjusted by Mr. Bryant to diminish the discordance between the separate readings.

TABLE XIX.—DETERMINATIONS of the ABSOLUTE VALUE of HORIZONTAL MAGNETIC FORCE in the YEAR 1908.

Abstract of the Observations of Deflexion of a Magnet for Absolute Measure of Horizontal Force made with the Gibson Instrument in the Magnetic Pavilion.

| Greenwich Civil Time, 1908. | Distances of Centres of Magnets. | Temperature Fahrenheit. | Observed Deflexion. | Mean of the Times of Vibration of Deflecting Magnet. | Number of Vibrations. | Temperature Fahrenheit. | Observer. |
|---|---|---|---|---|---|---|---|
| d h | ft. | ° | ° ′ ″ | s | | ° | |
| January 8. 14 | 1·0 | 44·4 | 9. 38. 0 | 5·808 | 100 | 44·4 | B |
| | 1·3 | | 4. 22. 30 | 5·806 | 100 | 44·8 | |
| January 23. 13 | 1·0 | 45·4 | 9. 37. 18 | 5·807 | 100 | 45·3 | E |
| | 1·3 | | 4. 22. 12 | 5·804 | 100 | 47·7 | |
| February 7. 12 | 1·0 | 48·5 | 9. 37. 53 | 5·807 | 100 | 49·3 | E |
| | 1·3 | | 4. 22. 25 | 5·810 | 100 | 50·2 | |
| February 21. 15 | 1·0 | 51·6 | 9. 36. 5 | 5·807 | 100 | 51·9 | B |
| | 1·3 | | 4. 21. 40 | 5·805 | 100 | 53·1 | |
| March 6. 15 | 1·0 | 48·9 | 9. 36. 40 | 5·807 | 100 | 49·6 | B |
| | 1·3 | | 4. 22. 3 | 5·807 | 100 | 50·6 | |
| March 24. 15 | 1·0 | 55·6 | 9. 36. 3 | 5·809 | 100 | 57·7 | E |
| | 1·3 | | 4. 21. 33 | 5·809 | 100 | 59·1 | |
| April 7. 15 | 1·0 | 54·7 | 9. 36. 29 | 5·811 | 100 | 56·3 | E |
| | 1·3 | | 4. 21. 48 | 5·811 | 100 | 57·9 | |
| April 22. 15 | 1·0 | 49·9 | 9. 36. 5 | 5·808 | 100 | 50·1 | B |
| | 1·3 | | 4. 21. 43 | 5·802 | 100 | 50·9 | |
| May 7. 15 | 1·0 | 60·2 | 9. 34. 55 | 5·811 | 100 | 60·4 | B |
| | 1·3 | | 4. 21. 8 | 5·811 | 100 | 62·0 | |
| May 21. 15 | 1·0 | 64·5 | 9. 34. 34 | 5·813 | 100 | 66·3 | E |
| | 1·3 | | 4. 20. 59 | 5·813 | 100 | 67·0 | |
| June 5. 15 | 1·0 | 67·4 | 9. 34. 34 | 5·812 | 100 | 68·2 | E |
| | 1·3 | | 4. 21. 0 | 5·815 | 100 | 69·6 | |
| June 22. 15 | 1·0 | 65·5 | 9. 35. 8 | 5·815 | 100 | 65·4 | B |
| | 1·3 | | 4. 21. 10 | 5·813 | 100 | 66·2 | |
| July 7. 14 | 1·0 | 69·1 | 9. 34. 41 | 5·814 | 100 | 69·3 | B |
| | 1·3 | | 4. 21. 3 | 5·814 | 100 | 70·1 | |
| July 25. 12 | 1·0 | 70·0 | 9. 35. 31 | 5·821 | 100 | 70·6 | E |
| | 1·3 | | 4. 21. 15 | 5·822 | 100 | 72·0 | |
| August 7. 15 | 1·0 | 70·9 | 9. 34. 25 | 5·818 | 100 | 72·6 | E |
| | 1·3 | | 4. 20. 43 | 5·818 | 100 | 74·5 | |
| August 21. 15 | 1·0 | 70·1 | 9. 33. 28 | 5·814 | 100 | 70·0 | B |
| | 1·3 | | 4. 20. 35 | 5·814 | 100 | 70·9 | |
| September 7. 15 | 1·0 | 68·5 | 9. 35. 8 | 5·817 | 100 | 68·6 | B |
| | 1·3 | | 4. 21. 18 | 5·819 | 100 | 70·0 | |
| September 22. 15 | 1·0 | 57·0 | 9. 36. 26 | 5·813 | 100 | 57·5 | E |
| | 1·3 | | 4. 21. 46 | 5·811 | 100 | 58·9 | |
| October 7. 15 | 1·0 | 62·6 | 9. 36. 0 | 5·816 | 100 | 64·3 | E |
| | 1·3 | | 4. 21. 26 | 5·818 | 100 | 66·5 | |
| October 23. 15 | 1·0 | 50·1 | 9. 36. 18 | 5·809 | 100 | 49·4 | B |
| | 1·3 | | 4. 21. 50 | 5·809 | 100 | 50·8 | |
| November 6. 15 | 1·0 | 54·8 | 9. 35. 50 | 5·812 | 100 | 54·2 | B |
| | 1·3 | | 4. 21. 30 | 5·812 | 100 | 55·3 | |
| November 23. 15 | 1·0 | 52·2 | 9. 36. 23 | 5·809 | 100 | 52·8 | E |
| | 1·3 | | 8. 21. 44 | 5·808 | 100 | 53·4 | |
| December 7. 13 | 1·0 | 49·0 | 9. 37. 4 | 5·808 | 100 | 49·5 | E |
| | 1·3 | | 4. 22. 9 | 5·813 | 100 | 50·2 | |
| December 21. 14 | 1·0 | 52·0 | 9. 36. 10 | 5·809 | 100 | 51·8 | B |
| | 1·3 | | 4. 21. 38 | 5·809 | 100 | 53·0 | |

The deflecting magnet is placed on the east side of the suspended magnet, with its marked pole alternately east and west, and on the west side with its marked pole also alternately east and west: the deflexion given in the table above is the mean of the four deflexions observed in these positions of the magnets.

The initials B and E are those of Mr Bryant and Mr Edney.

In the subsequent calculations every observation is reduced to the temperature 35° Fahrenheit.

TABLE XIX.—*continued*—COMPUTATION of the VALUES of HORIZONTAL FORCE in ABSOLUTE MEASURE.

From Observations made with the Gibson Instrument in the Magnetic Pavilion.

| Greenwich Civil Time, 1908. | In English Measure. | | | | | | | | | In Metric Measure. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Apparent Value of $A_1$. | Apparent Value of $A_2$. | Apparent Value of P. | Mean Value of P. | Log. $\frac{m}{X}$. | Corrected Time of Vibration of Deflecting Magnet. | Log. $m\,X$. | Value of $m$. | Value of Horizontal Force $X$. | Value of Horizontal Force. | |
| | | | | | | | | | | As observed. | Reduced to Mean of Month. |
| d h | | | | | | s | | | | | |
| Jan. 8. 14 | 0·08379 | 0·08391 | −0·00350 | | 8·92473 | 5·8138 | 0·13189 | 0·3375 | 4·0140 | 1·8508 | 1·8531 |
| Jan. 23. 13 | 0·08370 | 0·08383 | −0·00372 | | 8·92429 | 5·8112 | 0·13229 | 0·3375 | 4·0179 | 1·8526 | 1·8537 |
| Feb. 7. 12 | 0·08383 | 0·08394 | −0·00327 | | 8·92491 | 5·8128 | 0·13207 | 0·3377 | 4·0140 | 1·8508 | 1·8529 |
| Feb. 21. 15 | 0·08362 | 0·08375 | −0·00384 | | 8·92386 | 5·8093 | 0·13261 | 0·3375 | 4·0214 | 1·8542 | 1·8522 |
| Mar. 6. 15 | 0·08366 | 0·08383 | −0·00485 | | 8·92419 | 5·8119 | 0·13221 | 0·3374 | 4·0180 | 1·8526 | 1·8515 |
| Mar. 24. 15 | 0·08367 | 0·08376 | −0·00276 | | 8·92404 | 5·8103 | 0·13248 | 0·3375 | 4·0199 | 1·8535 | 1·8530 |
| Apr. 7. 15 | 0·08372 | 0·08383 | −0·00327 | | 8·92433 | 5·8131 | 0·13206 | 0·3374 | 4·0167 | 1·8520 | 1·8530 |
| Apr. 22. 15 | 0·08359 | 0·08374 | −0·00417 | | 8·92377 | 5·8111 | 0·13233 | 0·3373 | 4·0205 | 1·8538 | 1·8533 |
| May 7. 15 | 0·08357 | 0·08370 | −0·00372 | | 8·92361 | 5·8113 | 0·13237 | 0·3373 | 4·0214 | 1·8542 | 1·8558 |
| May 21. 15 | 0·08359 | 0·08372 | −0·00384 | | 8·92369 | 5·8114 | 0·13238 | 0·3373 | 4·0211 | 1·8541 | 1·8498 |
| June 5. 15 | 0·08363 | 0·08376 | −0·00400 | | 8·92391 | 5·8117 | 0·13235 | 0·3374 | 4·0199 | 1·8535 | 1·8525 |
| June 22. 15 | 0·08368 | 0·08379 | −0·00321 | | 8·92413 | 5·8145 | 0·13192 | 0·3373 | 4·0169 | 1·8521 | 1·8550 |
| July 7. 14 | 0·08367 | 0·08380 | −0·00389 | −0·00353 | 8·92413 | 5·8123 | 0·13226 | 0·3374 | 4·0185 | 1·8529 | 1·8544 |
| July 25. 12 | 0·08381 | 0·08388 | −0·00226 | | 8·92469 | 5·8171 | 0·13155 | 0·3374 | 4·0126 | 1·8502 | 1·8526 |
| Aug. 7. 15 | 0·08366 | 0·08372 | −0·00180 | | 8·92389 | 5·8143 | 0·13198 | 0·3372 | 4·0183 | 1·8528 | 1·8524 |
| Aug. 21. 15 | 0·08351 | 0·08367 | −0·00479 | | 8·92338 | 5·8111 | 0·13245 | 0·3372 | 4·0229 | 1·8549 | 1·8532 |
| Sept. 7. 15 | 0·08372 | 0·08387 | −0·00434 | | 8·92445 | 5·8151 | 0·13185 | 0·3374 | 4·0151 | 1·8513 | 1·8510 |
| Sept. 22. 15 | 0·08375 | 0·08386 | −0·00333 | | 8·92448 | 5·8138 | 0·13197 | 0·3375 | 4·0155 | 1·8515 | 1·8515 |
| Oct. 7. 15 | 0·08376 | 0·08383 | −0·00203 | | 8·92445 | 5·8152 | 0·13180 | 0·3374 | 4·0149 | 1·8512 | 1·8519 |
| Oct. 23. 15 | 0·08363 | 0·08378 | −0·00451 | | 8·92396 | 5·8139 | 0·13191 | 0·3372 | 4·0177 | 1·8525 | 1·8570 |
| Nov. 6. 15 | 0·08363 | 0·08374 | −0·00333 | | 8·92385 | 5·8133 | 0·13203 | 0·3372 | 4·0187 | 1·8530 | 1·8504 |
| Nov. 23. 15 | 0·08367 | 0·08378 | −0·00321 | | 8·92406 | 5·8123 | 0·13217 | 0·3374 | 4·0184 | 1·8528 | 1·8525 |
| Dec. 7. 13 | 0·08372 | 0·08386 | −0·00412 | | 8·92442 | 5·8143 | 0·13184 | 0·3374 | 4·0152 | 1·8514 | 1·8534 |
| Dec. 21. 14 | 0·08364 | 0·08374 | −0·00305 | | 8·92388 | 5·8117 | 0·13225 | 0·3373 | 4·0196 | 1·8534 | 1·8515 |
| Means ... | ... | ... | ... | ... | ... | ... | ... | ... | 4·0179 | 1·8526 | 1·8528 |

The value of $X$ in English Measure is referred to the Foot-Grain-Second Unit, and in Metric Measure to the Millimètre-Milligramme-Second Unit. To obtain $X$ in the Centimètre-Gramme-Second (C.G.S.) Unit, the values in Metric Measure must be divided by 10.

## MONTHLY MEAN DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS FROM HOURLY ORDINATES, ON FIVE SELECTED DAYS, IN EACH MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic register, on five quiet days in each month, selected for comparison with results at other British Observatories. The days included are January 14, 16, 20, 21, 23, February 2, 14, 15, 21, 28, March 7, 13, 14, 15, 24, April 3, 12, 13, 20, 21, May 7, 15, 16, 17, 22, June 2, 5, 16, 23, 25, July 3, 4, 8, 19, 31, August 5, 6, 16, 20, 28, September 1, 2, 20, 21, 26, October 10, 11, 16, 23, 24, November 5, 16, 21, 22, 23, December 2, 11, 15, 20, 21.

The results for Declination are given in minutes of arc: those for Horizontal Force and Vertical Force are given both in terms of the whole Horizontal or Vertical Force and in terms of the Millimètre-Milligramme-Second (Metric) Unit. The letter *f* indicates values in terms of the whole Horizontal or Vertical Force, and the letter *m* values in terms of the Metric Unit, the unit for the former values being ·00001 of the whole Horizontal or Vertical Force, and for the latter ·00001 of the Metric Unit, or ·000001 of the Centimètre-Gramme-Second (C.G.S.) Unit. The values of the whole Horizontal and Vertical Forces expressed in terms of the Metric Unit are 1·8528 and 4·3518 respectively for the year.

### TABLE XX.—MONTHLY MEAN DIURNAL INEQUALITY of MAGNETIC DECLINATION WEST.

*(The results are in each case diminished by the smallest hourly value.)*

1908.

| Hour, Greenwich Civil Time. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | For the Year. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight. | 0·7 | 1·7 | 3·6 | 5·3 | 3·3 | 4·5 | 4·8 | 3·7 | 2·8 | 2·8 | 0·8 | 0·2 | 2·63 |
| 1h | 0·8 | 1·9 | 4·1 | 5·3 | 3·6 | 4·1 | 5·1 | 3·4 | 3·2 | 3·0 | 0·9 | 0·4 | 2·76 |
| 2 | 1·1 | 2·1 | 4·1 | 5·4 | 3·3 | 4·0 | 5·0 | 3·5 | 3·2 | 3·2 | 0·9 | 0·7 | 2·82 |
| 3 | 1·1 | 2·0 | 4·0 | 5·5 | 3·1 | 4·1 | 4·4 | 3·4 | 3·2 | 3·1 | 1·1 | 0·8 | 2·76 |
| 4 | 1·1 | 2·0 | 3·9 | 4·7 | 2·6 | 3·2 | 4·0 | 3·0 | 2·6 | 3·2 | 0·8 | 0·9 | 2·45 |
| 5 | 0·9 | 1·9 | 3·5 | 4·0 | 1·4 | 2·1 | 2·2 | 1·5 | 2·3 | 2·9 | 0·7 | 0·9 | 1·80 |
| 6 | 0·8 | 1·4 | 3·1 | 2·8 | 0·5 | 0·9 | 1·0 | 0·5 | 1·7 | 2·5 | 0·3 | 0·7 | 1·13 |
| 7 | 0·6 | 1·1 | 2·0 | 1·1 | 0·0 | 0·0 | 0·6 | 0·0 | 0·6 | 1·8 | 0·2 | 0·4 | 0·48 |
| 8 | 0·4 | 0·5 | 0·6 | 0·0 | 0·0 | 0·0 | 0·0 | 0·7 | 0·0 | 0·1 | 0·0 | 0·3 | 0·00 |
| 9 | 0·6 | 0·0 | 0·0 | 0·9 | 0·8 | 1·1 | 0·9 | 2·2 | 0·9 | 0·0 | 0·0 | 0·5 | 0·44 |
| 10 | 1·4 | 0·6 | 2·0 | 3·7 | 3·7 | 3·2 | 3·5 | 4·3 | 3·4 | 1·6 | 0·8 | 1·1 | 2·22 |
| 11 | 1·9 | 2·6 | 5·4 | 7·0 | 7·5 | 5·4 | 6·2 | 7·2 | 6·0 | 4·9 | 2·6 | 2·2 | 4·69 |
| Noon. | 2·7 | 4·4 | 8·3 | 10·4 | 9·6 | 8·0 | 8·8 | 10·4 | 8·7 | 7·9 | 3·6 | 3·0 | 6·93 |
| 13h | 3·4 | 5·7 | 9·7 | 11·9 | 10·2 | 9·5 | 9·8 | 11·5 | 9·4 | 8·9 | 3·7 | 3·1 | 7·85 |
| 14 | 3·3 | 5·7 | 10·0 | 11·2 | 9·5 | 10·2 | 10·5 | 11·2 | 9·2 | 8·5 | 3·2 | 2·4 | 7·69 |
| 15 | 2·7 | 4·7 | 8·4 | 9·4 | 8·4 | 9·3 | 9·8 | 9·4 | 7·7 | 7·0 | 2·4 | 1·9 | 6·54 |
| 16 | 2·7 | 3·6 | 6·0 | 7·7 | 7·3 | 8·3 | 8·3 | 7·5 | 6·1 | 5·4 | 2·2 | 1·7 | 5·35 |
| 17 | 2·1 | 2·8 | 4·9 | 6·2 | 6·0 | 6·9 | 6·8 | 5·7 | 4·6 | 4·8 | 1·8 | 1·3 | 4·27 |
| 18 | 1·6 | 2·2 | 4·8 | 5·5 | 5·0 | 5·8 | 5·8 | 5·1 | 4·5 | 4·3 | 1·4 | 0·8 | 3·68 |
| 19 | 0·9 | 1·8 | 4·5 | 5·3 | 4·0 | 5·1 | 5·4 | 5·1 | 4·5 | 3·6 | 1·2 | 0·5 | 3·27 |
| 20 | 0·5 | 1·5 | 4·3 | 5·3 | 3·8 | 5·1 | 5·2 | 4·8 | 4·4 | 3·6 | 0·7 | 0·3 | 3·07 |
| 21 | 0·1 | 1·3 | 4·2 | 5·2 | 3·6 | 4·7 | 5·1 | 4·4 | 4·3 | 3·5 | 0·5 | 0·1 | 2·86 |
| 22 | 0·0 | 1·2 | 4·1 | 5·0 | 3·3 | 4·8 | 5·2 | 4·2 | 4·0 | 3·3 | 0·5 | 0·0 | 2·75 |
| 23 | 0·1 | 1·3 | 3·6 | 4·7 | 3·2 | 4·9 | 5·3 | 3·7 | 4·0 | 2·7 | 0·9 | 0·2 | 2·66 |
| 24 | 0·3 | 1·7 | 3·4 | 4·8 | 3·4 | 4·4 | 4·8 | 3·6 | 4·3 | 2·5 | 1·0 | 0·2 | 2·65 |
| Means 0h–23h | 1·31 | 2·25 | 4·55 | 5·56 | 4·32 | 4·80 | 5·15 | 4·85 | 4·22 | 3·86 | 1·30 | 1·02 | 3·38 |
| Means 1h–24h | 1·30 | 2·25 | 4·54 | 5·54 | 4·32 | 4·80 | 5·15 | 4·85 | 4·28 | 3·85 | 1·31 | 1·02 | 3·38 |

## TABLE XXI.—MONTHLY MEAN DIURNAL INEQUALITY of HORIZONTAL MAGNETIC FORCE.

*(The results are corrected for temperature, and in each case diminished by the smallest hourly value.)*

1908.

| Hour, Greenwich Civil Time. | January. | | February. | | March. | | April. | | May. | | June. | | July. | | August. | | September. | | October. | | November. | | December. | | For the Year. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* |
| Midn. | 36 | 67 | 91 | 169 | 161 | 298 | 203 | 376 | 178 | 330 | 211 | 391 | 168 | 311 | 195 | 361 | 224 | 415 | 202 | 374 | 90 | 167 | 40 | 74 | 141·8 | 262·8 |
| 1h | 40 | 74 | 92 | 171 | 162 | 300 | 201 | 372 | 192 | 357 | 185 | 343 | 166 | 308 | 193 | 358 | 208 | 385 | 200 | 371 | 86 | 159 | 37 | 69 | 138·7 | 257·3 |
| 2 | 42 | 78 | 94 | 175 | 165 | 306 | 200 | 371 | 177 | 328 | 177 | 328 | 156 | 289 | 203 | 376 | 196 | 363 | 194 | 359 | 87 | 161 | 39 | 72 | 136·1 | 252·2 |
| 3 | 44 | 82 | 93 | 173 | 162 | 300 | 203 | 376 | 172 | 319 | 176 | 326 | 161 | 298 | 202 | 374 | 187 | 346 | 195 | 361 | 87 | 161 | 43 | 80 | 135·7 | 251·3 |
| 4 | 56 | 104 | 91 | 170 | 163 | 302 | 197 | 365 | 174 | 322 | 176 | 326 | 157 | 291 | 183 | 339 | 177 | 328 | 203 | 376 | 95 | 176 | 53 | 98 | 135·6 | 251·4 |
| 5 | 62 | 115 | 109 | 202 | 173 | 321 | 194 | 359 | 159 | 295 | 174 | 322 | 159 | 295 | 173 | 321 | 163 | 302 | 194 | 359 | 103 | 191 | 61 | 113 | 135·6 | 251·3 |
| 6 | 62 | 115 | 116 | 215 | 170 | 315 | 198 | 367 | 129 | 239 | 157 | 291 | 140 | 259 | 144 | 267 | 141 | 261 | 190 | 353 | 98 | 182 | 62 | 115 | 125·8 | 233·3 |
| 7 | 58 | 107 | 108 | 200 | 152 | 282 | 161 | 298 | 84 | 156 | 113 | 209 | 100 | 185 | 100 | 185 | 115 | 213 | 164 | 304 | 84 | 156 | 56 | 104 | 99·8 | 184·9 |
| 8 | 60 | 111 | 99 | 185 | 106 | 196 | 121 | 224 | 46 | 85 | 64 | 119 | 42 | 78 | 53 | 98 | 79 | 146 | 106 | 196 | 64 | 119 | 44 | 82 | 65·6 | 121·6 |
| 9 | 32 | 59 | 65 | 120 | 62 | 115 | 42 | 78 | 18 | 33 | 20 | 37 | 18 | 33 | 21 | 39 | 34 | 63 | 28 | 52 | 20 | 37 | 26 | 48 | 24·1 | 44·5 |
| 10 | 21 | 39 | 38 | 70 | 22 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 19 | 0·0 | 0·0 |
| 11 | 10 | 19 | 12 | 22 | 0 | 0 | 8 | 15 | 1 | 2 | 18 | 33 | 0 | 0 | 28 | 52 | 1 | 2 | 5 | 9 | 16 | 30 | 0 | 0 | 0·2 | 0·3 |
| Noon. | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 52 | 22 | 41 | 60 | 111 | 16 | 30 | 100 | 185 | 61 | 113 | 20 | 37 | 20 | 37 | 7 | 13 | 19·7 | 36·6 |
| 13h | 35 | 65 | 30 | 56 | 27 | 50 | 73 | 135 | 62 | 115 | 87 | 161 | 62 | 115 | 157 | 291 | 84 | 156 | 74 | 137 | 46 | 85 | 23 | 43 | 55·2 | 102·4 |
| 14 | 40 | 74 | 55 | 102 | 68 | 126 | 124 | 230 | 112 | 208 | 130 | 241 | 120 | 222 | 207 | 384 | 112 | 208 | 105 | 195 | 63 | 117 | 26 | 48 | 88·7 | 164·6 |
| 15 | 24 | 44 | 59 | 109 | 93 | 173 | 165 | 306 | 162 | 300 | 166 | 308 | 165 | 306 | 227 | 421 | 123 | 228 | 131 | 243 | 65 | 120 | 20 | 37 | 108·6 | 201·3 |
| 16 | 14 | 26 | 42 | 78 | 118 | 219 | 192 | 357 | 176 | 326 | 216 | 400 | 201 | 372 | 227 | 421 | 144 | 267 | 155 | 287 | 59 | 109 | 25 | 46 | 122·6 | 227·3 |
| 17 | 28 | 52 | 59 | 109 | 137 | 254 | 209 | 387 | 198 | 367 | 235 | 435 | 219 | 406 | 241 | 447 | 150 | 278 | 171 | 317 | 73 | 135 | 31 | 57 | 137·8 | 255·3 |
| 18 | 34 | 63 | 91 | 170 | 143 | 265 | 225 | 417 | 209 | 387 | 249 | 461 | 243 | 450 | 265 | 491 | 166 | 308 | 190 | 353 | 91 | 169 | 41 | 76 | 154·2 | 285·8 |
| 19 | 30 | 56 | 105 | 195 | 161 | 298 | 224 | 415 | 206 | 382 | 249 | 461 | 238 | 441 | 308 | 570 | 180 | 334 | 202 | 374 | 90 | 167 | 53 | 98 | 162·4 | 300·9 |
| 20 | 26 | 48 | 107 | 198 | 151 | 280 | 221 | 410 | 212 | 393 | 238 | 441 | 238 | 441 | 306 | 567 | 198 | 367 | 204 | 378 | 94 | 175 | 47 | 87 | 162·1 | 300·4 |
| 21 | 26 | 48 | 109 | 202 | 155 | 287 | 223 | 413 | 212 | 393 | 230 | 426 | 234 | 434 | 292 | 541 | 192 | 357 | 196 | 363 | 82 | 152 | 43 | 80 | 158·1 | 293·0 |
| 22 | 28 | 52 | 105 | 195 | 154 | 285 | 207 | 384 | 206 | 382 | 222 | 411 | 224 | 415 | 288 | 534 | 188 | 348 | 186 | 345 | 78 | 145 | 39 | 72 | 152·3 | 282·3 |
| 23 | 38 | 70 | 113 | 209 | 159 | 295 | 205 | 380 | 209 | 387 | 226 | 419 | 217 | 402 | 261 | 484 | 182 | 337 | 186 | 345 | 70 | 130 | 37 | 69 | 150·5 | 278·9 |
| 24 | 45 | 83 | 112 | 208 | 151 | 280 | 204 | 378 | 200 | 371 | 219 | 406 | 209 | 387 | 263 | 487 | 191 | 354 | 178 | 330 | 70 | 130 | 37 | 69 | 148·5 | 275·3 |
| Means 0h–23h | 35·2 | 65·3 | 78·5 | 145·6 | 119·3 | 221·2 | 159·3 | 295·3 | 138·2 | 256·1 | 157·5 | 291·7 | 143·8 | 266·3 | 182·2 | 337·8 | 137·7 | 255·2 | 145·9 | 270·3 | 69·2 | 128·3 | 36·0 | 66·7 | 108·8 | 201·7 |
| 1h–24h | 35·6 | 66·0 | 79·3 | 147·2 | 118·9 | 220·4 | 159·4 | 295·4 | 139·1 | 257·8 | 157·8 | 292·3 | 145·5 | 269·5 | 185·1 | 343·0 | 136·3 | 252·7 | 144·9 | 268·5 | 68·4 | 126·8 | 35·8 | 66·5 | 109·1 | 202·2 |

## TABLE XXII.—MONTHLY MEAN DIURNAL INEQUALITY of VERTICAL MAGNETIC FORCE.

*(The results are corrected for temperature, and in each case diminished by the smallest hourly value.)*

1908.

| Hour, Greenwich Civil Time. | January. | | February. | | March. | | April. | | May. | | June. | | July. | | August. | | September. | | October. | | November. | | December. | | For the Year. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* | *f* | *m* |
| Midn. | 25 | 109 | 19 | 83 | 43 | 187 | 71 | 309 | 57 | 248 | 44 | 191 | 37 | 161 | 44 | 191 | 49 | 213 | 29 | 126 | 22 | 96 | 26 | 113 | 38·0 | 165·3 |
| 1h | 15 | 65 | 23 | 100 | 43 | 187 | 68 | 296 | 55 | 239 | 40 | 174 | 33 | 144 | 40 | 174 | 49 | 213 | 19 | 83 | 20 | 87 | 20 | 87 | 34·6 | 150·5 |
| 2 | 17 | 74 | 19 | 83 | 46 | 200 | 70 | 305 | 55 | 239 | 42 | 183 | 35 | 152 | 38 | 165 | 47 | 205 | 23 | 100 | 22 | 96 | 16 | 70 | 35·0 | 152·4 |
| 3 | 19 | 83 | 17 | 74 | 48 | 209 | 72 | 313 | 55 | 239 | 42 | 183 | 35 | 152 | 38 | 165 | 49 | 213 | 22 | 96 | 18 | 78 | 18 | 78 | 35·3 | 153·3 |
| 4 | 17 | 74 | 17 | 74 | 50 | 218 | 72 | 313 | 57 | 248 | 48 | 209 | 45 | 196 | 40 | 174 | 47 | 205 | 19 | 83 | 18 | 78 | 16 | 70 | 36·4 | 158·2 |
| 5 | 15 | 65 | 17 | 74 | 52 | 226 | 74 | 322 | 57 | 248 | 54 | 235 | 49 | 213 | 46 | 200 | 51 | 222 | 14 | 61 | 16 | 70 | 18 | 78 | 37·8 | 164·2 |
| 6 | 13 | 57 | 19 | 83 | 52 | 226 | 74 | 322 | 59 | 257 | 54 | 235 | 54 | 235 | 48 | 209 | 55 | 239 | 14 | 61 | 20 | 87 | 16 | 70 | 39·0 | 169·8 |
| 7 | 10 | 44 | 17 | 74 | 59 | 257 | 83 | 361 | 61 | 265 | 50 | 218 | 50 | 218 | 50 | 218 | 53 | 231 | 20 | 87 | 18 | 78 | 14 | 61 | 39·6 | 172·4 |
| 8 | 8 | 35 | 17 | 74 | 61 | 265 | 79 | 344 | 55 | 239 | 48 | 209 | 56 | 244 | 48 | 209 | 49 | 213 | 20 | 87 | 18 | 78 | 12 | 52 | 38·5 | 167·2 |
| 9 | 4 | 17 | 17 | 74 | 51 | 222 | 67 | 292 | 39 | 170 | 42 | 183 | 42 | 183 | 42 | 183 | 37 | 161 | 14 | 61 | 14 | 61 | 12 | 52 | 30·9 | 134·6 |
| 10 | 0 | 0 | 11 | 48 | 33 | 144 | 37 | 161 | 25 | 109 | 24 | 104 | 28 | 122 | 26 | 113 | 23 | 100 | 0 | 0 | 10 | 44 | 4 | 17 | 17·6 | 76·6 |
| 11 | 4 | 17 | 7 | 30 | 15 | 65 | 13 | 57 | 1 | 4 | 6 | 26 | 12 | 52 | 12 | 52 | 13 | 57 | 0 | 0 | 4 | 17 | 0 | 0 | 6·5 | 27·8 |
| Noon. | 4 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 17 | 0 | 0 | 2 | 9 | 0·0 | 0·0 |
| 13h | 4 | 17 | 3 | 13 | 10 | 44 | 8 | 35 | 18 | 78 | 6 | 26 | 3 | 13 | 12 | 52 | 4 | 17 | 12 | 52 | 12 | 52 | 8 | 35 | 7·5 | 32·6 |
| 14 | 10 | 44 | 11 | 48 | 16 | 70 | 24 | 104 | 34 | 148 | 20 | 87 | 17 | 74 | 36 | 157 | 24 | 104 | 22 | 96 | 16 | 70 | 12 | 52 | 19·4 | 84·2 |
| 15 | 11 | 48 | 19 | 83 | 19 | 83 | 38 | 165 | 60 | 261 | 34 | 148 | 27 | 117 | 54 | 235 | 47 | 205 | 28 | 122 | 22 | 96 | 14 | 61 | 30·3 | 131·7 |
| 16 | 9 | 39 | 23 | 100 | 25 | 109 | 49 | 213 | 66 | 287 | 40 | 174 | 41 | 178 | 58 | 252 | 55 | 239 | 38 | 165 | 18 | 78 | 15 | 65 | 35·6 | 154·7 |
| 17 | 23 | 100 | 17 | 74 | 22 | 96 | 53 | 231 | 74 | 322 | 53 | 231 | 49 | 213 | 62 | 270 | 53 | 231 | 32 | 139 | 22 | 96 | 21 | 91 | 39·3 | 170·9 |
| 18 | 28 | 122 | 19 | 83 | 18 | 78 | 53 | 231 | 72 | 313 | 57 | 248 | 53 | 231 | 60 | 261 | 57 | 248 | 32 | 139 | 22 | 96 | 20 | 87 | 40·1 | 174·5 |
| 19 | 30 | 131 | 17 | 74 | 24 | 104 | 51 | 222 | 72 | 313 | 61 | 265 | 55 | 239 | 50 | 218 | 57 | 248 | 28 | 122 | 18 | 78 | 24 | 104 | 39·8 | 172·9 |
| 20 | 28 | 122 | 17 | 74 | 20 | 87 | 53 | 231 | 68 | 296 | 55 | 239 | 49 | 213 | 50 | 218 | 57 | 248 | 26 | 113 | 18 | 78 | 24 | 104 | 37·9 | 165·0 |
| 21 | 32 | 139 | 19 | 83 | 22 | 96 | 51 | 222 | 66 | 287 | 53 | 231 | 47 | 205 | 54 | 235 | 61 | 265 | 22 | 96 | 18 | 78 | 26 | 113 | 38·5 | 167·2 |
| 22 | 32 | 139 | 17 | 74 | 26 | 113 | 53 | 231 | 60 | 261 | 51 | 222 | 45 | 196 | 52 | 226 | 59 | 257 | 22 | 96 | 16 | 70 | 22 | 96 | 37·1 | 161·5 |
| 23 | 24 | 104 | 17 | 74 | 30 | 131 | 55 | 239 | 58 | 252 | 47 | 205 | 43 | 187 | 50 | 218 | 59 | 257 | 20 | 87 | 14 | 61 | 22 | 96 | 35·8 | 155·6 |
| 24 | 26 | 113 | 15 | 65 | 32 | 139 | 55 | 239 | 58 | 252 | 46 | 200 | 39 | 170 | 48 | 209 | 59 | 257 | 18 | 78 | 18 | 78 | 22 | 96 | 35·5 | 154·4 |
| Means 0h–23h | 15·9 | 69·2 | 15·8 | 68·8 | 32·7 | 142·4 | 52·8 | 230·0 | 51·0 | 221·8 | 40·5 | 176·1 | 37·7 | 164·1 | 42·1 | 183·1 | 44·0 | 191·3 | 20·0 | 87·0 | 16·5 | 71·8 | 15·9 | 69·2 | 31·3 | 136·0 |
| 1h–24h | 16·0 | 69·4 | 15·6 | 68·0 | 32·3 | 140·4 | 52·2 | 227·0 | 51·0 | 222·0 | 40·5 | 176·5 | 37·8 | 164·5 | 42·2 | 183·9 | 44·4 | 193·1 | 19·5 | 85·0 | 16·3 | 71·0 | 15·8 | 68·5 | 31·2 | 135·5 |

ROYAL OBSERVATORY, GREENWICH.

# MAGNETIC DISTURBANCES

AND

# EARTH CURRENTS.

1908.

## MAGNETIC DISTURBANCES in DECLINATION, HORIZONTAL FORCE, and VERTICAL FORCE, recorded at the ROYAL OBSERVATORY, GREENWICH, in the Year 1908.

The following notes give a brief description of all magnetic movements (superposed on the ordinary diurnal movement) exceeding 3′ in Declination, 0·0010 in Horizontal Force, or 0·0003 in Vertical Force, as taken from the photographic records of the respective Magnetometers. The movements in Horizontal and Vertical Force are expressed in parts of the whole Horizontal and Vertical Forces respectively. When any one of the three elements is not specifically mentioned, it is to be understood that the movement, if any, was insignificant. Any failure or want of register is specially indicated.

The term "wave" is used to indicate a movement in one direction and return; "double wave" a movement in one direction and return with continuation in the opposite direction and return; "two successive waves" consecutive wave movements in the same direction; "fluctuations" a number of movements in both directions. The extent and direction of the movement are indicated in brackets, + denoting an increase, and − a decrease of the magnetic element. In the case of fluctuations the sign ± denotes positive and negative movements of generally equal extent.

Magnetic movements which do not admit of brief description in this way are exhibited on accompanying plates.

The time is Greenwich Civil Time (commencing at midnight, and counting the hours from 0 to 24).

1908.

January

$2^d\ 19\frac{1}{4}^h$ to $20\frac{1}{4}^h$ Wave in Dec. ( − 5′).

$3^d\ 11\frac{1}{4}^h$ Sudden decrease in H.F. ( − ·0010). $11\frac{1}{2}^h$ to $12\frac{1}{2}^h$ Wave in H.F. ( − ·0010): in Dec. small. $17\frac{1}{4}^h$ to $18\frac{1}{2}^h$ Wave in H.F. (− ·0010). $17\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Wave in Dec. ( − 3′).

$4^d\ 16\frac{1}{4}^h$ to $18^h$ Sharp irregular wave in Dec. ( − 6′). $16\frac{1}{2}^h$ to $17\frac{1}{2}^h$ Double-crested wave in H.F. ( − ·0010). $4^d\ 23\frac{1}{4}^h$ to $5^d\ 0\frac{1}{4}^h$ Sharp wave in H.F. ( + ·0016), preceded by small waves in Dec. and H.F.

$5^d\ 16\frac{3}{4}^h$ to $18\frac{1}{4}^h$ Irregular double-crested wave in Dec. ( − 5′). $16\frac{3}{4}^h$ Sudden decrease in H.F. ( − ·0013), followed till $18^h$ by a wave ( − ·0010). $22\frac{3}{4}^h$ to $23\frac{3}{4}^h$ Very sharp waves in Dec. ( − 10′) and H.F. ( + ·0020).

$6^d\ 2\frac{3}{4}^h$ to $4\frac{1}{4}^h$ Wave in Dec. ( + 4′).

$7^d\ 17\frac{1}{2}^h$ to $19\frac{1}{4}^h$ Double-crested wave in Dec. ( − 4′). $7^d\ 23^h$ to $8^d\ 0\frac{1}{4}^h$ Wave in Dec. ( − 3′).

$8^d\ 4^h$ to $5^h$ Slow increase in Dec. ( + 5′). $8^d\ 23\frac{3}{4}^h$ to $9^d\ 1\frac{1}{2}^h$ Wave in Dec. ( − 7′), followed till $2^h$ by a sharp decrease ( − 12′).

$9^d\ 0\frac{1}{4}^h$ to $0\frac{3}{4}^h$ Decrease in H.F. ( − ·0011). $1^h$ to $2^h$ Sharp wave in H.F. ( + ·0027). $1\frac{1}{4}^h$ to $1\frac{3}{4}^h$ Sharp decrease in V.F. ( − ·0005), followed till $3\frac{1}{4}^h$ by a slow wave ( + ·0003). $2\frac{1}{4}^h$ to $3\frac{1}{4}^h$ Wave in Dec. ( + 7′), followed till $5^h$ by a slow increase (+ 9′). $2\frac{1}{2}^h$ to $4^h$ Sharp wave in H.F. ( + ·0025). $6\frac{1}{2}^h$ to $8^h$ Wave in H.F. ( + ·0013): small irregular waves in Dec. $9\frac{3}{4}^h$ to $10\frac{1}{2}^h$ Irregular wave in H.F. ( − ·0013), steep at commencement. $10^h$ to $11\frac{1}{4}^h$ Irregular wave in Dec. ( + 4′). $12\frac{1}{4}^h$ to $12\frac{1}{2}^h$ Sharp increase in Dec. ( + 3′), immediately followed till $12\frac{3}{4}^h$ by a very sharp wave ( + 4′). $12\frac{1}{4}^h$ to $12\frac{1}{2}^h$ Sharp increase in H.F. ( + ·0012), immediately followed till $14\frac{1}{4}^h$ by a triple-crested wave ( − ·0013), steep at commencement. $13^h$ to $14\frac{1}{4}^h$ Irregular wave in Dec. ( − 3′). $15^h$ to $17^h$ Flat-crested wave in Dec. ( − 11′). $15^h$ to $17\frac{1}{2}^h$ Double-crested wave in H.F. ( − ·0025). $15^h$ to $18^h$ Slow wave in V.F. ( + ·0005). $18^h$ to $19\frac{1}{2}^h$ Double wave in H.F. ( + ·0010 to − ·0012), very steep at reversal. $20\frac{1}{2}^h$ to $21\frac{3}{4}^h$ Double-crested wave in H.F. ( − ·0012).

$10^d\ 1\frac{1}{2}^h$ to $2\frac{3}{4}^h$. Wave in H.F. ( + ·0013), steep at commencement. $20\frac{3}{4}^h$ to $24^h$. Fluctuations in Dec. and H.F.

$11^d\ 17^h$ to $18\frac{3}{4}$ Irregular wave in H.F. ( − ·0011). $17\frac{1}{4}^h$ to $19^h$ Irregular wave in Dec. ( − 4′). $20\frac{3}{4}^h$ to $21\frac{1}{4}^h$ Very sharp wave in Dec. ( − 8′). $20\frac{3}{4}^h$ to $22^h$ Very sharp wave in H.F. ( + ·0040).

$12^d\ 10\frac{1}{2}^h$ to $11^h$ Decrease in H.F. ( − ·0014). $22\frac{1}{4}^h$ to $23^h$ Wave in H.F. ( + ·0010). $23\frac{1}{4}^h$ to $24^h$ Wave in H.F. ( − ·0010) in Dec. small.

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$17^d\ 22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Sharp waves in Dec. ( − 6′) and H.F. ( + ·0017).

$18^d\ 21\frac{1}{2}^h$ to $22\frac{3}{4}^h$ Sharp flat-crested wave in H.F. ( + ·0021). $21\frac{3}{4}^h$ to $22\frac{1}{4}^h$ Sharp decrease in Dec. ( − 4′) and V.F. ( − ·0003).

$25^d\ 2^h$ to $3^h$ Wave in Dec. ( + 4′).

$26^d\ 3^h$ to $4^h$ Waves in Dec. ( + 3′) and H F. ( + ·0010).

$27^d\ 22\frac{1}{4}^h$ to $28^d\ 1^h$ Wave in Dec. ( − 15′). $27^d\ 22\frac{3}{4}^h$ to $28^d\ 1^h$ Flat-crested wave in H.F. ( − ·0020).

$29^d\ 5^h$ to $5\frac{1}{4}^h$ Sharp increase in Dec. ( + 4′), immediately followed till $6\frac{3}{4}^h$ by a wave ( − 7′). $7^h$ to $8^h$ Decrease in H.F. ( − ·0030), with very small fluctuations in Dec. and H.F. $20^h$ to $20\frac{1}{2}^h$ Decrease in Dec. ( − 5′) and H.F. ( − ·0010), followed till $22^h$ by an irregular triple-crested wave in Dec. ( + 4′), and an irregular wave in H.F. ( + ·0023): in V.F. small.

$30^d\ 20\frac{1}{4}^h$ to $22\frac{1}{4}^h$ Irregular flat-crested wave in Dec. ( − 3′). Double-crested wave in H.F. ( − ·0010).

$31^d\ 14^h$ to $15^h$ Wave in H.F. ( − ·0010).

February

$3^d\ 17\frac{3}{4}^h$ to $19\frac{3}{4}^h$ Double wave in H.F. (− ·0014 to + ·0012). $18^h$ to $20^h$ Double wave in Dec. ( − 8′ to + 6′). $21^h$ to $21\frac{3}{4}^h$ Sharp waves in Dec. ( − 5′) and H.F. ( − ·0015).

$4^d\ 2\frac{3}{4}^h$ to $3\frac{3}{4}^h$ Irregular double-crested wave in Dec. ( + 3′). $2\frac{3}{4}^h$ to $4\frac{1}{2}^h$ Double-crested wave in H.F. ( + ·0012). $11\frac{1}{2}^h$ to $12\frac{1}{2}^h$ Flat-crested wave in Dec. ( − 3′): in H.F. small. $14\frac{1}{4}^h$ to $14\frac{3}{4}^h$ Sharp wave in H.F. ( − ·0010). $14\frac{1}{2}^h$ to $15\frac{1}{2}^h$ Wave in Dec. ( − 5′). $16\frac{1}{4}^h$ to $17\frac{1}{4}^h$ Wave in H.F. ( − ·0017). $16\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Irregular wave in Dec. ( −7 ′). $19\frac{1}{4}^h$ to $20\frac{1}{4}^h$ Wave in Dec. (− 4′). $4^d\ 23\frac{1}{2}^h$ to $5^d\ 0\frac{3}{4}^h$ Wave in Dec. ( + 3′).

$5^d\ 1\frac{1}{4}^h$ to $2\frac{3}{4}^h$ Double-crested wave in Dec. ( − 3′). $3\frac{1}{4}^h$ to $4\frac{1}{2}^h$ Wave in Dec. ( + 5′). $4^h$ to $4\frac{1}{4}^h$ Sharp increase in H.F. (+ ·0018). $5\frac{1}{2}^h$ to $6\frac{1}{2}^h$ Wave in H.F. (+ ·0010). $8\frac{3}{4}^h$ to $9\frac{3}{4}^h$ Wave in H.F. ( − ·0013). $13\frac{3}{4}^h$ to $15^h$ Wave in Dec. ( + 4′). $13\frac{3}{4}^h$ to $15\frac{1}{4}^h$ Double-crested wave in H.F. (− ·0012). $16\frac{1}{2}^h$ to $17\frac{1}{2}^h$ Waves in Dec. ( − 4′) and H.F. ( − ·0012). $19\frac{3}{4}^h$ to $20\frac{1}{4}^h$ Wave in Dec. ( − 3′), immediately followed by a sharp decrease ( − 12′). $20\frac{1}{2}^h$ to $21\frac{1}{4}^h$ Sharp wave in H.F. ( + ·0020), followed till $22\frac{1}{2}^h$ by a double-crested wave ( − ·0010). $20\frac{3}{4}^h$ to $22\frac{1}{4}^h$ Irregular increase in Dec. ( + 8′). $22\frac{1}{2}^h$ to $23\frac{3}{4}^h$ Wave in H.F. ( + ·0012). $5^d\ 22\frac{3}{4}^h$ to $6^d\ 2^h$ Irregular flat-crested wave in Dec. ( − 10′).

$6^d\ 10\frac{1}{4}^h$ to $12^h$ Wave in H.F. ( − ·0024), $10\frac{1}{2}^h$ to $11\frac{1}{2}^h$ wave in Dec. ( + 5′), both followed by small sharp fluctuations. $16^h$ to $18^h$ Irregular wave in Dec. ( − 12′), very steep at commencement. $16^h$ to $16\frac{1}{2}^h$ Sharp wave in H.F. ( − ·0015). $19\frac{1}{4}^h$ to $20\frac{3}{4}^h$ Two successive sharp waves in Dec. ( − 8′) and ( − 7′). $19\frac{1}{2}^h$ to $21^h$ Two successive waves in H.F. (+ ·0038) and ( + ·0014), the first very sharp. $22^h$ to $22\frac{3}{4}^h$ Sharp irregular double-crested wave in Dec. ( + 4′). $22^h$ to $23\frac{1}{4}^h$ Two successive waves in H.F. ( + ·0010) and (+ ·0014). $23^h$ to $24^h$ Irregular increase in Dec. (+ 7′). $23\frac{1}{2}^h$ to $23\frac{3}{4}^h$ Increase in H.F. ( + ·0012).

$7^d\ 13^h$ to $15^h$ Irregular flat-crested wave in Dec. ( + 4′). $16\frac{3}{4}^h$ to $17^h$ Sharp decrease in H.F. ( − ·0015). $17^h$ to $17\frac{1}{4}^h$ Sharp decrease in Dec. ( − 4′). $17\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Sharp wave in Dec. ( − 14′). $17\frac{1}{2}^h$ to $19^h$ Double wave in H.F. ( − ·0027 to + ·0018), first portion very sharp. $19\frac{1}{2}^h$ to $20\frac{1}{2}^h$ Two successive sharp waves in Dec. ( − 5′) and ( − 4′). $19\frac{3}{4}^h$ to $21^h$ Sharp double-crested wave in H.F. ( + ·0016). $22\frac{3}{4}^h$ to $23\frac{1}{2}^h$ Wave in H.F. ( + ·0011).

$8^d\ 22^h$ to $23\frac{1}{2}^h$ Double-crested wave in H.F. ( + ·0012).

$9^d\ 17\frac{1}{2}^h$ to $18\frac{1}{4}^h$ Wave in H.F. ( − ·0010). $17\frac{3}{4}^h$ to $19^h$ Sharp flat-crested wave in Dec. ( − 6′).

$10^d\ 14\frac{3}{4}^h$ to $15\frac{3}{4}^h$ Flat-crested wave in H.F. ( − ·0010).

$11^d\ 0\frac{1}{4}^h$ to $1\frac{1}{4}^h$ Wave in Dec. ( − 3′). $13^h$ to $13\frac{3}{4}^h$ Wave in Dec. ( + 4′). $14\frac{1}{2}^h$ to $16\frac{1}{4}^h$ Wave in Dec. ( + 6′). $15\frac{1}{4}^h$ to $16^h$ Decrease in H.F. ( − ·0017). $16^h$ to $17\frac{1}{2}^h$ Irregular double-crested wave in H.F. (+ ·0018), immediately followed till $18\frac{1}{4}^h$ by a wave ( + ·0015). $17\frac{1}{4}^h$ to $18\frac{1}{4}^h$ Sharp wave in Dec. ( − 7′), preceded and followed by small ones. $19^h$ to $19\frac{1}{2}^h$ Wave in Dec. ( − 4′), steep at commencement. $20\frac{1}{4}^h$ to $22\frac{1}{4}^h$ Irregular quadruple-crested waves in Dec. (− 9′) and H.F. ( + ·0021), the former very steep at commencement.

$12^d\ 1\frac{1}{2}^h$ to $3^h$ Wave in Dec. ( + 6′), steep at commencement. $6\frac{3}{4}^h$ to $8^h$ Wave in H.F. (− ·0010). $9^h$ to $10\frac{1}{4}^h$ Irregular wave in H.F. (+ ·0012): in Dec. small. $11\frac{1}{2}^h$ to $12\frac{3}{4}^h$ Wave in Dec. (− 3′). $20\frac{1}{4}^h$ to $20\frac{1}{2}^h$ Sharp decrease in Dec. ( − 13′). $20\frac{1}{2}^h$ to $22\frac{1}{4}^h$ Two successive waves in H.F. (+ ·0016) and (+ ·0011). $21^h$ to $21\frac{3}{4}^h$ Increase in Dec. ( + 7′).

$13^d\ 1\frac{1}{4}^h$ to $2^h$ Wave in Dec. ( + 5′): small waves in H.F.

$22^d\ 12\frac{1}{4}^h$ Sudden increase in Dec. ( + 3′) and H.F. (+ ·0020). $14\frac{1}{2}^h$ Sudden decrease in Dec. ( − 3′) and H.F. (− ·0010). $17^h$ to $17\frac{3}{4}^h$ Wave in Dec. ( − 3′): sharp double wave in H.F. ( − ·0010 to + ·0010). $18\frac{1}{2}^h$ to $21\frac{1}{2}^h$ Irregular wave in H.F. ( − ·0024), with superposed fluctuations. $18\frac{3}{4}^h$ to $19\frac{3}{4}^h$ Irregular wave in Dec. ( − 5′). $19\frac{3}{4}^h$ to $21\frac{3}{4}^h$ Irregular wave in Dec. ( − 4′). $22^d\ 23\frac{1}{4}^h$ to $23^d\ 0\frac{1}{2}^h$ Irregular wave in Dec. ( − 11′), very steep at commencement: irregular wave in H.F. ( + ·0020).

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February $23^d$ $0\frac{3}{4}^h$ to $1\frac{3}{4}^h$ Double wave in Dec. ( − 3′ to + 3′). $1^h$ to $2\frac{3}{4}^h$ Wave in H.F. (+ ·0022). $6^h$ to $7^h$ Wave in Dec. ( + 4′). $6\frac{1}{2}^h$ to $7\frac{1}{4}^h$ Wave in H.F. ( + ·0010). $9\frac{3}{4}^h$ to $10^h$ Sharp increase in Dec. ( + 3′). $9\frac{3}{4}^h$ to $13^h$ Double wave in H.F. ( + ·0012 to − ·0020). $17\frac{1}{2}^h$ to $18^h$ Wave in Dec. ( + 3′).

$24^d$ $0\frac{1}{2}^h$ to $3^h$ Irregular wave in Dec. ( − 8′). $0\frac{1}{2}^h$ to $1\frac{3}{4}^h$ Wave in H.F. ( + ·0014). $12\frac{3}{4}^h$ to $14^h$ Two successive waves in H.F. ( + ·0010) and ( + ·0010). $13^h$ to $13\frac{1}{2}^h$ Sharp wave in Dec. ( − 4′). $20\frac{3}{4}^h$ to $21\frac{3}{4}^h$ Wave in H.F. ( + ·0011).

$25^d$ $0\frac{1}{2}^h$ to $1\frac{1}{2}^h$ Wave in Dec. ( − 3′): in H.F. ( − ·0010).

$26^d$ $2\frac{1}{2}^h$ to $4\frac{1}{4}^h$ Double wave in Dec. (+ 3′ to − 3′).

$27^d$ $4\frac{1}{2}^h$ to $5\frac{1}{2}^h$ Wave in Dec. ( − 3′). $16\frac{1}{2}^h$ to $18^h$ Wave in H.F. ( − ·0020). $16\frac{3}{4}^h$ to $18\frac{1}{4}^h$ Wave in Dec. ( − 10′).

$29^d$ $16^h$ to $17\frac{1}{2}^h$ Sharp double waves in Dec. ( + 3′ to − 8′) and H.F. ( + ·0010 to − ·0015), both followed by smaller waves till $22^h$. $22^h$ to $23^h$ Flat-crested wave in Dec. ( − 4′). $22\frac{1}{4}^h$ to $23\frac{1}{2}^h$ Double-crested wave in H.F. ( + ·0024). $23^h$ to $24^h$ Wave in Dec. ( − 4′).

March $1^d$ $0^h$ to $2\frac{1}{4}^h$ Two successive waves in Dec. ( + 3′) and ( + 3′). $12^h$ to $13^h$ Wave in Dec. ( + 4′). $16^h$ to $17\frac{1}{4}^h$ Double-crested wave in Dec. ( − 4′). $17\frac{1}{4}^h$ to $19^h$ Two successive waves in H.F. ( + ·0016) and ( + ·0014). $19^h$ to $20\frac{3}{4}^h$ Irregular wave in Dec. ( − 24′), very steep at commencement. $19\frac{1}{4}^h$ to $20\frac{3}{4}^h$ Sharp wave in H.F. ( + ·0055). $20\frac{3}{4}^h$ to $21\frac{3}{4}^h$ Double-crested waves in Dec. ( − 3′) and H.F. ( + ·0010). $21\frac{3}{4}^h$ to $22^h$ Very sharp wave in Dec. ( − 4′): sharp decrease in V.F. ( − ·0004). $22^h$ to $22\frac{3}{4}^h$ Sharp wave in Dec. ( − 10′) and in H.F. ( + ·0020). $22\frac{3}{4}^h$ to $24^h$ Double wave in Dec. ( − 5′ to + 6′). $22\frac{3}{4}^h$ to $23\frac{3}{4}^h$ Wave in H.F. (+ ·0033). $1^d$ $22\frac{3}{4}^h$ to $2^d$ $1\frac{1}{4}^h$ Wave in V.F. ( − ·0005).

$2^d$ $1^h$ to $3^h$ Irregular double-crested wave in Dec. ( + 5′). $1^h$ to $1\frac{3}{4}^h$ Wave in H.F. ( + ·0010), sharp at commencement. $3^h$ to $4\frac{3}{4}^h$ Wave in Dec. ( − 5′): in H.F. small. $7\frac{3}{4}^h$ to $8^h$ Very sharp wave in Dec. ( + 3′): in H.F. small. $8^h$ to $10^h$ Wave in H.F. (+ ·0018), with superposed small fluctuations. $8\frac{3}{4}^h$ to $10^h$ Wave in Dec. ( + 4′), followed till $10\frac{1}{2}^h$ by an increase (+ 3′). $10\frac{1}{2}^h$ to $11\frac{1}{2}^h$ Wave in H.F. ( − ·0012). $11\frac{3}{4}^h$ to $12^h$ Increase in Dec. ( + 3′) and H.F. ( + ·0010). $14^h$ to $15^h$ Flat-crested wave in H.F. ( + ·0014), steep at both ends. $14^h$ to $18^h$ Slow irregular wave in V.F. ( + ·0007). $15\frac{1}{4}^h$ to $16\frac{1}{2}^h$ Wave in Dec. ( + 5′). $15\frac{1}{4}^h$ to $16\frac{3}{4}^h$ Irregular double wave in H.F. ( + ·0010 to − ·0012). $16\frac{3}{4}^h$ to $17\frac{1}{4}^h$ Very steep wave in Dec. ( − 8′). $16\frac{3}{4}^h$ to $18^h$ Sharp double wave in H.F. ( − ·0017 to + ·0022). $18^h$ to $19\frac{1}{4}^h$ Double wave in Dec. ( + 4′ to − 3′). $19\frac{3}{4}^h$ to $20\frac{1}{4}^h$ Sharp wave in Dec. ( − 4′), followed by a sharp increase ( + 5′) and partial return. $19\frac{3}{4}^h$ to $21^h$ Two successive sharp waves in H.F. ( + ·0014) and ( + ·0016). $21^h$ to $22\frac{1}{4}^h$ Irregular wave in H.F ( + ·0012), followed till $23\frac{3}{4}^h$ by another ( + ·0017). $23^h$ to $24^h$ Wave in Dec. ( + 6′).

$3^d$ $0\frac{3}{4}^h$ to $1\frac{3}{4}^h$ Wave in Dec. ( + 3′). $0\frac{3}{4}^h$ to $2\frac{1}{2}^h$ Two successive waves in H.F. ( + ·0010) and (+ ·0010). $8^h$ to $9\frac{1}{2}^h$ Wave in H.F. ( − ·0016), with superposed sharp fluctuations from $9\frac{1}{4}^h$ continuing until $14\frac{1}{2}^h$: small fluctuations in Dec. $14\frac{1}{2}^h$ to $15\frac{1}{2}^h$ Wave in H.F. ( − ·0010). $15^h$ to $18\frac{1}{2}^h$ Long wave in V.F. ( + ·0005), with superposed fluctuations. $16^h$ to $16\frac{1}{2}^h$ Sharp wave in H.F. ( − ·0010). $16\frac{1}{4}^h$ to $17\frac{1}{4}^h$ Flat-crested wave in Dec. ( − 5′). $18^h$ to $18\frac{1}{2}^h$ Sharp waves in Dec. ( − 3′) and H.F. ( + ·0016). $18\frac{1}{2}^h$ to $20^h$ Very irregular double-crested wave in Dec. ( − 10′), the first portion steep, the second flat-crested: wave in H.F. ( + ·0030) steep at commencement.

$4^d$ $2\frac{1}{2}^h$ to $4\frac{1}{2}^h$ Wave in Dec. ( + 9′): small movements in H.F. $3^h$ to $4^h$ Decrease in V.F. ( − ·0004). $17\frac{1}{2}^h$ to $18^h$ Very steep wave in Dec. ( − 5′), followed till $19\frac{1}{2}^h$ by a triple-crested wave ( − 15′). $17\frac{3}{4}^h$ to $19\frac{1}{4}^h$ Sharp triple wave in H.F. ( + ·0014, − ·0019 to + ·0028), immediately followed by a sharp wave (+ ·0014) and another smaller one. $22\frac{1}{4}^h$ to $23\frac{1}{2}^h$ Double-crested wave in Dec. ( + 6′): wave in H.F. ( + ·0018). $22\frac{1}{4}^h$ to $23^h$ Decrease in V.F. ( − ·0004).

$5^d$ $1^h$ to $2\frac{3}{4}^h$ Waves in Dec. ( + 7′) and H.F. ( + ·0013). $16\frac{3}{4}^h$ to $18^h$ Wave in Dec. ( − 4′).

$6^d$ $18^h$ to $19^h$ Wave in Dec. ( − 3′). $19\frac{1}{2}^h$ to $19\frac{3}{4}^h$ Decrease in Dec. ( − 8′). $19\frac{1}{2}^h$ to $20\frac{1}{2}^h$ Wave in H.F. ( + ·0013). $19\frac{3}{4}^h$ to $21^h$ Wave in Dec. ( + 4′). $22\frac{3}{4}^h$ to $23\frac{3}{4}^h$ Wave in Dec. ( − 4′).

$7^d$ $22\frac{1}{4}^h$ to $24^h$ Wave in H.F. ( + ·0014): in Dec. small.

$8^d$ $11\frac{1}{2}^h$ to $13\frac{1}{4}^h$ Two successive waves in H.F. ( − ·0010) and ( − ·0019), the first sharp, the second flat-crested, followed till $14^h$ by a small double wave: irregular movements in Dec. $14\frac{3}{4}^h$ to $16\frac{1}{2}^h$ Wave in H.F. ( − ·0020). $17\frac{1}{4}^h$ to $18\frac{3}{4}^h$ Double wave in H.F. (+ ·0014 to − ·0020), with superposed sharp fluctuations on the first portion. $18\frac{1}{4}^h$ to $19\frac{1}{4}^h$ Wave in Dec. ( − 8′). $21\frac{1}{4}^h$ to $23^h$ Flat-crested wave in Dec. ( − 7′): double-crested wave in H.F. ( + ·0016).

$9^d$ $5\frac{1}{4}^h$ to $6\frac{1}{2}^h$ Wave in H.F. ( + ·0011). $8^h$ to $10\frac{1}{2}^h$ Irregular wave in Dec. ( − 7′), with small superposed fluctuations. $10\frac{1}{2}^h$ to $12^h$ Wave in H.F. ( − ·0022). $12\frac{1}{2}^h$ to $13\frac{1}{2}^h$ Wave in Dec. ( + 3′). $13^h$ to $14^h$ Flat-crested wave in H.F. ( − ·0020). $18\frac{1}{2}^h$ to $20^h$ Two successive sharp waves in Dec. ( − 4′) and ( − 5′). $19^h$ to $19\frac{3}{4}^h$ Wave in H.F. ( − ·0010). $22^h$ to $23^h$ Wave in H.F. ( + ·0014).

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$10^d\ 0\frac{3}{4}^h$ to $2^h$ Irregular wave in Dec. ( + 4′). $2\frac{3}{4}^h$ to $4^h$ Wave in Dec. (+4′). $5^h$ to $6\frac{1}{2}^h$ Wave in H.F. (−·0014).

$11^d\ 17^h$ to $18\frac{1}{2}^h$ Wave in Dec. ( − 4′): in H.F. small. $23^h$ to $23\frac{3}{4}^h$ Wave in H.F. ( + ·0010) with small superposed fluctuations. $23\frac{1}{4}^h$ to $23\frac{3}{4}^h$ Decrease in Dec. (− 3′). $11^d\ 23\frac{3}{4}^h$ to $12^d\ 0\frac{3}{4}^h$ Wave in Dec. (+5′): in H.F. ( + ·0026).

$12^d\ 0^h$ to $0\frac{1}{2}^h$ Decrease in V.F. ( − ·0003).

$16^d\ 9\frac{1}{2}^h$ to $10\frac{1}{4}^h$ Wave in H.F. ( − ·0014). $10^h$ to $11^h$ Increase in Dec. ( + 9′). $12\frac{1}{2}^h$ to $13^h$ Sharp wave in H.F. ( + ·0011). $14^h$ to $15\frac{1}{4}^h$ Double-crested wave in H.F. ( + ·0020). $14\frac{1}{2}^h$ to $15\frac{1}{2}^h$ Double-crested wave in Dec. ( + 4′). $17^h$ to $18^h$ Wave in H.F. ( + ·0011). $22^h$ to $24^h$ Double wave in H.F. ( +·0015 to − ·0010): in Dec. small.

$17^d\ 1\frac{3}{4}^h$ to $3^h$ Wave in Dec. ( + 4′): in H.F. small. $5^h$ to $6^h$ Wave in Dec. ( + 3′). $19\frac{1}{4}^h$ to $20\frac{1}{4}^h$ Double-crested wave in Dec. ( − 4′): wave in H.F. ( + ·0019).

$19^d\ 1\frac{1}{4}^h$ to $2^h$ Wave in Dec. ( + 4′).

$20^d\ 0^h$ to $2\frac{1}{2}^h$ Flat-crested wave in Dec. ( − 4′). $2^h$ to $3\frac{1}{2}^h$ Wave in H.F. ( + ·0016). $2^h$ to $3^h$ Decrease in V.F. (− ·0006). $3^h$ to $5^h$ Irregular flat-crested wave in Dec. ( − 9′). $14^h$ to $15\frac{1}{4}^h$ Wave in H.F. ( − ·0010). $16^h$ to $17^h$ Wave in H.F. ( − ·0011). $18^h$ to $21^h$ Waves in Dec. ( − 5′) and H.F. ( + ·0025), each with superposed fluctuations. $21\frac{1}{2}^h$ to $23^h$ Wave in H.F. ( + ·0010). $22^h$ to $23\frac{3}{4}^h$ Flat-crested wave in Dec. ( − 3′).

$21^d\ 1^h$ to $4^h$ Triple wave in Dec. (− 3′, + 4′, − 3′). $1\frac{1}{2}^h$ to $2\frac{3}{4}^h$ Wave in H.F. ( − ·0018). $11\frac{1}{2}^h$ to $12\frac{1}{2}^h$ Wave in H.F. ( − ·0010). $12\frac{1}{4}^h$ to $13\frac{1}{4}^h$ Wave in Dec. ( + 3′). $17^h$ Sharp decrease in Dec. ( − 3′): small wave in H.F.

$22^d\ 0\frac{1}{2}^h$ to $1\frac{1}{2}^h$ Wave in Dec. ( + 4′). $18^h$ to $19^h$ Wave in Dec. (− 4′). $23\frac{1}{2}^h$ to $24^h$ wave in Dec. ( + 3′). $22^d\ 23\frac{1}{2}^h$ to $23^d\ 0\frac{3}{4}^h$ Wave in H.F. ( + ·0012).

$25^d\ 5\frac{3}{4}^h$ to $7^h$ Wave in H.F. ( − ·0010). $23^h$ to $23\frac{1}{2}^h$ Wave in Dec. ( + 3′).

$26^d\ 12^h$ to $28^d\ 12^h$ See Plate I.

$28^d\ 17\frac{1}{4}^h$ to $18\frac{3}{4}^h$ Wave in Dec. ( − 11′): double wave in H.F. ( − ·0018 to + ·0015). $20\frac{1}{2}^h$ to $21\frac{3}{4}^h$ Sharp double-crested wave in H.F. ( + ·0030). $21^h$ to $22^h$ Sharp double wave in Dec. ( + 8′ to − 10′). $21^h$ to $21\frac{3}{4}^h$ Decrease in V.F. ( − ·0006). $21\frac{3}{4}^h$ to $22^h$ Sharp increase in H.F. ( + ·0042), followed till $23^h$ by decrease ( − ·0050). $28^d\ 22\frac{3}{4}^h$ to $29^d\ 1\frac{1}{4}^h$ Wave in Dec. ( − 5′) with superposed fluctuations.

$29^d\ 1^h$ to $1\frac{1}{2}^h$ Wave in H.F. ( − ·0010). $1\frac{1}{2}^h$ to $3\frac{1}{4}^h$ Two successive waves in Dec. ( + 4′) and ( + 4′). $2^h$ to $3\frac{3}{4}^h$ Two successive waves in H.F. ( + ·0010) and ( + ·0010). $2\frac{1}{2}^h$ to $3^h$ Decrease in V.F. ( − ·0003). $13\frac{1}{2}^h$ Sharp increase in H.F. ( + ·0011). $14\frac{1}{2}^h$ to $16^h$ Triple-crested sharp wave in Dec. ( − 4′) with superposed sharp fluctuations. $14\frac{3}{4}^h$ to $15^h$ Sharp wave in H.F. ( − ·0015). $15^h$ to $17^h$ Two successive waves in H.F. ( − ·0019) and ( − ·0021). $17\frac{3}{4}^h$ to $18\frac{3}{4}^h$ Wave in Dec. ( − 3′): in H.F. ( − ·0012). $19\frac{3}{4}^h$ to $20\frac{1}{4}^h$ Sharp wave in Dec. ( − 3′). $20\frac{1}{2}^h$ to $23\frac{3}{4}^h$ Quadruple-crested wave in H.F. ( + ·0020). $22\frac{1}{2}^h$ to $23\frac{3}{4}^h$ Wave in Dec. ( − 4′).

$30^d\ 0\frac{1}{2}^h$ to $1\frac{3}{4}^h$ Wave in Dec. ( + 6′). $10^h$ to $11^h$ Decrease in V.F. ( − ·0005). $15^h$ to $16\frac{1}{2}^h$ Triple-crested wave in H.F. (+ ·0014). $20\frac{3}{4}^h$ to $21^h$ Very sharp wave in Dec. ( − 7′). $20\frac{3}{4}^h$ to $22^h$ Wave in H.F. ( + ·0036), very steep at commencement.

$31^d\ 14^h$ to $15^h$ Wave in H.F. ( − ·0011) with superposed fluctuations, followed by smaller waves. $18^h$ to $20^h$ Flat-crested wave in H.F. ( + ·0010) with superposed fluctuations: small waves in Dec. $21\frac{3}{4}^h$ to $24^h$ Irregular wave in Dec. ( − 7′). $22^h$ to $23\frac{3}{4}^h$ Wave in H.F. ( + ·0020).

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$5^d\ 4^h$ to $6^h$ Wave in H.F. ( − ·0010). $5^h$ to $6\frac{1}{2}^h$ Wave in Dec. ( + 4′), $13\frac{1}{4}^h$ to $14\frac{1}{4}^h$ Wave in H.F. ( + ·0012). $18\frac{1}{4}^h$ to $19\frac{1}{2}^h$ Wave in Dec. ( − 7′).

$6^d\ 7\frac{1}{2}^h$ to $9^h$ Wave in Dec. ( + 4′). $11^h$ to $14^h$ Irregular triple-crested wave in H.F. ( − ·0017). $16\frac{1}{2}^h$ to $19\frac{3}{4}^h$ Three successive irregular waves in H.F. ( − ·0023), ( − ·0019) and ( − ·0011): smaller waves in Dec. $20\frac{3}{4}^h$ to $21\frac{1}{2}^h$ Sharp wave in Dec. ( − 10′). $20\frac{3}{4}^h$ to $22\frac{1}{4}^h$ Wave in H.F. ( + ·0016).

$7^d\ 4\frac{1}{4}^h$ to $5\frac{1}{2}^h$ Wave in Dec. ( + 4′). $5^h$ to $6\frac{1}{2}^h$ Wave in H.F. ( + ·0010). $8\frac{1}{2}^h$ to $10\frac{1}{2}^h$ Flat-crested wave in H.F. ( + ·0011). $15\frac{3}{4}^h$ to $17\frac{1}{4}^h$ Flat-crested wave in H.F. ( − ·0013): in Dec. small. $20\frac{1}{4}$ to $20\frac{3}{4}^h$ Decrease in Dec. ( − 4′). $21^h$ to $21\frac{3}{4}^h$ Wave in H.F. (+ ·0010). $21\frac{3}{4}^h$ to $22\frac{1}{2}^h$ Wave in Dec. ( + 3′). $22^h$ to $23\frac{1}{4}^h$ Irregular double wave in H.F. ( − ·0010 to + ·0023). $22\frac{1}{2}^h$ to $24^h$ Irregular double-crested wave in Dec. ( + 12′). $23\frac{1}{2}^h$ to $23\frac{3}{4}^h$ Increase in H.F. ( + ·0012). $7^d\ 23\frac{1}{2}^h$ to $8^d\ 0\frac{3}{4}^h$ Wave in V.F. ( − ·0004).

$8^d\ 0\frac{1}{4}^h$ to $1^h$ Wave in Dec. ( + 4′). $0\frac{1}{2}^h$ to $1\frac{1}{4}^h$ Wave in H.F. ( − ·0015). $2\frac{3}{4}^h$ to $3^h$ Increase in Dec. ( + 8′). $2\frac{3}{4}^h$ to $3\frac{3}{4}^h$ Wave in H.F. ( − ·0020). $3\frac{1}{4}^h$ to $6^h$ Irregular flat-crested wave in Dec. ( − 4′). $5^h$ to $6\frac{1}{2}^h$ Flat-crested wave in H.F. ( − ·0013).

$9^d\ 20\frac{3}{4}^h$ to $22\frac{1}{4}^h$ Wave in Dec. ( − 4′). $21^h$ to $22\frac{3}{4}^h$ Two successive waves in H.F. ( + ·0010) and ( + ·0010).

$14^d\ 23^h$ to $15^d\ 0\frac{1}{2}^h$ Wave in H.F. ( + ·0012).

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15d 13h to 14h Wave in Dec. ( − 3′). 14¾h to 16½h Irregular wave in H.F. ( − ·0029). 17¼h to 17½h Sharp Wave in Dec. ( − 3′): Sharp decrease in H.F. ( − ·0017). 19¼h to 19½h Sharp decrease in Dec. ( − 6′), continuing with a wave ( − 5′) till 19¾h: decrease in V.F. ( − ·0004). 19¼h to 21h Three successive waves in H.F. ( − ·0020), ( − ·0012) and ( − ·0026). 20h to 22h Fluctuations in V.F. (± ·0002). 20¼h to 21½h Sharp triple wave in Dec. ( − 6′, + 7′ to − 6′), immediately followed till 22¾h by an irregular wave ( − 9′), steep at both ends. 21h to 22¾h Irregular double wave in H.F. ( − ·0033 to − ·0020), with strong superposed fluctuations.

16d 1¼h to 1½h Increase in Dec. ( + 6′), continued till 2¼h by a wave ( + 5′).

17d 0¾h to 1½h Wave in Dec. ( + 5′). 18½h to 19h Wave in Dec. ( − 4′): in H.F. ( + ·0011). 19¼h to 20h Wave in H.F. ( − ·0013). 19¼h to 20½h Wave in Dec. ( − 5′), steep at commencement.

18d 1h to 2¼h Wave in Dec. ( + 4′). 20h to 20½h Wave in H.F. ( − ·0013). 20¼h to 22h Irregular wave in Dec. ( − 3′). 20¾h to 21¼h Wave in H.F. ( + ·0017). 22¼h to 23h Small sharp waves in H.F. followed till 24h by a wave ( + ·0012) steep at commencement.

22d 14h to 14¼h Very sharp wave in H.F. ( + ·0015): in Dec. and V.F. small. 14½h to 16¼h Irregular triple-crested wave in H.F. ( + ·0015). 16¾h to 17½h Wave in H.F. ( + ·0012). 20h to 21¼h Double wave in H.F. ( − ·0010 to + ·0026), the second portion very steep. 20¼h to 21¾h Two successive steep waves in Dec. ( − 12′) and ( − 4′). 21¼h to 21½h Sharp decrease in V.F. ( − ·0003).

23d 17¾h to 18½h Wave in H.F. ( − ·0017). 18h to 19½h Wave in Dec. ( − 4′). 20½h to 22½h Two successive waves in H.F. ( + ·0012) and ( + ·0013). 21¼h to 22¼h Wave in Dec. ( − 6′).

24d 0¼h to 2½h Double wave in H.F. ( − ·0012 to + ·0013). 0½h to 1¾h Wave in Dec. ( + 5′). 1h to 1½h decrease in V.F. ( − ·0004). 16¾h to 17½h Irregular wave in H.F. ( − 0022). 17h to 18h Wave in Dec. ( − 3′). 20½h to 21½h Wave in Dec. ( − 4′). 22¾h to 24h Flat-crested wave in H.F. ( − ·0013). 24d 23½h to 25d 1h Flat-crested wave in Dec. ( + 4′).

25d 0½h to 2h Wave in H.F. ( + ·0024). 0½h to 1h Decrease in V.F. ( − ·0004). 16¾h to 19h Irregular wave in H.F. ( − ·0017). 19½h to 21h Double wave in Dec. ( − 4′ to + 3′). 20¼h to 20¾h Wave in H.F. ( + ·0010).

26d 0h to 2h Wave in Dec. ( + 7′). 0½h to 3h Flat-crested wave in H.F. ( + ·0014). 7¾h to 8¾h Wave in H.F. ( − ·0010). 17¼h to 18¼h Wave in H.F. ( + ·0012), preceded and followed by smaller ones. 23¼h to 23½h Increase in H.F. ( + ·0010), continuing a small wave.

27d 14h to 16½h Two successive waves in H.F. ( − ·0013) and ( − ·0013), the second flat-crested. 18¼h to 18¾h Wave in H.F ( − ·0011). 18½h to 19¼h Wave in Dec. ( − 3′). 23h to 24h Wave in H.F. ( + ·0012).

28d 14½h to 16½h Flat-crested wave in H.F. ( − ·0011). 16½h to 18¼h Wave in H.F. ( − ·0013).

29d 21¼h to 22¼h Wave in H.F. ( + ·0014).

May

1d 6½h to 8h Small sharp fluctuations in Dec. and H.F. 14h to 14¾h Wave in H.F. ( + ·0010). 14¾h to 16¾h Irregular quadruple-crested wave in H.F. ( + ·0019). 15½h to 17½h Irregular wave in Dec. ( − 9′), steep at commencement. 17¾h to 18½h wave in H.F. ( − ·0013). 17¾h to 19½h Wave in Dec. ( − 5′). 22½h to 24h Two successive waves in H.F. ( + ·0017) and ( + ·0019). 22¾h to 23¼h Increase in Dec. ( + 3′), immediately followed by a decrease ( − 10′): decrease in V.F. ( − ·0004). 23¾h to 24h Increase in Dec. ( + 3′).

2d 0¼h to 1¼h Irregular Wave in Dec. ( + 8′). 0¼h to 2h Irregular double-crested wave in H.F. ( + ·0018). 0½h to 3h Wave in V.F. ( − ·0005). 7¾h to 8¼h Increase in Dec. ( + 5′). 8h to 9½h Wave in H.F. ( − ·0010). 11h Sharp increase in H.F. ( + ·0015). 12h to 13h Wave in H.F. ( − ·0019). 14½h to 15½h Wave in H.F. ( + ·0015). 16h to 16¾h Sharp wave in H.F. ( + ·0020) with very sharp superposed fluctuations ( ± ·0008). 16¾h to 17¾h Wave in H.F. ( + ·0015): in Dec. small. 17¾h to 18¼h Increase in H.F. ( + ·0010), immediately followed till 20h by a quadruple wave ( − ·0010, + ·0008, − ·0008 to + ·0009). 18½h to 20h Quadruple Wave in Dec. ( − 3′, + 2′, − 4′ to + 2′). 20h to 21¼h Irregular wave in H.F. ( + ·0020) with superposed fluctuations. 20½h Decrease in Dec. ( − 3′). 20¾h to 21¼ Wave in Dec. ( + 5′). 21½h to 22¼h Wave in Dec. ( + 4′).

3d 0h to 1h Irregular increase in Dec. ( + 6′). 20h to 20¾h Wave in H.F. ( + ·0010). 20¾h to 22¼h Irregular wave in Dec. ( − 5′).

4d 0½h to 1½h Wave in Dec. ( − 3′): in H.F. small. 13¾h to 15½h Double wave in H.F. ( + ·0010 to − ·0010). 21h to 21½h Sharp wave in Dec. ( − 3′): in H.F small.

5d 1h to 2h Wave in Dec. ( + 3′). 2¾h to 4h Wave in Dec. ( + 5′).

6d 0h to 1¾h Wave in Dec. ( + 4′) with superposed fluctuations.

8d 12h to 9d 9h Loss of Dec. and H.F. registers.

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May

10d 14h to 15¾h Double-crested wave in H.F. ( + ·0018). 16¾h to 17½h Irregular increase in H.F. ( + ·0025). 19h to 21½h Two successive waves in H.F. ( + ·0010) and ( + ·0018). 19¼h to 20h Decrease in Dec. ( − 7′), followed by a small increase. 22¼h to 22¾h Sharp double-crested wave in H.F. ( + ·0012). 22½h to 23½h Flat-crested wave in Dec. ( − 5′). 23½h to 24h Sharp decrease in Dec. ( − 12′) and in V.F. ( − ·0007). 10d 23½h to 11d 0¾h Double wave in H.F. ( + ·0010 to − ·0012).

11d 0¼h to 3¼h Two successive irregular waves in Dec. ( + 7′) and ( + 10′). 0¾h to 2¾h Triple-crested wave in H.F. ( − ·0022). 1h to 5h Wave in V.F. ( − ·0010). 3h to 4h Wave in H.F. ( + ·0010). 22¾h to 23¾h Flat-crested wave in H.F. ( + ·0010).

12d 0h to 0¾h Sharp wave in Dec. ( + 5′): in H.F. small. 3h to 5h Wave in Dec. ( + 4′). 3¾h to 5¼h Wave in H.F. ( + ·0013). 14¾h to 16¼h Wave in H.F. ( − ·0012). 12d 23½h to 13d 0½h Double-crested wave in Dec. ( − 3′).

13d 1h to 3¾h Irregular double-crested wave in H.F. ( − ·0020). 2½h to 4½h Flat-crested wave in Dec. ( + 5′). 5¾h to 7¼h Wave in H.F. ( − ·0012). 17h to 18½h Sharp fluctuations in H.F.

14d 0h to 1h Sharp wave in Dec. ( + 6′): decrease in V.F. ( − ·0006). 0h to 2h Double-crested wave in H.F. ( + ·0023).

20d 2¼h to 3½h Wave in Dec. ( + 5′). 11h to 20h Loss of Dec. and H.F. registers.

21d 9h to 10¾h Flat-crested wave in H.F. ( + ·0010), followed till 11½h by a wave ( + ·0010). 15h to 16½h Wave in H.F. ( − ·0017).

22d 21¾h to 22¾h Wave in H.F. ( + ·0010).

23d 2h to 3¾h Double-crested wave in Dec. ( − 4′). 4½h to 5h Decrease in H.F. ( − ·0020). 5h to 6h Wave in H.F. ( − ·0014), followed till 8h by a flat-crested wave ( − ·0013). 5½h to 6½h Double wave in Dec. ( + 3′ to − 2′). 7¼h to 7¾h Wave in Dec. ( − 3′). 10½h Increase in H.F. ( + ·0010). 17½h to 17¾h Increase in H.F. ( + ·0013). 19½h to 20h Increase in H.F. ( + ·0012). 23d 22¾h to 24d 0½h Flat-crested wave in Dec. ( − 6′).

24d 4½h to 5¼h Wave in Dec. ( − 3′), followed by smaller ones with sharp fluctuations: fluctuations also in H.F. 6¾h to 8½h Wave in Dec. ( − 5′), with superposed sharp fluctuations continuing until 9½h. 9h to 10½h Wave in H.F. ( + ·0015), with small superposed fluctuations. 13¼h to 14½h Wave in H.F. ( − ·0012), followed by a smaller one. 15¾h to 17½h Irregular double wave in H.F. ( − ·0013 to + ·0015), with small superposed fluctuations. 16h to 17½h Wave in Dec. ( − 6′).

25d 18h to 26d 18h See Plate I.

27d 2½h to 3h Sharp double-crested wave in Dec. ( − 3′): in H.F. small. 6¾h to 7¼h Sharp wave in Dec. ( − 4′): in H.F. ( − ·0010). 8¼h to 9h Sharp fluctuations in Dec. and H.F. 15¾h Sharp sudden increase in H.F. ( + ·0020): in Dec. and V.F. small, followed by sharp fluctuations in H.F. till 16h. 16½h to 18h Wave in H.F. ( + ·0020), with superposed fluctuations and followed by fluctuations till 19h. 19½h to 20h Sharp double wave in H.F. ( + ·0010 to − ·0011). 20¼h to 21h Wave in H.F. ( − ·0012). 21h to 21¼h Decrease in Dec. ( − 4′), followed till 22h by a wave ( − 3′).

28d 6½h to 9½h Wave in H.F. ( − ·0017), with small superposed fluctuations. 11¾h to 14h Irregular double wave in H.F. ( + ·0016 to − ·0015). 14h to 16h Two successive waves in H.F. ( − ·0011) and ( − ·0010). 18½h to 20h Wave in H.F. ( − ·0011). 19½h to 20h Wave in Dec. ( − 3′). 28d 23½h to 29d 1h Wave in H.F. ( + ·0012).

29d 0h to 0¾h Wave in Dec. ( + 4′). 5¾h to 7h Wave in H.F. ( + ·0010). 15½h to 16½h Wave in H.F. ( + ·0011), with sharp superposed fluctuations. 16½h to 18½h Two successive waves in H.F. ( + ·0012) and ( + ·0020): small wave in Dec. 22½h to 23½h Wave in Dec. ( + 3′). 29d 23½h to 30d 1½h Wave in Dec. ( + 5′).

30d 8h to 9¾h Wave in H.F. ( − ·0020).

31d 21¾h to 23¼h Double-crested wave in Dec. ( − 3′).

June

1d 4½h to 6½h Flat-crested wave in Dec. ( + 6′).

3d 12¼h to 13h Wave in H.F. ( − ·0011). 13¾h to 14¼h Sharp wave in H.F. ( − ·0016). 14¼h to 16h Double-crested wave in H.F. ( − ·0023). 18¾h to 19¼h Very steep wave in H.F. ( + ·0050): in Dec. small. 19½h to 20h Sharp wave in H.F. ( + ·0016). 20h to 22h Two successive waves in Dec. ( − 5′) and ( − 5′). 20¾h to 21¼h Sharp wave in H.F. ( − ·0016). 23¼h to 24h Two very sharp successive waves in H.F. ( + ·0022) and ( + ·0016): in Dec. small.

4d 0h to 0½h Very sharp triple-crested wave in H.F. ( + ·0015): in Dec. small. 2h to 4¼h Very sharp fluctuations in H.F.: in Dec. small. 6¼h to 7¼h Wave in Dec. ( + 5′).

6d 7¾h to 8¼h Double-crested wave in Dec. ( − 3′): in H.F. small. 8¼h to 9½h Flat-crested wave in H.F. ( − ·0010). 11h sharp decrease in H.F. ( − ·0012): small sharp wave in Dec.

7d 12¾h to 14½h Two successive waves in H.F. ( + ·0011) and ( + ·0013).

1908.

June

$9^d\ 16\frac{1}{4}^h$ to $17\frac{1}{2}^h$ Double-crested wave in H.F. ( − ·0011).

$10^d\ 12^h$ to $11^d\ 21^h$ Loss of V.F. register.

$12^d\ 20\frac{1}{4}^h$ to $20\frac{1}{2}^h$ Very sharp wave in H.F. ( + ·0013), followed till $21\frac{1}{2}^h$ by a double-crested wave, ( + ·0013). $21^h$ to $22^h$ Wave in Dec. ( − 4′). $23^h$ Sudden decrease in H.F. ( − ·0013).

$15^d\ 14\frac{3}{4}^h$ to $16\frac{1}{4}^h$ Wave in H.F. ( − ·0012).

$17^d\ 2\frac{1}{4}^h$ to $3\frac{1}{2}^h$ Wave in Dec. (+ 5′), sharp at apex. $14^h$ to $14\frac{1}{2}^h$ Increase in H.F. ( + ·0020). $14\frac{3}{4}^h$ to $16\frac{1}{2}^h$ Irregular double wave in H.F. ( − ·0012 to + ·0012), followed by smaller waves till $20^h$. $21^h$ Sharp decrease in Dec. (− 3′).

$18^d\ 0\frac{1}{4}^h$ to $0\frac{3}{4}^h$ Sharp double-crested wave in H.F. ( + ·0010). $1^h$ Very sharp wave in H.F. ( + ·0017). $1\frac{1}{4}^h$ to $1\frac{1}{2}^h$ Sharp wave in Dec. ( + 3′). $11^h$ to $12\frac{3}{4}^h$ Flat-crested wave in H.F. (−·0016). $12\frac{3}{4}^h$ to $14\frac{1}{4}^h$ Triple-crested wave in H.F. ( − ·0024). $14\frac{3}{4}^h$ to $16^h$ Wave in H.F. (+·0026). $16^h$ to $17^h$ Wave in H.F. ( + ·0012). $18^d\ 23^h$ to $19^d\ 0\frac{1}{4}^h$ Wave in Dec. (− 4′).

$19^d\ 12^h$ to $14^h$ Flat-crested wave in H.F. ( − ·0014). $14^h$ to $16\frac{1}{4}^h$ Two successive waves in H.F. ( − ·0015) and ( − ·0020). $18^h$ to $19^h$ Wave in H.F. (+·0012). $21^h$ to $22^h$ Wave in Dec. ( − 3′). Double wave in H.F. ( − ·0008 to + ·0008).

$20^d\ 0\frac{1}{2}^h$ to $1\frac{1}{2}^h$ Wave in H.F. ( + ·0010). $1\frac{3}{4}^h$ to $2\frac{3}{4}^h$ Wave in H.F. ( + ·0013). $3\frac{1}{4}^h$ to $4\frac{1}{2}^h$ Wave in H.F. ( + ·0010): in Dec. small. $20\frac{1}{2}^h$ to $22^h$ Wave in Dec. ( + 4′). $20^d\ 23\frac{3}{4}^h$ to $21^d\ 1^h$ Wave in Dec. ( + 3′).

$21^d\ 0^h$ to $1^h$ Wave in H.F. ( + ·0014).

$24^d\ 14\frac{3}{4}^h$ to $15\frac{1}{4}^h$ Sharp wave in Dec. ( − 3′): very sharp wave in H.F. ( − ·0026), followed till $16\frac{1}{2}^h$ by a wave ( − ·0027), very sharp at apex. $17\frac{1}{4}^h$ to $18\frac{1}{4}^h$ Irregular wave in H.F. ( + ·0020), with superposed fluctuations.

$26^d\ 0\frac{1}{4}^h$ to $2\frac{1}{4}^h$. Flat-crested wave in H.F. ( + ·0014). $7^h$ to $10\frac{1}{2}^h$ Wave in H.F. ( − ·0022). $7\frac{1}{4}^h$ to $8^h$ Wave in Dec. ( − 3′). $11\frac{1}{2}^h$ to $12\frac{1}{2}^h$ Wave in H.F. (−·0010). $14\frac{1}{2}^h$ to $15\frac{1}{4}^h$ Wave in H.F. (−·0010). $15\frac{1}{2}^h$ to $16\frac{1}{2}^h$ Double wave in H.F. (+ ·0009 to − ·0009). $16\frac{1}{2}^h$ to $17\frac{1}{2}^h$ Wave in Dec. ( − 3′). $18\frac{3}{4}^h$ to $19^h$ Decrease in H.F. (−·0011). $21\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in Dec. ( − 4′). $22^h$ to $22\frac{3}{4}^h$ Double-crested wave in H.F. ( − ·0011).

$27^d\ 1\frac{1}{2}^h$ to $3^h$ Wave in Dec. ( + 5′). $15\frac{3}{4}^h$ to $17^h$ Wave in H.F. ( + ·0010).

$29^d\ 13\frac{3}{4}^h$ to $15^h$ Two successive waves in H.F. ( − ·0011) and (− ·0010).

$30^d\ 16^h$ to $18^h$ Wave in H.F. ( + ·0018). $20\frac{3}{4}^h$ to $21\frac{3}{4}^h$ Wave in Dec. ( − 3′). $21\frac{3}{4}^h$ to $22\frac{1}{4}^h$ Wave in H.F. ( + ·0010).

July

$1^d\ 0\frac{3}{4}^h$ to $4^h$ Two successive waves in Dec. ( + 3′) and ( + 4′).

$6^d\ 17^h$ to $20\frac{1}{2}^h$ Two successive irregular waves in H.F. ( + ·0020) and ( + ·0020). $20\frac{1}{2}^h$ to $21\frac{3}{4}^h$ Wave in Dec. ( − 3′).

$14^d\ 20\frac{1}{2}^h$ to $15^d\ 9^h$ Loss of V.F. register.

$15^d\ 13\frac{1}{4}^h$ to $13\frac{1}{2}$ Increase in H.F. ( + ·0014). $14\frac{3}{4}^h$ to $15^h$ Sharp wave in H.F. ( + ·0010): in Dec. small. $15^h$ to $19^h$ Very irregular triple wave in H.F. ( + ·0024, − ·0020 to + ·0016) with superposed fluctuations, the middle portion very steep. $16\frac{1}{4}^h$ to $17^h$ Wave in Dec. ( + 3′), steep at end. $19^h$ to $19\frac{3}{4}^h$ Wave in H.F. ( + ·0012). $21^h$ to $21\frac{3}{4}^h$ Wave in H.F. ( + ·0012): in Dec. small. $22^h$ to $23\frac{1}{2}^h$ Continuous small waves in H.F., followed till $24^h$ by a sharp wave ( − ·0018). $15^d\ 23\frac{1}{4}^h$ to $16^d\ 2\frac{1}{2}^h$ Irregular quintuple-crested wave in Dec. ( − 11′). $15^d\ 23^h$ to $16^d\ 3\frac{3}{4}^h$ Wave in V.F. ( − ·0007), with superposed fluctuations.

$16^d\ 1\frac{1}{2}^h$ to $2\frac{1}{4}^h$ Wave in H.F. ( − ·0013), steep at commencement. $5^h$ to $7\frac{3}{4}^h$ Two successive waves in H.F. ( − ·0012) and ( − ·0010) with rapid superposed fluctuations. $5\frac{1}{2}^h$ to $8\frac{1}{2}^h$ Very irregular wave in Dec. ( + 14′) with small superposed fluctuations. $7\frac{3}{4}^h$ to $10\frac{1}{4}^h$ Wave in H.F. ( − ·0015) with superposed fluctuations. $8\frac{1}{2}^h$ to $9\frac{3}{4}^h$ Wave in Dec. ( + 6′). $8\frac{1}{2}^h$ to $9^h$ Increase in V.F. ( + ·0004). $12\frac{3}{4}^h$ to $14\frac{1}{2}^h$ Wave in H.F. (−·0026). $17^h$ to $17\frac{3}{4}^h$ Wave in H.F. ( − ·0018). $21\frac{3}{4}^h$ to $22\frac{1}{4}^h$ Sharp waves in Dec. ( + 7′) and H.F. ( + 0015).

$17^d\ 0^h$ to $1\frac{1}{2}^h$ Wave in Dec. ( + 4′). $4\frac{1}{4}^h$ to $6^h$ Wave in H.F. ( − ·0012). $16\frac{1}{2}^h$ to $17\frac{1}{2}^h$ Wave in H.F. ( + ·0016). $22^h$ to $23\frac{1}{4}^h$ Two successive waves in Dec. ( − 3′) and ( − 3′). $22\frac{3}{4}^h$ to $23\frac{1}{4}^h$ Wave in H.F. ( + ·0010).

$24^d\ 16^h$ to $16\frac{1}{2}^h$ Wave in H.F. ( + ·0012), followed till $17\frac{3}{4}^h$ by two successive waves ( − ·0012) and (− ·0012). $17^h$ to $17\frac{1}{4}^h$ Decrease in Dec. ( − 3′).

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July

$25^d\ 2\frac{1}{4}^h$ to $4\frac{1}{4}^h$ Wave in Dec. ($-$ 6′), followed till $8^h$ by an irregular flat-crested wave ($-$ 8′). $2\frac{3}{4}^h$ to $4\frac{1}{2}^h$ Wave in H.F. ($-$ ·0015). $11\frac{3}{4}^h$ to $12\frac{1}{2}^h$ Wave in H.F. ($-$ ·0013), with small superposed fluctuations. $14^h$ Sharp wave in H.F. ($+$ ·0012). $14\frac{1}{2}^h$ to $15^h$ Irregular decrease in Dec. ($-$ 5′), followed till $15\frac{1}{4}^h$ by a sharp wave ($+$ 4′): small wave in V.F. $14\frac{1}{2}^h$ to $15\frac{1}{4}^h$ Sharp double wave in H.F. ($+$ ·0015 to $-$ ·0032), followed till $17\frac{1}{2}^h$ by an irregular triple-wave ($-$ ·0020, $+$ ·0023 to $-$ ·0020). $18^h$ to $18\frac{1}{2}^h$ Wave in H.F. ($+$ ·0016).

$26^d\ 20\frac{1}{2}^h$ to $21\frac{1}{2}^h$ Wave in Dec. ($-$ 3′).

August

$3^d\ 17\frac{1}{2}^h$ to $18\frac{1}{4}^h$ Wave in H.F. ($+$ ·0024). $22^h$ to $23\frac{1}{2}^h$ Wave in Dec. ($-$ 6′).

$4^d\ 1\frac{1}{4}^h$ to $2\frac{1}{4}^h$ Wave in Dec. ($+$ 3′): in H.F. small.

$7^d\ 2^h$ to $3\frac{3}{4}^h$ Wave in Dec. ($+$ 4′). $4^h$ to $6\frac{1}{2}^h$ Wave in Dec. ($-$ 5′), with small superposed fluctuations. $15^h$ to $16^h$ Wave in H.F. ($-$ ·0012): in Dec. small. $18\frac{1}{4}^h$ to $19\frac{1}{4}^h$ Wave in H.F. ($-$ ·0010).

$8^d\ 4^h$ to $5^h$ Decrease in Dec. ($-$ 5′). $7\frac{3}{4}^h$ to $8^h$ Sharp wave in H.F. ($-$ ·0014). $7\frac{3}{4}^h$ to $8\frac{1}{2}^h$ Wave in Dec. ($-$ 3′). $8\frac{1}{2}^h$ to $9\frac{1}{2}^h$ Double wave in H.F. ($-$ ·0010 to $+$ ·0010), followed till $11^h$ by a wave ($+$ ·0013). $9\frac{1}{2}^h$ to $10\frac{1}{2}^h$ Wave in V.F. ($+$ ·0003).

$8^d\ 19\frac{1}{2}^h$ to $9^d\ 19\frac{1}{2}^h$ See Plate II.

$11^d\ 11\frac{3}{4}^h$ to $12^h$ Increase in Dec. ($+$ 3′) and H.F. ($+$ ·0012). $12\frac{1}{4}^h$ to $14^h$ Flat-crested wave in H.F. ($-$ ·0016), followed till $14\frac{1}{2}^h$ by a wave ($-$ ·0010). $15^h$ to $16^h$ Wave in H.F. ($-$ ·0020). $16\frac{1}{4}^h$ to $17\frac{1}{4}^h$ Wave in H.F. ($-$ ·0018). $17^h$ to $19^h$ Irregular wave in Dec. ($-$ 9′). $17\frac{1}{4}^h$ to $18^h$ Wave in H.F. ($-$ ·0020). $18^h$ to $19^h$ Wave in H.F. ($-$ ·0014). $19^h$ to $20\frac{1}{4}^h$ Wave in H.F. ($-$ ·0014). $19\frac{1}{2}^h$ to $20\frac{1}{2}^h$ Wave in Dec. ($-$ 6′). $11^d\ 22\frac{3}{4}^h$ to $12^d\ 1\frac{1}{4}^h$ Two successive waves in H.F. ($+$ ·0010) and ($+$ ·0010): small waves in Dec.

$12^d\ 1\frac{1}{4}^h$ to $4^h$ Irregular double wave in H.F. ($+$ ·0020 to $-$ ·0012). $2^h$ to $3\frac{1}{2}^h$ Waves in Dec. ($-$ 6′) and V.F. ($-$ ·0004). $8^h$ to $11\frac{1}{4}^h$ Double wave in H.F. ($-$ ·0015 to $+$ ·0012), with superposed fluctuations. $15\frac{1}{4}^h$ to $17\frac{1}{4}^h$ Irregular double wave in Dec. ($+$ 5′ to $-$ 10′), steep at commencement. $15\frac{1}{4}^h$ to $16^h$ Very steep double wave in H.F. ($+$ ·0040 to $-$ ·0035), with superposed sharp fluctuations. $16^h$ to $19^h$ Two successive triple waves in H.F. ($+$ ·0020, $-$ ·0015 to $+$ ·0025) and ($+$ ·0016, $-$ ·0025 to $+$ ·0018). $18^h$ to $18\frac{1}{4}^h$ Wave in Dec. ($-$ 3′), followed till $20^h$ by a double-crested wave ($-$ 15′), very steep at commencement. $19^h$ to $20^h$ Decrease in H.F. ($-$ ·0024). $21^h$ to $21\frac{3}{4}$ Double wave in Dec. ($+$ 4′ to $-$ 4′), immediately followed by a decrease ($-$ 4′). $21^h$ to $22^h$ Increase in H.F. ($+$ ·0018), with two successive steep waves superposed ($+$ ·0015) and ($+$ ·0013): irregular decrease in V.F. ($-$ ·0008). $23^h$ to $24^h$ Wave in Dec. ($-$ 4′): flat-crested wave in H.F. ($-$ ·0011). $12^d\ 23\frac{1}{2}^h$ to $13^d\ 0\frac{3}{4}^h$ Wave in V.F. ($+$ ·0003).

$13^d\ 0\frac{1}{4}^h$ to $0\frac{3}{4}^h$ Decrease in H.F. ($-$ ·0013). $0\frac{1}{2}^h$ to $1^h$ Sharp increase in Dec. ($+$ 10′), followed by slower partial return ($-$ 4′): fluctuations following, especially in H.F., until $15^h$. $15^h$ to $16\frac{1}{2}^h$ Irregular triple wave in H.F. ($+$ ·0013, $-$ ·0013 to $+$ ·0015), followed till $17\frac{1}{2}^h$ by a wave ($+$ ·0018). $16^h$ to $16\frac{1}{4}^h$ Decrease in Dec. ($-$ 5′), followed till $17^h$ by a wave ($-$ 3′): small waves in H.F. $19\frac{3}{4}^h$ to $22^h$ Irregular triple-crested wave in Dec. ($-$ 7′). $20^h$ to $21\frac{1}{4}^h$ Wave in H.F. ($+$ ·0015). $13^d\ 23\frac{1}{2}^h$ to $14^d\ 1^h$ Wave in Dec. ($+$ 4′): in H.F. small.

$14^d\ 3\frac{1}{4}^h$ to $4\frac{3}{4}^h$ Wave in H.F. ($+$ ·0012). $11\frac{3}{4}^h$ to $12\frac{3}{4}^h$ Wave in H.F. ($+$ ·0011), with superposed fluctuations, followed till $13\frac{1}{2}^h$ by an increase ($+$ ·0018), the fluctuations continuing until $15\frac{1}{2}^h$.

$15^d\ 0\frac{1}{4}^h$ to $1\frac{1}{4}^h$ Flat-crested wave in Dec. ($+$ 4′).

$19^d\ 0\frac{1}{4}^h$ to $1^h$ Irregular wave in Dec. ($+$ 5′). $0\frac{1}{4}^h$ to $3\frac{1}{4}^h$ Quadruple wave in H.F. ($+$ ·0022, $-$ ·0013, $+$ ·0020 to $-$ ·0032); very steep at each end. $0\frac{1}{4}^h$ to $1^h$ Decrease in V.F. ($-$ ·0007). $1^h$ to $1\frac{1}{4}^h$ Wave in Dec. ($+$ 4′), followed till $2^h$ by a decrease ($-$ 9′). $1\frac{1}{4}^h$ to $3^h$ Irregular wave in V.F. ($-$ ·0003). $2\frac{1}{2}^h$ to $3\frac{3}{4}^h$ Sharp wave in Dec. ($+$ 44′). $3^h$ to $5^h$ Wave in V.F. ($-$ ·0009). $4\frac{1}{2}^h$ to $5\frac{3}{4}^h$ Increase in Dec. ($+$ 15′), followed till $6\frac{3}{4}^h$ by a wave ($-$ 5′). $4\frac{3}{4}^h$ to $6^h$ Flat-crested wave in H.F. ($-$ ·0011), followed till $8\frac{1}{4}^h$ by an irregular double-crested wave ($-$ ·0023). $5\frac{3}{4}^h$ to $6\frac{3}{4}^h$ Wave in V.F. ($-$ ·0003). $8^h$ to $8\frac{1}{2}^h$ Decrease in Dec. ($-$ 7′). $8\frac{3}{4}^h$ to $9\frac{1}{2}^h$ Decrease in H.F. ($-$ ·0025). $9\frac{3}{4}^h$ to $10^h$ Decrease in H.F. ($-$ ·0015). $11\frac{1}{2}^h$ to $12\frac{1}{4}^h$ Wave in H.F. ($-$ ·0014). $12\frac{1}{2}^h$ to $13\frac{3}{4}^h$ Flat-crested wave in H.F. ($+$ ·0023). $13^h$ to $13\frac{1}{4}^h$ Wave in Dec. ($+$ 3′). $13^h$ to $15^h$ Wave in V.F. ($+$ ·0006). $14^h$ to $14\frac{1}{4}^h$ Sharp decrease in Dec. ($-$ 8′), followed till $14\frac{3}{4}^h$ by slow irregular increase ($+$ 3′). $14\frac{1}{4}^h$ to $14\frac{1}{2}^h$ Sharp increase in H.F. ($+$ ·0035), followed till $14\frac{3}{4}^h$ by a wave ($+$ ·0012). $15\frac{1}{2}^h$ to $16^h$ Wave in H.F. ($+$ ·0011).

$21^d\ 1\frac{1}{2}^h$ to to $3\frac{1}{2}^h$ Wave in Dec. ($+$ 4′): in H.F. ($+$ ·0018).

$21^d\ 8^h$ to $22^d\ 8^h$ See Plate II.

$22^d\ 12\frac{1}{2}^h$ to $13\frac{3}{4}^h$ Wave in H.F. ($-$ ·0015).

$23^d\ 22^h$ to $23\frac{1}{4}^h$ Wave in H.F. ($+$ ·0011). $22^h$ to $24^h$ Small double wave in Dec. ($+$ 2′ to $-$ 2′).

$25^d\ 2\frac{3}{4}^h$ to $4\frac{1}{4}^h$ Wave in Dec. ($+$ 3′). $3^h$ to $4^h$ Increase in H.F. ($+$ ·0010), followed till $5\frac{1}{4}^h$ by a wave ($-$ ·0012). $15\frac{1}{4}^h$ to $16\frac{3}{4}^h$ Wave in H.F. ($-$ ·0011). $18\frac{3}{4}^h$ to $21^h$ Double-crested wave in Dec. ($-$ 7′).

$29^d\ 9^h$ to $10^h$ Decrease in V.F. ($-$ ·0005). $12^h$ to $13^h$ Wave in H.F. ($+$ ·0013). $18^h$ to $19\frac{1}{4}^h$ Wave in H.F. ($-$ ·0015). $22\frac{1}{4}^h$ to $24^h$ Wave in H.F. ($+$ ·0010).

$31^d\ 0^h$ to $1\frac{1}{4}^h$ Wave in Dec. ($+$ 4′), and H.F. ($+$ ·0011). $22\frac{1}{2}^h$ to $24^h$ Wave in H.F. ($+$ ·0012).

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September

$3^d\ 15\frac{3}{4}^h$ to $17^h$ Wave in H.F. ( + ·0012).

$4^d\ 14^h$ to $5^d\ 11\frac{1}{2}^h$ Loss of Dec. and H.F. registers.

$5^d\ 0^h$ to $0\frac{1}{2}^h$ Sharp decrease in V.F. ( − ·0010), continued till $1\frac{1}{4}^h$ by a flat-crested wave ( − ·0010). $1\frac{1}{4}^h$ to $3\frac{1}{4}^h$ Double wave in V.F. ( − ·0006 to + ·0003). $4^h$ to $4\frac{1}{4}^h$ Decrease in V.F. ( − ·0005). $5^h$ to $7^h$ Increase in V.F. ( + ·0014). $12^h$ to $12\frac{3}{4}^h$ Two successive waves in Dec. ( + 3′) and ( + 3′), and in H.F. ( + ·0013) and ( + ·0015). $12^h$ to $14\frac{3}{4}^h$ Irregular increase in V.F. ( + ·0015). $12\frac{3}{4}^h$ to $13^h$ Sharp increase in H.F. ( + ·0028), continued to $13\frac{1}{4}^h$ by a sharp double wave ( + ·0012 to − ·0012): small fluctuations in Dec. and H.F., continuing until $14\frac{3}{4}^h$. $14\frac{3}{4}^h$ to $15\frac{1}{4}^h$ Wave in Dec. ( − 3′). $14\frac{3}{4}^h$ to $15^h$ Sharp wave in H.F. ( + ·0012). $15\frac{1}{4}^h$ to $16\frac{1}{4}^h$ Irregular wave in H.F. ( + ·0018), followed till $17^h$ by a wave ( − ·0018), steep at commencement. $17\frac{1}{4}^h$ to $18\frac{3}{4}^h$ Two successive sharp waves in Dec. ( − 9′) and (− 13′), and in H.F. ( + ·0060) and ( + ·0040). $17\frac{3}{4}^h$ to $18^h$ Sharp decrease in V.F. ( − ·0005). $18\frac{3}{4}^h$ to $21\frac{1}{2}^h$ Three successive waves in Dec. ( − 5′), ( − 5′), and ( − 10′). $18\frac{3}{4}^h$ to $19^h$ Decrease in V.F. ( − ·0003). $19\frac{1}{2}^h$ to $20\frac{1}{4}^h$ Wave in H.F. ( + ·0018). $22^h$ to $22\frac{3}{4}^h$ Wave in H.F. ( + ·0026). $22^h$ to $23\frac{1}{4}^h$ Wave in V.F. ( − ·0003), followed till $24^h$ by an decrease ( − ·0004). $22\frac{1}{4}^h$ to $24^h$ Triple wave in Dec. ( + 4′, − 8′ to + 4′). $23^h$ to $23\frac{3}{4}^h$ Wave in H.F. ( − ·0010).

$6^d\ 0\frac{1}{4}^h$ to $3\frac{1}{2}^h$ Slow wave in V.F. ( + ·0004). $0\frac{1}{2}^h$ to $1\frac{3}{4}^h$ Flat-crested wave in H.F. ( − ·0011). $2\frac{3}{4}^h$ to $3\frac{1}{2}^h$ Flat-crested wave in Dec. ( + 4′).

$7^d\ 2\frac{1}{2}^h$ to $4^h$ Flat-crested wave in Dec. ( + 4′). $9\frac{1}{2}^h$ to $10^h$ Decrease in V.F. ( − ·0004). $17\frac{1}{4}^h$ to $19\frac{1}{4}^h$ Wave in H.F. ( − ·0017). $21\frac{3}{4}^h$ to $22^h$ Decrease in Dec. ( − 4′). $22\frac{1}{4}^h$ Decrease in H.F. ( − ·0010).

$8^d\ 14\frac{3}{4}^h$ Sudden decrease in Dec. ( − 3′), and in H.F. ( − ·0012), continued till $15^h$ by a sharp wave ( − ·0010). $16^h$ to $16\frac{3}{4}^h$ Two successive waves in H.F. ( + ·0016) and ( + ·0016), immediately followed till $17\frac{1}{4}^h$ by a very sharp double wave ( + ·0015 to − ·0020): small sharp movements in Dec. and V.F. $21^h$ to $22\frac{1}{4}^h$ Two successive waves in H.F. (+ ·0010) and (+ ·0013). $22^h$ to $23\frac{1}{4}^h$ Flat-crested wave in Dec. ( − 4′).

$9^d\ 9^h$ to $11^h$ Wave in V.F. ( − ·0004). $19\frac{1}{4}^h$ to $20^h$ Wave in Dec. ( − 4′): in H.F. ( + ·0010). $21\frac{1}{2}^h$ to $22\frac{3}{4}^h$ Wave in Dec. ( − 7′): in H.F. ( + ·0028), followed till $24^h$ by another wave ( + ·0028).

$9^d\ 23\frac{3}{4}^h$ to $10^d\ 1^h$ Wave in Dec. ( − 4′).

$10^d\ 2^h$ to $2\frac{1}{4}^h$ Sharp increase in H.F. ( + ·0023). $2\frac{1}{4}^h$ to $3\frac{1}{4}^h$ Wave in Dec. ( − 4′). $3\frac{1}{2}^h$ to $4\frac{1}{4}^h$ Wave in Dec. ( + 4′), and in H.F ( + ·0016). $3\frac{3}{4}^h$ to $4^h$ Decrease in V.F. ( − ·0004). $10^h$ to $11^h$ Flat-crested wave in H.F. (− ·0015). $12\frac{1}{4}^h$ to $12\frac{3}{4}^h$ Sharp wave in H.F. ( − ·0020), followed by small sharp fluctuations till $14\frac{1}{2}^h$. $21\frac{1}{4}^h$ to $22^h$ Wave in Dec. ( − 3′).

$11^d\ 13\frac{1}{4}^h$ to $14\frac{1}{2}^h$ Wave in H.F. ( + ·0016). $16^h$ to $16\frac{3}{4}^h$ Very steep double-crested wave in H.F. ( + ·0024), with sharp superposed fluctuations. $16\frac{3}{4}^h$ to $18^h$ Wave in H.F. ( − ·0018), very steep at commencement. $18\frac{3}{4}^h$ to $19\frac{1}{4}^h$ Increase in H.F. ( + ·0024), with superposed fluctuations. $19\frac{1}{2}^h$ to $19\frac{3}{4}^h$ Decrease in Dec. (− 3′): in H.F. ( − ·0010).

$11^d\ 20^h$ to $12^d\ 20^h$ See Plate II.

$13^d\ 17\frac{1}{4}^h$ to $18\frac{1}{2}^h$ Two successive waves in H.F. ( + ·0012) and ( + ·0013). $18^h$ to $19^h$ Irregular double-crested wave in Dec. ( − 4′). $21\frac{1}{4}^h$ to $22\frac{1}{2}^h$ Two successive waves in Dec. ( − 4′) and ( − 3′). $21\frac{1}{4}^h$ to $23\frac{1}{2}^h$ Three successive waves in H.F. ( + ·0010), ( + ·0012), and ( + ·0010). $13^d\ 23\frac{1}{4}^h$ to $14^d\ 1^h$ Flat-crested wave in Dec. ( − 5′).

$15^d\ 23\frac{3}{4}^h$ to $24^h$ Sharp increase in H.F. ( + ·0024).

$16^d\ 0^h$ to $0\frac{3}{4}^h$ Steep decrease in H.F. ( − ·0040). $0^h$ to $1\frac{1}{2}^h$ Wave in V.F. ( − ·0005). $0\frac{1}{4}^h$ to $0\frac{3}{4}^h$ Decrease in Dec. ( − 7′). $6\frac{1}{2}^h$ to $8^h$ Wave in H.F. ( − ·0033). $6\frac{3}{4}^h$ to $8^h$ Wave in V.F. ( + ·0003). $7^h$ to $9^h$ Wave in Dec. ( + 12′). $9\frac{1}{2}^h$ to $12\frac{1}{2}^h$ Irregular triple-crested wave in H.F. ( − ·0033): small wave in Dec. $12\frac{3}{4}^h$ to $14^h$ Wave in H.F. ( − ·0019). $14\frac{3}{4}^h$ to $15\frac{1}{2}^h$ Wave in H.F. (+ ·0030). $15^h$ to $15\frac{3}{4}^h$ Double-crested wave in Dec. ( + 6′): sharp increase in V.F. ( + ·0009). $16^h$ to $17\frac{1}{2}^h$ Double-crested wave in H.F. ( + ·0028). $16^h$ to $18^h$ Wave in V.F. ( + ·0005). $17^h$ to $17\frac{1}{2}^h$ Sharp decrease in Dec. ( − 8′), followed till $18\frac{1}{4}^h$ by a sharp wave (+9′). $17\frac{1}{2}^h$ to $19\frac{1}{4}^h$ Two successive waves in H.F. ( + ·0017) and ( + ·0017). $20^h$ to $21^h$ Sharp double wave in Dec. ( − 8′ to + 4′): wave in H.F. ( + ·0024): irregular decrease in V.F. ( − ·0007). $21\frac{3}{4}^h$ to $22\frac{1}{2}^h$ Sharp wave in Dec. ( − 10′). $21\frac{3}{4}^h$ to $23^h$ Wave in H.F. ( + ·0026), steep at commencement.

$17^d\ 3\frac{1}{2}^h$ to $4\frac{1}{2}^h$ Flat-crested wave in Dec. ( − 3′). $4^h$ to $5\frac{1}{2}^h$ Irregular wave in H.F. ( − ·0011). $8^h$ to $9^h$ Decrease in H.F. ( − ·0024). $17^h$ to $18\frac{1}{2}^h$ Wave in Dec. ( − 5′). $19\frac{1}{2}^h$ to $20^h$ Wave in Dec. ( − 3′). $19\frac{1}{2}^h$ to $20\frac{3}{4}^h$ Irregular double-crested wave in H.F. ( + ·0020). $20^h$ to $21^h$ Irregular wave in Dec. ( + 4′).

$18^d\ 23\frac{3}{4}^h$ to $19^d\ 0\frac{3}{4}^h$ Wave in Dec. ( + 6′).

$19^d\ 9\frac{3}{4}^h$ to $11\frac{3}{4}^h$ Wave in H.F. ( − ·0016).

$23^d\ 1\frac{1}{4}^h$ to $2^h$ Sharp wave in Dec. ( + 4′). $1\frac{1}{4}^h$ to $3^h$ Wave in H.F. ( + ·0014). $1\frac{1}{2}^h$ to $2\frac{1}{4}^h$ Decrease in V.F. ( − ·0004).

$24^d\ 19^h$ to $20^h$ Wave in Dec. ( − 4′). $19^h$ to $19\frac{1}{4}^h$ Sharp decrease in H.F. ( − ·0013).

$25^d\ 22^h$ to $23\frac{1}{4}^h$ Wave in Dec. ( + 3′): in H.F. small.

1908.

September

28d 8¾h to 9h Very sharp wave in Dec. ( − 3′): in H.F. ( − ·0010). 8¾h to 9¼h Irregular decrease in V.F. ( − ·0004). 9¾h to 11h Wave in H.F. ( − ·0024), with rapid superposed fluctuations: fluctuations also in Dec. 16h to 16¼h Sharp decrease in Dec. ( − 4′). 16¼h to 17h Wave in H.F. ( + ·0014). 17h to 17½h Wave in Dec. ( − 3′). 17¾h to 18h Very steep wave in H.F. ( + ·0011).

28d 19h to 30d 19h See Plate III.

30d 15½h to 21½h Loss of V.F. register. September 30d 19½h to October 1d 2h. Loss of Dec. register.

30d 20¼h to 20½h Very steep wave in H.F. ( + ·0026). 21½h to 21¾h Increase in H.F. ( + ·0012), followed till 22¾h by a double-crested wave ( − ·0018), followed till 24h by a sharp wave ( − ·0035).

30d 22½h to October 1d 9½h Irregular wave in V.F. ( − ·0006).

October

1d 0½h to 1h Wave in H.F. ( + ·0015), very steep at commencement. 1¼h to 2¼h Wave in H.F. ( − ·0013). 4h to 5h Irregular wave in Dec. ( − 4′): in H.F. small. 7¾h to 8½h Wave in H.F. ( − ·0012). 8½h to 11½h Loss of Dec. register. 12¼h to 12¾h Increase in H.F. ( + ·0015). 17h to 18½h Double-crested wave in Dec ( − 4′). 18h to 19½h Irregular double wave in H.F. ( − ·0010 to + ·0012).

2d 18h to 6d 17h Loss of Dec. register.

3d 7½h to 8¾h Wave in H.F. ( − ·0010). 15¼h to 17h Wave in H.F. ( − ·0010).

4d 1h to 3h Wave in V.F. ( − ·0003). 18h to 19h Wave in H.F. ( − ·0011). 22h to 23½h Wave in H.F. ( + ·0030). 4d 23½h to 5d 1h Wave in H.F. ( + ·0010).

5d 9¼h to 10h Double-crested wave in V.F. ( − ·0003). 9½h to 11h Double wave in H.F. ( − ·0016 to + ·0014), with rapid superposed fluctuations continuing till 16½h. 12¾h to 13¾h Wave in H.F. ( + ·0016): in V.F. small. 16¾h to 17½h Wave in H.F. ( − ·0020). 19h to 20h Wave in V.F. ( + ·0003). 20h to 21½h Irregular triple wave in H.F. ( − ·0011, + ·0020 to − ·0013). 22h to 23½h Triple wave in H.F. ( + ·0018, − ·0026 to + ·0018), followed till 24h by a wave ( ·0018). 5d 22h to 6d 1h Irregular wave in V.F. ( − ·0007).

6d 0h to 2h Two successive waves in H.F. ( − ·0015) and ( − ·0016). 2h to 3½h Flat-crested wave in H.F. ( − ·0013). 13¼h to 14¼h Wave in H.F. ( − ·0012). 15¾h to 17¼h Double wave in H.F. ( − ·0016 to + ·0012). 17¾h to 18h Sharp decrease in Dec. ( − 5′): wave in H.F. ( − ·0010), immediately followed till 19½h by a double-crested wave ( + ·0020). 18¾h to 19½h Flat-crested wave in Dec.( − 5′). 22¼h to 23h Wave in Dec. ( + 3′): in H.F. small.

7d 0h to 1¼h Wave in Dec. ( + 5′). 7d 19h to 8d 10½h Loss of Dec. register.

9d 4h to 12½h Loss of Dec. register.

12d 13h to 15h Wave in H.F. ( + ·0015). 15½h to 16¼h Wave in H.F. ( + ·0012). 16¾h to 17¾h Wave in Dec. ( + 4′), continued till 18¼h by a decrease ( − 12′), continued till 19¼h by an irregular wave ( − 5′). 17h to 19¼h Flat-crested wave in H.F. ( − ·0018), with small waves superposed: double-crested wave in V.F. ( + ·0004). 19¼h to 20¼h Wave in H.F. ( − ·0016). 19¾h to 20½h Irregular decrease in Dec. ( − 10′). followed by an irregular triple wave ( + 8′, − 9′ to + 4′). 20h to 20¾h Decrease in V.F. ( − ·0005). 20½h to 23h Four successive waves in H.F. ( + ·0020), ( + ·0014), ( + ·0018), and ( + ·0010). 21¼h to 22¼h Wave in V.F. ( − ·0004). 23h to 24h Increase in Dec. ( + 10′).

13d 1¼h to 2½h Double wave in H.F. ( − ·0018 to + ·0017), continued till 4h by a very irregular wave ( − ·0015). 1½h to 2h Sharp increase in Dec. ( + 15′), followed till 4h by an irregular double-crested wave ( − 11′). 1¾h to 4h Double-crested wave in V.F. ( − ·0009): fluctuations after 4h in Dec. and H.F. 6½h to 8h Wave in H.F. ( − ·0010). 12¼h to 14h Double-crested wave in H.F. ( − ·0020). 14¾h to 17¼h Two successive irregular waves in H.F. ( + ·0018) and ( + ·0015). 16h to 18¾h Triple-crested wave in Dec. ( − 8′), followed till 21h by two successive irregular waves ( − 7′) and ( − 6′). 18¾h to 19h Wave in H.F. ( + ·0011). 19¾h to 21h Double-crested wave in H.F. ( + ·0024).

14d 9h to 11¼h Irregular wave in H.F. ( − ·0024). 18¼h to 19h Wave in Dec. ( − 4′). 18½h to 19¼h Wave in H.F. ( + ·0014).

17d 22¾h to 18d 0¾h Wave in H.F. ( + ·0025), steep at commencement.

18d 18½h to 20¾h Two successive waves in Dec. ( − 5′) and ( − 8′). 18½h to 19¼h Wave in H.F. ( − ·0012). 19½h to 21h Double wave in H.F. ( − ·0010 to + ·0012).

21d 20¾h to 21h Sudden decrease in Dec. ( − 4′).

25d 20h to 21h Wave in Dec. ( − 3′), steep at commencement.

26d 21½h to 22h Sharp increase in Dec. ( + 3′), immediately followed by sharp decrease ( − 6′). 26d 23h to 27d 5½h Loss of V.F. Register.

27d 7¼h to 12h Loss of V.F. Register. 20¾h to 21¼h Wave in Dec. ( − 5′).

30d 2¾h to 3½h Wave in Dec. ( + 4′): in H.F. small.

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October $31^d$ $6\frac{1}{4}^h$ to $7^h$ Irregular increase in Dec. ( + 4′). $6\frac{3}{4}^h$ to $7\frac{1}{2}^h$ Decrease in H.F. ( − ·0024). $7\frac{1}{2}^h$ to $8\frac{1}{2}^h$ Two successive waves in Dec. ( − 4′) and ( − 5′), followed by smaller ones. $7\frac{3}{4}^h$ to $8\frac{1}{2}^h$ Two successive waves in H.F. ( − ·0011) and ( − ·0013). $10^h$ Very sharp wave in Dec. ( + 3′): sharp decrease in H.F. ( − ·0015). $12\frac{3}{4}^h$ to $14^h$ Wave in H.F. ( − ·0040). $13^h$ to $14^h$ Double wave in Dec. ( + 4′ to − 4′), the first portion very steep. $17\frac{1}{2}^h$ to $18^h$ Sharp decrease in Dec. ( − 8′), continued till $18\frac{1}{2}^h$ by a sharp wave ( − 10′). $17^h$ to $18\frac{3}{4}^h$ Double wave in H.F. ( − ·0018 to + ·0038), followed till $19^h$ by a wave ( + ·0011): irregular movements in V.F. till $22^h$. $18\frac{3}{4}^h$ to $19\frac{1}{2}^h$ Double-crested wave in Dec. ( − 7′). $19\frac{1}{2}^h$ to $20\frac{3}{4}^h$ Double-crested wave in H.F. ( − ·0015). $20^h$ to $21^h$ Two successive waves in Dec. ( + 5′) and ( + 3′). $20\frac{3}{4}^h$ to $21\frac{1}{2}^h$ Two successive waves in H.F. ( + ·0012) and ( + ·0020). $21^h$ to $22\frac{1}{2}^h$ Two successive waves in Dec. ( − 7′) and ( − 5′).

November $1^d$ $8\frac{1}{2}^h$ to $10^h$ Wave in H.F. ( − ·0015). $12^h$ to $13\frac{1}{2}^h$ Wave in Dec. ( − 5′). $12^h$ to $14\frac{1}{2}^h$ Very irregular wave in H.F. ( + ·0016), followed till $15^h$ by an increase ( + ·0016). $14^h$ to $14\frac{1}{4}^h$ Sharp decrease in Dec. ( − 4′). $20^h$ to $21\frac{1}{2}^h$ Two successive waves in H.F. ( − ·0012) and ( − ·0013). $20\frac{1}{2}^h$ to $21^h$ Wave in Dec. ( − 3′). $21\frac{1}{2}^h$ to $22\frac{1}{4}^h$ Wave in Dec. ( + 5′): decrease in H.F. ( − ·0010), in V.F. ( − ·0003).

$2^d$ $18\frac{1}{4}^h$ to $19\frac{3}{4}^h$ Wave in H.F. ( + ·0012). $18\frac{1}{2}^h$ to $19\frac{3}{4}^h$ Double-crested wave in Dec. ( − 3′). $22\frac{1}{2}^h$ to $23\frac{3}{4}^h$ Wave in H.F. ( + ·0010): in Dec. small.

$6^d$ $8\frac{3}{4}^h$ to $9\frac{1}{4}^h$ Decrease in V.F. ( − ·0003).

$7^d$ $19\frac{1}{4}^h$ to $20\frac{3}{4}^h$ Wave in Dec. ( − 4′).

$8^d$ $0^h$ to $2^h$ Double wave in H.F. ( − ·0010 to + ·0024). $0\frac{1}{2}^h$ to $1\frac{3}{4}^h$ Sharp wave in Dec. ( − 12′), followed till $3\frac{1}{2}^h$ by a double wave ( − 4′ to + 11′). $2^h$ to $3^h$ Decrease in V.F. ( − ·0003). $2\frac{1}{4}^h$ to $4^h$ Double wave in H.F. (+ ·0015 to − ·0018), followed till $5^h$ by two successive waves ( − ·0015) and ( − ·0013). $3^h$ to $3\frac{1}{2}^h$ Sharp decrease in V.F. ( − ·0006), followed till $4\frac{3}{4}^h$ by two successive waves ( + ·0003) and ( + ·0003). $3\frac{1}{2}^h$ to $6^h$ Increase in Dec. ( + 12′), with four successive sharp superposed waves ( + 7′), ( + 6′), ( + 3′), and ( + 6′). $5^h$ to $5\frac{1}{4}^h$ Irregular sharp decrease in H.F. ( − ·0025). $5\frac{3}{4}^h$ to $7^h$ Flat-crested wave in H.F. ( + ·0016). $6^h$ to $10\frac{1}{2}^h$ Sharp fluctuations in Dec., H.F. and V.F. $10\frac{1}{2}^h$ to $12^h$ Irregular double-crested wave in Dec. ( − 7′). $12\frac{1}{4}^h$ to $14\frac{1}{2}^h$ Two successive waves in Dec. ( + 6′) and ( + 6′). $12\frac{1}{4}^h$ to $12\frac{3}{4}^h$ Wave in H.F. ( − ·0010), followed till $14\frac{1}{2}^h$ by an irregular double-crested wave ( − ·0028). $13^h$ to $15^h$ Irregular increase in V.F. ( + ·0012), followed till $16\frac{1}{4}^h$ by a wave ( + ·0007). $14\frac{1}{4}^h$ to $16^h$ Irregular double wave in Dec. ( + 7′ to − 11′), each portion double-crested. $14\frac{1}{2}^h$ to $16^h$ Irregular double wave in H.F. ( − ·0025 to + ·0017), each portion triple-crested. $16^h$ to $17^h$ Two successive waves in Dec. ( − 4′) and ( − 16′). $16\frac{1}{4}$ to $18\frac{1}{4}^h$ Quintuple sharp wave in H.F. ( − ·0020, + ·0017, − ·0027, + ·0020 to − ·0017). $16\frac{1}{2}^h$ to $20\frac{3}{4}^h$ Irregular decrease in V.F. ( − ·0016). $17^h$ to $17\frac{1}{2}^h$ Very sharp decrease in Dec. ( − 25′), immediately followed till $18^h$ by a sharp increase ( + 19′), and partial return ( − 6′). $18^h$ to $19^h$ Irregular wave in Dec. ( + 4′). $18\frac{3}{4}^h$ to $19\frac{1}{2}^h$ Wave in H.F. ( − ·0014). $19\frac{3}{4}^h$ to $20\frac{1}{2}^h$ Sharp wave in Dec. ( − 11′). $19\frac{3}{4}^h$ to $20\frac{3}{4}^h$ Double wave in H.F. ( − ·0013 to + ·0024). $21^h$ to $23\frac{1}{2}^h$ Two successive waves in H.F. ( − ·0011) and ( − ·0015). $21\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Wave in Dec. ( − 4′).

$9^d$ $1\frac{1}{4}^h$ to $2\frac{3}{4}^h$ Wave in Dec. ( + 7′), in H.F. small. $3\frac{1}{4}^h$ to $5\frac{1}{2}^h$ Irregular wave in H.F. ( − ·0020). $12^h$ to $13\frac{3}{4}^h$ Irregular wave in H.F. ( − ·0026). $12\frac{3}{4}^h$ to $13\frac{3}{4}^h$ Wave in Dec. ( − 5′). $14\frac{1}{4}^h$ to $15\frac{1}{2}^h$ Wave in Dec. ( − 4′). $15\frac{1}{4}^h$ to $17\frac{1}{4}^h$ Double wave in H.F. ( − ·0023 to + ·0017), the middle portion very steep. $16^h$ to $17^h$ Sharp wave in Dec. ( − 13′). $18\frac{1}{2}^h$ to $19\frac{1}{2}^h$ Irregular waves in Dec. ( − 4′) and H.F. ( + ·0020), steep at commencement. $20^h$ to $21^h$ Double-crested wave in Dec. ( − 5′). $20\frac{1}{2}^h$ to $20\frac{3}{4}^h$ Sharp decrease in H.F. ( − ·0012). $21^h$ to $21\frac{1}{2}^h$ Sharp wave in Dec. ( − 5′), followed till $23\frac{1}{2}^h$ by an irregular triple-crested wave ( − 6′). $21^h$ to $23^h$ Triple-crested wave in H.F. ( + ·0022).

$10^d$ $15^h$ to $17^h$ Irregular wave in Dec. ( − 9′), steep at commencement, followed till $18^h$ by a wave ( − 8′). $15^h$ to $16^h$ Wave in H.F. ( − ·0020). $17^h$ to $18^h$ Double wave in H.F. ( − ·0013 to + ·0017). $10^d$ $23\frac{1}{2}^h$ to $11^d$ $0\frac{1}{4}^h$ Wave in H.F. ( + ·0021).

$11^d$ $15\frac{3}{4}^h$ to $16\frac{1}{2}^h$ Wave in Dec. ( − 4′): in H.F. ( − ·0010). $18\frac{1}{4}^h$ to $19\frac{3}{4}^h$ Wave in Dec. ( − 5′): in H.F. small. $20^h$ to $21\frac{1}{2}^h$ Double-crested wave in Dec. ( + 3′). $20\frac{1}{4}^h$ to $21\frac{1}{4}^h$ Triple-crested wave in H.F. ( + ·0012). $23\frac{1}{2}^h$ Sharp increase in H.F. (+ ·0010). $11^d$ $23\frac{1}{2}^h$ to $12^d$ $0\frac{1}{2}^h$ Wave in Dec. ( + 7′): steep at commencement: decrease in V.F. (− ·0003).

$12^d$ $20\frac{3}{4}^h$ to $22^h$ Double-crested wave in Dec. ( − 3′): in H.F. ( + ·0018).

$14^d$ $12\frac{3}{4}^h$ to $13^h$ Sharp decrease in H.F. ( − ·0015). $18^h$ to $19^h$ Wave in H.F. ( − ·0010). $18\frac{1}{4}^h$ to $19^h$ Decrease in Dec. ( − 7′). $19\frac{1}{2}^h$ to $20\frac{1}{2}^h$ Wave in H.F. ( − ·0013). $23\frac{1}{4}^h$ to $24^h$ Decrease in Dec. ( − 5′): Wave in H.F. ( + ·0013).

$15^d$ $1\frac{1}{4}$ to $2\frac{1}{4}$ Wave in Dec. ( − 3′).

$17^d$ $1^h$ Sharp increase in Dec. ( + 4′) and H.F. ( + 0010), in V.F. small, all followed by slower partial return. $2^h$ to $4\frac{1}{4}^h$ Double wave in Dec. ( − 6′ to + 6′), the first portion double-crested. $3^h$ to $4\frac{1}{2}^h$ Double wave in H.F. ( − ·0012 to + ·0015). $3\frac{1}{4}^h$ to $4^h$ Wave in V.F. ( + ·0003). $7^h$ to $8\frac{1}{4}^h$ Wave in H.F. ( − ·0011). $11\frac{1}{2}^h$ to $13\frac{1}{2}^h$ Irregular wave in H.F. ( − ·0020). $13\frac{1}{2}^h$ to $15\frac{3}{4}^h$ Very irregular quadruple wave in Dec. ( + 5′, − 6′, + 4′ to − 5′): the concluding position steep. $13\frac{3}{4}^h$ to $14\frac{3}{4}^h$ Steep wave in

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H.F. ( − ·0042). $14^h$ to $15^h$ Increase in V.F. (+ ·0012). $15^h$ to $17^h$ Three successive sharp waves in H.F. ( − ·0018), ( − ·0010), and ( − ·0017), the two last double-crested. $15\frac{3}{4}^h$ to $17^h$ Three successive waves in Dec. ( − 6′), ( − 5′), and ( − 4′), followed by a very sudden decrease ( − 10′). $17^h$ to $18^h$ Very sharp double wave in Dec. ( + 11′ to − 18′): sharp irregular triple wave in H.F. (− ·0018, + ·0010 to − ·0048), with small superposed fluctuations: very sharp wave in V.F. ( + ·0023). $18^h$ to $18\frac{1}{2}^h$ Wave in Dec. ( − 4′): in H.F. ( − ·0016). $20\frac{3}{4}^h$ to $21^h$ Sharp decrease in Dec. ( − 14′), followed till $21\frac{3}{4}^h$ by a sharp wave ( + 7′). $20\frac{3}{4}^h$ to $22^h$ Two successive waves in H.F. (+ ·0016) and ( + ·0020), very steep at end: in V.F. small. $21\frac{3}{4}^h$ to $23^h$ Triple-crested wave in Dec. ( + 8′), steep at both ends, followed till $23\frac{3}{4}^h$ by a wave ( + 4′). $22^h$ to $22\frac{1}{4}$ Decrease in H.F. ( − ·0014). $22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Two successive sharp waves in H.F. ( + ·0017) and ( + ·0015).

November $18^d$ $0\frac{1}{2}^h$ to $1^h$ Sharp increase in Dec. ( + 10′). $0\frac{1}{2}^h$ to $1\frac{1}{4}^h$ Wave in V.F. ( + ·0003). $1^h$ Sudden increase in H.F. ( + ·0017). $1^h$ to $2^h$ Wave in Dec. ( − 5′), followed till $3\frac{3}{4}^h$ by an irregular double-crested wave ( − 7′).

$19^d$ $2\frac{1}{2}^h$ to $4^h$ Wave in Dec. ( + 3′).

$20^d$ $11\frac{3}{4}^h$ to $14^h$ Loss of Dec. and H.F. registers.

$24^d$ $21\frac{3}{4}^h$ to $22\frac{1}{2}^h$ Wave in Dec. ( − 3′).

$27^d$ $22\frac{1}{2}^h$ to $23^h$ Flat-crested wave in Dec. ( + 3′). $22\frac{3}{4}^h$ to $23\frac{1}{4}^h$ Wave in H.F. ( + ·0011).

$28^d$ $3\frac{1}{2}^h$ to $4\frac{1}{2}^h$ Wave in Dec. ( + 8′). $3\frac{3}{4}^h$ to $4\frac{1}{4}^h$ Increase in H.F. ( + ·0020) decrease in V.F. ( − ·0003). $17\frac{1}{2}^h$ to $20^h$ Irregular triple-crested wave in Dec. (−9′). $18\frac{1}{4}^h$ to $19\frac{1}{2}^h$ Wave in H.F. ( + 0015) steep at commencement. $21\frac{3}{4}^h$ to $22\frac{3}{4}^h$ Wave in Dec. ( − 4′): in H.F. (−·0014).

December $4^d$ $12^h$ to $15^h$ Irregular wave in Dec. ( + 5′), followed till $17\frac{3}{4}^h$ by another ( + 9′). $16^h$ to $18\frac{3}{4}^h$ Irregular wave in H.F. ( − 0025). $16^h$ to $19^h$ Slow wave in V.F. ( + ·0005). $20\frac{3}{4}^h$ to $21^h$ Sharp wave in H.F. ( + ·0010). $21\frac{1}{4}^h$ to $23\frac{1}{4}^h$ Double wave in Dec. (−11′ to + 5′): serrated wave in H.F. ( − ·0026). $22^h$ to $24^h$ Double wave in V.F. ( + ·0004 to − ·0009). $4^d$ $23\frac{1}{4}^h$ to $5^d$ $0\frac{1}{4}^h$ Sharp decrease in Dec. ( − 17′) with return ( + 12′): and in H.F. ( − ·0066) with return ( + ·0047).

$5^d$ $0\frac{1}{4}^h$ to $1\frac{1}{2}^h$ Wave in H.F. ( − ·0018), sharp at commencement, followed till $2^h$ by a wave ( + ·0010). $1\frac{1}{4}^h$ to $2\frac{3}{4}^h$ Sharp increase in Dec. ( + 18′) with return ( − 13′). $2^h$ to $2\frac{3}{4}^h$ Increase in H.F. (+ ·0024). $2^h$ to $3\frac{1}{4}^h$ Wave in V.F. ( − ·0004). $3^h$ to $3\frac{1}{4}^h$ Increase in Dec. ( + 6′). $3\frac{3}{4}^h$ to $4\frac{3}{4}^h$ Flat-crested wave in Dec. ( − 3′). $5\frac{1}{2}^h$ to $6\frac{1}{4}^h$ Wave in Dec. ( − 3′). $5\frac{1}{2}^h$ to $7\frac{1}{4}^h$ Irregular wave in H.F. ( − 0010). $7^h$ to $8^h$ Wave in Dec. ( − 4′). $7\frac{1}{4}^h$ to $11^h$ Two successive serrated waves in H.F. ( − ·0022) and ( − ·0033). $8\frac{3}{4}^h$ to $9\frac{1}{4}^h$ Wave in Dec. ( − 4′). $10\frac{3}{4}^h$ to $11^h$ Wave in Dec. ( − 4′). $14^h$ to $14\frac{3}{4}^h$ Wave in H.F. (−0010). $16\frac{3}{4}^h$ to $17\frac{3}{4}^h$ Wave in Dec. ( − 4′). $20^h$ to $21^h$ Decrease in Dec. ( − 5′), followed till $21\frac{3}{4}^h$ by a sharp double wave ( − 8′ to + 4′). $21^h$ to $22\frac{1}{4}^h$ Irregular wave in H.F. ( + ·0039) steep at commencement: small wave in V.F.

$6^d$ $14^h$ Sharp decrease in Dec. ( − 4′). $14^h$ to $14\frac{1}{4}^h$ Wave in H.F. ( − ·0010). $16^h$ to $17\frac{1}{2}^h$ Wave in H.F. ( − ·0013). $16\frac{3}{4}^h$ to $17\frac{3}{4}^h$ Wave in Dec. ( − 6′). $19\frac{3}{4}^h$ to $20\frac{1}{4}^h$ Two successive sharp waves in Dec. ( − 3′) and (−5′). $19\frac{1}{4}^h$ to $21^h$ Sharp double-crested wave in H.F. ( + ·0025). $21\frac{1}{4}^h$ to $22\frac{3}{4}^h$ Two successive waves in H.F. ( + ·0016) and ( + ·0016). $21\frac{3}{4}^h$ to $23\frac{1}{4}^h$ Triple wave in Dec. (−3′, + 3′ to −4′): small wave in V.F.

$7^d$ $20\frac{3}{4}^h$ to $21\frac{1}{4}^h$ Wave in Dec. ( + 3′) in H.F., small.

$8^d$ $14\frac{3}{4}^h$ to $15\frac{3}{4}^h$ Wave in Dec. ( − 3′).

$9^d$ $18^h$ to $20\frac{3}{4}^h$ Loss of H.F. and V.F. register.

$12^d$ $9\frac{1}{4}^h$ to $11\frac{1}{2}^h$ Loss of V.F. register.

$18^d$ $20^h$ to $22^h$ Irregular wave in Dec. ( − 8′). $20\frac{1}{4}^h$ to $21\frac{1}{4}^h$ Wave in H.F. (+ ·0014).

$19^d$ $1\frac{3}{4}^h$ to $2\frac{1}{4}^h$ Wave in Dec. ( + 4′). $1\frac{3}{4}^h$ to $4^h$ Flat-crested wave in Dec. ( − 3′).

$22^d$ $21\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Wave in Dec. ( − 3′).

$23^d$ $19\frac{1}{4}^h$ to $20\frac{3}{4}^h$ Wave in H.F. ( − ·0010). $19\frac{3}{4}^h$ to $21^h$ Wave in Dec. ( − 4′).

$25^d$ $14\frac{3}{4}^h$ to $16\frac{1}{2}^h$ Slow wave in H.F. ( − ·0015).

$26^d$ $15^h$ to $16\frac{1}{4}^h$ Wave in H.F. ( −·0020). $15^h$ to $16^h$ Irregular increase in V.F. (+ ·0004). $15\frac{1}{2}^h$ to $16\frac{1}{2}^h$ Wave in Dec. ( − 6′), steep at commencement. $17^h$ to $18\frac{1}{4}^h$ Wave in Dec. ( + 3′). $17\frac{1}{2}^h$ to $18\frac{1}{4}^h$ Wave in H.F. ( − ·0012). $19\frac{3}{4}^h$ to $21^h$ Wave in Dec. ( − 4′).

$28^d$ $22\frac{3}{4}^h$ to $23\frac{3}{4}^h$ Wave in H.F. ( + ·0011). $28^d$ $23^h$ to $29^d$ $0\frac{1}{2}^h$ Double wave in Dec. ( + 3′ to − 3′).

$30^d$ $3\frac{1}{4}^h$ to $12\frac{1}{2}^h$ Loss of Dec. and H.F. registers.

$30^d$ $3\frac{1}{4}^h$ to $31^d$ $17^h$ Loss of V.F. register.

$31^d$ $10\frac{1}{4}^h$ to $17\frac{1}{2}^h$ Loss of Dec. register.

$31^d$ $11\frac{1}{2}^h$ to $17^h$ Loss of H.F. register.

## EXPLANATION OF THE PLATES.

The magnetic motions figured on the Plates are :—

(1.) Those for days of great disturbance—September $11^d\ 20^h$ to $12^d\ 20^h$, $28^d\ 19^h$ to $30^d\ 19^h$.

(2.) Those for days of lesser disturbance—March 26–28, May $25^d\ 18^h$ to $26^d\ 18^h$, August $8^d\ 19\frac{1}{2}^h$ to $9^d\ 19\frac{1}{2}^h$, $21^d\ 8^h$ to $22^d\ 8^h$.

(3.) Those for four quiet days—February 21, May 15, August 5, November 22—which are given as types of the ordinary diurnal movement at four seasons of the year.

The time is Greenwich Civil Time (commencing at midnight, and counting the hours from 0 to 24).

The magnetic declination, horizontal force, and vertical force are indicated by the letters D., H., and V. respectively; the declination (west) is expressed in minutes of arc, the units for horizontal and vertical force are ·00001 of the whole horizontal and vertical forces respectively, the corresponding scales being given on the sides of each diagram. Equal changes of amplitude in the several registers correspond nearly to equal changes of absolute magnetic force, 0·001 of a C.G.S. unit being represented by $0^{in.}80 = 20{\cdot}2^{mm.}$ in the declination curve, by $0^{in.}74 = 18{\cdot}8^{mm.}$ in the horizontal force curve, and by $0^{in.}58 = 14{\cdot}8^{mm.}$ in the vertical force curve.

Downward motion indicates increase of declination and of horizontal and vertical force.

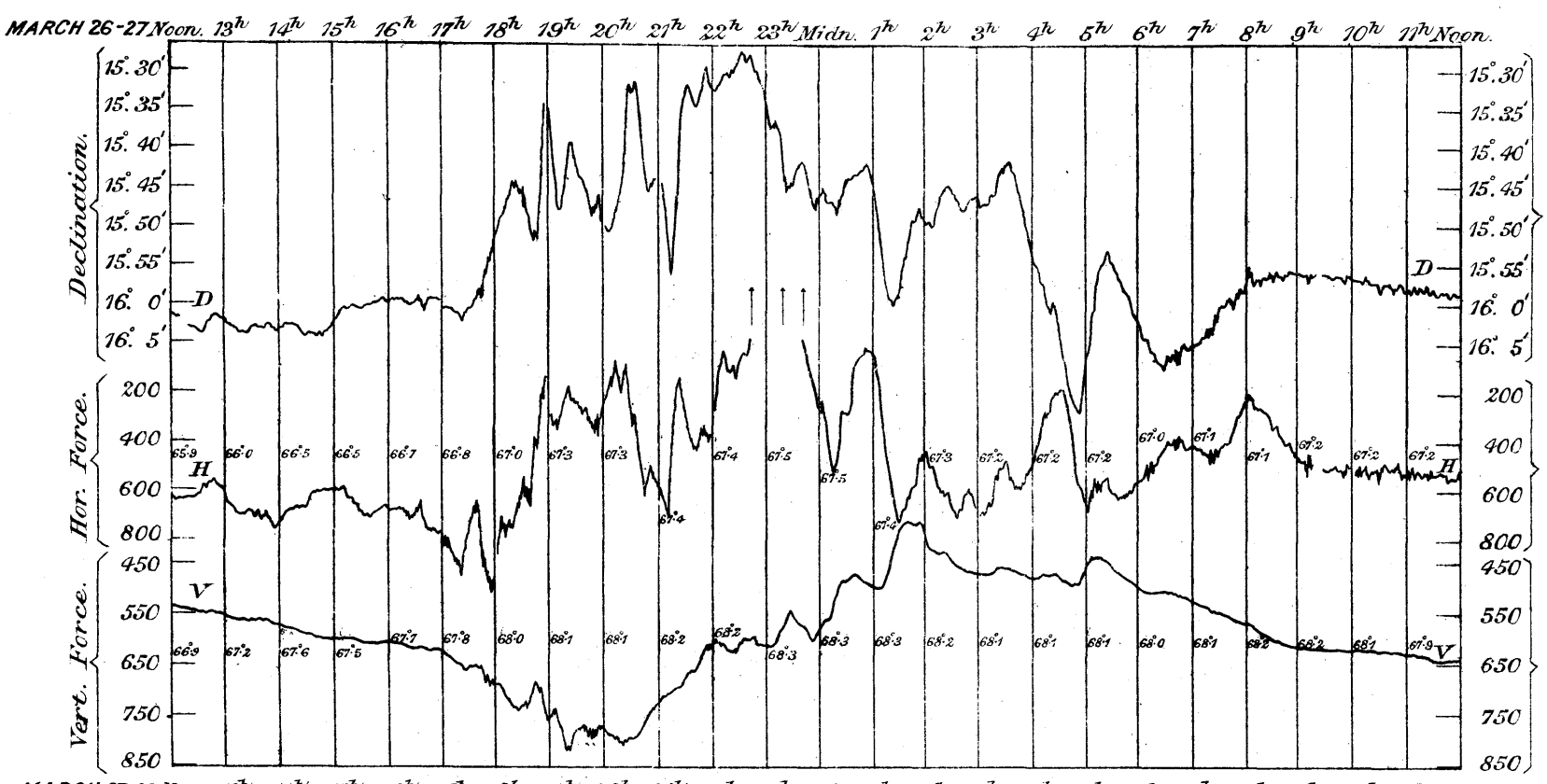
The earth current registers are not given on the plates in consequence of interference with the records caused by the running of trains on the City and South London Electric Railway.

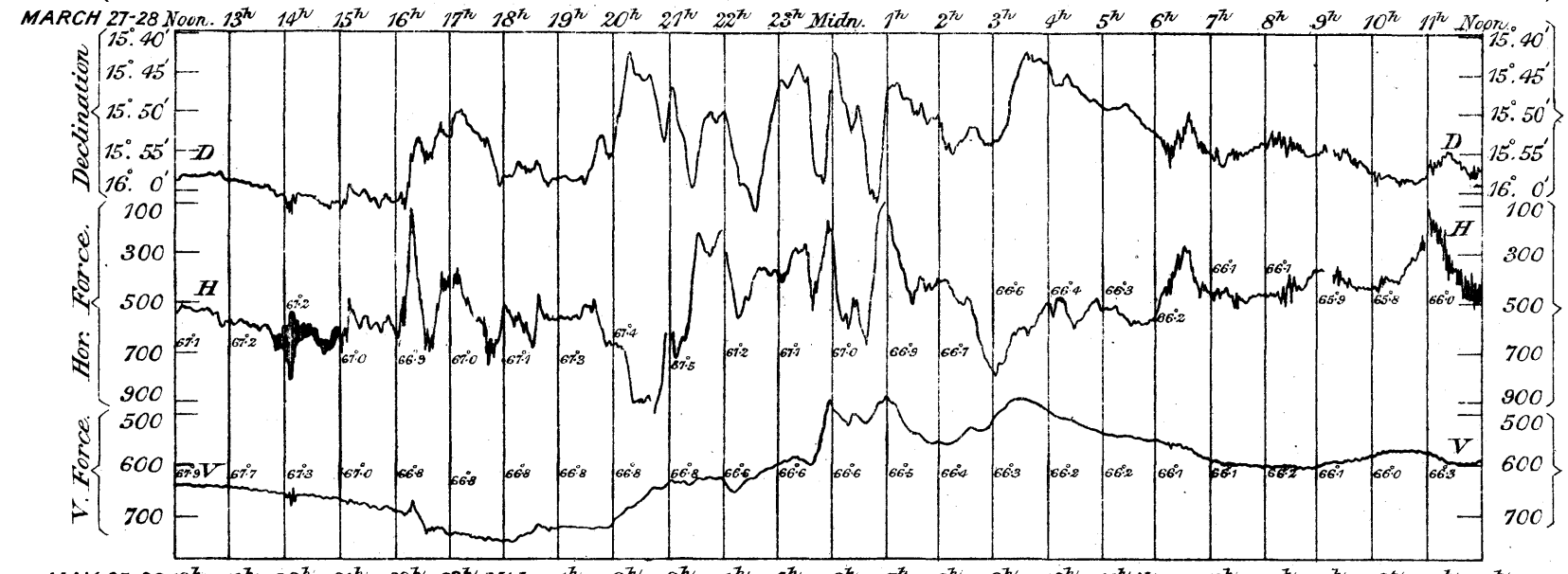
An arrow (↑) indicates that the register was out of range of registration in the direction of the arrow head.

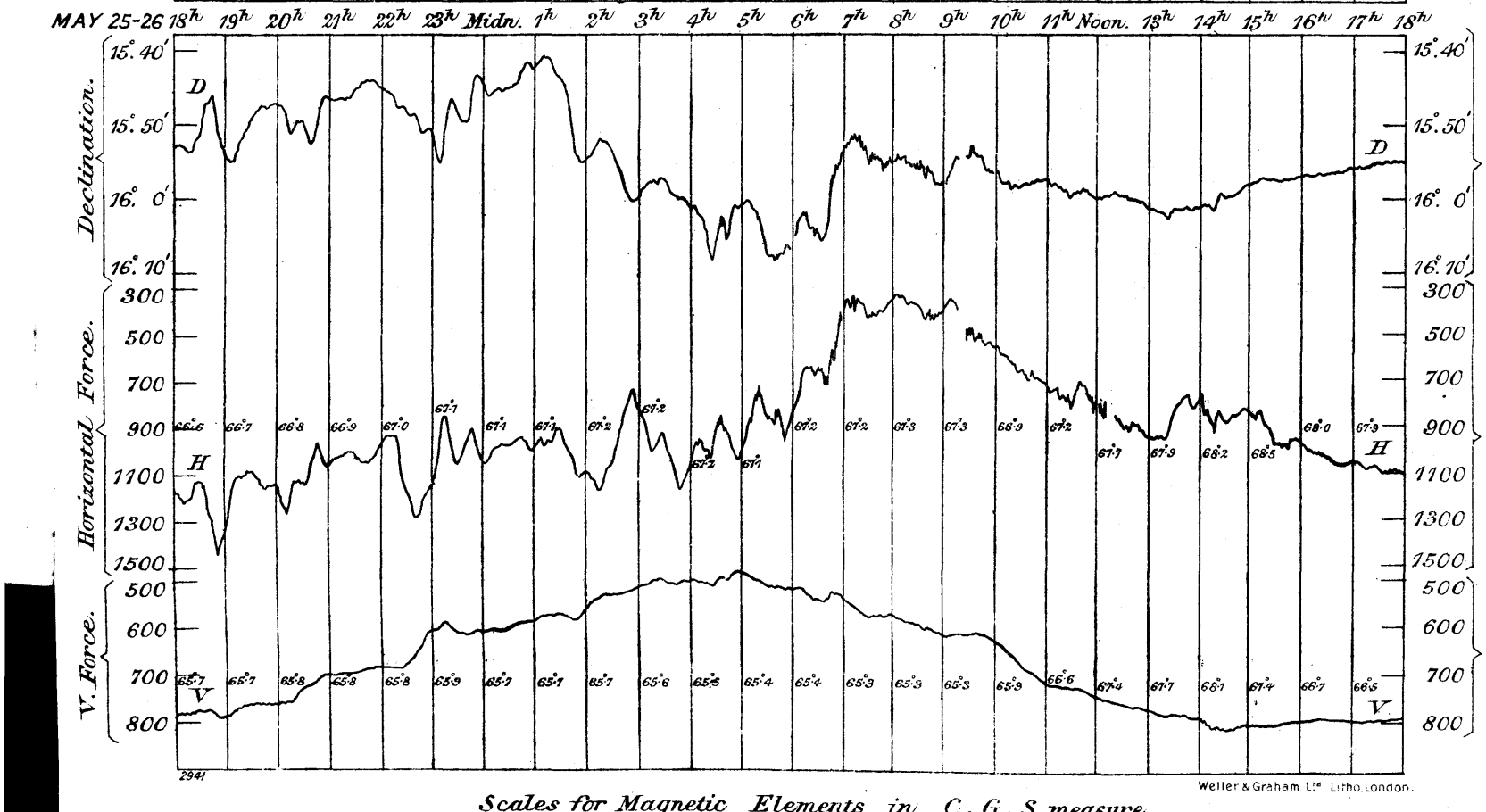
The temperatures (Fahrenheit) of the horizontal and vertical force magnets at each hour are given in small figures on the Diagrams.

*Plate I.*

# *Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1908.*



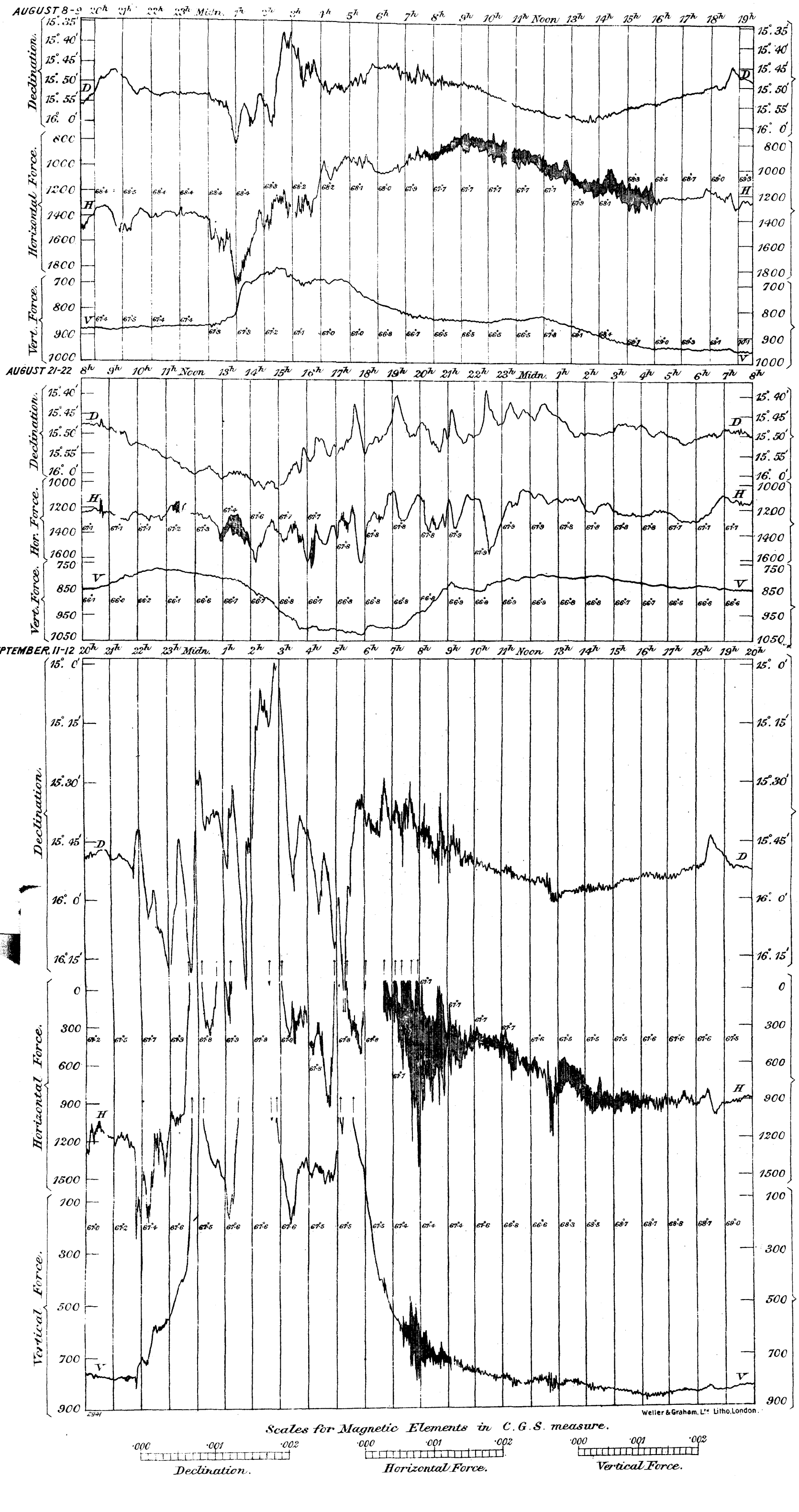

2941

Weller & Graham Ltd Litho London.

*Scales for Magnetic Elements in C. G. S. measure.*

*Plate II.*

# *Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1908.*



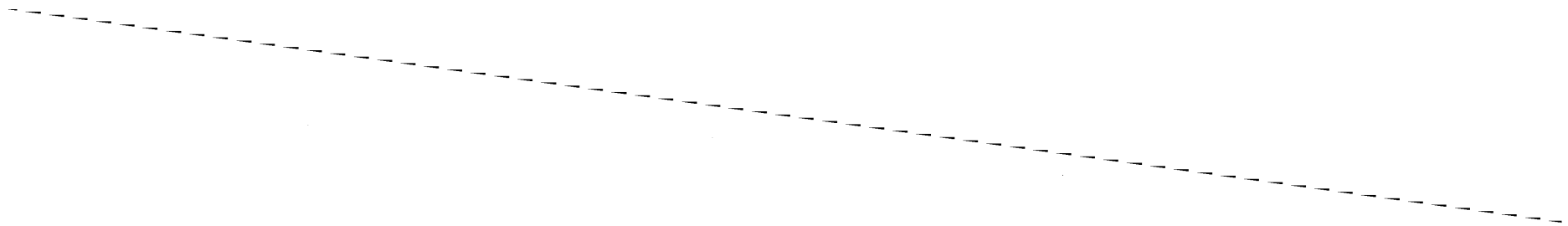
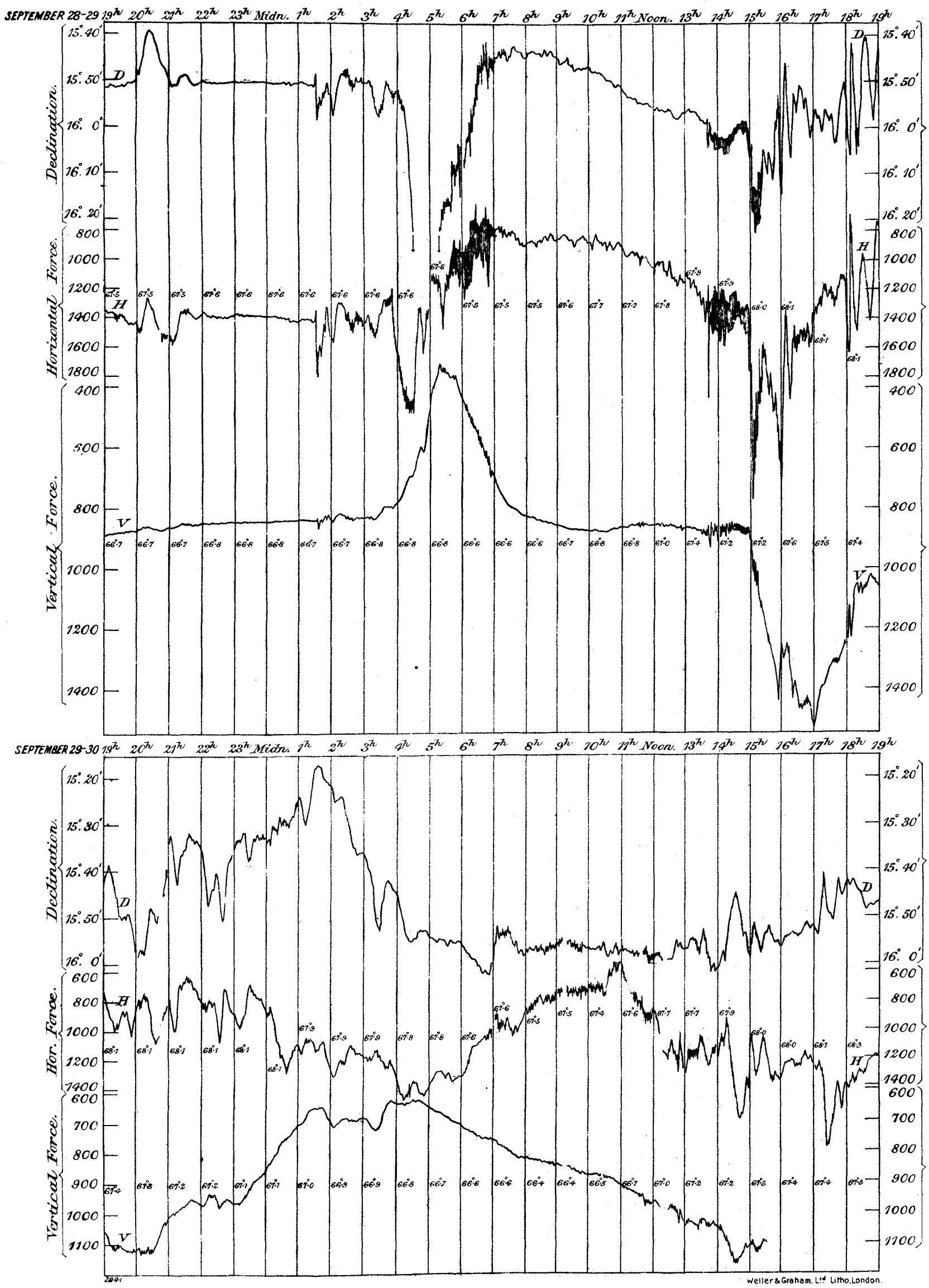


*Plate III.*

# *Magnetic Disturbances recorded at the Royal Observatory, Greenwich, 1908.*




*Scales for Magnetic Elements in C. G. S. measure.*

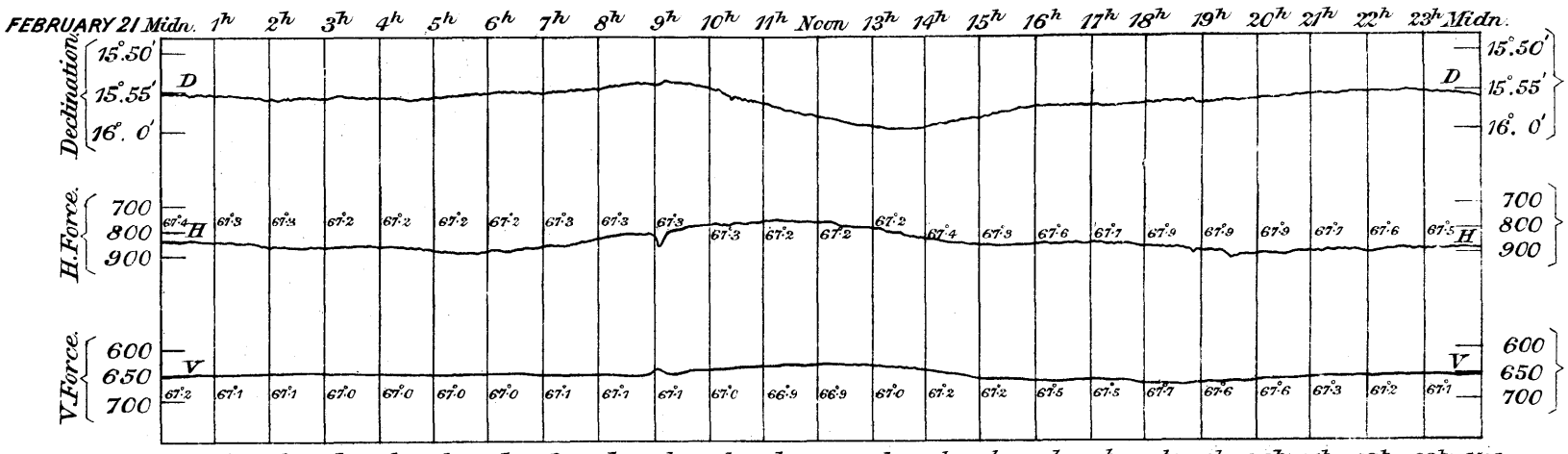
·000 ·001 ·002 — *Declination.*

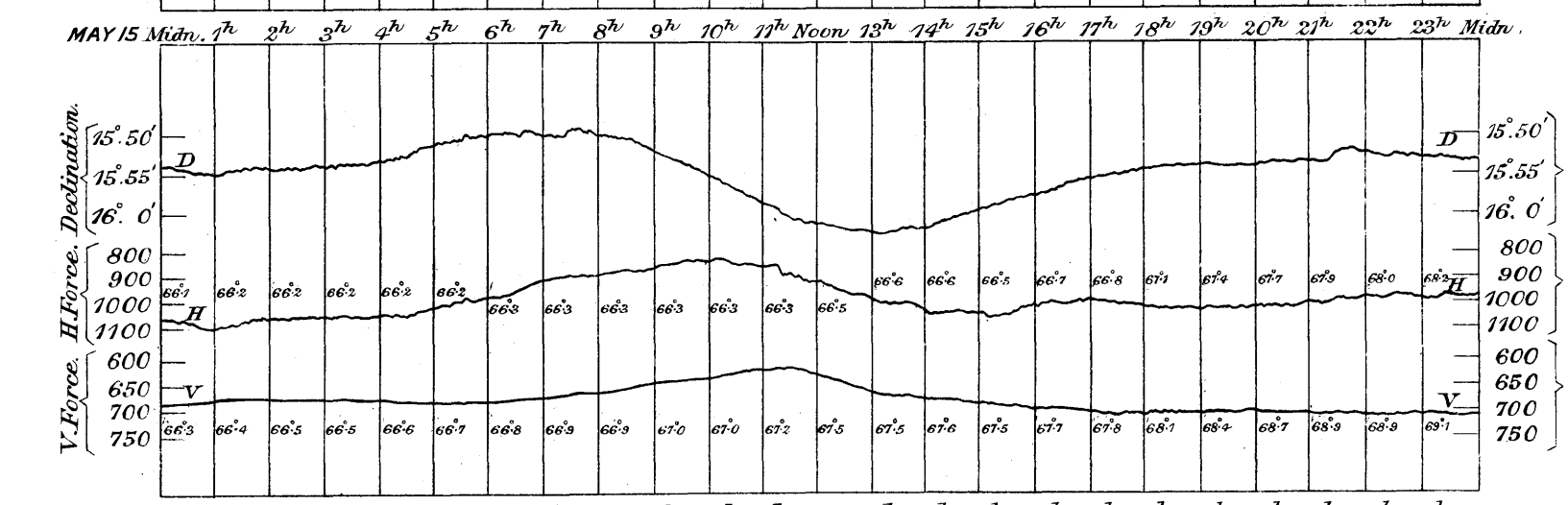
·000 ·001 ·002 — *Horizontal Force.*

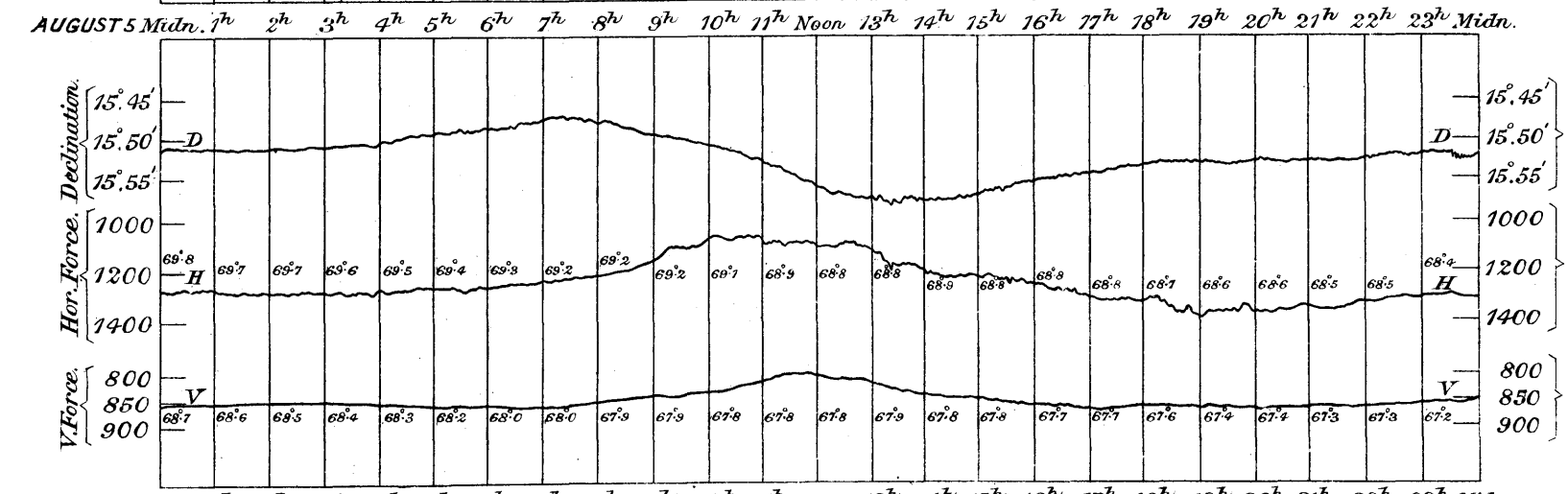
·000 ·001 ·002 — *Vertical Force.*

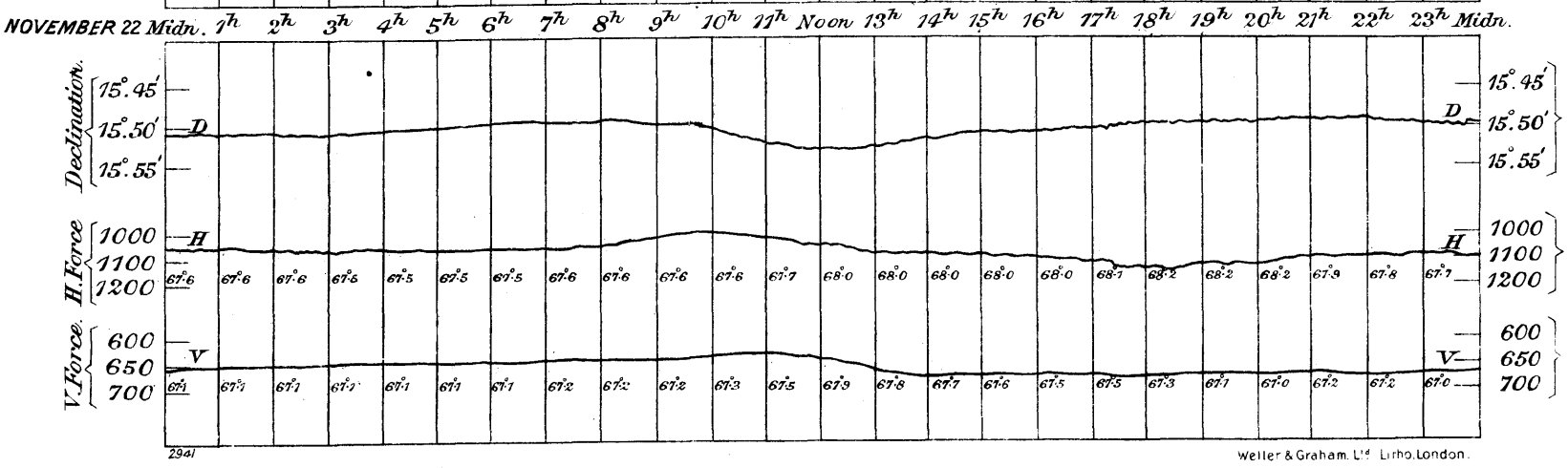
*Plate IV.*

# *Types of Magnetic Diurnal Variations at four seasons of the year recorded at the Royal Observatory, Greenwich, 1908.*



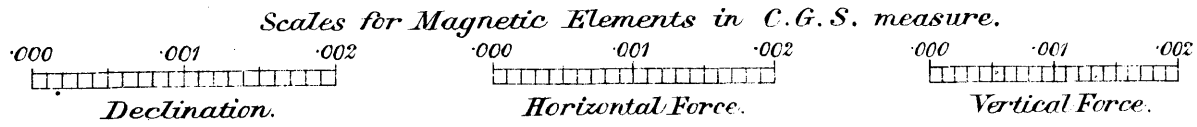




2941

Weller & Graham. Ltd Litho. London.

*Scales for Magnetic Elements in C.G.S. measure.*



ROYAL OBSERVATORY, GREENWICH.

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# RESULTS

OF

# METEOROLOGICAL OBSERVATIONS.

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1908.

| MONTH and DAY, 1908. | Phases of the Moon. | BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit). | TEMPERATURE. Of the Air. Highest. | Lowest. | Daily Range. | Mean of 24 Hourly Values. | Excess above Average of 65 Years. | Of Evaporation. Mean of 24 Hourly Values. | Of the Dew Point. Deduced Mean Daily Value | Difference between the Air Temperature and Dew Point Temperature. Mean. | Greatest. | Least. | Degree of Humidity (Saturation=100). | TEMPERATURE. Of Radiation. Highest in Sun's Rays. | Lowest on the Grass. | Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground. | Daily Amount of Ozone. | Electricity. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | ° | ° | in. | | |
| Jan. 1 | ... | 29·886 | 36·4 | 31·5 | 4·9 | 34·0 | − 4·6 | 31·5 | 27·1 | 6·9 | 9·9 | 3·4 | 75 | 43·0 | 25·2 | 0·000 | 1·0 | wP |
| 2 | ... | 30·169 | 32·3 | 26·2 | 6·1 | 29·9 | − 8·5 | 27·0 | 17·7 | 12·2 | 17·2 | 6·9 | 59 | 43·5 | 21·6 | 0·000 | 6·0 | wP : wP, wwN : wP |
| 3 | New: Greatest Declination S. | 30·099 | 32·6 | 24·1 | 8·5 | 27·7 | −10·6 | 24·6 | 11·5 | 16·2 | 18·5 | 11·5 | 49 | 60·0 | 15·1 | 0·000 | 0·0 | wP : wP : sP |
| 4 | Perigee | 30·097 | 38·4 | 24·5 | 13·9 | 30·6 | − 7·7 | 28·2 | 21·4 | 9·2 | 13·0 | 5·5 | 67 | 61·6 | 13·0 | 0·000 | 0·0 | mP : mP : sP |
| 5 | ... | 30·198 | 30·0 | 18·0 | 12·0 | 25·2 | −13·0 | 24·5 | 20·8 | 4·4 | 5·3 | 0·0 | 82 | 31·2 | 10·2 | 0·000 | 0·0 | sP : ... : ... |
| 6 | ... | 29·907 | 49·2 | 17·9 | 31·3 | 40·4 | + 2·3 | 38·7 | 36·5 | 3·9 | 7·7 | 1·7 | 87 | 49·5 | 10·1 | 0·013 | 1·2 | ... : wP : wwP |
| 7 | ... | 29·359 | 49·8 | 44·4 | 5·4 | 46·9 | + 8·9 | 45·9 | 44·8 | 2·1 | 4·4 | 1·5 | 93 | 57·9 | 40·2 | 0·214 | 3·8 | wwP : wwN, wwP : wwP, vN |
| 8 | ... | 28·886 | 44·4 | 32·3 | 12·1 | 38·8 | + 0·9 | 38·0 | 37·0 | 1·8 | 3·4 | 0·9 | 94 | 39·6 | 30·8 | 0·950 | 0·0 | vP, vN : wP, wN |
| 9 | ... | 29·533 | 37·3 | 29·9 | 7·4 | 33·2 | − 4·7 | 31·3 | 27·6 | 5·6 | 11·7 | 3·2 | 79 | 49·8 | 24·6 | 0·003 | 6·0 | wP : mP : mP |
| 10 | In Equator : First Quarter | 30·102 | 35·0 | 23·8 | 11·2 | 30·6 | − 7·3 | 27·8 | 19·9 | 10·7 | 12·9 | 5·9 | 63 | 55·1 | 15·0 | 0·000 | 0·0 | mP : sP : sP |
| 11 | ... | 30·286 | 33·1 | 19·1 | 14·0 | 26·4 | −11·5 | 24·7 | 16·5 | 9·9 | 12·7 | 3·7 | 65 | 50·9 | 11·1 | 0·002* | 0·0 | sP |
| 12 | ... | 30·161 | 36·9 | 17·9 | 19·0 | 28·3 | − 9·6 | 26·4 | 18·9 | 9·4 | 13·0 | 3·0 | 67 | 67·2 | 8·8 | 0·000 | 0·0 | sP |
| 13 | ... | 30·058 | 41·1 | 22·1 | 19·0 | 32·1 | − 5·9 | 30·7 | 27·5 | 4·6 | 7·5 | 0·0 | 82 | 67·4 | 14·3 | 0·003* | 0·0 | mP : sP : sP |
| 14 | ... | 30·103 | 46·3 | 34·3 | 12·0 | 39·1 | + 1·1 | 38·0 | 36·6 | 2·5 | 5·1 | 0·9 | 91 | 59·6 | 25·5 | 0·000 | 0·0 | vP : mP : mP |
| 15 | ... | 30·022 | 47·5 | 38·7 | 8·8 | 43·2 | + 5·1 | 42·2 | 41·0 | 2·2 | 4·2 | 1·8 | 92 | 67·2 | 28·5 | 0·012* | 1·5 | wP |
| 16 | ... | 29·852 | 51·1 | 44·9 | 6·2 | 48·8 | +10·5 | 47·5 | 46·1 | 2·7 | 4·3 | 2·2 | 91 | 53·6 | 39·5 | 0·014 | 6·0 | wwP |
| 17 | Greatest Declination N. | 29·878 | 52·0 | 46·3 | 5·7 | 49·7 | +11·2 | 47·5 | 45·1 | 4·6 | 6·0 | 2·3 | 85 | 69·8 | 40·0 | 0·000 | 4·5 | wwP : wwP : wP |
| 18 | Full | 30·131 | 49·0 | 27·1 | 21·9 | 39·5 | + 0·9 | 38·8 | 37·9 | 1·6 | 3·3 | 1·1 | 94 | 48·0 | 22·5 | 0·016* | 0·0 | wwP : wP : vP |
| 19 | Apogee | 30·136 | 38·6 | 28·5 | 10·1 | 34·7 | − 4·0 | 34·5 | 34·2 | 0·5 | 1·5 | 0·2 | 98 | 40·2 | 26·4 | 0·019* | 0·0 | vP : mP : wP |
| 20 | ... | 30·304 | 43·2 | 27·9 | 15·3 | 38·1 | − 0·7 | 36·7 | 34·8 | 3·3 | 6·8 | 1·1 | 88 | 62·8 | 20·2 | 0·001* | 0·0 | wP : mP : mP |
| 21 | ... | 30·413 | 34·5 | 25·6 | 8·9 | 30·4 | − 8·4 | 30·2 | 29·6 | 0·8 | 1·4 | 0·0 | 96 | 45·8 | 19·5 | 0·008* | 0·5 | ssP : sP : mP |
| 22 | ... | 30·291 | 38·2 | 30·3 | 7·9 | 34·3 | − 4·5 | 33·7 | 32·7 | 1·6 | 4·1 | 1·1 | 94 | 43·2 | 27·4 | 0·000 | 1·5 | wP : mP : mP |
| 23 | ... | 30·324 | 39·4 | 32·1 | 7·3 | 34·4 | − 4·5 | 34·3 | 34·1 | 0·3 | 1·0 | 0·0 | 98 | 61·1 | 27·0 | 0·006* | 0·0 | wP : vP, wwN : vP |
| 24 | In Equator | 30·320 | 35·1 | 31·4 | 3·7 | 33·1 | − 5·8 | 33·0 | 32·7 | 0·4 | 1·6 | 0·3 | 99 | 37·0 | 31·7 | 0·005* | 0·0 | mP |
| 25 | ... | 30·220 | 44·0 | 28·8 | 15·2 | 35·7 | − 3·4 | 35·1 | 34·2 | 1·5 | 4·4 | 0·4 | 94 | 45·2 | 29·0 | 0·001* | 1·2 | mP |
| 26 | Last Quarter | 30·040 | 50·5 | 43·5 | 7·0 | 46·7 | + 7·4 | 45·3 | 43·8 | 2·9 | 6·9 | 0·8 | 90 | 59·0 | 38·4 | 0·144 | 3·8 | wP : wP : wwP |
| 27 | ... | 29·736 | 53·6 | 45·0 | 8·6 | 50·4 | +10·9 | 48·6 | 46·7 | 3·7 | 10·1 | 1·3 | 88 | 54·8 | 40·0 | 0·010 | 0·7 | wwP |
| 28 | ... | 29·411 | 46·9 | 37·5 | 9·4 | 41·9 | + 2·3 | 38·7 | 34·8 | 7·1 | 10·5 | 2·9 | 77 | 75·2 | 32·4 | 0·040 | 3·3 | wwP : wP, sN : mP, mN |
| 29 | ... | 29·651 | 40·9 | 34·2 | 6·7 | 37·8 | − 1·9 | 34·5 | 30·0 | 7·8 | 13·6 | 2·2 | 74 | 69·0 | 28·0 | 0·003 | 0·0 | mP : sP : sP |
| 30 | ... | 29·944 | 40·1 | 33·4 | 6·7 | 36·2 | − 3·5 | 33·7 | 30·0 | 6·2 | 10·8 | 1·0 | 78 | 57·0 | 28·1 | 0·038 | 0·0 | mP : ssP : vP |
| 31 | Greatest Declination S. | 29·727 | 46·7 | 36·9 | 9·8 | 41·8 | + 2·1 | 38·6 | 34·7 | 7·1 | 11·4 | 1·4 | 77 | 68·3 | 32·6 | 0·006 | 0·0 | mP |
| Means | ... | 29·976 | 41·7 | 30·9 | 10·8 | 36·8 | − 1·8 | 35·2 | 31·8 | 5·0 | 7·9 | 2·2 | 82·8 | 54·6 | 25·1 | Sum 1·508 | 1·3 | ... |
| Number of Column for Reference. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

* Rainfall (column 16). Amounts entered on January 11, 13, 15, 18, 19, 20, 21, 23, 24 and 25 are derived from frost, dew, or fog.

The mean reading of the *Barometer* for the month was 29$^{in}$·976, being 0$^{in}$·182 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 53°·6 on January 27; the lowest in the month was 17°·9 on January 6 and 12; and the range was 35°·7.
The mean of all the highest daily readings in the month was 41°·7, being 1°·4 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 30°·9, being 2°·8 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 10°·8, being 1°·4 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 36°·8, being 1°·8 *lower* than the average for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Daily Duration of Sunshine. | Sun above Horizon. | Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M. | General Direction. P.M. | Pressure on the Square Foot. Greatest. | Pressure on the Square Foot. Mean of 24 Hourly Measures. | Robinson's. Horizontal Movement of the Air. | Clouds and Weather. A.M. | Clouds and Weather. P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | hours. | hours. | | | lbs. | lbs. | miles. | | |
| Jan. 1 | 0·0 | 7·8 | NE : ENE : E | E | 8·3 | 0·79 | 507 | 10 : 10, w : 10, w | 9, n, s : 9, n, w : p.-cl, w |
| 2 | 2·9 | 7·9 | E | E | 15·1 | 1·50 | 622 | 9 : 1, w, ho.-fr : p.-cl, st.-w | 8, cu.-s, st.-w : p.-cl, w : p.-cl, w |
| 3 | 6·2 | 7·9 | E | E : ENE | 7·8 | 0·43 | 435 | 1, ho.-fr : o : o, w | o, w : o : o, ho.-fr |
| 4 | 6·2 | 7·9 | ENE : E | E : ENE | 0·5 | 0·00 | 249 | o, ho.-fr : o, ho.-fr : o | o : o, ho.-fr : o, f, ho.-fr |
| 5 | 0·0 | 7·9 | ENE : Calm | Variable: WSW : SW | 0·0 | 0·00 | 107 | o, f, ho.-fr: o, slt.-f, ho.-fr: o, slt.-f | o, slt.-f, glm: o, f : o, f |
| 6 | 0·0 | 8·0 | SSW : SW | SW : WSW | 5·3 | 0·61 | 562 | 10 : 10 : 10, oc.-slt.-r, w | 10, sc, w : 10, oc.-th.-r : 10, oc.-th.-r |
| 7 | 0·4 | 8·0 | WSW : SW | SW : SSW : S | 3·7 | 0·25 | 419 | 9 : 10, m.-r : 10, slt.-r | p.-cl : 10, fq.-r : 10, sc, oc.-r |
| 8 | 0·0 | 8·0 | Variable : W : NW | NW : N | 6·9 | 0·55 | 507 | v, r : 10, sn, slt.-r: 10, c.-r | 10, fq.-r : 10, oc.-slt.-r : 10, th.-r, w |
| 9 | 0·4 | 8·0 | N : NNE | NNE : NE | 7·2 | 0·53 | 482 | 9 : 10, slt.-sn : 10, slt.-sn | 9, cu, n, w : p.-cl, slt.-sn, w: o, w |
| 10 | 1·5 | 8·1 | NE : NNE | NE : NNE : SW | 2·5 | 0·07 | 266 | p.-cl, ho.-fr : 10 : p.-cl | p.-cl, ci, ci.-cu : o, ho.-fr : o, slt.-f, ho.-fr |
| 11 | 5·1 | 8·1 | WSW : SW | WSW : SW : S | 0·0 | 0·00 | 182 | o, ho.-fr : 1, ho.-fr : 1, th.-cl | 1, li.-cl : 1 : o, ho.-fr |
| 12 | 6·9 | 8·1 | E : SE : ESE | SE : ESE | 0·0 | 0·00 | 148 | o, slt.-m, ho.-fr: o, slt.-m, ho.-fr: o, slt.-f | o : o, ho.-fr |
| 13 | 6·4 | 8·2 | SE : ESE | SE : ESE | 0·0 | 0·00 | 131 | o, ho.-fr : o, ho.-fr : o, slt.-f | 1, ci.-cu : 10 |
| 14 | 2·6 | 8·2 | SE : S : SW | SSW : S | 0·0 | 0·00 | 175 | 10 : p.-cl : 6, ci.-s | p.-cl, ci.-s, li.-cl : th.-cl, d : p.-cl, ho.-fr, lu.-ha |
| 15 | 1·3 | 8·2 | SSW : SW | SSW : SW | 1·4 | 0·03 | 273 | 9 : 10 : 8, cu, ci.-s | 6 : p.-cl : 9, sc, m.-r, w |
| 16 | 0·0 | 8·3 | SW : WSW | SW : WSW | 4·0 | 0·47 | 532 | 10, oc.-m.-r: 10, oc.-m.-r: 10, sc, oc.-slt.-r | 10, oc.-slt.-r : 10, oc.-slt.-r |
| 17 | 1·0 | 8·3 | SW : WSW | SW | 4·0 | 0·31 | 441 | 10 : 10 | p.-cl, ci, ci.-s: p.-cl : 10, sc |
| 18 | 0·0 | 8·4 | WSW | Calm : Variable | 0·2 | 0 00 | 152 | o, hy.-d, ho.-fr: o : o, slt.-f | 1, slt.-f : f : tk.-f, ho.-fr |
| 19 | 0·0 | 8·4 | Variable : Calm | Calm : Variable | 0·0 | 0·00 | 79 | 10, f, m.-r : 10, f : 10, f, m.-r | 10, f, glm : 10, f : 10, f |
| 20 | 5·2 | 8·5 | NNW : N : NNE | NE : ENE | 0·2 | 0·00 | 147 | 10, m : p.-cl, m : 4, th.-cl | 2, th.-cl : 1, th.-cl, slt.-f: th.-cl, f, ho.-fr |
| 21 | 0·0 | 8·5 | Calm | ESE | 0·0 | 0·00 | 106 | f, ho.-fr : tk.-f : 10, f, ho.-fr | 10, f : 10 |
| 22 | 0·0 | 8·6 | SSE | SSE : SE | 0·0 | 0·00 | 104 | 10 : 10 | 10 : 10 : p.-cl, f |
| 23 | 0·7 | 8·6 | SE : ESE : Calm | Calm : ESE | 0·0 | 0·00 | 78 | f : f | p.-cl, f : f : tk.-f |
| 24 | 0·0 | 8·6 | ESE | ENE : E : ESE | 0·0 | 0·00 | 114 | f : f | 10, slt.-f : 10 : 10, m |
| 25 | 0·0 | 8·7 | Variable : WSW | WSW : SW | 4·7 | 0·12 | 282 | 10, slt.-f : 10, slt.-f : 10 | 10, m.-r : v |
| 26 | 0·0 | 8·8 | WSW | WSW | 8·5 | 0·77 | 578 | 9 : 10 : 10, sc, w | 10, sc, w : 10, slt.-r, w : 10, r |
| 27 | 0·0 | 8·8 | WSW | W | 11·0 | 0·97 | 645 | 10, shs.-r : 10, oc.-slt.-r : 10, oc.-slt.-r | 10, sc : p.-cl, w : o, st.-w |
| 28 | 1·7 | 8·8 | W : WSW | WSW : W | 10·6 | 1·15 | 621 | p.-cl, st.-w: p.-cl, sh.-r, w: 9, slt.-sh, w | , sc, n, slt.-sh, st.-w: p.-cl, cu, n, w: 10, oc.-shs |
| 29 | 5·7 | 8·9 | N | N | 4·2 | 0·43 | 371 | 9, sh.-r : p.-cl : 4, ci, ci.-s, th.-cl | 6, ci.-s : p.-cl : p.-cl |
| 30 | 0·4 | 8·9 | N : NNW : NW | W | 2·6 | 0·15 | 339 | 9, slt.-sn : 10, slt.-sh : 10, s | 10, th.-cl, s, so.-ha : 10, slt.-r : 9, slt.-r |
| 31 | 2·3 | 9·0 | W | W : WNW : NW | 6·2 | 0·50 | 474 | 9 : 10, oc.-slt.-r : 8, cu, th.-cl | 5 : p.-cl : 10 |
| Means | 1·8 | 8·3 | ... | ... | ... | 0·31 | 327 | | |
| Number of Column for Reference. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

The mean *Temperature of Evaporation* for the month was 35°·2, being 2°·0 *lower* than
The mean *Temperature of the Dew Point* for the month was 31°·8, being 3°·5 *lower* than
The mean *Degree of Humidity* for the month was 82·8, being 5·2 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·179, being 0in·027 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·2, being 0gr·2 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 560 grains, being 6 grains *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 6·4.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·220. The maximum daily amount of *Sunshine* was 6·9 hours on January 12.

The highest reading of the *Solar Radiation Thermometer* was 75°·2 on January 28; and the lowest reading of the *Terrestrial Radiation Thermometer* was 8°·8 on January 12.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·9; for the 6 hours ending 15h was 0·4; and for the 6 hours ending 21h was 0·0.

The *Proportions of Wind* referred to the cardinal points were N. 5, E. 8, S. 6, and W. 9. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 15·1 lbs. on the square foot on January 2. The mean daily *Horizontal Movement of the Air* for the month was 327 miles; the greatest daily value was 645 miles on January 27; and the least daily value was 78 miles on January 23.

*Rain* (0in·005 or over) fell on 9 days in the month, amounting to 1in·508, as measured by gauge No. 6 partly sunk below the ground; being 0in·373 *less* than the average fall for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Phases of the Moon. | BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit). | TEMPERATURE. Of the Air. Highest. | Lowest. | Daily Range. | Mean of 24 Hourly Values. | Excess above Average of 65 Years. | Of Evaporation. Mean of 24 Hourly Values. | Of the Dew Point. Deduced Mean Daily Value. | Difference between the Air Temperature and Dew Point Temperature. Mean. | Greatest. | Least. | Degrees of Humidity (Saturation = 100). | TEMPERATURE. Of Radiation. Highest in Sun's Rays. | Lowest on the Grass. | Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground. | Daily Amount of Ozone. | Electricity. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | ° | ° | in. | | |
| Feb. 1 | ... | 29·779 | 42·6 | 33·9 | 8·7 | 38·4 | − 1·2 | 33·5 | 27·0 | 11·4 | 14·7 | 7·9 | 63 | 67·0 | 28·3 | 0·003 | 0·0 | mP : sP : sP |
| 2 | Perigee : New | 30·125 | 41·5 | 28·4 | 13·1 | 35·6 | − 3·9 | 32·6 | 28·0 | 7·6 | 10·6 | 3·6 | 73 | 67·2 | 21·5 | 0·000 | 0·0 | sP |
| 3 | ... | 30·015 | 44·4 | 28·3 | 16·1 | 38·3 | − 1·2 | 36·1 | 33·1 | 5·2 | 10·8 | 1·3 | 82 | 47·9 | 21·5 | 0·044 | 0·0 | vP : mP, vN : sP |
| 4 | ... | 30·225 | 42·7 | 34·6 | 8·1 | 37·7 | − 1·8 | 34·9 | 31·1 | 6·6 | 9·7 | 4·1 | 78 | 70·6 | 29·2 | 0·000 | 0·0 | mP : sP : sP |
| 5 | ... | 30·455 | 42·8 | 32·1 | 10·7 | 38·1 | − 1·5 | 35·6 | 32·2 | 5·9 | 8·6 | 2·5 | 79 | 56·3 | 24·6 | 0·000 | 0·0 | mP : sP : mP |
| 6 | In Equator | 30·500 | 49·2 | 37·7 | 11·5 | 42·2 | + 2·6 | 40·4 | 38·2 | 4·0 | 8·2 | 0·9 | 86 | 52·9 | 28·3 | 0·000 | 0·0 | wP : mP : wP |
| 7 | ... | 30·503 | 48·3 | 36·6 | 11·7 | 43·0 | + 3·5 | 42·1 | 41·0 | 2·0 | 5·7 | 0·2 | 93 | 52·1 | 31·0 | 0·008 | 0·0 | wP |
| 8 | ... | 30·298 | 47·1 | 37·1 | 10·0 | 43·8 | + 4·5 | 41·0 | 37·7 | 6·1 | 8·6 | 2·6 | 78 | 66·0 | 30·0 | 0·000 | 2·0 | wP : mP : mP |
| 9 | First Quarter | 30·280 | 48·0 | 35·3 | 12·7 | 43·5 | + 4·4 | 41·9 | 40·0 | 3·5 | 6·3 | 1·2 | 88 | 53·3 | 26·7 | 0·003 | 0·0 | wP |
| 10 | ... | 30·329 | 45·0 | 33·6 | 11·4 | 40·0 | + 1·1 | 38·9 | 37·5 | 2·5 | 5·3 | 2·4 | 91 | 52·2 | 25·5 | 0·000 | 0·0 | wP : mP : mP |
| 11 | ... | 30·382 | 50·0 | 31·6 | 18·4 | 42·1 | + 3·3 | 39·8 | 37·0 | 5·1 | 10·5 | 2·2 | 83 | 74·7 | 22·5 | 0·002* | 0·0 | wP : mP : mP |
| 12 | ... | 30·304 | 52·0 | 33·3 | 18·7 | 42·7 | + 3·9 | 40·2 | 37·2 | 5·5 | 12·9 | 2·4 | 82 | 92·0 | 19·9 | 0·000 | 5·0 | wP : wP : mP |
| 13 | Greatest Declination N. | 30·072 | 48·0 | 28·7 | 19·3 | 38·3 | − 0·7 | 36·3 | 33·6 | 4·7 | 10·3 | 0·0 | 84 | 79·7 | 17·4 | 0·009* | 0·0 | mP |
| 14 | ... | 30·058 | 51·5 | 39·1 | 12·4 | 44·7 | + 5·4 | 42·3 | 39·5 | 5·2 | 9·2 | 1·1 | 82 | 77·9 | 32·0 | 0·000 | 1·7 | wP : wP : mP |
| 15 | Apogee | 29·914 | 50·2 | 37·4 | 12·8 | 44·6 | + 5·2 | 42·4 | 39·8 | 4·8 | 8·2 | 2·3 | 84 | 63·0 | 31·0 | 0·115 | 11·3 | wP : wP : mN, mP |
| 16 | ... | 29·973 | 46·1 | 33·7 | 12·4 | 40·0 | + 0·5 | 36·7 | 32·4 | 7·6 | 13·7 | 2·2 | 74 | 65·2 | 28·5 | 0·000 | 1·2 | mP |
| 17 | Full | 29·525 | 54·5 | 36·1 | 18·4 | 46·3 | + 6·7 | 44·7 | 42·9 | 3·4 | 5·2 | 0·8 | 89 | 76·4 | 31·0 | 0·411 | 3·8 | wP, wN : wP |
| 18 | ... | 29·514 | 50·8 | 42·1 | 8·7 | 45·6 | + 6·1 | 42·3 | 38·5 | 7·1 | 12·2 | 4·0 | 77 | 69·9 | 35·0 | 0·241 | 0·0 | wP : sN, mP : mP |
| 19 | ... | 29·692 | 51·6 | 39·6 | 12·0 | 45·6 | + 6·1 | 42·3 | 38·5 | 7·1 | 12·6 | 4·0 | 77 | 66·8 | 32·9 | 0·000 | 0·0 | wP : mP : mP |
| 20 | ... | 29·776 | 51·2 | 43·1 | 8·1 | 47·0 | + 7·5 | 45·5 | 43·8 | 3·2 | 6·1 | 1·3 | 89 | 61·0 | 37·6 | 0·095 | 0·0 | wP : wP : wP, mN |
| 21 | In Equator | 29·737 | 52·0 | 43·0 | 9·0 | 47·0 | + 7·4 | 44·9 | 42·6 | 4·4 | 8·6 | 1·3 | 85 | 67·0 | 38·8 | 0·000 | 1·2 | wP |
| 22 | ... | 29·571 | 50·0 | 41·6 | 8·4 | 45·4 | + 5·7 | 42·3 | 38·7 | 6·7 | 11·9 | 3·8 | 78 | 70·8 | 34·8 | 0·078 | 2·0 | wP : wP, wN : wN, vP |
| 23 | ... | 29·560 | 50·5 | 39·3 | 11·2 | 43·7 | + 3·9 | 39·9 | 35·4 | 8·3 | 11·1 | 5·1 | 73 | 82·0 | 32·4 | 0·020 | 3·8 | wP : wP, sN : mP |
| 24 | ... | 29·526 | 44·8 | 36·1 | 8·7 | 41·0 | + 1·0 | 38·0 | 34·2 | 6·8 | 11·9 | 4·6 | 77 | 55·2 | 30·5 | 0·129 | 0·0 | wP : mP, mN : ssP, ssN |
| 25 | Last Quarter | 29·708 | 45·8 | 37·4 | 8·4 | 42·0 | + 1·9 | 39·3 | 36·0 | 6·0 | 9·7 | 3·0 | 80 | 59·5 | 32·0 | 0·141 | 0·0 | mP : mP, vN : vP, ssN |
| 26 | ... | 29·819 | 47·5 | 36·6 | 10·9 | 41·4 | + 1·2 | 38·8 | 35·6 | 5·8 | 12·2 | 0·9 | 81 | 71·0 | 29·5 | 0·073 | 2·0 | mP : sP : ssN, mP |
| 27 | Greatest Declination S. | 29·563 | 47·9 | 36·6 | 11·3 | 42·7 | + 2·4 | 39·8 | 36·3 | 6·4 | 9·9 | 0·9 | 79 | 69·2 | 31·8 | 0·000 | 0·0 | mP : mP : mP, sN |
| 28 | ... | 29·158 | 43·0 | 32·4 | 10·6 | 37·0 | − 3·3 | 34·8 | 31·7 | 5·3 | 14·0 | 1·8 | 81 | 77·7 | 28·0 | 0·070 | 5·0 | wP, wN : vP, ssN : sP, ssN |
| 29 | ... | 29·042 | 39·9 | 31·0 | 8·9 | 34·9 | − 5·4 | 32·2 | 27·8 | 7·1 | 12·2 | 3·3 | 75 | 68·0 | 26·9 | 0·017 | 1·0 | vP, ssN : sP : sP |
| Means | ... | 29·910 | 47·5 | 35·7 | 11·8 | 41·8 | + 2·3 | 39·3 | 36·1 | 5·7 | 10·0 | 2·5 | 80·7 | 66·6 | 28·9 | Sum 1·459 | 1·4 | ... |
| Number of Column for Reference. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

* Rainfall (column 16). Amounts entered on February 11 and 13 are derived from frost and fog.

The mean reading of the *Barometer* for the month was $29^{in}\cdot910$, being $0^{in}\cdot108$ *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 54°·5 on February 17; the lowest in the month was 28°·3 on February 3; and the range was 26°·2.
The mean of all the highest daily readings in the month was 47°·5, being 2°·3 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 35°·7, being 1°·5 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 11°·8, being 0°·8 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 41°·8, being 2°·3 *higher* than the average for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Daily Duration of Sunshine. | Sun above Horizon. | WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS. OSLER'S. General Direction. A.M. | General Direction. P.M. | Pressure on the Square Foot. Greatest. | Pressure on the Square Foot. Mean of 24 Hourly Measures. | ROBINSON'S. Horizontal Movement of the Air. | CLOUDS AND WEATHER. A.M. | CLOUDS AND WEATHER. P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | hours. | hours. | | | lbs. | lbs. | miles. | | |
| Feb. 1 | 5·8 | 9·0 | NNW : NW : N | N | 6·4 | 0·94 | 512 | p.-cl, sl,w : 1, ho.-fr : 2, w | 5, cu, ci.-s, w : 0, h |
| 2 | 6·8 | 9·1 | N | NNE : N : SW | 3·1 | 0·16 | 257 | 0 : 0 | 1 : 1 : 9, slt.-f |
| 3 | 0·0 | 9·2 | SW : WSW | WSW : NNW : N | 7·1 | 0·35 | 353 | 9 : 10, slt.-r : 10, fq.-th.-r | 9, fq.-r : p.-cl : 0, w |
| 4 | 3·8 | 9·2 | N | N : NNE | 5·6 | 0·70 | 429 | 0, ho.-fr : 0, slt.-h : 2 | 9, cu, n : 10 |
| 5 | 2·3 | 9·3 | N | NNW : WSW : W | 1·1 | 0·02 | 193 | p.-cl : 1, ho.-fr : 1, s, f | p.-cl, n, f : 10, n : 10 |
| 6 | 1·7 | 9·3 | W : WSW | WSW : W | 0·2 | 0·00 | 198 | 10, slt.-m : 10, slt.-m : p.-cl, slt.-f | 1, slt.-f : slt.-f : 0, m, d |
| 7 | 0·0 | 9·4 | W : WSW | W : WNW : NNW | 0·2 | 0·00 | 190 | 0, f : f : 10, f | 9, slt.-f : 10, slt.-f, m |
| 8 | 6·3 | 9·4 | WNW : W | NW : WNW : W | 1·8 | 0·06 | 304 | p.-cl : 1, ho.-fr : 1, ci, th.-cl | 5, ci, th.-cl : 10 : p.-cl, m |
| 9 | 0·0 | 9·5 | W : WSW : NNW | NNW : WNW | 0·2 | 0·00 | 178 | p.-cl : p.-cl : 10, slt.-f | 9, slt.-sh : 10 : 10, m |
| 10 | 0·0 | 9·6 | W : WSW | Calm : SW | 0·0 | 0·00 | 141 | 10, m : 10,m,slt.-f : 10, slt.-f | 10, slt.-f : p.-cl : 1 |
| 11 | 0·7 | 9·6 | SW : WSW | SW : WSW | 1·2 | 0·01 | 229 | 1 : 8 : 10 | p.-cl : 10 : 10 |
| 12 | 8·4 | 9·7 | WSW : SW | SW : SSE : SE | 0·2 | 0·01 | 146 | 10 : p.-cl : 2,cu,li.-cl | 2, th.-cl : 1 : 1, ho.-fr |
| 13 | 3·0 | 9·8 | ESE : E : ENE | SE : WSW : SSW | 0·1 | 0·00 | 135 | 0, ho.-fr : p.-cl,f,ho.-fr: f | ci, ci.-s : 9,th.-cl,lu.-ha: 10, th.-cl, slt.-r |
| 14 | 1·5 | 9·8 | SW : W | W : WSW | 1·6 | 0·07 | 287 | 10 : 9 : 9 | 8 : 0 |
| 15 | 0·0 | 9·9 | SW : WSW | SW : NW : W | 11·5 | 0·93 | 551 | p.-cl : p.-cl, slt.-sh : 10, sc, n, w | 10, sc, slt.-r, st.-w: p.-cl, sc, n, glm, fq.-r,hy.-sh,hl,w : 0 |
| 16 | 5·2 | 9·9 | W : WSW | NW : W : WSW | 5·5 | 0·31 | 393 | 0 : 0 : 3,cu,th.-cl,h | th.-cl : th.-cl, lu.-ha: th.-cl, lu.-ha |
| 17 | 1·0 | 10·0 | SSW : S : SW | SW : W : NW | 4·3 | 0·37 | 428 | p.-cl, r : 10, r : 10, sc, c.-r | 9, n, ci.-cu, oc.-slt.-r: 10 : 9 |
| 18 | 1·6 | 10·1 | NW : W : WSW | NW : NNW | 11·5 | 0·96 | 570 | 9, w : 9, slt.-sh : 10, hy.-sh, glm, w | p.-cl, cu, n, st.-w : p.-cl, w : 0 |
| 19 | 1·8 | 10·1 | WNW : W : WSW | NW : W | 4·1 | 0·24 | 383 | 0 : 9 : 9 | 6, cu : p.-cl : 10 |
| 20 | 0·0 | 10·2 | W : WSW | WSW : W | 1·0 | 0·03 | 296 | 9 : 9 : 10, m.-r | 10, th.-r : 10, r : 10 |
| 21 | 0·1 | 10·2 | W : WSW | WSW : W | 5·0 | 0·45 | 439 | 10 : 9 : 10, sc, n | 10 : p.-cl : 9 |
| 22 | 0·2 | 10·3 | W : WSW : SW | SW : WSW : W | 20·0 | 2·00 | 688 | 9 : 9 : 10, sc, slt.-r, w | 10, sc, fq.-r, g : p.-cl, fq.-r, st.-w: p.-cl, w |
| 23 | 1·6 | 10·4 | W : SW : WSW | W : WNW | 5·5 | 0·35 | 452 | p.-cl, w : 1 : 9, cu, n | v, oc.-slt.-r : p.-cl : 2 |
| 24 | 0·0 | 10·5 | W : WNW | NW : NNW : N | 12·8 | 1·13 | 619 | p.-cl : 1 : 9, cu, n, slt.-sn | 10, slt.-r, st.-w: p.-cl, oc.-hy.-shs, w: p.-cl, sh.-r |
| 25 | 0·9 | 10·5 | NNW : NW | NW : NNW : N | 11·0 | 0·77 | 484 | 1 : p.-cl : 9, cu, th.-cl, n | 10, n, fq.-r : 9, fq.-r, st.-w: 9, w |
| 26 | 1·1 | 10·6 | N : NNW : WNW | W : WSW | 3·4 | 0·27 | 395 | p.-cl : p.-cl : 9, th.-cl | 9 : 10, slt.-r : p.-cl |
| 27 | 0·9 | 10·6 | W : WSW | W : WSW | 4·5 | 0·34 | 475 | 1 : p.-cl : 9, cu, n | 9, cu, n : p.-cl, slt.-sh : p.-cl |
| 28 | 4·2 | 10·7 | WSW : W | WNW : W : WSW | 7·4 | 0·60 | 572 | 0 : 10, r : 10, sc, n, r, w | v, sn, w : p.-cl, slt.-sh, w: 1 |
| 29 | 3·9 | 10·8 | WSW : NW : WNW | NW : NNW : WNW | 3·8 | 0·35 | 485 | 1 : p.-cl, sn : 5, cu, th.-cl, sc.-ha | 9 : 9, slt.-sn : p.-cl, sn |
| Means | 2·2 | 9·9 | ... | ... | ... | 0·39 | 372 | | |
| Number of Column for Reference. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

The mean *Temperature of Evaporation* for the month was 39°·3, being 1°·6 *higher* than
The mean *Temperature of the Dew Point* for the month was 36°·1, being 0°·7 *higher* than
The mean *Degree of Humidity* for the month was 80·7, being 4·8 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·213, being 0in·006 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·5, being 0gr·1 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 553 grains, being the *same* as
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 7·1.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·219. The maximum daily amount of *Sunshine* was 8·4 hours on February 12.

The highest reading of the *Solar Radiation Thermometer* was 92°·0 on February 12; and the lowest reading of the *Terrestrial Radiation Thermometer* was 17°·4 on February 13.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·6; for the 6 hours ending 15h was 0·8; and for the 6 hours ending 21h was 0·0.

The *Proportions of Wind* referred to the cardinal points were N. 7, E. 0, S. 4, and W. 17. One day was calm.

The *Greatest Pressure of the Wind* in the month was 20·0 lbs. on the square foot on February 22. The mean daily *Horizontal Movement of the Air* for the month was 372 miles; the greatest daily value was 688 miles on February 22; and the least daily value was 135 miles on February 13.

*Rain* (0in·005 or over) fell on 13 days in the month, amounting to 1in·459, as measured by gauge No. 6 partly sunk below the ground; being 0in·021 *less* than the average fall for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Phases of the Moon. | BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit). | TEMPERATURE. Of the Air. Highest. | Lowest. | Daily Range. | Mean of 24 Hourly Values. | Excess above Average of 65 Years. | Of Evaporation. Mean of 24 Hourly Values. | Of the Dew Point. Deduced Mean Daily Value. | Difference between the Air Temperature and Dew Point Temperature. Mean. | Greatest. | Least. | Degree of Humidity (Saturation = 100). | TEMPERATURE. Of Radiation. Highest in Sun's Rays. | Lowest on the Grass. | Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground. | Daily Amount of Ozone. | Electricity. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | ° | ° | in. | | |
| Mar. 1 | Perigee | 29·177 | 40·8 | 33·1 | 7·7 | 35·5 | − 4·9 | 33·6 | 30·7 | 4·8 | 8·2 | 0·8 | 82 | 71·0 | 29·3 | 0·065 | 0·0 | mP : mP, ssN : vP, ssN |
| 2 | New | 29·467 | 42·4 | 32·8 | 9·6 | 36·9 | − 3·5 | 34·9 | 32·1 | 4·8 | 10·8 | 1·3 | 84 | 70·5 | 27·7 | 0·068 | 0·0 | mP : sP : sP |
| 3 | ... | 29·471 | 44·0 | 32·6 | 11·4 | 36·4 | − 4·1 | 34·8 | 32·5 | 3·9 | 11·0 | 0·7 | 86 | 70·9 | 27·2 | 0·109 | 3·0 | mP : vP : vP, ssN |
| 4 | In Equator | 29·492 | 43·1 | 31·4 | 11·7 | 35·8 | − 4·9 | 34·7 | 33·0 | 2·8 | 7·6 | 0·8 | 90 | 83·2 | 27·2 | 0·193 | 0·0 | ssN, wP : mP, ssN : sP, mN |
| 5 | ... | 29·777 | 44·0 | 33·1 | 10·9 | 37·2 | − 3·7 | 35·2 | 32·4 | 4·8 | 9·5 | 0·8 | 83 | 66·0 | 27·0 | 0·000 | 1·5 | mP : sP : mP |
| 6 | ... | 29·196 | 51·0 | 37·3 | 13·7 | 43·0 | + 2·0 | 40·7 | 37·9 | 5·1 | 11·3 | 1·8 | 82 | 88·6 | 32·2 | 0·279 | 8·7 | wP, ssN : wP : mP, vN |
| 7 | ... | 29·557 | 46·0 | 37·1 | 8·9 | 41·4 | + 0·4 | 38·1 | 34·0 | 7·4 | 11·0 | 2·1 | 76 | 63·0 | 31·1 | 0·003 | 0·8 | wP : mP : mP |
| 8 | ... | 29·569 | 56·0 | 37·1 | 18·9 | 47·7 | + 6·6 | 45·5 | 43·1 | 4·6 | 8·2 | 0·9 | 85 | 78·9 | 31·1 | 0·030 | 4·0 | wP |
| 9 | First Quarter | 29·232 | 50·7 | 38·5 | 12·2 | 44·8 | + 3·8 | 41·1 | 36·8 | 8·0 | 15·1 | 2·7 | 73 | 90·4 | 33·2 | 0·065 | 9·3 | vP, vN : mP |
| 10 | ... | 29·185 | 49·9 | 39·5 | 10·4 | 43·5 | + 2·6 | 40·1 | 36·1 | 7·4 | 10·8 | 2·5 | 75 | 91·2 | 34·2 | 0·045 | 3·7 | vN, wP : mP : sP |
| 11 | Greatest Declination N. | 29·573 | 47·0 | 31·2 | 15·8 | 40·4 | − 0·6 | 37·3 | 33·3 | 7·1 | 14·1 | 3·7 | 76 | 88·2 | 24·3 | 0·037 | 0·0 | vP, ssN : sP : sP |
| 12 | ... | 29·840 | 47·1 | 28·7 | 18·4 | 38·8 | − 2·3 | 36·3 | 33·0 | 5·8 | 11·1 | 2·3 | 81 | 89·7 | 22·0 | 0·000 | 1·0 | sP : mP : mP |
| 13 | Apogee | 29·945 | 44·6 | 30·6 | 14·0 | 37·5 | − 3·8 | 35·3 | 32·3 | 5·2 | 10·8 | 2·3 | 82 | 82·4 | 20·5 | 0·000 | 0·0 | mP : sP : mP |
| 14 | ... | 30·044 | 44·1 | 28·3 | 15·8 | 35·7 | − 5·8 | 32·2 | 26·9 | 8·8 | 13·9 | 3·2 | 70 | 98·2 | 20·3 | 0·000 | 2·0 | mP : wP : mP |
| 15 | ... | 30·032 | 42·2 | 24·3 | 17·9 | 35·5 | − 6·2 | 32·5 | 27·9 | 7·6 | 14·3 | 3·0 | 73 | 110·8 | 15·2 | 0·001 | 0·0 | mP : wP : vP |
| 16 | ... | 29·830 | 48·5 | 32·0 | 16·5 | 38·9 | − 3·0 | 36·9 | 34·2 | 4·7 | 10·7 | 2·0 | 85 | 80·4 | 29·0 | 0·052 | 1·0 | wP : vN, vP : sP |
| 17 | ... | 29·724 | 43·9 | 31·5 | 12·4 | 37·3 | − 4·7 | 35·2 | 32·3 | 5·0 | 11·0 | 1·4 | 83 | 83·0 | 27·4 | 0·000 | 0·0 | mP : sP : mP |
| 18 | Full | 29·715 | 42·4 | 32·0 | 10·4 | 37·0 | − 5·0 | 34·7 | 31·4 | 5·6 | 9·0 | 2·7 | 81 | 83·2 | 25·0 | 0·007 | 1·0 | mP |
| 19 | In Equator | 29·725 | 43·9 | 28·9 | 15·0 | 35·0 | − 6·9 | 32·3 | 28·0 | 7·0 | 13·6 | 3·1 | 74 | 93·8 | 20·7 | 0·000 | 4·0 | mP: sP : sP |
| 20 | ... | 29·703 | 42·2 | 26·8 | 15·4 | 34·8 | − 7·1 | 32·8 | 29·6 | 5·2 | 10·8 | 0·9 | 81 | 84·0 | 17·3 | 0·001 | 1·0 | sP : sP : vP |
| 21 | ... | 29·807 | 47·3 | 31·1 | 16·2 | 38·1 | − 3·8 | 34·7 | 30·1 | 8·0 | 16·3 | 4·3 | 72 | 91·5 | 21·5 | 0·000 | 1·5 | mP |
| 22 | ... | 29·505 | 48·0 | 31·0 | 17·0 | 41·1 | − 0·9 | 38·6 | 35·5 | 5·6 | 16·6 | 0·9 | 81 | 83·9 | 21·5 | 0·104 | 11·5 | wP : wP, vN : ssN, wP |
| 23 | ... | 29·677 | 53·4 | 38·6 | 14·8 | 44·7 | + 2·5 | 42·7 | 40·4 | 4·3 | 12·4 | 0·4 | 85 | 66·9 | 28·7 | 0·004 | 0·0 | wP : mP : mP |
| 24 | ... | 29·922 | 59·2 | 32·3 | 26·9 | 47·6 | + 5·2 | 43·1 | 38·1 | 9·5 | 18·2 | 2·2 | 71 | 114·2 | 24·5 | 0·003* | 4·0 | mP : wP : mP |
| 25 | Last Quarter | 29·816 | 47·0 | 41·3 | 5·7 | 44·2 | + 1·5 | 43·0 | 41·6 | 2·6 | 6·6 | 0·7 | 91 | 59·1 | 39·1 | 0·552 | 1·0 | wP, wN, : vN : vN, wwP |
| 26 | Greatest Declination S. | 29·871 | 45·7 | 39·7 | 6·0 | 42·0 | − 1·0 | 41·0 | 39·8 | 2·2 | 4·2 | 0·9 | 92 | 63·6 | 35·7 | 0·167 | 0·0 | wP, vN : mP : mP |
| 27 | ... | 29·939 | 53·3 | 38·6 | 14·7 | 44·5 | + 1·2 | 41·7 | 38·4 | 6·1 | 14·4 | 0·9 | 79 | 97·4 | 33·6 | 0·000 | 6·0 | wP : wP : mP |
| 28 | ... | 29·859 | 50·0 | 38·3 | 11·7 | 44·4 | + 0·7 | 40·3 | 35·5 | 8·9 | 16·6 | 1·8 | 71 | 87·1 | 27·1 | 0·065 | 2·5 | wP, vN : mP : mP |
| 29 | Perigee | 29·889 | 52·8 | 36·6 | 16·2 | 45·5 | + 1·4 | 41·6 | 37·1 | 8·4 | 13·2 | 2·9 | 73 | 101·2 | 27·3 | 0·082 | 6·5 | mP : wP : wP, ssN |
| 30 | ... | 29·713 | 56·0 | 37·9 | 18·1 | 45·5 | + 1·0 | 41·7 | 37·3 | 8·2 | 19·2 | 1·7 | 74 | 109·3 | 31·5 | 0·291 | 7·2 | vP : wP : vP, vN |
| 31 | ... | 29·556 | 49·4 | 37·2 | 12·2 | 44·4 | − 0·5 | 39·9 | 34·6 | 9·8 | 18·1 | 2·8 | 68 | 96·5 | 30·0 | 0·000 | 3·8 | wP, ssN : mP : mP |
| Means | ... | 29·671 | 47·6 | 33·9 | 13·8 | 40·5 | − 1·4 | 37·8 | 34·4 | 6·1 | 12·2 | 1·9 | 79·3 | 85·1 | 27·2 | Sum 2·223 | 2·7 | ... |
| Number of Column for Reference. | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

* Rainfall (column 16). Amount entered on March 24 is derived from frost.

The mean reading of the *Barometer* for the month was 29$^{in}$·671, being 0$^{in}$·075 *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 59°·2 on March 24; the lowest in the month was 24°·3 on March 15; and the range was 34°·9.
The mean of all the highest daily readings in the month was 47°·6, being 2°·2 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 33°·9, being 1°·2 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 13°·8, being 0°·9 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 40°·5, being 1°·4 *lower* than the average for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Daily Duration of Sunshine. | Sun above Horizon. | Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M. | Osler's. General Direction. P.M. | Osler's. Pressure on the Square Foot. Greatest. | Osler's. Pressure on the Square Foot. Mean of 24 Hourly Measures. | Robinson's. Horizontal Movement of the Air. | Clouds and Weather. A.M. | Clouds and Weather. P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | hours. | hours. | | | lbs. | lbs. | miles. | | |
| Mar. 1 | 0·4 | 10·8 | N : NNW | N : NW : NE | 3·0 | 0·13 | 360 | 10 : 10 : 10, n | 9, oc.-r, sl, sn: 10, sn : 10 |
| 2 | 0·6 | 10·9 | NE : NNE : N | N : NW : WSW | 0·1 | 0·00 | 209 | p.-cl : 10, oc.-sn, slt.-r : 10, n | 10, cu, th.-cl, n, so.-ha : 10, th.-cl : 10, th.-cl |
| 3 | 0·5 | 11·0 | WSW : SW | SE : S : ESE | 3·1 | 0·03 | 198 | 10 : 10, slt.-sn : 10, th.-cl, slt.-sn, so.-ha | 10, n, slt.-r : 10 : 10, r |
| 4 | 0·6 | 11·0 | SE : ESE : E | Variable | 2·7 | 0·02 | 174 | 10, slt.-r : p.-cl, ho.-fr: 10, n | 9, slt.-r, sl, sn: 10, oc.-shs : 9 |
| 5 | 1·0 | 11·1 | W : WNW : WSW | WSW : SSW : S | 0·7 | 0·00 | 218 | 10 : p.-cl, ho.-fr: 8, th.-cl | 7, th.-cl, so.-ha: th.-cl : p.-cl |
| 6 | 4·0 | 11·1 | S : SSW : SW | SW : WNW | 6·5 | 0·63 | 511 | 10, r : 10, r, w : 7, th.-r | 7, cu.-s, slt.-sh, w: 10, fq.-r, w : 10, slt.-r, w |
| 7 | 0·6 | 11·2 | NW : WNW : W | W : WSW | 10·3 | 0·70 | 535 | 10, oc.-r, w : p.-cl, w : 10, s, w | 10, n : 9, cl.-cu, ci.-s, cu.-s : p.-cl, d |
| 8 | 0·7 | 11·3 | SW : SSW : WSW | WSW : SW | 13·0 | 0·75 | 518 | 9, oc.-slt.-r : 10 : 10, slt.-sh | 9, w : p.-cl, st.-w : 9, r, w |
| 9 | 6·0 | 11·4 | SW : WSW | WSW : SW | 10·0 | 1·06 | 698 | p.-cl, r : p.-cl, w : 8, li.-sc, n, sh.-r | 5, cu, n, w : li.-cl : p.-cl |
| 10 | 1·3 | 11·4 | WSW : W | W : WNW | 8·6 | 1·06 | 747 | 9, m -r, w: 9, w : 10, w | 10, oc.-shs, w : 10, slt.-sh, w : 10, w |
| 11 | 3·7 | 11·5 | NW : N | N : WSW | 7·2 | 0·28 | 330 | 10, sh.-r, w: 10, sh.-r : p.-cl, sh.-r, hl | 8, cu, n : li.-cl, slt.-f : m, ho.-fr |
| 12 | 5·0 | 11·6 | WSW: Variable: ENE | Variable : SW: WSW | 0·1 | 0·00 | 135 | p.-cl, ho.-fr: p.-cl : 8 | 6, th.-cl, n : 9, slt.-sh : 9, ho.-fr |
| 13 | 3·9 | 11·6 | WSW : N : NNE | NE : SE | 0·2 | 0·00 | 189 | 9, ho.-fr : p.-cl : 5, cu, n | 10, cu, n : p.-cl : 0, ho.-fr |
| 14 | 7·3 | 11·7 | SSE : ESE : SE | ESE : E : SE | 0·0 | 0·00 | 175 | p.-cl, h, ho.-fr: h, ho.-fr : 4, th.-cl | 7, cu.-s, n : p.-cl, lu.-ha : 1, ho.-fr |
| 15 | 5·4 | 11·8 | ENE : NE : NNE | Variable : Calm : WSW | 0·2 | 0·00 | 94 | 0, ho.-fr : 0, slt.-m : 3, ci, ci.-s, cu | p.-cl : 10 : 10, oc.-sn |
| 16 | 2·0 | 11·8 | S : SSW : SW | WSW : W : N | 1·0 | 0·00 | 227 | 10, slt.-sn : p.-cl, slt.-r: 10, oc.-slt.-r | 9, cu : 10, oc.-shs : 10, c.-r, sn |
| 17 | 4·8 | 11·9 | NNE : N | N : NNE | 0·8 | 0·00 | 207 | 9 : p.-cl : 5, cu, n | 9, cu, n : p.-cl, cu : p.-cl, th.-cl |
| 18 | 0·9 | 12·0 | N : NNE | NE : E : ENE | 1·5 | 0·00 | 242 | 9 : 9 : 9, n | 9, shs.-r, oc.-sn: p.-cl : p.-cl, ho.-fr |
| 19 | 6·1 | 12·0 | ENE : NE | NE : ENE : E | 1·2 | 0·00 | 214 | 1, ho.-fr : 1 : 3, cu, n | 8, cu.-s, n : p.-cl, slt.-sn : 1, h, ho.-fr |
| 20 | 2·1 | 12·1 | NE : NNE | NE : Variable : Calm | 0·1 | 0·00 | 105 | 1, ho.-fr : p.-cl, th.-cl, h, ho.-fr : 7 | 9 : 10, slt.-r : 10, m |
| 21 | 1·5 | 12·2 | S : WSW : SSW | SSW : SSE : S | 0·0 | 0·00 | 130 | 10, m : 9 : 9, cu, n | 9, n : p.-cl : 0, ho.-fr |
| 22 | 2·0 | 12·2 | S : SSE | S | 8·1 | 0·42 | 354 | 0, ho.-fr : 0 : 9, w | 10, fq.-r, w : 10, slt.-r |
| 23 | 0·9 | 12·3 | S : W : WNW | Variable | 0·0 | 0·00 | 155 | 10, oc.-m.-r: 10 : 9, s | p.-cl, cu, th.-cl: p.-cl : 0, slt.-f, m |
| 24 | 9·9 | 12·4 | WSW : SW | SW | 0·6 | 0·01 | 203 | 0, ho.-fr : 1, li.-cl : 4, th.-cl | 4, ci, ci.-s : p.-cl, ci.-cu : 9 |
| 25 | 0·0 | 12·4 | S : SSE : SE | SE : ESE | 1·7 | 0·02 | 185 | 10, slt.-r : 10, slt.-r : 10, c.-r | 10, c.-r : 10, fq.-r : 10, slt.-r |
| 26 | 0·0 | 12·5 | N : NNE | Variable : Calm | 0·9 | 0·03 | 170 | 10, slt.-r : 10, slt.-r : 10, oc.-shs | 10 : 10, oc.-slt.-r : 9 |
| 27 | 5·7 | 12·6 | Variable | SW : SSW | 2·0 | 0·05 | 212 | 10, m : 10, m : p.-cl, cu, th.-cl | 7, cu, n, th.-cl: p.-cl : p.-cl |
| 28 | 3·8 | 12·6 | SSW : SW : N | NNW : NW : SW | 3·4 | 0·20 | 325 | 10 : 10, r : 9 | 7, cu, n : 0, m, ho.-fr |
| 29 | 6·3 | 12·7 | SW | SW | 4·8 | 0·54 | 478 | p.-cl, ho.-fr: p.-cl : 7, ci.-cu, cu | 9, cu : 10, cu, n, w : 10, r, w |
| 30 | 8·0 | 12·8 | WSW | WSW : SW | 11·3 | 0·67 | 486 | p.-cl : p.-cl : 1, ci, cu | 4, ci, cu : 10, hy.-r, w : p.-cl, r, w |
| 31 | 6·8 | 12·8 | WSW : W | WNW : W : WSW | 10·5 | 1·02 | 609 | p.-cl, l, t, w: p.-cl, w : 9, cu, n, st.-w | p.-cl, cu, n, w, so.-ha: p.-cl : 0 |
| Means | 3·3 | 11·8 | ... | ... | ... | 0·25 | 303 | | |
| Number of Column for Reference. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

The mean *Temperature of Evaporation* for the month was 37°·8, being 1°·6 *lower* than
The mean *Temperature of the Dew Point* for the month was 34°·4, being 1°·9 *lower* than
The mean *Degree of Humidity* for the month was 79·3, being 1·2 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·199, being 0in·015 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·3, being 0gr·2 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 550 grains, being 1 grain *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 7·5.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·278. The maximum daily amount of *Sunshine* was 9·9 hours on March 24.

The highest reading of the *Solar Radiation Thermometer* was 114°·2 on March 24; and the lowest reading of the *Terrestrial Radiation Thermometer* was 15°·2 on March 15.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 1·1; for the 6 hours ending 15h was 1·3; and for the 6 hours ending 21h was 0·3.

The *Proportions of Wind* referred to the cardinal points were N. 7, E. 4, S. 8, and W. 10. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 13·0 lbs. on the square foot on March 8. The mean daily *Horizontal Movement of the Air* for the month was 303 miles; the greatest daily value was 747 miles on March 10; and the least daily value was 94 miles on March 15.

*Rain* (0in·005 or over) fell on 17 days in the month, amounting to 2in·223, as measured by gauge No. 6 partly sunk below the ground; being 0in·703 *greater* than the average fall for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Phases of the Moon. | BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit). | TEMPERATURE. Of the Air. Highest. | Lowest. | Daily Range. | Mean of 24 Hourly Values. | Excess above Average of 65 Years. | TEMPERATURE. Of Evaporation. Mean of 24 Hourly Values. | Of the Dew Point. Deduced Mean Daily Value. | Difference between the Air Temperature and Dew Point Temperature. Mean. | Greatest. | Least. | Degree of Humidity (Saturation = 100). | TEMPERATURE. Of Radiation. Highest in Sun's Rays. | Lowest on the Grass. | Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground. | Daily Amount of Ozone. | Electricity. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | ° | ° | in. | | |
| Apr. 1 | New : In Equator | 29·765 | 51·1 | 36·2 | 14·9 | 44·4 | − 0·9 | 40·1 | 35·1 | 9·3 | 16·6 | 2·4 | 70 | 83·3 | 28·6 | 0·000 | 0·0 | mP : sP : sP |
| 2 | ... | 29·822 | 60·3 | 43·0 | 17·3 | 50·2 | + 4·5 | 46·8 | 43·2 | 7·0 | 14·2 | 1·9 | 78 | 99·8 | 36·9 | 0·000 | 3·5 | vP : wP : mP |
| 3 | ... | 29·710 | 54·0 | 41·5 | 12·5 | 47·6 | + 1·6 | 43·0 | 37·9 | 9·7 | 15·0 | 2·9 | 70 | 100·9 | 35·8 | 0·041 | 4·5 | wwN, wP : vP, ssN : sP |
| 4 | ... | 29·718 | 51·8 | 38·6 | 13·2 | 42·5 | − 3·7 | 39·0 | 34·8 | 7·7 | 13·9 | 3·3 | 75 | 96·0 | 32·9 | 0·012 | 0·2 | mP : sP : vP, vN |
| 5 | ... | 29·754 | 45·9 | 39·0 | 6·9 | 41·7 | − 4·6 | 39·9 | 37·6 | 4·1 | 6·4 | 2·8 | 87 | 83·0 | 35·5 | 0·287 | 0·8 | vP, vN : vvP, vvN |
| 6 | ... | 30·066 | 49·0 | 37·8 | 11·2 | 42·2 | − 4·1 | 39·4 | 36·0 | 6·2 | 11·8 | 2·5 | 79 | 86·8 | 33·4 | 0·003 | 0·0 | mP : mP, mN : mP |
| 7 | ... | 30·156 | 54·0 | 36·2 | 17·8 | 44·6 | − 1·7 | 40·1 | 34·9 | 9·7 | 16·6 | 3·1 | 69 | 108·3 | 29·5 | 0·000 | 2·0 | mP |
| 8 | Greatest Declination N. : First Quarter | 30·034 | 57·1 | 32·8 | 24·3 | 43·1 | − 3·0 | 39·2 | 34·5 | 8·6 | 18·8 | 1·4 | 72 | 109·8 | 23·0 | 0·000 | 4·0 | mP |
| 9 | ... | 29·876 | 58·1 | 28·4 | 29·7 | 46·1 | + 0·1 | 40·8 | 34·8 | 11·3 | 21·1 | 1·4 | 65 | 110·6 | 19·0 | 0·000 | 3·0 | mP |
| 10 | Apogee | 29·767 | 48·6 | 41·0 | 7·6 | 45·0 | − 0·9 | 43·2 | 41·1 | 3·9 | 8·8 | 1·3 | 86 | 70·0 | 40·8 | 0·022 | 0·0 | wN, wP : mP : vP |
| 11 | ... | 29·694 | 45·5 | 40·2 | 5·3 | 42·9 | − 2·9 | 41·2 | 39·2 | 3·7 | 7·0 | 2·2 | 86 | 61·0 | 35·5 | 0·000 | 1·0 | wP |
| 12 | ... | 29·841 | 53·9 | 39·3 | 14·6 | 44·7 | − 1·2 | 42·0 | 38·8 | 5·9 | 15·4 | 2·4 | 80 | 82·8 | 30·3 | 0·007 | 0·0 | wP |
| 13 | ... | 29·989 | 49·5 | 34·9 | 14·6 | 41·8 | − 4·3 | 38·5 | 34·5 | 7·3 | 14·1 | 3·0 | 77 | 119·1 | 28·3 | 0·000 | 4·0 | mP : wP : mP |
| 14 | ... | 30·011 | 48·0 | 34·7 | 13·3 | 41·7 | − 4·7 | 38·2 | 33·9 | 7·8 | 13·0 | 3·1 | 75 | 104·5 | 28·0 | 0·001 | 0·0 | mP : mP : sP |
| 15 | In Equator | 30·000 | 56·9 | 36·6 | 20·3 | 44·9 | − 1·9 | 41·2 | 36·9 | 8·0 | 17·6 | 2·4 | 73 | 115·5 | 29·9 | 0·000 | 5·0 | mP : mP : wP |
| 16 | Full | 30·052 | 59·1 | 38·2 | 20·9 | 49·0 | + 1·8 | 43·6 | 37·8 | 11·2 | 21·8 | 2·9 | 65 | 113·2 | 32·1 | 0·000 | 3·2 | mP : wP : mP |
| 17 | ... | 30·005 | 57·6 | 37·1 | 20·5 | 45·3 | − 2·3 | 40·7 | 35·4 | 9·9 | 20·1 | 2·9 | 69 | 114·8 | 31·3 | 0·000 | 0·8 | mP : wP : mP |
| 18 | ... | 29·741 | 50·3 | 36·4 | 13·9 | 42·6 | − 5·4 | 38·6 | 33·8 | 8·8 | 20·4 | 3·2 | 72 | 108·2 | 25·3 | 0·001 | 4·0 | mP : vP, wwN : sP, mN |
| 19 | ... | 29·566 | 45·8 | 33·0 | 12·8 | 36·0 | −12·3 | 34·4 | 32·0 | 4·0 | 11·9 | 2·5 | 86 | 89·8 | 30·1 | 0·143 | 3·0 | mP : vvP, vvN |
| 20 | ... | 29·612 | 45·8 | 32·4 | 13·4 | 38·1 | −10·4 | 34·1 | 28·7 | 9·4 | 14·7 | 1·5 | 68 | 106·7 | 25·0 | 0·022 | 0·0 | mP, ssN : sP, ssN : ssP |
| 21 | ... | 29·656 | 47·2 | 31·9 | 15·3 | 41·0 | − 7·7 | 38·4 | 35·1 | 5·9 | 10·5 | 2·9 | 80 | 68·5 | 22·2 | 0·046 | 0·0 | mP : sP : vP |
| 22 | Greatest Declination S. | 29·556 | 55·2 | 38·2 | 17·0 | 45·6 | − 3·1 | 42·6 | 39·2 | 6·4 | 15·0 | 1·1 | 79 | 115·2 | 34·4 | 0·004 | 0·0 | mP : wP : mP, wwN |
| 23 | Last Quarter | 29·423 | 46·2 | 31·6 | 14·6 | 39·3 | − 9·3 | 37·4 | 34·9 | 4·4 | 7·9 | 0·6 | 85 | 86·8 | 32·0 | 0·459 | 1·3 | wP : vP, ssN : ssN, vP |
| 24 | ... | 29·270 | 40·9 | 30·5 | 10·4 | 34·5 | −14·1 | 31·6 | 26·8 | 7·7 | 16·6 | 1·0 | 73 | 92·1 | 25·6 | 0·178 | 1·7 | mP, ssN : sP, ssN : mP |
| 25 | Perigee | 29·240 | 46·1 | 31·6 | 14·5 | 37·6 | −11·0 | 35·2 | 31·9 | 5·7 | 13·2 | 1·5 | 80 | 89·2 | 25·3 | 0·126 | 10·5 | vP, ssN : vP, ssN : ssP, ssN |
| 26 | ... | 29·436 | 51·2 | 32·4 | 18·8 | 40·4 | − 8·2 | 36·4 | 31·3 | 9·1 | 17·8 | 0·6 | 70 | 106·2 | 29·5 | 0·020 | 4·5 | vP, ssN : wP : mP |
| 27 | ... | 29·613 | 55·5 | 37·3 | 18·2 | 44·9 | − 3·8 | 43·1 | 41·0 | 3·9 | 12·6 | 0·4 | 87 | 109·2 | 31·4 | 0·143 | 6·2 | mP : wP, vN : wP |
| 28 | In Equator | 29·547 | 47·6 | 42·9 | 4·7 | 45·5 | − 3·3 | 44·8 | 44·0 | 1·5 | 4·4 | 0·0 | 95 | 57·5 | 36·0 | 0·410 | 0·8 | wP : ssN, vP : mP |
| 29 | ... | 29·833 | 62·0 | 44·4 | 17·6 | 51·9 | + 2·9 | 49·5 | 47·1 | 4·8 | 18·0 | 0·2 | 84 | 97·1 | 37·5 | 0·000 | 2·0 | mP : mP : wP |
| 30 | New | 30·030 | 57·7 | 47·1 | 10·6 | 52·6 | + 3·5 | 50·8 | 49·0 | 3·6 | 6·5 | 1·0 | 88 | 70·5 | 43·3 | 0·178 | 6·0 | wP, wN : wwP : wP |
| Means | ... | 29·759 | 51·7 | 36·8 | 14·9 | 43·6 | − 3·7 | 40·5 | 36·7 | 6·9 | 14·1 | 1·9 | 77·4 | 95·2 | 30·9 | Sum 2·103 | 2·4 | ... |
| Number of Column for Reference. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was 29$^{in}$·759, being 0$^{in}$·011 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 62°·0 on April 29 ; the lowest in the month was 28°·4 on April 9 ; and the range was 33°·6.
The mean of all the highest daily readings in the month was 51°·7, being 5°·5 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 36°·8, being 2°·2 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 14°·9, being 3°·3 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 43°·6, being 3°·7 *lower* than the average for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Daily Duration of Sunshine. | Sun above Horizon. | Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M. | General Direction. P.M. | Pressure on the Square Foot. Greatest. | Pressure on the Square Foot. Mean of 24 Hourly Measures. | Robinson's. Horizontal Movement of the Air. | Clouds and Weather. A.M. | Clouds and Weather. P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | hours. | hours. | | | lbs. | lbs. | miles. | | |
| Apr. 1 | 3·0 | 12·9 | W : NW | WNW : NW : WSW | 2·3 | 0·15 | 353 | p.-cl : p.-cl : 8, cu, n | 9, cu, n : 9 : 9 |
| 2 | 0·6 | 13·0 | WSW | W : WSW : SW | 3·8 | 0·17 | 361 | 10 : 10 : 10, n, m.-r | p.-cl, n, s : 10, n, s : 10, slt.-r |
| 3 | 6·9 | 13·0 | WSW : W | W : NW : WNW | 10·5 | 0·83 | 580 | p.-cl,slt.-r: 1 : 9, oc.-slt.-r | 9, n, oc.-r, hy.-sh, hl, t, w : 9, w : 2, w |
| 4 | 1·8 | 13·1 | W : NW | NNW : NNE : NW | 3·8 | 0·24 | 379 | p.-cl : p.-cl : 10, n, th.-r | 8, cu, n : 10, oc.-r, l, t : 9 |
| 5 | 1·3 | 13·1 | NNW : N | N : NE : NNE | 5·8 | 0·27 | 362 | 9, slt.-r : 10, slt.-r : 10, slt.-r, hy.-sh, hl | 10, fq.-shs, hl: 10, sq : 9 |
| 6 | 5·2 | 13·2 | NNE | NE : NNE | 4·4 | 0·40 | 441 | p.-cl : 10 : p.-cl, cu, n | p.-cl, cu, n, slt.-sh : 9 : 10 |
| 7 | 12·1 | 13·3 | NNE | NE | 7·8 | 0·47 | 455 | 1 : 1 : 1, ci, w | 1, th.-cl : 0 : 0 |
| 8 | 10·3 | 13·3 | NE : NNE : N | ENE : SE | 1·9 | 0·08 | 234 | 0, ho.-fr : p.-cl, h : 1, th.-cl, h | 1, th.-cl, h : 0 : 0, ho.-fr |
| 9 | 10·3 | 13·4 | ENE : NE | NE : Calm : SSW | 0·2 | 0·00 | 112 | 0, ho.-fr : 0, m : 3, th.-cl | 0 : p.-cl, ci.-s, s : 10 |
| 10 | 0·2 | 13·5 | NNE : N | NNE : ESE | 0·3 | 0·01 | 197 | 10, r : 10 : 10, cu, n | 10 : 10 : 10, m.-r |
| 11 | 0·0 | 13·5 | ESE : SE | ESE : NE | 0·0 | 0·00 | 196 | 10 : 10 | 10 : 9 |
| 12 | 0·2 | 13·6 | NE : NNE : ENE | E : ESE : NE | 2·6 | 0·05 | 244 | 8 : 9, slt.-sh : 10, th.-r | 10, slt.-sh : p.-cl, s : 9 |
| 13 | 5·9 | 13·6 | NE : ENE : E | E : NE | 1·3 | 0·07 | 269 | p.-cl : 1 : 5, cu, n | 9, cu, n : 10, slt.-r : p.-cl |
| 14 | 3·0 | 13·7 | NE : NNE : ENE | ENE : NE | 3·0 | 0·37 | 375 | p.-cl : 9 : 8, cu, n | 10, n, th.-r : p.-cl, cu, s : p.-cl |
| 15 | 8·5 | 13·8 | NNE : NE : ENE | ENE : NE | 3·6 | 0·29 | 361 | 9 : p.-cl : 8, cu, ci.-s | p.-cl, cu : p.-cl : 1, li.-cl |
| 16 | 11·9 | 13·8 | ENE : E | E : ENE | 13·6 | 1·24 | 589 | 0 : 1, w : 1, ci, li.-cl, st.-w | 1, li.-cl, w : 0, w : 0 |
| 17 | 11·9 | 13·9 | ENE : NE | ENE : NE | 3·5 | 0·35 | 390 | p.-cl : p.-cl : 3, ci.-s, th.-cl | p.-cl, cu, ci.-s: 1 : 1, th.-cl |
| 18 | 5·9 | 14·0 | N : W : NNE | NNE | 8·8 | 0·85 | 446 | p.-cl : 9 : 9, cu, n, w | p.-cl, w : p.-cl, hl, w : 9 |
| 19 | 2·5 | 14·0 | N : NNE | N : NNE | 8·1 | 0·59 | 390 | p.-cl : 10, oc.-sn : 9, oc.-th.-r, hl, w | 9, cu, n, fq.-shs, hl, sn, w : p.-cl, w : 9, sn, r |
| 20 | 7·2 | 14·1 | NNE | NNE : NE : W | 5·2 | 0·53 | 393 | v, oc.-sn : v, oc.-sn : p.-cl, oc.-sn, w | v, oc.-sn, w : v, oc.-sn : 1 |
| 21 | 0·0 | 14·2 | W : NW : NNW | NNW : N : E | 1·8 | 0·05 | 226 | v : 10, oc.-slt.-r | 10, sh.-r : 10, oc.-shs : 10, r |
| 22 | 3·8 | 14·2 | Calm : W | W : SW : WSW | 3·5 | 0·07 | 228 | 10 : p.-cl : 6, cu, n | 9, n, s : 10, n, s, fq.-r : 9 |
| 23 | 0·0 | 14·3 | NNW : NE : ESE | ESE : NE : NNE | 2·6 | 0·07 | 278 | 10, slt.-r : 10 : 10, oc.-slt.-r | 10, fq.-r : 10, c.-r, sn : 10, sn |
| 24 | 7·1 | 14·3 | NNE : N | N : W : SSW | 3·2 | 0·18 | 346 | 10, sn : 10, slt.-sn : 6, cu | p.-cl, sn : p.-cl : 0 |
| 25 | 0·3 | 14·4 | SSW : S : SE | SE : NW: WNW | 8·0 | 0·54 | 408 | p.-cl, sn : 10, sn : 10, w | 10, oc.-r, w : 9, fq.-shs, hl, sn: 10, sn, w |
| 26 | 12·2 | 14·5 | WNW | WNW : W : WSW | 7·5 | 0·65 | 538 | 10, sn : 1 : 5, cu, n, w | 4, cu, w : s, th.-cl |
| 27 | 0·9 | 14·5 | W : Calm : SW | SW : SE : SSE | 0·2 | 0·01 | 140 | p.-cl : p.-cl : 9, slt.-r | 10, fq.-r : 10, oc.-r |
| 28 | 0·0 | 14·6 | SE | ENE:Calm:Variable | 5·0 | 0·31 | 271 | 10, sh.-r : 10 : 10, oc.-r, w | 10, c.-r : 10, r : 10, m, slt.-r |
| 29 | 4·5 | 14·6 | WSW : SW : NW | NNW : E : ESE | 0·6 | 0·02 | 181 | 10 : 10 : 9 | 7, cu : p.-cl : 10 |
| 30 | 0·0 | 14·7 | ESE : SE : SSE | S | 2·0 | 0·11 | 252 | 10, r : 10, c.-r : 10, r | 10, oc.-slt.-r : p.-cl : p.-cl |
| Means | 4·6 | 13·8 | ... | ... | ... | 0·30 | 333 | | |
| Number of Column for Reference. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

The mean *Temperature of Evaporation* for the month was 40°·5, being 3°·4 *lower* than
The mean *Temperature of the Dew Point* for the month was 36°·7, being 3°·4 *lower* than
The mean *Degree of Humidity* for the month was 77·4, being 1·6 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·218, being 0in·030 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·5, being 0gr·4 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 548 grains, being 5 grains *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 7·4.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·332. The maximum daily amount of *Sunshine* was 12·2 hours on April 26.

The highest reading of the *Solar Radiation Thermometer* was 119°·1 on April 13; and the lowest reading of the *Terrestrial Radiation Thermometer* was 19°·0 on April 9.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·8; for the 6 hours ending 15h was 1·3; and for the 6 hours ending 21h was 0·3.

The *Proportions of Wind* referred to the cardinal points were N. 10, E. 10, S. 3, and W. 6. One day was calm.

The *Greatest Pressure of the Wind* in the month was 13·6 lbs. on the square foot on April 16. The mean daily *Horizontal Movement of the Air* for the month was 333 miles; the greatest daily value was 589 miles on April 16; and the least daily value was 112 miles on April 9.

*Rain* (0in·005 or over) fell on 15 days in the month, amounting to 2in·103, as measured by gauge No. 6 partly sunk below the ground; being 0in·537 *greater* than the average fall for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Phases of the Moon. | BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit). | TEMPERATURE. Of the Air. Highest. | Lowest. | Daily Range. | Mean of 24 Hourly Values. | Excess above Average of 65 Years. | Of Evaporation. Mean of 24 Hourly Values. | Of the Dew Point. Deduced Mean Daily Value. | Difference between the Air Temperature and Dew Point Temperature. Mean. | Greatest. | Least. | Degree of Humidity (Saturation = 100). | TEMPERATURE. Of Radiation. Highest in Sun's Rays. | Lowest on the Grass. | Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground. | Daily Amount of Ozone. | Electricity. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | ° | ° | in. | | |
| May 1 | ... | 29·996 | 73·3 | 50·9 | 22·4 | 62·3 | +13·0 | 58·1 | 54·5 | 7·8 | 17·7 | 1·7 | 76 | 120·6 | 43·3 | 0·000 | 0·0 | wP : wP : wwP |
| 2 | ... | 29·908 | 75·5 | 48·4 | 27·1 | 62·0 | +12·5 | 58·0 | 54·6 | 7·4 | 16·3 | 0·0 | 77 | 119·2 | 39·9 | 0·003* | 1·5 | wwP |
| 3 | ... | 29·828 | 53·5 | 47·7 | 5·8 | 50·4 | + 0·6 | 49·5 | 48·5 | 1·9 | 2·5 | 0·4 | 94 | 66·0 | 45·0 | 0·097 | 4·5 | wwP : vN, wP : wP |
| 4 | ... | 29·588 | 63·8 | 46·2 | 17·6 | 53·5 | + 3·5 | 51·7 | 50·0 | 3·5 | 8·4 | 0·8 | 88 | 108·8 | 43·0 | 0·004 | 1·5 | wwN, wP : wP : wP |
| 5 | Greatest Declination N. | 29·379 | 58·1 | 47·6 | 10·5 | 52·3 | + 2·0 | 50·7 | 49·1 | 3·2 | 6·4 | 1·7 | 89 | 92·8 | 40·8 | 0·113 | 16·5 | wP : wwN, wP : wP |
| 6 | ... | 29·300 | 59·5 | 47·7 | 11·8 | 53·5 | + 3·0 | 50·3 | 47·1 | 6·4 | 9·7 | 1·2 | 79 | 91·9 | 41·1 | 0·042 | 13·0 | wP : wP, wN : wP |
| 7 | ... | 29·701 | 64·1 | 43·6 | 20·5 | 52·8 | + 2·1 | 47·7 | 42·6 | 10·2 | 19·2 | 0·8 | 69 | 124·3 | 37·7 | 0·038 | 14·8 | wP : mP : wP |
| 8 | Apogee : First Quarter | 29·694 | 59·5 | 50·6 | 8·9 | 55·1 | + 4·1 | 53·5 | 52·0 | 3·1 | 4·9 | 0·6 | 89 | 83·4 | 49·0 | 0·019 | 6·7 | wwP |
| 9 | ... | 29·639 | 68·3 | 47·3 | 21·0 | 57·7 | + 6·5 | 52·9 | 48·5 | 9·2 | 18·2 | 2·8 | 72 | 124·7 | 35·8 | 0·000 | 14·2 | wP |
| 10 | ... | 29·742 | 64·5 | 45·8 | 18·7 | 54·0 | + 2·5 | 49·4 | 44·9 | 9·1 | 19·6 | 3·2 | 71 | 118·5 | 33·2 | 0·007 | 9·3 | wP : wP : wP, mN |
| 11 | ... | 29·781 | 63·7 | 39·6 | 24·1 | 51·7 | − 0·1 | 48·4 | 45·1 | 6·6 | 19·8 | 0·7 | 78 | 125·3 | 30·2 | 0·291 | 6·0 | wP : wP : vN, vP |
| 12 | In Equator | 29·632 | 66·5 | 46·4 | 20·1 | 54·5 | + 2·4 | 50·3 | 46·2 | 8·3 | 17·8 | 0·6 | 73 | 132·0 | 42·2 | 0·070 | 6·0 | vP, wN : wP : wP |
| 13 | ... | 29·581 | 61·0 | 44·3 | 16·7 | 51·5 | − 0·9 | 47·1 | 42·6 | 8·9 | 15·4 | 2·1 | 72 | 133·2 | 37·0 | 0·005 | 4·5 | wP : vP, ssN |
| 14 | ... | 29·496 | 56·5 | 41·6 | 14·9 | 48·8 | − 3·8 | 47·4 | 45·9 | 2·9 | 11·0 | 0·2 | 90 | 97·5 | 32·9 | 0·065 | 13·7 | wP : wP, vN : wP |
| 15 | ... | 29·555 | 56·5 | 45·6 | 10·9 | 50·5 | − 2·3 | 48·0 | 45·4 | 5·1 | 8·2 | 0·8 | 83 | 112·1 | 39·2 | 0·092 | 11·0 | wP, mN : wP, wN : wP |
| 16 | Full | 30·001 | 65·0 | 45·9 | 19·1 | 54·9 | + 1·9 | 51·1 | 47·5 | 7·4 | 12·9 | 1·1 | 75 | 122·5 | 40·6 | 0·000 | 2·5 | wP |
| 17 | ... | 30·233 | 75·2 | 55·1 | 20·1 | 63·0 | + 9·9 | 58·0 | 53·8 | 9·2 | 18·5 | 2·6 | 72 | 131·2 | 50·6 | 0·000 | 8·8 | wwP |
| 18 | ... | 30·271 | 72·4 | 52·0 | 20·4 | 60·8 | + 7·5 | 56·4 | 52·6 | 8·2 | 16·2 | 1·9 | 74 | 127·3 | 44·9 | 0·000 | 5·5 | wwP : wP : wP |
| 19 | Greatest Declination S. | 30·157 | 77·0 | 50·6 | 26·4 | 63·4 | + 9·9 | 58·0 | 53·5 | 9·9 | 19·2 | 0·4 | 70 | 135·0 | 40·0 | 0·000 | 3·0 | wP |
| 20 | Perigee | 30·100 | 65·0 | 48·7 | 16·3 | 56·7 | + 2·9 | 52·2 | 48·0 | 8·7 | 17·0 | 3·8 | 73 | 123·5 | 42·2 | 0·000 | 10·0 | wP |
| 21 | ... | 29·699 | 72·2 | 44·1 | 28·1 | 56·4 | + 2·2 | 51·7 | 47·3 | 9·1 | 19·8 | 1·4 | 71 | 126·8 | 35·6 | 0·000 | 3·5 | wP : wP : mP |
| 22 | ... | 29·639 | 61·3 | 42·0 | 19·3 | 50·1 | − 4·5 | 45·8 | 41·3 | 8·8 | 17·3 | 4·6 | 72 | 128·4 | 32·9 | 0·044 | 9·5 | wP : vP, ssN : mP |
| 23 | Last Quarter | 29·869 | 64·0 | 43·2 | 20·8 | 52·0 | − 2·9 | 47·0 | 41·9 | 10·1 | 20·3 | 1·1 | 69 | 127·2 | 32·8 | 0·000 | 4·0 | mP : mP : wP |
| 24 | ... | 29·815 | 66·0 | 37·8 | 28·2 | 52·0 | − 3·3 | 48·4 | 44·7 | 7·3 | 16·2 | 0·2 | 76 | 130·8 | 27·3 | 0·000 | 7·2 | wP |
| 25 | In Equator | 29·720 | 61·1 | 48·7 | 12·4 | 53·6 | − 1·9 | 50·3 | 47·1 | 6·5 | 14·4 | 1·4 | 78 | 111·5 | 42·3 | 0·008 | 12·1 | ... : wP, wN : mP |
| 26 | ... | 29·994 | 66·1 | 51·0 | 15·1 | 56·8 | + 1·0 | 53·0 | 49·5 | 7·3 | 11·5 | 1·2 | 76 | 110·5 | 44·0 | 0·000 | 0·7 | wP : wP : mP |
| 27 | ... | 30·289 | 74·6 | 48·0 | 26·6 | 61·7 | + 5·7 | 55·8 | 50·8 | 10·9 | 18·2 | 1·4 | 68 | 135·3 | 33·3 | 0·000 | 5·0 | wP |
| 28 | ... | 30·279 | 71·4 | 47·0 | 24·4 | 59·3 | + 3·1 | 54·6 | 50·4 | 8·9 | 17·6 | 0·4 | 72 | 141·6 | 33·2 | 0·000 | 0·0 | wP |
| 29 | ... | 30·090 | 72·8 | 49·3 | 23·5 | 60·0 | + 3·6 | 54·2 | 49·1 | 10·9 | 20·3 | 1·8 | 67 | 129·6 | 44·6 | 0·103 | 3·0 | wP : wP, wwN : wP, vN |
| 30 | New | 29·829 | 68·1 | 52·9 | 15·2 | 59·4 | + 2·7 | 57·6 | 56·0 | 3·4 | 7·6 | 0·8 | 89 | 114·0 | 47·0 | 0·526 | 0·0 | vP, vvN : wP : wP |
| 31 | ... | 29·776 | 75·3 | 54·9 | 20·4 | 63·1 | + 6·0 | 59·8 | 57·0 | 6·1 | 16·3 | 0·2 | 81 | 132·7 | 46·1 | 0·000 | 5·0 | wP : wwP |
| Means | ... | 29·825 | 66·2 | 47·2 | 18·9 | 55·9 | + 2·9 | 52·2 | 48·6 | 7·3 | 14·8 | 1·4 | 76·9 | 118·7 | 39·6 | Sum 1·527 | 6·5 | ... |
| Number of Column for Reference. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

* Rainfall (column 16). Amount entered on May 2 is derived from dew.

The mean reading of the *Barometer* for the month was 29$^{in.}$·825, being 0$^{in.}$·031 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 77°·0 on May 19; the lowest in the month was 37°·8 on May 24; and the range was 39°·2.
The mean of all the highest daily readings in the month was 66°·2, being 2°·3 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 47°·2, being 3°·5 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 18°·9, being 1°·3 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 55°·9, being 2°·9 *higher* than the average for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Daily Duration of Sunshine. | Sun above Horizon. | Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M. | General Direction. P.M. | Pressure on the Square Foot. Greatest. | Pressure on the Square Foot. Mean of 24 Hourly Measures. | Robinson's. Horizontal Movement of the Air. | Clouds and Weather. A.M. | Clouds and Weather. P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | hours. | hours. | | | lbs. | lbs. | miles. | | |
| May 1 | 7·7 | 14·8 | SSW : SW | NNW : Variable | 0·6 | 0·02 | 166 | 9 : 9 : 8, cu | 8, ci, cu : p.-cl : 0, d |
| 2 | 6·2 | 14·8 | Calm : SSE | Calm : ENE | 0·4 | 0·01 | 83 | 0, m : 1, h : 5, cu, n | 5, cu, th.-cl: p.-cl, n : p.-cl, d |
| 3 | 0·0 | 14·9 | ENE : E | ENE | 3·4 | 0·14 | 250 | p.-cl : 10 : 10, r | 10 : 10 |
| 4 | 0·8 | 14·9 | ENE : Calm : SE | WSW : SW : SSW | 0·9 | 0·02 | 155 | 10 : 10 : 10, th.-cl | 10, cu, n, li.-shs : p.-cl |
| 5 | 0·6 | 15·0 | SW : SSW : S | SSW : S | 7·0 | 0·38 | 346 | p.-cl : 10, n, fq.-r | 10, n, fq.-r : p.-cl |
| 6 | 1·9 | 15·1 | SSW | SW : WSW | 8·7 | 0·63 | 483 | 9, sh.-r : 9, oc.-slt.-r: 10,n,fq.-th.-r | 9, cu,n,oc.-r: p.-cl,cu,n,w: 0 |
| 7 | 12·0 | 15·1 | WSW | WSW : SW : SSW | 3·2 | 0·27 | 393 | 0 : 1 : 5, ci, cu, n | 6, cu, n : 9 : 10, r |
| 8 | 0·0 | 15·1 | SW | WSW : SW | 7·0 | 0·55 | 468 | 10, oc.-slt.-r : 10, oc.-slt.-r | 10, w : 10 |
| 9 | 9·1 | 15·2 | WSW : W | WSW : SW | 3·2 | 0·29 | 368 | p.-cl : p.-cl : 8, cu, n | 8, ci, cu, n : p.-cl : 1 |
| 10 | 5·4 | 15·3 | SW | W : WSW | 3·0 | 0·19 | 319 | p.-cl : 9 : 10, n, slt.-sh | p.-cl, cu, n : p.-cl, sh.-r |
| 11 | 3·8 | 15·3 | WSW : SE : S | SSE : ESE : E | 0·5 | 0·02 | 128 | p.-cl : p.-cl | 10, s : 10, fq.-r : 10, r |
| 12 | 8·4 | 15·4 | NE : N : W | W : WSW : SW | 1·0 | 0·06 | 209 | 10, r : p.-cl : 5, cu | 6, cu : p.-cl : p.-cl |
| 13 | 9·1 | 15·4 | W : WSW | WSW : SW | 4·8 | 0·19 | 318 | p.-cl : p.-cl : 7, cu, n | 9, cu, n, t : p.-cl, li.-shs, hl: 1 |
| 14 | 1·5 | 15·5 | SW : S : SSW | S : SSW : SW | 4·4 | 0·18 | 262 | p.-cl : p.-cl : 10, n, fq.-r | 10, sc,n,fq.-r: p.-cl, r : 1 |
| 15 | 1·9 | 15·5 | SSW : SW | SW : WSW : W | 9·0 | 0·72 | 474 | p.-cl, slt.-r : 10, sc, r, w | 10, n, fq.-r : p.-cl,oc.-slt.-r,w: 2 |
| 16 | 6·2 | 15·6 | WSW : W | W : WSW | 3·1 | 0·19 | 347 | p.-cl, m : p.-cl : 8, ci, ci.-s, cu | 9 : p.-cl |
| 17 | 9·8 | 15·6 | WSW | W : SW | 3·4 | 0·25 | 346 | 10 : 10 : p.-cl | 3, ci, cu, th.-cl : 1 |
| 18 | 13·3 | 15·7 | W : WSW | W : WNW | 1·7 | 0·17 | 317 | p.-cl : 1 | 2 : p.-cl, cu : 0 |
| 19 | 10·3 | 15·7 | WSW | WSW : NW : NNW | 0·6 | 0·02 | 166 | 0, m, d : m, th.-cl : 3, cu, th.-cl | 3, cu : p.-cl : p.-cl |
| 20 | 4·2 | 15·8 | NNE : NE : ENE | ESE : ENE | 2·3 | 0·15 | 260 | p.-cl : 9 : 9, cu, n | p.-cl, cu : 4, cu, li.-cl : li.-cl |
| 21 | 8·1 | 15·8 | ENE : W | W : WNW | 3·9 | 0·21 | 271 | p.-cl, m : 9 : 9, cu, th.-cl | p.-cl,cu,th.-cl: p.-cl : 0 |
| 22 | 8·4 | 15·9 | WSW : SW | WSW : W : WNW | 6·0 | 0·36 | 399 | 0 : p.-cl : 8, cu, n, fq.-r | 8, cu,n, fq.-r,hl: 9 : 10 |
| 23 | 12·7 | 15·9 | NW : N : NNE | NNE : SE | 3·1 | 0·12 | 232 | p.-cl : p.-cl | 7, cu, n : p.-cl : 1, h, d |
| 24 | 11·0 | 15·9 | S : Calm : SW | SW : WSW | 3·7 | 0·12 | 241 | 0 : li.-cl : 5, cu | 7, cu : p.-cl |
| 25 | 0·6 | 16·0 | SW : W : WSW | WSW | 2·8 | 0·17 | 310 | 10, th.-r : 9, th.-r : 10, cu, n | 10, n, li.-shs: 10, cu, n, s : 9 |
| 26 | 0·8 | 16·0 | WSW : W | W : NNW : NW | 2·5 | 0·07 | 249 | 10 : 9 : 9, cu, n | 10 : p.-cl : 9 |
| 27 | 14·0 | 16·1 | NNW : NE | NE : ESE | 1·2 | 0·03 | 146 | 10 : li.-cl : 3, cu, li.-cl | 4, cu : 2 : 1, slt.-h |
| 28 | 13·0 | 16·1 | ENE : NE | NE : ENE | 3·5 | 0·26 | 295 | m : li.-cl : 6, cu | p.-cl : p.-cl : 10 |
| 29 | 9·0 | 16·1 | NE : ENE | ENE : NE | 9·0 | 0·50 | 401 | p.-cl : 1, m : 2, cu, w | p.-cl, w : 10, oc.-slt.-r : 10, r |
| 30 | 2·7 | 16·2 | NE : ENE | E : SE : SSE | 1·5 | 0·04 | 187 | 10, r : 10, oc.-r : 10 | 9 : p.-cl : 10 |
| 31 | 7·4 | 16·2 | ESE | ESE : SE : SSE | 0·6 | 0·00 | 113 | 10, m : 9 : p.-cl, cu | p.-cl, cu, n : ci, th.-cl : th.-cl |
| Means | 6·4 | 15·5 | ... | ... | ... | 0·20 | 281 | | |
| Number of Column for Reference. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

The mean *Temperature of Evaporation* for the month was 52°·2, being 3°·2 *higher* than
The mean *Temperature of the Dew Point* for the month was 48°·6, being 3°·6 *higher* than
The mean *Degree of Humidity* for the month was 76·9, being 2·7 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·343, being 0in·044 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs·9, being 0gr·5 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 535 grains, being 3 grains *less* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 7·0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·415. The maximum daily amount of *Sunshine* was 14·0 hours on May 27.

The highest reading of the *Solar Radiation Thermometer* was 141°·6 on May 28; and the lowest reading of the *Terrestrial Radiation Thermometer* was 27°·3 on May 24.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 2·6; for the 6 hours ending 15h was 3·0; and for the 6 hours ending 21h was 0·9.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 6, S. 7, and W. 13. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 9·0 lbs. on the square foot on May 15 and 29. The mean daily *Horizontal Movement of the Air* for the month was 281 miles; the greatest daily value was 483 miles on May 6; and the least daily value was 83 miles on May 2.

*Rain* (0in·005 or over) fell on 15 days in the month, amounting to 1in·527, as measured by gauge No. 6 partly sunk below the ground; being 0in·388 *less* than the average fall for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Phases of the Moon. | BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit). | TEMPERATURE. Of the Air. Highest. | Lowest. | Daily Range. | Mean of 24 Hourly Values. | Excess above Average of 65 Years. | Of Evaporation. Mean of 24 Hourly Values. | Of the Dew Point. Deduced Mean Daily Value. | Difference between the Air Temperature and Dew Point Temperature. Mean. | Greatest. | Least. | Degree of Humidity (Saturation = 100). | TEMPERATURE. Of Radiation. Highest in Sun's Rays. | Lowest on the Grass. | Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground. | Daily Amount of Ozone. | Electricity. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | ° | ° | in. | | |
| June 1 | Greatest Declination N. | 29·750 | 81·1 | 55·0 | 26·1 | 67·5 | +10·1 | 62·6 | 58·7 | 8·8 | 17·5 | 1·1 | 73 | 142·5 | 45·5 | 0·078 | 5·5 | wwP, mN : wwP : vP, vN |
| 2 | ... | 29·792 | 75·1 | 56·3 | 18·8 | 65·2 | + 7·4 | 61·3 | 58·1 | 7·1 | 14·4 | 0·0 | 78 | 119·1 | 45·0 | 0·456 | 8·5 | vP, ssN : wwP : wP |
| 3 | ... | 29·881 | 77·9 | 54·1 | 23·8 | 66·5 | + 8·4 | 61·6 | 57·7 | 8·8 | 16·2 | 0·6 | 74 | 137·4 | 44·0 | 0·000 | 4·0 | wP : wwP : wP |
| 4 | ... | 29·849 | 81·5 | 57·1 | 24·4 | 66·9 | + 8·6 | 63·0 | 59·9 | 7·0 | 16·5 | 0·7 | 79 | 124·0 | 49·3 | 0·954 | 0·0 | wP : vP, vN |
| 5 | Apogee | 29·822 | 66·3 | 53·0 | 13·3 | 57·1 | − 1·3 | 51·5 | 46·4 | 10·7 | 18·7 | 5·4 | 67 | 131·0 | 46·2 | 0·000 | 8·0 | wP : wP : mP |
| 6 | ... | 29·813 | 58·3 | 45·8 | 12·5 | 51·7 | − 6·6 | 46·4 | 41·0 | 10·7 | 16·2 | 4·0 | 67 | 112·7 | 42·2 | 0·003 | 2·0 | mP, ssN : mP : mP |
| 7 | First Quarter | 29·985 | 65·0 | 41·7 | 23·3 | 51·7 | − 6·5 | 46·9 | 42·0 | 9·7 | 15·0 | 3·8 | 70 | 109·5 | 34·7 | 0·000 | 6·5 | mP : vP : wP |
| 8 | ... | 29·941 | 69·2 | 49·8 | 19·4 | 56·9 | − 1·2 | 52·3 | 48·1 | 8·8 | 16·6 | 1·6 | 72 | 135·3 | 46·1 | 0·000 | 4·5 | wP : wP : mP |
| 9 | In Equator | 30·057 | 70·5 | 47·1 | 23·4 | 57·9 | − 0·1 | 54·3 | 51·1 | 6·8 | 13·5 | 1·1 | 78 | 124·0 | 37·3 | 0·032 | 0·0 | mP |
| 10 | ... | 30·105 | 74·8 | 55·5 | 19·3 | 63·8 | + 5·7 | 59·6 | 56·1 | 7·7 | 17·9 | 0·6 | 77 | 128·5 | 46·5 | 0·000 | 0·0 | wP |
| 11 | ... | 30·019 | 71·6 | 51·6 | 20·0 | 60·8 | + 2·6 | 56·9 | 53·6 | 7·2 | 15·1 | 0·6 | 77 | 142·0 | 41·0 | 0·000 | 6·0 | wP |
| 12 | ... | 29·844 | 68·0 | 51·5 | 16·5 | 57·3 | − 1·1 | 53·8 | 50·6 | 6·7 | 13·3 | 1·8 | 78 | 120·8 | 40·1 | 0·000 | 5·0 | wP : wP : mP |
| 13 | ... | 29·715 | 67·0 | 49·3 | 17·7 | 56·1 | − 2·4 | 51·3 | 46·8 | 9·3 | 16·7 | 3·5 | 71 | 128·1 | 38·6 | 0·000 | 15·2 | wP |
| 14 | Full | 29·625 | 68·1 | 49·1 | 19·0 | 58·3 | − 0·4 | 53·5 | 49·2 | 9·1 | 15·8 | 2·0 | 72 | 129·8 | 36·3 | 0·000 | 7·3 | wP |
| 15 | Greatest Declination S. | 29·752 | 70·0 | 43·3 | 26·7 | 57·8 | − 1·0 | 52·3 | 47·3 | 10·5 | 21·4 | 0·0 | 68 | 139·1 | 30·2 | 0·000 | 8·0 | wP : wwP : wP |
| 16 | Perigee | 29·566 | 68·8 | 52·4 | 16·4 | 58·2 | − 0·7 | 54·5 | 51·2 | 7·0 | 15·1 | 1·3 | 77 | 136·3 | 46·0 | 0·136 | 9·5 | wP : wP, vN : wP |
| 17 | ... | 29·577 | 61·1 | 51·3 | 9·8 | 57·1 | − 1·9 | 56·2 | 55·4 | 1·7 | 4·6 | 0·0 | 94 | 90·0 | 44·0 | 0·407 | 0·2 | wwN, wwP : wP : wP |
| 18 | ... | 29·762 | 70·2 | 45·2 | 25·0 | 57·0 | − 2·2 | 51·9 | 47·2 | 9·8 | 18·4 | 0·0 | 69 | 144·2 | 33·5 | 0·000 | 0·8 | mP : wP : mP |
| 19 | ... | 29·656 | 72·0 | 44·6 | 27·4 | 60·1 | + 0·6 | 53·3 | 47·3 | 12·8 | 21·6 | 1·9 | 63 | 120·5 | 34·0 | 0·000 | 3·0 | mP : sP : sP |
| 20 | ... | 29·765 | 67·1 | 50·4 | 16·7 | 58·0 | − 1·9 | 52·0 | 46·6 | 11·4 | 18·0 | 3·0 | 66 | 139·7 | 39·3 | 0·000 | 6·2 | wP : mP : ... |
| 21 | Last Quarter | 29·991 | 65·0 | 46·7 | 18·3 | 55·0 | − 5·3 | 49·7 | 44·6 | 10·4 | 16·5 | 5·0 | 68 | 138·0 | 34·1 | 0·000 | 3·8 | ... : wP : vP |
| 22 | In Equator | 29·984 | 69·2 | 43·6 | 25·6 | 56·1 | − 4·5 | 51·1 | 46·4 | 9·7 | 18·7 | 1·6 | 70 | 131·4 | 29·0 | 0·000 | 3·0 | mP |
| 23 | ... | 29·991 | 74·0 | 46·4 | 27·6 | 61·6 | + 0·7 | 55·6 | 50·5 | 11·1 | 22·7 | 0·0 | 68 | 112·8 | 35·0 | 0·000 | 4·0 | mP |
| 24 | ... | 30·102 | 74·3 | 45·6 | 28·7 | 61·7 | + 0·5 | 56·1 | 51·3 | 10·4 | 23·1 | 1·1 | 69 | 137·2 | 35·9 | 0·000 | 6·0 | mP |
| 25 | ... | 30·155 | 71·2 | 48·5 | 22·7 | 57·6 | − 3·8 | 52·5 | 47·9 | 9·7 | 18·9 | 2·0 | 70 | 142·5 | 34·3 | 0·000 | 8·0 | mP : mP : vP |
| 26 | ... | 30·166 | 78·6 | 45·4 | 33·2 | 63·1 | + 1·6 | 56·6 | 51·1 | 12·0 | 21·9 | 1·3 | 65 | 147·3 | 30·3 | 0·000 | 5·0 | mP : wP : wP |
| 27 | ... | 30·204 | 68·5 | 51·8 | 16·7 | 60·2 | − 1·4 | 56·9 | 54·0 | 6·2 | 9·5 | 2·2 | 80 | 116·9 | 52·5 | 0·000 | 0·0 | wP |
| 28 | New | 30·128 | 73·8 | 54·3 | 19·5 | 61·8 | + 0·2 | 58·2 | 55·1 | 6·7 | 15·5 | 0·4 | 79 | 137·2 | 48·0 | 0·000 | 3·0 | wP |
| 29 | Greatest Declination N. | 30·066 | 76·0 | 53·2 | 22·8 | 61·7 | + 0·1 | 57·5 | 53·9 | 7·8 | 17·9 | 1·0 | 76 | 141·1 | 43·2 | 0·000 | 4·0 | wP |
| 30 | ... | 30·059 | 77·0 | 52·2 | 24·8 | 62·9 | + 1·4 | 57·6 | 53·1 | 9·8 | 21·3 | 1·4 | 71 | 143·8 | 41·9 | 0·000 | 9·0 | wP |
| Means | ... | 29·904 | 71·0 | 49·7 | 21·3 | 59·6 | + 0·2 | 54·9 | 50·7 | 8·8 | 16·9 | 1·6 | 72·9 | 130·1 | 40·1 | Sum 2·066 | 4·9 | ... |
| Number of Column for Reference. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was $29^{in}\cdot904$, being $0^{in}\cdot089$ *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 81°·5 on June 4; the lowest in the month was 41°·7 on June 7; and the range was 39°·8.
The mean of all the highest daily readings in the month was 71°·0, being 0°·3 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 49°·7, being 0°·2 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 21°·3, being 0°·5 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 59°·6, being 0°·2 *higher* than the average for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Daily Duration of Sunshine. | Sun above Horizon. | Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M. | General Direction. P.M. | Pressure on the Square Foot. Greatest. | Pressure on the Square Foot. Mean of 24 Hourly Measures. | Robinson's. Horizontal Movement of the Air. | Clouds and Weather. A.M. | Clouds and Weather. P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | hours. | hours. | | | lbs. | lbs. | miles. | | |
| June 1 | 9·6 | 16·2 | Calm : SE : NE | SW : S | 2·4 | 0·04 | 128 | p.-cl : 10, r : p.-cl | 6, cu, n : 5,ci.-s,cu, n : 9, r, t.-sm |
| 2 | 10·7 | 16·3 | Variable : S : SSW | SW : SSW : SSE | 0·7 | 0·06 | 168 | 10,hy.-r, t.-sm : p.-cl : 7, cu | 7, cu, n : 3, cu, s : 1, d |
| 3 | 13·0 | 16·3 | E : ENE : ESE | ESE | 2·2 | 0·08 | 187 | 0, m : 0 : 0 | 1, th.-cl : 1, ci, th.-cl : 1, l |
| 4 | 6·2 | 16·3 | ESE : NE : ENE | NNE : Variable : N | 4·0 | 0·06 | 179 | p.-cl, l, t : 9 : p.-cl,ci.-s,cu,s | 9, n, t : 10, hy.-r,hl,t.-sm : p.-cl, r, t.-sm |
| 5 | 10·1 | 16·4 | N : NNE | N : NNW : NW | 3·8 | 0·26 | 294 | p.-cl : 10 : 5, cu | 6, cu, n : 4, cu : p.-cl |
| 6 | 7·6 | 16·4 | NW : N | N : NNE | 6·7 | 0·59 | 445 | 10, slt.-sh : li.-cl : 9, cu, n | 9, cu, n, w : 9, w : p.-cl |
| 7 | 6·3 | 16·4 | N : NNE | Variable : SW : WSW | 1·0 | 0·03 | 206 | 0 : 0 : 10 | p.-cl : 10, slt.-sh |
| 8 | 6·8 | 16·4 | WSW : W | W : N | 2·6 | 0·10 | 266 | 10 : p.-cl,cu.-s,s : 9, n | p.-cl, cu, n : p.-cl,s,so.-ha : p.-cl,s,lu.-ha |
| 9 | 2·2 | 16·4 | W : WSW | W | 2·2 | 0·04 | 209 | 9 : 10, slt.-r : 10, n, slt.-r | 9, cu, n : p.-cl, slt.-sh : p.-cl, d |
| 10 | 5·9 | 16·5 | W : WSW : NW | Variable : SW : WSW | 0·4 | 0·01 | 173 | p.-cl : p.-cl : 9, cu, n | 9, cu, n : p.-cl : 1, li.-cl, d |
| 11 | 13·8 | 16·5 | WSW : SW | SW : WSW | 4·3 | 0·20 | 282 | 0, d : li.-cl : 8, cu | 8, cu : p.-cl,ci.-cu,cu : 9, s, lu.-ha |
| 12 | 1·2 | 16·5 | SW : WSW | WSW : NW : NNW | 3·4 | 0·07 | 256 | 10, s : 10 : 10, cu,n,s, slt.-sh | 10, cu, n : p.-cl, ci, ci.-s : p.-cl, s, lu.-ha |
| 13 | 5·7 | 16·5 | WSW | WSW : SW | 8·2 | 0·38 | 387 | 9 : p.-cl, cu.-s,s : p.-cl, ci.-s, cu, s, so.-ha | 10, s, w : 9, s : 10, slt.-sh |
| 14 | 5·0 | 16·5 | SW : WSW : W | W : N : NE | 6·1 | 0·49 | 412 | 9 : 9, slt.-sh : 9, cu, n, w | p.-cl, w : p.-cl : 1, li.-cl, d |
| 15 | 14·2 | 16·5 | Calm : S : SW | SW | 3·4 | 0·22 | 251 | 0, hy.-d : li.-cl, m : 5, cu | 2, ci,ci.-s, cu : 1, ci.-s : p.-cl |
| 16 | 3·8 | 16·5 | SW : SSW : WSW | SW | 1·1 | 0·03 | 193 | 10 : p.-cl : 8, ci, ci.-s, ci.-cu,r, so.-ha | 10, r : 10 : 10, r |
| 17 | 0·3 | 16·5 | Calm : ENE : NE | Variable : Calm : WSW | 0·4 | 0·00 | 107 | 10, c.-r : 10, c.-r : 10, r, glm | 10, slt.-sh : 9, cu, n : 10 |
| 18 | 12·9 | 16·6 | WSW | WSW : SW | 1·2 | 0·03 | 195 | 2, hy.-d : li.-cl : 5, ci, ci.-cu,ci.-s, cu | 8, cu, n : p.-cl,cu,ci.-s : ci.-s, s, d |
| 19 | 12·0 | 16·6 | WSW : NNE | Variable : NW : N | 1·0 | 0·01 | 152 | 1, d : li.-cl, m,d : cu, li.-cl | cu, li.-cl : 0 |
| 20 | 12·1 | 16·6 | NNE : N | NNE : NE | 4·0 | 0·38 | 356 | 0 : 0, m : 6, cu, n | 9, cu, n : p.-cl : 9 |
| 21 | 5·8 | 16·6 | ENE : NE | NE : SE : ENE | 2·3 | 0·20 | 297 | 10 : 10 : p.-cl | p.-cl, cu : p.-cl, cu, n : p.-cl |
| 22 | 9·8 | 16·6 | ENE : NE : NNE | NE : Variable | 0·5 | 0·02 | 121 | 0 : p.-cl, m : 4,ci,ci.-s,so.-ha | 0 : 1 : ci.-s, th.-cl,hy.-d |
| 23 | 12·5 | 16·6 | Calm : Variable | NNE : NE : E | 1·0 | 0·02 | 110 | th.-cl,m,d : th.-cl, h : 5 | 5, h : 0 : p.-cl |
| 24 | 14·2 | 16·6 | NE : NNE | NE : NNE | 3·0 | 0·21 | 258 | p.-cl : 1 : 2, ci, li.-cl | 1 : p.-cl, cu : li.-cl |
| 25 | 8·9 | 16·6 | NE : ENE | ENE : SE : ESE | 2·2 | 0·15 | 260 | 9 : 10 : p.-cl | 2, li.-cl : 1 : 0 |
| 26 | 15·3 | 16·5 | ENE : E | E : ESE | 2·5 | 0·06 | 192 | 1 : 0 : 1, ci.-s, li.-cl | p.-cl, cu : p.-cl |
| 27 | 3·1 | 16·5 | NE : ENE | E | 2·4 | 0·24 | 319 | 10 : 10 | 9, cu, n : p.-cl : 10 |
| 28 | 8·6 | 16·5 | E : SE | SE : SSE | 2·1 | 0·18 | 253 | 10 : 10 : p.-cl | 2 : 0 : p.-cl, d |
| 29 | 12·5 | 16·5 | SE : E | SE : ESE | 2·5 | 0·16 | 250 | 10 : p.-cl : 1, cu | 1 : 1, s : 1, s |
| 30 | 11·5 | 16·5 | ESE : E | SE | 2·2 | 0·15 | 252 | p.-cl : p.-cl : 1, ci | 2, ci, ci.-s, ci.-cu, so.-ha : 1, ci, cu : 1 |
| Means | 8·7 | 16·5 | ... | ... | ... | 0·15 | 239 | | |
| Number of Column for Reference. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

The mean *Temperature of Evaporation* for the month was 54°·9, being the *same* as
The mean *Temperature of the Dew Point* for the month was 50°·7, being 0°·2 *lower* than
The mean *Degree of Humidity* for the month was 72·9, being 0·7 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·370, being 0in·003 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·2, being the *same* as
The mean *Weight of a Cubic Foot of Air* for the month was 532 grains, being 1 grain *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 6·1.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·529. The maximum daily amount of *Sunshine* was 15·3 hours on June 26.

The highest reading of the *Solar Radiation Thermometer* was 147°·3 on June 26; and the lowest reading of the *Terrestrial Radiation Thermometer* was 29°·0 on June 22.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 1·2; for the 6 hours ending 15h was 2·5; and for the 6 hours ending 21h was 1·2.

The *Proportions of Wind* referred to the cardinal points were N. 6, E. 9, S. 5, and W. 8. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 8·2 lbs. on the square foot on June 13. The mean daily *Horizontal Movement of the Air* for the month was 239 miles; the greatest daily value was 445 miles on June 6; and the least daily value was 107 miles on June 17.

*Rain* (0in·005 or over) fell on 6 days in the month, amounting to 2in·066, as measured by gauge No. 6 partly sunk below the ground; being 0in·028 *greater* than the average fall for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Phases of the Moon. | BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit). | TEMPERATURE. Of the Air. Highest. | Lowest. | Daily Range. | Mean of 24 Hourly Values. | Excess above Average of 65 Years. | Of Evaporation. Mean of 24 Hourly Values. | Of the Dew Point. Deduced Mean Daily Value. | Difference between the Air Temperature and Dew Point Temperature. Mean. | Greatest. | Least. | Degree of Humidity (Saturation=100). | TEMPERATURE. Of Radiation. Highest in Sun's Rays. | Lowest on the Grass. | Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground. | Daily Amount of Ozone. | Electricity. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | n. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | ° | ° | in. | | |
| July 1 | ... | 30·111 | 79·9 | 52·6 | 27·3 | 65·9 | + 4·4 | 57·3 | 50·3 | 15·6 | 29·6 | 5·0 | 57 | 145·1 | 43·0 | 0·000 | 4·0 | wP : wP : mP |
| 2 | Apogee | 30·131 | 80·1 | 52·1 | 28·0 | 65·0 | + 3·4 | 56·7 | 49·9 | 15·1 | 26·5 | 3·6 | 58 | 147·1 | 39·7 | 0·000 | 3·0 | mP : wP : mP |
| 3 | ... | 30·022 | 84·0 | 49·6 | 34·4 | 65·9 | + 4·1 | 59·0 | 53·4 | 12·5 | 27·4 | 1·9 | 64 | 140·6 | 38·9 | 0·000 | 0·0 | mP : mP : vP, ssN |
| 4 | ... | 29·899 | 62·1 | 55·6 | 6·5 | 58·5 | − 3·6 | 57·7 | 57·0 | 1·5 | 3·6 | 0·0 | 95 | 71·0 | 56·8 | 0·543 | 0·0 | vvP, vvN |
| 5 | ... | 29·886 | 71·0 | 52·2 | 18·8 | 60·8 | − 1·5 | 57·5 | 54·7 | 6·1 | 14·2 | 0·6 | 81 | 123·3 | 43·5 | 0·000 | 2·0 | wwP |
| 6 | In Equator: First Quarter | 29·849 | 75·5 | 49·9 | 25·6 | 62·6 | + 0·2 | 57·3 | 52·8 | 9·8 | 17·5 | 2·4 | 71 | 114·0 | 41·0 | 0·000 | 0·0 | wP |
| 7 | ... | 29·760 | 75·0 | 55·9 | 19·1 | 63·0 | + 0·6 | 56·2 | 50·5 | 12·5 | 21·6 | 3·2 | 64 | 132·2 | 45·1 | 0·000 | 0·0 | wP : wP : mP |
| 8 | ... | 29·678 | 66·5 | 54·9 | 11·6 | 59·0 | − 3·4 | 56·6 | 54·4 | 4·6 | 9·7 | 1·9 | 86 | 101·5 | 46·5 | 0·131 | 9·5 | wP : wP, wwN : wP |
| 9 | ... | 29·668 | 73·0 | 53·1 | 19·9 | 60·8 | − 1·6 | 55·3 | 50·5 | 10·3 | 22·5 | 0·4 | 69 | 140·0 | 49·5 | 0·175 | 14·2 | wP : wP : wP, wwN |
| 10 | ... | 29·647 | 69·0 | 53·3 | 15·7 | 61·3 | − 1·2 | 59·7 | 58·3 | 3·0 | 7·6 | 0·2 | 90 | 113·1 | 53·6 | 0·037 | 12·8 | wwP : wP |
| 11 | ... | 29·564 | 73·7 | 58·3 | 15·4 | 64·3 | + 1·6 | 60·7 | 57·7 | 6·6 | 13·9 | 0·8 | 79 | 127·3 | 57·1 | 0·006 | 7·5 | wP |
| 12 | ... | 29·445 | 69·3 | 56·6 | 12·7 | 61·7 | − 1·2 | 59·6 | 57·8 | 3·9 | 10·6 | 0·2 | 87 | 110·0 | 55·8 | 0·184 | 0·0 | wP : vP, ssN : vP, vN |
| 13 | Greatest Declination S. : Full | 29·447 | 59·0 | 55·2 | 3·8 | 57·4 | − 5·7 | 55·9 | 54·5 | 2·9 | 6·8 | 0·4 | 90 | 67·8 | 53·3 | 1·041 | 0·5 | vP, vN : wP, vN : wP |
| 14 | ... | 29·629 | 68·0 | 51·1 | 16·9 | 57·2 | − 6·1 | 54·3 | 51·6 | 5·6 | 11·9 | 0·8 | 82 | 134·4 | 46·4 | 0·072 | 4·5 | wP : vP, ssN : wP |
| 15 | Perigee | 29·757 | 73·0 | 51·9 | 21·1 | 59·5 | − 3·9 | 55·3 | 51·6 | 7·9 | 16·7 | 1·6 | 75 | 139·2 | 46·1 | 0·003 | 6·5 | wP : wP, wN : wP |
| 16 | ... | 29·622 | 66·5 | 54·6 | 11·9 | 59·0 | − 4·4 | 57·7 | 56·5 | 2·5 | 7·0 | 0·0 | 92 | 107·5 | 53·5 | 0·738 | 16·5 | wP, wN |
| 17 | ... | 29·278 | 68·9 | 55·1 | 13·8 | 59·9 | − 3·5 | 57·4 | 55·2 | 4·7 | 11·2 | 0·8 | 85 | 130·9 | 54·0 | 0·296 | 12·0 | wwP : vP, ssN : wP |
| 18 | ... | 29·506 | 64·8 | 55·0 | 9·8 | 58·1 | − 5·2 | 56·5 | 55·1 | 3·0 | 7·2 | 0·4 | 89 | 101·0 | 52·5 | 0·427 | 0·2 | wP, mN : wP : wP, vN |
| 19 | In Equator | 29·895 | 63·5 | 51·8 | 11·7 | 57·7 | − 5·5 | 55·9 | 54·3 | 3·4 | 7·8 | 1·6 | 88 | 94·2 | 43·5 | 0·010 | 0·8 | wP |
| 20 | Last Quarter | 29·957 | 68·5 | 47·1 | 21·4 | 57·3 | − 5·9 | 55·1 | 53·1 | 4·2 | 11·7 | 0·8 | 86 | 117·5 | 37·4 | 0·001 | 0·0 | wP |
| 21 | ... | 30·050 | 70·0 | 51·6 | 18·4 | 58·4 | − 4·8 | 55·5 | 52·9 | 5·5 | 9·7 | 0·4 | 82 | 99·5 | 41·0 | 0·000 | 1·0 | wP : wwP |
| 22 | ... | 29·976 | 77·8 | 48·1 | 29·7 | 63·1 | 0·0 | 58·2 | 54·1 | 9·0 | 16·7 | 1·2 | 73 | 134·0 | 40·0 | 0·000 | 6·0 | wP : wwP |
| 23 | ... | 29·934 | 79·0 | 55·2 | 23·8 | 65·9 | + 2·9 | 60·3 | 55·7 | 10·2 | 17·7 | 3·0 | 70 | 129·8 | 47·3 | 0·000 | 4·0 | wP |
| 24 | ... | 29·907 | 82·9 | 53·1 | 29·8 | 68·9 | + 6·0 | 63·0 | 58·4 | 10·5 | 20·4 | 0·2 | 69 | 140·1 | 43·6 | 0·000 | 5·2 | wP : wwP : wwP |
| 25 | ... | 29·831 | 79·0 | 57·1 | 21·9 | 67·3 | + 4·6 | 62·5 | 58·7 | 8·6 | 15·0 | 2·3 | 74 | 132·1 | 49·2 | 0·000 | 0·8 | wwP : wP, wN : wP |
| 26 | Greatest Declination N. | 29·949 | 79·0 | 53·9 | 25·1 | 64·5 | + 2·0 | 59·3 | 55·0 | 9·5 | 19·0 | 0·8 | 72 | 134·5 | 42·8 | 0·000 | 0·0 | wP : wwP |
| 27 | ... | 29·976 | 78·0 | 51·1 | 26·9 | 65·7 | + 3·3 | 58·7 | 53·0 | 12·7 | 21·3 | 2·4 | 64 | 130·6 | 41·8 | 0·000 | 6·0 | wP : wP : mP |
| 28 | New | 30·054 | 74·1 | 55·0 | 19·1 | 64·6 | + 2·3 | 58·9 | 54·1 | 10·5 | 18·0 | 3·2 | 69 | 125·5 | 45·7 | 0·000 | 0·0 | wP |
| 29 | ... | 30·247 | 75·8 | 53·1 | 22·7 | 63·3 | + 1·0 | 57·3 | 52·3 | 11·0 | 20·1 | 2·7 | 67 | 138·2 | 42·1 | 0·000 | 4·0 | mP : wP |
| 30 | Apogee | 30·178 | 83·1 | 47·6 | 35·5 | 67·5 | + 5·2 | 59·2 | 52·6 | 14·9 | 26·2 | 1·4 | 59 | 138·7 | 36·4 | 0·000 | 4·0 | wP : wP : mP |
| 31 | ... | 30·099 | 74·5 | 56·7 | 17·8 | 66·4 | + 4·2 | 59·4 | 53·7 | 12·7 | 23·1 | 3·4 | 64 | 136·6 | 44·4 | 0·000 | 4·0 | wP : wP : mP |
| Means | ... | 29·837 | 73·0 | 53·2 | 19·9 | 62·3 | − 0·4 | 57·9 | 54·2 | 8·1 | 15·9 | 1·5 | 75·8 | 122·5 | 46·2 | Sum 3·664 | 4·2 | ... |
| Number of Column for Reference. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was 29$^{in}$·837, being 0$^{in}$·038 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 84°·0 on July 3; the lowest in the month was 47°·1 on July 20; and the range was 36°·9.
The mean of all the highest daily readings in the month was 73°·0, being 1°·2 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 53°·2, being 0°·1 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 19°·9, being 1°·0 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 62°·3, being 0°·4 *lower* than the average for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Daily Duration of Sunshine. | Sun above Horizon. | Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M. | General Direction. P.M. | Pressure on the Square Foot. Greatest. | Pressure on the Square Foot. Mean of 24 Hourly Measures. | Robinson's. Horizontal Movement of the Air. | Clouds and Weather. A.M. | Clouds and Weather. P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | hours. | hours. | | | lbs. | lbs. | miles. | | |
| July 1 | 15·0 | 16·5 | E : ENE : ESE | ESE : SE | 3·0 | 0·21 | 261 | 0 : 0 : 2, ci, so.-ha | 4, ci, so.-ha : 7, ci : li.-cl, d |
| 2 | 13·4 | 16·5 | ENE : NE : E | SE : SSE | 2·3 | 0·12 | 208 | li.-cl : li.-cl : 6,ci,ci.-s,so.-ha | 7, ci, ci.-s, so.-ha: 5, ci, ci.-s : 1 |
| 3 | 14·4 | 16·5 | SE : E : ENE | NE : SE | 1·6 | 0·10 | 181 | 1, m : 1, li.-cl : 2, ci, so.-ha | 4, ci, cu, so.-ha: p.-cl, ci, n : p.-cl, l, t |
| 4 | 0·0 | 16·4 | SE : ENE : ESE | ESE : SE | 1·2 | 0·01 | 113 | 10, t.-sm : 10, r : 10, t.-sm, hy.-r | 10, n, slt.-sh, t : 10 : 10, r, l, t |
| 5 | 4·1 | 16·4 | ESE : E : ENE | SE : SSE | 0·6 | 0·01 | 140 | 10, m : p.-cl : 9, cu, n | 9 : p.-cl : p.-cl |
| 6 | 5·0 | 16·4 | SSE : Calm : SW | W : WSW : SW | 0·7 | 0·04 | 147 | p.-cl : p.-cl : 9, cu.-s | 9, cu, n : 5 : p.-cl |
| 7 | 7·4 | 16·4 | NNE : W | W : WNW | 3·1 | 0·26 | 282 | p.-cl : 9, m : 7, cu, n | 8, cu, n : 7, cu, n : 2 |
| 8 | 1·2 | 16·4 | W : WSW | WSW | 4·5 | 0·33 | 300 | 9 : 10, oc.-slt.-r : 10, sc, oc.-r | 10, cu, n, fq.-r : p.-cl : p.-cl |
| 9 | 9·2 | 16·3 | W | WNW : W : WSW | 8·4 | 0·75 | 480 | p.-cl : p.-cl, w : 8, cu, n, w | p.-cl, ci, ci.-s, cu, n, so.-ha, w : 9, cu, n, s, r : 10, r |
| 10 | 0·6 | 16·3 | SW : WSW | WSW | 7·3 | 0·66 | 448 | 10, fq.-r : 10 : 10, sc, w | 10, sc, oc.-slt.-r, w: 10, sc, fq.-th.-r, w : 9, sc, r |
| 11 | 5·6 | 16·3 | WSW | WSW : SW | 7·2 | 0·42 | 366 | 10, r : 10 : 9, cu, n, w | 9, ci, cu, cu.-s, w: p.-cl, so.-ha, w: 8 |
| 12 | 0·2 | 16·2 | WSW: Variable: Calm | Variable | 0·4 | 0·00 | 109 | 8 : 10, slt.-sh : 10 | 10, r : 10, r |
| 13 | 0·0 | 16·2 | WSW : N : NW | W : WNW : WSW | 1·0 | 0·01 | 200 | 10, fq.-r : 10, r : 10, c.-r, glm | 10, th.-r : p.-cl : 9 |
| 14 | 6·1 | 16·2 | W | W : WSW | 2·3 | 0·05 | 287 | p.-cl : p.-cl : 8, cu, n, shs.-r | 9, r : p.-cl : p.-cl |
| 15 | 6·9 | 16·1 | W | W : WSW | 2·7 | 0·08 | 277 | p.-cl : p.-cl : 8, cu, n | 9 : p.-cl : 10, slt.-r |
| 16 | 0·3 | 16·1 | SW : WSW | WSW | 6·0 | 0·51 | 416 | 10, slt.-r : 10, shs.-r : 10, li.-shs | 10, fq.-r : 10, sc, c.-r, w : 10, sc, r |
| 17 | 4·9 | 16·1 | WSW : W | W : WSW | 6·5 | 0·47 | 436 | 9, slt.-r, w: 9 : 9, hy.-shs | 9, hy.-shs : 9 : 9 |
| 18 | 0·5 | 16·0 | W : N : NNE | N : NNE | 6·0 | 0·43 | 381 | 10, hy.-shs: 10, oc.-shs : 10, n | 10 : 9, fq.-hy.-shs: 10 |
| 19 | 0·9 | 16·0 | NNE | NNE : NE | 4·0 | 0·50 | 386 | 10 : 10, oc.-slt.-r : 9, sc, oc.-slt.-r, w | 10, sc, slt.-sh, w: p.-cl, w : 1 |
| 20 | 0·8 | 15·9 | NNE | NNE : NE | 2·5 | 0·08 | 213 | p.-cl, m : 10 : 10 | p.-cl, slt.-sh : 10 : 1, hy.-d |
| 21 | 2·4 | 15·9 | NNE : Calm | Calm : S : SW | 0·4 | 0·00 | 128 | 1 : p.-cl, m : 10 | 10, n : p.-cl : p.-cl |
| 22 | 13·0 | 15·8 | SW : W : WSW | WSW : SW | 1·1 | 0·01 | 182 | p.-cl : 1 : 4, ci.-cu, cu | 7, cu : p.-cl : p.-cl, h, d |
| 23 | 8·3 | 15·8 | SW : WSW : W | WNW : W : NW | 0·2 | 0·00 | 145 | p.-cl : th.-cl, m : 4, th.-cl, h | 8, th.-cl, cu, so.-ha: 5, ci.-cu, cu.-s: 1, d |
| 24 | 11·0 | 15·7 | W : Calm : WSW | WSW : SW | 0·6 | 0·02 | 155 | 1, h : th.-cl, h : 2, ci, cu | 6, cu, th.-cl, so.-ha: ci, ci.-cu, cu, so.-ha : li.-cl |
| 25 | 4·1 | 15·7 | SSW : Calm | WSW : W | 2·0 | 0·08 | 189 | 9 : 9 : 10 | 9 : p.-cl, cu : th.-cl, h |
| 26 | 10·1 | 15·7 | W | WSW | 0·7 | 0·00 | 156 | 0 : 0 : 4, cu, n | cu : cu, ci.-cu : li.-cl, d |
| 27 | 13·1 | 15·6 | WSW : NW | WNW : W : NNE | 0·5 | 0·00 | 161 | 1 : p.-cl : 7, ci.-cu, cu, so.-ha | 6 : p.-cl : 8 |
| 28 | 8·0 | 15·6 | Calm : NE : NNE | NNE : NE : E | 2·2 | 0·09 | 195 | 8 : p.-cl, m, h : 9, cu, n | 9 : p.-cl : p.-cl, d |
| 29 | 14·2 | 15·5 | NNE : NE | NE : S | 1·2 | 0·07 | 205 | 1 : 1 : 3, cu | 3, cu : 1, cu : 0, d |
| 30 | 11·9 | 15·5 | Calm : WNW : W | WNW : W | 1·0 | 0·04 | 198 | 0, d : 1 : 4, ci, ci.-s | 6, ci, ci.-s : p.-cl, ci : p.-cl |
| 31 | 9·4 | 15·4 | W : NNE | NNE | 2·4 | 0·09 | 215 | 9 : 10 : 7, cu | 3, cu : ci, ci.-s, cu : 1 |
| Means | 6·5 | 16·0 | ... | ... | ... | 0·18 | 244 | | |
| Number of Column for Reference. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

The mean *Temperature of Evaporation* for the month was 57°·9, being the *same* as
The mean *Temperature of the Dew Point* for the month was 54°·2, being 0°·4 *higher* than
The mean *Degree of Humidity* for the month was 75·8, being 3·0 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·421, being 0in·006 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·6, being the *same* as
The mean *Weight of a Cubic Foot of Air* for the month was 528 grains, being 1 grain *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 6·9.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·406. The maximum daily amount of *Sunshine* was 15·0 hours on July 1.

The highest reading of the *Solar Radiation Thermometer* was 147°·1 on July 2; and the lowest reading of the *Terrestrial Radiation Thermometer* was 36°·4 on July 30.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 1·2; for the 6 hours ending 15h was 2·4; and for the 6 hours ending 21h was 0·6.

The *Proportions of Wind* referred to the cardinal points were N. 6, E. 5, S. 5, and W. 13. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 8·4 lbs. on the square foot on July 9. The mean daily *Horizontal Movement of the Air* for the month was 244 miles; the greatest daily value was 480 miles on July 9; and the least daily value was 109 miles on July 12.

*Rain* (0in·005 or over) fell on 12 days in the month, amounting to 3in·664, as measured by gauge No. 6 partly sunk below the ground; being 1in·265 *greater* than the average fall for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Phases of the Moon. | BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit). | TEMPERATURE. Of the Air. Highest. | Lowest. | Daily Range. | Mean of 24 Hourly Values. | Excess above Average of 65 Years. | Of Evaporation. Mean of 24 Hourly Values. | Of the Dew Point. Deduced Mean Daily Value. | Difference between the Air Temperature and Dew Point Temperature. Mean. | Greatest. | Least. | Degree of Humidity (Saturation=100). | TEMPERATURE. Of Radiation. Highest in Sun's Rays. | Lowest on the Grass. | Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground. | Daily Amount of Ozone. | Electricity. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | ° | ° | in. | | |
| Aug. 1 | ... | 30·122 | 71·2 | 51·0 | 20·2 | 60·7 | − 1·5 | 54·5 | 49·1 | 11·6 | 20·9 | 2·5 | 66 | 129·9 | 38·5 | 0·000 | 5·2 | mP : mP : vP |
| 2 | In Equator | 30·184 | 72·7 | 48·1 | 24·6 | 60·2 | − 1·9 | 55·2 | 50·8 | 9·4 | 21·5 | 1·2 | 71 | 134·8 | 36·7 | 0·000 | 5·8 | wP |
| 3 | ... | 30·171 | 83·0 | 47·1 | 35·9 | 66·4 | + 4·3 | 60·2 | 55·2 | 11·2 | 23·8 | 1·4 | 67 | 136·2 | 35·6 | 0·000 | 3·0 | wP |
| 4 | ... | 29·987 | 80·2 | 55·4 | 24·8 | 68·3 | + 6·2 | 61·7 | 56·5 | 11·8 | 20·6 | 1·3 | 66 | 137·7 | 42·6 | 0·000 | 4·0 | wP : wP : mP |
| 5 | First Quarter | 29·686 | 63·3 | 54·6 | 8·7 | 57·8 | − 4·3 | 55·1 | 52·7 | 5·1 | 12·9 | 2·7 | 83 | 91·2 | 55·0 | 0·067 | 0·0 | wP : mP, ssN : mP |
| 6 | ... | 29·805 | 68·2 | 56·1 | 12·1 | 61·2 | − 1·0 | 57·5 | 54·3 | 6·9 | 12·4 | 1·9 | 78 | 112·1 | 53·0 | 0·004 | 2·0 | wP |
| 7 | ... | 29·971 | 75·6 | 55·2 | 20·4 | 63·3 | + 1·1 | 57·4 | 52·4 | 10·9 | 21·8 | 3·6 | 68 | 138·6 | 46·0 | 0·000 | 0·0 | wP : mP : mP |
| 8 | ... | 30·006 | 71·1 | 51·3 | 19·8 | 61·3 | − 1·0 | 58·3 | 55·7 | 5·6 | 12·6 | 1·2 | 82 | 117·2 | 41·8 | 0·000 | 0·0 | wP |
| 9 | Greatest Declination S. | 29·908 | 78·0 | 51·7 | 26·3 | 63·8 | + 1·5 | 58·8 | 54·6 | 9·2 | 19·4 | 0·6 | 73 | 120·2 | 42·0 | 0·000 | 0·0 | wP |
| 10 | ... | 29·756 | 76·4 | 52·4 | 24·0 | 62·6 | + 0·3 | 57·9 | 53·9 | 8·7 | 19·2 | 0·8 | 74 | 139·5 | 42·0 | 0·134 | 5·0 | wP : wP : mP |
| 11 | ... | 29·959 | 69·9 | 47·3 | 22·6 | 57·3 | − 5·1 | 50·6 | 44·5 | 12·8 | 23·8 | 2·7 | 62 | 132·5 | 39·1 | 0·000 | 0·0 | mP |
| 12 | Full : Perigee | 30·037 | 66·0 | 46·9 | 19·1 | 56·4 | − 6·1 | 49·5 | 43·1 | 13·3 | 20·2 | 5·2 | 61 | 122·2 | 39·7 | 0·000 | 3·0 | mP : mP : sP |
| 13 | ... | 29·807 | 63·5 | 50·2 | 13·3 | 56·2 | − 6·3 | 53·1 | 50·2 | 6·0 | 12·2 | 1·6 | 80 | 102·0 | 36·0 | 0·088 | 0·0 | vP : mP : mP |
| 14 | ... | 29·764 | 66·6 | 51·7 | 14·9 | 58·1 | − 4·4 | 53·7 | 49·7 | 8·4 | 13·9 | 2·8 | 74 | 121·0 | 39·6 | 0·000 | 3·0 | mP |
| 15 | In Equator | 29·891 | 69·3 | 49·2 | 20·1 | 58·4 | − 4·0 | 54·0 | 50·0 | 8·4 | 17·8 | 0·6 | 74 | 125·7 | 35·9 | 0·000 | 8·5 | mP : wP : wP |
| 16 | ... | 29·953 | 70·9 | 48·2 | 22·7 | 58·6 | − 3·7 | 53·8 | 49·5 | 9·1 | 21·2 | 0·8 | 72 | 140·9 | 35·0 | 0·000 | 6·5 | wP : wP : vP |
| 17 | ... | 29·969 | 71·0 | 47·2 | 23·8 | 58·0 | − 4·1 | 53·3 | 49·1 | 8·9 | 21·6 | 1·6 | 72 | 133·2 | 33·5 | 0·000 | 3·0 | mP |
| 18 | Last Quarter | 30·002 | 64·0 | 51·1 | 12·9 | 57·5 | − 4·4 | 54·7 | 52·2 | 5·3 | 10·2 | 3·0 | 83 | 84·1 | 37·2 | 0·000 | 0·0 | mP |
| 19 | ... | 30·009 | 66·3 | 53·7 | 12·6 | 59·2 | − 2·5 | 55·6 | 52·4 | 6·8 | 13·5 | 1·4 | 79 | 105·0 | 47·1 | 0·000 | 0·0 | wP : mP : wP |
| 20 | ... | 29·812 | 64·0 | 53·0 | 11·0 | 58·7 | − 2·8 | 57·6 | 56·6 | 2·1 | 6·0 | 0·0 | 93 | 94·6 | 46·8 | 0·468 | 7·2 | wP : wP : vP, ssN |
| 21 | ... | 29·633 | 74·9 | 55·3 | 19·6 | 62·3 | + 1·0 | 58·6 | 55·4 | 6·9 | 17·8 | 0·4 | 78 | 132·2 | 44·4 | 0·001 | 11·3 | wP |
| 22 | Greatest Declination N. | 29·660 | 71·0 | 54·1 | 16·9 | 59·8 | − 1·3 | 57·5 | 55·5 | 4·3 | 10·3 | 0·6 | 86 | 126·4 | 43·3 | 0·144 | 6·0 | wwP : vP, ssN : mP |
| 23 | ... | 29·687 | 56·8 | 52·1 | 4·7 | 54·2 | − 6·7 | 53·4 | 52·6 | 1·6 | 3·0 | 0·0 | 94 | 70·0 | 46·5 | 0·672 | 5·5 | wP : vP, wN : wP |
| 24 | ... | 29·681 | 77·3 | 52·1 | 25·2 | 63·0 | + 2·2 | 58·5 | 54·7 | 8·3 | 22·3 | 0·0 | 74 | 137·8 | 51·8 | 0·090 | 9·0 | wP |
| 25 | ... | 29·555 | 72·0 | 54·8 | 17·2 | 60·3 | − 0·4 | 56·6 | 53·4 | 6·9 | 16·7 | 3·6 | 78 | 133·0 | 50·0 | 0·239 | 14·2 | wwP : wP, ssN : wP |
| 26 | Apogee: New | 29·622 | 70·6 | 52·4 | 18·2 | 60·1 | − 0·6 | 56·9 | 54·1 | 6·0 | 9·5 | 2·0 | 81 | 116·1 | 47·0 | 0·005 | 11·8 | wP |
| 27 | ... | 29·461 | 68·0 | 53·6 | 14·4 | 61·5 | + 0·9 | 57·5 | 54·0 | 7·5 | 14·0 | 1·0 | 77 | 126·3 | 46·5 | 0·247 | 13·0 | wwP, wwN : wP, wN : wP |
| 28 | ... | 29·374 | 67·9 | 51·3 | 16·6 | 56·1 | − 4·3 | 53·6 | 51·2 | 4·9 | 9·9 | 1·2 | 84 | 124·0 | 43·5 | 0·716 | 20·5 | wP : vP, ssN : wP |
| 29 | ... | 29·496 | 69·0 | 52·0 | 17·0 | 58·4 | − 1·9 | 53·6 | 49·3 | 9·1 | 17·1 | 2·4 | 72 | 130·3 | 46·0 | 0·011 | 16·5 | wP : vP, ssN |
| 30 | In Equator | 29·716 | 69·2 | 46·9 | 22·3 | 55·8 | − 4·3 | 52·1 | 48·6 | 7·2 | 19·3 | 0·4 | 78 | 123·4 | 40·3 | 0·091 | 8·0 | wwP : wP : vP, ssN |
| 31 | ... | 29·637 | 63·8 | 46·6 | 17·2 | 54·8 | − 5·1 | 52·1 | 49·5 | 5·3 | 11·8 | 0·0 | 82 | 119·6 | 39·8 | 0·306 | 13·7 | wP : wP : wP, mN |
| Means | ... | 29·817 | 70·1 | 51·4 | 18·7 | 59·7 | − 1·9 | 55·6 | 52·0 | 7·7 | 16·0 | 1·6 | 76·2 | 121·2 | 42·7 | Sum 3 283 | 6·0 | ... |
| Number of Column for Reference. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was $29^{in}\cdot817$, being $0^{in}\cdot034$ *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 83°·0 on August 3; the lowest in the month was 46°·6 on August 31; and the range was 36°·4.
The mean of all the highest daily readings in the month was 70°·1, being 2°·6 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 51°·4, being 1°·6 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 18°·7, being 1°·0 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 59°·7, being 1°·9 *lower* than the average for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Daily Duration of Sunshine. | Sun above Horizon. | WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS. OSLER'S. General Direction. A.M. | General Direction. P.M. | Pressure on the Square Foot. Greatest. | Pressure on the Square Foot. Mean of 24 Hourly Measures. | ROBINSON'S. Horizontal Movement of the Air. | CLOUDS AND WEATHER. A.M. | CLOUDS AND WEATHER. P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | hours. | hours. | | | lbs. | lbs. | miles. | | |
| Aug. 1 | 13·1 | 15·4 | NNE | NNE : SE | 1·5 | 0·11 | 202 | 0 : p.-cl,slt.-m: p.-cl, cu | 5, cu : cu : p.-cl, d |
| 2 | 13·6 | 15·3 | ESE : Calm : ENE | ENE : NE : SE | 1·9 | 0·09 | 161 | 1, d : 1, m, h : 2, cu | 5, cu : 0, d |
| 3 | 11·5 | 15·3 | Calm : NNE | NE : Variable : W | 0·5 | 0·00 | 92 | 1 : 1, m : 1, th.-cl | 1, ci, so.-ha : 1 |
| 4 | 8·2 | 15·2 | W : N : NW | WNW : NW : N | 2·2 | 0·14 | 209 | 1 : 1, m, h : 5, cu, th.-cl | 8, cu, n,s, so.-ha: p.-cl : p.-cl |
| 5 | 0·2 | 15·1 | NW : WNW : N | NNE : NE | 8·5 | 0·69 | 395 | 10 : 10 : 10, n, r | 10, sc, fq.-th.-r, w: 10, sh.-r, w : 10, slt.-sh |
| 6 | 3·7 | 15·1 | NNE : NE | NE : NNE | 7·0 | 0·87 | 466 | 10, slt.-sh : 10 : 10, sc, w | p.-cl, w : p.-cl, w : 10, w |
| 7 | 10·8 | 15·1 | NE : NNE | NNE : NE | 2·7 | 0·16 | 240 | 10 : 10 : 3, ci.-cu, cu | 3,ci.-cu,ci.-s: 2 : 1, h, d |
| 8 | 6·0 | 15·0 | NNE:WSW:WNW | WNW : NNE : Calm | 0·2 | 0·01 | 115 | 1, h : h : th.-cl | th.-cl, m : p.-cl : p.-cl, d |
| 9 | 10·7 | 14·9 | Variable:Calm:NNE | W : WSW | 0·1 | 0·00 | 86 | p.-cl, m,d: 1 : p.-cl | th.-cl : p.-cl : 10 |
| 10 | 7·3 | 14·9 | WSW | W : NNE : NW | 9·0 | 0·15 | 267 | 0 : p.-cl. ci, ci,-cu : 8, ci, ci.-cu, cu | 8, ci, ci.-cu, cu, so.-ha, w : p.-cl,hy.-shs,sq : 1 |
| 11 | 13·3 | 14·8 | NW : NNW | NW : N : NNW | 4·3 | 0·41 | 364 | 1 : p.-cl : 7, cu | 5, cu : p.-cl : th.-cl |
| 12 | 8·6 | 14·8 | NNW : N : NNE | N | 1·2 | 0·05 | 214 | p.-cl : p.-cl : 5, cu, n | 8, cu, n : 9 : 9 |
| 13 | 0·1 | 14·7 | N : NW : W | NNW : NW | 2·8 | 0·11 | 259 | 9,r,lu.-ha: 10, r : 10, n | 10, n : p.-cl, d : 10 |
| 14 | 7·0 | 14·7 | N : NNE | NE : NNE | 1·5 | 0·06 | 216 | p.-cl : p.-cl : 9 | 9 : 9 : 1, hy.-d |
| 15 | 9·9 | 14·6 | NE : E | ESE : E | 2·1 | 0·09 | 211 | p.-cl, m, d: 9 : 2, cu | 5, cu, n : 3 : 1, d |
| 16 | 12·3 | 14·5 | E : ENE | E : ESE : SE | 1·4 | 0·05 | 165 | 0, m, d : p.-cl : 6, cu | p.-cl, cu : 1, d |
| 17 | 10·7 | 14·5 | ENE : NNE : NE | NE : ENE : SE | 1·3 | 0·05 | 173 | 0 : p.-cl, m : 6, cu | 3, cu : p.-cl : p.-cl, d |
| 18 | 0·0 | 14·4 | NE : ENE | ENE : ESE : E | 0·9 | 0·00 | 162 | 9 : 10,oc.-m.-r: 10 | 10 : 9 : 9, d |
| 19 | 0·9 | 14·3 | ENE | ENE : E : ESE | 0·5 | 0·00 | 181 | 9 : 9 | 9, n : p.-cl, cu, n : p.-cl, d |
| 20 | 0·1 | 14·3 | E : ESE | ESE : E : ENE | 3·2 | 0·29 | 309 | p.-cl : 10 : 10, sc, r | 10, sc, shs.-r : 10, n, hy.-r : 10, sc, slt.-r |
| 21 | 9·8 | 14·2 | ENE : Calm : WSW | WSW : SW : S | 2·3 | 0·10 | 223 | 10 : p.-cl : 5, cu, n | 7, cu, n : p.-cl : p.-cl, sh.-r, d |
| 22 | 1·9 | 14·2 | SSW : S | N : NW : W | 2·0 | 0·03 | 190 | p.-cl : p.-cl, m : 9, shs.-r | 10, n, glm, fq.-shs, t.-sm, : 9 : p.-cl |
| 23 | 0·0 | 14·1 | W | WSW : W | 0·9 | 0·03 | 211 | 9 : 9, r : 10, c.-r | 10, c.-r : 10, c.-r : 10, slt.-sh |
| 24 | 8·3 | 14·0 | SW : WSW : W | W : WSW | 3·0 | 0·26 | 355 | 10, r : 10 : 7, cu, n | 4, cu : p.-cl : 0, d |
| 25 | 9·6 | 14·0 | WSW : W | W : WSW | 4·1 | 0·44 | 443 | p.-cl, r : p.-cl : 9, cu, n | p.-cl, shs.-r : p.-cl : 1 |
| 26 | 4·3 | 13·9 | W | W : WSW | 8·0 | 0·61 | 474 | 1 : p.-cl : 10, sc, r | 10, cu,n,slt.-sh, w: 9, sc, s, w : 9, slt.-sh, w |
| 27 | 7·5 | 13·9 | WSW : W | W : WSW | 12·0 | 0·89 | 485 | 9, r, st.-w: p.-cl,sh.-r,w: 9, ci, cu, n | p.-cl, shs.-r, so.-ha: p.-cl, slt.-sh: 1, d |
| 28 | 2·8 | 13·8 | SW : WSW | WSW : W | 12·4 | 0·45 | 457 | 1 : p.-cl, r : 10, oc.-r | 9, hy.-r, l, t: p.-cl, hy.-sh, hl, l, t, sq : 1, d |
| 29 | 10·6 | 13·7 | WSW : W | W : WSW | 6·8 | 0·40 | 486 | 1, d : 1 : 7, cu, n | 8,ci,cu,n, w: p.-cl, oc.-shs, w: 0, d |
| 30 | 8·6 | 13·7 | WSW : W : WNW | W : WNW | 4·0 | 0·06 | 279 | li.-cl : p.-cl : 8, ci, cu | p.-cl, ci, cu : 9, shs.-r,l, t: 0, d |
| 31 | 2·6 | 13·6 | W : WSW | WSW : SSW : SW | 10·1 | 0·37 | 364 | 0 : p.-cl : 9, cu, n, sh.-r, so.-ha | 10, slt.-sh : 10, r, w : p.-cl, th.-r |
| Means | 6·9 | 14·5 | ... | ... | ... | 0·22 | 273 | | |
| Number of Column for Reference. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

The mean *Temperature of Evaporation* for the month was 55°·6, being 1°·9 *lower* than
The mean *Temperature of the Dew Point* for the month was 52°·0, being 2°·0 *lower* than
The mean *Degree of Humidity* for the month was 76·2, being 0·1 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·388, being 0in·030 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·3, being 0gr·3 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 531 grains, being 3 grains *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 6·7.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·476. The maximum daily amount of *Sunshine* was 13·6 hours on August 2.

The highest reading of the *Solar Radiation Thermometer* was 140°·9 on August 16; and the lowest reading of the *Terrestrial Radiation Thermometer* was 33°·5 on August 17.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 2·1; for the 6 hours ending 15h was 2·8; and for the 6 hours ending 21h was 1·1.

The *Proportions of Wind* referred to the cardinal points were N. 8, E. 6, S. 3, and W. 11. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 12·4 lbs. on the square foot on August 28. The mean daily *Horizontal Movement of the Air* for the month was 273 miles; the greatest daily value was 486 miles on August 29; and the least daily value was 86 miles on August 9.

*Rain* (0in·005 or over) fell on 14 days in the month, amounting to 3in·283, as measured by gauge No. 6 partly sunk below the ground; being 0in·939 *greater* than the average fall for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Phases of the Moon. | BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit). | TEMPERATURE. Of the Air. Highest. | Lowest. | Daily Range. | Mean of 24 Hourly Values. | Excess above Average of 65 Years. | Of Evaporation. Mean of 24 Hourly Values. | Of the Dew Point. Deduced Mean Daily Value. | Difference between the Air Temperature and Dew Point Temperature. Mean. | Greatest. | Least. | Degree of Humidity (Saturation=100). | TEMPERATURE. Of Radiation. Highest in Sun's Rays. | Lowest on the Grass. | Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground. | Daily Amount of Ozone. | Electricity. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | ° | ° | in. | | |
| Sept. 1 | ... | 29·233 | 61·0 | 50·1 | 10·9 | 55·2 | − 4·6 | 50·5 | 46·0 | 9·2 | 13·3 | 2·6 | 71 | 114·1 | 44·2 | 0·074 | 9·3 | wP : vP, ssN : wP |
| 2 | ... | 29·676 | 64·5 | 46·7 | 17·8 | 52·7 | − 7·0 | 49·3 | 45·9 | 6·8 | 14·2 | 1·8 | 78 | 116·6 | 37·4 | 0·189 | 0·0 | wP : vP, ssN : mP |
| 3 | First Quarter | 29·730 | 60·7 | 41·3 | 19·4 | 51·0 | − 8·6 | 47·8 | 44·5 | 6·5 | 11·0 | 0·0 | 79 | 114·4 | 33·0 | 0·363 | 12·0 | wP : wP, wwN : vN, wP |
| 4 | ... | 29·688 | 54·1 | 46·6 | 7·5 | 52·3 | − 7·2 | 51·2 | 50·1 | 2·2 | 5·2 | 0·6 | 93 | 61·3 | 38·5 | 0·333 | 0·0 | wP, wN : wP : wP |
| 5 | ... | 30·086 | 64·8 | 40·0 | 24·8 | 51·8 | − 7·6 | 48·0 | 44·2 | 7·6 | 13·5 | 1·8 | 75 | 112·5 | 29·0 | 0·000 | 6·5 | wP |
| 6 | Greatest Declination S. | 30·037 | 68·0 | 48·1 | 19·9 | 56·6 | − 2·6 | 52·8 | 49·3 | 7·3 | 14·2 | 3·3 | 77 | 117·0 | 40·8 | 0·000 | 9·0 | wwP : wP |
| 7 | ... | 29·874 | 71·4 | 47·3 | 24·1 | 58·4 | − 0·6 | 54·2 | 50·4 | 8·0 | 21·6 | 1·3 | 75 | 128·5 | 34·2 | 0·000 | 9·5 | wwP : wP : wP |
| 8 | ... | 29·587 | 74·3 | 43·3 | 31·0 | 59·4 | + 0·6 | 55·3 | 51·6 | 7·8 | 17·3 | 1·7 | 76 | 128·3 | 32·1 | 0·000 | 12·0 | wP : wwP |
| 9 | Perigee | 29·488 | 66·0 | 50·5 | 15·5 | 56·1 | − 2·5 | 51·0 | 46·2 | 9·9 | 17·3 | 6·0 | 70 | 128·0 | 44·5 | 0·019 | 13·0 | wwP : wwP, wwN : wP |
| 10 | Full | 29·631 | 60·0 | 44·2 | 15·8 | 51·4 | − 7·0 | 46·1 | 40·6 | 10·8 | 19·4 | 3·4 | 67 | 123·8 | 36·4 | 0·000 | 3·0 | wP |
| 11 | ... | 29·640 | 57·6 | 43·1 | 14·5 | 49·2 | − 8·9 | 46·3 | 43·2 | 6·0 | 12·7 | 2·0 | 80 | 101·0 | 33·4 | 0·005 | 0·0 | wP : mP, ssN : wP |
| 12 | In Equator | 29·820 | 59·5 | 40·1 | 19·4 | 48·7 | − 9·3 | 44·4 | 39·7 | 9·0 | 17·9 | 2·4 | 71 | 114·5 | 28·3 | 0·000 | 0·0 | wP : mP : vP, vN |
| 13 | ... | 30·065 | 61·9 | 36·1 | 25·8 | 50·5 | − 7·3 | 46·4 | 42·1 | 8·4 | 15·8 | 1·4 | 74 | 109·4 | 24·5 | 0·000 | 0·7 | wP |
| 14 | ... | 30·053 | 67·2 | 48·9 | 18·3 | 55·7 | − 2·0 | 51·3 | 47·1 | 8·6 | 15·5 | 2·2 | 73 | 127·3 | 39·2 | 0·000 | 2·3 | wP : wP : mP |
| 15 | ... | 29·834 | 63·0 | 45·6 | 17·4 | 54·0 | − 3·6 | 52·0 | 50·0 | 4·0 | 8·9 | 0·6 | 86 | 97·0 | 36·3 | 0·104 | 0·0 | wP : wwP, wN : wwP, wN |
| 16 | ... | 29·976 | 64·0 | 44·6 | 19·4 | 53·8 | − 3·7 | 50·0 | 46·3 | 7·5 | 15·0 | 0·8 | 75 | 105·2 | 36·7 | 0·001 | 9·8 | wwP : mP : mP |
| 17 | Last Quarter | 29·928 | 71·0 | 50·1 | 20·9 | 61·0 | + 3·8 | 55·5 | 50·8 | 10·2 | 16·6 | 1·2 | 69 | 123·0 | 35·1 | 0·000 | 5·2 | wwP : wP : wP |
| 18 | Greatest Declination N. | 29·835 | 73·6 | 45·0 | 28·6 | 59·9 | + 3·0 | 56·8 | 54·1 | 5·8 | 18·9 | 1·1 | 82 | 122·2 | 30·9 | 0·008 | 0·0 | wP : wP : wP, sN |
| 19 | ... | 29·896 | 74·1 | 52·0 | 22·1 | 62·8 | + 6·3 | 60·0 | 57·7 | 5·1 | 12·4 | 1·5 | 83 | 116·0 | 42·9 | 0·000 | 0·0 | wP |
| 20 | .. | 29·820 | 77·2 | 52·6 | 24·6 | 64·4 | + 8·2 | 61·4 | 58·9 | 5·5 | 14·6 | 1·1 | 82 | 125·8 | 41·0 | 0·000 | 5·2 | wwP |
| 21 | ... | 29·886 | 64·2 | 47·5 | 16·7 | 58·1 | + 2·2 | 56·4 | 54·9 | 3·2 | 9·5 | 1·7 | 89 | 84·3 | 34·3 | 0·038 | 0·8 | wwP, wwN : wP : wP |
| 22 | Apogee | 29·799 | 62·1 | 41·5 | 20·6 | 53·1 | − 2·5 | 51·4 | 49·7 | 3·4 | 10·8 | 0·8 | 88 | 91·1 | 28·8 | 0·021 | 0·0 | wP |
| 23 | ... | 29·680 | 66·0 | 52·4 | 13·6 | 59·4 | + 4·0 | 57·2 | 55·3 | 4·1 | 8·3 | 1·5 | 87 | 99·6 | 45·1 | 0·000 | 0·0 | wP |
| 24 | ... | 29·719 | 66·8 | 53·2 | 13·6 | 57·0 | + 1·7 | 56·2 | 55·5 | 1·5 | 7·0 | 1·3 | 94 | 99·7 | 45·8 | 0·033 | 0·0 | wwP : wP, vN : wP |
| 25 | New | 29·757 | 62·0 | 50·1 | 11·9 | 55·3 | + 0·1 | 53·9 | 52·5 | 2·8 | 8·4 | 1·0 | 91 | 91·6 | 42·1 | 0·000 | 2·5 | wwP : wP : wP |
| 26 | In Equator | 29·731 | 67·0 | 51·0 | 16·0 | 57·4 | + 2·2 | 53·3 | 49·5 | 7·9 | 17·8 | 1·8 | 75 | 117·0 | 44·5 | 0·022 | 5·0 | wwP : wP : wP |
| 27 | ... | 29·796 | 63·6 | 50·3 | 13·3 | 55·4 | + 0·3 | 52·9 | 50·5 | 4·9 | 11·2 | 1·3 | 84 | 97·9 | 45·8 | 0·002 | 9·0 | wP |
| 28 | ... | 29·865 | 71·8 | 56·1 | 15·7 | 62·7 | + 7·8 | 60·5 | 58·6 | 4·1 | 8·6 | 1·1 | 87 | 111·3 | 53·5 | 0·000 | 4·5 | wwP |
| 29 | ... | 30·021 | 75·2 | 56·1 | 19·1 | 65·2 | +10·5 | 62·8 | 60·9 | 4·3 | 11·7 | 0·8 | 86 | 123·9 | 47·0 | 0·000 | 1·0 | wwP |
| 30 | ... | 30·057 | 79·9 | 55·8 | 24·1 | 66·4 | +12·0 | 62·9 | 60·1 | 6·3 | 15·3 | 0·4 | 80 | 124·2 | 44·6 | 0·007* | 4·0 | wwP |
| | | | | | | | | | | | | | | | | Sum | | |
| Means | ... | 29·807 | 66·4 | 47·7 | 18·7 | 56·5 | − 0·7 | 53·3 | 50·2 | 6·3 | 13·5 | 1·6 | 79·9 | 110·9 | 38·3 | 1·219 | 4·1 | ... |
| Number of Column for Reference. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

* Rainfall (Column 16). Amount entered on September 30 is derived from dew.

The mean reading of the *Barometer* for the month was $29^{in}·807$, being $0^{in}·004$ *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 79°·9 on September 30; the lowest in the month was 36°·1 on September 13; and the range was 43°·8.
The mean of all the highest daily readings in the month was 66°·4, being 0°·9 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 47°·7, being 1°·4 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 18°·7, being 0°·5 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 56°·5, being 0°·7 *lower* than the average for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Daily Duration of Sunshine. | Sun above Horizon. | Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M. | General Direction. P.M. | Pressure on the Square Foot. Greatest. | Pressure on the Square Foot. Mean of 24 Hourly Measures. | Robinson's. Horizontal Movement of the Air. | Clouds and Weather. A.M. | Clouds and Weather. P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | hours. | hours. | | | lbs. | lbs. | miles. | | |
| Sept. 1 | 3·2 | 13·5 | W : WSW | WNW : NW | 15·7 | 1·07 | 648 | 0 : p.-cl : p.-cl, r, w | p.-cl, cu, n, w : 10, st.-w : p.-cl |
| 2 | 8·1 | 13·5 | WNW : W : NW | Var. : WNW : NNW | 4·8 | 0·07 | 306 | p.-cl, m : p.-cl : 7, cu, n | 9, fq.-r, l, t : p.-cl : 0, h |
| 3 | 3·1 | 13·4 | W : SW | SW : SSE : SE | 6·0 | 0·09 | 219 | 0, h, m : p.-cl : 8, cu, s, so.-ha | 10, fq.-r : 10, fq.-r, w : 10, r, w |
| 4 | 0·0 | 13·3 | NE : E : ENE | NE : NNE | 4·7 | 0·15 | 280 | 10, r : 10, r : 10, sc, n, r | 10, sc, n, slt.-r : p.-cl, th.-r : p.-cl |
| 5 | 8·3 | 13·3 | NE : N : W | W : WNW : WSW | 1·3 | 0·05 | 236 | 1, hy.-d : 1 : 6, ci.-cu, cu | 8, cu, n : p.-cl : 9 |
| 6 | 9·6 | 13·2 | W : WNW | W : WNW : WSW | 5·0 | 0·34 | 384 | p.-cl : p.-cl : 9, cu, w | p.-cl, w : 2 |
| 7 | 11·0 | 13·1 | W : SW : WSW | W : WSW : SW | 1·6 | 0·06 | 255 | 1 : p.-cl : 1 | 0 : 0 : 1, th.-cl, hy.-d |
| 8 | 7·2 | 13·1 | Calm : SW | SW : WSW | 5·2 | 0·34 | 292 | 1, li.-cl, hy.-d : 1 : p.-cl, ci.-cu, ci.-s | 9, ci.-s : 10, n, li.-shs : p.-cl, li.-sc, w |
| 9 | 8·8 | 13·0 | WSW : W | W | 16·2 | 1·72 | 691 | 1, w : p.-cl, w : 8, sc, cu, n, st.-w | 8, cu, n, st.-w : p.-cl, shs.-r, st.-w : 9, w |
| 10 | 11·2 | 13·0 | W : WNW | WNW : W | 4·0 | 0·26 | 400 | 1 : p.-cl : 4, cu, n | 5, cu : 3, cu : p.-cl |
| 11 | 3·2 | 12·9 | W : N | NNE : NE | 1·3 | 0·01 | 159 | 9 : 9, slt.-sh : 9, so.-ha | 9, sh.-r : p.-cl : p.-cl, d |
| 12 | 8·7 | 12·8 | NE : NNE | N : Variable | 2·1 | 0·05 | 185 | p.-cl : 1, m, h : 4, cu, n | 7, cu, n : p.-cl, d : p.-cl, m, d |
| 13 | 5·3 | 12·8 | W : WSW | WNW : W : WSW | 0·5 | 0·02 | 218 | p.-cl, hy.-d : p.-cl : 7, cl, ci.-cu, cu, so.-ha | 9, cu, th.-cl, so.-ha : 10, cu, n : 10 |
| 14 | 6·6 | 12·7 | WSW : SW : W | W : WSW : SW | 2·0 | 0·10 | 288 | p.-cl : 9 : 8, cu.-s | 5, cu : 2 : 1, d, lu.-ha |
| 15 | 0·2 | 12·6 | SW : W | WSW : W : WNW | 0·4 | 0·01 | 223 | 1, hy.-d : p.-cl : 10, th.-cl, so.-ha | 10, fq.-r : p.-cl, oc.-r : 4 |
| 16 | 4·4 | 12·6 | WNW : W : WSW | WSW | 3·1 | 0·13 | 290 | 1, hy.-d : li.-cl, h : 7, th.-cl, so.-ha | 10, s, n, slt.-sh, so.-ha : 10, oc.-slt.-r : 9 |
| 17 | 10·5 | 12·5 | W : WSW | WSW : SW | 2·5 | 0·18 | 307 | 9 : p.-cl : 4 | 1, ci, ci.-cu : p.-cl : 1, hy.-d |
| 18 | 3·9 | 12·4 | Variable : SSE | SW : SSW : S | 1·7 | 0·02 | 142 | 1, f, hy.-d : li.-cl, f : p.-cl | 10, ci.-s, cu.-s, s : p.-cl, cu.-s, s, slt.-sh : 0, hy.-d |
| 19 | 6·7 | 12·4 | SSW : WSW : W | Calm : Variable | 0·2 | 0·00 | 105 | 0, hy.-d : p.-cl : 3, cu, th.-cl | 6, cu, n : p.-cl, cu, n : p.-cl, d |
| 20 | 6·6 | 12·3 | Calm : SE | S : SW : WSW | 1·4 | 0·02 | 160 | p.-cl : p.-cl : 7, ci, so.-ha | p.-cl, so.-ha : p.-cl : 9 |
| 21 | 0·5 | 12·3 | WSW : W | WNW : W : WSW | 0·4 | 0·00 | 158 | 9 : 10 : 10, fq.-r | 10, th.-cl : p.-cl, so.-ha : 0, hy.-d |
| 22 | 0·4 | 12·2 | W : Calm | W : Calm : SE | 0·0 | 0·00 | 98 | 1, hy.-d : li.-cl : 9, cu, th.-cl | 10, s, n : 10, fq.-shs : 10 |
| 23 | 3·2 | 12·1 | ESE : SE | SE : E | 0·8 | 0·02 | 151 | 10 : p.-cl : 8, cu, n | 9, cu, n : 10 : 9 |
| 24 | 0·7 | 12·1 | NE : NNE | Variable | 2·4 | 0·01 | 126 | 10, th.-r : 10, th.-r : 10, s, n | 9, sh.-r : 9 : 10, slt.-f |
| 25 | 1·7 | 12·0 | Calm : Variable | WSW : SSW : SW | 0·3 | 0·00 | 130 | 10 : 10 | p.-cl : 1, th.-cl : p.-cl, hy.-d |
| 26 | 9·3 | 11·9 | SSW : SW : W | W | 3·2 | 0·16 | 318 | 10, sh.-r : li.-cl : 6, cu, n | 5, cu : p.-cl : p.-cl |
| 27 | 0·3 | 11·9 | W : WSW | SW : SSE | 0·7 | 0·01 | 172 | 9 : p.-cl : 9, ci.-s, cu, n | 9, li.-shs : 10, li.-shs : 10 |
| 28 | 3·4 | 11·8 | Calm : SW | W : WSW : SW | 1·6 | 0·04 | 197 | 10 : 9 : 9, cu, n, m.-r | 9, cu, n : p.-cl : 10 |
| 29 | 8·3 | 11·7 | SSW : SW | SW : SSW : S | 2·2 | 0·07 | 213 | 9 : li.-cl : 7, sc, n | 5, cu : 1, li.-cl : 0, hy.-d |
| 30 | 10·7 | 11·7 | S : SSW : SW | SW : SSW : SSE | 0·3 | 0·01 | 173 | 0, hy.-d : 0 | 0 : 0, hy.-d |
| Means | 5·5 | 12·6 | ... | ... | ... | 0·17 | 251 | | |
| Number of Column for Reference. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

The mean *Temperature of Evaporation* for the month was 53°·3, being 0°·8 *lower* than
The mean *Temperature of the Dew Point* for the month was 50°·2, being 1°·0 *lower* than
The mean *Degree of Humidity* for the month was 79·9, being 0·3 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·364, being 0in·013 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·1, being 0gr·1 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 534 grains, being 1 grain *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 6·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·437. The maximum daily amount of *Sunshine* was 11·2 hours on September 10.

The highest reading of the *Solar Radiation Thermometer* was 128°·5 on September 7; and the lowest reading of the *Terrestrial Radiation Thermometer* was 24°·5 on September 13.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 1·8; for the 6 hours ending 15h was 1·6; and for the 6 hours ending 21h was 0·7.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 2, S. 7, and W. 15. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 16·2 lbs. on the square foot on September 9. The mean daily *Horizontal Movement of the Air* for the month was 251 miles; the greatest daily value was 691 miles on September 9; and the least daily value was 98 miles on September 22.

*Rain* (0in·005 or over) fell on 12 days in the month, amounting to 1in·219, as measured by gauge No. 6 partly sunk below the ground; being 0in·929 *less* than the average fall for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Phases of the Moon. | BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit). | TEMPERATURE. Of the Air. Highest. | Lowest. | Daily Range. | Mean of 24 Hourly Values. | Excess above Average of 65 Years. | Of Evaporation. Mean of 24 Hourly Values. | Of the Dew Point. Deduced Mean Daily Value. | Difference between the Air Temperature and Dew Point Temperature. Mean. | Greatest. | Least. | Degree of Humidity (Saturation = 100). | TEMPERATURE. Of Radiation. Highest in Sun's Rays. | Lowest on the Grass. | Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground. | Daily Amount of Ozone. | Electricity. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | ° | ° | in. | | |
| Oct. 1 | ... | 30·000 | 77·8 | 50·1 | 27·7 | 62·8 | + 8·7 | 60·6 | 58·7 | 4·1 | 14·3 | 0·0 | 87 | 119·0 | 42·6 | 0·003* | 4·0 | wwP |
| 2 | ... | 29·999 | 78·5 | 50·4 | 28·1 | 62·4 | + 8·7 | 59·7 | 57·4 | 5·0 | 18·9 | 0·0 | 84 | 112·4 | 40·0 | 0·005* | 0·0 | wP : wwP : wwP |
| 3 | First Quarter: Greatest Declination S. | 30·007 | 78·0 | 52·1 | 25·9 | 62·6 | + 9·3 | 59·4 | 56·7 | 5·9 | 18·5 | 0·0 | 81 | 121·7 | 40·1 | 0·007* | 2·0 | wwP |
| 4 | ... | 30·036 | 75·2 | 49·1 | 26·1 | 60·4 | + 7·4 | 57·8 | 55·5 | 4·9 | 14·3 | 0·4 | 85 | 112·1 | 41·1 | 0·005* | 0·0 | wwP |
| 5 | ... | 30·102 | 60·3 | 50·3 | 10·0 | 55·9 | + 3·1 | 55·0 | 54·2 | 1·7 | 5·5 | 0·0 | 94 | 71·0 | 39·1 | 0·005* | 0·0 | wwP |
| 6 | ... | 30·070 | 64·9 | 45·4 | 19·5 | 54·8 | + 2·3 | 52·1 | 49·5 | 5·3 | 13·5 | 0·4 | 82 | 109·5 | 31·7 | 0·001* | 6·0 | wwP : wP: wP |
| 7 | ... | 29·989 | 71·2 | 42·5 | 28·7 | 54·4 | + 2·1 | 52·3 | 50·2 | 4·2 | 14·4 | 0·0 | 86 | 113·8 | 29·7 | 0·007* | 4·0 | wP |
| 8 | Perigee | 29·961 | 67·0 | 53·2 | 13·8 | 57·8 | + 5·8 | 56·8 | 55·9 | 1·9 | 6·1 | 0·0 | 94 | 106·2 | 40·0 | 0·004* | 4·0 | wP |
| 9 | In Equator: Full | 29·819 | 68·6 | 59·0 | 9·6 | 61·7 | +10·1 | 59·9 | 58·4 | 3·3 | 7·7 | 0·4 | 89 | 107·2 | 48·0 | 0·030 | 0·0 | wwP : wwP : wwN, wwP |
| 10 | ... | 29·817 | 65·3 | 48·6 | 16·7 | 57·6 | + 6·3 | 55·0 | 52·7 | 4·9 | 11·6 | 0·6 | 83 | 104·1 | 39·2 | 0·195 | 3·0 | wwP, wwN : wP : wP |
| 11 | ... | 30·077 | 65·0 | 43·7 | 21·3 | 53·3 | + 2·4 | 50·6 | 47·9 | 5·4 | 12·2 | 0·2 | 82 | 106·0 | 32·6 | 0·000 | 0·2 | wP |
| 12 | ... | 29·989 | 67·0 | 46·2 | 20·8 | 55·7 | + 5·1 | 53·1 | 50·7 | 5·0 | 13·7 | 0·0 | 84 | 118·4 | 32·5 | 0·005* | 5·8 | wP : wwP : wP |
| 13 | ... | 29·905 | 66·0 | 48·7 | 17·3 | 55·1 | + 4·8 | 54·4 | 53·7 | 1·4 | 6·8 | 0·0 | 95 | 107·9 | 37·8 | 0·001* | 0·0 | wP : wwP : wP |
| 14 | ... | 29·863 | 66·8 | 50·6 | 16·2 | 56·2 | + 6·1 | 54·2 | 52·3 | 3·9 | 10·4 | 0·0 | 87 | 104·5 | 38·8 | 0·000 | 0·0 | wP |
| 15 | ... | 29·895 | 71·0 | 46·6 | 24·4 | 57·6 | + 7·7 | 54·8 | 52·3 | 5·3 | 19·8 | 0·0 | 83 | 119·1 | 35·9 | 0·007* | 5·0 | wP : wwP : wP |
| 16 | Greatest Declination N. | 29·842 | 62·2 | 50·1 | 12·1 | 55·6 | + 5·8 | 54·6 | 53·7 | 1·9 | 6·6 | 0·4 | 94 | 103·4 | 36·9 | 0·006* | 0·0 | wP : wwP : wwP |
| 17 | Last Quarter | 29·820 | 64·0 | 54·0 | 10·0 | 57·4 | + 7·8 | 56·7 | 56·1 | 1·3 | 4·2 | 0·2 | 96 | 87·1 | 48·5 | 0·687 | 0·0 | wwP, wN : wwP : wwP |
| 18 | ... | 29·879 | 65·1 | 51·9 | 13·2 | 58·0 | + 8·7 | 56·5 | 55·1 | 2·9 | 10·6 | 0·2 | 90 | 111·8 | 42·5 | 0·000 | 4·0 | wwP |
| 19 | ... | 29·866 | 58·5 | 50·8 | 7·7 | 54·7 | + 5·6 | 54·3 | 53·9 | 0·8 | 2·5 | 0·2 | 97 | 68·2 | 47·3 | 0·078 | 0·0 | wwP, wwN : wwP : wwP |
| 20 | Apogee | 29·860 | 53·2 | 46·4 | 6·8 | 48·7 | − 0·1 | 47·0 | 45·1 | 3·6 | 6·0 | 0·6 | 88 | 84·5 | 40·8 | 0·010 | 0·0 | wwP : wP : wP |
| 21 | ... | 29·940 | 48·9 | 39·7 | 9·2 | 44·0 | − 4·6 | 41·3 | 38·1 | 5·9 | 11·1 | 1·5 | 79 | 94·3 | 28·9 | 0·170 | 4·0 | wN, wwP : wP : wP |
| 22 | ... | 30·237 | 49·0 | 36·0 | 13·0 | 43·4 | − 4·9 | 40·4 | 36·8 | 6·6 | 9·2 | 2·2 | 78 | 89·2 | 28·9 | 0·002* | 1·0 | wP |
| 23 | In Equator | 30·207 | 52·0 | 40·0 | 12·0 | 46·0 | − 2·1 | 43·1 | 39·8 | 6·2 | 10·7 | 1·1 | 80 | 93·2 | 29·1 | 0·002 | 0·0 | wP : mP, wwN : mP |
| 24 | ... | 30·015 | 46·8 | 34·5 | 12·3 | 41·5 | − 6·4 | 39·2 | 36·3 | 5·2 | 12·5 | 1·1 | 83 | 93·7 | 25·5 | 0·001 | 0·0 | wP : mP, wN : vP |
| 25 | New | 29·989 | 47·4 | 33·1 | 14·3 | 41·6 | − 6·1 | 39·0 | 35·8 | 5·8 | 10·8 | 1·2 | 80 | 73·2 | 24·8 | 0·002* | 0·0 | mP : mP : wP |
| 26 | ... | 29·828 | 51·0 | 42·2 | 8·8 | 47·8 | + 0·2 | 47·2 | 46·5 | 1·3 | 2·5 | 0·6 | 95 | 59·4 | 35·6 | 0·136 | 0·2 | wwP : wwP : wP |
| 27 | ... | 29·781 | 49·2 | 36·5 | 12·7 | 43·5 | − 4·0 | 43·1 | 42·6 | 0·9 | 6·5 | 0·7 | 96 | 62·0 | 29·8 | 0·530 | 0·8 | wP, wN : vP, vvN : vP, vN |
| 28 | ... | 29·977 | 62·5 | 38·2 | 24·3 | 53·0 | + 5·6 | 52·1 | 51·2 | 1·8 | 4·7 | 0·4 | 94 | 85·5 | 32·0 | 0·054 | 0·0 | wP, wN : wwP : wwP |
| 29 | ... | 30·038 | 67·7 | 48·1 | 19·6 | 57·2 | + 9·9 | 54·3 | 51·6 | 5·6 | 13·1 | 1·4 | 82 | 101·2 | 36·8 | 0·001* | 5·0 | wwP |
| 30 | Greatest Declination S. | 29·868 | 66·0 | 42·1 | 23·9 | 54·3 | + 7·1 | 52·6 | 50·9 | 3·4 | 10·1 | 0·4 | 88 | 100·0 | 30·3 | 0·002* | 1·0 | wwP |
| 31 | ... | 29·944 | 63·4 | 46·3 | 17·1 | 54·9 | + 7·8 | 53·7 | 52·5 | 2·4 | 8·0 | 0·6 | 92 | 78·2 | 36·2 | 0·009 | 0·0 | wwP |
| Means | ... | 29·955 | 62·9 | 46·0 | 16·9 | 53·9 | + 3·9 | 52·0 | 50·1 | 3·8 | 10·2 | 0·5 | 87·4 | 97·3 | 36·2 | Sum 1·965 | 1·6 | ... |
| Number of Column for Reference. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

* Rainfall (Column 16). Amounts entered on October 1, 2, 3, 4, 5, 6, 7, 8, 12, 13, 15, 16, 22, 25, 29, and 30, are derived from dew or fog.

The mean reading of the *Barometer* for the month was 29$^{in}$·955, being 0$^{in}$·234 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 78°·5 on October 2; the lowest in the month was 33°·1 on October 25; and the range was 45°·4.
The mean of all the highest daily readings in the month was 62°·9, being 5°·4 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 46°·0, being 2°·8 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 16°·9, being 2°·6 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 53°·9, being 3°·9 *higher* than the average for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Daily Duration of Sunshine. | Sun above Horizon. | Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M. | P.M. | Pressure on the Square Foot. Greatest. | Mean of 24 Hourly Measures. | Robinson's. Horizontal Movement of the Air. | Clouds and Weather. A.M. | P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | hours. | hours. | | | lbs. | lbs. | miles. | | |
| Oct. 1 | 8·7 | 11·6 | Calm : Variable | SW: SSW : S | 0·4 | 0·00 | 104 | o, f : f : o, slt.-f | 1, li.-cl : o : o, m, hy.-d |
| 2 | 7·8 | 11·5 | Calm : ENE | S : SSE : SE | 0·4 | 0·00 | 80 | o, m, f, hy.-d: tk.-f : o, slt.-f | o : o, m, d |
| 3 | 7·9 | 11·5 | Calm : E | SSE : S : Calm | 0·1 | 0·00 | 105 | f : tk.-f : o, slt.-f | o : o : o, m, hy.-d |
| 4 | 7·9 | 11·4 | Calm | ENE : Calm | 0·0 | 0·00 | 61 | m, tk.-f : tk.-f : o, slt.-f | o : o : o, slt.-f, d |
| 5 | 0·7 | 11·3 | Calm : ENE : ESE | ESE | 1·6 | 0·05 | 163 | tk.-f : tk.-f : 10, s | 9, cu.-s, s : p.-cl : p.-cl, d |
| 6 | 10·0 | 11·3 | SE | ESE : SE | 2·1 | 0·07 | 190 | 1 : 1,ci.-s,slt.-m: 3, ci | 1, ci : 1, ci : o, m, hy.-d |
| 7 | 7·3 | 11·2 | Calm : SE | SW : SSW : W | 0·2 | 0·00 | 100 | m, f : tk.-f : 1 | o : o : o, f, d |
| 8 | 2·9 | 11·1 | SSW : SW | SSW : SE : S | 0·7 | 0·00 | 136 | m, f : 10 : 10 | p.-cl, cu.-s, s : p.-cl : p.-cl,hy.-d,lu.-co |
| 9 | 0·6 | 11·1 | SSW : SW | WSW : SSW : SW | 0·8 | 0·01 | 180 | p.-cl : 10 : 9, n | 10, oc.-slt.-r : 10, fq.-th.-r : 10 |
| 10 | 3·5 | 11·0 | SW : NW : W | W : WSW | 1·8 | 0·08 | 250 | 10, r : 10, hy.-r : p.-cl,sc,ci.-s | p.-cl, so.-ha : o, d |
| 11 | 7·9 | 10·9 | WSW | WSW : SW : SSW | 1·0 | 0·02 | 197 | 1, li.-cl : li.-cl, slt.-m : 7, ci, cu | p.-cl, ci, cu : 1, lu.-co, hy.-d |
| 12 | 9·4 | 10·9 | SSW : S | S : SSE : SE | 0·8 | 0·02 | 164 | li.-cl : p.-cl, m,f : p.-cl, cu.-s | 1, cu : o : o, f, hy.-d |
| 13 | 3·1 | 10·8 | Calm : SSE : SE | SE : SW | 0·2 | 0·00 | 88 | p.-cl, m : 10, f : 10 | 7, cu : 1, f : p.-cl, f |
| 14 | 5·0 | 10·7 | SSE : WSW : SW | WSW : SSW : SE | 0·0 | 0·00 | 125 | p.-cl, f : 10, th.-cl : p.-cl, li.-cl, cu | p.-cl, cu : p.-cl : o, f, hy.-d |
| 15 | 7·5 | 10·7 | SE : E : SSE | SSE : SE : ESE | 1·7 | 0·03 | 148 | p.-cl, f : 1, f : 3, ci, f | 3, ci, cu : 1 : 1, m, hy.-d |
| 16 | 4·6 | 10·6 | SE : ESE | ESE : SE | 3·2 | 0·17 | 238 | o : li.-cl : p.-cl, ci, th.-cl | 9,ci,th.-cl,sc: 10, glm : 10 |
| 17 | 0·1 | 10·6 | ESE : SE | Calm : SE | 0·2 | 0·00 | 85 | 10, r : 10, r : 10, s | 9 : 9 : 10, r |
| 18 | 4·7 | 10·5 | SE | SSE : SE | 0·3 | 0·00 | 119 | f : 10 : 8, ci, cu, n | p.-cl, ci.-s : o : p.-cl, d,slt.-f |
| 19 | 0·0 | 10·4 | ESE : SE | SE : SSE | 1·2 | 0·06 | 208 | 9, slt.-r : 10, hy.-sh : 10, s | 10, s : 10, s : p.-cl |
| 20 | 1·1 | 10·4 | SE : SSE | SE | 1·2 | 0·07 | 198 | p.-cl : 10 : 10, s | 8, cu, cu.-s, s: 10 : 10, shs.-r |
| 21 | 4·5 | 10·3 | SE : ESE | ESE : E | 5·0 | 0·39 | 316 | 10, r : 10, sh.-r : 9, w | 3, cu, li.-cl : 1 : p.-cl, d |
| 22 | 2·5 | 10·2 | ENE : E : ESE | ESE : ENE : E | 5·2 | 0·28 | 319 | 1 : p.-cl : 8, cu.-s, w | 9, w : 10 : 10, oc.-slt.-r |
| 23 | 1·3 | 10·2 | ENE : E | ENE : NE : NNE | 1·2 | 0·03 | 206 | p.-cl : p.-cl : 9, cu, n, oc.-slt.-r | p.-cl, cu, n : p.-cl : o, h, d |
| 24 | 3·2 | 10·1 | NNE | ENE : NE : NNE | 5·2 | 0·23 | 299 | p.-cl : 10 : 10, oc.-slt.-r | p.-cl, slt.-sh, hl : p.-cl, r : p.-cl, r |
| 25 | 3·5 | 10·1 | N : NNE : NE | NNE | 3·7 | 0·34 | 314 | p.-cl : 1 : p.-cl, cu | 10 : 10 |
| 26 | 0·0 | 10·0 | NNE : NE : E | E : ESE | 4·3 | 0·28 | 297 | 10, th.-r : 10, th.-r : 10, slt.-r | 10, slt.-r : p.-cl : p.-cl |
| 27 | 0·0 | 9·9 | ENE : E : SE | SE : S : SSW | 2·5 | 0·10 | 255 | 9 : 10, slt.-r : 10, sh.-r | 10, r : p.-cl, hy.-sh : p.-cl |
| 28 | 0·2 | 9·9 | SSE : ESE : SW | SW : SSW | 1·4 | 0·05 | 205 | 10, r : 10, r : 10, th.-cl, cu | 9, sc, cu.-s : p.-cl : p.-cl, d |
| 29 | 7·8 | 9·8 | Calm : SSW : S | SSE : SE | 0·1 | 0·00 | 135 | 9 : li.-cl : 5,ci,ci.-cu,ci.-s | ci, ci.-s, so.-ha : 1, th.-cl, hy.-d |
| 30 | 8·7 | 9·7 | SE : SSE | S : SSE | 0·5 | 0·02 | 139 | o, hy.-d : o | o : o : p.-cl |
| 31 | 0·9 | 9·7 | S : SSW : WSW | Variable : Calm | 0·2 | 0·00 | 129 | 9,slt.-sh : 10 : 10 | 6, ci.-s,cu.-s,so.-ha: th.-cl : p.-cl, m, f, hy.-d |
| Means | 4·3 | 10·6 | ... | ... | ... | 0·07 | 179 | | |
| Number of Column for Reference. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

The mean *Temperature of Evaporation* for the month was 52°·0, being 4°·1 *higher* than
The mean *Temperature of the Dew Point* for the month was 50°·1, being 4°·4 *higher* than
The mean *Degree of Humidity* for the month was 87·4, being 2·4 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·362, being 0in·055 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs·1, being 0gr·6 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 539 grains, being 1 grain *less* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 5·4.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·405. The maximum daily amount of *Sunshine* was 10·0 hours on October 6.

The highest reading of the *Solar Radiation Thermometer* was 121°·7 on October 3; and the lowest reading of the *Terrestrial Radiation Thermometer* was 24°·8 on October 25.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·1; for the 6 hours ending 15h was 1·4; and for the 6 hours ending 21h was 0·1.

The *Proportions of Wind* referred to the cardinal points were N. 2, E. 10, S. 10, and W. 4. Five days were calm.

The *Greatest Pressure of the Wind* in the month was 5·2 lbs. on the square foot on October 22 and 24. The mean daily *Horizontal Movement of the Air* for the month was 179 miles; the greatest daily value was 319 miles on October 22; and the least daily value was 61 miles on October 4.

*Rain* (0in·005 or over) fell on 10 days in the month, amounting to 1in·965, as measured by gauge No. 6 partly sunk below the ground; being 0in·817 *less* than the average fall for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Phases of the Moon. | BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit). | TEMPERATURE. Of the Air. Highest. | Lowest. | Daily Range. | Mean of 24 Hourly Values. | Excess above Average of 65 Years. | Of Evaporation. Mean of 24 Hourly Values. | Of the Dew Point. Deduced Mean Daily Value. | Difference between the Air Temperature and Dew Point Temperature. Mean. | Greatest. | Least. | Degree of Humidity (Saturation=100). | TEMPERATURE. Of Radiation. Highest in Sun's Rays. | Lowest on the Grass. | Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground. | Daily Amount of Ozone. | Electricity. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | n. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | ° | ° | in. | | |
| Nov. 1 | First Quarter | 29·974 | 58·5 | 45·6 | 12·9 | 52·2 | + 5·2 | 51·8 | 51·4 | 0·8 | 3·6 | 0·0 | 97 | 77·2 | 36·2 | 0·003* | 0·0 | wwP |
| 2 | ... | 29·927 | 55·3 | 46·1 | 9·2 | 49·0 | + 2·2 | 48·6 | 48·2 | 0·8 | 6·4 | 0·0 | 97 | 86·0 | 42·6 | 0·003* | 1·0 | wwP |
| 3 | ... | 29·879 | 55·0 | 42·0 | 13·0 | 48·0 | + 1·4 | 46·5 | 44·8 | 3·2 | 7·4 | 0·0 | 90 | 77·7 | 30·0 | 0·000 | 0·0 | wwP : wP : wP |
| 4 | ... | 29·896 | 54·8 | 40·4 | 14·4 | 48·8 | + 2·4 | 47·1 | 45·2 | 3·6 | 7·6 | 0·2 | 88 | 74·0 | 32·8 | 0·001* | 0·0 | wP |
| 5 | Perigee: In Equator | 29·965 | 53·0 | 41·1 | 11·9 | 48·3 | + 2·2 | 46·3 | 44·1 | 4·2 | 8·2 | 0·4 | 86 | 66·0 | 29·4 | 0·001* | 0·0 | wP |
| 6 | ... | 29·935 | 50·7 | 37·7 | 13·0 | 45·8 | 0·0 | 43·5 | 40·9 | 4·9 | 8·2 | 2·1 | 84 | 86·0 | 28·4 | 0·000 | 0·0 | wP |
| 7 | ... | 29·767 | 44·7 | 34·2 | 10·5 | 40·0 | − 5·4 | 37·2 | 33·6 | 6·4 | 10·3 | 3·2 | 78 | 74·7 | 24·0 | 0·000 | 5·0 | wwP : wP : mP |
| 8 | Full | 29·532 | 46·9 | 32·4 | 14·5 | 40·3 | − 4·7 | 36·5 | 31·6 | 8·7 | 18·1 | 3·2 | 71 | 75·0 | 21·6 | 0·000 | 0·0 | wP |
| 9 | ... | 29·687 | 46·0 | 27·6 | 18·4 | 38·2 | − 6·4 | 35·1 | 30·9 | 7·3 | 14·5 | 1·4 | 75 | 79·0 | 11·0 | 0·000 | 0·0 | wP : wP : mP |
| 10 | ... | 29·792 | 44·9 | 22·1 | 22·8 | 34·2 | −10·1 | 31·7 | 27·4 | 6·8 | 14·3 | 0·0 | 76 | 83·9 | 9·1 | 0·009 | 0·0 | mP : vP : sP, wN |
| 11 | ... | 29·774 | 55·5 | 36·8 | 18·7 | 49·8 | + 5·8 | 48·6 | 47·4 | 2·4 | 4·6 | 1·1 | 92 | 65·0 | 30·0 | 0·000 | 1·0 | wP : wwP |
| 12 | Greatest Declination N. | 29·813 | 58·3 | 48·2 | 10·1 | 54·1 | +10·4 | 51·6 | 49·2 | 4·9 | 11·8 | 0·8 | 83 | 89·5 | 37·1 | 0·048 | 0·0 | wwP : wP : wP |
| 13 | ... | 29·795 | 57·9 | 45·2 | 12·7 | 51·9 | + 8·4 | 50·0 | 48·1 | 3·8 | 10·3 | 0·4 | 87 | 90·9 | 35·0 | 0·061 | 0·0 | wwP, wwN : wP |
| 14 | ... | 29·764 | 53·1 | 46·3 | 6·8 | 50·4 | + 7·1 | 48·7 | 46·9 | 3·5 | 8·0 | 0·4 | 88 | 75·2 | 39·0 | 0·158 | 3·0 | wwP, wwN : wP : wP, wN |
| 15 | Last Quarter | 30·041 | 48·8 | 42·7 | 6·1 | 46·6 | + 3·5 | 45·9 | 45·1 | 1·5 | 3·4 | 0·6 | 95 | 53·2 | 35·9 | 0·000 | 0·0 | wwP |
| 16 | Apogee | 30·032 | 47·8 | 43·1 | 4·7 | 44·8 | + 2·0 | 43·4 | 41·8 | 3·0 | 4·2 | 1·5 | 90 | 51·0 | 42·5 | 0·000 | 0·0 | wwP : wP : wP |
| 17 | ... | 30·079 | 49·7 | 41·3 | 8·4 | 46·1 | + 3·5 | 44·2 | 42·0 | 4·1 | 10·5 | 0·2 | 87 | 60·3 | 34·0 | 0·038 | 0·2 | wP : mP : mP |
| 18 | ... | 30·090 | 51·3 | 39·3 | 12·0 | 45·6 | + 3·2 | 43·2 | 40·5 | 5·1 | 9·6 | 1·3 | 83 | 65·9 | 31·7 | 0·064 | 0·8 | wP : wP : wP, mN |
| 19 | ... | 29·788 | 49·5 | 36·5 | 13·0 | 44·8 | + 2·5 | 42·4 | 39·6 | 5·2 | 8·2 | 1·7 | 82 | 58·5 | 28·4 | 0·073 | 0·0 | wP, vN : wP : mP |
| 20 | In Equator | 29·896 | 48·3 | 31·0 | 17·3 | 41·7 | − 0·5 | 39·5 | 36·8 | 4·9 | 8·0 | 0·8 | 84 | 72·5 | 24·5 | 0·000 | 0·0 | wP : mP : wP |
| 21 | ... | 29·778 | 48·2 | 41·9 | 6·3 | 45·3 | + 3·2 | 42·3 | 38·8 | 6·5 | 9·5 | 0·9 | 78 | 67·3 | 34·2 | 0·221 | 1·2 | wP : mP : vP, wwN |
| 22 | ... | 29·325 | 58·0 | 46·0 | 12·0 | 52·5 | +10·4 | 49·5 | 46·5 | 6·0 | 12·0 | 1·3 | 81 | 66·0 | 39·8 | 0·000 | 3·8 | wwP : wwP : wP |
| 23 | New | 29·651 | 50·2 | 33·7 | 16·5 | 45·8 | + 3·8 | 41·5 | 36·6 | 9·2 | 13·0 | 4·1 | 71 | 70·0 | 25·0 | 0·008 | 2·0 | wP, wN : mP : mP |
| 24 | ... | 29·958 | 53·5 | 32·1 | 21·4 | 45·9 | + 3·9 | 43·7 | 41·2 | 4·7 | 8·0 | 1·6 | 84 | 65·9 | 23·8 | 0·008 | 0·2 | mP : wP : wP |
| 25 | ... | 29·862 | 54·2 | 42·5 | 11·7 | 48·0 | + 6·1 | 44·6 | 40·9 | 7·1 | 13·9 | 1·4 | 77 | 78·1 | 36·0 | 0·049 | 0·8 | wP : mP : mP |
| 26 | Greatest Declination S. | 29·993 | 53·7 | 42·3 | 11·4 | 47·6 | + 5·8 | 45·5 | 43·2 | 4·4 | 7·6 | 2·6 | 86 | 73·0 | 33·6 | 0·000 | 0·0 | wP |
| 27 | ... | 30·066 | 53·0 | 40·4 | 12·6 | 46·0 | + 4·3 | 44·6 | 43·0 | 3·0 | 8·0 | 1·3 | 90 | 73·3 | 29·0 | 0·002* | 0·0 | wP |
| 28 | ... | 29·910 | 53·0 | 41·2 | 11·8 | 48·0 | + 6·5 | 46·7 | 45·3 | 2·7 | 6·2 | 1·3 | 91 | 61·5 | 29·9 | 0·002* | 0·8 | wP |
| 29 | ... | 30·081 | 54·4 | 48·0 | 6·4 | 51·5 | +10·3 | 50·6 | 49·7 | 1·8 | 4·2 | 1·6 | 94 | 59·0 | 40·9 | 0·012 | 2·2 | wP |
| 30 | Perigee: First Quarter | 30·246 | 54·0 | 46·1 | 7·9 | 49·4 | + 8·4 | 49·0 | 48·6 | 0·8 | 3·6 | 0·6 | 97 | 62·1 | 37·7 | 0·003* | 0·0 | wP |
| Means | ... | 29·877 | 52·1 | 39·8 | 12·3 | 46·7 | + 3·2 | 44·7 | 42·3 | 4·4 | 8·8 | 1·2 | 85·4 | 71·3 | 31·1 | Sum 0·764 | 0·7 | ... |
| Number of Column for Reference. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

* Rainfall (Column 16). Amounts entered on November 1, 2, 4, 5, 27, 28, and 30, are derived from fog or dew.

The mean reading of the *Barometer* for the month was $29^{in}\cdot877$, being $0^{in}\cdot119$ *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 58°·5 on November 1; the lowest in the month was 22°·1 on November 10; and the range was 36°·4.
The mean of all the highest daily readings in the month was 52°·1, being 3°·1 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 39°·8, being 1°·9 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 12°·3, being 1°·2 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 46°·7, being 3°·2 *higher* than the average for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Daily Duration of Sunshine. | Sun above Horizon. | Wind as deduced from Self-Registering Anemometers. Osler's. General Direction. A.M. | General Direction. P.M. | Pressure on the Square Foot. Greatest. | Pressure on the Square Foot. Mean of 24 Hourly Measures. | Robinson's. Horizontal Movement of the Air. | Clouds and Weather. A.M. | Clouds and Weather. P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | hours. | hours. | | | lbs. | lbs. | miles. | | |
| Nov. 1 | 0·5 | 9·6 | Calm : E | SE : ESE | 0·7 | 0·03 | 158 | f : p.-cl, f | p.-cl, cu : 10, h, f, d |
| 2 | 3·4 | 9·6 | ESE | ESE : SE | 0·7 | 0·03 | 175 | p.-cl, f : 10, f : p.-cl, ci, f | 2, ci, ci.-s, so.-ha : 10 : 10 |
| 3 | 4·8 | 9·5 | SE : ESE | SE : E : ENE | 0·2 | 0·00 | 124 | 10 : 10 : p.-cl | 0 : 0, f |
| 4 | 2·8 | 9·4 | ENE : NE : E | E : ENE | 0·7 | 0·02 | 177 | tk.-f : 10 : 8, cu, s | 8 : 9 : 10 |
| 5 | 0·0 | 9·4 | E : ESE | ESE : SE | 0·4 | 0·00 | 126 | p.-cl, f : 10, f : 10 | p.-cl, cu, cu.-s : 10 : 10 |
| 6 | 2·8 | 9·3 | SE : ENE : ESE | SE | 1·9 | 0·05 | 171 | p.-cl : th.-cl : 7, ci, ci.-cu | 9, cu.-s, n : p.-cl : p.-cl, lu.-co, lu.-ha |
| 7 | 5·5 | 9·3 | SE | SE : ESE | 3·0 | 0·13 | 248 | p.-cl : 9 : 6, ci, ci.-s, so.-ha | 5, ci, so.-ha : 5, ci, lu.-ha : ci, ho.-fr |
| 8 | 8·3 | 9·2 | E : ENE : ESE | E : ENE | 10·7 | 0·41 | 355 | p.-cl, ho.-fr : 0, ho.-fr : 2, ci.-cu, cu, w | ci.-cu, w : cu : li.-cl, d, ho.-fr |
| 9 | 8·0 | 9·2 | ENE : ESE | ESE | 3·5 | 0·14 | 231 | p.-cl, ho.-fr : 0, ho.-fr : 0 | 0 : 0, ho.-fr |
| 10 | 6·8 | 9·1 | ESE : SE | SSE : S | 0·5 | 0·01 | 136 | 0, fr : 0, f : 0 | 1, ci : 1 : p.-cl, ho.-fr, slt.-sh |
| 11 | 0·0 | 9·1 | S : SSW : SW | SW | 2·4 | 0·12 | 284 | 10 : 10 : 10, s | 10 : 10, slt.-sh : p.-cl |
| 12 | 4·9 | 9·0 | SW : WSW : W | W : WSW : SW | 2·7 | 0·08 | 257 | 10, slt.-r : 1 : p.-cl, cu, cu.-s | 7, ci.-cu, cu : p.-cl, d : 10 |
| 13 | 4·4 | 9·0 | SSW : SW : W | W : SW : S | 3·0 | 0·11 | 253 | 9, sh.-r : p.-cl : p.-cl, sh. r, so.-ha | 2 : p.-cl : 10 |
| 14 | 0·8 | 8·9 | SSW : W : WSW | W : WSW : NE | 1·5 | 0·07 | 236 | 10, sh.-r, lu.-ha : 10, r : 9, cu.-s | 10, slt.-r : 10, oc.-slt.-r, hy.-sh : 10 |
| 15 | 0·0 | 8·8 | NE | NE : ENE : ESE | 1·9 | 0·03 | 213 | 9 : 10, m | 10 : 10, oc.-m.-r : 10 |
| 16 | 0·0 | 8·8 | ESE : Calm : SW | SW : WSW : W | 0·5 | 0·00 | 145 | 10 : 10 : 10, s | 10, s : 9 : p.-cl |
| 17 | 0·2 | 8·7 | W : WNW | WNW : W | 1·1 | 0·05 | 259 | 10, r : p.-cl : 9, cu, th.-cl | 9, ci, th.-cl : p.-cl : 0, d |
| 18 | 0·5 | 8·7 | WSW : W | W : WSW | 2·6 | 0·22 | 351 | 0, d : li.-cl : 9 | 9, ci.-s, cu.-s, n, so.-ha : 9, oc.-slt.-r : 9, r |
| 19 | 0·5 | 8·7 | WNW : N | NNE : N : NW | 4·6 | 0·44 | 391 | 10, r : 10, oc.-r : 9, sc, n, li.-shs | 9, n, w : 1 : 1, h, d |
| 20 | 5·2 | 8·6 | W : WSW | W : NNW | 6·0 | 0·12 | 297 | p.-cl, ho.-fr : p.-cl : li.-cl | 6, ci, cu.-s : 10 : p.-cl, sq |
| 21 | 1·3 | 8·6 | NNW : NW | W : WSW : SW | 3·3 | 0·40 | 412 | 1, h : 1, h, m : 3, cu, n | 9 : 10, r : 10, r |
| 22 | 0·0 | 8·5 | W | W : NW : WNW | 10·1 | 1·10 | 639 | 10, oc.-slt.-r : 9 : 9, sc, n | 10, sc, st.-w : p.-cl, st.-w : p.-cl, g |
| 23 | 4·4 | 8·5 | WNW : NW : N | N : NW : W | 12·0 | 1·34 | 564 | 9, sh.-r, g : p.-cl, st.-w : p.-cl, cu, w | p.-cl, slt.-sh, hl, w : 0 : 1, ho.-fr |
| 24 | 0·0 | 8·4 | WSW : SW | WSW : SW | 5·3 | 0·30 | 381 | p.-cl : 9 : 9, s, th.-cl, so-ha | 10, s, sc, so.-ha : 9, sc, slt.-r : p.-cl, sc, w |
| 25 | 5·3 | 8·4 | WSW : NW : W | WNW : WSW : W | 5·0 | 0·41 | 424 | 10, th.-r, w : p.-cl : p.-cl, ci, li.-cl | p.-cl, ci, ci.-s, so.-ha : 0 |
| 26 | 1·1 | 8·3 | W | W | 3·4 | 0·35 | 430 | 0 : p.-cl : 7, cu, li.-cl | 8, ci.-s, cu : p.-cl : 0, d |
| 27 | 4·5 | 8·3 | W : WSW : SW | SW : S : SSW | 2·1 | 0·04 | 232 | p.-cl, d : p.-cl : 7, ci, cu.-s, n | ci, cu, n : p.-cl, cu.-s : 1, ho.-fr |
| 28 | 0·6 | 8·2 | SW | SW : SSW | 2·7 | 0·20 | 324 | p.-cl : 10 : 10, n, s | 10, n : p.-cl, hy.-d : 1, d |
| 29 | 0·0 | 8·2 | SW | SW | 1·5 | 0·03 | 199 | 9 : 9 : 10 | 10, fq.-th.-r : 10 |
| 30 | 0·0 | 8·2 | SW : Calm | WSW : Calm : SE | 0·1 | 0·00 | 99 | 10 : 10, slt.-f : 9 | p.-cl, s : 10, slt.-f : 10, slt.-f |
| Means | 2·6 | 8·8 | ... | ... | ... | 0·21 | 276 | | |
| Number of Column for Reference. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

The mean *Temperature of Evaporation* for the month was 44°·7, being 2°·8 *higher* than
The mean *Temperature of the Dew Point* for the month was 42°·3, being 2°·3 *higher* than
The mean *Degree of Humidity* for the month was 85·4, being 1·9 *less* than
The mean *Elastic Force of Vapour* for the month was 0in·270, being 0in·023 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs·1, being 0gr·3 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 546 grains, being 2 grains *less* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 7·0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·289. The maximum daily amount of *Sunshine* was 8·3 hours on November 8.

The highest reading of the *Solar Radiation Thermometer* was 90°·9 on November 13; and the lowest reading of the *Terrestrial Radiation Thermometer* was 9°·1 on November 10.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 0·3; for the 6 hours ending 15h was 0·4; and for the 6 hours ending 21h was 0·0.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 7, S. 6, and W. 12. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 12·0 lbs. on the square foot on November 23. The mean daily *Horizontal Movement of the Air* for the month was 276 miles; the greatest daily value was 639 miles on November 22; and the least daily value was 99 miles on November 30.

*Rain* (0in·005 or over) fell on 12 days in the month, amounting to 0in·764, as measured by gauge No. 6 partly sunk below the ground; being 1in·456 *less* than the average fall for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Phases of the Moon. | BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit). | TEMPERATURE. Of the Air. Highest. | Lowest. | Daily Range. | Mean of 24 Hourly Values. | Excess above Average of 65 Years. | Of Evaporation. Mean of 24 Hourly Values. | Of the Dew Point. Deduced Mean Daily Value. | Difference between the Air Temperature and Dew Point Temperature. Mean. | Greatest. | Least. | Degree of Humidity (Saturation = 100). | TEMPERATURE. Of Radiation. Highest in Sun's Rays. | Lowest on the Grass. | Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground. | Daily Amount of Ozone. | Electricity. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | | ° | ° | in. | | |
| Dec. 1 | ... | 30·250 | 46·3 | 39·1 | 7·2 | 42·2 | + 1·3 | 41·9 | 41·5 | 0·7 | 1·9 | 0·2 | 98 | 50·6 | 39·2 | 0·000 | 0·0 | wP |
| 2 | ... | 30·173 | 42·8 | 36·6 | 6·2 | 39·8 | − 1·1 | 38·6 | 37·0 | 2·8 | 4·8 | 1·6 | 90 | 52·2 | 37·0 | 0·000 | 0·0 | wP : mP : mP |
| 3 | In Equator | 30·121 | 40·5 | 37·0 | 3·5 | 37·9 | − 3·2 | 36·4 | 34·4 | 3·5 | 4·4 | 2·9 | 87 | 41·4 | 37·0 | 0·000 | 0·0 | wP : mP |
| 4 | ... | 30·129 | 44·9 | 34·5 | 10·4 | 39·5 | − 1·8 | 38·5 | 37·2 | 2·3 | 3·1 | 0·2 | 92 | 47·0 | 35·0 | 0·067 | 0·0 | wP |
| 5 | ... | 30·053 | 46·8 | 42·1 | 4·7 | 44·5 | + 3·0 | 44·0 | 43·4 | 1·1 | 2·0 | 0·0 | 96 | 50·2 | 32·5 | 0·000 | 0·0 | wP |
| 6 | ... | 29·872 | 47·8 | 42·6 | 5·2 | 46·2 | + 4·7 | 45·4 | 44·5 | 1·7 | 3·2 | 0·4 | 94 | 50·7 | 38·4 | 0·143 | 0·0 | wP |
| 7 | Full | 29·941 | 42·7 | 33·6 | 9·1 | 40·4 | − 0·9 | 40·0 | 39·5 | 0·9 | 2·2 | 0·0 | 97 | 50·2 | 29·9 | 0·000 | 0·0 | wP |
| 8 | ... | 29·762 | 49·5 | 35·9 | 13·6 | 44·7 | + 3·7 | 42·6 | 40·1 | 4·6 | 6·5 | 1·0 | 85 | 72·2 | 32·2 | 0·145 | 6·0 | wP : wP : wP, vN |
| 9 | Greatest Declination N. | 29·543 | 47·0 | 36·1 | 10·9 | 42·3 | + 1·7 | 41·3 | 40·1 | 2·2 | 6·3 | 0·9 | 92 | 56·9 | 28·3 | 0·062 | 1·8 | vN, wP : mP : mP |
| 10 | ... | 28·990 | 52·9 | 36·9 | 16·0 | 45·4 | + 5·0 | 43·3 | 40·9 | 4·5 | 6·6 | 1·3 | 85 | 62·6 | 29·0 | 0·156 | 5·2 | wP, wN : wP : wP |
| 11 | ... | 28·761 | 43·6 | 38·0 | 5·6 | 40·3 | + 0·1 | 38·0 | 35·0 | 5·3 | 9·2 | 0·7 | 82 | 55·0 | 31·8 | 0·111 | 0·2 | wP, wN : mP : mP |
| 12 | ... | 29·306 | 45·0 | 36·3 | 8·7 | 41·5 | + 1·2 | 37·9 | 33·4 | 8·1 | 11·9 | 4·6 | 74 | 59·0 | 30·1 | 0·004 | 0·8 | wP : mP : mP |
| 13 | ... | 29·386 | 54·2 | 37·9 | 16·3 | 47·1 | + 6·6 | 45·5 | 43·7 | 3·4 | 5·5 | 0·4 | 89 | 73·0 | 31·8 | 0·180 | 0·0 | vP, vN : wP : wP, mN |
| 14 | Apogee | 29·333 | 49·8 | 46·1 | 3·7 | 47·9 | + 7·2 | 47·3 | 46·6 | 1·3 | 3·6 | 1·0 | 95 | 53·2 | 39·9 | 0·305 | 2·5 | wP, wN : wP, mN : vP, sN |
| 15 | Last Quarter | 29·239 | 51·0 | 44·0 | 7·0 | 47·4 | + 6·6 | 45·9 | 44·2 | 3·2 | 5·9 | 0·6 | 90 | 69·1 | 37·1 | 0·052 | 4·5 | sN, wP : wP, mN : wP |
| 16 | ... | 29·414 | 48·2 | 39·0 | 9·2 | 45·3 | + 4·6 | 44·8 | 44·2 | 1·1 | 2·3 | 0·0 | 96 | 57·0 | 26·1 | 0·002* | 2·0 | wP |
| 17 | In Equator | 29·262 | 51·0 | 42·6 | 8·4 | 47·3 | + 6·9 | 46·3 | 45·2 | 2·1 | 4·0 | 0·0 | 93 | 59·5 | 34·6 | 0·208 | 6·0 | wwP, wwN : wwP, wN : wP |
| 18 | ... | 29·539 | 45·9 | 36·0 | 9·9 | 40·7 | + 0·7 | 39·3 | 37·5 | 3·2 | 4·6 | 0·2 | 89 | 51·8 | 29·5 | 0·005† | 0·0 | wP : wP : mP |
| 19 | ... | 29·924 | 45·0 | 36·1 | 8·9 | 41·6 | + 2·1 | 40·6 | 39·4 | 2·2 | 3·6 | 0·4 | 93 | 50·3 | 30·0 | 0·058 | 1·5 | wP |
| 20 | ... | 30·053 | 49·0 | 42·2 | 6·8 | 46·0 | + 7·0 | 45·5 | 45·0 | 1·0 | 2·5 | 0·2 | 96 | 54·3 | 41·6 | 0·018 | 4·5 | wwP |
| 21 | ... | 30·148 | 49·0 | 44·0 | 5·0 | 47·0 | + 8·3 | 46·4 | 45·7 | 1·3 | 2·8 | 0·4 | 96 | 53·0 | 42·5 | 0·002 | 0·0 | wwP : wwP : wP |
| 22 | ... | 30·112 | 44·2 | 37·6 | 6·6 | 41·3 | + 2·9 | 39·9 | 38·1 | 3·2 | 5·9 | 2·0 | 89 | 68·0 | 32·0 | 0·000 | 0·0 | wwP : wP : mP |
| 23 | New | 30·035 | 40·4 | 34·7 | 5·7 | 38·2 | 0·0 | 36·9 | 35·1 | 3·1 | 4·6 | 2·7 | 89 | 43·0 | 35·0 | 0·000 | 1·5 | wP |
| 24 | Greatest Declination S. | 29·869 | 37·9 | 34·3 | 3·6 | 35·7 | − 2·5 | 34·4 | 32·4 | 3·3 | 4·6 | 1·5 | 88 | 45·1 | 29·8 | 0·000 | 4·5 | wP : mP : mP |
| 25 | ... | 29·857 | 39·1 | 36·2 | 2·9 | 38·0 | − 0·4 | 36·8 | 35·1 | 2·9 | 3·9 | 1·7 | 89 | 43·4 | 35·0 | 0·000 | 0·2 | wP |
| 26 | Perigee | 29·844 | 37·3 | 34·1 | 3·2 | 35·5 | − 3·1 | 33·9 | 31·4 | 4·1 | 5·7 | 2·9 | 85 | 39·0 | 33·4 | 0·000 | 1·8 | wP |
| 27 | ... | 29·733 | 34·3 | 25·7 | 8·6 | 30·7 | − 8·1 | 29·5 | 26·2 | 4·5 | 6·1 | 1·8 | 82 | 39·0 | 29·0 | 0·082 | 3·5 | wP : wP : mP |
| 28 | ... | 29·792 | 29·5 | 23·0 | 6·5 | 26·4 | −12·5 | 23·9 | 11·7 | 14·7 | 20·0 | 5·8 | 52 | 59·6 | 17·3 | 0·000 | 3·2 | wP : mP : sP |
| 29 | ... | 29·635 | 25·4 | 19·8 | 5·6 | 22·8 | −16·2 | 22·0 | 16·9 | 5·9 | 14·3 | 1·6 | 76 | 31·2 | 17·4 | 0·319 | 5·3 | wP : wwP, wwN : ... |
| 30 | First Quarter: In Equator. | 30·049 | 23·3 | 12·1 | 11·2 | 16·6 | −22·3 | 16·5 | 15·7 | 0·9 | 5·9 | 0·0 | 100 | 28·6 | 2·0 | 0·000 | 0·5 | ... |
| 31 | ... | 30·262 | 43·4 | 20·1 | 23·3 | 35·3 | − 3·4 | 34·4 | 33·0 | 2·3 | 5·7 | 0·0 | 91 | 44·5 | 16·8 | 0·084 | 1·5 | ... : wP, wwN : wP |
| Means | ... | 29·754 | 43·5 | 35·3 | 8·2 | 39·9 | − 0·1 | 38·6 | 36·6 | 3·3 | 5·6 | 1·2 | 88·7 | 52·0 | 31·0 | Sum 2·003 | 1·8 | ... |
| Number of Column for Reference. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

The results apply to the civil day.

The mean reading of the Barometer (Column 2) and the mean temperatures of the Air and Evaporation (Columns 6 and 8) are deduced from the photographic records. The average temperature (Column 7) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 9) and the Degree of Humidity (Column 13) are deduced from the corresponding temperatures of the Air and Evaporation by means of Glaisher's Hygrometrical Tables. The mean difference between the Air and Dew Point Temperatures (Column 10) is the difference between the numbers in Columns 6 and 9, and the Greatest and Least Differences (Columns 11 and 12) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers.

The values given in Columns 3, 4, 5, 14, and 15 are derived from eye-readings of self-registering thermometers.

* Rainfall (Column 16). Amount entered on December 16 is derived from dew. † Amount entered on December 18 is derived partly from dew.

The mean reading of the *Barometer* for the month was 29$^{in.}$·754, being 0$^{in.}$·031 *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 54°·2 on December 13; the lowest in the month was 12°·1 on December 30; and the range was 42°·1.
The mean of *all* the highest daily readings in the month was 43°·5, being 0°·7 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 35°·3, being 0°·3 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 8°·2, being 1°·0 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 39°·9, being 0°·1 *lower* than the average for the 65 years, 1841–1905.

| MONTH and DAY, 1908. | Daily Duration of Sunshine. | Sun above Horizon. | WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS. OSLER'S. General Direction. A.M. | General Direction. P.M. | Pressure on the Square Foot. Greatest. | Pressure on the Square Foot. Mean of 24 Hourly Measures. | ROBINSON'S. Horizontal Movement of the Air. | CLOUDS AND WEATHER. A.M. | CLOUDS AND WEATHER. P.M. |
|---|---|---|---|---|---|---|---|---|---|
| | hours. | hours. | | | lbs. | lbs. | miles. | | |
| Dec. 1 | 0·0 | 8·1 | SE : Calm | Variable : SE : ESE | 0·0 | 0·00 | 72 | 10, slt.-f : 10, slt.-f : 10, s, slt.-f | 10, s : 10, s, slt.-f : 10, m |
| 2 | 0·0 | 8·1 | Calm : Variable | SE : SSE : Calm | 0·0 | 0·00 | 75 | 10, m : 10, m : 10, cu.-s | 10, slt.-f : 10, slt.-f : 10 |
| 3 | 0·0 | 8·1 | SSE : Calm | S : Calm | 0·0 | 0·00 | 83 | 10 : 10 | 10 : 10 |
| 4 | 0·0 | 8·0 | WSW : Calm | Calm : SW | 0·0 | 0·00 | 90 | 10, slt.-m : 10 : 10, s | 10, s, m.-r : 10, m.-r : 9, slt.-r |
| 5 | 0·0 | 8·0 | WSW | WSW : SW : SSW | 0·3 | 0·00 | 170 | 9 : 10 : 10, slt.-f | 10 : 9, lu.-ha, d : 10, th.-cl, lu.-ha |
| 6 | 0·0 | 8·0 | SSW : SW | Calm : NE : ENE | 0·5 | 0·01 | 154 | 10 : 10, m.-r : 10, r, slt.-f, glm | 10, r, glm : 10 : 10 |
| 7 | 0·1 | 7·9 | NNE | WNW : W : WSW | 0·3 | 0·01 | 166 | 9 : 10 : 9, s | 10, s, slt.-f, glm : 10, slt.-f : th.-cl, h, lu.-co |
| 8 | 1·9 | 7·9 | SW | SW | 7·3 | 0·54 | 474 | 1 : 1 : p.-cl, li.-cl, cu, w | 9, cu.-s, w : 10, oc.-slt.-r, w : 10, sc, r, w |
| 9 | 2·1 | 7·9 | Variable : WSW | WSW : W : SW | 0·5 | 0·01 | 189 | 9, r : 10 : 9, so.-ha | p.-cl, cu.-s : p.-cl, hy.-d : 0, ho.-fr |
| 10 | 1·6 | 7·9 | SW | W : WSW : WNW | 9·8 | 0·86 | 513 | 9, oc.-shs : 10, r, w : 10, sc, r, w | p.-cl, sh.-r, w : 9, slt.-r : p.-cl, sc, w |
| 11 | 2·4 | 7·9 | W : WSW : N | N : NNW : NW | 7·0 | 0·67 | 484 | 1 : 10, hy.-r : p.-cl | 1 : 1, w : th.-cl, w |
| 12 | 0·7 | 7·9 | NW : N : NNW | NNW : WNW : W | 9·6 | 0·93 | 510 | 9, oc.-slt.-r, w : 9, w : 9, s, w | 10, s : 9, th.-cl : 9 |
| 13 | 0·8 | 7·8 | SSW : SSE : SW | WSW : SW | 5·4 | 0·28 | 338 | 9, r : 9, oc.-th.-r : 9, s, th.-r | p.-cl, ci.-cu : p.-cl, w : p.-cl, r |
| 14 | 0·0 | 7·8 | SW : SSW | SW | 7·4 | 0·12 | 241 | 9, r : 10, fq.-r | 10, s, fq.-r : 9, slt.-sh, w |
| 15 | 1·0 | 7·8 | WSW : SW | SW : SSW | 6·0 | 0·54 | 386 | p.-cl, oc.-r, w : p.-cl : 8, cu.-s, fq.-r | 8, ci, cu.-s, slt.-sh : p.-cl, d : p.-cl |
| 16 | 0·0 | 7·8 | SSW : S | S : SSW | 0·7 | 0·02 | 152 | p.-cl : f : 10, s, slt.-f | 10, s : p.-cl, hy.-d : 9 |
| 17 | 0·0 | 7·8 | SSW : SW | WSW : SW | 3·3 | 0·23 | 310 | 9, th.-r : 10, slt.-r : 10, sc, oc.-slt.-r | 10, r : 9 : p.-cl |
| 18 | 2·5 | 7·8 | WSW | W : WSW | 1·2 | 0·05 | 251 | 1, ho.-fr : 1, ho.-fr : 1, th.-cl | p.-cl, slt.-sh : p.-cl : 1, d |
| 19 | 0·0 | 7·8 | WSW : W | W : WSW : S | 1·1 | 0·04 | 200 | 9 : 10 : 10, s, m.-r | 10, m, r : 10, fq.-r |
| 20 | 0·0 | 7·8 | S : SSW | SW | 0·8 | 0·05 | 200 | 10 : 10, oc.-slt.-r : 10 | 10 : 10, oc.-slt.-r : p.-cl |
| 21 | 0·0 | 7·7 | SW : SSW | SSW : SW | 0·2 | 0·00 | 151 | 10, slt.-sh : 10 : 10, s | 9 : 10 : 10 |
| 22 | 3·5 | 7·8 | SSW : S | SSW : SW | 0·6 | 0·01 | 166 | 10 : 10 : p.-cl | 5, ci, cu.-s : p.-cl : 10 |
| 23 | 0·0 | 7·8 | SW : S | S : SSE | 0·7 | 0·02 | 125 | 9 : 10 : 10, s | 10, s : 10 : 10 |
| 24 | 0·0 | 7·8 | SSE : SE | ESE : SE | 3·0 | 0·16 | 233 | 10 : 10 : 9, s | 9 : 0, d : 9 |
| 25 | 0·0 | 7·8 | ESE : E | ESE : E | 3·1 | 0·31 | 321 | 9 : 10 : 10, s | 10, s : 10 |
| 26 | 0·0 | 7·8 | ESE | ESE : SE | 2·2 | 0·13 | 214 | 10 : 10 : 10, s | 10, s : 10 |
| 27 | 0·0 | 7·8 | SSE : ESE | SE | 4·4 | 0·18 | 230 | 10 : 10 : 10, slt.-sn | 10, slt.-sn : 10, slt.-sn : 9, sn |
| 28 | 5·7 | 7·8 | ESE : E | ESE : E : SE | 2·5 | 0·21 | 276 | p.-cl : p.-cl : 5, th.-cl | 5, li.-cl : p.-cl, th.-cl : p.-cl |
| 29 | 0·0 | 7·8 | SE : SSE | SE : ESE : NE | 3·1 | 0·21 | 252 | 9 : 9, sn : 10, s, sn | 10, s, sn : 10, sn : p.-cl, slt.-sn |
| 30 | 0·0 | 7·8 | NNE : WSW | Variable | 0·4 | 0·00 | 130 | p.-cl, ho.-fr : p.-cl, h, f : 1, slt.-f | p.-cl, s, slt.-f : p.-cl : 9, f, ho.-fr |
| 31 | 0·0 | 7·8 | SSE : SW : SSW | SSW : SW : WSW | 2·1 | 0·07 | 228 | 9 : p.-cl : 10, r | 10, s, r : 10, sh.-r, f : 10, f |
| Means | 0·7 | 7·9 | ... | ... | ... | 0·18 | 238 | | |
| Number of Column for Reference. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

The mean *Temperature of Evaporation* for the month was 38°·6, being 0°·1 *higher* than
The mean *Temperature of the Dew Point* for the month was 36°·6, being 0°·1 *lower* than
The mean *Degree of Humidity* for the month was 88·7, being 0·1 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in·217, being 0in·001 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs·6, being the *same* as
The mean *Weight of a Cubic Foot of Air* for the month was 552 grains, being the *same* as
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0, and an overcast sky by 10) was 8·5.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·091. The maximum daily amount of *Sunshine* was 5·7 hours on December 28.

The highest reading of the *Solar Radiation Thermometer* was 73°·0 on December 13; and the lowest reading of the *Terrestrial Radiation Thermometer* was 2°·0 on December 30.

The mean daily distribution of *Ozone* for the 12 hours ending 9h was 1·6; for the 6 hours ending 15h was 0·2; and for the 6 hours ending 21h was 0·0.

The *Proportions of Wind* referred to the cardinal points were N. 2, E. 5, S. 11, and W. 10. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 9·8 lbs. on the square foot on December 10. The mean daily *Horizontal Movement of the Air* for the month was 238 miles; the greatest daily value was 513 miles on December 10; and the least daily value was 72 miles on December 1.

*Rain* (0in·005 or over) fell on 15 days in the month, amounting to 2in·003, as measured by gauge No. 6 partly sunk below the ground; being 0in·176 *greater* than the average fall for the 65 years, 1841–1905.

HIGHEST and LOWEST READINGS of the BAROMETER, reduced to 32° Fahrenheit, as extracted from the PHOTOGRAPHIC RECORDS.

| MAXIMA. | | | MINIMA. | | | MAXIMA. | | | MINIMA. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Greenwich Civil Time, 1908. | Reading. | | Greenwich Civil Time, 1908. | Reading. | | Greenwich Civil Time, 1908. | Reading. | | Greenwich Civil Time, 1908. | Reading. |
| | d h m | in. | | d h m | in. | | d h m | in. | | d h m | in. |
| January | 2. 10. 25 | 30·213 | January | 3. 19. 15 | 30·061 | April | 1. 22. 5 | 29·880 | April | 3. 15. 5 | 29·660 |
| | 5. 18. 20 | 30·259 | | 8. 3. 10 | 28·721 | | 4. 0. 30 | 29·741 | | 4. 16. 15 | 29·670 |
| | 11. 10. 30 | 30·317 | | 13. 5. 25 | 30·030 | | 6. 22. 5 | 30·204 | | 11. 16. 0 | 29·669 |
| | 14. 11. 20 | 30·133 | | 16. 6. 0 | 29·817 | | 15. 9. 20 | 30·036 | | 15. 17. 5 | 29·961 |
| | 18. 23. 10 | 30·197 | | 19. 16. 0 | 30·089 | | 16. 23. 30 | 30·101 | | 19. 16. 30 | 29·490 |
| | 21. 9. 45 | 30·454 | | 22. 15. 0 | 30·259 | | 20. 22. 0 | 29·730 | | 24. 4. 0 | 29·201 |
| | 24. 10. 0 | 30·345 | | 28. 20. 15 | 29·215 | | 24. 21. 30 | 29·350 | | 25. 18. 0 | 29·111 |
| | 30. 9. 5 | 30·040 | | 31. 20. 55 | 29·625 | | 27. 22. 10 | 29·644 | | 28. 15. 0 | 29·478 |
| | | | | | | | 30. 9. 30 | 30·061 | | | |
| February | 2. 19. 30 | 30·213 | February | 3. 13. 40 | 29·892 | May | 7. 20. 5 | 29·790 | May | 6. 13. 20 | 29·243 |
| | 6. 22. 0 | 30·555 | | 9. 4. 15 | 30·240 | | 11. 7. 10 | 29·845 | | 9. 4. 10 | 29·568 |
| | 11. 10. 20 | 30·412 | | 14. 5. 0 | 29·979 | | 18. 8. 20 | 30·296 | | 14. 19. 20 | 29·448 |
| | 14. 22. 10 | 30·164 | | 15. 16. 55 | 29·689 | | 20. 9. 20 | 30·168 | | 19. 19. 30 | 30·065 |
| | 16. 20. 30 | 30·063 | | 17. 14. 50 | 29·290 | | 23. 21. 30 | 29·940 | | 22. 11. 10 | 29·578 |
| | 18. 4. 55 | 29·548 | | 18. 13. 15 | 29·408 | | 27. 22. 20 | 30·350 | | 25. 5. 25 | 29·673 |
| | 20. 10. 40 | 29·822 | | 21. 15. 45 | 29·670 | | | | | | |
| | 22. 3. 0 | 29·740 | | 22. 16. 10 | 29·293 | June | 3. 11. 10 | 29·901 | June | 2. 2. 20 | 29·716 |
| | 23. 8. 10 | 29·602 | | 24. 13. 0 | 29·458 | | 5. 9. 30 | 29·865 | | 4. 17. 50 | 29·771 |
| | 25. 7. 40 | 29·762 | | 25. 16. 45 | 29·599 | | 7. 11. 0 | 30·038 | | 6. 3. 5 | 29·705 |
| | 26. 9. 20 | 29·950 | | 29. 4. 10 | 28·923 | | 10. 11. 15 | 30·133 | | 8. 17. 20 | 29·906 |
| | | | | | | | 14. 23. 30 | 29·835 | | 14. 4. 25 | 29·486 |
| March | 2. 22. 10 | 29·508 | March | 4. 1. 0 | 29·400 | | 18. 10. 10 | 29·799 | | 17. 6. 25 | 29·526 |
| | 5. 11. 40 | 29·847 | | 6. 15. 55 | 29·006 | | 21. 22. 5 | 30·020 | | 19. 15. 55 | 29·597 |
| | 8. 1. 30 | 29·698 | | 10. 2. 40 | 29·075 | | 27. 7. 10 | 30·226 | | 22. 17. 0 | 29·945 |
| | 15. 0. 30 | 30·075 | | 17. 17. 0 | 29·670 | | | | | 29. 18. 0 | 30·024 |
| | 18. 23. 30 | 29·755 | | 20. 16. 0 | 29·674 | July | 2. 1. 0 | 30·155 | July | 7. 18. 0 | 29·712 |
| | 21. 11. 0 | 29·834 | | 22. 17. 20 | 29·365 | | 8. 1. 0 | 29·778 | | 9. 0. 40 | 29·568 |
| | 24. 9. 0 | 29·949 | | 25. 16. 45 | 29·753 | | 9. 20. 35 | 29·772 | | 12. 17. 25 | 29·333 |
| | 27. 7. 40 | 30·006 | | 28. 6. 0 | 29·715 | | 15. 21. 15 | 29·801 | | 17. 15. 25 | 29·223 |
| | 28. 23. 10 | 30·013 | | 29. 21. 0 | 29·728 | | 21. 10. 30 | 30·079 | | 25. 9. 0 | 29·800 |
| | 30. 9. 0 | 29·823 | | 30. 23. 30 | 29·416 | | 29. 10. 5 | 30·270 | | 31. 3. 40 | 30·076 |

HIGHEST and LOWEST READINGS of the BAROMETER, reduced to 32° Fahrenheit, as extracted from the PHOTOGRAPHIC RECORDS—*concluded.*

| MAXIMA. | | MINIMA. | | MAXIMA. | | MINIMA. | |
|---|---|---|---|---|---|---|---|
| Greenwich Civil Time, 1908. | Reading. | Greenwich Civil Time, 1908. | Reading. | Greenwich Civil Time, 1908. | Reading. | Greenwich Civil Time, 1908. | Reading. |
| d h m | in. | d h m | in. | d h m | in. | d h m | in. |
| August 3. 1. 15 | 30·227 | August 5. 13. 35 | 29·622 | October 26. 20. 40 | 29·869 | October 27. 15. 5 | 29·722 |
| 8. 2. 40 | 30·039 | 10. 18. 5 | 29·693 | 29. 7. 0 | 30·088 | 30. 14. 20 | 29·831 |
| 12. 7. 40 | 30·089 | 13. 19. 0 | 29·709 | November 1. 0. 0 | 30·008 | November 3. 16. 10 | 29·840 |
| 18. 23. 10 | 30·031 | 21. 4. 10 | 29·618 | 5. 10. 40 | 30·003 | 8. 14. 0 | 29·492 |
| 22. 22. 45 | 29·769 | 23. 12. 0 | 29·613 | 10. 9. 0 | 29·823 | 12. 2. 40 | 29·699 |
| 24. 11. 40 | 29·702 | 25. 14. 20 | 29·518 | 12. 21. 10 | 29·890 | 13. 9. 35 | 29·742 |
| 26. 9. 20 | 29·670 | 27. 4. 5 | 29·312 | 13. 20. 30 | 29·830 | 14. 6. 55 | 29·715 |
| 27. 21. 40 | 29·537 | 28. 16. 25 | 29·301 | 15. 23. 30 | 30·112 | 16. 22. 5 | 29·968 |
| 30. 23. 15 | 29·813 | September 1. 10. 20 | 29·010 | 17. 23. 40 | 30·205 | 19. 7. 5 | 29·633 |
| September 3. 7. 35 | 29·843 | 4. 3. 30 | 29·514 | 19. 23. 50 | 29·987 | 20. 20. 25 | 29·777 |
| 5. 10. 0 | 30·130 | 9. 14. 15 | 29·433 | 21. 10. 5 | 29·859 | 23. 1. 30 | 29·220 |
| 14. 0. 15 | 30·118 | 15. 17. 30 | 29·771 | 24. 1. 40 | 30·042 | 25. 1. 55 | 29·778 |
| 16. 11. 15 | 30·043 | 18. 17. 0 | 29·792 | 26. 22. 40 | 30·119 | 28. 13. 25 | 29·880 |
| 19. 10. 30 | 29·930 | 20. 13. 0 | 29·765 | December 1. 10. 0 | 30·286 | December 6. 23. 15 | 29·814 |
| 21. 21. 30 | 29·914 | 23. 15. 40 | 29·641 | 7. 19. 0 | 30·030 | 11. 7. 15 | 28·601 |
| 25. 9. 20 | 29·784 | 26. 3. 40 | 29·656 | 12. 21. 25 | 29·528 | 13. 14. 25 | 29·325 |
| 30. 9. 20 | 30·088 | October 1. 16. 45 | 29·961 | 13. 23. 5 | 29·429 | 15. 1. 0 | 29·167 |
| October 5. 11. 10 | 30·138 | 10. 3. 5 | 29·732 | 16. 9. 55 | 29·460 | 17. 15. 30 | 29·203 |
| 11. 9. 10 | 30·125 | 14. 5. 30 | 29·843 | 21. 10. 5 | 30·181 | 24. 23. 55 | 29·768 |
| 15. 8. 35 | 29·923 | 17. 5. 15 | 29·777 | 25. 20. 0 | 29·933 | 28. 4. 40 | 29·694 |
| 22. 11. 10 | 30·294 | 26. 7. 5 | 29·785 | 28. 21. 0 | 29·883 | 29. 15. 0 | 29·460 |

The readings in the above table are accurate, but the times are occasionally liable to uncertainty, as the barometer will sometimes remain at its extreme reading without sensible change for a considerable interval of time. In such cases the time given is the middle of the stationary period.
The time is expressed in civil reckoning, commencing at midnight and counting from $0^h$ to $24^h$.
The height of the barometer cistern above mean sea level is 159 feet: no correction has been applied to the readings to reduce to sea level.

HIGHEST and LOWEST READINGS of the BAROMETER in each Month for the YEAR 1908.

| MONTH, 1908. | Readings of the Barometer. | | Range. |
|---|---|---|---|
| | Highest. | Lowest. | |
| | in. | in. | in. |
| January | 30·454 | 28·721 | 1·733 |
| February | 30·555 | 28·923 | 1·632 |
| March | 30·075 | 29·006 | 1·069 |
| April | 30·204 | 29·111 | 1·093 |
| May | 30·350 | 29·243 | 1·107 |
| June | 30·226 | 29·486 | 0·740 |
| July | 30·270 | 29·223 | 1·047 |
| August | 30·227 | 29·213 | 1·014 |
| September | 30·130 | 29·010 | 1·120 |
| October | 30·294 | 29·722 | 0·572 |
| November | 30·279 | 29·220 | 1·059 |
| December | 30·321 | 28·601 | 1·720 |

The highest reading in the year was $30^{in.}555$. The lowest reading in the year was $28^{in.}601$.
The range of reading in the year was $1^{in.}954$.

## MONTHLY RESULTS of METEOROLOGICAL ELEMENTS for the YEAR 1908.

| MONTH, 1908. | Mean Reading of the Barometer. | TEMPERATURE OF THE AIR. Highest. | Lowest. | Range in the Month. | Mean of all the Highest. | Mean of all the Lowest. | Mean of the Daily Ranges. | Monthly Mean. | Excess of Mean above Average of 65 Years. | Mean Temperature of Evaporation. | Mean Temperature of the Dew Point. | Mean Degree of Humidity. (Saturation =100.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | in. | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | |
| January..... | 29·976 | 53·6 | 17·9 | 35·7 | 41·7 | 30·9 | 10·8 | 36·8 | − 1·8 | 35·2 | 31·8 | 82·8 |
| February.... | 29·910 | 54·5 | 28·3 | 26·2 | 47·5 | 35·7 | 11·8 | 41·8 | + 2·3 | 39·3 | 36·1 | 80·7 |
| March ..... | 29·671 | 59·2 | 24·3 | 34·9 | 47·6 | 33·9 | 13·8 | 40·5 | − 1·4 | 37·8 | 34·4 | 79·3 |
| April ..... | 29·759 | 62·0 | 28·4 | 33·6 | 51·7 | 36·8 | 14·9 | 43·6 | − 3·7 | 40·5 | 36·7 | 77·4 |
| May ..... | 29·825 | 77·0 | 37·8 | 39·2 | 66·2 | 47·2 | 18·9 | 55·9 | + 2·9 | 52·2 | 48·6 | 76·9 |
| June..... | 29·904 | 81·5 | 41·7 | 39·8 | 71·0 | 49·7 | 21·3 | 59·6 | + 0·2 | 54·9 | 50·7 | 72·9 |
| July..... | 29·837 | 84·0 | 47·1 | 36·9 | 73·0 | 53·2 | 19·9 | 62·3 | − 0·4 | 57·9 | 54·2 | 75·8 |
| August..... | 29·817 | 83·0 | 46·6 | 36·4 | 70·1 | 51·4 | 18·7 | 59·7 | − 1·9 | 55·6 | 52·0 | 76·2 |
| September... | 29·807 | 79·9 | 36·1 | 43·8 | 66·4 | 47·7 | 18·7 | 56·5 | − 0·7 | 53·3 | 50·2 | 79·9 |
| October..... | 29·955 | 78·5 | 33·1 | 45·4 | 62·9 | 46·0 | 16·9 | 53·9 | + 3·9 | 52·0 | 50·1 | 87·4 |
| November... | 29·877 | 58·5 | 22·1 | 36·4 | 52·1 | 39·8 | 12·3 | 46·7 | + 3·2 | 44·7 | 42·3 | 85·4 |
| December... | 29·754 | 54·2 | 12·1 | 42·1 | 43·5 | 35·3 | 8·2 | 39·9 | − 0·1 | 38·6 | 36·6 | 88·7 |
| Means..... | 29·841 | Highest 84·0 | Lowest 12·1 | Annual Range 71·9 | 57·8 | 42·3 | 15·5 | 49·8 | + 0·2 | 46·8 | 43·6 | 80·3 |

| MONTH, 1908. | Mean Elastic Force of Vapour. | Mean Weight of Vapour in a Cubic Foot of Air. | Mean Weight of a Cubic Foot of Air. | Mean Amount of Ozone. | Mean Amount of Cloud. (0–10.) | RAIN. Number of Rainy Days. | Amount collected in Gauge No. 6, whose receiving Surface is 5 inches above the Ground. | WIND. From Osler's Anemometer. Number of Hours of Prevalence of each Wind referred to different Points of Azimuth. N. | N.E. | E. | S.E. | S. | S.W. | W. | N.W. | Number of Calm or nearly Calm Hours. | Mean Daily Pressure on the Square Foot. | From Robinson's Anemometer. Mean Daily Horizontal Movement of the Air. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | in. | grs. | grs. | | | | in. | h | h | h | h | h | h | h | h | h | lbs. | miles. |
| January..... | 0·179 | 2·2 | 560 | 1·3 | 6·4 | 9 | 1·508 | 65 | 56 | 119 | 72 | 58 | 159 | 123 | 25 | 67 | 0·31 | 327 |
| February ... | 0·213 | 2·5 | 553 | 1·4 | 7·1 | 13 | 1·459 | 109 | 8 | 6 | 11 | 14 | 156 | 255 | 124 | 13 | 0·39 | 372 |
| March..... | 0·199 | 2·3 | 550 | 2·7 | 7·5 | 17 | 2·223 | 104 | 70 | 46 | 55 | 74 | 180 | 122 | 52 | 41 | 0·25 | 303 |
| April..... | 0·218 | 2·5 | 548 | 2·4 | 7·4 | 15 | 2·103 | 117 | 202 | 89 | 63 | 26 | 51 | 102 | 47 | 23 | 0·30 | 333 |
| May ..... | 0·343 | 3·9 | 535 | 6·5 | 7·0 | 15 | 1·527 | 20 | 79 | 72 | 42 | 54 | 215 | 180 | 32 | 50 | 0·20 | 281 |
| June..... | 0·370 | 4·2 | 532 | 4·9 | 6·1 | 6 | 2·066 | 84 | 135 | 100 | 66 | 20 | 142 | 96 | 25 | 52 | 0·15 | 239 |
| July ..... | 0·421 | 4·6 | 528 | 4·2 | 6·9 | 12 | 3·664 | 64 | 104 | 44 | 59 | 16 | 156 | 225 | 29 | 47 | 0·18 | 244 |
| August..... | 0·388 | 4·3 | 531 | 6·0 | 6·7 | 14 | 3·283 | 110 | 126 | 82 | 25 | 9 | 87 | 192 | 44 | 69 | 0·22 | 273 |
| September.. | 0·364 | 4·1 | 534 | 4·1 | 6·3 | 12 | 1·219 | 23 | 53 | 20 | 36 | 47 | 183 | 251 | 42 | 65 | 0·17 | 251 |
| October..... | 0·362 | 4·1 | 539 | 1·6 | 5·4 | 10 | 1·965 | 26 | 56 | 113 | 201 | 102 | 88 | 42 | 3 | 113 | 0·07 | 179 |
| November... | 0·270 | 3·1 | 546 | 0·7 | 7·0 | 12 | 0·764 | 33 | 43 | 104 | 102 | 30 | 165 | 165 | 42 | 36 | 0·21 | 276 |
| December... | 0·217 | 2·6 | 552 | 1·8 | 8·5 | 15 | 2·003 | 28 | 20 | 55 | 102 | 110 | 228 | 111 | 23 | 67 | 0·18 | 238 |
| Sums..... | ... | ... | ... | ... | ... | 150 | 23·784 | 783 | 952 | 850 | 834 | 560 | 1810 | 1864 | 488 | 643 | ... | ... |
| Means..... | 0·295 | 3·4 | 542 | 3·1 | 6·9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0·22 | 276 |

The greatest recorded pressure of the wind on the square foot in the year was 20·0 lbs. on February 22.
The greatest recorded daily horizontal movement of the air in the year was 747 miles on March 10.
The least recorded daily horizontal movement of the air in the year was 61 miles on October 4.

## MONTHLY MEAN READING of the BAROMETER at every HOUR of the DAY, as deduced from the PHOTOGRAPHIC RECORDS.

| Hour, Greenwich Civil Time. | 1908. January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | in. | in. | in. | in. | in. | in. | in. | in. | in. | in. | in. | in. | in. |
| Midnight | 29·980 | 29·940 | 29·666 | 29·765 | 29·837 | 29·910 | 29·843 | 29·840 | 29·804 | 29·964 | 29·871 | 29·764 | 29·849 |
| 1h | 29·977 | 29·940 | 29·666 | 29·762 | 29·832 | 29·907 | 29·839 | 29·835 | 29·802 | 29·960 | 29·866 | 29·761 | 29·846 |
| 2 | 29·977 | 29·937 | 29·662 | 29·757 | 29·829 | 29·904 | 29·837 | 29·830 | 29·800 | 29·955 | 29·863 | 29·761 | 29·843 |
| 3 | 29·977 | 29·932 | 29·656 | 29·753 | 29·826 | 29·900 | 29·831 | 29·825 | 29·799 | 29·950 | 29·857 | 29·759 | 29·839 |
| 4 | 29·978 | 29·929 | 29·656 | 29·750 | 29·826 | 29·899 | 29·833 | 29·821 | 29·797 | 29·946 | 29·854 | 29·753 | 29·837 |
| 5 | 29·977 | 29·927 | 29·658 | 29·752 | 29·830 | 29·902 | 29·837 | 29·821 | 29·797 | 29·945 | 29·854 | 29·747 | 29·837 |
| 6 | 29·976 | 29·926 | 29·661 | 29·758 | 29·833 | 29·905 | 29·840 | 29·825 | 29·801 | 29·948 | 29·858 | 29·745 | 29·840 |
| 7 | 29·979 | 29·925 | 29·668 | 29·763 | 29·837 | 29·910 | 29·844 | 29·829 | 29·806 | 29·955 | 29·865 | 29·748 | 29·844 |
| 8 | 29·986 | 29·926 | 29·674 | 29·767 | 29·839 | 29·914 | 29·847 | 29·832 | 29.808 | 29·961 | 29·876 | 29·754 | 29·849 |
| 9 | 29·994 | 29·924 | 29·678 | 29·769 | 29·839 | 29·915 | 29·847 | 29·832 | 29·811 | 29·967 | 29·887 | 29·760 | 29·852 |
| 10 | 29·997 | 29·919 | 29·681 | 29·769 | 29·837 | 29·915 | 29·847 | 29·829 | 29·812 | 29·968 | 29·893 | 29·764 | 29·853 |
| 11 | 29·996 | 29·916 | 29·682 | 29·765 | 29·833 | 29·913 | 29·845 | 29·824 | 29·808 | 29·966 | 29·894 | 29·759 | 29·850 |
| Noon | 29·985 | 29·902 | 29·680 | 29·760 | 29·828 | 29·910 | 29·845 | 29·817 | 29·806 | 29·961 | 29·886 | 29·749 | 29·844 |
| 13h | 29·970 | 29·885 | 29·675 | 29·756 | 29·822 | 29·903 | 29·841 | 29·812 | 29·804 | 29·952 | 29·878 | 29·743 | 29·837 |
| 14 | 29·960 | 29·874 | 29·669 | 29·750 | 29·817 | 29·899 | 29·837 | 29·809 | 29·801 | 29·948 | 29·875 | 29·739 | 29·831 |
| 15 | 29·957 | 29·868 | 29·665 | 29·743 | 29·812 | 29·894 | 29·831 | 29·803 | 29·797 | 29·943 | 29·875 | 29·740 | 29·827 |
| 16 | 29·959 | 29·866 | 29·663 | 29·741 | 29·805 | 29·888 | 29·824 | 29·797 | 29·798 | 29·941 | 29·877 | 29·743 | 29·825 |
| 17 | 29·962 | 29·872 | 29·666 | 29·743 | 29·803 | 29·886 | 29·821 | 29·793 | 29·799 | 29·943 | 29·880 | 29·747 | 29·826 |
| 18 | 29·966 | 29·884 | 29·670 | 29·748 | 29·805 | 29·886 | 29·818 | 29·793 | 29·803 | 29·949 | 29·884 | 29·752 | 29·830 |
| 19 | 29·967 | 29·895 | 29·677 | 29·757 | 29·809 | 29·891 | 29·822 | 29·797 | 29·812 | 29·954 | 29·887 | 29·757 | 29·835 |
| 20 | 29·969 | 29·904 | 29·683 | 29·768 | 29·818 | 29·898 | 29·831 | 29·806 | 29·819 | 29·959 | 29·889 | 29·761 | 29·842 |
| 21 | 29·972 | 29·914 | 29·684 | 29·775 | 29·829 | 29·912 | 29·840 | 29·812 | 29·825 | 29·965 | 29·891 | 29·766 | 29·849 |
| 22 | 29·974 | 29·919 | 29·685 | 29·777 | 29·831 | 29·918 | 29·845 | 29·812 | 29·830 | 29·966 | 29·890 | 29·766 | 29·851 |
| 23 | 29·977 | 29·922 | 29·683 | 29·779 | 29·831 | 29·918 | 29·845 | 29·812 | 29·831 | 29·965 | 29·887 | 29·768 | 29·851 |
| 24 | 29·977 | 29·923 | 29·682 | 29·777 | 29·829 | 29·920 | 29·846 | 29·811 | 29·831 | 29·963 | 29·880 | 29·765 | 29·850 |
| Means 0h.–23h. | 29·976 | 29·910 | 29·671 | 29·759 | 29·825 | 29·904 | 29·837 | 29·817 | 29·807 | 29·955 | 29·877 | 29·754 | 29·841 |
| Means 1h.–24h. | 29·976 | 29·910 | 29·671 | 29·760 | 29·825 | 29·904 | 29·837 | 29·816 | 29·808 | 29·955 | 29·877 | 29·754 | 29·841 |
| Number of Days employed. | 31 | 29 | 31 | 30 | 31 | 30 | 31 | 31 | 30 | 31 | 30 | 31 | ... |

## MONTHLY MEAN TEMPERATURE of the AIR at every HOUR of the DAY, as deduced from the PHOTOGRAPHIC RECORDS.

| Hour, Greenwich Civil Time. | 1908. January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| Midnight | 35·2 | 40·3 | 37·9 | 40·1 | 50·9 | 54·2 | 57·2 | 55·5 | 52·4 | 50·7 | 45·1 | 39·3 | 46·6 |
| 1h | 35·3 | 39·8 | 37·6 | 39·9 | 50·5 | 53·3 | 56·7 | 55·0 | 52·2 | 50·5 | 45·0 | 39·2 | 46·3 |
| 2 | 35·4 | 39·5 | 37·5 | 39·8 | 50·0 | 52·7 | 56·2 | 54·7 | 52·0 | 50·3 | 44·8 | 39·1 | 46·0 |
| 3 | 35·2 | 39·2 | 37·5 | 39·5 | 49·7 | 52·3 | 55·9 | 54·4 | 51·8 | 50·5 | 44·9 | 38·9 | 45·8 |
| 4 | 35·2 | 39·0 | 37·3 | 39·3 | 49·4 | 52·0 | 55·8 | 54·1 | 51·7 | 50·5 | 44·9 | 38·9 | 45·7 |
| 5 | 35·2 | 38·9 | 37·1 | 39·2 | 49·5 | 52·4 | 55·9 | 54·0 | 51·5 | 50·4 | 44·8 | 39·0 | 45·7 |
| 6 | 35·2 | 38·9 | 37·2 | 39·6 | 50·5 | 53·6 | 57·1 | 54·6 | 51·3 | 50·4 | 44·7 | 39·1 | 46·0 |
| 7 | 35·1 | 39·0 | 37·5 | 40·7 | 52·2 | 55·5 | 58·8 | 56·2 | 52·5 | 50·5 | 44·8 | 39·1 | 46·8 |
| 8 | 35·3 | 39·3 | 38·5 | 42·5 | 55·0 | 58·3 | 61·4 | 58·5 | 55·1 | 51·6 | 45·1 | 39·1 | 48·3 |
| 9 | 35·7 | 40·4 | 40·3 | 44·4 | 57·5 | 61·2 | 64·2 | 61·3 | 58·1 | 53·2 | 46·1 | 39·3 | 50·1 |
| 10 | 36·8 | 41·8 | 41·8 | 45·7 | 59·5 | 63·3 | 66·1 | 63·2 | 60·5 | 55·2 | 47·5 | 39·9 | 51·8 |
| 11 | 38·0 | 43·6 | 43·3 | 47·1 | 61·2 | 64·9 | 67·3 | 64·2 | 61·8 | 57·9 | 49·2 | 40·7 | 53·3 |
| Noon | 39·3 | 45·0 | 44·8 | 48·0 | 62·2 | 66·0 | 67·9 | 65·6 | 62·9 | 59·8 | 50·6 | 41·6 | 54·5 |
| 13h | 40·0 | 45·7 | 45·3 | 48·5 | 62·9 | 67·2 | 68·6 | 66·4 | 63·6 | 60·7 | 50·9 | 41·9 | 55·1 |
| 14 | 40·1 | 46·1 | 45·7 | 48·9 | 63·3 | 67·7 | 69·1 | 66·0 | 63·4 | 61·2 | 50·9 | 41·7 | 55·3 |
| 15 | 39·5 | 46·1 | 45·5 | 49·2 | 62·7 | 67·8 | 69·6 | 66·2 | 63·0 | 60·9 | 50·0 | 41·4 | 55·2 |
| 16 | 38·8 | 45·5 | 44·8 | 48·6 | 62·2 | 67·2 | 68·9 | 65·7 | 61·5 | 59·3 | 48·9 | 41·0 | 54·4 |
| 17 | 38·2 | 44·6 | 43·5 | 47·4 | 61·0 | 66·2 | 67·8 | 64·5 | 59·7 | 57·1 | 47·8 | 40·7 | 53·2 |
| 18 | 37·4 | 43·6 | 42·2 | 46·0 | 59·7 | 64·6 | 66·4 | 63·0 | 57·9 | 54·9 | 47·0 | 40·2 | 51·9 |
| 19 | 37·0 | 42·5 | 41·0 | 44·4 | 57·7 | 62·0 | 64·5 | 60·8 | 56·3 | 53·3 | 46·3 | 39·7 | 50·5 |
| 20 | 36·6 | 41·8 | 39·8 | 43·0 | 55·7 | 59·6 | 62·0 | 58·7 | 55·1 | 52·0 | 45·6 | 39·3 | 49·1 |
| 21 | 36·4 | 41·1 | 38·8 | 42·0 | 54·0 | 57·5 | 59·8 | 57·3 | 54·0 | 51·1 | 45·3 | 39·2 | 48·0 |
| 22 | 36·0 | 40·7 | 38·5 | 41·4 | 52·8 | 56·1 | 58·7 | 56·5 | 53·5 | 50·5 | 45·3 | 39·2 | 47·4 |
| 23 | 35·8 | 40·3 | 38·2 | 40·8 | 51·9 | 55·0 | 58·0 | 55·9 | 53·0 | 50·4 | 45·1 | 39·1 | 47·0 |
| 24 | 35·5 | 40·0 | 37·9 | 40·6 | 51·1 | 54·2 | 57·2 | 55·3 | 52·6 | 50·3 | 45·0 | 39·2 | 46·6 |
| Means 0h.–23h. | 36·8 | 41·8 | 40·5 | 43·6 | 55·9 | 59·6 | 62·2 | 59·7 | 56·5 | 53·9 | 46·7 | 39·9 | 49·8 |
| Means 1h.–24h. | 36·8 | 41·8 | 40·5 | 43·6 | 55·9 | 59·6 | 62·2 | 59·7 | 56·5 | 53·9 | 46·7 | 39·9 | 49·8 |
| Number of Days employed. | 31 | 29 | 31 | 30 | 31 | 30 | 31 | 30 | 30 | 31 | 30 | 31 | ... |

## MONTHLY MEAN TEMPERATURE of EVAPORATION at every HOUR of the DAY, as deduced from the PHOTOGRAPHIC RECORDS.

| Hour, Greenwich Civil Time. | 1908. January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| Midnight | 33·9 | 38·0 | 36·6 | 38·5 | 49·5 | 52·3 | 55·4 | 53·6 | 51·0 | 50·0 | 43·6 | 38·1 | 45·0 |
| 1h | 34·1 | 37·7 | 36·2 | 38·4 | 49·2 | 51·6 | 55·0 | 53·2 | 50·8 | 49·8 | 43·8 | 38·0 | 44·8 |
| 2 | 34·1 | 37·3 | 36·1 | 38·4 | 49·0 | 51·1 | 54·8 | 53·0 | 50·5 | 49·7 | 43·7 | 38·0 | 44·6 |
| 3 | 34·0 | 37·2 | 36·0 | 38·2 | 48·7 | 50·8 | 54·6 | 52·8 | 50·5 | 49·8 | 43·7 | 37·9 | 44·5 |
| 4 | 33·9 | 37·2 | 35·9 | 38·0 | 48·5 | 50·5 | 54·4 | 52·7 | 50·3 | 49·8 | 43·7 | 37·9 | 44·4 |
| 5 | 33·9 | 37·2 | 35·7 | 38·0 | 48·5 | 50·8 | 54·5 | 52·6 | 50·2 | 49·8 | 43·7 | 38·0 | 44·4 |
| 6 | 33·9 | 37·2 | 35·7 | 38·2 | 49·3 | 51·5 | 55·2 | 53·1 | 49·9 | 49·7 | 43·6 | 38·1 | 44·6 |
| 7 | 33·8 | 37·3 | 36·0 | 39·1 | 50·4 | 52·6 | 56·3 | 54·1 | 50·9 | 49·8 | 43·6 | 38·1 | 45·2 |
| 8 | 34·0 | 37·7 | 36·8 | 40·1 | 51·9 | 54·3 | 57·7 | 55·3 | 52·7 | 50·7 | 43·9 | 38·0 | 46·1 |
| 9 | 34·3 | 38·6 | 37·9 | 41·1 | 53·1 | 55·7 | 59·1 | 56·5 | 54·5 | 52·0 | 44·5 | 38·3 | 47·1 |
| 10 | 35·1 | 39·6 | 38·7 | 41·8 | 54·4 | 56·9 | 60·0 | 57·3 | 55·7 | 53·2 | 45·4 | 38·8 | 48·1 |
| 11 | 36·2 | 40·8 | 39·5 | 42·4 | 55·1 | 57·8 | 60·3 | 57·7 | 56·2 | 54·9 | 46·2 | 39·4 | 48·9 |
| Noon | 37·1 | 41·7 | 40·2 | 42·8 | 55·6 | 58·4 | 60·6 | 58·2 | 56·7 | 55·7 | 46·9 | 40·1 | 49·5 |
| 13h | 37·5 | 42·0 | 40·5 | 43·2 | 56·0 | 59·0 | 60·8 | 58·4 | 56·9 | 56·0 | 47·1 | 40·2 | 49·8 |
| 14 | 37·5 | 42·4 | 40·6 | 43·2 | 56·1 | 59·3 | 61·1 | 58·4 | 56·8 | 56·1 | 47·0 | 40·1 | 49·9 |
| 15 | 37·1 | 42·3 | 40·6 | 43·3 | 55·7 | 59·2 | 61·5 | 58·5 | 56·7 | 55·9 | 46·5 | 39·8 | 49·8 |
| 16 | 36·6 | 42·0 | 40·1 | 42·9 | 55·3 | 58·8 | 60·9 | 58·2 | 56·1 | 55·1 | 45·9 | 39·5 | 49·3 |
| 17 | 36·2 | 41·4 | 39·5 | 42·5 | 54·9 | 58·2 | 60·6 | 57·8 | 55·2 | 54·1 | 45·1 | 39·3 | 48·7 |
| 18 | 35·8 | 40·5 | 38·7 | 41·7 | 54·1 | 57·6 | 59·9 | 57·0 | 54·7 | 52·7 | 44·6 | 38·9 | 48·0 |
| 19 | 35·5 | 39·9 | 38·1 | 40·9 | 53·1 | 56·1 | 59·1 | 56·2 | 53·8 | 51·7 | 44·3 | 38·6 | 47·3 |
| 20 | 35·2 | 39·4 | 37·5 | 40·1 | 52·1 | 55·0 | 58·0 | 55·4 | 53·2 | 50·8 | 43·9 | 38·2 | 46·6 |
| 21 | 35·0 | 38·8 | 37·0 | 39·6 | 51·2 | 53·7 | 56·8 | 54·6 | 52·3 | 50·1 | 43·8 | 38·1 | 45·9 |
| 22 | 34·5 | 38·5 | 36·9 | 39·2 | 50·6 | 53·1 | 56·3 | 54·5 | 51·8 | 49·7 | 43·8 | 38·1 | 45·6 |
| 23 | 34·4 | 38·2 | 36·8 | 38·9 | 50·1 | 52·6 | 56·0 | 54·1 | 51·4 | 49·7 | 43·6 | 38·0 | 45·3 |
| 24 | 34·1 | 37·9 | 36·7 | 39·0 | 49·7 | 52·1 | 55·4 | 53·5 | 51·3 | 49·7 | 43·6 | 38·0 | 45·1 |
| Means 0h.–23h. | 35·1 | 39·3 | 37·8 | 40·4 | 52·2 | 54·9 | 57·9 | 55·5 | 53·3 | 52·0 | 44·7 | 38·6 | 46·8 |
| Means 1h.–24h. | 35·2 | 39·3 | 37·8 | 40·5 | 52·2 | 54·9 | 57·9 | 55·5 | 53·3 | 51·9 | 44·7 | 38·6 | 46·8 |
| Number of Days employed. | 31 | 29 | 31 | 30 | 31 | 30 | 31 | 30 | 30 | 31 | 30 | 31 | ... |

## MONTHLY MEAN TEMPERATURE of the DEW POINT at every HOUR of the DAY, as deduced by GLAISHER'S TABLES from the corresponding AIR and EVAPORATION TEMPERATURES.

| Hour, Greenwich Civil Time. | 1908. January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| Midnight | 31·9 | 35·0 | 34·9 | 36·4 | 48·0 | 50·4 | 53·8 | 51·8 | 49·6 | 49·3 | 41·9 | 36·5 | 43·3 |
| 1h | 32·2 | 35·0 | 34·3 | 36·5 | 47·8 | 49·9 | 53·5 | 51·5 | 49·4 | 49·1 | 42·4 | 36·4 | 43·2 |
| 2 | 32·1 | 34·4 | 34·2 | 36·6 | 47·9 | 49·5 | 53·5 | 51·3 | 49·0 | 49·1 | 42·5 | 36·6 | 43·1 |
| 3 | 32·1 | 34·6 | 34·0 | 36·5 | 47·7 | 49·3 | 53·4 | 51·2 | 49·2 | 49·1 | 42·4 | 36·6 | 43·0 |
| 4 | 31·9 | 34·9 | 34·0 | 36·3 | 47·6 | 49·0 | 53·1 | 51·3 | 48·9 | 49·1 | 42·4 | 36·6 | 42·9 |
| 5 | 31·9 | 34·9 | 33·8 | 36·4 | 47·5 | 49·2 | 53·2 | 51·2 | 48·9 | 49·2 | 42·5 | 36·7 | 42·9 |
| 6 | 31·9 | 34·9 | 33·6 | 36·4 | 48·0 | 49·5 | 53·5 | 51·6 | 48·5 | 49·0 | 42·3 | 36·8 | 43·0 |
| 7 | 31·8 | 35·1 | 34·0 | 37·1 | 48·6 | 49·9 | 54·0 | 52·1 | 49·3 | 49·1 | 42·2 | 36·8 | 43·3 |
| 8 | 32·0 | 35·6 | 34·5 | 37·2 | 48·9 | 50·7 | 54·5 | 52·4 | 50·4 | 49·8 | 42·5 | 36·6 | 43·8 |
| 9 | 32·2 | 36·3 | 34·8 | 37·3 | 49·1 | 51·0 | 54·8 | 52·4 | 51·3 | 50·8 | 42·7 | 37·0 | 44·1 |
| 10 | 32·7 | 36·9 | 34·9 | 37·3 | 49·9 | 51·5 | 55·0 | 52·3 | 51·5 | 51·3 | 43·1 | 37·4 | 44·5 |
| 11 | 33·8 | 37·5 | 35·0 | 37·1 | 49·8 | 51·9 | 54·7 | 52·3 | 51·4 | 52·3 | 43·0 | 37·8 | 44·7 |
| Noon | 34·2 | 37·9 | 34·9 | 37·1 | 49·9 | 52·2 | 54·8 | 52·2 | 51·4 | 52·1 | 43·0 | 38·2 | 44·8 |
| 13h | 34·2 | 37·7 | 35·0 | 37·4 | 50·1 | 52·5 | 54·7 | 51·9 | 51·3 | 51·9 | 43·1 | 38·1 | 44·8 |
| 14 | 34·1 | 38·2 | 34·8 | 37·0 | 50·1 | 52·6 | 54·9 | 52·2 | 51·3 | 51·7 | 42·9 | 38·1 | 44·8 |
| 15 | 34·0 | 38·0 | 35·0 | 37·0 | 49·7 | 52·4 | 55·2 | 52·3 | 51·4 | 51·6 | 42·8 | 37·8 | 44·8 |
| 16 | 33·6 | 37·9 | 34·6 | 36·7 | 49·4 | 52·1 | 54·7 | 52·1 | 51·5 | 51·4 | 42·7 | 37·6 | 44·5 |
| 17 | 33·5 | 37·7 | 34·7 | 37·0 | 49·6 | 51·7 | 54·9 | 52·2 | 51·2 | 51·3 | 42·1 | 37·5 | 44·4 |
| 18 | 33·6 | 36·8 | 34·4 | 36·8 | 49·1 | 51·8 | 54·6 | 51·9 | 51·9 | 50·6 | 41·9 | 37·2 | 44·2 |
| 19 | 33·4 | 36·7 | 34·4 | 36·8 | 48·9 | 51·0 | 54·6 | 52·2 | 51·4 | 50·1 | 42·0 | 37·2 | 44·1 |
| 20 | 33·2 | 36·4 | 34·5 | 36·6 | 48·7 | 50·9 | 54·6 | 52·4 | 51·4 | 49·6 | 41·9 | 36·8 | 43·9 |
| 21 | 33·0 | 35·9 | 34·6 | 36·6 | 48·5 | 50·2 | 54·2 | 52·2 | 50·6 | 49·1 | 42·0 | 36·7 | 43·6 |
| 22 | 32·2 | 35·7 | 34·7 | 36·5 | 48·4 | 50·3 | 54·1 | 52·6 | 50·1 | 48·9 | 42·1 | 36·7 | 43·5 |
| 23 | 32·2 | 35·5 | 34·9 | 36·5 | 48·3 | 50·3 | 54·2 | 52·4 | 49·8 | 49·0 | 41·9 | 36·6 | 43·5 |
| 24 | 31·9 | 35·2 | 35·1 | 37·0 | 48·3 | 50·0 | 53·8 | 51·8 | 50·0 | 49·1 | 42·0 | 36·4 | 43·4 |
| Means 0h.–23h. | 32·8 | 36·2 | 34·5 | 36·8 | 48·8 | 50·8 | 54·3 | 52·0 | 50·4 | 50·2 | 42·4 | 37·1 | 43·9 |
| Means 1h.–24h. | 32·8 | 36·2 | 34·5 | 36·8 | 48·8 | 50·8 | 54·3 | 52·0 | 50·5 | 50·2 | 42·4 | 37·1 | 43·9 |

## MONTHLY MEAN DEGREE of HUMIDITY (Saturation = 100) at every HOUR of the DAY, as deduced by GLAISHER'S TABLES from the corresponding AIR and EVAPORATION TEMPERATURES.

| Hour, Greenwich Civil Time. | 1908. January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight. | 87 | 82 | 89 | 87 | 90 | 87 | 88 | 88 | 91 | 95 | 89 | 90 | 89 |
| 1h | 89 | 83 | 88 | 88 | 91 | 88 | 89 | 88 | 90 | 95 | 91 | 90 | 89 |
| 2 | 88 | 82 | 88 | 89 | 93 | 90 | 91 | 88 | 90 | 96 | 92 | 91 | 90 |
| 3 | 88 | 84 | 87 | 90 | 93 | 90 | 92 | 89 | 91 | 95 | 91 | 93 | 90 |
| 4 | 87 | 86 | 88 | 90 | 94 | 89 | 91 | 90 | 90 | 95 | 91 | 93 | 90 |
| 5 | 87 | 87 | 88 | 90 | 93 | 89 | 91 | 90 | 91 | 96 | 92 | 92 | 90 |
| 6 | 87 | 87 | 87 | 89 | 92 | 86 | 88 | 89 | 90 | 95 | 92 | 92 | 89 |
| 7 | 87 | 86 | 87 | 87 | 88 | 82 | 84 | 86 | 89 | 95 | 91 | 92 | 88 |
| 8 | 88 | 87 | 86 | 82 | 80 | 76 | 78 | 80 | 85 | 94 | 91 | 91 | 85 |
| 9 | 87 | 86 | 81 | 75 | 73 | 70 | 72 | 73 | 78 | 92 | 89 | 92 | 81 |
| 10 | 86 | 84 | 78 | 73 | 70 | 65 | 68 | 68 | 72 | 87 | 86 | 91 | 77 |
| 11 | 85 | 79 | 73 | 69 | 67 | 63 | 64 | 65 | 69 | 82 | 79 | 90 | 74 |
| Noon. | 82 | 76 | 68 | 66 | 64 | 62 | 63 | 62 | 67 | 76 | 76 | 89 | 71 |
| 13h | 80 | 74 | 67 | 66 | 63 | 59 | 61 | 60 | 64 | 73 | 75 | 87 | 69 |
| 14 | 79 | 75 | 66 | 64 | 62 | 58 | 60 | 62 | 65 | 72 | 75 | 88 | 69 |
| 15 | 81 | 74 | 67 | 63 | 63 | 58 | 60 | 61 | 66 | 71 | 77 | 88 | 69 |
| 16 | 83 | 75 | 68 | 63 | 63 | 58 | 60 | 61 | 70 | 75 | 80 | 88 | 70 |
| 17 | 83 | 76 | 71 | 68 | 66 | 60 | 63 | 64 | 74 | 81 | 82 | 89 | 73 |
| 18 | 87 | 77 | 75 | 71 | 68 | 63 | 66 | 67 | 81 | 85 | 83 | 90 | 76 |
| 19 | 87 | 81 | 78 | 74 | 72 | 67 | 71 | 73 | 84 | 89 | 86 | 91 | 79 |
| 20 | 88 | 82 | 82 | 79 | 78 | 73 | 77 | 80 | 88 | 92 | 88 | 91 | 83 |
| 21 | 88 | 82 | 85 | 82 | 81 | 77 | 83 | 83 | 88 | 93 | 89 | 91 | 85 |
| 22 | 87 | 83 | 87 | 83 | 85 | 81 | 85 | 87 | 89 | 94 | 89 | 91 | 87 |
| 23 | 87 | 83 | 88 | 86 | 87 | 85 | 87 | 88 | 89 | 95 | 89 | 91 | 88 |
| 24 | 87 | 83 | 90 | 87 | 90 | 86 | 88 | 88 | 91 | 96 | 89 | 90 | 89 |
| Means 0h.–23h. | 86 | 81 | 80 | 78 | 78 | 74 | 76 | 77 | 81 | 88 | 86 | 90 | 81 |
| Means 1h.–24h. | 86 | 81 | 80 | 78 | 78 | 74 | 76 | 77 | 81 | 88 | 86 | 90 | 81 |

## TOTAL AMOUNT of SUNSHINE registered in each HOUR of the DAY in each MONTH, as derived from the RECORDS of the CAMPBELL-STOKES SELF-REGISTERING INSTRUMENT for the YEAR 1908.

| Month, 1908. | Registered Duration of Sunshine in the Hour ending 5h. | 6h. | 7h. | 8h. | 9h. | 10h. | 11h. | Noon. | 13h. | 14h. | 15h. | 16h. | 17h. | 18h. | 19h. | 20h. | Total registered Duration of Sunshine in each Month. | Corresponding aggregate Period during which the Sun was above the Horizon. | Proportion of Sunshine. | Mean Altitude of the Sun at Noon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | h | h | h | h | h | h | h | h | h | h | h | h | h | h | h | h | h | h | | ° |
| January | ... | ... | ... | ... | 2·0 | 8·0 | 9·2 | 9·5 | 11·2 | 9·4 | 7·0 | 0·6 | ... | ... | ... | ... | 56·9 | 258·4 | 0·220 | 18 |
| February | ... | ... | ... | 1·0 | 5·2 | 9·0 | 8·5 | 8·9 | 8·8 | 8·3 | 8·0 | 3·7 | 1·4 | ... | ... | ... | 62·8 | 286·7 | 0·219 | 26 |
| March | ... | ... | 1·6 | 7·6 | 11·2 | 9·7 | 13·2 | 14·4 | 13·1 | 10·0 | 8·6 | 7·7 | 4·2 | 0·5 | ... | ... | 101·8 | 366·7 | 0·278 | 37 |
| April | ... | 0·4 | 5·5 | 10·4 | 12·5 | 12·3 | 12·3 | 12·7 | 12·5 | 11·7 | 12·8 | 13·7 | 11·5 | 7·3 | 1·9 | ... | 137·5 | 414·1 | 0·332 | 48 |
| May | 0·4 | 7·6 | 11·8 | 14·3 | 16·8 | 16·4 | 17·0 | 15·7 | 15·9 | 15·5 | 15·6 | 14·3 | 13·6 | 13·0 | 10·5 | 1·5 | 199·9 | 481·9 | 0·415 | 57 |
| June | 4·6 | 10·6 | 14·0 | 15·1 | 17·1 | 17·9 | 17·0 | 17·3 | 18·9 | 20·3 | 21·7 | 21·5 | 20·7 | 19·5 | 17·3 | 8·1 | 261·6 | 494·4 | 0·529 | 62 |
| July | 2·5 | 9·6 | 11·6 | 13·4 | 15·2 | 17·3 | 16·0 | 14·2 | 14·0 | 13·8 | 15·2 | 16·6 | 16·3 | 14·7 | 9·7 | 1·9 | 202·0 | 497·4 | 0·406 | 60 |
| August | 0·1 | 6·9 | 13·5 | 14·9 | 18·5 | 18·7 | 16·8 | 17·5 | 18·8 | 16·3 | 16·2 | 17·2 | 16·6 | 12·8 | 9·0 | 0·2 | 214·0 | 450·0 | 0·476 | 52 |
| September | ... | 0·3 | 9·4 | 17·5 | 18·0 | 17·6 | 17·3 | 14·5 | 14·8 | 14·1 | 13·9 | 11·7 | 10·3 | 5·4 | 0·3 | ... | 165·1 | 378·1 | 0·437 | 41 |
| October | ... | ... | ... | 3·2 | 7·5 | 11·9 | 15·5 | 13·7 | 15·5 | 17·7 | 18·3 | 17·0 | 12·5 | 0·5 | ... | ... | 133·3 | 329·4 | 0·405 | 30 |
| November | ... | ... | ... | 0·3 | 4·1 | 7·8 | 10·8 | 13·8 | 12·7 | 12·0 | 10·4 | 4·5 | 0·2 | ... | ... | ... | 76·6 | 265·5 | 0·289 | 20 |
| December | ... | ... | ... | ... | 0·4 | 1·9 | 2·5 | 4·7 | 4·9 | 4·6 | 3·0 | 0·3 | ... | ... | ... | ... | 22·3 | 243·8 | 0·091 | 16 |
| For the Year | 7·6 | 35·4 | 67·4 | 97·7 | 128·5 | 148·5 | 156·1 | 156·9 | 161·1 | 153·7 | 150·7 | 128·8 | 107·3 | 73·7 | 48·7 | 11·7 | 1633·8 | 4466·4 | 0·366 | ... |

The hours are reckoned from *apparent* midnight.

READINGS of DRY-BULB THERMOMETERS placed in a STEVENSON'S SCREEN in the OBSERVATORY GROUNDS, and of those mounted in a louvre-boarded shed on the ROOF of the MAGNET HOUSE at an elevation of 20 feet above the GROUND; and EXCESS of the READINGS above those of the corresponding THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE, in the YEAR 1908.

(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending at 21h.)

[Observations of the maximum and minimum thermometers only have been made on Sundays, Good Friday, Christmas Day, and Public Holidays.]

## JANUARY.

| Days of the Month. | Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Days of the Month. | Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 38·0 | 32·6 | 33·4 | 33·3 | 34·2 | 32·9 | +1·6 | 0·0 | 0·0 | −0·4 | −0·2 | +0·3 | 1 | 36·6 | 32·1 | 33·2 | 33·3 | 34·1 | 32·4 | +0·2 | −0·5 | −0·2 | −0·4 | −0·3 | −0·2 |
| 2 | 32·9 | 28·1 | 29·9 | 30·4 | 29·7 | 28·8 | −0·1 | 0·0 | −0·2 | −0·2 | +0·1 | +0·4 | 2 | 32·8 | 27·6 | 29·6 | 30·8 | 29·7 | 28·7 | −0·2 | −0·5 | −0·5 | +0·2 | +0·1 | +0·3 |
| 3 | 32·0 | 24·1 | 26·0 | 31·1 | 31·4 | 26·7 | −0·6 | 0·0 | +0·2 | −0·5 | −0·3 | +0·4 | 3 | 33·4 | 22·9 | 25·1 | 31·4 | 31·1 | 25·9 | +0·8 | −1·2 | −0·7 | −0·2 | −0·6 | −0·4 |
| 4 | 38·0 | 25·1 | 26·7 | 36·0 | 36·9 | 29·5 | −0·4 | +0·9 | −1·1 | −1·1 | +0·2 | +0·6 | 4 | 38·3 | 22·7 | 26·0 | 36·3 | 36·4 | 27·9 | −0·1 | −1·5 | −1·8 | −0·8 | −0·3 | −1·0 |
| 5 | 31·0 | 20·5 | ... | ... | ... | ... | +1·0 | −0·6 | ... | ... | ... | ... | 5 | 30·5 | 20·7 | ... | ... | ... | ... | +0·5 | −0·4 | ... | ... | ... | ... |
| 6 | 49·2 | 20·1 | 40·4 | 44·0 | 48·7 | 48·1 | 0·0 | +2·2 | −0·5 | −0·1 | −0·2 | +0·3 | 6 | 49·4 | 19·3 | 40·4 | 44·0 | 48·9 | 47·9 | +0·2 | +1·4 | −0·5 | −0·1 | 0·0 | +0·1 |
| 7 | 49·2 | 45·1 | 47·8 | 48·2 | 48·2 | 45·9 | −0·6 | −0·2 | +0·2 | +0·4 | +0·1 | +0·3 | 7 | 49·1 | 44·7 | 47·6 | 48·4 | 48·1 | 46·2 | −0·7 | −0·6 | 0·0 | +0·6 | 0·0 | +0·6 |
| 8 | 46·0 | 32·1 | 36·4 | 38·8 | 40·0 | 39·7 | +0·1 | −0·2 | +0·2 | +0·7 | +0·4 | +0·1 | 8 | 46·2 | 32·0 | 36·0 | 38·9 | 39·9 | 38·9 | +0·3 | −0·3 | −0·2 | +0·8 | +0·3 | −0·7 |
| 9 | 39·8 | 30·6 | 33·4 | 34·8 | 35·2 | 31·1 | +0·2 | 0·0 | −0·1 | 0·0 | +3·1 | +0·3 | 9 | 38·9 | 30·3 | 33·1 | 34·6 | 35·1 | 30·9 | −0·7 | −0·3 | −0·4 | −0·2 | +3·0 | +0·1 |
| 10 | 34·5 | 27·3 | 31·3 | 33·6 | 34·0 | 28·8 | −0·5 | +0·7 | +0·2 | −0·2 | −0·2 | +1·4 | 10 | 34·6 | 26·5 | 31·0 | 33·7 | 33·9 | 28·4 | −0·4 | −0·1 | −0·1 | −0·1 | −0·3 | +1·0 |
| 11 | 33·7 | 22·1 | 23·9 | 31·9 | 32·9 | 27·3 | +0·6 | +3·0 | +2·2 | −0·6 | +0·2 | +1·7 | 11 | 33·8 | 20·2 | 24·0 | 32·0 | 33·1 | 27·5 | +0·7 | +1·1 | +2·3 | −0·5 | +0·4 | +1·9 |
| 12 | 35·5 | 20·6 | ... | ... | ... | ... | −1·4 | +2·7 | ... | ... | ... | ... | 12 | 36·9 | 18·9 | ... | ... | ... | ... | 0·0 | +1·0 | ... | ... | ... | ... |
| 13 | 40·5 | 23·6 | 27·3 | 36·9 | 38·4 | 36·0 | −0·6 | +1·5 | +0·9 | −1·8 | −0·3 | +0·4 | 13 | 41·5 | 21·7 | 27·1 | 38·2 | 38·6 | 35·9 | +0·4 | −0·4 | +0·7 | −0·5 | −0·1 | +0·3 |
| 14 | 46·0 | 34·3 | 38·9 | 44·1 | 44·9 | 40·6 | −0·3 | +0·1 | +1·3 | −0·1 | 0·0 | +2·5 | 14 | 46·6 | 35·1 | 39·9 | 44·7 | 45·4 | 40·7 | +0·3 | +0·9 | +2·3 | +0·5 | +0·5 | +2·6 |
| 15 | 47·5 | 38·8 | 42·1 | 44·3 | 46·8 | 46·1 | 0·0 | +1·5 | +0·1 | −0·1 | +0·9 | +0·6 | 15 | 47·8 | 37·4 | 42·0 | 44·4 | 47·0 | 46·1 | +0·3 | +0·1 | 0·0 | 0·0 | +1·1 | +0·6 |
| 16 | 51·0 | 45·0 | 49·2 | 50·4 | 50·0 | 50·5 | −0·1 | +0·1 | −0·1 | −0·1 | +0·3 | +0·1 | 16 | 51·0 | 44·6 | 49·1 | 50·4 | 49·9 | 50·4 | −0·1 | −0·3 | −0·2 | −0·1 | +0·2 | 0·0 |
| 17 | 51·3 | 47·1 | 50·0 | 50·2 | 49·9 | 49·9 | −0·7 | +0·8 | +0·1 | +0·1 | +0·2 | +0·5 | 17 | 51·7 | 46·2 | 50·1 | 50·3 | 49·6 | 49·5 | −0·3 | −0·1 | +0·2 | +0·2 | −0·1 | +0·1 |
| 18 | 50·2 | 30·4 | 40·2 | 42·9 | 41·9 | 30·7 | +0·5 | +0·8 | +0·3 | −0·7 | +1·5 | +1·1 | 18 | 50·6 | 30·5 | 39·9 | 42·9 | 42·1 | 30·9 | +0·9 | +0·9 | 0·0 | −0·7 | +1·7 | +1·3 |
| 19 | 37·8 | 27·1 | ... | ... | ... | ... | +0·2 | 0·0 | ... | ... | ... | ... | 19 | 37·9 | 26·3 | ... | ... | ... | ... | +0·3 | −0·8 | ... | ... | ... | ... |
| 20 | 42·8 | 33·7 | 37·2 | 40·9 | 42·0 | 34·3 | −0·4 | +2·5 | +0·7 | −1·1 | +0·1 | +0·9 | 20 | 42·8 | 32·6 | 36·9 | 41·1 | 41·9 | 34·4 | −0·4 | +1·4 | +0·4 | −0·9 | 0·0 | +1·0 |
| 21 | 35·3 | 25·4 | 28·8 | 32·6 | 32·7 | 32·1 | +0·8 | −0·2 | −0·6 | −0·1 | −0·1 | +0·3 | 21 | 34·5 | 25·1 | 28·7 | 32·7 | 33·1 | 31·9 | 0·0 | −0·5 | −0·7 | 0·0 | +0·3 | +0·1 |
| 22 | 38·0 | 29·9 | 33·7 | 35·6 | 37·8 | 36·6 | −0·2 | −0·2 | +0·2 | 0·0 | −0·2 | +1·2 | 22 | 38·2 | 29·3 | 33·7 | 35·5 | 38·2 | 36·2 | 0·0 | −0·8 | +0·2 | −0·1 | +0·2 | +0·8 |
| 23 | 38·6 | 32·1 | 33·8 | 36·4 | 36·4 | 33·7 | −0·8 | 0·0 | 0·0 | −0·4 | +0·8 | +0·6 | 23 | 39·6 | 32·3 | 33·9 | 36·5 | 37·9 | 33·7 | +0·2 | +0·2 | +0·1 | −0·3 | +2·3 | +0·6 |
| 24 | 34·9 | 30·9 | 33·1 | 33·4 | 34·9 | 32·9 | −0·2 | −0·5 | +0·2 | −0·2 | +0·1 | +0·2 | 24 | 34·9 | 31·0 | 33·0 | 33·7 | 34·9 | 33·0 | −0·2 | −0·4 | +0·1 | +0·1 | +0·1 | +0·3 |
| 25 | 42·5 | 28·4 | 30·5 | 34·6 | 40·0 | 42·4 | −0·3 | −0·4 | 0·0 | −0·2 | −0·6 | −0·2 | 25 | 42·6 | 28·1 | 30·7 | 34·9 | 40·4 | 42·6 | −0·2 | −0·7 | +0·2 | +0·1 | −0·2 | 0·0 |
| 26 | 50·5 | 42·1 | ... | ... | ... | ... | 0·0 | −0·5 | ... | ... | ... | ... | 26 | 50·3 | 41·9 | ... | ... | ... | ... | −0·2 | −0·7 | ... | ... | ... | ... |
| 27 | 53·8 | 47·4 | 51·3 | 52·6 | 52·7 | 48·9 | +0·2 | −0·7 | −0·1 | 0·0 | +0·1 | +0·3 | 27 | 53·5 | 47·2 | 51·6 | 52·6 | 52·7 | 48·8 | −0·1 | −0·9 | +0·2 | 0·0 | +0·1 | +0·2 |
| 28 | 49·0 | 38·4 | 43·1 | 43·7 | 41·8 | 38·6 | +0·4 | 0·0 | +0·4 | −0·3 | +0·2 | +0·2 | 28 | 50·2 | 37·7 | 43·1 | 43·7 | 41·7 | 38·4 | +1·6 | −0·7 | +0·4 | −0·3 | +0·1 | 0·0 |
| 29 | 41·0 | 35·1 | 35·9 | 40·2 | 40·8 | 36·6 | +0·1 | −0·6 | 0·0 | 0·0 | +0·3 | +1·0 | 29 | 40·7 | 34·6 | 35·8 | 39·7 | 40·7 | 36·0 | −0·2 | −1·1 | −0·1 | −0·5 | +0·2 | +0·4 |
| 30 | 40·1 | 33·4 | 34·9 | 37·9 | 39·1 | 35·9 | 0·0 | 0·0 | +0·1 | 0·0 | −0·1 | −0·2 | 30 | 40·0 | 33·1 | 34·9 | 37·7 | 39·1 | 35·8 | −0·1 | −0·3 | +0·1 | −0·2 | −0·1 | −0·3 |
| 31 | 46·4 | 35·6 | 39·4 | 45·3 | 45·0 | 43·9 | −0·3 | −0·4 | −1·0 | −0·1 | +0·1 | +0·2 | 31 | 46·9 | 35·6 | 39·4 | 45·0 | 44·9 | 43·9 | +0·2 | −0·4 | −1·0 | −0·4 | 0·0 | +0·2 |
| Means | 41·8 | 31·8 | 36·2 | 39·4 | 40·2 | 37·4 | −0·1 | +0·4 | +0·1 | −0·3 | +0·2 | +0·6 | Means | 42·0 | 31·2 | 36·1 | 39·5 | 40·3 | 37·1 | +0·1 | −0·2 | 0·0 | −0·1 | +0·3 | +0·4 |

## READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—*continued.*

### FEBRUARY.

| Days of the Month. | Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Days of the Month. | Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 44·0 | 35·5 | 37·8 | 40·2 | 40·5 | 36·3 | −0·2 | −0·1 | 0·0 | −0·2 | +0·2 | +0·4 | 1 | 44·6 | 35·0 | 37·6 | 39·7 | 40·1 | 35·9 | +0·4 | −0·6 | −0·2 | −0·7 | −0·2 | 0·0 |
| 2 | 41·2 | 31·1 | ... | ... | ... | .. | −0·3 | 0·0 | ... | ... | ... | ... | 2 | 41·6 | 30·5 | ... | ... | ... | ... | +0·1 | −0·6 | ... | ... | ... | ... |
| 3 | 44·2 | 30·8 | 38·2 | 41·5 | 44·1 | 38·9 | −0·2 | +2·5 | −0·4 | −0·1 | −0·2 | +0·3 | 3 | 44·5 | 30·6 | 38·4 | 41·4 | 44·2 | 38·8 | +0·1 | +2·3 | −0·2 | −0·2 | −0·1 | +0·2 |
| 4 | 42·3 | 34·1 | 36·2 | 41·0 | 41·4 | 38·2 | −0·4 | −0·5 | +0·3 | −0·3 | 0·0 | +0·1 | 4 | 42·4 | 33·9 | 36·1 | 40·9 | 41·3 | 38·2 | −0·3 | −0·7 | +0·2 | −0·4 | −0·1 | +0·1 |
| 5 | 42·5 | 32·6 | 33·5 | 39·2 | 42·2 | 39·9 | −0·3 | +0·5 | −0·1 | −1·6 | 0·0 | −0·1 | 5 | 42·9 | 31·4 | 33·7 | 39·3 | 42·6 | 39·9 | +0·1 | −0·7 | +0·1 | −1·5 | +0·4 | −0·1 |
| 6 | 49·3 | 38·3 | 40·9 | 43·9 | 49·2 | 40·9 | +0·1 | −0·5 | −0·1 | +0·1 | 0·0 | +1·0 | 6 | 49·4 | 38·2 | 40·9 | 43·7 | 49·4 | 40·8 | +0·2 | −0·6 | −0·1 | −0·1 | +0·2 | +0·9 |
| 7 | 48·0 | 36·1 | 40·9 | 43·0 | 46·8 | 46·6 | −0·3 | −0·5 | −0·2 | −0·4 | +0·3 | +0·4 | 7 | 48·6 | 35·7 | 40·9 | 42·9 | 46·8 | 46·8 | +0·3 | −0·9 | −0·2 | −0·5 | +0·3 | +0·6 |
| 8 | 47·3 | 37·4 | 38·7 | 45·3 | 45·8 | 46·7 | −0·3 | +0·3 | −1·8 | +0·3 | +0·2 | +0·1 | 8 | 47·6 | 36 6 | 38·7 | 44·9 | 45·7 | 46·4 | 0·0 | −0·5 | −1·8 | −0·1 | +0·1 | −0·2 |
| 9 | 47·7 | 37·6 | ... | ... | ... | ... | −0·3 | +2·3 | ... | ... | ... | ... | 9 | 47·8 | 37·1 | ... | ... | ... | ... | −0·2 | +1·8 | ... | ... | ... | ... |
| 10 | 45·8 | 39·1 | 41·1 | 43·8 | 43·5 | 39·1 | +0·1 | +4·4 | 0·0 | 0·0 | +2·3 | +4·4 | 10 | 45·6 | 38·1 | 40·9 | 43·7 | 43·4 | 38·5 | −0·1 | +3·4 | −0·2 | −0·1 | +2·2 | +3·8 |
| 11 | 49·5 | 34·7 | 39·0 | 46·7 | 48·5 | 43·7 | −0·5 | +3·1 | +0·2 | +0·1 | −0·1 | +0·6 | 11 | 49·7 | 34·1 | 39·0 | 47·0 | 48·7 | 43·0 | −0·3 | +2·5 | +0·2 | +0·4 | +0·1 | −0·1 |
| 12 | 51·2 | 37·4 | 42·4 | 49·9 | 49·1 | 37·7 | −0·8 | +1·8 | −0·9 | +0·1 | +1·0 | +1·9 | 12 | 51·8 | 35·4 | 42·9 | 49·9 | 49·8 | 36·4 | −0·2 | −0·2 | −0·4 | +0·1 | +1·7 | +0·6 |
| 13 | 46·7 | 29·9 | 31·3 | 40·4 | 46·7 | 40·3 | −1·3 | +1·2 | 0·0 | −2·1 | −0·8 | +0·5 | 13 | 47·6 | 29·1 | 31·0 | 42·0 | 47·6 | 40·4 | −0·4 | +0·4 | −0·3 | −0·5 | +0·1 | +0·6 |
| 14 | 51·0 | 39·4 | 42·8 | 49·9 | 50·9 | 42·0 | −0·5 | +0·3 | 0·0 | +0·1 | −0·5 | +0·4 | 14 | 51·4 | 38·9 | 43·1 | 49·7 | 50·9 | 41·9 | −0·1 | −0·2 | +0·3 | −0·1 | −0·5 | +0·3 |
| 15 | 49·5 | 39·5 | 47·6 | 49·4 | 47·9 | 39·9 | −0·7 | +0·7 | −0·2 | −0·2 | −0·2 | +0·3 | 15 | 51·6 | 38·2 | 47·4 | 49·6 | 47·9 | 38·2 | +1·4 | −0·6 | −0·4 | 0·0 | −0·2 | −1·4 |
| 16 | 46·5 | 33·3 | ... | ... | ... | ... | +0·4 | −0·4 | .. | ... | ... | ... | 16 | 46·5 | 32·7 | ... | ... | ... | ... | +0·4 | −1·0 | ... | ... | ... | ... |
| 17 | 54·2 | 37·6 | 47·6 | 50·0 | 53·7 | 46·6 | −0·3 | +1·5 | 0·0 | −0·6 | −0·3 | +0·6 | 17 | 54·1 | 37·6 | 47·6 | 50·6 | 53·9 | 46·3 | −0·4 | +1·5 | 0·0 | 0·0 | −0·1 | +0·3 |
| 18 | 51·3 | 42·5 | 43·9 | 46·0 | 49·9 | 45·9 | +0·5 | −0·6 | +0·1 | +0·7 | +0·4 | +1·0 | 18 | 50·8 | 42·3 | 43·8 | 46·1 | 49·9 | 45·9 | 0·0 | −0·8 | 0·0 | +0·8 | +0·4 | +1·0 |
| 19 | 51·5 | 40·1 | 42·8 | 49·0 | 51·1 | 48·7 | −0·1 | +0·5 | +0·1 | −0·1 | +0·5 | +1·0 | 19 | 51·6 | 39·2 | 42·9 | 49·0 | 51·1 | 48·1 | 0·0 | −0·4 | +0·2 | −0·1 | +0·5 | +0·4 |
| 20 | 50·5 | 43·3 | 45·7 | 48·8 | 49·9 | 46·7 | −0·7 | +0·2 | 0·0 | −0·3 | +0·3 | −0·2 | 20 | 51·1 | 43·1 | 45·7 | 48·9 | 49·9 | 46·5 | −0·1 | 0·0 | 0·0 | −0·2 | +0·3 | −0·4 |
| 21 | 51·7 | 43·5 | 46·3 | 49·9 | 50·9 | 46·1 | −0·3 | −0·4 | −0·3 | +0·1 | +0·3 | +0·4 | 21 | 51·7 | 43·0 | 46·3 | 49·9 | 50·9 | 46·0 | −0·3 | −0·9 | −0·3 | +0·1 | +0·3 | +0·3 |
| 22 | 50·2 | 41·1 | 44·6 | 48·4 | 48·6 | 45·1 | +0·2 | −0·5 | 0·0 | −0·2 | −0·3 | +0·5 | 22 | 50·6 | 41·0 | 44·7 | 48·6 | 48·4 | 44·9 | +0·6 | −0·6 | +0·1 | 0·0 | −0·5 | +0·3 |
| 23 | 50·1 | 39·6 | ... | ... | ... | ... | −0·4 | 0·0 | ... | ... | ... | ... | 23 | 50·2 | 38·9 | ... | ... | ... | ... | −0·3 | −0·7 | ... | ... | ... | ... |
| 24 | 44·9 | 35·8 | 38·4 | 43·4 | 43·4 | 41·8 | +0·1 | −0·3 | +0·1 | −0·2 | −0·2 | −0·1 | 24 | 45·5 | 35·1 | 38·6 | 43·4 | 43·4 | 39·8 | +0·7 | −1·0 | +0·3 | −0·2 | −0·2 | −2·1 |
| 25 | 46·0 | 38·1 | 40·6 | 44·4 | 43·1 | 40·0 | +0·2 | +0·7 | −0·3 | −0·2 | +0·1 | −0·4 | 25 | 46·6 | 36·2 | 40·4 | 44·4 | 43·0 | 38·7 | +0·8 | −1·2 | −0·5 | −0·2 | 0·0 | −1·7 |
| 26 | 47·3 | 37·0 | 39·7 | 43·9 | 45·8 | 43·9 | −0·2 | +0·4 | +0·6 | 0·0 | 0·0 | +0·2 | 26 | 47·2 | 36·4 | 39·1 | 44·1 | 45·7 | 43·9 | −0·3 | −0·2 | 0·0 | +0·2 | −0·1 | +0·2 |
| 27 | 47·1 | 38·4 | 42·6 | 46·7 | 46·3 | 40·3 | −0·8 | −0·7 | 0·0 | +0·1 | −0·1 | +0·6 | 27 | 47·6 | 38·1 | 42·5 | 46·9 | 46·4 | 40·0 | −0·3 | −1·0 | −0·1 | +0·3 | 0·0 | +0·3 |
| 28 | 42·5 | 33·6 | 38·3 | 39·9 | 40·9 | 34·0 | −0·5 | 0·0 | +0·6 | 0·0 | −0·2 | +0·4 | 28 | 42·6 | 32·6 | 38·4 | 39·9 | 40·9 | 33·7 | −0·4 | −1·0 | +0·7 | 0·0 | −0·2 | +0·1 |
| 29 | 39·2 | 31·0 | 32·8 | 38·7 | 38·6 | 35·9 | −0·7 | 0·0 | −0·8 | +0·2 | +0·9 | +1·1 | 29 | 39·6 | 30·2 | 32·8 | 38·6 | 38·5 | 35·8 | −0·3 | −0·8 | −0·8 | +0·1 | +0·8 | +1·0 |
| Means | 47·4 | 36·8 | 40·5 | 44·9 | 46·4 | 41·8 | −0·3 | +0·5 | −0·1 | −0·2 | +0·1 | +0·6 | Means | 47·7 | 36·2 | 40·5 | 45·0 | 46·4 | 41·4 | 0·0 | −0·1 | −0·1 | −0·1 | +0·2 | +0·2 |

READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—*continued.*

MARCH.

| Days of the Month. | Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Days of the Month. | Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 39·0 | 33·3 | ... | ... | ... | ... | −1·8 | +0·2 | ... | ... | ... | ... | 1 | 39·3 | 33·1 | ... | ... | ... | ... | −1·5 | 0·0 | ... | ... | ... | ... |
| 2 | 42·2 | 32·6 | 35·2 | 38·5 | 41·9 | 37·7 | −0·2 | −0·2 | −0·6 | −0·1 | +0·3 | +0·8 | 2 | 42·2 | 32·2 | 34·9 | 37·5 | 41·9 | 37·7 | −0·2 | −0·6 | −0·9 | −1·1 | +0·3 | +0·8 |
| 3 | 42·8 | 32·3 | 35·1 | 40·4 | 41·1 | 35·1 | −1·2 | −0·3 | −0·3 | −1·0 | +0·3 | +0·1 | 3 | 43·8 | 31·6 | 35·9 | 41·9 | 41·1 | 34·9 | −0·2 | −1·0 | +0·5 | +0·5 | +0·3 | −0·1 |
| 4 | 41·1 | 32·1 | 34·8 | 38·5 | 38·4 | 38·1 | −2·0 | +0·7 | −0·4 | −0·2 | +0·6 | +0·5 | 4 | 42·5 | 31·8 | 34·7 | 39·1 | 37·7 | 37·9 | −0·6 | +0·4 | −0·5 | +0·4 | −0·1 | +0·3 |
| 5 | 43·0 | 33·1 | 34·2 | 42·2 | 42·9 | 35·7 | −1·0 | 0·0 | −0·4 | +0·4 | −0·3 | +1·1 | 5 | 43·8 | 32·3 | 34·1 | 42·1 | 42·9 | 35·7 | −0·2 | −0·8 | −0·5 | +0·3 | −0·3 | +1·1 |
| 6 | 50·5 | 35·1 | 44·9 | 48·9 | 47·0 | 40·8 | −0·5 | +0·5 | +0·1 | +0·5 | −0·5 | +0·6 | 6 | 51·4 | 34·6 | 44·9 | 48·8 | 47·0 | 40·7 | +0·4 | 0·0 | +0·1 | +0·4 | −0·5 | +0·5 |
| 7 | 45·5 | 38·7 | 40·9 | 43·7 | 45·3 | 39·9 | −0·5 | 0·0 | 0·0 | +0·1 | −0·1 | +0·7 | 7 | 45·9 | 38·6 | 40·9 | 43·9 | 45·4 | 39·4 | −0·1 | −0·1 | 0·0 | +0·3 | 0·0 | +0·2 |
| 8 | 55·1 | 38·0 | ... | ... | ... | ... | −0·9 | +0·9 | ... | ... | ... | ... | 8 | 55·1 | 37·2 | ... | ... | ... | ... | −0·9 | +0·1 | ... | ... | ... | ... |
| 9 | 50·5 | 39·6 | 44·7 | 45·2 | 47·1 | 40·3 | +0·2 | −0·3 | 0·0 | +0·3 | +0·3 | −0·1 | 9 | 50·4 | 39·1 | 44·9 | 45·2 | 46·9 | 39·9 | +0·1 | −0·8 | +0·2 | +0·3 | +0·1 | −0·5 |
| 10 | 49·6 | 38·1 | 43·9 | 47·2 | 45·1 | 43·8 | −0·3 | −0·4 | −0·5 | +0·2 | −0·5 | +0·5 | 10 | 49·6 | 37·2 | 43·9 | 46·9 | 44·9 | 43·8 | −0·3 | −1·3 | −0·5 | −0·1 | −0·7 | +0·5 |
| 11 | 46·5 | 36·9 | 41·3 | 43·2 | 45·6 | 37·4 | −0·5 | +3·8 | +0·1 | −0·4 | +0·1 | +4·3 | 11 | 46·1 | 35·9 | 41·1 | 43·4 | 45·1 | 38·1 | −0·9 | +2·8 | −0·1 | −0·2 | −0·4 | +5·0 |
| 12 | 46·1 | 31·9 | 38·7 | 43·9 | 45·8 | 38·4 | −1·0 | +3·2 | +0·4 | −0·6 | −0·3 | +0·8 | 12 | 47·7 | 30·4 | 39·9 | 43·9 | 46·3 | 37·9 | +0·6 | +1·7 | +1·6 | −0·6 | +0·2 | +0·3 |
| 13 | 43·3 | 33·4 | 37·9 | 41·9 | 43·0 | 33·8 | −1·3 | +1·8 | −0·3 | −0·2 | −0·1 | +1·7 | 13 | 44·4 | 31·6 | 37·9 | 41·9 | 43·1 | 32·7 | −0·2 | 0·0 | −0·3 | −0·2 | 0·0 | +0·6 |
| 14 | 42·0 | 29·9 | 35·6 | 41·5 | 41·1 | 33·2 | −2·1 | +1·6 | −1·7 | −0·3 | −0·6 | +0·6 | 14 | 44·6 | 28·2 | 36·7 | 42·1 | 42·9 | 32·7 | +0·5 | −0·1 | −0·6 | +0·3 | +1·2 | +0·1 |
| 15 | 41·0 | 26·9 | ... | ... | ... | ... | −1·2 | +2·6 | ... | ... | ... | ... | 15 | 42·6 | 25·3 | ... | ... | ... | ... | +0·4 | +1·0 | ... | ... | ... | ... |
| 16 | 48·0 | 32·2 | 38·8 | 41·6 | 47·1 | 40·9 | −0·5 | +0·2 | −0·1 | +0·5 | +0·4 | +0·7 | 16 | 49·6 | 31·9 | 38·9 | 42·0 | 47·5 | 40·4 | +1·1 | −0·1 | 0·0 | +0·9 | +0·8 | +0·2 |
| 17 | 43·4 | 32·1 | 37·1 | 41·7 | 41·1 | 35·9 | −0·5 | +0·6 | −0·1 | +0·4 | −0·1 | +1·2 | 17 | 43·1 | 30·6 | 37·4 | 40·8 | 41·0 | 35·6 | −0·8 | −0·9 | +0·2 | −0·5 | −0·2 | +0·9 |
| 18 | 41·5 | 33·8 | 36·9 | 40·4 | 40·0 | 35·4 | −0·9 | −0·2 | +0·1 | −0·7 | −0·7 | +0·4 | 18 | 42·5 | 33·0 | 36·9 | 40·9 | 41·1 | 34·4 | +0·1 | −1·0 | +0·1 | −0·2 | +0·4 | −0·6 |
| 19 | 42·0 | 29·9 | 35·9 | 39·9 | 41·4 | 34·3 | −1·9 | +1·0 | −0·8 | 0·0 | +0·1 | +1·7 | 19 | 43·3 | 27·6 | 36·4 | 39·9 | 42·0 | 32·7 | −0·6 | −1·3 | −0·3 | 0·0 | +0·7 | +0·1 |
| 20 | 41·0 | 27·9 | 30·1 | 40·3 | 40·5 | 36·7 | −1·2 | +1·1 | +0·1 | −0·8 | −0·1 | +1·1 | 20 | 41·8 | 26·1 | 29·8 | 39·8 | 41·2 | 36·9 | −0·4 | −0·7 | −0·2 | −1·3 | +0·6 | +1·3 |
| 21 | 46·8 | 34·0 | 39·1 | 43·1 | 43·1 | 37·1 | −0·5 | +1·6 | +0·2 | −0·8 | +0·2 | +2·7 | 21 | 47·4 | 33·6 | 39·9 | 44·4 | 43·5 | 36·6 | +0·1 | +1·2 | +1·0 | +0·5 | +0·6 | +2·2 |
| 22 | 47·2 | 34·1 | ... | ... | ... | ... | −0·8 | +3·1 | ... | ... | ... | ... | 22 | 48·6 | 32·4 | ... | ... | ... | ... | +0·6 | +1·4 | ... | ... | ... | ... |
| 23 | 53·7 | 41·1 | 44·1 | 47·3 | 53·7 | 43·7 | +0·3 | +1·0 | +0·4 | +0·1 | +0·3 | +3·3 | 23 | 53·3 | 40·6 | 43·9 | 47·5 | 53·1 | 44·4 | −0·1 | +0·5 | +0·2 | +0·3 | −0·3 | +4·0 |
| 24 | 58·5 | 35·4 | 47·1 | 57·1 | 57·7 | 47·3 | −0·7 | +3·1 | −0·5 | +0·6 | −0·7 | +0·9 | 24 | 58·8 | 35·1 | 48·2 | 56·6 | 57·6 | 47·4 | −0·4 | +2·8 | +0·6 | +0·1 | −0·8 | +1·0 |
| 25 | 47·7 | 42·1 | 43·6 | 45·4 | 45·7 | 42·9 | +1·3 | +0·8 | −0·2 | −0·5 | −0·1 | +0·1 | 25 | 48·1 | 41·6 | 43·7 | 46·7 | 45·9 | 42·9 | +1·7 | +0·3 | −0·1 | +0·8 | +0·1 | +0·1 |
| 26 | 44·4 | 39·6 | 40·9 | 42·4 | 43·7 | 42·5 | −1·3 | −0·5 | +0·1 | −0·2 | −1·0 | +0·9 | 26 | 44·9 | 39·1 | 40·2 | 42·3 | 44·9 | 41·9 | −0·8 | −1·0 | −0·6 | −0·3 | +0·2 | +0·3 |
| 27 | 52·5 | 39·6 | 42·4 | 51·0 | 51·9 | 41·4 | −0·8 | +1·0 | −0·2 | −0·1 | −0·2 | +0·9 | 27 | 52·8 | 38·7 | 43·4 | 51·6 | 52·0 | 40·9 | −0·5 | +0·1 | +0·8 | +0·5 | −0·1 | +0·4 |
| 28 | 49·8 | 40·2 | 41·1 | 47·5 | 48·6 | 42·2 | −0·2 | +0·2 | −0·1 | −0·2 | −1·1 | +1·0 | 28 | 50·1 | 39·3 | 40·9 | 46·4 | 48·1 | 42·0 | +0·1 | −0·7 | −0·3 | −1·3 | −1·6 | +0·8 |
| 29 | 52·0 | 37·6 | ... | ... | ... | ... | −0·8 | +1·0 | ... | ... | ... | ... | 29 | 52·6 | 36·8 | ... | ... | ... | ... | −0·2 | +0·2 | ... | ... | ... | ... |
| 30 | 55·0 | 37·8 | 46·3 | 54·0 | 53·2 | 45·9 | −1·0 | −0·1 | −0·3 | +1·6 | +0·3 | +0·1 | 30 | 55·7 | 36·9 | 46·6 | 52·3 | 52·9 | 45·9 | −0·3 | −1·0 | 0·0 | −0·1 | 0·0 | +0·1 |
| 31 | 49·5 | 40·0 | 44·7 | 47·7 | 47·4 | 40·4 | +0·1 | +0·3 | 0·0 | −0·9 | −0·1 | +0·7 | 31 | 49·1 | 38·0 | 44·9 | 47·8 | 47·4 | 39·8 | −0·3 | −1·7 | +0·2 | −0·8 | −0·1 | +0·1 |
| Means | 46·8 | 35·1 | 39·8 | 44·4 | 45·4 | 39·3 | −0·8 | +0·9 | −0·2 | −0·1 | −0·1 | +1·1 | Means | 47·5 | 34·2 | 40·0 | 44·5 | 45·5 | 39·0 | −0·1 | 0·0 | 0·0 | 0·0 | 0·0 | +0·8 |

READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—*continued.*

APRIL.

| Days of the Month. | Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Days of the Month. | Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 51·0 | 35·4 | 44·4 | 48·3 | 49·5 | 46·0 | −0·1 | −0·8 | −0·5 | −0·1 | −0·1 | +0·4 | 1 | 51·8 | 35·4 | 44·7 | 48·3 | 49·9 | 45·9 | +0·7 | −0·8 | −0·2 | −0·1 | +0·3 | +0·3 |
| 2 | 60·0 | 43·0 | 50·7 | 55·3 | 55·9 | 50·4 | −0·3 | 0·0 | 0·0 | −0·5 | +0·3 | 0·0 | 2 | 59·6 | 42·1 | 51·1 | 55·9 | 55·9 | 50·2 | −0·7 | −0·9 | +0·4 | +0·1 | +0·3 | −0·2 |
| 3 | 53·6 | 41·8 | 48·4 | 51·5 | 52·7 | 46·9 | −0·4 | −0·4 | −0·4 | +0·5 | +0·1 | +0·9 | 3 | 53·6 | 41·0 | 48·8 | 51·4 | 51·8 | 46·7 | −0·4 | −1·2 | 0·0 | +0·4 | −0·8 | +0·7 |
| 4 | 50·7 | 38·6 | 43·7 | 45·9 | 49·6 | 41·3 | −1·1 | 0·0 | +0·1 | +0·5 | +0·7 | +1·0 | 4 | 52·0 | 37·6 | 43·6 | 45·9 | 49·4 | 41·1 | +0·2 | −1·0 | 0·0 | +0·5 | +0·5 | +0·8 |
| 5 | 45·0 | 39·1 | ... | ... | ... | ... | −0·9 | +0·1 | ... | ... | ... | ... | 5 | 45·5 | 38·4 | ... | ... | ... | ... | −0·4 | −0·6 | ... | ... | ... | ... |
| 6 | 48·4 | 38·1 | 42·4 | 43·7 | 48·4 | 41·0 | −0·6 | +0·3 | −0·1 | 0·0 | +0·1 | +0·1 | 6 | 48·4 | 37·3 | 42·4 | 43·3 | 47·5 | 41·0 | −0·6 | −0·5 | −0·1 | −0·4 | −0·8 | +0·1 |
| 7 | 52·8 | 36·7 | 44·8 | 50·7 | 52·4 | 41·7 | −1·2 | +0·1 | −0·5 | +0·1 | −1·6 | +0·3 | 7 | 53·6 | 35·8 | 43·9 | 48·9 | 52·1 | 41·1 | −0·4 | −0·8 | −1·4 | −1·7 | −1·9 | −0·3 |
| 8 | 56·6 | 33·1 | 44·4 | 52·9 | 56·4 | 41·1 | −0·5 | +0·3 | +1·2 | −0·9 | −0·3 | +3·0 | 8 | 57·4 | 32·3 | 42·5 | 53·9 | 56·2 | 39·8 | +0·3 | −0·5 | −0·7 | +0·1 | −0·5 | +1·7 |
| 9 | 57·3 | 32·6 | 45·8 | 55·0 | 57·1 | 47·1 | −0·8 | +4·2 | −0·3 | +0·6 | −0·4 | +0·8 | 9 | 58·8 | 31·0 | 45·9 | 55·8 | 57·9 | 47·4 | +0·7 | +2·6 | −0·2 | +1·4 | +0·4 | +1·1 |
| 10 | 49·3 | 42·4 | 45·8 | 46·8 | 45·5 | 42·8 | +0·7 | +0·3 | +0·8 | −0·2 | 0·0 | +0·7 | 10 | 49·1 | 42·1 | 45·1 | 46·4 | 45·1 | 42·2 | +0·5 | 0·0 | +0·1 | −0·6 | −0·4 | +0·1 |
| 11 | 44·8 | 40·3 | 43·1 | 44·3 | 44·8 | 41·7 | −0·7 | −0·3 | −0·5 | −0·8 | +0·2 | +0·2 | 11 | 45·6 | 40·1 | 43·4 | 45·3 | 45·0 | 41·3 | +0·1 | −0·5 | −0·2 | +0·2 | +0·4 | −0·2 |
| 12 | 52·5 | 40·3 | ... | ... | ... | ... | −1·4 | +0·1 | ... | ... | ... | ... | 12 | 54·1 | 39·6 | ... | ... | ... | ... | +0·2 | −0·6 | ... | ... | ... | ... |
| 13 | 48·0 | 35·1 | 44·9 | 47·0 | 44·9 | 40·9 | −1·5 | +0·2 | 0·0 | −0·4 | −0·1 | +0·3 | 13 | 51·6 | 33·7 | 45·2 | 50·0 | 47·4 | 40·4 | +2·1 | −1·2 | +0·3 | +2·6 | +2·4 | −0·2 |
| 14 | 47·2 | 35·8 | 46·2 | 44·9 | 46·0 | 39·9 | −0·8 | +1·1 | +0·5 | +0·2 | −0·5 | +0·3 | 14 | 50·0 | 35·1 | 46·4 | 45·2 | 46·3 | 39·4 | +2·0 | +0·4 | +0·7 | +0·5 | −0·2 | −0·2 |
| 15 | 55·5 | 36·7 | 43·6 | 50·0 | 54·9 | 45·1 | −1·4 | +0·1 | 0·0 | +0·1 | −0·6 | +0·4 | 15 | 58·2 | 36·1 | 43·3 | 50·0 | 56·7 | 44·9 | +1·3 | −0·5 | −0·3 | +0·1 | +1·2 | +0·2 |
| 16 | 58·3 | 42·6 | 52·6 | 57·2 | 56·4 | 42·9 | −0·8 | +0·2 | +0·1 | −0·2 | −0·7 | +0·5 | 16 | 59·6 | 41·6 | 52·9 | 58·1 | 57·7 | 42·4 | +0·5 | −0·8 | +0·4 | +0·7 | +0·6 | 0·0 |
| 17 | 56·2 | 37·1 | ... | ... | ... | ... | −1·4 | 0·0 | ... | ... | ... | ... | 17 | 57·7 | 36·1 | ... | ... | ... | ... | +0·1 | −1·0 | ... | ... | ... | ... |
| 18 | 49·5 | 38·6 | 44·2 | 48·3 | 48·4 | 40·4 | −0·8 | +2·2 | −0·5 | +1·0 | +0·8 | +0·5 | 18 | 49·1 | 37·3 | 43·9 | 47·9 | 46·9 | 39·9 | −1·2 | +0·9 | −0·8 | +0·6 | −0·7 | 0·0 |
| 19 | 44·8 | 34·6 | ... | ... | ... | ... | −1·0 | +1·2 | ... | ... | ... | ... | 19 | 44·5 | 33·1 | ... | ... | ... | ... | −1·3 | −0·3 | ... | ... | ... | ... |
| 20 | 44·5 | 32·3 | ... | ... | ... | ... | −1·3 | −0·1 | ... | ... | ... | ... | 20 | 44·1 | 31·3 | ... | ... | ... | ... | −1·7 | −1·1 | ... | ... | ... | ... |
| 21 | 47·2 | 31·7 | 40·4 | 46·3 | 46·9 | 42·1 | 0·0 | −0·2 | −1·1 | −0·3 | +0·2 | +0·3 | 21 | 47·2 | 30·5 | 40·8 | 46·5 | 46·8 | 41·9 | 0·0 | −1·4 | −0·7 | −0·1 | +0·1 | +0·1 |
| 22 | 54·5 | 39·1 | 49·7 | 54·0 | 47·8 | 45·3 | −0·7 | +0·9 | −0·1 | +1·0 | −0·1 | +0·4 | 22 | 54·2 | 38·6 | 49·7 | 53·7 | 47·9 | 44·9 | −1·0 | +0·4 | −0·1 | +0·7 | 0·0 | 0·0 |
| 23 | 45·3 | 33·1 | 41·0 | 43·2 | 40·0 | 33·7 | 0·0 | 0·0 | −0·2 | −0·5 | −0·1 | +0·4 | 23 | 45·0 | 32·1 | 41·2 | 45·0 | 39·9 | 32·9 | −0·3 | −1·0 | 0·0 | +1·3 | −0·2 | −0·4 |
| 24 | 41·0 | 30·6 | 33·2 | 36·8 | 38·1 | 33·8 | +0·1 | +0·1 | −1·4 | +0·3 | +1·0 | +1·2 | 24 | 41·0 | 30·6 | 31·9 | 35·7 | 36·1 | 33·6 | +0·1 | +0·1 | −2·7 | −0·8 | −1·0 | +1·0 |
| 25 | 45·3 | 31·9 | 37·0 | 43·7 | 43·8 | 32·9 | −0·8 | +0·3 | −0·3 | −0·9 | +0·2 | +0·3 | 25 | 46·5 | 31·1 | 37·0 | 44·7 | 43·8 | 32·6 | +0·4 | −0·5 | −0·3 | +0·1 | +0·2 | 0·0 |
| 26 | 50·8 | 32·1 | ... | ... | ... | ... | −0·4 | −0·3 | ... | ... | ... | ... | 26 | 50·7 | 32·1 | ... | ... | ... | ... | −0·5 | −0·3 | ... | ... | ... | ... |
| 27 | 52·0 | 38·3 | 48·4 | 49·7 | 47·1 | 45·7 | −3·5 | +1·0 | +0·1 | −0·4 | −0·3 | +0·1 | 27 | 54·2 | 37·8 | 49·8 | 50·8 | 48·1 | 45·3 | −1·3 | +0·5 | +1·5 | +0·7 | +0·7 | −0·3 |
| 28 | 47·1 | 44·1 | 46·1 | 45·4 | 45·1 | 46·0 | −0·5 | −0·4 | −0·4 | +0·2 | +0·1 | +0·4 | 28 | 47·5 | 44·0 | 46·2 | 45·0 | 44·9 | 45·9 | −0·1 | −0·5 | −0·3 | −0·2 | −0·1 | +0·3 |
| 29 | 61·8 | 43·1 | 48·9 | 55·0 | 60·4 | 51·1 | −0·2 | +0·2 | −0·7 | −0·6 | −1·1 | +0·9 | 29 | 63·4 | 42·9 | 49·0 | 55·1 | 62·0 | 50·8 | +1·4 | 0·0 | −0·6 | −0·5 | +0·5 | +0·6 |
| 30 | 57·2 | 47·6 | 51·9 | 52·1 | 55·1 | 54·9 | −0·5 | +0·5 | −0·5 | −0·5 | −0·3 | +0·3 | 30 | 57·6 | 47·8 | 52·9 | 52·5 | 55·4 | 54·6 | −0·1 | +0·7 | +0·5 | −0·1 | 0·0 | 0·0 |
| Means | 50·9 | 37·5 | 45·1 | 48·7 | 49·5 | 43·1 | −0·8 | +0·4 | −0·2 | −0·1 | −0·1 | +0·6 | Means | 51·7 | 36·8 | 45·1 | 49·0 | 49·6 | 42·8 | 0·0 | −0·3 | −0·2 | +0·2 | 0·0 | +0·2 |

READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—*continued.*

## MAY.

| Days of the Month. | Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Days of the Month. | Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 73·3 | 52·6 | 63·9 | 69·9 | 71·5 | 61·3 | 0·0 | +1·7 | −0·7 | +0·5 | +0·4 | +1·7 | 1 | 73·6 | 52·3 | 63·9 | 69·9 | 71·4 | 61·0 | +0·3 | +1·4 | −0·7 | +0·5 | +0·3 | +1·4 |
| 2 | 73·5 | 50·9 | 64·0 | 70·9 | 73·1 | 58·9 | −2·0 | +2·5 | +1·4 | +0·3 | −0·5 | +1·3 | 2 | 75·9 | 51·2 | 63·4 | 72·6 | 74·9 | 58·4 | +0·4 | +2·8 | +0·8 | +2·0 | +1·3 | +0·8 |
| 3 | 59·0 | 47·9 | ... | ... | ... | ... | +1·4 | 0·0 | ... | ... | ... | ... | 3 | 58·8 | 47·5 | ... | ... | ... | ... | +1·2 | −0·4 | ... | ... | ... | ... |
| 4 | 61·8 | 46·3 | 50·4 | 59·2 | 60·9 | 53·9 | −2·0 | +0·1 | −1·1 | −0·8 | −0·2 | +0·3 | 4 | 64·6 | 46·0 | 53·1 | 61·1 | 62·1 | 53·4 | +0·8 | −0·2 | +1·6 | +1·1 | +1·0 | −0·2 |
| 5 | 57·1 | 47·9 | 53·8 | 54·8 | 54·2 | 52·9 | −1·0 | +0·3 | 0·0 | −0·6 | −0·5 | +0·7 | 5 | 57·8 | 46·8 | 54·1 | 55·2 | 54·6 | 52·8 | −0·3 | −0·8 | +0·3 | −0·2 | −0·1 | +0·6 |
| 6 | 58·5 | 50·6 | 53·4 | 54·4 | 55·7 | 51·9 | −1·0 | +0·3 | −0·4 | −0·7 | −0·7 | +0·4 | 6 | 58·9 | 50·2 | 53·9 | 55·1 | 56·0 | 51·2 | −0·6 | −0·1 | +0·1 | 0·0 | −0·4 | −0·3 |
| 7 | 63·2 | 43·4 | 54·1 | 60·4 | 62·2 | 52·7 | −0·9 | −0·2 | +0·2 | +0·2 | +0·5 | +0·6 | 7 | 64·1 | 42·1 | 53·7 | 59·4 | 62·9 | 52·3 | 0·0 | −1·5 | −0·2 | −0·8 | +1·2 | +0·2 |
| 8 | 58·4 | 50·1 | 56·9 | 56·4 | 57·1 | 55·1 | −1·1 | −0·1 | +0·1 | 0·0 | −0·1 | 0·0 | 8 | 58·8 | 50·2 | 57·4 | 56·4 | 57·4 | 54·9 | −0·7 | 0·0 | +0·6 | 0·0 | +0·2 | −0·2 |
| 9 | 67·2 | 52·1 | 59·9 | 66·1 | 64·9 | 52·4 | −1·1 | +0·8 | −1·0 | −0·4 | +0·9 | +1·0 | 9 | 68·5 | 51·2 | 60·1 | 65·9 | 66·1 | 51·9 | +0·2 | −0·1 | −0·8 | −0·6 | +2·1 | +0·5 |
| 10 | 63·2 | 46·1 | ... | ... | ... | ... | −1·3 | +0·3 | ... | ... | ... | ... | 10 | 64·4 | 45·5 | ... | ... | ... | ... | −0·1 | −0·3 | ... | ... | ... | ... |
| 11 | 61·2 | 42·6 | 56·5 | 60·3 | 57·9 | 49·0 | −2·5 | +3·0 | −0·4 | −0·5 | +0·4 | +0·3 | 11 | 64·5 | 41·2 | 58·3 | 63·8 | 59·1 | 48·9 | +0·8 | +1·6 | +1·4 | +3·0 | +1·6 | +0·2 |
| 12 | 64·6 | 46·6 | 56·7 | 61·7 | 62·9 | 53·4 | −1·9 | +0·2 | +0·3 | −0·4 | +1·0 | +0·9 | 12 | 67·5 | 46·0 | 56·4 | 61·5 | 64·3 | 52·8 | +1·0 | −0·4 | 0·0 | −0·6 | +2·4 | +0·3 |
| 13 | 60·0 | 44·2 | 54·6 | 54·1 | 58·1 | 48·0 | −1·0 | −0·1 | +0·2 | +0·2 | −0·1 | +0·4 | 13 | 59·9 | 43·1 | 54·9 | 54·8 | 59·0 | 47·5 | −1·1 | −1·2 | +0·5 | +0·9 | +0·8 | −0·1 |
| 14 | 54·8 | 42·9 | 51·9 | 54·7 | 50·3 | 48·7 | −1·7 | +1·3 | +0·3 | −0·1 | +0·4 | +1·1 | 14 | 56·4 | 41·6 | 53·1 | 55·8 | 50·2 | 48·1 | −0·1 | 0·0 | +1·5 | +1·0 | +0·3 | +0·5 |
| 15 | 54·7 | 45·8 | 51·4 | 50·1 | 51·6 | 51·8 | −1·8 | +0·2 | −0·2 | −0·5 | −0·1 | +0·5 | 15 | 55·4 | 44·6 | 51·9 | 50·5 | 52·1 | 51·0 | −1·1 | −1·0 | +0·3 | −0·1 | +0·4 | −0·3 |
| 16 | 63·0 | 45·9 | 56·5 | 61·4 | 61·9 | 56·3 | −2·0 | 0·0 | +0·1 | +0·3 | +0·4 | +0·5 | 16 | 64·6 | 45·2 | 57·2 | 62·6 | 63·1 | 55·9 | −0·4 | −0·7 | +0·8 | +1·5 | +1·6 | +0·1 |
| 17 | 73·4 | 55·1 | ... | ... | ... | ... | −1·8 | 0·0 | ... | ... | ... | ... | 17 | 75·6 | 55·0 | ... | ... | ... | .. | +0·4 | −0·1 | ... | ... | ... | ... |
| 18 | 70·5 | 52·1 | 59·4 | 65·9 | 70·1 | 63·5 | −1·9 | +0·1 | −0·1 | +0·7 | −0·3 | +2·0 | 18 | 73·0 | 51·2 | 60·7 | 66·4 | 71·7 | 62·4 | +0·6 | −0·8 | +1·2 | +1·2 | +1·3 | +0·9 |
| 19 | 74·7 | 51·2 | 61·2 | 71·9 | 73·9 | 64·2 | −2·3 | +0·6 | −0·7 | −0·5 | −1·7 | +2·2 | 19 | 79·0 | 50·2 | 62·9 | 71·9 | 75·5 | 63·4 | +2·0 | −0·4 | +1·0 | −0·5 | −0·1 | +1·4 |
| 20 | 64·5 | 51·4 | 58·9 | 60·4 | 62·2 | 51·7 | −0·5 | +0·5 | −0·7 | −0·4 | −0·4 | +0·8 | 20 | 65·8 | 50·2 | 60·7 | 62·7 | 65·1 | 50·9 | +0·8 | −0·7 | +1·1 | +1·9 | +2·5 | 0·0 |
| 21 | 70·0 | 49·0 | 57·8 | 67·9 | 64·2 | 52·0 | −2·2 | +0·3 | −0·7 | −0·6 | +0·3 | +1·1 | 21 | 73·5 | 48·1 | 60·9 | 69·9 | 65·7 | 51·8 | +1·3 | −0·6 | +2·4 | +1·4 | +1·8 | +0·9 |
| 22 | 59·8 | 42·4 | 54·9 | 56·9 | 53·8 | 49·6 | −1·5 | +0·4 | +0·5 | −0·7 | 0·0 | +0·6 | 22 | 61·4 | 40·8 | 56·0 | 57·9 | 54·9 | 49·0 | +0·1 | −1·2 | +1·6 | +0·3 | +1·1 | 0·0 |
| 23 | 62·1 | 43·7 | 55·8 | 60·7 | 59·9 | 49·2 | −1·9 | +0·1 | +0·9 | +0·1 | −0·8 | +1·6 | 23 | 62·1 | 42·7 | 54·3 | 58·9 | 59·0 | 48·1 | −1·9 | −0·9 | −0·6 | −1·7 | −1·7 | +0·5 |
| 24 | 64·5 | 40·1 | ... | ... | ... | ... | −1·5 | +2·3 | ... | ... | ... | ... | 24 | 66·6 | 38·9 | ... | ... | ... | ... | +0·6 | +1·1 | ... | ... | ... | ... |
| 25 | 59·8 | 48·9 | 56·7 | 59·0 | 55·2 | 53·4 | −1·3 | +0·3 | +0·7 | −0·1 | +0·2 | +0·4 | 25 | 61·4 | 47·7 | 57·9 | 60·2 | 55·4 | 52·8 | +0·3 | −0·9 | +1·9 | +1·1 | +0·4 | −0·2 |
| 26 | 63·5 | 51·1 | 59·5 | 61·9 | 60·0 | 58·1 | −2·6 | +0·1 | +1·0 | 0·0 | −0·5 | +1·7 | 26 | 66·1 | 50·2 | 60·7 | 63·8 | 61·0 | 57·0 | 0·0 | −0·8 | +2·2 | +1·9 | +0·5 | +0·6 |
| 27 | 72·9 | 52·1 | 65·5 | 70·5 | 72·2 | 57·1 | −1·7 | +2·5 | +0·7 | −1·6 | +0·2 | +1·3 | 27 | 74·6 | 51·3 | 66·6 | 70·9 | 72·5 | 56·0 | 0·0 | +1·7 | +1·8 | −1·2 | +0·5 | +0·2 |
| 28 | 69·7 | 49·9 | 66·5 | 67·7 | 68·9 | 53·9 | −1·7 | +2·9 | +0·8 | +1·1 | −1·2 | +0·5 | 28 | 71·6 | 48·2 | 65·9 | 67·7 | 69·9 | 53·4 | +0·2 | +1·2 | +0·2 | +1·1 | −0·2 | 0·0 |
| 29 | 71·5 | 49·8 | 63·9 | 70·0 | 71·2 | 60·3 | −1·3 | +0·5 | +0·8 | −0·9 | 0·0 | +0·5 | 29 | 73·1 | 49·2 | 63·9 | 69·9 | 71·9 | 60·0 | +0·3 | −0·1 | +0·8 | −1·0 | +0·7 | +0·2 |
| 30 | 66·3 | 52·6 | 57·9 | 62·8 | 65·9 | 59·9 | −1·8 | −0·3 | −0·5 | −1·7 | −1·2 | +1·3 | 30 | 69·2 | 52·2 | 58·4 | 64·1 | 68·4 | 59·7 | +1·1 | −0·7 | 0·0 | −0·4 | +1·3 | +1·1 |
| 31 | 73·9 | 55·0 | ... | ... | ... | ... | −1·4 | +0·1 | ... | ... | ... | ... | 31 | 76·4 | 54·5 | ... | ... | ... | ... | +1·1 | −0·4 | ... | ... | ... | ... |
| Means | 64·9 | 48·4 | 57·8 | 61·9 | 62·3 | 54·6 | −1·5 | +0·7 | +0·1 | −0·3 | −0·1 | +0·9 | Means | 66·6 | 47·6 | 58·5 | 62·7 | 63·2 | 54·0 | +0·2 | −0·1 | +0·8 | +0·5 | +0·8 | +0·3 |

## READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—*continued.*

### JUNE.

| Days of the Month. | Readings of Thermometers in a Stevenson's Screen. 4 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Days of the Month. | Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 79·5 | 57·3 | 70·9 | 78·4 | 77·3 | 69·1 | −1·6 | +2·3 | +0·2 | −1·2 | +1·7 | +2·2 | 1 | 82·3 | 56·4 | 72·5 | 80·9 | 79·4 | 69·0 | +1·2 | +1·4 | +1·8 | +1·3 | +3·8 | +2·1 |
| 2 | 75·2 | 59·7 | 66·9 | 68·6 | 71·5 | 62·9 | +0·1 | +0·5 | −1·3 | 0·0 | +0·6 | +2·6 | 2 | 78·4 | 59·3 | 68·7 | 70·4 | 73·1 | 62·4 | +3·3 | +0·1 | +0·5 | +1·8 | +2·2 | +2·1 |
| 3 | 76·8 | 56·2 | 74·0 | 76·2 | 74·4 | 64·5 | −1·1 | +2·1 | −0·6 | −0·3 | +0·5 | +1·7 | 3 | 78·5 | 55·1 | 74·9 | 77·4 | 75·9 | 63·7 | +0·6 | +1·0 | +0·3 | +0·9 | +2·0 | +0·9 |
| 4 | 80·5 | 59·5 | 67·8 | 79·1 | 79·9 | 62·9 | −1·0 | +1·4 | +1·1 | +1·0 | +1·5 | +0·3 | 4 | 80·8 | 58·8 | 66·6 | 77·9 | 79·9 | 61·7 | −0·7 | +0·7 | −0·1 | −0·2 | +1·5 | −0·9 |
| 5 | 67·3 | 53·7 | 59·1 | 61·9 | 63·9 | 55·1 | +1·0 | +0·5 | +2·5 | +0·6 | +1·5 | +0·9 | 5 | 68·1 | 52·7 | 57·4 | 60·9 | 65·7 | 54·2 | +1·8 | −0·5 | +0·8 | −0·4 | +3·3 | 0·0 |
| 6 | 58·0 | 47·9 | 54·1 | 54·0 | 56·2 | 50·5 | −0·3 | +0·2 | +1·9 | +0·6 | −1·5 | +0·8 | 6 | 58·6 | 48·0 | 53·8 | 54·4 | 55·8 | 49·9 | +0·3 | +0·3 | +1·6 | +1·0 | −1·9 | +0·2 |
| 7 | 61·9 | 42·1 | ... | ... | ... | ... | −3·1 | +0·4 | ... | ... | ... | ... | 7 | 64·8 | 41·1 | ... | ... | ... | ... | −0·2 | −0·6 | ... | ... | ... | ... |
| 8 | 67·2 | 49·9 | ... | ... | ... | ... | −2·0 | +0·1 | ... | ... | ... | ... | 8 | 71·1 | 49·4 | ... | ... | ... | ... | +1·9 | −0·4 | ... | ... | ... | ... |
| 9 | 68·5 | 47·6 | 54·0 | 61·2 | 64·9 | 61·5 | −2·0 | +0·5 | −0·2 | −0·8 | −0·2 | +0·9 | 9 | 69·3 | 46·0 | 54·8 | 61·9 | 65·9 | 60·9 | −1·2 | −1·1 | +0·6 | −0·1 | +0·8 | +0·3 |
| 10 | 73·2 | 56·1 | 63·9 | 68·1 | 70·1 | 63·9 | −1·6 | +0·6 | −0·3 | 0·0 | +0·4 | +0·7 | 10 | 75·1 | 55·2 | 64·9 | 68·9 | 70·9 | 63·5 | +0·3 | −0·3 | +0·7 | +0·8 | +1·2 | +0·3 |
| 11 | 70·0 | 52·9 | 64·0 | 66·2 | 69·1 | 58·1 | −1·6 | +1·3 | −1·5 | −0·4 | +0·8 | +0·6 | 11 | 71·7 | 51·5 | 66·6 | 66·9 | 70·5 | 57·5 | +0·1 | −0·1 | +1·1 | +0·3 | +2·2 | 0·0 |
| 12 | 66·0 | 52·0 | 59·5 | 64·9 | 64·4 | 57·2 | −2·0 | +0·5 | +0·6 | −0·2 | +0·3 | +3·6 | 12 | 67·8 | 51·2 | 61·2 | 66·9 | 66·1 | 56·8 | −0·2 | −0·3 | +2·3 | +1·8 | +2·0 | +3·2 |
| 13 | 64·7 | 49·6 | 59·9 | 64·7 | 58·9 | 55·9 | −2·3 | +0·3 | +0·8 | +1·4 | +0·1 | +0·6 | 13 | 67·1 | 48·7 | 61·4 | 66·7 | 59·2 | 55·7 | +0·1 | −0·6 | +2·3 | +3·4 | +0·4 | +0·4 |
| 14 | 66·5 | 55·0 | ... | ... | ... | ... | −1·6 | 0·0 | ... | ... | ... | ... | 14 | 68·8 | 54·6 | ... | ... | ... | ... | +0·7 | −0·4 | ... | ... | ... | ... |
| 15 | 69·9 | 46·3 | 64·7 | 68·2 | 67·1 | 56·7 | −0·1 | +3·0 | +1·3 | +1·4 | +0·7 | +0·7 | 15 | 71·2 | 44·3 | 65·4 | 68·4 | 68·4 | 55·9 | +1·2 | +1·0 | +2·0 | +1·6 | +2·0 | −0·1 |
| 16 | 66·5 | 52·7 | 63·0 | 59·7 | 58·8 | 57·8 | −2·3 | +0·3 | −1·5 | 0·0 | −0·6 | +0·5 | 16 | 69·2 | 52·0 | 64·3 | 59·9 | 59·9 | 57·1 | +0·4 | −0·4 | −0·2 | +0·2 | +0·5 | −0·2 |
| 17 | 60·9 | 54·8 | 57·0 | 57·3 | 57·9 | 55·2 | −0·2 | +0·2 | −1·6 | −1·1 | −1·2 | +0·4 | 17 | 61·7 | 54·2 | 57·9 | 58·4 | 59·9 | 54·8 | +0·6 | −0·4 | −0·7 | 0·0 | +0·8 | 0·0 |
| 18 | 69·0 | 46·6 | 62·4 | 64·4 | 68·9 | 57·4 | −1·2 | +1·4 | +2·0 | +0·7 | +0·7 | +1·1 | 18 | 72·6 | 45·2 | 62·7 | 66·9 | 70·7 | 56·7 | +2·4 | 0·0 | +2·3 | +3·2 | +2·5 | +0·4 |
| 19 | 70·8 | 47·0 | 62·8 | 67·2 | 69·4 | 61·8 | −1·2 | +2·4 | +0·2 | −0·8 | −0·3 | +1·1 | 19 | 73·4 | 45·0 | 63·1 | 68·1 | 71·2 | 60·4 | +1·4 | +0·4 | +0·5 | +0·1 | +1·5 | −0·3 |
| 20 | 65·9 | 50·9 | 63·0 | 62·9 | 64·4 | 53·7 | −1·2 | +0·5 | +0·8 | −0·7 | +0·4 | +0·6 | 20 | 66·0 | 49·7 | 62·3 | 63·7 | 64·5 | 52·9 | −1·1 | −0·7 | +0·1 | +0·1 | +0·5 | −0·2 |
| 21 | 63·5 | 50·1 | ... | ... | ... | ... | −1·5 | 0·0 | ... | ... | ... | ... | 21 | 64·4 | 50·1 | ... | ... | ... | ... | −0·6 | 0·0 | ... | ... | ... | ... |
| 22 | 68·1 | 47·0 | 54·7 | 63·8 | 67·8 | 58·8 | −1·1 | +3·4 | +0·1 | +0·8 | +1·1 | +3·7 | 22 | 69·9 | 44·3 | 54·0 | 61·1 | 68·1 | 58·9 | +0·7 | +0·7 | −0·6 | −1·9 | +1·4 | +3·8 |
| 23 | 73·2 | 49·1 | 64·8 | 70·2 | 72·9 | 64·0 | −0·8 | +2·7 | +1·0 | +0·1 | +0·4 | +2·5 | 23 | 73·6 | 47·8 | 64·8 | 70·9 | 72·9 | 63·7 | −0·4 | +1·4 | +1·0 | +0·8 | +0·4 | +2·2 |
| 24 | 73·9 | 49·3 | 66·2 | 71·9 | 73·8 | 58·0 | −0·4 | +3·7 | +0·6 | +0·7 | +0·2 | +0·6 | 24 | 74·6 | 47·7 | 64·6 | 71·6 | 73·4 | 57·1 | +0·3 | +2·1 | −1·0 | +0·4 | −0·2 | −0·3 |
| 25 | 70·3 | 51·3 | 55·8 | 66·0 | 69·4 | 55·8 | −0·9 | +0·7 | 0·0 | +0·4 | +0·4 | +2·2 | 25 | 72·6 | 50·7 | 55·9 | 65·8 | 70·1 | 54·9 | +1·4 | +0·1 | +0·1 | +0·2 | +1·1 | +1·3 |
| 26 | 76·9 | 49·3 | ... | ... | ... | ... | −1·7 | +3·9 | ... | ... | ... | ... | 26 | 79·1 | 47·2 | ... | ... | ... | ... | +0·5 | +1·8 | ... | ... | ... | ... |
| 27 | 67·5 | 52·1 | 58·8 | 62·9 | 65·8 | 60·9 | −1·0 | +0·3 | −0·4 | −0·4 | −0·8 | +0·4 | 27 | 68·8 | 52·2 | 59·0 | 63·1 | 66·9 | 60·8 | +0·3 | +0·4 | −0·2 | −0·2 | +0·3 | +0·3 |
| 28 | 73·0 | 54·2 | ... | ... | ... | ... | −0·8 | −0·1 | ... | ... | ... | ... | 28 | 74·8 | 54·4 | ... | ... | ... | ... | +1·0 | +0·1 | ... | ... | ... | ... |
| 29 | 75·0 | 54·0 | 66·1 | 73·8 | 72·8 | 56·8 | −1·0 | +0·2 | +1·1 | −0·8 | +0·1 | +2·2 | 29 | 74·6 | 53·9 | 64·4 | 74·0 | 74·2 | 55·8 | −1·4 | +0·1 | −0·6 | −0·6 | +1·5 | +1·2 |
| 30 | 76·0 | 52·9 | 63·7 | 73·4 | 76·0 | 61·9 | −1·0 | +0·7 | +0·8 | +0·1 | −0·6 | +1·8 | 30 | 78·1 | 52·2 | 63·2 | 73·1 | 77·1 | 61·2 | +1·1 | 0·0 | +0·3 | −0·2 | +0·5 | +1·1 |
| Means | 69·9 | 51·6 | 62·4 | 66·9 | 68·2 | 59·2 | −1·2 | +1·1 | +0·3 | 0·0 | +0·3 | +1·4 | Means | 71·6 | 50·6 | 62·7 | 67·4 | 69·2 | 58·6 | +0·5 | +0·2 | +0·6 | +0·6 | +1·3 | +0·7 |

READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—*continued.*

## JULY.

| Days of the Month. | Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Days of the Month. | Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 78·5 | 53·6 | 70·2 | 78·3 | 76·9 | 62·7 | −1·4 | +1·0 | +0·1 | −1·3 | +0·3 | +2·6 | 1 | 80·0 | 52·5 | 69·9 | 78·7 | 77·6 | 61·8 | +0·1 | −0·1 | −0·2 | −0·9 | +1·0 | +1·7 |
| 2 | 79·2 | 53·3 | 69·9 | 77·9 | 76·3 | 62·8 | −0·9 | +1·2 | −0·6 | +0·5 | +0·2 | +2·7 | 2 | 81·0 | 52·2 | 69·3 | 77·7 | 77·1 | 61·4 | +0·9 | +0·1 | −1·2 | +0·3 | +1·0 | +1·3 |
| 3 | 83·4 | 53·1 | 73·1 | 80·6 | 80·1 | 58·9 | −0·6 | +3·5 | +0·5 | +0·1 | −1·7 | +1·3 | 3 | 83·6 | 51·5 | 72·9 | 78·9 | 81·7 | 57·7 | −0·4 | +1·9 | +0·3 | −1·6 | −0·1 | +0·1 |
| 4 | 61·0 | 55·8 | 56·4 | 57·1 | 60·7 | 59·1 | −1·1 | 0·0 | +0·5 | +0·1 | −0·8 | +0·4 | 4 | 62·9 | 56·1 | 56·1 | 57·4 | 61·4 | 58·7 | +0·8 | +0·3 | +0·2 | +0·4 | −0·1 | 0·0 |
| 5 | 69·8 | 56·3 | ... | ... | ... | ... | −1·2 | 0·0 | ... | ... | ... | ... | 5 | 72·5 | 56·3 | ... | ... | ... | ... | +1·5 | 0·0 | ... | ... | ... | ... |
| 6 | 73·0 | 52·5 | 63·9 | 69·0 | 71·2 | 62·0 | −2·5 | +2·6 | −0·3 | −1·2 | −0·4 | +0·9 | 6 | 74·8 | 51·2 | 65·5 | 71·2 | 72·9 | 61·7 | −0·7 | +1·3 | +1·3 | +1·0 | +1·3 | +0·6 |
| 7 | 72·2 | 56·6 | 65·1 | 70·9 | 68·9 | 61·6 | −2·8 | +0·6 | +1·0 | +0·5 | −0·6 | +0·5 | 7 | 74·6 | 55·8 | 65·7 | 71·9 | 69·7 | 60·9 | −0·4 | −0·2 | +1·6 | +1·5 | +0·2 | −0·2 |
| 8 | 65·0 | 55·4 | 61·9 | 60·1 | 59·6 | 58·0 | −1·5 | +0·5 | −0·7 | +0·3 | −0·2 | +0·6 | 8 | 66·4 | 54·1 | 61·9 | 60·0 | 59·4 | 57·1 | −0·1 | −0·8 | −0·7 | +0·2 | −0·4 | −0·3 |
| 9 | 71·5 | 54·0 | 62·8 | 65·4 | 68·9 | 54·1 | −1·5 | 0·0 | −0·8 | −0·7 | −0·7 | 0·0 | 9 | 72·5 | 53·3 | 63·0 | 66·1 | 69·9 | 53·7 | −0·5 | −0·7 | −0·6 | 0·0 | +0·3 | −0·4 |
| 10 | 67·2 | 53·7 | 62·9 | 65·1 | 64·7 | 60·7 | −1·8 | +0·6 | −0·2 | −0·2 | +0·3 | −0·3 | 10 | 68·6 | 53·2 | 63·7 | 65·9 | 65·0 | 60·2 | −0·4 | +0·1 | +0·6 | +0·6 | +0·6 | −0·8 |
| 11 | 71·6 | 58·1 | 65·1 | 68·1 | 69·9 | 64·9 | −2·1 | −0·2 | −0·7 | −0·6 | +0·1 | +0·3 | 11 | 73·6 | 57·9 | 66·1 | 69·0 | 71·1 | 64·4 | −0·1 | −0·4 | +0·3 | +0·3 | +1·3 | −0·2 |
| 12 | 67·3 | 57·1 | ... | ... | ... | ... | −2·0 | +0·5 | ... | ... | ... | ... | 12 | 70·6 | 56·5 | ... | ... | ... | ... | +1·3 | −0·1 | ... | ... | ... | ... |
| 13 | 60·0 | 54·9 | 56·7 | 56·0 | 55·8 | 57·9 | 0·0 | −0·3 | +0·2 | −0·1 | −1·1 | +0·3 | 13 | 60·0 | 55·0 | 55·9 | 55·9 | 55·9 | 57·4 | 0·0 | −0·2 | −0·6 | −0·2 | −1·0 | −0·2 |
| 14 | 66·3 | 51·2 | 62·4 | 61·3 | 61·5 | 56·9 | −1·7 | +0·1 | 0·0 | −1·2 | −0·9 | +0·7 | 14 | 68·0 | 50·1 | 64·4 | 62·7 | 62·4 | 56·1 | 0·0 | −1·0 | +2·0 | +0·2 | 0·0 | −0·1 |
| 15 | 69·2 | 52·1 | 61·4 | 66·4 | 64·7 | 58·6 | −3·8 | +0·2 | −1·6 | −0·4 | +0·1 | +0·8 | 15 | 72·2 | 50·7 | 63·2 | 67·7 | 66·0 | 57·9 | −0·8 | −1·2 | +0·2 | +0·9 | +1·4 | +0·1 |
| 16 | 64·5 | 54·5 | 63·2 | 62·2 | 57·9 | 58·2 | −1·6 | −0·1 | +0·1 | −0·4 | −0·5 | −0·4 | 16 | 66·4 | 54·2 | 64·1 | 62·6 | 57·9 | 57·9 | +0·3 | −0·4 | +1·0 | 0·0 | −0·5 | −0·7 |
| 17 | 67·4 | 56·6 | 60·9 | 58·3 | 64·9 | 57·9 | −1·5 | −0·4 | −0·8 | −0·2 | −1·0 | +0·3 | 17 | 67·6 | 56·2 | 61·5 | 58·9 | 66·8 | 57·1 | −1·3 | −0·8 | −0·2 | +0·4 | +0·9 | −0·5 |
| 18 | 64·0 | 54·6 | 56·2 | 57·8 | 60 8 | 57·5 | −0·8 | −0·4 | +0·1 | −0·3 | −1·8 | +0·4 | 18 | 64·1 | 54·4 | 55·9 | 57·9 | 60·9 | 56·1 | −0·7 | −0·6 | −0·2 | −0·2 | −1·7 | −1·0 |
| 19 | 62·1 | 54·9 | ... | ... | ... | ... | −1·4 | +0·3 | ... | ... | ... | ... | 19 | 62·7 | 54·0 | ... | ... | ... | ... | −0·8 | −0·6 | ... | ... | ... | ... |
| 20 | 68·0 | 49·3 | 56·7 | 63·1 | 67·7 | 56·7 | −0·5 | +2·2 | −0·1 | 0·0 | +0·2 | +1·2 | 20 | 68·7 | 47·8 | 56·8 | 63·4 | 68·0 | 55·4 | +0·2 | +0·7 | 0·0 | +0·3 | +0·5 | −0·1 |
| 21 | 65·6 | 51·9 | 58·9 | 63·9 | 62·9 | 58·6 | −4·4 | +0·3 | −0·5 | +0·3 | +0·5 | +0·7 | 21 | 67·6 | 50·2 | 60·0 | 65·8 | 63·1 | 58·1 | −2·4 | −1·4 | +0·6 | +2·2 | +0·7 | +0·2 |
| 22 | 76·6 | 46·2 | 65·8 | 73·9 | 76·0 | 60·7 | −1·2 | −1·9 | −0·5 | +1·3 | −0·1 | +1·1 | 22 | 80·5 | 50·2 | 67·4 | 75·0 | 78·9 | 60·2 | +2·7 | +2·1 | +1·1 | +2·4 | +2·8 | +0·6 |
| 23 | 77·1 | 56·9 | 68·4 | 74·9 | 74·9 | 65·0 | −1·9 | +1·7 | −0·6 | +1·1 | −1·5 | +4·0 | 23 | 80·6 | 55·8 | 70·5 | 76·4 | 77·3 | 65·9 | +1·6 | +0·6 | +1·5 | +2·6 | +0·9 | +4·9 |
| 24 | 80·3 | 55·1 | 72·0 | 79·1 | 79·4 | 67·0 | −2·6 | +2·0 | +0·1 | −1·3 | −1·6 | +2·0 | 24 | 83·5 | 54·2 | 73·0 | 80·6 | 82·2 | 66·9 | +0·6 | +1·1 | +1·1 | +0·2 | +1·2 | +1·9 |
| 25 | 76·1 | 59·3 | 69·9 | 71·5 | 71·8 | 63·6 | −2·9 | +2·2 | −0·7 | −0·2 | −2·7 | +1·0 | 25 | 78·7 | 58·8 | 71·4 | 72·9 | 72·9 | 62·9 | −0·3 | +1·7 | +0·8 | +1·2 | −1·6 | +0·3 |
| 26 | 75·6 | 55·1 | ... | ... | ... | ... | −3·4 | +1·2 | ... | ... | ... | ... | 26 | 78·7 | 53·7 | ... | ... | ... | ... | −0·3 | −0·2 | ... | ... | ... | ... |
| 27 | 76·8 | 53·9 | 65·9 | 71·9 | 76·0 | 66·1 | −1·2 | +2·8 | −1·3 | −0·7 | 0·0 | +1·5 | 27 | 80·4 | 52·7 | 68·8 | 73·7 | 78·1 | 65·0 | +2·4 | +1·6 | +1·6 | +1·1 | +2·1 | +0·4 |
| 28 | 73·2 | 57·4 | 69·8 | 69·1 | 71·1 | 62·9 | −0·9 | +2·4 | +1·6 | +0·3 | +0·1 | +2·1 | 28 | 73·6 | 56·5 | 68·4 | 69·9 | 70·9 | 62·1 | −0·5 | +1·5 | +0·2 | +1·1 | −0·1 | −1·3 |
| 29 | 74·8 | 54·4 | 66·8 | 71·7 | 73·9 | 61·9 | −1·0 | +0·5 | +1·6 | +0·6 | +0·2 | +2·1 | 29 | 74·0 | 53·2 | 65·3 | 70·5 | 73·7 | 60·9 | −1·8 | −0·7 | +0·1 | −0·6 | 0·0 | +1·1 |
| 30 | 81·5 | 50·9 | 69·2 | 75·8 | 81·3 | 69·7 | −1·6 | +3·3 | −0·4 | +0·2 | −0·3 | +0·8 | 30 | 84·1 | 49·3 | 70·4 | 77·9 | 82·6 | 69·1 | +1·0 | +1·7 | +0·8 | +2·3 | +1·0 | +0·2 |
| 31 | 74·8 | 63·1 | 66·0 | 70·7 | 74·7 | 64·1 | +0·3 | +1·0 | −0·4 | +0·4 | +1·1 | +1·1 | 31 | 74·0 | 62·4 | 65·9 | 68·9 | 73·3 | 62·8 | −0·5 | +0·3 | −0·5 | −1·4 | −0·3 | −0·2 |
| Means | 71·4 | 54·6 | 64·5 | 68·2 | 69·4 | 61·0 | −1·7 | +0·9 | −0·2 | −0·1 | −0·5 | +1·1 | Means | 73·1 | 53·9 | 65·1 | 68·8 | 70·2 | 60·3 | 0·0 | +0·2 | +0·4 | +0·5 | +0·4 | +0·4 |

READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—*continued.*

AUGUST.

| Days of the Month. | Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Days of the Month. | Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 70·3 | 51·6 | 63·9 | 67·7 | 70·0 | 61·9 | −0·9 | +0·6 | +1·3 | +1·3 | +0·4 | +1·5 | 1 | 70·6 | 50·2 | 65·6 | 68·0 | 70·2 | 61·3 | −0·6 | −0·8 | +3·0 | +1·6 | +0·6 | +0·9 |
| 2 | 72·3 | 50·7 | ... | ... | ... | ... | −0·4 | +2·6 | ... | ... | ... | ... | 2 | 73·7 | 49·4 | ... | ... | ... | ... | +1·0 | +1·3 | ... | ... | ... | ... |
| 3 | 80·9 | 50·1 | ... | ... | ... | ... | −2·1 | +3·0 | ... | ... | ... | ... | 3 | 83·6 | 49·2 | ... | ... | ... | ... | +0·6 | +2·1 | ... | ... | ... | ... |
| 4 | 78·2 | 58·2 | 70·8 | 78·1 | 76·6 | 67·6 | −2·0 | +2·8 | −0·8 | +0·9 | −0·4 | +1·1 | 4 | 79·9 | 57·3 | 72·8 | 79·7 | 77·9 | 66·8 | −0·3 | +1·9 | +1·2 | +2·5 | +0·9 | +0·3 |
| 5 | 67·7 | 55·1 | 60·8 | 57·1 | 56·4 | 57·9 | +1·0 | +0·5 | +0·7 | +2·0 | +0·7 | +0·5 | 5 | 67·5 | 54·0 | 60·9 | 57·0 | 54·0 | 57·8 | +0·8 | −0·6 | +0·8 | +1·9 | −1·7 | +0·4 |
| 6 | 67·2 | 57·5 | 60·0 | 63·9 | 66·9 | 59·8 | −1·0 | +1·4 | +0·2 | −0·7 | −0·7 | +0·7 | 6 | 67·0 | 56·3 | 59·9 | 63·9 | 66·7 | 59·3 | −1·2 | +0·2 | +0·1 | −0·7 | −0·9 | +0·2 |
| 7 | 75·6 | 55·4 | 60·7 | 73·2 | 74·1 | 65·0 | 0·0 | +0·2 | +0·2 | +2·2 | +0·5 | +2·4 | 7 | 75·2 | 55·4 | 60·7 | 70·0 | 72·6 | 65·7 | −0·4 | +0·2 | +0·2 | −1·0 | −1·0 | +3·1 |
| 8 | 69·8 | 54·1 | 62·4 | 67·0 | 68·9 | 61·9 | −1·3 | +2·8 | −0·5 | +1·3 | +0·9 | +2·3 | 8 | 71·6 | 53·2 | 64·5 | 68·7 | 68·9 | 61·1 | +0·5 | +1·9 | +1·6 | +3·0 | +0·9 | +1·5 |
| 9 | 75·0 | 54·1 | ... | ... | ... | ... | −3·0 | +2·4 | ... | ... | ... | ... | 9 | 77·5 | 53·2 | ... | ... | ... | ... | −0·5 | +1·5 | ... | ... | ... | ... |
| 10 | 75·3 | 53·9 | 67·0 | 73·1 | 69·2 | 54·3 | −1·1 | +0·7 | −0·6 | +1·3 | −1·3 | +0·8 | 10 | 76·3 | 52·0 | 67·9 | 73·9 | 70·5 | 52·8 | −0·1 | −1·2 | +0·3 | +2·1 | 0·0 | −0·7 |
| 11 | 68·2 | 47·9 | 59·2 | 64·8 | 65·9 | 57·0 | −1·7 | +0·6 | −0·2 | +0·9 | −0·5 | +0·5 | 11 | 68·6 | 46·2 | 58·8 | 65·9 | 66·9 | 56·0 | −1·3 | −1·1 | −0·6 | +2·0 | +0·5 | −0·5 |
| 12 | 65·2 | 47·6 | 57·9 | 62·9 | 62·9 | 58·0 | −0·8 | +0·7 | +1·0 | +0·5 | +0·3 | +0·5 | 12 | 66·6 | 46·2 | 56·3 | 62·7 | 63·9 | 57·6 | +0·6 | −0·7 | −0·6 | +0·3 | +1·3 | +0·1 |
| 13 | 62·0 | 50·4 | 54·4 | 58·1 | 60·9 | 57·4 | −1·5 | +0·2 | −0·3 | −0·2 | +0·3 | +0·5 | 13 | 63·1 | 50·2 | 54·9 | 58·4 | 61·0 | 56·9 | −0·4 | 0·0 | +0·2 | +0·1 | +0·4 | 0·0 |
| 14 | 66·0 | 53·4 | 59·9 | 64·4 | 62·2 | 57·9 | −0·6 | +0·6 | +0·2 | −0·2 | +0·4 | +1·0 | 14 | 65·5 | 52·3 | 60·5 | 63·9 | 62·6 | 56·9 | −1·1 | −0·5 | +0·8 | −0·7 | +0·8 | 0·0 |
| 15 | 67·8 | 51·1 | 61·9 | 65·9 | 67·2 | 55·7 | −1·5 | +1·9 | +0·3 | −2·0 | +1·4 | +1·9 | 15 | 69·9 | 49·3 | 59·8 | 66·7 | 68·4 | 54·5 | +0·6 | +0·1 | −1·8 | −1·2 | +2·6 | +0·7 |
| 16 | 69·7 | 50·4 | ... | ... | ... | ... | −1·2 | +2·2 | ... | ... | ... | ... | 16 | 71·0 | 49·1 | ... | ... | ... | ... | +0·1 | +0·9 | ... | ... | ... | ... |
| 17 | 70·7 | 49·6 | 60·2 | 67·3 | 69·2 | 56·8 | −0·3 | +2·4 | −0·5 | +2·2 | −0·1 | +3·9 | 17 | 70·0 | 48·7 | 60·9 | 65·6 | 68·9 | 55·5 | −1·0 | +1·5 | +0·2 | +0·5 | −0·4 | +2·6 |
| 18 | 63·2 | 54·1 | 56·7 | 58·7 | 61·4 | 58·5 | −0·8 | +3·0 | +0·3 | +0·2 | −0·2 | +1·9 | 18 | 63·7 | 52·6 | 56·6 | 58·9 | 61·9 | 57·9 | −0·3 | +1·5 | +0·2 | +0·4 | +0·3 | +1·3 |
| 19 | 65·1 | 54·8 | 59·8 | 63·7 | 64·8 | 57·0 | −1·2 | +0·3 | 0·0 | −0·2 | +0·4 | +0·7 | 19 | 66·9 | 54·3 | 60·6 | 64·1 | 65·2 | 56·1 | +0·6 | −0·2 | +0·8 | +0·2 | +0·8 | −0·2 |
| 20 | 63·3 | 53·6 | 59·3 | 60·9 | 62·8 | 59·9 | −0·7 | +0·6 | −0·2 | +0·1 | −0·3 | +0·2 | 20 | 64·4 | 52·5 | 59·3 | 60·7 | 63·3 | 59·5 | +0·4 | −0·5 | −0·2 | −0·1 | +0·2 | −0·2 |
| 21 | 73·5 | 57·9 | 65·8 | 72·5 | 69·1 | 58·7 | −1·4 | +0·5 | −0·4 | +1·3 | −0·4 | +2·8 | 21 | 73·7 | 57·5 | 66·9 | 71·7 | 70·9 | 57·8 | −1·2 | +0·1 | +0·7 | +0·5 | +1·4 | +1·9 |
| 22 | 68·8 | 55·3 | 61·9 | 64·4 | 61·8 | 59·9 | −2·2 | +1·2 | +0·1 | −0·3 | +0·3 | +1·4 | 22 | 70·4 | 55·1 | 62·6 | 66·0 | 61·1 | 58·4 | −0·6 | +1·0 | +0·8 | +1·3 | −0·4 | −0·1 |
| 23 | 60·0 | 52·1 | ... | ... | ... | ... | +1·2 | 0·0 | ... | ... | ... | ... | 23 | 58·8 | 51·2 | ... | ... | ... | ... | 0·0 | −0·9 | ... | ... | ... | ... |
| 24 | 76·0 | 52·1 | 64·8 | 70·2 | 73·9 | 58·9 | −1·3 | 0·0 | −0·8 | +0·3 | 0·0 | +0·8 | 24 | 77·0 | 51·4 | 65·0 | 70·9 | 74·9 | 57·9 | −0·3 | −0·7 | −0·6 | +1·0 | +1·0 | −0·2 |
| 25 | 70·5 | 56·7 | 62·0 | 64·9 | 60·3 | 58·7 | −1·5 | +0·2 | −1·1 | −1·3 | −1·1 | +0·7 | 25 | 70·7 | 55·5 | 62·9 | 65·9 | 60·9 | 58·1 | −1·3 | −1·0 | −0·2 | −0·3 | −0·5 | +0·1 |
| 26 | 68·6 | 52·7 | 60·1 | 66·2 | 66·6 | 60·7 | −2·0 | +0·3 | −0·7 | −0·1 | +0·1 | 0·0 | 26 | 69·4 | 51·7 | 61·4 | 67·6 | 67·0 | 60·1 | −1·2 | −0·7 | +0·6 | +1·3 | +0·5 | −0·6 |
| 27 | 66·7 | 57·6 | 62·7 | 65·7 | 65·4 | 58·0 | −1·3 | +0·5 | +0·5 | −0·1 | −1·0 | +0·6 | 27 | 67·6 | 56·5 | 63·6 | 66·9 | 65·7 | 57·0 | −0·4 | −0·6 | +1·4 | +1·1 | −0·7 | −0·4 |
| 28 | 66·0 | 52·0 | 54·8 | 61·4 | 57·4 | 54·4 | −1·9 | +0·7 | −0·9 | −0·2 | −1·5 | +0·1 | 28 | 67·1 | 50·4 | 54·7 | 62·2 | 57·3 | 53·7 | −0·8 | −0·9 | −1·0 | +0·6 | −1·6 | −0·6 |
| 29 | 68·0 | 53·5 | 60·8 | 66·5 | 61·9 | 53·8 | −1·0 | +0·4 | −1·1 | +0·2 | −1·7 | +0·4 | 29 | 68·4 | 52·4 | 61·1 | 67·1 | 62·4 | 52·9 | −0·6 | −0·7 | −0·8 | +0·8 | −1·2 | −0·5 |
| 30 | 68·1 | 49·1 | ... | ... | ... | ... | −1·1 | 0·0 | ... | ... | ... | ... | 30 | 70·0 | 47·8 | ... | ... | ... | ... | +0·8 | −1·3 | ... | ... | ... | ... |
| 31 | 62·2 | 46·7 | 59·1 | 60·5 | 58·7 | 54·3 | −1·6 | +0·1 | −0·5 | −0·6 | −0·4 | −0·1 | 31 | 63·6 | 45·2 | 60·3 | 61·8 | 59·1 | 54·1 | −0·2 | −1·4 | +0·7 | +0·7 | 0·0 | −0·3 |
| Means | 69·1 | 52·9 | 61·1 | 65·6 | 65·4 | 58·6 | −1·1 | +1·1 | −0·2 | +0·4 | −0·2 | +1·1 | Means | 70·0 | 51·8 | 61·5 | 65·9 | 65·7 | 57·8 | −0·3 | 0·0 | +0·3 | +0·7 | +0·2 | +0·4 |

READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—*continued.*

SEPTEMBER.

| Days of the Month. | Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Days of the Month. | Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 59·8 | 50·0 | 55·2 | 56·8 | 58·7 | 56·7 | −1·2 | −0·1 | −0·6 | −0·3 | −0·8 | +0·3 | 1 | 60·1 | 48·3 | 55·4 | 55 8 | 58·7 | 55·9 | −0·9 | −1·8 | −0·4 | −1·3 | −0·8 | −0·5 |
| 2 | 64·0 | 47·8 | 56·6 | 60·0 | 52·4 | 50·9 | −0·5 | +0·2 | −0·1 | −0·1 | −0·7 | +0·4 | 2 | 64·6 | 46·4 | 57·6 | 61·1 | 51·7 | 49·6 | +0·1 | −1·2 | +0·9 | +1·0 | −1·4 | −0·9 |
| 3 | 58·6 | 42·0 | 53·9 | 56·9 | 54·3 | 52·0 | −2·1 | +0·7 | −0·7 | 0·0 | −0·3 | +0·4 | 3 | 61·6 | 40·1 | 56·0 | 58·0 | 54·7 | 51·7 | +0·9 | −1·2 | +1·4 | +1·1 | +0·1 | +0·1 |
| 4 | 54·0 | 50·0 | 53·0 | 53·7 | 52·1 | 50·2 | −0·1 | +0·4 | +0·3 | −0·4 | −0·1 | 0·0 | 4 | 54·1 | 49·2 | 52·9 | 52·8 | 51·7 | 49·9 | 0·0 | −0·4 | +0·2 | −1·3 | −0·5 | −0·3 |
| 5 | 60·8 | 41·1 | 53·0 | 57·7 | 60·4 | 53·4 | −4·0 | +1·1 | +0·1 | +0·1 | +0·4 | +0·1 | 5 | 62·1 | 40·0 | 54·0 | 59·9 | 60·9 | 52·9 | −2·7 | 0·0 | +1·1 | +2·3 | +0·9 | −0·4 |
| 6 | 66·6 | 50·6 | ... | ... | ... | ... | −1·4 | +1·1 | ... | ... | ... | ... | 6 | 67·7 | 48·5 | ... | ... | ... | .. | −0·3 | −1·0 | ... | ... | ... | ... |
| 7 | 71·1 | 49·2 | 59·9 | 68·7 | 71·1 | 55·1 | −0·3 | +1·9 | −0·6 | +1·1 | +0·5 | +1·5 | 7 | 71·6 | 48·1 | 61·2 | 68·1 | 71·1 | 54·8 | +0·2 | +0·8 | +0·7 | +0·5 | +0·5 | +1·2 |
| 8 | 73·5 | 46·1 | 62·3 | 73·2 | 65·9 | 58·7 | −0·8 | +2·8 | −1·3 | +0·1 | −1·4 | +0·1 | 8 | 74·6 | 45·2 | 63·9 | 73·7 | 66·3 | 58·1 | +0·3 | +1·9 | +0·3 | +0·6 | −1·0 | −0·5 |
| 9 | 64·0 | 51·3 | 58·0 | 63·5 | 61·1 | 51·9 | −2·0 | +0·2 | −0·4 | 0·0 | −0·5 | 0·0 | 9 | 64·6 | 50·3 | 58·8 | 63·4 | 61·4 | 51·1 | −1·4 | −0·8 | +0·4 | −0·1 | −0·2 | −0·8 |
| 10 | 60·0 | 44·2 | 52·4 | 56·9 | 58·1 | 48·8 | 0·0 | 0·0 | −0·2 | +0·4 | −0·2 | +0·3 | 10 | 60·1 | 43·2 | 54·4 | 56·7 | 58·9 | 48·0 | +0·1 | −1·0 | +1·8 | +0·2 | +0·6 | −0·5 |
| 11 | 57·2 | 43·2 | 50·4 | 56·9 | 55·7 | 47·9 | −0·4 | +0·1 | −0·5 | +0·5 | −0·5 | +2·3 | 11 | 56·7 | 42·1 | 51·8 | 56·1 | 55·3 | 46·9 | −0·9 | −1·0 | +0·9 | −0·3 | −0·9 | +1·3 |
| 12 | 59·5 | 42·2 | 51·8 | 57·9 | 58·4 | 46·3 | 0·0 | +0·9 | +0·2 | +1·3 | +1·6 | +2·7 | 12 | 59·6 | 41·1 | 52·0 | 57·9 | 57·4 | 45·1 | +0·1 | −0·2 | +0·4 | +1·3 | +0·6 | +1·5 |
| 13 | 60·1 | 39·6 | ... | ... | ... | ... | −1·8 | +3·5 | ... | ... | ... | ... | 13 | 61·6 | 38·0 | ... | ... | ... | ... | −0·3 | +1·9 | ... | ... | ... | ... |
| 14 | 66·0 | 49·1 | 55·9 | 61·9 | 64·9 | 51·9 | −1·2 | +0·2 | −0·5 | −0·9 | −0·2 | +0·7 | 14 | 66·7 | 48·7 | 56·5 | 62·9 | 65·4 | 50·9 | −0·5 | −0·2 | +0·1 | +0·1 | +0·3 | −0·3 |
| 15 | 61·5 | 48·6 | 58·1 | 60·0 | 56·9 | 52·7 | −1·5 | +3·0 | −0·8 | +0·1 | −0·2 | +0·9 | 15 | 62·6 | 48·2 | 59·9 | 60·9 | 56·9 | 52·2 | −0·4 | +2·6 | +1·0 | +1·0 | −0·2 | +0·4 |
| 16 | 61·6 | 44·9 | 53·0 | 59·5 | 58·8 | 54·9 | −2·4 | +0·3 | −1·6 | −0·1 | −0·3 | +0·2 | 16 | 62·6 | 43·5 | 56·0 | 60·8 | 59·2 | 54·4 | −1·4 | −1·1 | +1·4 | +1·2 | +0·1 | −0·3 |
| 17 | 71·0 | 54·2 | 60·2 | 69·3 | 69·4 | 54·9 | 0·0 | +2·1 | −0·4 | +1·3 | +1·2 | +2·3 | 17 | 71·3 | 53·3 | 61·1 | 68·7 | 69·7 | 54·0 | +0·3 | +1·2 | +0·5 | +0·7 | +1·5 | +1·4 |
| 18 | 72·7 | 45·2 | 62·5 | 69·9 | 68·9 | 61·1 | −0·9 | +0·2 | −2·3 | −0·9 | +0·2 | +2·8 | 18 | 74·4 | 45·2 | 65·0 | 71·3 | 70·1 | 61·9 | +0·8 | +0·2 | +0·2 | +0·5 | +1·4 | +3·6 |
| 19 | 72·3 | 54·4 | 62·3 | 68·9 | 71·8 | 60·1 | −1·8 | +2·4 | −1·4 | −0·5 | −0·8 | +2·0 | 19 | 75·0 | 53·5 | 64·9 | 70·9 | 73·1 | 59·9 | +0·9 | +1·5 | +1·2 | +1·5 | +0·5 | +1·8 |
| 20 | 75·5 | 54·1 | ... | ... | ... | ... | −1·7 | +1·5 | ... | ... | ... | ... | 20 | 77·1 | 53·7 | ... | ... | ... | ... | −0·1 | +1·1 | ... | ... | ... | ... |
| 21 | 63·7 | 53·1 | 58·2 | 58·1 | 62·1 | 53·3 | −0·1 | +2·7 | 0·0 | −1·3 | −0·5 | +2·2 | 21 | 63·6 | 51·7 | 58·3 | 58·7 | 62·5 | 52·7 | −0·2 | +1·3 | +0·1 | −0·7 | −0·1 | +1·6 |
| 22 | 60·9 | 42·5 | 52·9 | 59·6 | 59·9 | 53·9 | −1·2 | +1·0 | −0·3 | −0·1 | +0·1 | +0·3 | 22 | 63·1 | 42·1 | 53·1 | 60·9 | 61·5 | 53·7 | +1·0 | +0·6 | −0·1 | +1·2 | +1·7 | +0·1 |
| 23 | 64·1 | 52·9 | 60·1 | 63·8 | 62·7 | 57·9 | −1·9 | +0·5 | −2·8 | −0·9 | +0·1 | +0·4 | 23 | 66·0 | 52·7 | 61·8 | 64·9 | 63·3 | 57·7 | 0·0 | +0·3 | −1·1 | +0·2 | +0·7 | +0·2 |
| 24 | 65·0 | 54·2 | 56·8 | 59·9 | 59·2 | 55·2 | −1·8 | +0·2 | +0·3 | −0·8 | +0·6 | +0·2 | 24 | 65·5 | 54·2 | 56·7 | 61·1 | 58·5 | 55·2 | −1·3 | +0·2 | +0·2 | +0·4 | −0·1 | +0·2 |
| 25 | 62·4 | 51·5 | 54·9 | 57·9 | 62·4 | 53·1 | +0·4 | +1·4 | +0·3 | −0·5 | +1·2 | +0·4 | 25 | 62·9 | 51·3 | 55·1 | 59·1 | 62·5 | 52·9 | +0·9 | +1·2 | +0·5 | +0·7 | +1·3 | +0·2 |
| 26 | 65·9 | 52·1 | 56·5 | 62·4 | 62·9 | 53·5 | −1·1 | +1·1 | −1·2 | −0·1 | −0·7 | +0·7 | 26 | 66·6 | 51·7 | 58·4 | 62·8 | 62·7 | 52·9 | −0·4 | +0·7 | +0·7 | +0·3 | −0·9 | +0·1 |
| 27 | 61·9 | 49·9 | ... | ... | ... | ... | −1·7 | −0·4 | ... | ... | ... | ... | 27 | 63·2 | 49·9 | ... | ... | ... | ... | −0·4 | −0·4 | ... | ... | ... | ... |
| 28 | 70·4 | 53·9 | 61·3 | 67·5 | 70·4 | 63·6 | −1·4 | −0·4 | −0·4 | +0·5 | −1·0 | +0·5 | 28 | 70·9 | 54·3 | 62·1 | 68·7 | 69·9 | 63·0 | −0·9 | 0·0 | +0·4 | +1·7 | −1·5 | −0·1 |
| 29 | 75·2 | 59·9 | 65·2 | 69·4 | 73·2 | 61·7 | 0·0 | 0·0 | −2·4 | −0·6 | −0·5 | +1·8 | 29 | 76·3 | 59·9 | 67·7 | 70·1 | 73·4 | 61·1 | +1·1 | 0·0 | +0·1 | +0·1 | −0·3 | +1·2 |
| 30 | 79·8 | 58·1 | 65·9 | 78·7 | 78·1 | 62·2 | −0·1 | +2·0 | −2·7 | +2·0 | −0·7 | +3·1 | 30 | 80·6 | 58·1 | 69·9 | 77·9 | 78·5 | 61·9 | +0·7 | +2·0 | +1·3 | +1·2 | −0·3 | +2·8 |
| Means | 65·3 | 49·2 | 57·3 | 62·7 | 62·7 | 54·7 | −1·1 | +1·0 | −0·8 | 0·0 | −0·1 | +1·0 | Means | 66·2 | 48·4 | 58·6 | 63·2 | 62·9 | 54·2 | −0·2 | +0·2 | +0·5 | +0·5 | +0·1 | +0·5 |

READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—*continued.*

OCTOBER.

| Days of the Month. | Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Days of the Month. | Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 78·5 | 52·5 | 58·4 | 76·6 | 77·5 | 61·9 | +0·7 | +2·4 | −1·1 | +1·6 | +0·1 | +4·3 | 1 | 79·0 | 52·2 | 58·0 | 75·2 | 77·9 | 60·9 | +1·2 | +2·1 | −1·5 | +0·2 | +0·5 | +3·3 |
| 2 | 79·0 | 53·5 | 56·0 | 72·4 | 78·9 | 59·9 | +0·5 | +3·1 | −0·6 | −1·4 | +1·2 | +1·9 | 2 | 79·8 | 53·3 | 56·7 | 72·9 | 78·9 | 59·4 | +1·3 | +2·9 | +0·1 | −0·9 | +1·2 | +1·4 |
| 3 | 77·3 | 52·1 | 54·9 | 72·7 | 77·3 | 59·7 | −0·7 | 0·0 | −1·4 | +0·5 | −0·1 | +2·1 | 3 | 78·6 | 52·2 | 55·1 | 71·9 | 77·9 | 60·1 | +0·6 | +0·1 | −1·2 | −0·3 | +0·5 | +2·5 |
| 4 | 75·8 | 50·1 | ... | ... | ... | ... | +0·6 | +1·0 | ... | ... | ... | ... | 4 | 75·9 | 49·2 | ... | ... | ... | ... | +0·7 | +0·1 | ... | ... | ... | ... |
| 5 | 61·0 | 52·9 | 57·5 | 59·2 | 59·2 | 53·5 | +3·5 | +2·6 | 0·0 | −0·4 | −0·4 | +0·7 | 5 | 61·1 | 51·7 | 57·4 | 59·9 | 59·7 | 52·5 | +3·6 | +1·4 | −0·1 | +0·3 | +0·1 | −0·3 |
| 6 | 64·0 | 49·1 | 56·8 | 62·8 | 62·1 | 51·4 | −0·9 | +1·1 | −0·8 | 0·0 | −0·2 | +3·1 | 6 | 65·2 | 47·7 | 58·2 | 62·4 | 62·4 | 50·0 | +0·3 | −0·3 | +0·6 | −0·4 | +0·1 | +1·7 |
| 7 | 71·0 | 44·3 | 47·8 | 65·9 | 70·1 | 55·1 | −0·2 | +1·8 | −0·1 | −0·5 | +0·5 | +3·0 | 7 | 71·7 | 43·2 | 47·9 | 66·8 | 70·2 | 54·9 | +0·5 | +0·7 | 0·0 | +0·4 | +0·6 | +2·8 |
| 8 | 65·8 | 52·4 | 56·5 | 60·3 | 65·8 | 56·8 | −1·2 | +2·3 | +0·4 | −1·1 | −0·7 | +1·4 | 8 | 67·6 | 52·2 | 56·0 | 61·8 | 65·0 | 55·9 | +0·6 | +2·1 | −0·1 | +0·4 | −1·5 | +0·5 |
| 9 | 67·0 | 56·1 | 63·1 | 65·9 | 63·8 | 60·1 | −1·6 | +1·0 | −0·5 | −0·2 | +0·2 | +0·4 | 9 | 68·9 | 55·8 | 63·9 | 66·9 | 63·9 | 59·9 | +0·3 | +0·7 | +0·3 | +0·8 | +0·3 | +0·2 |
| 10 | 65·0 | 52·9 | 54·9 | 60·2 | 62·7 | 53·2 | −0·3 | +0·5 | −0·7 | −0·3 | −0·9 | +0·8 | 10 | 65·5 | 51·8 | 55·2 | 60·8 | 62·9 | 52·4 | +0·2 | −0·6 | −0·4 | +0·3 | −0·7 | 0·0 |
| 11 | 64·5 | 46·9 | ... | ... | ... | ... | −0·5 | +3·2 | ... | ... | ... | ... | 11 | 65·1 | 46·1 | ... | ... | ... | ... | +0·1 | +2·4 | ... | ... | ... | ... |
| 12 | 65·6 | 48·8 | 56·5 | 63·1 | 64·9 | 52·7 | −1·4 | +2·6 | −3·6 | +0·5 | +0 8 | +1·7 | 12 | 66·7 | 48·2 | 56·9 | 63·5 | 65·1 | 51·9 | −0·3 | +2·0 | −3·2 | +0·9 | +1·0 | +0·9 |
| 13 | 64·8 | 51·3 | 53·9 | 58·5 | 63·1 | 51·7 | −1·2 | +1·8 | 0·0 | −1·0 | +0·7 | +2·1 | 13 | 66·3 | 50·8 | 53·8 | 59·9 | 63·9 | 50·9 | +0·3 | +1·3 | −0·1 | +0·4 | +1·5 | +1·3 |
| 14 | 65·8 | 49·9 | 53·9 | 59·1 | 65·8 | 55·8 | −1·0 | +1·2 | 0·0 | −0·2 | −0·3 | +2·1 | 14 | 66·8 | 49·4 | 54·7 | 60·4 | 66·7 | 55·2 | 0·0 | +0·7 | +0·8 | +1·1 | +0·6 | +1·5 |
| 15 | 70·8 | 47·5 | 52·7 | 68·2 | 68·0 | 57·1 | −0·2 | +0·9 | +0·5 | −1·4 | −0·5 | +0·8 | 15 | 70·8 | 47·4 | 53·3 | 68·7 | 68·7 | 56·5 | −0·2 | +0·8 | +1·1 | −0·9 | +0·2 | +0·2 |
| 16 | 61·0 | 51·7 | 57·0 | 59·7 | 58·9 | 56·6 | −1·2 | +1·6 | −0·4 | −0·3 | +0·5 | +0·8 | 16 | 62·7 | 51·3 | 57·0 | 60·1 | 58·7 | 55·6 | +0·5 | +1·2 | −0·4 | +0·1 | +0·3 | −0·2 |
| 17 | 62·5 | 54·1 | 56·1 | 59·9 | 62·1 | 57·7 | −1·5 | +0·1 | −0·4 | −0·8 | −0·6 | +1·2 | 17 | 64·4 | 54·0 | 56·3 | 61·4 | 63·6 | 56·9 | +0·4 | 0·0 | −0·2 | +0·7 | +0·9 | +0·4 |
| 18 | 64·8 | 53·1 | ... | ... | ... | ... | −0·3 | +0·9 | ... | ... | ... | ... | 18 | 65·5 | 52·0 | ... | ... | ... | ... | +0·4 | −0·2 | ... | ... | ... | ... |
| 19 | 58·3 | 52·1 | 54·8 | 57·3 | 57·1 | 53·7 | −0·2 | +0·2 | 0·0 | −0·3 | +0·1 | +0·3 | 19 | 58·9 | 51·4 | 54·7 | 57·8 | 57·0 | 53·2 | +0·4 | −0·5 | −0·1 | +0·2 | 0·0 | −0·2 |
| 20 | 54·0 | 46·5 | 47·9 | 48·8 | 52·1 | 46·9 | +0·3 | +0·1 | 0·0 | −0·2 | +0·3 | +0·2 | 20 | 53·6 | 46·2 | 48·1 | 49·1 | 52·2 | 46·8 | −0·1 | −0·2 | +0·2 | +0·1 | +0·4 | +0·1 |
| 21 | 48·1 | 40·2 | 41·0 | 46·5 | 47·8 | 42·9 | −0·8 | −0·4 | 0·0 | −0·4 | −0·1 | +0·3 | 21 | 49·2 | 40·1 | 40·9 | 47·0 | 47·9 | 42·4 | +0·3 | −0·5 | −0·1 | +0·1 | 0·0 | −0·2 |
| 22 | 48·0 | 36·2 | 45·2 | 46·7 | 46·1 | 46·5 | −1·0 | +0·2 | −0·4 | −0·1 | −0·2 | −0·1 | 22 | 48·8 | 35·2 | 45·2 | 47·1 | 46·2 | 45·9 | −0·2 | −0·8 | −0·4 | +0·3 | −0·1 | −0·7 |
| 23 | 51·0 | 42·1 | 45·1 | 50·8 | 50·4 | 43·9 | −1·0 | +0·5 | −0·8 | −1·0 | −0·3 | +1·3 | 23 | 52·1 | 41·0 | 45·2 | 50·0 | 50·4 | 42·9 | +0·1 | −0·6 | −0·7 | −1·8 | −0·3 | +0·3 |
| 24 | 46·2 | 38·1 | 43·7 | 43·4 | 43·4 | 38·6 | −0·6 | +0·3 | 0·0 | 0·0 | −0·7 | +0·8 | 24 | 46·6 | 37·2 | 43·2 | 42·9 | 43·0 | 38·2 | −0·2 | −0·6 | −0·5 | −0·5 | −1·1 | +0·4 |
| 25 | 47·0 | 33·1 | ... | ... | ... | ... | −0·4 | 0·0 | ... | ... | ... | ... | 25 | 47·0 | 32·1 | ... | ... | ... | ... | −0·4 | −1·0 | ... | ... | ... | ... |
| 26 | 50·9 | 43·8 | 50·3 | 49·1 | 49·4 | 44·0 | −0·1 | +0·2 | −0·1 | −0·3 | −0·3 | +0·3 | 26 | 50·6 | 42·2 | 49·7 | 48·8 | 49·4 | 43·3 | −0·4 | −1·4 | −0·7 | −0·6 | −0·3 | −0·4 |
| 27 | 48·8 | 40·1 | 44·1 | 48·5 | 46·8 | 40·1 | −0·4 | +1·5 | +0·1 | −0·3 | +0·2 | +1·5 | 27 | 49·3 | 39·1 | 43·9 | 48·9 | 46·3 | 39·9 | +0·1 | +0·5 | −0·1 | +0·1 | −0·3 | +1·3 |
| 28 | 61·2 | 38·9 | 56·1 | 59·9 | 60·4 | 54·9 | −1·3 | +2·4 | 0·0 | −0·2 | −0·2 | +0·3 | 28 | 62·2 | 38·1 | 56·4 | 60·9 | 60·7 | 55·7 | −0·3 | +1·6 | +0·3 | +0·8 | +0·1 | +1·1 |
| 29 | 66·0 | 52·2 | 55·7 | 64·6 | 62·9 | 53·0 | −1·7 | +1·9 | −2·0 | 0·0 | −0·5 | +1·4 | 29 | 68·4 | 51·2 | 57·9 | 65·7 | 63·7 | 52·0 | +0·7 | +0·9 | +0·2 | +1·1 | +0·3 | +0·4 |
| 30 | 65·9 | 45·2 | 50·2 | 62·9 | 62·8 | 53·9 | −0·1 | +3·1 | −1·2 | +0·2 | −1·8 | +1·2 | 30 | 66·3 | 44·1 | 52·0 | 62·8 | 63·8 | 53·1 | +0·3 | +2·0 | +0·6 | +0·1 | −0·8 | +0·4 |
| 31 | 61·7 | 52·3 | 55·9 | 59·9 | 61·0 | 52·8 | −1·7 | +1·9 | −0·2 | −0·6 | +1·5 | +2·0 | 31 | 63·4 | 52·4 | 56·1 | 60·9 | 62·0 | 52·9 | 0·0 | +2·0 | 0·0 | +0·4 | +2·5 | +2·1 |
| Means | 62·3 | 47·7 | 52·8 | 59·4 | 60·8 | 52·4 | −0·5 | +1·3 | −0·5 | −0·3 | −0·1 | +1·3 | Means | 63·2 | 47·1 | 53·1 | 59·8 | 61·0 | 51·8 | +0·3 | +0·6 | −0·2 | +0·1 | +0·2 | +0·8 |

READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—*continued.*

NOVEMBER.

| Days of the Month. | Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Days of the Month. | Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h |
| | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 57·5 | 47·6 | ... | ... | .. | ... | −1·0 | +2·0 | ... | ... | ... | ... | 1 | 58·1 | 47·0 | ... | ... | ... | ... | −0·4 | +1·4 | ... | ... | ... | ... |
| 2 | 54·8 | 47·1 | 49·0 | 53·7 | 48·9 | 47·9 | −0·5 | −0·2 | −0·1 | −0·2 | +0·3 | +0·2 | 2 | 55·9 | 47·3 | 48·9 | 54·9 | 48·9 | 47·6 | +0·6 | 0·0 | −0·2 | +1·0 | +0·3 | −0·1 |
| 3 | 54·5 | 45·6 | 46·9 | 52·9 | 53·6 | 45·9 | −0·5 | +2·0 | −0·1 | −0·3 | 0·0 | +1·1 | 3 | 55·0 | 44·1 | 47·1 | 53·4 | 53·7 | 44·9 | 0·0 | +0·5 | +0·1 | +0·2 | +0·1 | +0·1 |
| 4 | 53·9 | 42·6 | 46·9 | 52·1 | 53·7 | 49·9 | −0·9 | +2·2 | 0·0 | −1·0 | 0·0 | 0·0 | 4 | 54·4 | 41·1 | 46·7 | 53·0 | 54·0 | 49·6 | −0·4 | +0·7 | −0·2 | −0·1 | +0·3 | −0·3 |
| 5 | 52·8 | 42·4 | 48·1 | 50·7 | 51·7 | 47·9 | −0·2 | +1·3 | −0·4 | −0·3 | −0·1 | +0·4 | 5 | 53·4 | 42·4 | 47·9 | 50·9 | 52·2 | 47·4 | +0·4 | +1·3 | −0·6 | −0·1 | +0·4 | −0·1 |
| 6 | 50·4 | 39·6 | 43·9 | 49·7 | 50·0 | 44·7 | −0·3 | +1·9 | −0·5 | −0·2 | +0·2 | +0·2 | 6 | 51·8 | 38·0 | 44·6 | 50·6 | 50·0 | 44·0 | +1·1 | +0·3 | +0·2 | +0·7 | +0·2 | −0·5 |
| 7 | 45·8 | 36·3 | 40·1 | 44·0 | 42·5 | 36·5 | +1·3 | +0·4 | 0·0 | −0·1 | +0·4 | +0·4 | 7 | 45·1 | 34·6 | 40·4 | 44·5 | 42·2 | 35·3 | +0·6 | −1·3 | +0·3 | +0·4 | +0·1 | −0·8 |
| 8 | 46·2 | 33·5 | ... | ... | ... | ... | −0·7 | +1·1 | ... | ... | ... | ... | 8 | 47·2 | 31·6 | ... | ... | ... | ... | +0·3 | −0·8 | ... | ... | ... | ... |
| 9 | 45·8 | 33·7 | 38·4 | 45·8 | 42·7 | 33·9 | −0·2 | +2·5 | 0·0 | +0·3 | −0·3 | +2·5 | 9 | 46·0 | 30·7 | 38·8 | 45·8 | 42·9 | 32·3 | 0·0 | −0·5 | +0·4 | +0·3 | −0·1 | +0·9 |
| 10 | 44·4 | 25·3 | 27·9 | 42·7 | 42·5 | 33·6 | −0·5 | +3·2 | +0·3 | −2·1 | +0·6 | +1·8 | 10 | 45·0 | 24·2 | 28·6 | 42·8 | 42·9 | 32·9 | +0·1 | +2·1 | +1·0 | −2·0 | +1·0 | +1·1 |
| 11 | 55·0 | 33·4 | 49·9 | 53·6 | 54·7 | 54·8 | −0·4 | +1·6 | −0·1 | 0·0 | +0·3 | +0·3 | 11 | 55·5 | 32·6 | 49·9 | 53·7 | 54·9 | 54·8 | +0·1 | +0·8 | −0·1 | +0·1 | +0·5 | +0·3 |
| 12 | 59·2 | 49·1 | 52·7 | 57·2 | 57·9 | 50·2 | +0·9 | +2·5 | −0·4 | 0·0 | −0·1 | +0·4 | 12 | 58·6 | 48·7 | 52·7 | 57·3 | 58·3 | 49·9 | +0·3 | +2·1 | −0·4 | +0·1 | +0·3 | +0·1 |
| 13 | 58·0 | 47·8 | 53·3 | 56·8 | 56·7 | 48·9 | +0·1 | +2·6 | −0·1 | +0·2 | +0·5 | +2·5 | 13 | 57·8 | 47·9 | 53·2 | 56·6 | 56·7 | 48·8 | −0·1 | +2·7 | −0·2 | 0·0 | +0·5 | +2·4 |
| 14 | 53·4 | 46·9 | 51·1 | 51·9 | 50·4 | 47·7 | +0·3 | +0·6 | −0·5 | 0·0 | +0·4 | +0·1 | 14 | 53·3 | 46·2 | 51·1 | 52·4 | 50·3 | 47·2 | +0·2 | −0·1 | −0·5 | +0·5 | +0·3 | −0·4 |
| 15 | 48·3 | 43·5 | ... | ... | ... | ... | −0·5 | +0·8 | ... | ... | ... | ... | 15 | 48·6 | 42·2 | ... | ... | ... | ... | −0·2 | −0·5 | ... | ... | ... | ... |
| 16 | 47·2 | 43·1 | 44·0 | 43·8 | 45·8 | 47·0 | +0·2 | −0·3 | +0·3 | +0·2 | +0·2 | +0·2 | 16 | 47·1 | 43·1 | 43·9 | 43·8 | 45·7 | 46·9 | +0·1 | −0·3 | +0·2 | +0·2 | +0·1 | +0·1 |
| 17 | 50·3 | 43·0 | 44·6 | 48·9 | 49·7 | 43·3 | +0·6 | +0·1 | −0·2 | +0·3 | +0·8 | +0·4 | 17 | 50·3 | 42·1 | 43·9 | 48·8 | 49·6 | 42·9 | +0·6 | −0·8 | −0·9 | +0·2 | +0·7 | 0·0 |
| 18 | 51·0 | 39·6 | 43·7 | 49·7 | 50·0 | 46·9 | −0·3 | +0·3 | −0·1 | +0·1 | +0·1 | 0·0 | 18 | 51·3 | 39·0 | 43·7 | 49·8 | 49·9 | 46·4 | 0·0 | −0·3 | −0·1 | +0·2 | 0·0 | −0·5 |
| 19 | 49·3 | 40·6 | 44·7 | 45·1 | 46·1 | 41·1 | −0·2 | +0·4 | +0·1 | −0·3 | 0·0 | +0·7 | 19 | 49·5 | 40·1 | 44·0 | 45·0 | 46·0 | 41·0 | 0·0 | −0·1 | −0·6 | −0·4 | −0·1 | +0·6 |
| 20 | 48·6 | 33·4 | 37·5 | 45·3 | 47·1 | 48·4 | +0·6 | +2·4 | −0·2 | −0·1 | 0·0 | +0·4 | 20 | 48·5 | 32·3 | 37·1 | 45·1 | 47·0 | 48·0 | +0·5 | +1·3 | −0·6 | −0·3 | −0·1 | 0·0 |
| 21 | 48·5 | 42·1 | 43·9 | 47·9 | 46·9 | 44·4 | +0·2 | +0·2 | −0·1 | −0·3 | +0·2 | −0·1 | 21 | 48·5 | 41·1 | 43·8 | 47·8 | 47·9 | 44·0 | +0·2 | −0·8 | −0·2 | −0·4 | +1·2 | −0·5 |
| 22 | 57·5 | 44·1 | ... | ... | ... | ... | −0·5 | 0·0 | ... | ... | ... | ... | 22 | 57·6 | 44·0 | ... | ... | ... | ... | −0·4 | −0·1 | ... | ... | ... | ... |
| 23 | 50·2 | 41·4 | 48·0 | 49·9 | 48·3 | 41·9 | 0·0 | +1·6 | +0·4 | −0·2 | +0·4 | +2·1 | 23 | 50·6 | 40·8 | 47·8 | 49·9 | 48·2 | 41·8 | +0·4 | +1·0 | +0·2 | −0·2 | +0·3 | +2·0 |
| 24 | 53·0 | 35·1 | 44·1 | 51·3 | 52·4 | 52·0 | 0·0 | +3·0 | +0·2 | −0·3 | −0·2 | +0·4 | 24 | 52·9 | 34·1 | 44·0 | 51·6 | 52·6 | 51·7 | −0·1 | +2·0 | +0·1 | 0·0 | 0·0 | +0·1 |
| 25 | 54·5 | 44·2 | 44·8 | 49·3 | 49·2 | 44·2 | +0·3 | +0·3 | 0·0 | −0·3 | +0·4 | 0·0 | 25 | 54·6 | 43·1 | 44·4 | 49·6 | 49·0 | 43·8 | +0·4 | −0·8 | −0·4 | 0·0 | +0·2 | −0·4 |
| 26 | 53·8 | 42·3 | 47·0 | 52·4 | 52·9 | 47·9 | +0·1 | 0·0 | −0·5 | −0·4 | −0·1 | +0·9 | 26 | 53·7 | 41·5 | 46·9 | 52·7 | 52·9 | 47·6 | 0·0 | −0·8 | −0·6 | −0·1 | −0·1 | +0·6 |
| 27 | 52·5 | 41·7 | 46·9 | 51·1 | 51·0 | 42·7 | −0·5 | +1·3 | −0·5 | −0·6 | +0·3 | +1·6 | 27 | 52·9 | 40·2 | 47·0 | 51·8 | 51·0 | 42·0 | −0·1 | −0·2 | −0·4 | +0·1 | +0·3 | +0·9 |
| 28 | 52·7 | 42·2 | 48·6 | 52·1 | 49·6 | 50·1 | −0·3 | +1·2 | +0·4 | 0·0 | +0·3 | 0·0 | 28 | 53·4 | 41·7 | 48·7 | 52·2 | 49·4 | 49·9 | +0·4 | +0·7 | +0·5 | +0·1 | +0·1 | −0·2 |
| 29 | 54·3 | 48·4 | ... | ... | ... | ... | −0·1 | +0·4 | ... | ... | ... | ... | 29 | 54·5 | 48·2 | ... | ... | ... | ... | +0·1 | +0·2 | ... | ... | ... | ... |
| 30 | 53·4 | 46·1 | 49·3 | 52·7 | 49·1 | 47·1 | −0·6 | 0·0 | −0·2 | −0·3 | +0·5 | +0·5 | 30 | 53·9 | 46·2 | 49·4 | 53·5 | 48·9 | 46·9 | −0·1 | +0·1 | −0·1 | +0·5 | +0·3 | +0·3 |
| Means | 51·9 | 41·4 | 45·4 | 50·0 | 49·7 | 45·6 | −0·1 | +1·2 | −0·1 | −0·2 | +0·2 | +0·7 | Means | 52·2 | 40·5 | 45·4 | 50·3 | 49·8 | 45·1 | +0·2 | +0·3 | −0·1 | 0·0 | +0·3 | +0·2 |

## READINGS of DRY-BULB THERMOMETERS in a STEVENSON'S SCREEN and on the ROOF of the MAGNET HOUSE—*concluded.*

### DECEMBER.

| Days of the Month. | Readings of Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Days of the Month. | Readings of Thermometers on the Roof of the Magnet House, 20 ft. above the ground. | | | | | | Excess above readings of the Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 47·5 | 39·1 | 41·7 | 40·5 | 42·0 | 40·1 | +0·4 | 0·0 | −0·1 | −0·5 | 0·0 | +0·1 | 1 | 47·6 | 39·0 | 41·4 | 41·0 | 42·0 | 39·9 | +0·5 | −0·1 | −0·4 | 0·0 | 0·0 | −0·1 |
| 2 | 42·2 | 36·5 | 37·1 | 41·7 | 39·9 | 41·4 | −0·6 | −0·1 | 0·0 | −0·1 | −1·0 | +0·1 | 2 | 42·9 | 36·5 | 37·2 | 42·8 | 40·8 | 41·0 | +0·1 | −0·1 | +0·1 | +1·0 | −0·1 | −0·3 |
| 3 | 41·8 | 37·0 | 37·3 | 38·4 | 38·2 | 37·8 | −0·3 | −0·1 | +0·1 | 0·0 | +0·3 | +0·3 | 3 | 41·7 | 36·6 | 37·1 | 38·3 | 38·1 | 37·5 | −0·4 | −0·5 | −0·1 | −0·1 | +0·2 | 0·0 |
| 4 | 44·0 | 34·4 | 35·4 | 38·7 | 42·6 | 43·7 | 0·0 | −0·1 | +0·2 | −0·2 | +0·1 | +0·1 | 4 | 44·1 | 34·1 | 35·4 | 39·7 | 42·5 | 43·5 | +0·1 | −0·4 | +0·2 | +0·8 | 0·0 | −0·1 |
| 5 | 46·6 | 43·1 | 44·8 | 46·5 | 45·4 | 43·7 | −0·2 | +1·0 | +0·2 | −0·2 | −0·1 | +0·4 | 5 | 46·8 | 43·1 | 44·7 | 46·8 | 45·7 | 43·7 | 0·0 | +1·0 | +0·1 | +0·1 | +0·2 | +0·4 |
| 6 | 48·0 | 43·0 | ... | ... | ... | ... | +0·5 | +0·7 | ... | ... | ... | ... | 6 | 47·8 | 43·0 | ... | ... | ... | ... | +0·3 | +0·7 | ... | ... | ... | ... |
| 7 | 46·0 | 36·4 | 41·4 | 42·2 | 40·9 | 37·0 | 0·0 | −0·2 | +0·4 | −0·2 | +0·1 | +0·4 | 7 | 45·9 | 36·2 | 41·0 | 43·2 | 40·7 | 36·9 | −0·1 | −0·4 | 0·0 | +0·8 | −0·1 | +0·3 |
| 8 | 49·2 | 34·2 | 44·9 | 48·4 | 48·8 | 48·4 | −0·3 | +0·6 | +0·3 | −0·2 | +0·2 | +0·2 | 8 | 49·6 | 33·5 | 44·9 | 48·8 | 48·8 | 48·1 | +0·1 | −0·1 | +0·3 | +0·2 | +0·2 | −0·1 |
| 9 | 48·7 | 39·2 | 41·1 | 43·8 | 45·7 | 39·7 | +0·1 | +1·4 | +0·3 | −0·3 | +0·3 | +1·5 | 9 | 48·5 | 38·1 | 40·7 | 43·9 | 45·2 | 39·0 | −0·1 | +0·3 | −0·1 | −0·2 | −0·2 | +0·8 |
| 10 | 52·6 | 38·2 | 43·9 | 50·3 | 51·0 | 45·0 | −0·3 | +2·1 | +0·1 | −0·4 | +0·5 | +0·1 | 10 | 52·9 | 37·1 | 43·9 | 50·5 | 50·9 | 44·8 | 0·0 | +1·0 | +0·1 | −0·2 | +0·4 | −0·1 |
| 11 | 45·1 | 38·1 | 38·9 | 42·4 | 43·1 | 41·9 | −0·6 | +0·1 | +0·5 | −0·2 | +0·5 | +0·8 | 11 | 46·1 | 37·1 | 38·5 | 42·8 | 42·9 | 41·4 | +0·4 | −0·9 | +0·1 | +0·2 | +0·3 | +0·3 |
| 12 | 45·3 | 36·9 | 43·4 | 44·1 | 44·7 | 37·2 | +0·3 | +0·6 | +0·2 | 0·0 | +0·3 | +0·6 | 12 | 45·1 | 36·1 | 43·4 | 44·0 | 44·7 | 36·9 | +0·1 | −0·2 | +0·2 | −0·1 | +0·3 | +0·3 |
| 13 | 53·5 | 36·9 | ... | ... | ... | ... | −0·7 | +0·3 | ... | ... | ... | ... | 13 | 54·1 | 36·0 | ... | ... | ... | ... | −0·1 | −0·6 | ... | ... | ... | ... |
| 14 | 49·6 | 46·6 | 48·6 | 49·2 | 48·6 | 48·1 | −0·2 | +0·2 | +0·5 | −0·2 | +0·4 | +0·2 | 14 | 49·8 | 46·3 | 48·8 | 49·7 | 48·5 | 48·0 | 0·0 | −0·1 | +0·7 | +0·3 | +0·3 | +0·1 |
| 15 | 50·8 | 44·1 | 46·7 | 47·2 | 49·8 | 47·1 | −0·2 | +0·1 | +0·1 | −0·4 | +0·2 | +0·2 | 15 | 51·2 | 43·2 | 46·4 | 47·7 | 49·9 | 46·9 | +0·2 | −0·8 | −0·2 | +0·1 | +0·3 | 0·0 |
| 16 | 48·7 | 40·7 | 43·9 | 46·8 | 47·7 | 46·0 | +0·5 | +1·7 | 0·0 | −0·2 | 0·0 | +1·2 | 16 | 48·8 | 40·2 | 44·0 | 47·4 | 47·6 | 45·9 | +0·6 | +1·2 | +0·1 | +0·4 | −0·1 | +1·1 |
| 17 | 50·5 | 44·1 | 47·1 | 50·2 | 46·9 | 44·4 | −0·5 | +1·5 | −0·1 | −0·4 | −0·7 | +0·8 | 17 | 50·6 | 43·1 | 47·4 | 50·4 | 47·0 | 43·9 | −0·4 | +0·5 | +0·2 | −0·2 | −0·6 | +0·3 |
| 18 | 45·9 | 36·4 | 38·3 | 42·4 | 45·1 | 39·2 | 0·0 | −0·1 | +1·0 | −0·5 | −0·2 | +0·5 | 18 | 45·8 | 35·5 | 36·8 | 42·4 | 44·8 | 38·9 | −0·1 | −1·0 | −0·5 | −0·5 | −0·5 | +0·2 |
| 19 | 45·0 | 36·0 | 41·8 | 43·8 | 44·3 | 42·9 | 0·0 | 0·0 | −0·2 | −0·2 | −0·3 | +0·3 | 19 | 45·3 | 35·0 | 41·9 | 43·9 | 44·3 | 42·9 | +0·3 | −1·0 | −0·1 | −0·1 | −0·3 | +0·3 |
| 20 | 48·8 | 42·1 | ... | ... | ... | ... | −0·2 | 0·0 | ... | ... | ... | ... | 20 | 49·0 | 42·1 | ... | ... | ... | ... | 0·0 | 0·0 | ... | ... | ... | ... |
| 21 | 49·0 | 45·1 | 48·0 | 48·5 | 48·4 | 45·4 | 0·0 | +0·1 | +0·1 | 0·0 | −0·2 | +0·3 | 21 | 49·6 | 45·2 | 48·2 | 48·9 | 48·9 | 45·4 | +0·6 | +0·2 | +0·3 | +0·4 | +0·3 | +0·3 |
| 22 | 45·8 | 38·1 | 40·9 | 42·7 | 41·1 | 40·4 | +0·3 | +0·5 | +0·4 | −0·7 | +0·7 | +0·2 | 22 | 46·0 | 37·1 | 40·9 | 43·9 | 41·1 | 40·4 | +0·5 | −0·5 | +0·4 | +0·5 | +0·7 | +0·2 |
| 23 | 41·0 | 35·4 | 39·5 | 39·6 | 38·8 | 35·9 | +0·1 | −0·2 | +0·2 | +0·2 | +0·4 | +0·3 | 23 | 41·1 | 35·1 | 39·5 | 40·1 | 38·7 | 35·8 | +0·2 | −0·5 | +0·2 | +0·7 | +0·3 | +0·2 |
| 24 | 38·0 | 34·1 | 34·9 | 36·8 | 37·0 | 35·9 | +0·1 | −0·2 | +0·1 | −0·2 | 0·0 | +0·2 | 24 | 37·6 | 33·8 | 34·8 | 37·0 | 36·9 | 35·2 | −0·3 | −0·5 | 0·0 | 0·0 | −0·1 | −0·5 |
| 25 | 39·2 | 35·3 | ... | ... | ... | ... | +0·1 | −0·2 | ... | ... | ... | ... | 25 | 39·4 | 35·1 | ... | ... | ... | ... | +0·3 | −0·4 | ... | ... | ... | ... |
| 26 | 37·4 | 33·9 | ... | ... | ... | ... | +0·1 | −0·2 | ... | ... | ... | ... | 26 | 37·6 | 33·6 | ... | ... | ... | ... | +0·3 | −0·5 | ... | ... | ... | ... |
| 27 | 35·0 | 25·5 | ... | ... | ... | ... | −0·6 | −0·2 | ... | ... | ... | ... | 27 | 35·3 | 25·1 | ... | ... | ... | ... | −0·3 | −0·6 | ... | ... | ... | ... |
| 28 | 28·4 | 23·2 | 25·9 | 27·3 | 27·7 | 24·9 | −1·1 | +0·2 | +0·3 | −1·2 | −0·1 | +0·2 | 28 | 29·6 | 22·0 | 24·9 | 28·0 | 27·7 | 24·0 | +0·1 | −1·0 | −0·7 | −0·5 | −0·1 | −0·7 |
| 29 | 26·3 | 19·5 | 20·4 | 20·8 | 19·9 | 23·4 | +0·9 | −0·3 | −0·6 | −0·2 | −0·2 | 0·0 | 29 | 25·6 | 19·9 | 20·1 | 20·7 | 20·3 | 22·7 | +0·2 | +0·1 | −0·9 | −0·3 | +0·2 | −0·7 |
| 30 | 23·9 | 15·1 | 15·9 | 20·4 | 18·5 | 16·1 | −0·1 | +3·0 | +3·8 | +1·3 | +1·7 | +0·9 | 30 | 24·0 | 15·1 | 16·2 | 19·8 | 19·9 | 17·8 | 0·0 | +3·0 | +4·1 | +0·7 | +3·1 | +2·6 |
| 31 | 42·0 | 16·0 | 36·7 | 37·5 | 40·4 | 42·0 | −0·3 | +1·0 | +0·1 | −0·3 | −0·1 | +1·6 | 31 | 42·6 | 17·1 | 36·4 | 37·9 | 40·9 | 42·0 | +0·3 | +2·1 | −0·2 | +0·1 | +0·4 | +1·6 |
| Means | 43·7 | 35·6 | 39·1 | 41·2 | 41·5 | 39·5 | −0·1 | +0·4 | +0·3 | −0·2 | +0·1 | +0·5 | Means | 43·9 | 35·2 | 39·0 | 41·6 | 41·6 | 39·3 | +0·1 | 0·0 | +0·2 | +0·2 | +0·2 | +0·3 |

READINGS of the WET-BULB THERMOMETER placed in a STEVENSON'S SCREEN in the OBSERVATORY GROUNDS; and EXCESS of the READINGS above those of the corresponding THERMOMETER on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE, in the YEAR 1908.

[No observations have been made of this thermometer on Sundays, Good Friday, Christmas Day, and Public Holidays.]

### JANUARY.

| Days of the Month. | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|
| | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 31·0 | 31·0 | 31·8 | 30·0 | − 0·1 | − 0·4 | 0·0 | + 0·5 |
| 2 | 26·4 | 26·5 | 26·2 | 25·1 | − 0·4 | − 0·2 | 0·0 | + 0·1 |
| 3 | 23·1 | 26·3 | 26·5 | 24·2 | − 0·2 | − 0·8 | − 0·3 | + 0·4 |
| 4 | 25·5 | 32·2 | 32·0 | 28·2 | − 0·7 | − 0·9 | + 0·1 | + 0·4 |
| 6 | 38·9 | 42·9 | 47·0 | 47·0 | + 0·5 | − 0·2 | − 0·6 | + 0·1 |
| 7 | 46·0 | 47·1 | 46·3 | 44·5 | − 0·5 | − 0·6 | − 0·4 | + 0·1 |
| 8 | 35·9 | 37·9 | 39·1 | 38·1 | + 0·1 | + 0·2 | + 0·3 | − 0·1 |
| 9 | 32·1 | 32·9 | 32·1 | 29·3 | − 0·1 | + 0·1 | + 1·6 | + 0·6 |
| 10 | 28·8 | 30·1 | 29·3 | 26·6 | + 0·1 | − 0·7 | 0·0 | + 1·4 |
| 11 | 22·4 | 29·0 | 29·3 | 26·2 | + 1·4 | + 0·2 | + 0·8 | + 1·2 |
| 13 | 26·8 | 34·9 | 35·8 | 33·7 | + 0·7 | − 2·0 | − 0·2 | + 0·2 |
| 14 | 37·3 | 42·0 | 42·9 | 39·3 | + 0·6 | − 0·4 | − 0·3 | + 1·7 |
| 15 | 41·0 | 43·0 | 44·3 | 44·9 | − 0·4 | − 0·4 | 0·0 | + 0·1 |
| 16 | 47·9 | 48·6 | 48·9 | 48·9 | − 0·3 | − 0·3 | + 0·2 | 0·0 |
| 17 | 47·6 | 48·1 | 47·0 | 47·6 | − 0·2 | − 0·1 | + 0·1 | + 0·2 |
| 18 | 39·5 | 41·8 | 40·4 | 30·5 | − 0·2 | − 0·1 | + 1·3 | + 0·9 |
| 20 | 36·1 | 38·1 | 39·0 | 33·8 | + 0·3 | − 0·7 | − 0·2 | + 0·7 |
| 21 | 28·8 | 32·1 | 32·7 | 32·0 | − 0·6 | + 0·4 | − 0·1 | + 0·3 |
| 22 | 33·0 | 34·2 | 36·0 | 35·7 | 0·0 | − 0·6 | − 0·4 | + 0·9 |
| 23 | 33·6 | 36·0 | 36·1 | 33·5 | − 0·1 | − 0·7 | + 0·5 | + 0·4 |
| 24 | 32·9 | 33·2 | 34·5 | 32·8 | 0·0 | − 0·2 | − 0·2 | + 0·2 |
| 25 | 30·2 | 34·0 | 39·0 | 40·4 | − 0·1 | − 0·5 | − 0·5 | − 0·5 |
| 27 | 50·0 | 50·8 | 50·4 | 45·1 | − 0·2 | − 0·3 | − 0·4 | + 0·1 |
| 28 | 39·5 | 39·7 | 38·9 | 36·1 | − 0·3 | − 0·2 | − 0·1 | − 0·1 |
| 29 | 33·0 | 34·5 | 34·9 | 33·8 | + 0·1 | − 0·4 | 0·0 | + 0·8 |
| 30 | 31·8 | 33·3 | 34·7 | 35·3 | 0·0 | − 0·3 | + 0·1 | − 0·5 |
| 31 | 37·2 | 40·5 | 40·7 | 39·5 | − 0·7 | − 0·5 | + 0·1 | + 0·1 |
| Means | 34·7 | 37·1 | 37·6 | 35·6 | 0·0 | − 0·4 | + 0·1 | + 0·4 |

### FEBRUARY.

| Days of the Month. | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|
| | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 33·8 | 34·0 | 34·0 | 31·7 | + 0·1 | − 0·1 | + 0·3 | + 0·4 |
| 3 | 37·1 | 40·7 | 41·2 | 35·5 | − 0·7 | − 0·2 | + 0·1 | + 0·1 |
| 4 | 34·0 | 37·0 | 37·0 | 36·1 | 0·0 | − 0·6 | − 0·2 | 0·0 |
| 5 | 32·3 | 36·0 | 38·0 | 37·3 | − 0·2 | − 0·6 | − 0·3 | − 0·3 |
| 6 | 39·9 | 42·0 | 44·4 | 39·9 | 0·0 | − 0·1 | − 0·3 | + 0·4 |
| 7 | 40·9 | 42·8 | 45·0 | 45·0 | 0·0 | − 0·3 | − 0·4 | + 0·1 |
| 8 | 37·3 | 41·3 | 41·8 | 43·0 | − 1·5 | − 0·5 | − 0·2 | − 0·1 |
| 10 | 40·0 | 41·5 | 41·0 | 37·2 | 0·0 | − 0·1 | + 1·2 | + 3·2 |
| 11 | 37·2 | 43·0 | 44·0 | 41·8 | − 0·2 | − 0·5 | − 0·3 | + 0·1 |
| 12 | 39·9 | 44·0 | 43·5 | 36·2 | − 0·7 | − 0·4 | + 0·4 | + 1·2 |
| 13 | 31·2 | 38·5 | 41·5 | 38·3 | 0·0 | − 1·2 | − 1·0 | + 0·3 |
| 14 | 42·0 | 46·3 | 45·7 | 39·8 | − 0·5 | − 0·1 | − 0·3 | + 0·2 |
| 15 | 45·3 | 45·5 | 46·5 | 37·4 | − 0·3 | − 0·2 | 0·0 | + 0·3 |
| 17 | 47·0 | 49·1 | 51·5 | 44·0 | + 0·1 | − 0·5 | + 0·6 | + 0·3 |
| 18 | 41·1 | 44·2 | 44·1 | 41·5 | − 0·4 | − 0·3 | + 0·2 | + 0·6 |
| 19 | 40·8 | 44·7 | 44·8 | 44·0 | 0·0 | − 0·1 | 0·0 | + 0·2 |
| 20 | 43·5 | 47·0 | 48·9 | 45·8 | − 0·3 | − 0·6 | + 0·1 | − 0·2 |
| 21 | 45·0 | 47·0 | 47·6 | 42·5 | − 0·3 | − 0·4 | − 0·1 | + 0·2 |
| 22 | 41·7 | 45·0 | 46·1 | 40·6 | − 0·1 | + 0·1 | − 0·2 | + 0·3 |
| 24 | 34·9 | 38·2 | 40·8 | 39·3 | − 0·2 | − 0·4 | − 0·1 | − 0·3 |
| 25 | 38·0 | 40·5 | 41·2 | 38·6 | − 0·6 | − 0·4 | − 0·4 | − 0·1 |
| 26 | 37·8 | 40·0 | 40·5 | 43·0 | + 0·9 | + 0·1 | − 0·1 | + 0·1 |
| 27 | 40·2 | 42·7 | 42·0 | 37·1 | − 0·4 | − 0·1 | + 0·1 | + 0·3 |
| 28 | 37·0 | 37·5 | 35·0 | 33·0 | + 0·2 | − 0·2 | − 0·7 | + 0·5 |
| 29 | 29·8 | 33·8 | 34·0 | 32·2 | − 0·4 | 0·0 | + 0·3 | + 0·4 |
| Means | 38·7 | 41·7 | 42·4 | 39·2 | − 0·2 | − 0·3 | − 0·1 | + 0·3 |

### MARCH.

| Days of the Month. | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|
| | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° |
| 2 | 34·0 | 36·0 | 37·0 | 35·6 | − 0·7 | − 0·4 | 0·0 | + 0·5 |
| 3 | 34·3 | 37·1 | 37·2 | 34·3 | − 0·5 | − 1·3 | + 0·1 | − 0·1 |
| 4 | 34·0 | 36·1 | 36·0 | 36·0 | − 0·7 | 0·0 | 0·0 | + 0·2 |
| 5 | 33·0 | 38·0 | 38·3 | 34·3 | − 0·1 | + 0·1 | − 0·5 | + 1·0 |
| 6 | 43·6 | 44·4 | 42·2 | 38·7 | − 0·1 | + 0·3 | − 0·6 | 0·0 |
| 7 | 36·8 | 39·0 | 40·5 | 38·0 | 0·0 | − 0·2 | − 0·1 | + 0·5 |
| 9 | 41·5 | 41·5 | 42·1 | 37·5 | − 0·2 | + 0·3 | + 0·2 | − 0·2 |
| 10 | 40·2 | 42·7 | 41·8 | 39·4 | − 0·4 | 0·0 | + 0·2 | 0·0 |
| 11 | 38·8 | 38·5 | 39·2 | 35·0 | + 1·0 | − 0·5 | 0·0 | + 2·7 |
| 12 | 36·1 | 39·8 | 40·9 | 37·1 | 0·0 | − 0·2 | + 0·2 | + 0·7 |
| 13 | 35·9 | 38·0 | 38·8 | 33·0 | + 0·1 | + 0·1 | + 0·6 | + 1·3 |
| 14 | 32·0 | 36·0 | 35·9 | 31·0 | − 0·8 | + 0·1 | − 0·1 | + 0·6 |
| 16 | 37·8 | 39·3 | 42·8 | 39·8 | + 0·2 | + 0·5 | + 0·2 | + 1·0 |
| 17 | 34·8 | 37·9 | 37·6 | 34·2 | 0·0 | + 0·3 | + 0·6 | + 0·4 |
| 18 | 35·1 | 36·5 | 37·0 | 33·6 | − 0·2 | − 0·8 | − 0·6 | + 0·6 |
| 19 | 33·0 | 35·0 | 35·2 | 33·0 | − 0·2 | − 0·2 | − 0·4 | + 2·2 |
| 20 | 29·7 | 36·0 | 35·8 | 34·9 | − 0·1 | − 0·8 | 0·0 | + 1·1 |
| 21 | 35·8 | 36·0 | 37·0 | 34·6 | + 0·2 | − 1·0 | − 0·2 | + 2·2 |
| 23 | 42·7 | 45·0 | 46·8 | 42·0 | 0·0 | + 0·1 | + 0·1 | + 2·3 |
| 24 | 42·8 | 48·5 | 48·7 | 43·7 | − 0·7 | − 0·1 | − 1·0 | + 0·8 |
| 25 | 43·0 | 44·2 | 44·2 | 42·5 | − 0·1 | − 0·8 | − 0·6 | + 0·1 |
| 26 | 40·1 | 41·4 | 42·0 | 41·3 | + 0·3 | − 0·4 | − 0·7 | + 0·4 |
| 27 | 41·5 | 44·7 | 46·0 | 39·3 | − 0·2 | − 0·4 | − 0·8 | + 0·7 |
| 28 | 39·1 | 41·2 | 40·5 | 37·9 | − 0·1 | − 0·5 | − 0·9 | + 1·2 |
| 30 | 41·2 | 44·6 | 45·0 | 44·2 | − 0·1 | + 1·3 | + 0·1 | − 0·3 |
| 31 | 39·3 | 40·0 | 39·2 | 38·0 | − 0·1 | − 0·6 | − 0·2 | + 0·3 |
| Means | 37·5 | 39·9 | 40·3 | 37·3 | − 0·1 | − 0·2 | − 0·2 | + 0·8 |

### APRIL.

| Days of the Month. | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|
| | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 40·0 | 42·0 | 42·0 | 42·6 | − 0·1 | − 0·3 | − 0·4 | + 0·2 |
| 2 | 48·6 | 51·0 | 49·8 | 47·4 | 0·0 | − 0·2 | + 0·5 | + 0·2 |
| 3 | 43·9 | 46·0 | 45·9 | 41·2 | + 0·3 | + 0·7 | + 0·1 | + 0·5 |
| 4 | 40·0 | 40·9 | 42·8 | 39·0 | + 0·2 | + 0·6 | + 0·8 | + 1·0 |
| 6 | 39·8 | 40·3 | 42·8 | 38·0 | 0·0 | − 0·1 | + 0·4 | + 0·3 |
| 7 | 40·0 | 44·1 | 44·5 | 38·2 | − 0·8 | − 0·1 | − 1·2 | + 0·4 |
| 8 | 41·0 | 44·5 | 46·8 | 37·9 | + 0·4 | − 0·9 | 0·0 | + 2·1 |
| 9 | 41·2 | 44·8 | 46·0 | 42·2 | − 1·1 | + 0·4 | − 0·4 | + 0·4 |
| 10 | 42·4 | 43·4 | 43·3 | 42·2 | − 0·2 | − 0·4 | 0·0 | + 0·4 |
| 11 | 41·9 | 42·0 | 41·9 | 40·1 | − 0·4 | − 0·8 | + 0·1 | + 0·3 |
| 13 | 39·2 | 40·6 | 39·8 | 38·3 | − 0·6 | − 1·2 | − 0·2 | + 0·3 |
| 14 | 40·0 | 39·2 | 40·2 | 37·0 | − 0·2 | + 0·2 | − 0·7 | + 0·2 |
| 15 | 40·0 | 42·9 | 46·0 | 43·0 | − 0·2 | − 0·6 | − 0·4 | 0·0 |
| 16 | 47·0 | 48·5 | 45·4 | 37·2 | − 0·6 | − 0·6 | − 0·7 | + 0·1 |
| 18 | 38·5 | 39·9 | 38·5 | 35·8 | − 1·1 | + 0·4 | − 0·8 | + 0·2 |
| 21 | 37·4 | 41·0 | 42·0 | 40·1 | − 1·3 | − 0·8 | 0·0 | − 0·2 |
| 22 | 44·5 | 44·9 | 43·0 | 42·8 | − 0·9 | − 0·4 | − 0·6 | 0·0 |
| 23 | 38·0 | 39·3 | 38·0 | 33·2 | 0·0 | − 0·7 | − 0·1 | + 0·3 |
| 24 | 31·6 | 32·0 | 33·6 | 31·2 | − 0·8 | + 0·8 | + 0·7 | + 0·6 |
| 25 | 33·6 | 38·8 | 38·4 | 32·2 | − 0·9 | − 0·4 | − 0·5 | − 0·2 |
| 27 | 43·0 | 44·9 | 45·2 | 45·0 | − 0·6 | − 0·9 | − 0·8 | 0·0 |
| 28 | 44·5 | 44·2 | 44·4 | 45·5 | − 0·5 | − 0·4 | − 0·3 | + 0·2 |
| 29 | 47·2 | 49·2 | 52·5 | 49·0 | − 0·9 | − 1·0 | − 1·3 | + 0·2 |
| 30 | 51·0 | 50·3 | 52·1 | 52·2 | − 0·4 | − 0·7 | − 0·8 | − 0·4 |
| Means | 41·4 | 43·1 | 43·5 | 40·5 | − 0·4 | − 0·3 | − 0·3 | + 0·3 |

READINGS of the WET-BULB THERMOMETER in a STEVENSON'S SCREEN in the OBSERVATORY GROUNDS—*continued.*

### MAY.

| Days of the Month. | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|
| | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 58·2 | 61·8 | 62·0 | 59·0 | − 1·6 | − 0·5 | 0·0 | + 0·2 |
| 2 | 59·0 | 62·0 | 63·0 | 56·2 | + 0·4 | − 0·4 | − 0·3 | + 0·4 |
| 4 | 49·0 | 55·9 | 56·3 | 52·0 | − 1·3 | − 1·1 | − 0·9 | + 0·5 |
| 5 | 50·6 | 52·0 | 52·5 | 51·0 | − 0·4 | − 0·8 | − 0·7 | + 0·4 |
| 6 | 49·8 | 51·0 | 53·1 | 47·0 | − 0·5 | − 0·9 | − 0·7 | + 0·5 |
| 7 | 46·1 | 50·3 | 51·5 | 47·8 | − 0·7 | − 1·3 | − 0·4 | 0·0 |
| 8 | 54·1 | 54·0 | 54·0 | 53·0 | − 0·5 | − 0·6 | − 0·6 | − 0·4 |
| 9 | 54·1 | 55·8 | 55·9 | 48·5 | − 1·1 | − 0·9 | + 0·2 | + 0·5 |
| 11 | 48·0 | 50·1 | 51·5 | 48·0 | − 1·8 | − 0·7 | − 0·3 | + 0·4 |
| 12 | 51·5 | 52·2 | 52·6 | 49·1 | − 0·1 | − 2·1 | 0·0 | + 0·1 |
| 13 | 47·8 | 48·0 | 48·8 | 45·8 | − 0·3 | + 0·2 | − 0·9 | + 0·5 |
| 14 | 48·8 | 49·0 | 48·2 | 47·5 | − 0·4 | − 0·8 | − 0·1 | + 0·7 |
| 15 | 48·1 | 47·3 | 48·9 | 48·0 | − 0·7 | − 0·3 | − 0·7 | + 0·1 |
| 16 | 52·0 | 54·8 | 54·3 | 54·0 | + 0·1 | + 0·4 | 0·0 | + 0·2 |
| 18 | 53·8 | 59·0 | 61·0 | 58·9 | − 0·9 | 0·0 | − 0·8 | + 1·1 |
| 19 | 57·5 | 62·0 | 62·5 | 58·2 | − 1·0 | − 0·5 | − 1·4 | + 0·8 |
| 20 | 53·0 | 54·2 | 53·1 | 47·3 | − 0·9 | − 0·6 | − 0·5 | + 0·3 |
| 21 | 54·1 | 59·5 | 57·0 | 46·1 | − 0·9 | − 1·1 | − 0·3 | + 0·5 |
| 22 | 49·0 | 50·0 | 49·8 | 45·3 | + 0·6 | − 1·3 | + 0·5 | 0·0 |
| 23 | 48·9 | 51·0 | 49·9 | 47·0 | + 0·1 | + 0·1 | − 0·9 | + 0·9 |
| 25 | 51·1 | 51·8 | 51·5 | 51·0 | + 0·4 | − 0·2 | + 0·2 | + 0·3 |
| 26 | 54·8 | 56·0 | 54·8 | 54·0 | + 0·7 | − 0·1 | − 0·1 | + 0·9 |
| 27 | 57·6 | 60·8 | 61·9 | 53·9 | + 0·3 | − 0·7 | + 0·4 | + 1·0 |
| 28 | 59·0 | 59·0 | 59·8 | 50·8 | + 0·2 | + 0·7 | − 0·6 | 0·0 |
| 29 | 55·9 | 58·9 | 60·0 | 55·0 | + 0·7 | − 0·1 | + 0·7 | + 0·4 |
| 30 | 56·5 | 60·0 | 62·0 | 58·8 | − 0·4 | − 1·3 | − 0·6 | + 0·5 |
| Means | 52·6 | 54·9 | 55·2 | 51·3 | − 0·4 | − 0·6 | − 0·3 | + 0·4 |

### JUNE.

| Days of the Month. | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|
| | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 66·0 | 67·8 | 67·5 | 63·4 | 0·0 | − 1·5 | + 1·1 | + 0·5 |
| 2 | 62·0 | 62·5 | 64·1 | 59·5 | − 1·0 | − 0·2 | + 0·3 | + 0·7 |
| 3 | 65·5 | 66·2 | 65·0 | 59·0 | − 1·3 | − 1·6 | + 0·2 | + 0·2 |
| 4 | 62·9 | 69·8 | 70·0 | 61·7 | − 0·2 | − 0·4 | + 0·4 | − 0·1 |
| 5 | 53·0 | 53·3 | 54·5 | 49·2 | + 0·1 | − 0·4 | + 0·5 | + 0·6 |
| 6 | 47·1 | 47·8 | 49·1 | 44·2 | + 0·8 | + 0·2 | − 0·5 | + 0·1 |
| 9 | 52·7 | 57·0 | 58·0 | 57·9 | − 0·3 | − 0·8 | − 0·7 | + 0·1 |
| 10 | 59·0 | 61·0 | 61·0 | 59·0 | − 0·3 | − 0·1 | − 0·2 | − 0·1 |
| 11 | 57·3 | 59·3 | 61·0 | 53·0 | − 2·0 | − 1·5 | − 0·8 | + 0·2 |
| 12 | 54·2 | 57·6 | 58·0 | 52·0 | − 0·6 | − 0·7 | − 0·5 | + 1·4 |
| 13 | 51·8 | 55·9 | 50·7 | 51·8 | 0·0 | + 0·8 | − 0·9 | 0·0 |
| 15 | 57·9 | 57·0 | 55·9 | 51·0 | + 0·6 | + 0·4 | + 0·7 | + 0·7 |
| 16 | 55·9 | 56·0 | 56·0 | 55·1 | − 1·0 | 0·0 | − 0·7 | + 0·1 |
| 17 | 56·1 | 56·3 | 56·4 | 53·3 | − 1·5 | − 0·6 | − 0·9 | − 0·1 |
| 18 | 54·0 | 53·8 | 57·2 | 52·0 | + 1·4 | − 1·0 | − 0·5 | + 0·6 |
| 19 | 53·9 | 55·9 | 57·2 | 54·0 | − 0·4 | − 1·9 | − 0·7 | + 1·0 |
| 20 | 54·0 | 54·2 | 56·4 | 48·8 | − 0·3 | − 0·8 | + 0·7 | + 0·1 |
| 22 | 49·0 | 53·7 | 56·1 | 53·1 | − 0·6 | − 1·1 | + 0·3 | + 1·5 |
| 23 | 57·2 | 60·5 | 62·3 | 55·2 | + 0·3 | + 0·2 | + 0·7 | + 0·3 |
| 24 | 57·0 | 60·4 | 60·0 | 54·4 | − 1·3 | − 0·2 | − 0·1 | + 0·4 |
| 25 | 51·1 | 57·0 | 60·0 | 50·2 | − 0·2 | − 0·8 | 0·0 | + 1·1 |
| 27 | 55·9 | 58·3 | 61·0 | 57·4 | − 0·4 | − 0·5 | − 0·8 | + 0·1 |
| 29 | 60·5 | 63·1 | 62·9 | 53·8 | + 0·7 | − 0·9 | + 0·1 | + 1·0 |
| 30 | 57·0 | 62·5 | 63·1 | 57·0 | − 0·7 | − 0·9 | − 1·0 | + 1·0 |
| Means | 56·3 | 58·6 | 59·3 | 54·4 | − 0·3 | − 0·6 | − 0·1 | + 0·5 |

### JULY.

| Days of the Month. | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|
| | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 62·0 | 63·2 | 60·3 | 55·9 | + 0·2 | − 1·6 | − 0·2 | + 0·9 |
| 2 | 59·5 | 62·2 | 62·2 | 54·3 | − 1·5 | + 0·2 | + 0·5 | + 0·7 |
| 3 | 60·3 | 64·9 | 67·0 | 57·3 | − 0·5 | 0·0 | − 0·6 | + 0·2 |
| 4 | 55·3 | 56·2 | 59·0 | 58·1 | − 0·2 | − 0·5 | − 0·8 | − 0·2 |
| 6 | 57·4 | 60·8 | 61·5 | 58·1 | − 0·2 | − 0·5 | − 1·0 | + 0·3 |
| 7 | 57·3 | 59·6 | 58·8 | 56·0 | 0·0 | + 1·3 | + 0·3 | + 0·1 |
| 8 | 58·2 | 58·0 | 57·9 | 55·2 | − 0·6 | + 0·2 | − 0·2 | + 0·2 |
| 9 | 56·5 | 57·3 | 58·0 | 53·0 | 0·0 | − 0·4 | + 0·2 | + 0·1 |
| 10 | 60·1 | 61·3 | 62·0 | 58·5 | − 0·5 | − 0·5 | − 0·1 | − 0·6 |
| 11 | 61·6 | 61·8 | 63·4 | 60·9 | − 0·5 | − 0·5 | 0·0 | + 0·1 |
| 13 | 56·0 | 55·3 | 53·4 | 56·0 | − 0·3 | − 0·3 | − 0·6 | + 0·2 |
| 14 | 57·5 | 56·0 | 57·0 | 53·8 | 0·0 | − 0·9 | − 0·7 | + 0·2 |
| 15 | 55·8 | 58·2 | 58·3 | 54·3 | − 1·9 | + 0·2 | 0·0 | − 0·7 |
| 16 | 60·0 | 59·0 | 57·0 | 57·8 | − 0·3 | − 0·2 | − 0·8 | 0·0 |
| 17 | 56·9 | 56·7 | 58·5 | 55·9 | − 1·2 | 0·0 | − 1·1 | 0·0 |
| 18 | 55·4 | 55·5 | 57·5 | 55·5 | − 0·3 | − 0·4 | − 1·3 | − 0·2 |
| 20 | 54·0 | 58·8 | 61·2 | 55·0 | − 0·7 | − 0·5 | + 0·2 | + 0·4 |
| 21 | 55·0 | 58·1 | 58·3 | 55·6 | − 0·6 | + 0·3 | − 0·3 | − 0·1 |
| 22 | 58·4 | 64·5 | 65·5 | 57·0 | − 1·2 | + 0·4 | − 0·6 | + 0·2 |
| 23 | 61·5 | 64·0 | 64·4 | 60·0 | − 0·3 | + 0·3 | − 1·7 | + 0·2 |
| 24 | 65·0 | 65·9 | 67·4 | 62·4 | − 0·8 | − 1·9 | − 1·7 | + 0·4 |
| 25 | 63·9 | 64·5 | 64·6 | 60·9 | − 1·0 | − 0·4 | − 2·3 | + 0·6 |
| 27 | 59·1 | 61·0 | 62·7 | 58·5 | − 1·2 | − 0·9 | − 0·4 | + 1·1 |
| 28 | 61·0 | 61·0 | 63·0 | 56·7 | − 0·5 | − 0·6 | − 0·4 | + 0·7 |
| 29 | 58·1 | 60·0 | 62·0 | 56·8 | 0·0 | − 0·9 | − 0·1 | + 0·8 |
| 30 | 61·4 | 64·0 | 64·9 | 60·0 | − 0·7 | + 0·1 | − 1·3 | + 0·2 |
| 31 | 59·0 | 59·7 | 59·2 | 55·9 | − 1·3 | − 0·4 | − 1·0 | + 0·1 |
| Means | 58·7 | 60·3 | 60·9 | 57·0 | − 0·6 | − 0·3 | − 0·6 | + 0·2 |

### AUGUST.

| Days of the Month. | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|
| | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 55·3 | 56·2 | 58·0 | 56·1 | − 0·5 | − 0·3 | 0·0 | − 0·5 |
| 4 | 63·9 | 65·0 | 64·2 | 58·0 | − 0·6 | − 0·1 | − 0·7 | + 0·2 |
| 5 | 53·4 | 54·0 | 54·1 | 55·0 | + 0·1 | 0·0 | − 0·1 | + 0·2 |
| 6 | 55·9 | 57·6 | 60·2 | 55·9 | − 0·2 | − 1·1 | − 0·7 | − 0·1 |
| 7 | 55·5 | 60·8 | 61·8 | 59·6 | − 0·6 | + 0·5 | − 0·3 | + 0·8 |
| 8 | 58·0 | 61·0 | 61·9 | 59·0 | − 1·0 | + 0·2 | + 0·2 | + 0·7 |
| 10 | 61·0 | 62·5 | 59·9 | 52·4 | − 0·2 | + 0·7 | − 1·0 | + 0·6 |
| 11 | 52·4 | 52·5 | 52·8 | 49·8 | − 0·9 | − 0·5 | − 0·5 | + 0·7 |
| 12 | 51·2 | 52·8 | 52·0 | 51·0 | − 0·1 | + 0·9 | + 0·6 | + 1·0 |
| 13 | 52·2 | 53·3 | 55·2 | 55·5 | − 0·5 | 0·0 | − 0·1 | − 0·1 |
| 14 | 54·1 | 56·8 | 56·1 | 55·2 | − 0·2 | − 0·3 | + 0·2 | + 0·4 |
| 15 | 56·8 | 57·0 | 57·4 | 51·5 | − 0·5 | − 1·8 | − 0·1 | + 0·8 |
| 17 | 54·3 | 57·0 | 56·8 | 53·9 | − 1·4 | + 0·7 | − 0·2 | + 2·1 |
| 18 | 53·7 | 54·9 | 56·4 | 56·0 | − 0·1 | − 0·1 | − 0·6 | + 0·6 |
| 19 | 54·8 | 56·7 | 57·4 | 55·5 | − 0·3 | − 0·6 | − 0·2 | + 0·2 |
| 20 | 57·0 | 59·0 | 59·7 | 59·3 | − 0·5 | − 0·5 | − 0·4 | − 0·3 |
| 21 | 60·0 | 62·6 | 60·9 | 57·2 | − 0·8 | + 0·8 | − 0·1 | + 1·5 |
| 22 | 59·2 | 61·6 | 59·0 | 54·7 | − 0·6 | − 0·4 | − 0·6 | + 0·8 |
| 24 | 62·0 | 62·0 | 61·8 | 56·0 | − 0·6 | − 0·3 | + 0·8 | + 0·1 |
| 25 | 56·6 | 57·3 | 59·0 | 53·5 | − 1·2 | − 0·5 | − 0·5 | + 0·1 |
| 26 | 55·5 | 61·0 | 61·2 | 57·0 | − 0·8 | − 0·3 | − 0·4 | − 0·5 |
| 27 | 56·1 | 58·0 | 59·0 | 56·0 | + 0·2 | − 0·2 | − 0·8 | + 0·2 |
| 28 | 52·6 | 57·2 | 55·9 | 51·8 | − 0·4 | − 0·6 | − 0·6 | 0·0 |
| 29 | 54·0 | 56·3 | 55·0 | 51·0 | − 1·3 | − 0·5 | − 1·2 | − 0·2 |
| 31 | 53·0 | 54·0 | 54·1 | 53·1 | − 0·8 | − 0·7 | − 1·2 | − 0·7 |
| Means | 55·9 | 57·9 | 58·0 | 55·0 | − 0·6 | − 0·2 | − 0·4 | + 0·3 |

## READINGS of the WET-BULB THERMOMETER in a STEVENSON'S SCREEN in the OBSERVATORY GROUNDS—*concluded.*

| Days of the Month. | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|
| | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| **SEPTEMBER.** | | | | | | | | |
| d | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 51·5 | 51·8 | 51·0 | 51·0 | − 0·5 | − 0·4 | − 0·8 | − 0·3 |
| 2 | 50·7 | 52·2 | 50·3 | 46·0 | − 0·6 | − 1·1 | − 0·5 | 0·0 |
| 3 | 49·2 | 51·0 | 50·9 | 51·2 | − 1·6 | − 0·7 | − 0·6 | − 0·4 |
| 4 | 52·2 | 52·0 | 49·7 | 48·0 | − 0·4 | − 0·3 | − 0·4 | − 0·4 |
| 5 | 48·3 | 51·5 | 52·7 | 49·5 | − 0·5 | − 0·3 | − 0·1 | − 0·4 |
| 7 | 54·3 | 56·6 | 58·0 | 53·0 | − 0·9 | − 0·4 | − 1·8 | + 0·6 |
| 8 | 56·4 | 61·3 | 59·0 | 55·0 | − 1·6 | − 1·5 | − 1·2 | − 0·3 |
| 9 | 51·6 | 53·6 | 53·1 | 48·0 | − 1·1 | − 0·8 | − 1·0 | − 0·5 |
| 10 | 46·5 | 47·5 | 48·0 | 45·0 | − 0·5 | − 0·2 | − 0·6 | + 0·3 |
| 11 | 48·0 | 49·9 | 48·8 | 46·1 | − 0·6 | + 0·2 | − 0·3 | + 1·2 |
| 12 | 46·8 | 48·0 | 48·4 | 44·1 | + 0·7 | + 0·6 | + 1·2 | + 1·4 |
| 14 | 50·8 | 53·6 | 55·8 | 50·2 | − 0·2 | − 1·4 | − 0·7 | + 0·3 |
| 15 | 53·5 | 56·0 | 54·0 | 51·5 | − 0·8 | + 0·4 | − 0·3 | + 0·5 |
| 16 | 49·9 | 51·9 | 53·0 | 52·0 | − 0·6 | + 0·1 | 0·0 | − 0·1 |
| 17 | 55·9 | 60·0 | 61·0 | 53·4 | − 0·3 | + 0·2 | + 0·5 | + 0·8 |
| 18 | 57·4 | 60·1 | 61·2 | 58·8 | − 2·4 | − 2·0 | − 0·7 | + 1·1 |
| 19 | 59·0 | 63·1 | 64·5 | 59·0 | − 1·3 | − 0·8 | − 1·0 | + 1·1 |
| 21 | 57·1 | 55·5 | 56·6 | 51·9 | − 0·5 | − 1·3 | − 0·9 | + 1·3 |
| 22 | 51·4 | 55·4 | 53·8 | 52·1 | − 1·2 | − 0·8 | − 0·9 | − 0·2 |
| 23 | 56·7 | 59·1 | 58·9 | 56·3 | − 2·7 | − 1·7 | − 0·4 | − 0·1 |
| 24 | 56·0 | 58·2 | 57·0 | 54·0 | − 0·2 | − 0·8 | − 0·2 | 0·0 |
| 25 | 53·9 | 54·8 | 57·0 | 52·0 | + 0·3 | − 0·8 | − 0·1 | + 0·2 |
| 26 | 52·8 | 55·0 | 53·5 | 51·2 | − 1·0 | − 1·0 | − 0·8 | + 0·4 |
| 28 | 59·3 | 63·0 | 64·8 | 61·0 | − 0·5 | − 0·6 | − 0·8 | − 0·8 |
| 29 | 63·0 | 64·8 | 66·0 | 60·6 | − 1·3 | − 0·3 | − 0·8 | + 0·7 |
| 30 | 63·0 | 69·3 | 69·0 | 61·0 | − 1·6 | + 0·5 | − 1·2 | + 2·1 |
| Means | 53·7 | 56·0 | 56·0 | 52·4 | − 0·8 | − 0·6 | − 0·6 | + 0·3 |
| **OCTOBER.** | | | | | | | | |
| d | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 58·0 | 67·8 | 69·2 | 59·8 | − 1·3 | + 0·3 | − 0·4 | + 2·2 |
| 2 | 55·8 | 66·6 | 67·3 | 58·6 | − 0·7 | − 0·4 | − 0·2 | + 0·6 |
| 3 | 54·5 | 65·0 | 66·2 | 58·5 | − 0·7 | − 0·4 | − 0·4 | + 1·2 |
| 5 | 57·0 | 57·9 | 56·2 | 52·0 | − 0·5 | − 0·2 | − 0·7 | 0·0 |
| 6 | 52·8 | 55·9 | 56·0 | 50·0 | − 1·0 | − 0·8 | − 0·8 | + 2·4 |
| 7 | 47·5 | 59·0 | 61·0 | 54·0 | − 0·4 | − 0·8 | − 0·3 | + 1·9 |
| 8 | 55·9 | 59·0 | 61·8 | 55·9 | 0·0 | − 0·8 | − 0·5 | + 0·8 |
| 9 | 61·0 | 62·2 | 61·0 | 59·3 | − 0·3 | − 0·4 | 0·0 | − 0·3 |
| 10 | 53·9 | 56·0 | 57·3 | 51·1 | + 0·1 | − 0·3 | − 0·7 | + 0·5 |
| 12 | 55·9 | 58·0 | 57·8 | 51·5 | − 1·7 | + 0·7 | + 0·4 | + 0·5 |
| 13 | 53·4 | 56·5 | 59·2 | 51·0 | − 0·4 | − 1·1 | − 0·1 | + 1·4 |
| 14 | 52·8 | 55·8 | 59·1 | 55·0 | 0·0 | + 0·3 | − 0·2 | + 1·8 |
| 15 | 52·2 | 58·0 | 57·1 | 56·0 | 0·0 | − 1·7 | − 1·3 | + 0·2 |
| 16 | 56·0 | 56·8 | 56·0 | 55·0 | − 0·6 | − 0·7 | − 0·2 | 0·0 |
| 17 | 55·5 | 58·3 | 60·0 | 56·8 | − 0·7 | − 0·9 | − 0·5 | + 0·4 |
| 19 | 54·0 | 56·2 | 56·0 | 52·5 | − 0·6 | − 0·6 | − 0·3 | − 0·1 |
| 20 | 46·3 | 46·4 | 49·0 | 44·8 | − 0·5 | − 0·5 | + 0·3 | + 0·3 |
| 21 | 40·0 | 41·9 | 42·7 | 38·8 | 0·0 | − 0·7 | − 0·1 | + 0·5 |
| 22 | 42·2 | 42·2 | 42·0 | 43·0 | − 0·6 | − 0·5 | − 0·3 | − 0·2 |
| 23 | 42·8 | 45·9 | 45·0 | 42·0 | − 0·5 | − 1·3 | 0·0 | + 0·5 |
| 24 | 41·9 | 41·4 | 37·8 | 36·5 | − 0·2 | − 0·2 | − 0·5 | + 0·5 |
| 26 | 49·6 | 48·7 | 48·8 | 42·8 | − 0·2 | − 0·1 | − 0·4 | + 0·2 |
| 27 | 43·3 | 47·0 | 46·0 | 39·2 | − 0·3 | − 0·7 | − 0·2 | + 0·9 |
| 28 | 55·5 | 58·0 | 58·1 | 54·3 | − 0·3 | 0·0 | − 0·7 | − 0·1 |
| 29 | 53·4 | 57·5 | 56·8 | 51·0 | − 1·4 | − 0·5 | − 0·8 | + 1·1 |
| 30 | 49·2 | 57·5 | 58·4 | 52·8 | − 1·6 | − 0·5 | − 1·6 | + 0·7 |
| 31 | 55·0 | 56·0 | 57·0 | 52·0 | − 0·5 | − 0·6 | + 0·3 | + 1·5 |
| Means | 51·7 | 55·2 | 55·7 | 50·9 | − 0·6 | − 0·5 | − 0·4 | + 0·7 |

| Days of the Month. | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|
| | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| **NOVEMBER.** | | | | | | | | |
| d | ° | ° | ° | ° | ° | ° | ° | ° |
| 2 | 48·5 | 50·7 | 47·8 | 47·0 | − 0·5 | − 0·4 | − 0·1 | 0·0 |
| 3 | 45·2 | 49·0 | 50·0 | 45·5 | − 0·6 | − 1·1 | + 0·2 | + 0·7 |
| 4 | 46·2 | 49·0 | 49·8 | 47·8 | − 0·4 | − 0·8 | + 0·2 | + 0·1 |
| 5 | 47·2 | 46·6 | 47·2 | 45·8 | − 0·4 | − 0·2 | − 0·6 | + 0·2 |
| 6 | 41·2 | 45·5 | 47·0 | 42·6 | − 0·7 | − 0·6 | − 0·3 | 0·0 |
| 7 | 37·6 | 39·2 | 38·8 | 34·0 | − 0·5 | − 0·4 | + 0·7 | + 0·3 |
| 9 | 35·4 | 38·9 | 36·1 | 32·0 | − 0·2 | + 0·1 | − 0·7 | + 2·2 |
| 10 | 27·3 | 36·1 | 36·2 | 31·2 | + 0·2 | − 3·0 | − 0·4 | + 0·4 |
| 11 | 49·0 | 52·2 | 53·7 | 53·1 | − 0·6 | − 0·4 | + 1·0 | 0·0 |
| 12 | 51·5 | 52·6 | 51·5 | 49·5 | − 0·3 | − 0·1 | − 0·4 | + 0·1 |
| 13 | 52·2 | 52·0 | 51·0 | 47·9 | − 0·4 | − 0·2 | 0·0 | + 2·0 |
| 14 | 49·2 | 47·4 | 47·1 | 46·9 | − 0·3 | − 0·3 | − 0·1 | + 0·1 |
| 16 | 42·3 | 42·0 | 44·0 | 45·3 | − 0·2 | + 0·1 | + 0·2 | − 0·1 |
| 17 | 43·8 | 44·7 | 44·4 | 41·0 | − 0·2 | − 0·2 | − 0·1 | + 0·2 |
| 18 | 41·4 | 44·9 | 46·0 | 46·0 | − 0·3 | − 0·3 | − 0·1 | − 0·1 |
| 19 | 42·0 | 41·8 | 42·2 | 38·1 | − 0·1 | − 0·2 | − 0·1 | + 0·2 |
| 20 | 36·3 | 42·1 | 42·8 | 45·5 | − 0·1 | − 0·1 | 0·0 | + 0·5 |
| 21 | 40·9 | 43·3 | 43·1 | 43·1 | − 0·1 | − 0·5 | − 0·1 | − 0·5 |
| 23 | 43·4 | 43·2 | 41·9 | 38·1 | − 0·2 | − 0·6 | + 0·1 | + 1·1 |
| 24 | 42·2 | 47·0 | 48·5 | 50·0 | + 0·7 | − 0·6 | − 0·6 | − 0·2 |
| 25 | 42·0 | 42·0 | 43·2 | 41·0 | − 0·8 | − 0·9 | − 0·3 | − 0·2 |
| 26 | 44·5 | 48·4 | 49·0 | 45·8 | − 0·7 | − 0·9 | − 0·7 | + 0·2 |
| 27 | 45·7 | 47·8 | 47·2 | 41·9 | − 0·4 | − 1·1 | − 0·6 | + 1·0 |
| 28 | 45·6 | 48·9 | 48·0 | 48·3 | − 0·2 | − 0·6 | − 0·5 | − 0·5 |
| 30 | 48·8 | 51·0 | 48·0 | 46·2 | − 0·5 | − 0·6 | − 0·2 | − 0·1 |
| Means | 43·6 | 45·9 | 45·8 | 43·7 | − 0·3 | − 0·6 | − 0·1 | + 0·3 |
| **DECEMBER.** | | | | | | | | |
| d | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 41·1 | 39·9 | 41·0 | 39·9 | − 0·6 | − 0·9 | − 0·3 | − 0·1 |
| 2 | 36·0 | 39·8 | 39·1 | 39·3 | − 0·1 | − 0·6 | − 0·4 | − 0·4 |
| 3 | 35·8 | 36·4 | 36·3 | 36·1 | 0·0 | − 0·4 | 0·0 | 0·0 |
| 4 | 34·7 | 37·2 | 40·9 | 43·0 | − 0·1 | − 0·6 | − 0·1 | − 0·3 |
| 5 | 44·1 | 45·2 | 44·2 | 43·0 | − 0·5 | − 0·5 | − 0·4 | + 0·2 |
| 7 | 40·2 | 41·0 | 40·0 | 36·9 | − 0·4 | − 0·3 | + 0·1 | + 0·3 |
| 8 | 42·0 | 45·0 | 45·2 | 45·8 | 0·0 | − 0·6 | − 0·4 | − 0·5 |
| 9 | 40·3 | 42·0 | 42·7 | 38·2 | − 0·4 | − 0·7 | − 0·1 | + 0·7 |
| 10 | 43·8 | 48·5 | 46·5 | 42·8 | + 1·0 | − 0·4 | − 0·4 | − 0·1 |
| 11 | 38·0 | 39·9 | 38·3 | 37·9 | + 0·3 | − 0·4 | − 0·5 | + 0·1 |
| 12 | 38·9 | 38·6 | 39·2 | 34·9 | − 0·5 | 0·0 | − 0·5 | + 0·1 |
| 14 | 47·4 | 48·0 | 47·5 | 46·8 | − 0·2 | − 0·4 | − 0·1 | 0·0 |
| 15 | 44·0 | 45·5 | 46·6 | 45·1 | − 0·2 | − 1·0 | − 0·3 | − 0·2 |
| 16 | 43·5 | 45·9 | 46·5 | 45·1 | − 0·3 | − 0·7 | − 0·3 | + 0·6 |
| 17 | 46·0 | 48·4 | 45·2 | 43·2 | − 0·2 | − 0·7 | − 0·4 | + 0·3 |
| 18 | 36·8 | 40·4 | 42·9 | 37·4 | 0·0 | − 0·6 | − 0·2 | + 0·2 |
| 19 | 39·9 | 42·0 | 42·9 | 42·3 | − 0·5 | − 0·6 | − 0·6 | − 0·3 |
| 21 | 47·4 | 47·8 | 47·2 | 44·0 | − 0·3 | − 0·1 | − 0·6 | − 0·3 |
| 22 | 39·3 | 40·0 | 39·0 | 38·5 | − 0·2 | − 1·0 | + 0·1 | − 0·3 |
| 23 | 37·5 | 37·2 | 36·8 | 34·7 | − 0·3 | − 0·6 | 0·0 | 0·0 |
| 24 | 33·6 | 34·9 | 35·0 | 35·4 | − 0·1 | − 0·2 | − 0·1 | + 0·2 |
| 28 | 23·2 | 23·9 | 23·8 | 22·9 | − 0·1 | − 0·5 | 0·0 | 0·0 |
| 29 | 20·2 | 20·2 | 19·8 | 23·0 | − 0·7 | − 0·5 | − 0·1 | − 0·1 |
| 30 | 15 9 | 19·0 | 18·5 | 16·1 | + 3·8 | 0·0 | + 1·7 | + 1·1 |
| 31 | 34·9 | 36·1 | 39·8 | 41·7 | + 0·2 | − 0·5 | − 0·1 | + 1·5 |
| Means | 37·8 | 39·3 | 39·4 | 38·2 | 0·0 | − 0·5 | − 0·2 | + 0·1 |

READINGS of THERMOMETERS placed in a STEVENSON'S SCREEN near the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE; and EXCESS of the READINGS above those of the corresponding THERMOMETERS on the ORDINARY STAND, in the YEAR 1908.

(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending at 21h.)

[Observations of the maximum and minimum thermometers only have been made on Sundays, Good Friday, Christmas Day and Public Holidays.]

## JANUARY.

| Days of the Month. | Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 36·9 | 32·3 | 33·3 | 33·8 | 34·3 | 32·5 | +0·5 | −0·3 | −0·1 | +0·1 | −0·1 | −0·1 | 31·1 | 31·5 | 32·1 | 29·8 | 0·0 | + 0·1 | + 0·3 | + 0·3 |
| 2 | 32·8 | 28·1 | 30·0 | 30·7 | 29·8 | 28·2 | −0·2 | 0·0 | −0·1 | +0·1 | +0·2 | −0·2 | 26·8 | 26·5 | 26·4 | 25·1 | 0·0 | − 0·2 | + 0·2 | + 0·1 |
| 3 | 32·7 | 24·5 | 26·0 | 32·2 | 32·0 | 26·4 | +0·1 | +0·4 | +0·2 | +0·6 | +0·3 | +0·1 | 23·4 | 27·3 | 27·1 | 24·1 | + 0·1 | + 0·2 | + 0·3 | + 0·3 |
| 4 | 38·9 | 24·2 | 28·0 | 38·0 | 37·0 | 29·0 | +0·5 | 0·0 | +0·2 | +0·9 | +0·3 | +0·1 | 26·1 | 33·8 | 32·2 | 27·9 | − 0·1 | + 0·7 | + 0·3 | + 0·1 |
| 5 | 30·1 | 20·9 | ... | ... | ... | ... | +0·1 | −0·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 6 | 50·1 | 18·1 | 41·1 | 44·0 | 49·0 | 48·0 | +0·9 | +0·2 | +0·2 | −0·1 | +0·1 | +0·2 | 38·3 | 43·3 | 47·8 | 47·1 | − 0·1 | + 0·2 | + 0·2 | + 0·2 |
| 7 | 50·2 | 45·4 | 47·7 | 48·3 | 48·3 | 45·8 | +0·4 | +0·1 | +0·1 | +0·5 | +0·2 | +0·2 | 46·6 | 47·8 | 47·0 | 44·8 | + 0·1 | + 0·1 | + 0·3 | + 0·4 |
| 8 | 46·5 | 32·5 | 36·8 | 38·7 | 40·0 | 39·4 | +0·6 | +0·2 | +0·6 | +0·6 | +0·4 | −0·2 | 36·2 | 38·1 | 39·1 | 38·2 | + 0·4 | + 0·4 | + 0·3 | 0·0 |
| 9 | 40·5 | 30·6 | 33·3 | 34·8 | 35·3 | 31·0 | +0·9 | 0·0 | −0·2 | 0·0 | +3·2 | +0·2 | 32·1 | 33·1 | 32·9 | 28·9 | − 0·1 | + 0·3 | + 2·4 | + 0·2 |
| 10 | 34·7 | 26·7 | 31·2 | 34·0 | 34·4 | 28·1 | −0·3 | +0·1 | +0·1 | +0·2 | +0·2 | +0·7 | 28·8 | 31·0 | 30·0 | 26·1 | + 0·1 | + 0·2 | + 0·7 | + 0·9 |
| 11 | 34·8 | 20·2 | 22·4 | 34·0 | 33·2 | 26·8 | +1·7 | +1·1 | +0·7 | +1·5 | +0·5 | +1·2 | 21·8 | 30·0 | 29·4 | 25·7 | + 0·8 | + 1·2 | + 0·9 | + 0·7 |
| 12 | 37·4 | 19·1 | ... | ... | ... | ... | +0·5 | +1·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 13 | 42·0 | 23·4 | 26·7 | 42·0 | 39·9 | 36·1 | +0·9 | +1·3 | +0·3 | +3·3 | +1·2 | +0·5 | 26·6 | 39·6 | 37·3 | 34·1 | + 0·5 | + 2·7 | + 1·3 | + 0·6 |
| 14 | 46·9 | 35·5 | 38·0 | 44·2 | 45·0 | 39·1 | +0·6 | +1·3 | +0·4 | 0·0 | +0·1 | +1·0 | 37·1 | 42·2 | 43·2 | 38·4 | + 0·4 | − 0·2 | 0·0 | + 0·8 |
| 15 | 49·3 | 39·0 | 42·0 | 43·7 | 46·4 | 45·8 | +1·8 | +1·7 | 0·0 | −0·7 | +0·5 | +0·3 | 41·3 | 43·1 | 44·4 | 44·8 | − 0·1 | − 0·3 | + 0·1 | 0·0 |
| 16 | 51·2 | 45·3 | 49·3 | 50·3 | 50·0 | 50·2 | +0·1 | +0·4 | 0·0 | −0·2 | +0·3 | −0·2 | 48·0 | 49·0 | 49·0 | 49·0 | − 0·2 | + 0·1 | + 0·3 | + 0·1 |
| 17 | 51·8 | 47·1 | 50·0 | 50·1 | 50·0 | 49·3 | −0·2 | +0·8 | +0·1 | 0·0 | +0·3 | −0·1 | 47·9 | 48·1 | 47·1 | 47·2 | + 0·1 | − 0·1 | + 0·2 | − 0·2 |
| 18 | 50·0 | 30·0 | 40·4 | 43·8 | 40·8 | 30·0 | +0·3 | +0·4 | +0·5 | +0·2 | +0·4 | +0·4 | 40·1 | 42·1 | 40·0 | 30·0 | + 0·4 | + 0·2 | + 0·9 | + 0·4 |
| 19 | 38·1 | 27·1 | ... | ... | ... | ... | +0·5 | 0·0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 20 | 43·4 | 32·3 | 37·0 | 42·0 | 42·5 | 33·2 | +0·2 | +1·1 | +0·5 | 0·0 | +0·6 | −0·2 | 36·1 | 38·9 | 39·8 | 33·1 | + 0·3 | + 0·1 | + 0·6 | 0·0 |
| 21 | 34·4 | 25·6 | 28·5 | 32·8 | 33·0 | 32·0 | −0·1 | 0·0 | −0·9 | +0·1 | +0·2 | +0·2 | 28·5 | 31·5 | 32·9 | 31·9 | − 0·9 | − 0·2 | + 0·1 | + 0·2 |
| 22 | 38·4 | 30·1 | 33·9 | 35·7 | 38·0 | 35·7 | +0·2 | 0·0 | +0·4 | +0·1 | 0·0 | +0·3 | 33·1 | 34·7 | 36·3 | 35·1 | + 0·1 | − 0·1 | − 0·1 | + 0·3 |
| 23 | 39·9 | 32·1 | 34·0 | 36·4 | 35·9 | 33·2 | +0·5 | 0·0 | +0·2 | −0·4 | +0·3 | +0·1 | 33·8 | 36·2 | 35·9 | 33·2 | + 0·1 | − 0·5 | + 0·3 | + 0·1 |
| 24 | 35·0 | 31·4 | 32·8 | 33·7 | 35·0 | 33·0 | −0·1 | 0·0 | −0·1 | +0·1 | +0·2 | +0·3 | 32·8 | 33·4 | 34·7 | 32·7 | − 0·1 | 0·0 | 0·0 | + 0·1 |
| 25 | 43·0 | 28·9 | 30·5 | 34·7 | 40·5 | 43·0 | +0·2 | +0·1 | 0·0 | −0·1 | −0·1 | +0·4 | 30·3 | 34·1 | 39·4 | 41·1 | 0·0 | − 0·4 | − 0·1 | + 0·2 |
| 26 | 50·9 | 43·0 | ... | ... | ... | ... | +0·4 | +0·4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 27 | 53·7 | 48·4 | 51·4 | 52·9 | 52·8 | 48·8 | +0·1 | +0·3 | 0·0 | +0·3 | +0·2 | +0·2 | 50·1 | 51·1 | 50·7 | 45·1 | − 0·1 | 0·0 | − 0·1 | + 0·1 |
| 28 | 49·5 | 38·5 | 42·9 | 44·0 | 41·5 | 38·5 | +0·9 | +0·1 | +0·2 | 0·0 | −0·1 | +0·1 | 40·0 | 40·1 | 39·1 | 36·4 | + 0·2 | + 0·2 | + 0·1 | + 0·2 |
| 29 | 40·6 | 35·7 | 35·8 | 40·1 | 40·5 | 35·8 | −0·3 | +0·4 | −0·1 | −0·1 | 0·0 | +0·2 | 33·1 | 35·0 | 35·0 | 33·1 | + 0·2 | + 0·1 | + 0·1 | + 0·1 |
| 30 | 39·7 | 33·6 | 35·0 | 38·0 | 39·1 | 36·1 | −0·4 | +0·2 | +0·2 | +0·1 | −0·1 | 0·0 | 32·0 | 33·7 | 35·0 | 35·8 | + 0·2 | + 0·1 | + 0·4 | 0·0 |
| 31 | 46·4 | 36·1 | 40·1 | 45·2 | 45·0 | 44·0 | −0·3 | +0·1 | −0·3 | −0·2 | +0·1 | +0·3 | 38·1 | 41·1 | 40·9 | 39·9 | + 0·2 | + 0·1 | + 0·3 | + 0·5 |
| Means | 42·3 | 31·8 | 36·2 | 39·9 | 40·3 | 37·0 | +0·4 | +0·4 | +0·1 | +0·3 | +0·3 | +0·2 | 34·8 | 37·6 | 38·0 | 35·5 | + 0·1 | + 0·2 | + 0·4 | + 0·2 |

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

FEBRUARY.

| Days of the Month. | Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 44·9 | 36·1 | 37·8 | 40·2 | 40·3 | 36·2 | +0·7 | +0·5 | 0·0 | −0·2 | 0·0 | +0·3 | 34·1 | 34·2 | 34·1 | 31·7 | + 0·4 | + 0·1 | + 0·4 | + 0·4 |
| 2 | 41·6 | 31·2 | ... | ... | ... | ... | +0·1 | +0·1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 3 | 44·3 | 29·2 | 38·7 | 41·5 | 44·2 | 38·8 | −0·1 | +0·9 | +0·1 | −0·1 | −0·1 | +0·2 | 37·9 | 40·9 | 41·1 | 35·4 | + 0·1 | 0·0 | 0·0 | 0·0 |
| 4 | 41·9 | 35·0 | 36·1 | 41·2 | 41·2 | 38·2 | −0·8 | +0·4 | +0·2 | −0·1 | −0·2 | +0·1 | 34·1 | 37·5 | 37·1 | 36·2 | + 0·1 | − 0·1 | − 0·1 | + 0·1 |
| 5 | 42·6 | 32·3 | 34·0 | 41·5 | 42·3 | 40·1 | −0·2 | +0·2 | +0·4 | +0·7 | +0·1 | +0·1 | 32·7 | 37·3 | 38·3 | 37·6 | + 0·2 | + 0·7 | 0·0 | 0·0 |
| 6 | 50·0 | 39·1 | 40·8 | 44·3 | 50·0 | 40·9 | +0·8 | +0·3 | −0·2 | +0·5 | +0·8 | +1·0 | 40·0 | 42·5 | 45·1 | 40·1 | + 0·1 | + 0·4 | + 0·4 | + 0·6 |
| 7 | 48·1 | 36·7 | 41·1 | 43·2 | 46·3 | 46·4 | −0·2 | +0·1 | 0·0 | −0·2 | −0·2 | +0·2 | 41·1 | 43·0 | 45·2 | 45·1 | + 0·2 | − 0·1 | − 0·2 | + 0·2 |
| 8 | 47·3 | 37·9 | 39·5 | 45·0 | 45·5 | 46·7 | −0·3 | +0·8 | −1·0 | 0·0 | −0·1 | +0·1 | 38·0 | 41·7 | 42·0 | 43·1 | − 0·8 | − 0·1 | 0·0 | 0·0 |
| 9 | 48·1 | 36·6 | ... | ... | ... | ... | +0·1 | +1·3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 10 | 45·9 | 35·7 | 41·0 | 44·1 | 42·0 | 35·9 | +0·2 | +1·0 | −0·1 | +0·3 | +0·8 | +1·2 | 40·1 | 42·0 | 40·3 | 35·1 | + 0·1 | + 0·4 | + 0·5 | + 1·1 |
| 11 | 49·7 | 33·0 | 38·9 | 46·3 | 48·5 | 43·2 | −0·3 | +1·4 | +0·1 | −0·3 | −0·1 | +0·1 | 37·3 | 43·5 | 44·2 | 42·0 | − 0·1 | 0·0 | − 0·1 | + 0·3 |
| 12 | 53·5 | 36·0 | 44·1 | 51·4 | 49·1 | 36·0 | +1·5 | +0·4 | +0·8 | +1·6 | +1·0 | +0·2 | 41·5 | 45·3 | 43·8 | 35·0 | + 0·9 | + 0·9 | + 0·7 | 0·0 |
| 13 | 49·0 | 30·1 | 31·1 | 43·0 | 48·2 | 40·0 | +1·0 | +1·4 | −0·2 | +0·5 | +0·7 | +0·2 | 31·0 | 40·1 | 43·1 | 38·2 | − 0·2 | + 0·4 | + 0·6 | + 0·2 |
| 14 | 51·6 | 39·4 | 42·8 | 50·8 | 51·6 | 42·1 | +0·1 | +0·3 | 0·0 | +1·0 | +0·2 | +0·5 | 42·2 | 47·1 | 46·3 | 40·1 | − 0·3 | + 0·7 | + 0·3 | + 0·5 |
| 15 | 49·9 | 39·7 | 48·0 | 49·3 | 48·0 | 39·8 | −0·3 | +0·9 | +0·2 | −0·3 | −0·1 | +0·2 | 45·8 | 45·5 | 46·5 | 37·3 | + 0·2 | − 0·2 | 0·0 | + 0·2 |
| 16 | 46·4 | 34·1 | ... | ... | ... | ... | +0·3 | +0·4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 17 | 54·3 | 36·4 | 47·6 | 50·2 | 54·0 | 46·0 | −0·2 | +0·3 | 0·0 | −0·4 | 0·0 | 0·0 | 47·1 | 49·4 | 50·9 | 43·9 | + 0·2 | − 0·2 | 0·0 | + 0·2 |
| 18 | 50·8 | 43·3 | 43·7 | 46·0 | 49·9 | 45·0 | 0·0 | +0·2 | −0·1 | +0·7 | +0·4 | +0·1 | 41·7 | 44·4 | 44·1 | 41·1 | + 0·2 | − 0·1 | + 0·2 | + 0·2 |
| 19 | 51·4 | 40·2 | 42·9 | 48·8 | 50·9 | 48·0 | −0·2 | +0·6 | +0·2 | −0·3 | +0·3 | +0·3 | 41·0 | 44·6 | 44·9 | 44·1 | + 0·2 | − 0·2 | + 0·1 | + 0·3 |
| 20 | 51·2 | 43·3 | 46·0 | 48·6 | 49·8 | 46·8 | 0·0 | +0·2 | +0·3 | −0·5 | +0·2 | −0·1 | 43·9 | 47·1 | 48·9 | 46·1 | + 0·1 | − 0·5 | + 0·1 | + 0·1 |
| 21 | 51·6 | 44·1 | 46·5 | 50·0 | 50·9 | 46·0 | −0·4 | +0·2 | −0·1 | +0·2 | +0·3 | +0·3 | 45·1 | 47·2 | 47·9 | 42·5 | − 0·2 | − 0·2 | + 0·2 | + 0·2 |
| 22 | 50·4 | 41·8 | 44·8 | 48·5 | 48·9 | 45·2 | +0·4 | +0·2 | +0·2 | −0·1 | 0·0 | +0·6 | 42·0 | 45·1 | 46·3 | 40·7 | + 0·2 | + 0·2 | 0·0 | + 0·4 |
| 23 | 49·9 | 40·3 | ... | ... | ... | ... | −0·6 | +0·7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 24 | 44·6 | 36·3 | 38·3 | 43·3 | 43·5 | 41·9 | −0·2 | +0·2 | 0·0 | −0·3 | −0·1 | 0·0 | 35·0 | 38·3 | 40·9 | 39·2 | − 0·1 | − 0·3 | 0·0 | − 0·4 |
| 25 | 45·6 | 37·8 | 40·5 | 44·2 | 42·9 | 40·0 | −0·2 | +0·4 | −0·4 | −0·4 | −0·1 | −0·4 | 38·1 | 41·0 | 41·5 | 38·4 | − 0·5 | + 0·1 | − 0·1 | − 0·3 |
| 26 | 47·1 | 37·1 | 39·3 | 44·0 | 46·0 | 44·0 | −0·4 | +0·5 | +0·2 | +0·1 | +0·2 | +0·3 | 37·1 | 40·2 | 40·7 | 43·1 | + 0·2 | + 0·3 | + 0·1 | + 0·2 |
| 27 | 47·3 | 39·2 | 42·7 | 46·4 | 46·1 | 40·1 | −0·6 | +0·1 | +0·1 | −0·2 | −0·3 | +0·4 | 40·6 | 42·7 | 42·0 | 37·2 | 0·0 | − 0·1 | + 0·1 | + 0·4 |
| 28 | 42·4 | 34·0 | 38·7 | 40·0 | 40·8 | 34·0 | −0·6 | +0·4 | +1·0 | +0·1 | −0·3 | +0·4 | 37·5 | 37·7 | 35·6 | 33·1 | + 0·7 | 0·0 | − 0·1 | + 0·6 |
| 29 | 39·5 | 31·4 | 33·3 | 38·2 | 38·0 | 35·3 | −0·4 | +0·4 | −0·3 | −0·3 | +0·3 | +0·5 | 30·2 | 33·6 | 33·9 | 32·2 | 0·0 | − 0·2 | + 0·2 | + 0·4 |
| Means | 47·6 | 36·8 | 40·7 | 45·2 | 46·4 | 41·5 | 0·0 | +0·5 | +0·1 | +0·1 | +0·1 | +0·3 | 39·0 | 42·1 | 42·6 | 39·1 | + 0·1 | + 0·1 | + 0·1 | + 0·2 |

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

## MARCH.

| Days of the Month. | Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 39·4 | 33·1 | ... | ... | ... | ... | −1·4 | 0·0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2 | 42·1 | 32·8 | 35·3 | 38·4 | 41·5 | 37·4 | −0·3 | 0·0 | −0·5 | −0·2 | −0·1 | +0·5 | 34·3 | 36·3 | 37·1 | 35·5 | − 0·4 | − 0·1 | + 0·1 | + 0·4 |
| 3 | 43·3 | 33·1 | 35·3 | 40·8 | 41·0 | 35·2 | −0·7 | +0·5 | −0·1 | −0·6 | +0·2 | +0·2 | 34·5 | 37·6 | 37·2 | 34·3 | − 0·3 | − 0·8 | + 0·1 | − 0·1 |
| 4 | 42·5 | 32·2 | 35·1 | 39·8 | 38·2 | 38·1 | −0·6 | +0·8 | −0·1 | +1·1 | +0·4 | +0·5 | 34·4 | 36·7 | 36·1 | 36·1 | − 0·3 | + 0·6 | + 0·1 | + 0·3 |
| 5 | 43·4 | 33·6 | 35·0 | 42·2 | 43·1 | 35·0 | −0·6 | +0·5 | +0·4 | +0·4 | −0·1 | +0·4 | 33·3 | 38·1 | 38·8 | 34·1 | + 0·2 | + 0·2 | 0·0 | + 0·8 |
| 6 | 50·8 | 34·6 | 44·8 | 48·9 | 47·0 | 40·0 | −0·2 | 0·0 | 0·0 | +0·5 | −0·5 | −0·2 | 43·6 | 44·4 | 42·2 | 38·9 | − 0·1 | + 0·3 | − 0·6 | + 0·2 |
| 7 | 45·8 | 38·9 | 41·0 | 43·3 | 45·3 | 40·0 | −0·2 | +0·2 | +0·1 | −0·3 | −0·1 | +0·8 | 37·0 | 39·1 | 40·6 | 38·1 | + 0·2 | − 0·1 | 0·0 | + 0·6 |
| 8 | 55·4 | 38·1 | ... | ... | ... | ... | −0·6 | +1·0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 9 | 50·5 | 40·4 | 44·9 | 45·0 | 46·8 | 40·4 | +0·2 | +0·5 | +0·2 | +0·1 | 0·0 | 0·0 | 41·7 | 41·3 | 42·1 | 37·8 | 0·0 | + 0·1 | + 0·2 | + 0·1 |
| 10 | 48·8 | 39·1 | 44·2 | 47·1 | 45·3 | 43·4 | −1·1 | +0·6 | −0·2 | +0·1 | −0·3 | +0·1 | 40·6 | 42·9 | 41·8 | 39·3 | 0·0 | + 0·2 | + 0·2 | − 0·1 |
| 11 | 48·4 | 34·1 | 41·1 | 43·6 | 45·3 | 34·1 | +1·4 | +1·0 | −0·1 | 0·0 | −0·2 | +1·0 | 38·3 | 39·1 | 39·3 | 33·2 | + 0·5 | + 0·1 | + 0·1 | + 0·9 |
| 12 | 46·8 | 29·6 | 38·3 | 44·2 | 46·5 | 38·3 | −0·3 | +0·9 | 0·0 | −0·3 | +0·4 | +0·7 | 36·1 | 40·1 | 41·1 | 37·2 | 0·0 | + 0·1 | + 0·4 | + 0·8 |
| 13 | 44·1 | 32·0 | 38·2 | 42·0 | 43·0 | 32·0 | −0·5 | +0·4 | 0·0 | −0·1 | −0·1 | −0·1 | 36·0 | 38·0 | 38·7 | 31·4 | + 0·2 | + 0·1 | + 0·5 | − 0·3 |
| 14 | 43·0 | 29·6 | 37·6 | 42·1 | 41·9 | 32·5 | −1·1 | +1·3 | +0·3 | +0·3 | +0·2 | −0·1 | 33·1 | 36·0 | 36·2 | 30·2 | + 0·3 | + 0·1 | + 0·2 | − 0·2 |
| 15 | 42·8 | 25·1 | ... | ... | ... | ... | +0·6 | +0·8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 16 | 48·6 | 32·6 | 38·5 | 41·0 | 46·6 | 40·2 | +0·1 | +0·6 | −0·4 | −0·1 | −0·1 | 0·0 | 37·5 | 39·1 | 42·3 | 39·0 | − 0·1 | + 0·3 | − 0·3 | + 0·2 |
| 17 | 44·4 | 32·1 | 37·0 | 41·0 | 41·2 | 35·1 | +0·5 | +0·6 | −0·2 | −0·3 | 0·0 | +0·4 | 34·8 | 37·4 | 37·2 | 34·1 | 0·0 | − 0·2 | + 0·2 | + 0·3 |
| 18 | 41·6 | 34·3 | 36·5 | 40·8 | 40·8 | 35·0 | −0·8 | +0·3 | −0·3 | −0·3 | +0·1 | 0·0 | 35·1 | 37·2 | 37·7 | 33·1 | − 0·2 | − 0·1 | + 0·1 | + 0·1 |
| 19 | 43·1 | 29·1 | 36·7 | 40·0 | 41·9 | 33·3 | −0·8 | +0·2 | 0·0 | +0·1 | +0·6 | +0·7 | 33·2 | 35·3 | 36·1 | 31·4 | 0·0 | + 0·1 | + 0·5 | + 0·6 |
| 20 | 41·8 | 27·6 | 29·8 | 40·3 | 40·9 | 36·0 | −0·4 | +0·8 | −0·2 | −0·8 | +0·3 | +0·4 | 29·6 | 36·0 | 36·1 | 34·2 | − 0·2 | − 0·8 | + 0·3 | + 0·4 |
| 21 | 47·4 | 33·1 | 38·9 | 43·2 | 42·9 | 35·0 | +0·1 | +0·7 | 0·0 | −0·7 | 0·0 | +0·6 | 35·6 | 36·2 | 37·3 | 33·1 | 0·0 | − 0·8 | + 0·1 | + 0·7 |
| 22 | 47·4 | 32·6 | ... | ... | ... | ... | −0·6 | +1·6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 23 | 54·4 | 40·7 | 43·8 | 47·8 | 53·0 | 41·3 | +1·0 | +0·6 | +0·1 | +0·6 | −0·4 | +0·9 | 42·7 | 45·3 | 46·2 | 40·2 | 0·0 | + 0·4 | − 0·5 | + 0·5 |
| 24 | 58·8 | 33·6 | 49·0 | 56·9 | 58·1 | 46·8 | −0·4 | +1·3 | +1·4 | +0·4 | −0·3 | +0·4 | 44·4 | 48·3 | 49·1 | 43·2 | + 0·9 | − 0·3 | − 0·6 | + 0·3 |
| 25 | 46·8 | 41·9 | 43·6 | 45·6 | 45·8 | 42·8 | +0·4 | +0·6 | −0·2 | −0·3 | 0·0 | 0·0 | 43·0 | 44·7 | 44·6 | 42·4 | − 0·1 | − 0·3 | − 0·2 | 0·0 |
| 26 | 44·9 | 40·3 | 40·6 | 42·6 | 44·2 | 42·0 | −0·8 | +0·2 | −0·2 | 0·0 | −0·5 | +0·4 | 40·1 | 41·9 | 42·2 | 41·1 | + 0·3 | + 0·1 | − 0·5 | + 0·2 |
| 27 | 52·7 | 39·2 | 42·2 | 51·2 | 51·9 | 40·9 | −0·6 | +0·6 | −0·4 | +0·1 | −0·2 | +0·4 | 41·5 | 45·2 | 46·2 | 39·1 | − 0·2 | + 0·1 | − 0·6 | + 0·5 |
| 28 | 49·5 | 40·1 | 41·0 | 47·2 | 48·9 | 42·2 | −0·5 | +1·2 | −0·2 | −0·5 | −0·8 | +1·0 | 39·1 | 41·3 | 40·9 | 37·8 | − 0·1 | − 0·4 | − 0·5 | + 1·1 |
| 29 | 52·4 | 37·6 | ... | ... | ... | ... | −0·4 | +1·0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 30 | 55·4 | 38·6 | 46·7 | 53·3 | 52·9 | 46·0 | −0·6 | +0·7 | +0·1 | +0·9 | 0·0 | +0·2 | 41·6 | 44·1 | 44·6 | 44·3 | + 0·3 | + 0·8 | − 0·3 | − 0·2 |
| 31 | 49·5 | 40·0 | 45·0 | 48·2 | 47·3 | 40·5 | +0·1 | +0·3 | +0·3 | −0·4 | −0·2 | +0·8 | 39·8 | 40·6 | 39·4 | 38·1 | + 0·4 | 0·0 | 0·0 | + 0·4 |
| Means | 47·3 | 34·8 | 40·0 | 44·5 | 45·4 | 38·6 | −0·3 | +0·6 | 0·0 | 0·0 | −0·1 | +0·4 | 37·7 | 40·1 | 40·4 | 36·8 | + 0·1 | 0·0 | 0·0 | + 0·3 |

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

APRIL.

| Days of the Month. | Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 50·3 | 36·6 | 44·5 | 47·8 | 49·2 | 46·2 | −0·8 | +0·4 | −0·4 | −0·6 | −0·4 | +0·6 | 40·1 | 42·0 | 42·3 | 43·0 | 0·0 | − 0·3 | − 0·1 | + 0·6 |
| 2 | 59·5 | 43·3 | 50·7 | 55·2 | 55·4 | 50·3 | −0·8 | +0·3 | 0·0 | −0·6 | −0·2 | −0·1 | 48·5 | 51·1 | 49·6 | 47·3 | − 0·1 | − 0·1 | + 0·3 | + 0·1 |
| 3 | 54·4 | 42·6 | 48·6 | 50·6 | 52·3 | 46·2 | +0·4 | +0·4 | −0·2 | −0·4 | −0·3 | +0·2 | 43·8 | 45·3 | 45·6 | 41·1 | + 0·2 | 0·0 | − 0·2 | + 0·4 |
| 4 | 50·6 | 39·1 | 43·7 | 45·2 | 48·7 | 40·5 | −1·2 | +0·5 | +0·1 | −0·2 | −0·2 | +0·2 | 39·9 | 40·2 | 42·0 | 38·3 | + 0·1 | − 0·1 | 0·0 | + 0·3 |
| 5 | 45·5 | 39·4 | ... | ... | ... | ... | −0·4 | +0·4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 6 | 48·7 | 38·0 | 42·6 | 43·8 | 48·7 | 41·1 | −0·3 | +0·2 | +0·1 | +0·1 | +0·4 | +0·2 | 40·0 | 40·3 | 42·8 | 38·1 | + 0·2 | − 0·1 | + 0·4 | + 0·4 |
| 7 | 53·6 | 37·1 | 44·8 | 50·5 | 53·5 | 41·8 | −0·4 | +0·5 | −0·5 | −0·1 | −0·5 | +0·4 | 40·3 | 44·3 | 45·3 | 38·2 | − 0·5 | + 0·1 | − 0·4 | + 0·4 |
| 8 | 56·9 | 33·1 | 42·8 | 54·0 | 56·9 | 39·2 | −0·2 | +0·3 | −0·4 | +0·2 | +0·2 | +1·1 | 40·1 | 45·2 | 47·1 | 36·5 | − 0·5 | − 0·2 | + 0·3 | + 0·7 |
| 9 | 58·3 | 29·4 | 46·0 | 54·4 | 57·8 | 46·5 | +0·2 | +1·0 | −0·1 | 0·0 | +0·3 | +0·2 | 41·8 | 44·3 | 46·9 | 42·1 | − 0·5 | − 0·1 | + 0·5 | + 0·3 |
| 10 | 48·9 | 42·5 | 45·0 | 47·0 | 45·4 | 42·5 | +0·3 | +0·4 | 0·0 | 0·0 | −0·1 | +0·4 | 42·6 | 43·9 | 43·4 | 42·1 | 0·0 | + 0·1 | + 0·1 | + 0·3 |
| 11 | 44·9 | 40·9 | 43·2 | 44·9 | 44·5 | 41·4 | −0·6 | +0·3 | −0·4 | −0·2 | −0·1 | −0·1 | 42·0 | 42·4 | 41·8 | 40·0 | − 0·3 | − 0·4 | 0·0 | + 0·2 |
| 12 | 53·1 | 40·6 | ... | ... | ... | ... | −0·8 | +0·4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 13 | 49·0 | 35·4 | 44·6 | 47·2 | 45·2 | 40·4 | −0·5 | +0·5 | −0·3 | −0·2 | +0·2 | −0·2 | 39·4 | 41·1 | 40·3 | 38·2 | − 0·4 | − 0·7 | + 0·3 | + 0·2 |
| 14 | 47·6 | 35·3 | 45·0 | 44·7 | 46·4 | 39·7 | −0·4 | +0·6 | −0·7 | 0·0 | −0·1 | +0·1 | 39·6 | 39·1 | 41·1 | 37·1 | − 0·6 | + 0·1 | + 0·2 | + 0·3 |
| 15 | 57·0 | 36·8 | 43·4 | 50·0 | 55·2 | 45·0 | +0·1 | +0·2 | −0·2 | +0·1 | −0·3 | +0·3 | 40·1 | 43·3 | 46·2 | 43·1 | − 0·1 | − 0·2 | − 0·2 | + 0·1 |
| 16 | 58·7 | 42·5 | 52·0 | 57·5 | 56·9 | 42·5 | −0·4 | +0·1 | −0·5 | +0·1 | −0·2 | +0·1 | 47·1 | 49·2 | 46·3 | 37·3 | − 0·5 | + 0·1 | + 0·2 | + 0·2 |
| 17 | 57·0 | 37·3 | ... | ... | ... | ... | −0·6 | +0·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 18 | 49·6 | 37·7 | 44·4 | 47·3 | 47·4 | 40·0 | −0·7 | +1·3 | −0·3 | 0·0 | −0·2 | +0·1 | 39·2 | 39·6 | 38·4 | 35·8 | − 0·4 | + 0·1 | − 0·9 | + 0·2 |
| 19 | 44·4 | 33·9 | ... | ... | ... | ... | −1·4 | +0·5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 20 | 44·9 | 32·6 | ... | ... | ... | ... | −0·9 | +0·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 21 | 46·9 | 32·3 | 40·8 | 46·2 | 46·8 | 42·0 | −0·3 | +0·4 | −0·7 | −0·4 | +0·1 | +0·2 | 38·1 | 41·5 | 42·1 | 40·3 | − 0·6 | − 0·3 | + 0·1 | 0·0 |
| 22 | 53·8 | 38·8 | 49·4 | 53·0 | 47·3 | 45·2 | −1·4 | +0·6 | −0·4 | 0·0 | −0·6 | +0·3 | 45·1 | 45·3 | 43·2 | 43·1 | − 0·3 | 0·0 | − 0·4 | + 0·3 |
| 23 | 45·6 | 33·1 | 41·0 | 43·8 | 40·0 | 33·2 | +0·3 | 0·0 | −0·2 | +0·1 | −0·1 | −0·1 | 38·1 | 40·1 | 38·2 | 33·1 | + 0·1 | + 0·1 | + 0·1 | + 0·2 |
| 24 | 40·3 | 30·5 | 32·3 | 35·9 | 37·3 | 33·2 | −0·6 | 0·0 | −2·3 | −0·6 | +0·2 | +0·6 | 30·9 | 31·3 | 33·1 | 31·3 | − 1·5 | + 0·1 | + 0·2 | + 0·7 |
| 25 | 45·8 | 32·1 | 37·0 | 44·0 | 44·0 | 32·8 | −0·3 | +0·5 | −0·3 | −0·6 | +0·4 | +0·2 | 34·1 | 39·1 | 39·1 | 32·2 | − 0·4 | − 0·1 | + 0·2 | − 0·2 |
| 26 | 50·8 | 32·7 | ... | ... | ... | ... | −0·4 | +0·3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 27 | 52·6 | 38·6 | 48·0 | 49·0 | 46·7 | 45·4 | −2·9 | +1·3 | −0·3 | −1·1 | −0·7 | −0·2 | 43·3 | 44·5 | 45·1 | 45·1 | − 0·3 | − 1·3 | − 0·9 | + 0·1 |
| 28 | 47·4 | 44·6 | 46·2 | 45·2 | 45·1 | 45·8 | −0·2 | +0·1 | −0·3 | 0·0 | +0·1 | +0·2 | 44·9 | 44·5 | 44·5 | 45·6 | − 0·1 | − 0·1 | − 0·2 | + 0·3 |
| 29 | 61·1 | 43·3 | 49·3 | 55·0 | 60·7 | 50·2 | −0·9 | +0·4 | −0·3 | −0·6 | −0·8 | 0·0 | 47·9 | 50·0 | 53·1 | 48·8 | − 0·2 | − 0·2 | − 0·7 | 0·0 |
| 30 | 57·6 | 47·5 | 51·3 | 52·2 | 55·1 | 55·0 | −0·1 | +0·4 | −1·1 | −0·4 | −0·3 | +0·4 | 50·5 | 50·7 | 52·4 | 52·6 | − 0·9 | − 0·3 | − 0·5 | 0·0 |
| Means | 51·2 | 37·6 | 44·9 | 48·5 | 49·4 | 42·8 | −0·5 | +0·4 | −0·4 | −0·2 | −0·1 | +0·2 | 41·6 | 43·3 | 43·7 | 40·4 | − 0·3 | − 0·2 | − 0·1 | + 0·3 |

## READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

### MAY.

| Days of the Month. | Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 72·6 | 52·2 | 64·1 | 69·1 | 71·0 | 60·0 | −0·7 | +1·3 | −0·5 | −0·3 | −0·1 | +0·4 | 59·4 | 62·1 | 62·0 | 58·9 | − 0·4 | − 0·2 | 0·0 | + 0·1 |
| 2 | 74·4 | 49·1 | 61·5 | 70·5 | 73·4 | 57·8 | −1·1 | +0·7 | −1·1 | −0·1 | −0·2 | +0·2 | 57·7 | 62·4 | 63·9 | 56·1 | − 0·9 | 0·0 | + 0·6 | + 0·3 |
| 3 | 58·5 | 48·1 | ... | ... | ... | ... | +0·9 | +0·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 4 | 62·4 | 46·1 | 49·8 | 59·1 | 60·3 | 53·5 | −1·4 | −0·1 | −1·7 | −0·9 | −0·8 | −0·1 | 49·0 | 56·1 | 56·6 | 51·7 | − 1·3 | − 0·9 | − 0·6 | + 0·2 |
| 5 | 56·8 | 48·1 | 53·3 | 54·8 | 54·2 | 52·5 | −1·3 | +0·5 | −0·5 | −0·6 | −0·5 | +0·3 | 50·8 | 52·3 | 53·0 | 50·9 | − 0·2 | − 0·5 | − 0·2 | + 0·3 |
| 6 | 58·6 | 50·6 | 53·8 | 54·3 | 55·9 | 51·7 | −0·9 | +0·3 | 0·0 | −0·8 | −0·5 | +0·2 | 50·3 | 51·8 | 53·5 | 47·1 | 0·0 | − 0·1 | − 0·3 | + 0·6 |
| 7 | 62·3 | 44·1 | 53·0 | 58·7 | 61·0 | 52·2 | −1·8 | +0·5 | −0·9 | −1·5 | −0·7 | +0·1 | 46·6 | 50·4 | 51·1 | 48·1 | − 0·2 | − 1·2 | − 0·8 | + 0·3 |
| 8 | 58·4 | 50·3 | 56·6 | 56·2 | 56·8 | 55·0 | −1·1 | +0·1 | −0·2 | −0·2 | −0·4 | −0·1 | 54·3 | 54·4 | 54·2 | 53·4 | − 0·3 | − 0·2 | − 0·4 | 0·0 |
| 9 | 66·2 | 52·0 | 60·0 | 65·0 | 63·5 | 52·0 | −2·1 | +0·7 | −0·9 | −1·5 | −0·5 | +0·6 | 54·9 | 55·5 | 55·4 | 48·9 | − 0·3 | − 1·2 | − 0·3 | + 0·9 |
| 10 | 62·5 | 45·6 | ... | ... | ... | ... | −2·0 | −0·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 11 | 60·5 | 41·1 | 56·1 | 59·0 | 57·8 | 48·8 | −3·2 | +1·5 | −0·8 | −1·8 | +0·3 | +0·1 | 48·8 | 49·9 | 52·2 | 48·0 | − 1·0 | − 0·9 | + 0·4 | + 0·4 |
| 12 | 64·4 | 46·7 | 55·9 | 61·0 | 62·1 | 52·8 | −2·1 | +0·3 | −0·5 | −1·1 | +0·2 | +0·3 | 51·3 | 53·3 | 52·3 | 49·7 | − 0·3 | − 1·0 | − 0·3 | + 0·7 |
| 13 | 59·1 | 44·6 | 54·0 | 53·4 | 56·2 | 48·0 | −1·9 | +0·3 | −0·4 | −0·5 | −2·0 | +0·4 | 48·1 | 47·8 | 49·2 | 46·1 | 0·0 | 0·0 | − 0·5 | + 0·8 |
| 14 | 54·6 | 42·3 | 51·1 | 53·8 | 49·7 | 48·3 | −1·9 | +0·7 | −0·5 | −1·0 | −0·2 | +0·7 | 49·0 | 48·9 | 48·3 | 47·6 | − 0·2 | − 0·9 | 0·0 | + 0·8 |
| 15 | 54·7 | 46·4 | 51·3 | 50·0 | 51·2 | 51·3 | −1·8 | +0·8 | −0·3 | −0·6 | −0·5 | 0·0 | 48·9 | 47·9 | 49·3 | 48·3 | + 0·1 | + 0·3 | − 0·3 | + 0·4 |
| 16 | 62·7 | 46·2 | 56·2 | 60·8 | 61·2 | 56·2 | −2·3 | +0·3 | −0·2 | −0·3 | −0·3 | +0·4 | 52·0 | 54·6 | 54·9 | 54·4 | + 0·1 | + 0·2 | + 0·6 | + 0·6 |
| 17 | 73·6 | 55·6 | ... | ... | ... | ... | −1·6 | +0·5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 18 | 70·6 | 52·3 | 58·9 | 65·0 | 70·3 | 62·0 | −1·8 | +0·3 | −0·6 | −0·2 | −0·1 | +0·5 | 54·1 | 59·2 | 62·1 | 58·2 | − 0·6 | + 0·2 | + 0·3 | + 0·4 |
| 19 | 75·5 | 51·1 | 61·5 | 71·0 | 74·2 | 62·9 | −1·5 | +0·5 | −0·4 | −1·4 | −1·4 | +0·9 | 57·9 | 61·8 | 63·6 | 58·1 | − 0·6 | − 0·7 | − 0·3 | + 0·7 |
| 20 | 64·2 | 51·0 | 59·1 | 60·7 | 62·8 | 51·0 | −0·8 | +0·1 | −0·5 | −0·1 | +0·2 | +0·1 | 53·5 | 54·5 | 53·5 | 47·3 | − 0·4 | − 0·3 | − 0·1 | + 0·3 |
| 21 | 69·4 | 49·1 | 58·2 | 67·0 | 63·8 | 51·3 | −2·8 | +0·4 | −0·3 | −1·5 | −0·1 | +0·4 | 54·7 | 59·9 | 57·1 | 46·1 | − 0·3 | − 0·7 | − 0·2 | + 0·5 |
| 22 | 58·9 | 42·5 | 54·0 | 56·4 | 52·8 | 49·0 | −2·4 | +0·5 | −0·4 | −1·2 | −1·0 | 0·0 | 48·2 | 50·1 | 48·7 | 45·6 | − 0·2 | − 1·2 | − 0·6 | + 0·3 |
| 23 | 62·6 | 43·1 | 54·0 | 59·8 | 60·1 | 48·1 | −1·4 | −0·5 | −0·9 | −0·8 | −0·6 | +0·5 | 48·3 | 50·9 | 51·0 | 46·9 | − 0·5 | 0·0 | + 0·2 | + 0·8 |
| 24 | 63·4 | 38·7 | ... | ... | ... | ... | −2·6 | +0·9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 25 | 59·5 | 49·3 | 55·5 | 58·6 | 54·9 | 53·2 | −1·6 | +0·7 | −0·5 | −0·5 | −0·1 | +0·2 | 50·4 | 51·9 | 51·3 | 51·1 | − 0·3 | − 0·1 | 0·0 | + 0·4 |
| 26 | 63·3 | 51·5 | 57·9 | 61·1 | 60·0 | 57·1 | −2·8 | +0·5 | −0·6 | −0·8 | −0·5 | +0·7 | 54·0 | 55·9 | 54·8 | 54·0 | − 0·1 | − 0·2 | − 0·1 | + 0·9 |
| 27 | 73·4 | 50·4 | 64·4 | 71·0 | 71·6 | 56·2 | −1·2 | +0·8 | −0·4 | −1·1 | −0·4 | +0·4 | 57·1 | 60·8 | 61·6 | 53·3 | − 0·2 | − 0·7 | + 0·1 | + 0·4 |
| 28 | 70·1 | 48·1 | 64·8 | 66·5 | 69·0 | 53·3 | −1·3 | +1·1 | −0·9 | −0·1 | −1·1 | −0·1 | 57·8 | 58·3 | 60·2 | 50·7 | − 1·0 | 0·0 | − 0·2 | − 0·1 |
| 29 | 71·9 | 49·6 | 62·7 | 70·2 | 71·0 | 60·0 | −0·9 | +0·3 | −0·4 | −0·7 | −0·2 | +0·2 | 54·9 | 58·8 | 59·6 | 54·9 | − 0·3 | − 0·2 | + 0·3 | + 0·3 |
| 30 | 67·0 | 52·9 | 58·0 | 63·8 | 67·0 | 58·8 | −1·1 | 0·0 | −0·4 | −0·7 | −0·1 | +0·2 | 56·5 | 61·0 | 62·6 | 58·3 | − 0·4 | − 0·3 | 0·0 | 0·0 |
| 31 | 74·0 | 55·2 | ... | ... | ... | ... | −1·3 | +0·3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Means | 64·7 | 48·2 | 57·1 | 61·4 | 62·0 | 54·0 | −1·6 | +0·5 | −0·6 | −0·8 | −0·4 | +0·3 | 52·6 | 55·0 | 55·5 | 51·3 | − 0·4 | − 0·4 | − 0·1 | + 0·4 |

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

JUNE.

| Days of the Month. | Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 78·9 | 56·0 | 70·9 | 78·9 | 75·2 | 66·8 | −2·2 | +1·0 | +0·2 | −0·7 | −0·4 | −0·1 | 65·7 | 68·3 | 66·0 | 63·1 | − 0·3 | − 1·0 | − 0·4 | + 0·2 |
| 2 | 73·7 | 59·6 | 66·9 | 68·0 | 70·3 | 60·0 | −1·4 | +0·4 | −1·3 | −0·6 | −0·6 | −0·3 | 62·0 | 62·3 | 63·1 | 58·9 | − 1·0 | − 0·4 | − 0·7 | + 0·1 |
| 3 | 77·1 | 55·1 | 74·0 | 75·8 | 73·9 | 63·3 | −0·8 | +1·0 | −0·6 | −0·7 | 0·0 | +0·5 | 65·9 | 66·5 | 64·3 | 59·1 | − 0·9 | − 1·3 | − 0·5 | + 0·3 |
| 4 | 80·5 | 59·2 | 66·8 | 77·2 | 78·0 | 62·8 | −1·0 | +1·1 | +0·1 | −0·9 | −0·4 | +0·2 | 62·9 | 69·6 | 69·2 | 61·4 | − 0·2 | − 0·6 | − 0·4 | − 0·4 |
| 5 | 65·1 | 53·7 | 57·1 | 60·8 | 62·4 | 54·4 | −1·2 | +0·5 | +0·5 | −0·5 | 0·0 | +0·2 | 52·5 | 53·0 | 54·1 | 48·6 | − 0·4 | − 0·7 | + 0·1 | 0·0 |
| 6 | 57·2 | 48·1 | 51·9 | 53·0 | 57·2 | 49·9 | −1·1 | +0·4 | −0·3 | −0·4 | −0·5 | +0·2 | 46·1 | 47·4 | 49·4 | 44·2 | − 0·2 | − 0·2 | − 0·2 | + 0·1 |
| 7 | 60·9 | 42·1 | ... | ... | ... | ... | −4·1 | +0·4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 8 | 67·3 | 50·0 | ... | ... | ... | ... | −1·9 | +0·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 9 | 68·7 | 47·7 | 54·0 | 61·4 | 64·9 | 61·0 | −1·8 | +0·6 | −0·2 | −0·6 | −0·2 | +0·4 | 53·0 | 57·2 | 58·1 | 58·0 | 0·0 | − 0·6 | − 0·6 | + 0·2 |
| 10 | 72·6 | 56·3 | 64·0 | 67·5 | 69·3 | 63·8 | −2·2 | +0·8 | −0·2 | −0·6 | −0·4 | +0·6 | 59·1 | 61·1 | 61·1 | 59·4 | − 0·2 | 0·0 | − 0·1 | + 0·3 |
| 11 | 68·9 | 52·8 | 63·8 | 65·0 | 67·6 | 57·8 | −2·7 | +1·2 | −1·7 | −1·6 | −0·7 | +0·3 | 57·7 | 59·2 | 61·0 | 53·1 | − 1·6 | − 1·6 | − 0·8 | + 0·3 |
| 12 | 65·5 | 52·0 | 58·9 | 64·1 | 63·7 | 54·9 | −2·5 | +0·5 | 0·0 | −1·0 | −0·4 | +1·3 | 54·6 | 57·6 | 58·0 | 51·1 | − 0·2 | − 0·7 | − 0·5 | + 0·5 |
| 13 | 63·6 | 49·9 | 59·0 | 62·7 | 58·3 | 55·3 | −3·4 | +0·6 | −0·1 | −0·6 | −0·5 | 0·0 | 51·6 | 54·6 | 51·3 | 51·8 | − 0·2 | − 0·5 | − 0·3 | 0·0 |
| 14 | 65·3 | 55·1 | ... | ... | ... | ... | −2·8 | +0·1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 15 | 68·1 | 44·4 | 62·6 | 66·2 | 65·5 | 56·2 | −1·9 | +1·1 | −0·8 | −0·6 | −0·9 | +0·2 | 56·9 | 56·1 | 55·1 | 50·6 | − 0·4 | − 0·5 | − 0·1 | + 0·3 |
| 16 | 65·7 | 53·1 | 62·5 | 59·5 | 58·8 | 57·3 | −3·1 | +0·7 | −2·0 | −0·2 | −0·6 | 0·0 | 55·3 | 56·0 | 56·0 | 55·1 | − 1·6 | 0·0 | − 0·7 | + 0·1 |
| 17 | 60·7 | 55·1 | 57·2 | 58·1 | 59·5 | 55·1 | −0·4 | +0·5 | −1·4 | −0·3 | +0·4 | +0·3 | 56·9 | 56·6 | 57·0 | 53·3 | − 0·7 | − 0·3 | − 0·3 | − 0·1 |
| 18 | 67·8 | 45·4 | 59·7 | 63·1 | 67·8 | 56·8 | −2·4 | +0·2 | −0·7 | −0·6 | −0·4 | +0·5 | 52·0 | 54·0 | 56·7 | 51·4 | − 0·6 | − 0·8 | − 1·0 | 0·0 |
| 19 | 70·1 | 46·1 | 61·9 | 66·9 | 69·2 | 61·0 | −1·9 | +1·5 | −0·7 | −1·1 | −0·5 | +0·3 | 53·5 | 56·1 | 58·0 | 53·3 | − 0·8 | − 1·7 | + 0·1 | + 0·3 |
| 20 | 66·4 | 51·0 | 61·6 | 63·1 | 63·6 | 53·0 | −0·7 | +0·6 | −0·6 | −0·5 | −0·4 | −0·1 | 53·7 | 55·0 | 55·6 | 48·7 | − 0·6 | 0·0 | − 0·1 | 0·0 |
| 21 | 63·8 | 50·6 | ... | ... | ... | ... | −1·2 | +0·5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 22 | 67·6 | 44·9 | 53·8 | 62·5 | 67·0 | 55·7 | −1·6 | +1·3 | −0·8 | −0·5 | +0·3 | +0·6 | 48·6 | 53·7 | 56·2 | 52·0 | − 1·0 | − 1·1 | + 0·4 | + 0·4 |
| 23 | 72·6 | 47·5 | 63·8 | 70·1 | 72·0 | 61·8 | −1·4 | +1·1 | 0·0 | 0·0 | −0·5 | +0·3 | 57·0 | 60·1 | 61·9 | 55·1 | + 0·1 | − 0·2 | + 0·3 | + 0·2 |
| 24 | 73·6 | 46·6 | 64·8 | 70·1 | 73·1 | 57·2 | −0·7 | +1·0 | −0·8 | −1·1 | −0·5 | −0·2 | 57·1 | 60·1 | 60·6 | 54·1 | − 1·2 | − 0·5 | + 0·5 | + 0·1 |
| 25 | 69·9 | 51·1 | 55·4 | 65·2 | 68·8 | 54·1 | −1·3 | +0·5 | −0·4 | −0·4 | −0·2 | +0·5 | 51·1 | 56·9 | 60·0 | 49·6 | − 0·2 | − 0·9 | 0·0 | + 0·5 |
| 26 | 76·8 | 46·3 | ... | ... | ... | ... | −1·8 | +0·9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 27 | 67·8 | 52·1 | 58·8 | 63·0 | 66·1 | 60·4 | −0·7 | +0·3 | −0·4 | −0·3 | −0·5 | −0·1 | 56·1 | 58·6 | 61·3 | 57·2 | − 0·2 | − 0·2 | − 0·5 | − 0·1 |
| 28 | 72·6 | 54·5 | ... | ... | ... | ... | −1·2 | +0·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 29 | 74·7 | 54·0 | 64·6 | 74·0 | 72·5 | 55·2 | −1·3 | +0·2 | −0·4 | −0·6 | −0·2 | +0·6 | 59·1 | 63·9 | 63·1 | 53·1 | − 0·7 | − 0·1 | + 0·3 | + 0·3 |
| 30 | 76·0 | 52·7 | 62·1 | 71·9 | 76·0 | 60·4 | −1·0 | +0·5 | −0·8 | −1·4 | −0·6 | +0·3 | 56·5 | 62·1 | 63·3 | 56·2 | − 1·2 | − 1·3 | − 0·8 | + 0·2 |
| Means | 69·3 | 51·1 | 61·5 | 66·2 | 67·5 | 58·1 | −1·7 | +0·7 | −0·6 | −0·7 | −0·4 | +0·3 | 56·0 | 58·6 | 59·2 | 54·1 | − 0·6 | − 0·6 | − 0·3 | + 0·2 |

## READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

### JULY.

| Days of the Month. | Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 78·2 | 52·9 | 70·0 | 78·2 | 76·8 | 60·6 | −1·7 | +0·3 | −0·1 | −1·4 | +0·2 | +0·5 | 61·6 | 64·1 | 60·6 | 55·4 | − 0·2 | − 0·7 | + 0·1 | + 0·4 |
| 2 | 78·7 | 52·7 | 69·1 | 76·9 | 75·5 | 60·1 | −1·4 | +0·6 | −1·4 | −0·5 | −0·6 | 0·0 | 60·0 | 62·1 | 61·5 | 53·9 | − 1·0 | + 0·1 | − 0·2 | + 0·3 |
| 3 | 82·2 | 51·1 | 72·9 | 79·8 | 80·3 | 57·7 | −1·8 | +1·5 | +0·3 | −0·7 | −1·5 | +0·1 | 60·9 | 65·0 | 67·2 | 57·1 | + 0·1 | + 0·1 | − 0·4 | 0·0 |
| 4 | 61·1 | 55·9 | 56·0 | 56·9 | 61·1 | 59·0 | −1·0 | +0·1 | +0·1 | −0·1 | −0·4 | +0·3 | 55·2 | 56·1 | 59·3 | 58·2 | − 0·3 | − 0·6 | − 0·5 | − 0·1 |
| 5 | 68·5 | 56·6 | ... | ... | ... | ... | −2·5 | +0·3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 6 | 72·5 | 50·9 | 63·6 | 69·8 | 70·5 | 61·3 | −3·0 | +1·0 | −0·6 | −0·4 | −1·1 | +0·2 | 57·3 | 60·5 | 62·0 | 58·1 | − 0·3 | − 0·8 | − 0·5 | + 0·3 |
| 7 | 71·9 | 56·6 | 62·9 | 69·9 | 69·0 | 61·3 | −3·1 | +0·6 | −1·2 | −0·5 | −0·5 | +0·2 | 56·4 | 58·7 | 58·6 | 56·1 | − 0·9 | + 0·4 | + 0·1 | + 0·2 |
| 8 | 64·4 | 55·6 | 62·0 | 59·6 | 59·4 | 57·8 | −2·1 | +0·7 | −0·6 | −0·2 | −0·4 | +0·4 | 58·5 | 58·0 | 58·1 | 55·3 | − 0·3 | + 0·2 | 0·0 | + 0·3 |
| 9 | 70·7 | 53·9 | 62·5 | 65·3 | 68·8 | 53·9 | −2·3 | −0·1 | −1·1 | −0·8 | −0·8 | −0·2 | 56·1 | 57·8 | 57·1 | 53·0 | − 0·4 | + 0·1 | − 0·7 | + 0·1 |
| 10 | 67·4 | 53·9 | 62·9 | 65·0 | 63·9 | 60·8 | −1·6 | +0·8 | −0·2 | −0·3 | −0·5 | −0·2 | 60·3 | 61·6 | 62·1 | 58·9 | − 0·3 | − 0·2 | 0·0 | − 0·2 |
| 11 | 71·4 | 58·5 | 65·0 | 68·4 | 69·0 | 65·0 | −2·3 | +0·2 | −0·8 | −0·3 | −0·8 | +0·4 | 61·8 | 62·3 | 63·1 | 61·1 | − 0·3 | 0·0 | − 0·3 | + 0·3 |
| 12 | 66·8 | 57·1 | ... | ... | ... | ... | −2·5 | +0·5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 13 | 59·8 | 55·1 | 56·2 | 55·9 | 56·5 | 58·0 | −0·2 | −0·1 | −0·3 | −0·2 | −0·4 | +0·4 | 56·1 | 55·3 | 53·9 | 56·0 | − 0·2 | − 0·3 | − 0·1 | + 0·2 |
| 14 | 65·1 | 51·5 | 61·8 | 62·0 | 61·9 | 56·8 | −2·9 | +0·4 | −0·6 | −0·5 | −0·5 | +0·6 | 57·1 | 56·3 | 57·1 | 53·7 | − 0·4 | − 0·6 | − 0·6 | + 0·1 |
| 15 | 69·6 | 52·2 | 61·9 | 66·2 | 63·8 | 58·1 | −3·4 | +0·3 | −1·1 | −0·6 | −0·8 | +0·3 | 56·7 | 57·9 | 58·0 | 55·1 | − 1·0 | − 0·1 | − 0·3 | + 0·1 |
| 16 | 64·7 | 54·8 | 62·8 | 62·2 | 57·7 | 58·3 | −1·8 | +0·2 | −0·3 | −0·4 | −0·7 | −0·3 | 60·1 | 59·1 | 57·2 | 58·0 | − 0·2 | − 0·1 | − 0·6 | + 0·2 |
| 17 | 66·1 | 57·1 | 61·0 | 57·5 | 65·2 | 57·8 | −2·8 | +0·1 | −0·7 | −1·0 | −0·7 | +0·2 | 57·9 | 56·1 | 59·1 | 56·1 | − 0·2 | − 0·6 | − 0·5 | + 0·2 |
| 18 | 63·8 | 55·1 | 56·0 | 58·0 | 62·0 | 57·0 | −1·0 | +0·1 | −0·1 | −0·1 | −0·6 | −0·1 | 55·5 | 56·1 | 58·6 | 55·4 | − 0·2 | + 0·2 | − 0·2 | − 0·3 |
| 19 | 62·6 | 55·0 | ... | ... | ... | ... | −0·9 | +0·4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 20 | 67·1 | 48·2 | 56·8 | 62·8 | 66·6 | 56·0 | −1·4 | +1·1 | 0·0 | −0·3 | −0·9 | +0·5 | 54·6 | 59·1 | 61·1 | 55·1 | − 0·1 | − 0·2 | + 0·1 | + 0·5 |
| 21 | 65·2 | 52·1 | 59·1 | 63·9 | 62·2 | 58·1 | −4·8 | +0·5 | −0·3 | +0·3 | −0·2 | +0·2 | 55·7 | 57·9 | 58·1 | 55·6 | + 0·1 | + 0·1 | − 0·5 | − 0·1 |
| 22 | 75·7 | 49·4 | 65·9 | 72·2 | 75·0 | 60·0 | −2·1 | +1·3 | −0·4 | −0·4 | −1·1 | +0·4 | 59·1 | 63·3 | 65·1 | 57·0 | − 0·5 | − 0·8 | − 1·0 | + 0·2 |
| 23 | 77·6 | 56·3 | 68·5 | 74·0 | 75·1 | 62·3 | −1·4 | +1·1 | −0·5 | +0·2 | −1·3 | +1·3 | 61·1 | 63·6 | 65·1 | 60·1 | − 0·7 | − 0·1 | − 1·0 | + 0·3 |
| 24 | 79·9 | 54·3 | 72·0 | 79·9 | 79·3 | 65·9 | −3·0 | +1·2 | +0·1 | −0·5 | −1·7 | +0·9 | 65·6 | 66·8 | 67·7 | 62·2 | − 0·2 | − 1·0 | − 1·4 | + 0·2 |
| 25 | 75·7 | 58·1 | 70·0 | 71·0 | 73·1 | 63·0 | −3·3 | +1·0 | −0·6 | −0·7 | −1·4 | +0·4 | 64·3 | 64·1 | 66·0 | 60·3 | − 0·6 | − 0·8 | − 0·9 | 0·0 |
| 26 | 74·8 | 55·1 | ... | ... | ... | ... | −4·2 | +1·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 27 | 76·1 | 52·1 | 66·3 | 72·0 | 75·9 | 65·4 | −1·9 | +1·0 | −0·9 | −0·6 | −0·1 | +0·8 | 59·6 | 61·4 | 63·1 | 57·6 | − 0·7 | − 0·5 | 0·0 | + 0·2 |
| 28 | 72·6 | 56·0 | 67·3 | 68·8 | 70·3 | 61·0 | −1·5 | +1·0 | −0·9 | 0·0 | −0·7 | +0·2 | 61·0 | 61·4 | 63·1 | 56·3 | − 0·5 | − 0·2 | − 0·3 | + 0·3 |
| 29 | 73·8 | 54·1 | 65·0 | 71·0 | 73·3 | 60·1 | −2·0 | +0·2 | −0·2 | −0·1 | −0·4 | +0·3 | 58·1 | 61·0 | 62·1 | 56·1 | 0·0 | + 0·1 | 0·0 | + 0·1 |
| 30 | 81·6 | 49·0 | 68·5 | 75·2 | 81·2 | 69·9 | −1·5 | +1·4 | −1·1 | −0·4 | −0·4 | +1·0 | 61·3 | 63·6 | 65·6 | 60·1 | − 0·8 | − 0·3 | − 0·6 | + 0·3 |
| 31 | 72·6 | 62·8 | 65·8 | 69·0 | 72·6 | 63·1 | −1·9 | +0·7 | −0·6 | −1·3 | −1·0 | +0·1 | 59·7 | 59·3 | 59·6 | 56·1 | − 0·6 | − 0·8 | − 0·6 | + 0·3 |
| **Means** | 70·9 | 54·3 | 64·1 | 67·8 | 69·1 | 60·3 | −2·2 | +0·6 | −0·5 | −0·4 | −0·7 | +0·3 | 58·9 | 60·3 | 61·1 | 57·0 | − 0·4 | − 0·3 | − 0·4 | + 0·2 |

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

AUGUST.

| Days of the Month. | Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 69·1 | 51·6 | 61·7 | 66·2 | 69·1 | 60·5 | −2·1 | +0·6 | −0·9 | −0·2 | −0·5 | +0·1 | 54·6 | 55·9 | 58·0 | 56·6 | − 1·2 | − 0·6 | 0·0 | 0·0 |
| 2 | 71·6 | 49·1 | ... | ... | ... | ... | −1·1 | +1·0 | ... | ... | ... | .. | ... | .. | ... | ... | ... | ... | ... | ... |
| 3 | 80·7 | 48·2 | ... | ... | ... | ... | −2·3 | +1·1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 4 | 77·5 | 56·2 | 71·2 | 76·2 | 76·5 | 66·8 | −2·7 | +0·8 | −0·4 | −1·0 | −0·5 | +0·3 | 64·0 | 64·7 | 64·1 | 58·0 | − 0·5 | − 0·4 | − 0·8 | + 0·2 |
| 5 | 67·1 | 54·8 | 59·8 | 55·3 | 55·9 | 57·5 | +0·4 | +0·2 | −0·3 | +0·2 | +0·2 | +0·1 | 53·1 | 54·1 | 54·1 | 55·0 | − 0·2 | + 0·1 | − 0·1 | + 0·2 |
| 6 | 67·1 | 56·7 | 59·9 | 64·1 | 67·0 | 59·2 | −1·1 | +0·6 | +0·1 | −0·5 | −0·6 | +0·1 | 56·1 | 58·1 | 60·8 | 56·1 | 0·0 | − 0·6 | − 0·1 | + 0·1 |
| 7 | 73·7 | 55·5 | 59·8 | 70·1 | 73·2 | 63·2 | −1·9 | +0·3 | −0·7 | −0·9 | −0·4 | +0·6 | 55·6 | 59·5 | 62·4 | 59·1 | − 0·5 | − 0·8 | + 0·3 | + 0·3 |
| 8 | 68·6 | 52·2 | 63·2 | 64·2 | 68·5 | 60·0 | −2·5 | +0·9 | +0·3 | −1·5 | +0·5 | +0·4 | 59·1 | 59·6 | 61·3 | 58·7 | + 0·1 | − 1·2 | − 0·4 | + 0·4 |
| 9 | 74·8 | 52·6 | ... | ... | ... | ... | −3·2 | +0·9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 10 | 73 9 | 54·0 | 66·8 | 71·5 | 69·2 | 54·0 | −2·5 | +0·8 | −0·8 | −0·3 | −1·3 | +0·5 | 60·6 | 61·5 | 60·2 | 52·2 | − 0·6 | − 0·3 | − 0·7 | + 0·4 |
| 11 | 67·5 | 48·0 | 58·2 | 62·8 | 65·8 | 56·5 | −2·4 | +0·7 | −1·2 | −1·1 | −0·6 | 0·0 | 52·7 | 52·1 | 53·1 | 49·4 | − 0·6 | − 0·9 | − 0·2 | + 0·3 |
| 12 | 65·6 | 47·6 | 55·9 | 61·6 | 62·1 | 57·8 | −0·4 | +0·7 | −1·0 | −0·8 | −0·5 | +0·3 | 50·2 | 52·1 | 51·6 | 50·4 | − 1·1 | + 0·2 | + 0·2 | + 0·4 |
| 13 | 61·6 | 50·4 | 54·4 | 58·1 | 60·2 | 57·0 | −1·9 | +0·2 | −0·3 | −0·2 | −0·4 | +0·1 | 52·4 | 53·3 | 55·3 | 55·4 | − 0·3 | 0·0 | 0·0 | − 0·2 |
| 14 | 65·4 | 53·1 | 59·5 | 64·2 | 61·8 | 57·3 | −1·2 | +0·3 | −0·2 | −0·4 | 0·0 | +0·4 | 54·4 | 57·1 | 56·2 | 55·1 | + 0·1 | 0·0 | − 0·1 | + 0·3 |
| 15 | 67·6 | 48·0 | 61·0 | 67·0 | 65·9 | 54·6 | −1·7 | −1·2 | −0·6 | −0·9 | +0·1 | +0·8 | 56·8 | 58·1 | 57·0 | 51·2 | − 0·5 | − 0·7 | − 0·5 | + 0·5 |
| 16 | 70·0 | 49·5 | ... | ... | ... | ... | −0·9 | +1·3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 17 | 69·6 | 48·2 | 59·9 | 65·3 | 69·2 | 54·2 | −1·4 | +1·0 | −0·8 | +0·2 | −0·1 | +1·3 | 55·1 | 56·4 | 57·9 | 52·5 | − 0·6 | + 0·1 | + 0·9 | + 0·7 |
| 18 | 62·9 | 52·3 | 56·1 | 58·2 | 61·2 | 57·3 | −1·1 | +1·2 | −0·3 | −0·3 | −0·4 | +0·7 | 53·4 | 55·0 | 56·9 | 55·7 | − 0·4 | 0·0 | − 0·1 | + 0·3 |
| 19 | 65·5 | 54·9 | 59·2 | 63·2 | 64·1 | 56·3 | −0·8 | +0·4 | −0·6 | −0·7 | −0·3 | 0·0 | 54·5 | 57·1 | 57·3 | 55·3 | − 0·6 | − 0·2 | − 0·3 | 0·0 |
| 20 | 63·6 | 53·5 | 59·1 | 60·7 | 63·0 | 60·0 | −0·4 | +0·5 | −0·4 | −0·1 | −0·1 | +0·3 | 57·1 | 59·3 | 60·1 | 59·3 | − 0·4 | − 0·2 | 0·0 | − 0·3 |
| 21 | 72·7 | 57·0 | 66·5 | 70·6 | 68·9 | 57·0 | −2·2 | +1·1 | +0·3 | −0·6 | −0·6 | +1·1 | 61·0 | 61·3 | 60·8 | 56·1 | + 0·2 | − 0·5 | − 0·2 | + 0·4 |
| 22 | 68·6 | 54·8 | 61·2 | 64·0 | 61·0 | 58·8 | −2·4 | +0·7 | −0·6 | −0·7 | −0·5 | +0·3 | 59·1 | 61·1 | 59·2 | 54·3 | − 0·7 | − 0·9 | − 0·4 | + 0·4 |
| 23 | 59·4 | 52·0 | ... | ... | ... | ... | +0·6 | −0·1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 24 | 75·0 | 52·0 | 65·4 | 70·1 | 73·8 | 58·4 | −2·3 | −0·1 | −0·2 | +0·2 | −0·1 | +0·3 | 62·4 | 62·4 | 61·1 | 56·1 | − 0·2 | + 0·1 | + 0·1 | + 0·2 |
| 25 | 70·1 | 57·2 | 63·0 | 66·0 | 60·2 | 58·5 | −1·9 | +0·7 | −0·1 | −0·2 | −1·2 | +0·5 | 57·7 | 57·7 | 58·9 | 53·8 | − 0·1 | − 0·1 | − 0·6 | + 0·4 |
| 26 | 69·4 | 53·1 | 60·3 | 66·0 | 66·1 | 60·8 | −1·2 | +0·7 | −0·5 | −0·3 | −0·4 | +0·1 | 56·0 | 61·1 | 61·1 | 57·3 | − 0·3 | − 0·2 | − 0·5 | − 0·2 |
| 27 | 66·5 | 57·9 | 62·0 | 65·7 | 65·6 | 57·9 | −1·5 | +0·8 | −0·2 | −0·1 | −0·8 | +0·5 | 55·9 | 58·3 | 59·1 | 56·0 | 0·0 | + 0·1 | − 0·7 | + 0·2 |
| 28 | 65·6 | 52·1 | 55·3 | 61·1 | 58·1 | 54·8 | −2·3 | +0·8 | −0·4 | −0·5 | −0·8 | +0·5 | 52·7 | 57·3 | 56·0 | 52·1 | − 0·3 | − 0·5 | − 0·5 | + 0·3 |
| 29 | 67·1 | 53·8 | 61·1 | 66·0 | 62·8 | 53·8 | −1·9 | +0·7 | −0·8 | −0·3 | −0·8 | +0·4 | 54·9 | 56·1 | 55·6 | 51·3 | − 0·4 | − 0·7 | − 0·6 | + 0·1 |
| 30 | 67·8 | 49·8 | ... | ... | ... | ... | −1·4 | +0·7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 31 | 61·7 | 47·1 | 59·8 | 60·4 | 58·5 | 54·5 | −2·1 | +0·5 | +0·2 | −0·7 | −0·6 | +0·1 | 53·7 | 54·2 | 54·5 | 53·6 | − 0·1 | − 0·5 | − 0·8 | − 0·2 |
| Means | 68·6 | 52·4 | 60·8 | 64·7 | 65·1 | 57·9 | −1·6 | +0·6 | −0·4 | −0·5 | −0·4 | +0·4 | 56·1 | 57·7 | 58·1 | 54·8 | − 0·4 | − 0·3 | − 0·2 | + 0·2 |

## READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

### SEPTEMBER.

| Days of the Month. | Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 60·1 | 50·5 | 55·4 | 56·5 | 59·1 | 56·4 | −0·9 | +0·4 | −0·4 | −0·6 | −0·4 | 0·0 | 52·0 | 51·7 | 52·0 | 51·3 | 0·0 | − 0·5 | + 0·2 | 0·0 |
| 2 | 63·1 | 48·1 | 56·0 | 59·3 | 52·0 | 51·0 | −1·4 | +0·5 | −0·7 | −0·8 | −1·1 | +0·5 | 51·3 | 53·0 | 50·4 | 46·4 | 0·0 | − 0·3 | − 0·4 | + 0·4 |
| 3 | 58·8 | 42·1 | 55·0 | 56·1 | 54·2 | 52·0 | −1·9 | +0·8 | +0·4 | −0·8 | −0·4 | +0·4 | 50·1 | 50·4 | 51·3 | 51·4 | − 0·7 | − 1·3 | − 0·2 | − 0·2 |
| 4 | 53·9 | 50·1 | 53·0 | 53·7 | 52·0 | 50·2 | −0·2 | +0·5 | +0·3 | −0·4 | −0·2 | 0·0 | 52·3 | 52·1 | 50·1 | 48·4 | − 0·3 | − 0·2 | 0·0 | 0·0 |
| 5 | 60·6 | 41·0 | 53·4 | 57·5 | 60·0 | 53·5 | −4·2 | +1·0 | +0·5 | −0·1 | 0·0 | +0·2 | 49·1 | 52·0 | 52·8 | 50·1 | + 0·3 | + 0·2 | 0·0 | + 0·2 |
| 6 | 66·1 | 50·1 | ... | ... | ... | ... | −1·9 | +0·6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 7 | 70·9 | 49·1 | 60·6 | 68·0 | 70·9 | 54·0 | −0·5 | +1·8 | +0·1 | +0·4 | +0·3 | +0·4 | 55·4 | 57·6 | 60·1 | 52·6 | + 0·2 | + 0·6 | + 0·3 | + 0·2 |
| 8 | 73·0 | 44·6 | 64·2 | 73·0 | 66·4 | 58·5 | −1·3 | +1·3 | +0·6 | −0·1 | −0·9 | −0·1 | 58·4 | 62·9 | 60·1 | 55·5 | + 0·4 | + 0·1 | − 0·1 | + 0·2 |
| 9 | 66·6 | 51·1 | 58·2 | 63·0 | 61·0 | 52·0 | +0·6 | 0·0 | −0·2 | −0·5 | −0·6 | +0·1 | 53·3 | 55·4 | 53·6 | 49·0 | + 0·6 | + 1·0 | − 0·5 | + 0·5 |
| 10 | 58·8 | 44·7 | 53·0 | 56·4 | 58·0 | 49·0 | −1·2 | +0·5 | +0·4 | −0·1 | −0·3 | +0·5 | 47·6 | 48·1 | 49·1 | 45·5 | + 0·6 | + 0·4 | + 0·5 | + 0·8 |
| 11 | 56·5 | 43·6 | 50·8 | 55·9 | 55·5 | 46·1 | −1·1 | +0·5 | −0·1 | −0·5 | −0·7 | +0·5 | 48·6 | 49·5 | 49·1 | 45·2 | 0·0 | − 0·2 | 0·0 | + 0·3 |
| 12 | 58·0 | 42·2 | 51·1 | 56·3 | 56·3 | 44·6 | −1·5 | +0·9 | −0·5 | −0·3 | −0·5 | +1·0 | 45·9 | 47·9 | 47·3 | 43·2 | − 0·2 | + 0·5 | + 0·1 | + 0·5 |
| 13 | 60·1 | 37·4 | ... | ... | ... | ... | −1·8 | +1·3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 14 | 66·4 | 49·3 | 56·0 | 62·0 | 64·2 | 51·6 | −0·8 | +0·4 | −0·4 | −0·8 | −0·9 | +0·4 | 51·1 | 55·1 | 56·5 | 50·3 | + 0·1 | + 0·1 | 0·0 | + 0·4 |
| 15 | 61·6 | 47·1 | 58·5 | 60·0 | 56·8 | 52·3 | −1·4 | +1·5 | −0·4 | +0·1 | −0·3 | +0·5 | 54·1 | 55·9 | 54·2 | 51·4 | − 0·2 | + 0·3 | − 0·1 | + 0·4 |
| 16 | 62·0 | 45·3 | 55·2 | 59·4 | 59·0 | 55·0 | −2·0 | +0·7 | +0·6 | −0·2 | −0·1 | +0·3 | 51·1 | 52·1 | 53·3 | 52·5 | + 0·6 | + 0·3 | + 0·3 | + 0·4 |
| 17 | 70·5 | 53·2 | 60·8 | 68·2 | 68·1 | 53·2 | −0·5 | +1·1 | +0·2 | +0·2 | −0·1 | +0·6 | 56·6 | 60·4 | 61·1 | 52·9 | + 0·4 | + 0·6 | + 0·6 | + 0·3 |
| 18 | 72·6 | 45·1 | 64·6 | 70·6 | 68·7 | 59·0 | −1·0 | +0·1 | −0·2 | −0·2 | 0·0 | +0·7 | 59·6 | 62·1 | 62·1 | 58·1 | − 0·2 | 0·0 | + 0·2 | + 0·4 |
| 19 | 73·5 | 53·2 | 63·2 | 69·0 | 72·3 | 59·0 | −0·6 | +1·2 | −0·5 | −0·4 | −0·3 | +0·9 | 60·1 | 63·3 | 65·2 | 58·5 | − 0·2 | − 0·6 | − 0·3 | + 0·6 |
| 20 | 75·9 | 53·8 | ... | ... | ... | ... | −1·3 | +1·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 21 | 63·6 | 51·3 | 58·0 | 58·7 | 62·1 | 51·8 | −0·2 | +0·9 | −0·2 | −0·7 | −0·5 | +0·7 | 57·3 | 56·3 | 57·2 | 51·1 | − 0·3 | − 0·5 | − 0·3 | + 0·5 |
| 22 | 60·7 | 42·7 | 53·0 | 60·0 | 59·9 | 53·8 | −1·4 | +1·2 | −0·2 | +0·3 | +0·1 | +0·2 | 52·4 | 56·3 | 54·6 | 52·2 | − 0·2 | + 0·1 | − 0·1 | − 0·1 |
| 23 | 64·6 | 53·4 | 62·3 | 64·4 | 62·3 | 57·5 | −1·4 | +1·0 | −0·6 | −0·3 | −0·3 | 0·0 | 58·6 | 60·1 | 59·3 | 56·4 | − 0·8 | − 0·7 | 0·0 | 0·0 |
| 24 | 64·9 | 54·6 | 56·4 | 60·0 | 58·9 | 55·0 | −1·9 | +0·6 | −0·1 | −0·7 | +0·3 | 0·0 | 56·1 | 58·6 | 57·4 | 54·1 | − 0·1 | − 0·4 | + 0·2 | + 0·1 |
| 25 | 62·0 | 51·1 | 54·2 | 57·9 | 62·0 | 53·1 | 0·0 | +1·0 | −0·4 | −0·5 | +0·8 | +0·4 | 53·3 | 55·3 | 57·5 | 52·2 | − 0·3 | − 0·3 | + 0·4 | + 0·4 |
| 26 | 65·5 | 51·8 | 58·0 | 63·0 | 63·6 | 53·2 | −1·5 | +0·8 | +0·3 | +0·5 | 0·0 | +0·4 | 54·1 | 57·0 | 54·1 | 51·3 | + 0·3 | + 1·0 | − 0·2 | + 0·5 |
| 27 | 61·6 | 50·8 | ... | ... | ... | ... | −2·0 | +0·5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 28 | 70·9 | 54·8 | 61·2 | 66·5 | 70·7 | 63·0 | −0·9 | +0·5 | −0·5 | −0·5 | −0·7 | −0·1 | 59·5 | 63·3 | 65·7 | 62·1 | − 0·3 | − 0·3 | + 0·1 | + 0·3 |
| 29 | 74·8 | 60·6 | 67·9 | 69·1 | 73·8 | 60·6 | −0·4 | +0·7 | +0·3 | −0·9 | +0·1 | +0·7 | 64·3 | 65·2 | 67·6 | 60·2 | 0·0 | + 0·1 | + 0·8 | + 0·3 |
| 30 | 79·8 | 57·1 | 69·5 | 77·8 | 78·8 | 60·2 | −0·1 | +1·0 | +0·9 | +1·1 | 0·0 | +1·1 | 65·1 | 69·5 | 69·2 | 60·1 | + 0·5 | + 0·7 | − 1·0 | + 1·2 |
| Means | 65·2 | 49·0 | 58·1 | 62·4 | 62·6 | 54·1 | −1·2 | +0·8 | 0·0 | −0·3 | −0·3 | +0·4 | 54·5 | 56·6 | 56·6 | 52·4 | 0·0 | 0·0 | 0·0 | + 0·3 |

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

OCTOBER.

| Days of the Month. | Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 78·2 | 50·6 | 60·0 | 75·7 | 77·8 | 58·9 | +0·4 | +0·5 | +0·5 | +0·7 | +0·4 | +1·3 | 58·6 | 67·8 | 69·9 | 58·2 | − 0·7 | + 0·3 | + 0·3 | + 0·6 |
| 2 | 79·1 | 51·3 | 55·8 | 75·1 | 78·8 | 58·2 | +0·6 | +0·9 | −0·8 | +1·3 | +1·1 | +0·2 | 55·6 | 67·9 | 68·2 | 57·8 | − 0·9 | + 0·9 | + 0·7 | − 0·2 |
| 3 | 78·0 | 52·2 | 54·0 | 73·0 | 78·0 | 58·5 | 0·0 | +0·1 | −2·3 | +0·8 | +0·6 | +0·9 | 54·0 | 65·4 | 68·0 | 58·3 | − 1·2 | 0·0 | + 1·4 | + 1·0 |
| 4 | 76·0 | 49·2 | ... | ... | ... | ... | +0·8 | +0·1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 5 | 60·4 | 51·1 | 57·3 | 58·8 | 59·2 | 53·0 | +0·1 | +0·8 | −0·2 | −0·8 | −0·4 | +0·2 | 57·2 | 58·0 | 56·9 | 52·1 | − 0·3 | − 0·1 | 0·0 | + 0·1 |
| 6 | 64·7 | 48·6 | 58·3 | 63·0 | 62·8 | 48·9 | −0·2 | +0·6 | +0·7 | +0·2 | +0·5 | +0·6 | 54·1 | 57·1 | 57·5 | 48·4 | + 0·3 | + 0·4 | + 0·7 | + 0·8 |
| 7 | 72·6 | 43·6 | 47·7 | 68·0 | 71·0 | 52·9 | +1·4 | +1·1 | −0·2 | +1·6 | +1·4 | +0·8 | 47·7 | 60·1 | 62·6 | 52·7 | − 0·2 | + 0·3 | + 1·3 | + 0·6 |
| 8 | 67·3 | 52·0 | 55·8 | 60·4 | 67·0 | 56·0 | +0·3 | +1·9 | −0·3 | −1·0 | +0·5 | +0·6 | 55·7 | 59·1 | 62·6 | 55·7 | − 0·2 | − 0·7 | + 0·3 | + 0·6 |
| 9 | 67·6 | 56·0 | 63·1 | 65·7 | 63·5 | 59·8 | −1·0 | +0·9 | −0·5 | −0·4 | −0·1 | +0·1 | 61·1 | 62·5 | 60·8 | 59·3 | − 0·2 | − 0·1 | − 0·2 | − 0·3 |
| 10 | 64·8 | 53·2 | 55·2 | 60·2 | 63·7 | 53·2 | −0·5 | +0·8 | −0·4 | −0·3 | +0·1 | +0·8 | 53·6 | 56·2 | 58·1 | 51·1 | − 0·2 | − 0·1 | + 0·1 | + 0·5 |
| 11 | 64·3 | 45·1 | ... | ... | ... | ... | −0·7 | +1·4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 12 | 66·6 | 47·9 | 59·7 | 63·3 | 64·8 | 51·8 | −0·4 | +1·7 | −0·4 | +0·7 | +0·7 | +0·8 | 57·4 | 58·1 | 57·5 | 51·1 | − 0·2 | + 0·8 | + 0·1 | + 0·1 |
| 13 | 65·6 | 49·9 | 53·7 | 58·4 | 63·0 | 49·9 | −0·4 | +0·4 | −0·2 | −1·1 | +0·6 | +0·3 | 53·5 | 56·6 | 59·3 | 49·8 | − 0·3 | − 1·0 | 0·0 | + 0·2 |
| 14 | 67·3 | 49·2 | 53·8 | 59·3 | 67·3 | 54·8 | +0·5 | +0·5 | −0·1 | 0·0 | +1·2 | +1·1 | 52·5 | 55·5 | 60·1 | 54·1 | − 0·3 | 0·0 | + 0·8 | + 0·9 |
| 15 | 71·1 | 47·1 | 52·3 | 70·5 | 69·5 | 56·6 | +0·1 | +0·5 | +0·1 | +0·9 | +1·0 | +0·3 | 52·3 | 60·0 | 59·1 | 56·0 | + 0·1 | + 0·3 | + 0·7 | + 0·2 |
| 16 | 61·6 | 51·2 | 57·8 | 60·2 | 58·7 | 56·1 | −0·6 | +1·1 | +0·4 | +0·2 | +0·3 | +0·3 | 56·6 | 57·3 | 56·2 | 55·1 | 0·0 | − 0·2 | 0·0 | + 0·1 |
| 17 | 62·8 | 54·1 | 56·1 | 60·3 | 62·6 | 57·0 | −1·2 | +0·1 | −0·4 | −0·4 | −0·1 | +0·5 | 56·0 | 59·0 | 60·7 | 56·8 | − 0·2 | − 0·2 | + 0·2 | + 0·4 |
| 18 | 65·6 | 52·8 | ... | ... | ... | ... | +0·5 | +0·6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 19 | 58·5 | 52·1 | 54·7 | 57·3 | 57·0 | 53·2 | 0·0 | +0·2 | −0·1 | −0·3 | 0·0 | −0·2 | 54·3 | 56·5 | 56·2 | 52·5 | − 0·3 | − 0·3 | − 0·1 | − 0·1 |
| 20 | 53·6 | 46·5 | 48·0 | 48·7 | 52·0 | 46·5 | −0·1 | +0·1 | +0·1 | −0·3 | +0·2 | −0·2 | 46·7 | 46·7 | 49·1 | 44·9 | − 0·1 | − 0·2 | + 0·4 | + 0·4 |
| 21 | 48·5 | 40·6 | 40·8 | 47·0 | 48·3 | 42·5 | −0·4 | 0·0 | −0·2 | +0·1 | +0·4 | −0·1 | 40·0 | 42·9 | 43·6 | 39·1 | 0·0 | + 0·3 | + 0·8 | + 0·8 |
| 22 | 48·5 | 36·4 | 45·4 | 46·9 | 46·2 | 46·3 | −0·5 | +0·4 | −0·2 | +0·1 | −0·1 | −0·3 | 42·9 | 43·1 | 43·1 | 43·5 | + 0·1 | + 0·4 | + 0·8 | + 0·3 |
| 23 | 51·7 | 42·1 | 45·8 | 51·7 | 50·9 | 43·0 | −0·3 | +0·5 | −0·1 | −0·1 | +0·2 | +0·4 | 43·5 | 47·3 | 46·1 | 42·1 | + 0·2 | + 0·1 | + 1·1 | + 0·6 |
| 24 | 45·8 | 38·0 | 43·6 | 43·0 | 44·1 | 38·0 | −1·0 | +0·2 | −0·1 | −0·4 | 0·0 | +0·2 | 42·2 | 41·7 | 39·2 | 36·7 | + 0·1 | + 0·1 | + 0·9 | + 0·7 |
| 25 | 46·8 | 33·2 | ... | ... | ... | ... | −0·6 | +0·1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 26 | 50·8 | 44·0 | 50·2 | 49·2 | 49·6 | 44·0 | −0·2 | +0·4 | −0·2 | −0·2 | −0·1 | +0·3 | 49·9 | 48·9 | 49·1 | 42·9 | + 0·1 | + 0·1 | − 0·1 | + 0·3 |
| 27 | 48·7 | 39·1 | 44·0 | 48·7 | 46·5 | 39·1 | −0·5 | +0·5 | 0·0 | −0·1 | −0·1 | +0·5 | 43·7 | 47·4 | 46·2 | 38·9 | + 0·1 | − 0·3 | 0·0 | + 0·6 |
| 28 | 61·5 | 37·6 | 56·1 | 59·8 | 60·3 | 54·9 | −1·0 | +1·1 | 0·0 | −0·3 | −0·3 | +0·3 | 55·9 | 58·0 | 58·6 | 54·6 | + 0·1 | 0·0 | − 0·2 | + 0·2 |
| 29 | 67·8 | 51·2 | 58·3 | 65·8 | 64·0 | 51·6 | +0·1 | +0·9 | +0·6 | +1·2 | +0·6 | 0·0 | 55·1 | 59·1 | 58·0 | 50·1 | + 0·3 | + 1·1 | + 0·4 | + 0·2 |
| 30 | 66·6 | 44·0 | 53·0 | 64·0 | 65·4 | 53·0 | +0·6 | +1·9 | +1·6 | +1·3 | +0·8 | +0·3 | 51·5 | 59·1 | 61·1 | 52·2 | + 0·7 | + 1·1 | + 1·1 | + 0·1 |
| 31 | 63·1 | 51·3 | 55·9 | 60·0 | 60·9 | 51·3 | −0·3 | +0·9 | −0·2 | −0·5 | +1·4 | +0·5 | 55·2 | 56·5 | 57·2 | 51·1 | − 0·3 | − 0·1 | + 0·5 | + 0·6 |
| Means | 62·8 | 47·1 | 53·2 | 59·8 | 61·2 | 51·4 | −0·1 | +0·7 | −0·1 | +0·1 | +0·4 | +0·4 | 52·1 | 55·8 | 56·5 | 50·6 | − 0·1 | + 0·1 | + 0·4 | + 0·4 |

## READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*continued.*

### NOVEMBER.

| Days of the Month. | Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 57·8 | 46·3 | ... | ... | ... | ... | −0·7 | +0·7 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 2 | 55·5 | 47·5 | 48·9 | 54·2 | 48·9 | 48·1 | +0·2 | +0·2 | −0·2 | +0·3 | +0·3 | +0·4 | 48·7 | 51·1 | 48·1 | 47·1 | − 0·3 | 0·0 | + 0·2 | + 0·1 |
| 3 | 55·6 | 44·6 | 46·9 | 54·1 | 54·2 | 44·6 | +0·6 | +1·0 | −0·1 | +0·9 | +0·6 | −0·2 | 45·9 | 50·7 | 50·4 | 44·3 | + 0·1 | + 0·6 | + 0·6 | − 0·5 |
| 4 | 54·6 | 41·3 | 46·8 | 53·2 | 54·1 | 49·8 | −0·2 | +0·9 | −0·1 | +0·1 | +0·4 | −0·1 | 46·6 | 50·0 | 50·1 | 47·6 | 0·0 | + 0·2 | + 0·5 | − 0·1 |
| 5 | 52·6 | 42·1 | 48·0 | 51·0 | 51·9 | 47·4 | −0·4 | +1·0 | −0·5 | 0·0 | +0·1 | −0·1 | 47·5 | 47·1 | 47·9 | 45·4 | − 0·1 | + 0·3 | + 0·1 | − 0·2 |
| 6 | 50·4 | 38·6 | 45·2 | 50·0 | 50·0 | 44·6 | −0·3 | +0·9 | +0·8 | +0·1 | +0·2 | +0·1 | 42·3 | 46·1 | 47·2 | 42·8 | + 0·4 | 0·0 | − 0·1 | + 0·2 |
| 7 | 44·6 | 36·0 | 40·3 | 44·4 | 42·3 | 36·0 | +0·1 | +0·1 | +0·2 | +0·3 | +0·2 | −0·1 | 38·2 | 40·2 | 38·3 | 33·9 | + 0·1 | + 0·6 | + 0·2 | + 0·2 |
| 8 | 46·6 | 33·0 | ... | ... | ... | ... | −0·3 | +0·6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 9 | 46·1 | 32·0 | 39·3 | 46·1 | 43·4 | 32·0 | +0·1 | +0·8 | +0·9 | +0·6 | +0·4 | +0·6 | 36·3 | 39·6 | 38·0 | 30·6 | + 0·7 | + 0·8 | + 1·2 | + 0·8 |
| 10 | 46·0 | 24·1 | 26·6 | 46·0 | 43·8 | 32·1 | +1·1 | +2·0 | −1·0 | +1·2 | +1·9 | +0·3 | 26·3 | 39·6 | 37·6 | 30·4 | − 0·8 | + 0·5 | + 1·0 | − 0·4 |
| 11 | 54·9 | 32·1 | 50·1 | 53·3 | 54·3 | 54·5 | −0·5 | +0·3 | +0·1 | −0·3 | −0·1 | 0·0 | 49·6 | 52·4 | 52·8 | 53·2 | 0·0 | − 0·2 | + 0·1 | + 0·1 |
| 12 | 59·5 | 47·7 | 52·8 | 58·0 | 59·2 | 50·0 | +1·2 | +1·1 | −0·3 | +0·8 | +1·2 | +0·2 | 51·8 | 53·1 | 52·4 | 49·7 | 0·0 | + 0·4 | + 0·5 | + 0·3 |
| 13 | 57·7 | 46·3 | 53·1 | 56·6 | 56·8 | 46·8 | −0·2 | +1·1 | −0·3 | 0·0 | +0·6 | +0·4 | 52·6 | 52·1 | 51·4 | 46·2 | 0·0 | − 0·1 | + 0·4 | + 0·3 |
| 14 | 53·2 | 46·4 | 51·6 | 51·9 | 50·1 | 47·4 | +0·1 | +0·3 | 0·0 | 0·0 | +0·1 | −0·2 | 49·6 | 48·0 | 47·3 | 47·1 | + 0·1 | + 0·3 | + 0·1 | + 0·3 |
| 15 | 48·6 | 43·0 | ... | ... | ... | ... | −0·2 | +0·3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 16 | 47·1 | 42·7 | 43·8 | 43·7 | 45·3 | 47·0 | +0·1 | −0·7 | +0·1 | +0·1 | −0·3 | +0·2 | 42·3 | 42·1 | 43·9 | 45·7 | − 0·2 | + 0·2 | + 0·1 | + 0·3 |
| 17 | 50·0 | 43·5 | 44·8 | 48·8 | 49·3 | 43·5 | +0·3 | +0·6 | 0·0 | +0·2 | +0·4 | +0·6 | 44·1 | 45·0 | 44·9 | 41·2 | + 0·1 | + 0·1 | + 0·4 | + 0·4 |
| 18 | 50·8 | 40·1 | 44·0 | 49·5 | 50·0 | 47·0 | −0·5 | +0·8 | +0·2 | −0·1 | +0·1 | +0·1 | 42·0 | 45·3 | 46·2 | 46·1 | + 0·3 | + 0·1 | + 0·1 | 0·0 |
| 19 | 49·5 | 41·0 | 44·7 | 45·2 | 46·0 | 41·0 | 0·0 | +0·8 | +0·1 | −0·2 | −0·1 | +0·6 | 42·1 | 42·1 | 42·4 | 38·2 | 0·0 | + 0·1 | + 0·1 | + 0·3 |
| 20 | 48·8 | 31·9 | 38·2 | 46·3 | 47·2 | 48·1 | +0·8 | +0·9 | +0·5 | +0·9 | +0·1 | +0·1 | 37·0 | 42·7 | 43·0 | 45·1 | + 0·6 | + 0·5 | + 0·2 | + 0·1 |
| 21 | 48·6 | 42·6 | 44·2 | 47·9 | 47·0 | 44·5 | +0·3 | +0·7 | +0·2 | −0·3 | +0·3 | 0·0 | 41·1 | 43·7 | 43·4 | 43·5 | + 0·1 | − 0·1 | + 0·2 | − 0·1 |
| 22 | 57·6 | 44·3 | ... | ... | ... | ... | −0·4 | +0·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 23 | 50·0 | 40·8 | 47·9 | 50·0 | 48·1 | 40·8 | −0·2 | +1·0 | +0·3 | −0·1 | +0·2 | +1·0 | 43·6 | 43·9 | 42·0 | 37·6 | 0·0 | + 0·1 | + 0·2 | + 0·6 |
| 24 | 52·6 | 33·3 | 44·2 | 51·8 | 52·6 | 51·8 | −0·4 | +1·2 | +0·3 | +0·2 | 0·0 | +0·2 | 41·9 | 47·7 | 49·1 | 50·3 | + 0·4 | + 0·1 | 0·0 | + 0·1 |
| 25 | 54·5 | 44·4 | 45·1 | 49·8 | 49·1 | 44·4 | +0·3 | +0·5 | +0·3 | +0·2 | +0·3 | +0·2 | 43·1 | 43·1 | 43·5 | 41·2 | + 0·3 | + 0·2 | 0·0 | 0·0 |
| 26 | 53·5 | 43·0 | 47·5 | 52·9 | 53·1 | 47·8 | −0·2 | +0·7 | 0·0 | +0·1 | +0·1 | +0·8 | 45·2 | 49·3 | 49·6 | 46·0 | 0·0 | 0·0 | − 0·1 | + 0·4 |
| 27 | 53·2 | 41·5 | 48·1 | 51·9 | 51·0 | 41·8 | +0·2 | +1·1 | +0·7 | +0·2 | +0·3 | +0·7 | 46·6 | 48·6 | 47·8 | 41·3 | + 0·5 | − 0·3 | 0·0 | + 0·4 |
| 28 | 52·9 | 41·8 | 48·1 | 52·1 | 49·1 | 50·2 | −0·1 | +0·8 | −0·1 | 0·0 | −0·2 | +0·1 | 46·0 | 49·2 | 48·2 | 48·9 | + 0·2 | − 0·3 | − 0·3 | + 0·1 |
| 29 | 54·4 | 48·6 | ... | ... | ... | ... | 0·0 | +0·6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 30 | 54·3 | 46·2 | 49·2 | 52·7 | 48·9 | 46·5 | +0·3 | +0·1 | −0·3 | −0·3 | +0·3 | −0·1 | 49·1 | 51·3 | 48·1 | 46·2 | − 0·2 | − 0·3 | − 0·1 | − 0·1 |
| Means | 52·0 | 40·9 | 45·6 | 50·5 | 49·8 | 45·1 | 0·0 | +0·7 | +0·1 | +0·2 | +0·3 | +0·2 | 44·0 | 46·6 | 46·1 | 43·6 | + 0·1 | + 0·2 | + 0·2 | + 0·1 |

READINGS of THERMOMETERS in a STEVENSON'S SCREEN in the MAGNETIC PAVILION ENCLOSURE—*concluded.*

DECEMBER.

| Days of the Month. | Readings of Dry-Bulb Thermometers in a Stevenson's Screen, 4 ft. above the ground. | | | | | | Excess above readings of Thermometers on the ordinary stand, 4 ft. above the ground. | | | | | | Readings of the Wet-Bulb Thermometer in a Stevenson's Screen, 4 ft. above the ground. | | | | Excess above readings of the Thermometer on the ordinary stand, 4 ft. above the ground. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | Maximum. | Minimum. | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h | 9h | Noon. | 15h | 21h |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 47·5 | 39·1 | 41·5 | 40·6 | 41·8 | 40·1 | +0·4 | 0·0 | −0·3 | −0·4 | −0·2 | +0·1 | 41·3 | 40·2 | 41·1 | 40·0 | − 0·4 | − 0·6 | − 0·2 | 0·0 |
| 2 | 41·8 | 36·6 | 36·9 | 41·8 | 40·8 | 41·1 | −1·0 | 0·0 | −0·2 | 0·0 | −0·1 | −0·2 | 36·1 | 40·1 | 39·4 | 39·6 | 0·0 | − 0·3 | − 0·1 | − 0·1 |
| 3 | 41·6 | 37·0 | 37·0 | 38·1 | 38·0 | 37·4 | −0·5 | −0·1 | −0·2 | −0·3 | +0·1 | −0·1 | 35·8 | 36·6 | 36·3 | 36·2 | 0·0 | − 0·2 | 0·0 | + 0·1 |
| 4 | 43·6 | 34·7 | 35·2 | 38·5 | 42·3 | 43·6 | −0·4 | +0·2 | 0·0 | −0·4 | −0·2 | 0·0 | 35·0 | 37·5 | 41·1 | 43·3 | + 0·2 | − 0·3 | + 0·1 | 0·0 |
| 5 | 46·2 | 43·1 | 44·9 | 46·1 | 45·2 | 43·3 | −0·6 | +1·0 | +0·3 | −0·6 | −0·3 | 0·0 | 44·4 | 45·6 | 44·4 | 43·1 | − 0·2 | − 0·1 | − 0·2 | + 0·3 |
| 6 | 47·6 | 43·2 | ... | ... | ... | ... | +0·1 | +0·9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 7 | 45·5 | 36·6 | 41·0 | 42·4 | 40·9 | 36·6 | −0·5 | 0·0 | 0·0 | 0·0 | +0·1 | 0·0 | 40·5 | 41·2 | 40·1 | 36·5 | − 0·1 | − 0·1 | + 0·2 | − 0·1 |
| 8 | 49·9 | 34·1 | 45·2 | 48·6 | 48·8 | 48·2 | +0·4 | +0·5 | +0·6 | 0·0 | +0·2 | 0·0 | 42·5 | 45·4 | 45·6 | 46·3 | + 0·5 | − 0·2 | 0·0 | 0·0 |
| 9 | 48·3 | 38·9 | 40·9 | 44·6 | 45·8 | 38·9 | −0·3 | +1·1 | +0·1 | +0·5 | +0·4 | +0·7 | 40·6 | 43·0 | 43·0 | 38·1 | − 0·1 | + 0·3 | + 0·2 | + 0·6 |
| 10 | 52·6 | 37·3 | 43·8 | 50·5 | 51·0 | 45·0 | −0·3 | +1·2 | 0·0 | −0·2 | +0·5 | +0·1 | 42·9 | 48·8 | 47·1 | 43·1 | + 0·1 | − 0·1 | + 0·2 | + 0·2 |
| 11 | 45·8 | 38·1 | 38·4 | 42·6 | 43·0 | 41·5 | +0·1 | +0·1 | 0·0 | 0·0 | +0·4 | +0·4 | 37·8 | 40·2 | 38·9 | 38·1 | + 0·1 | − 0·1 | + 0·1 | + 0·3 |
| 12 | 44·8 | 37·0 | 43·2 | 44·0 | 44·3 | 37·0 | −0·2 | +0·7 | 0·0 | −0·1 | −0·1 | +0·4 | 39·2 | 38·4 | 39·6 | 35·1 | − 0·2 | − 0·2 | − 0·1 | + 0·3 |
| 13 | 55·1 | 36·8 | ... | ... | ... | ... | +0·9 | +0·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 14 | 49·6 | 46·9 | 48·2 | 49·3 | 48·3 | 48·0 | −0·2 | +0·5 | +0·1 | −0·1 | +0·1 | +0·1 | 47·6 | 48·2 | 47·8 | 47·1 | 0·0 | − 0·2 | + 0·2 | + 0·3 |
| 15 | 51·5 | 44·6 | 46·8 | 47·3 | 49·9 | 47·0 | +0·5 | +0·6 | +0·2 | −0·3 | +0·3 | +0·1 | 44·4 | 46·3 | 47·1 | 45·5 | + 0·2 | − 0·2 | + 0·2 | + 0·2 |
| 16 | 48·4 | 40·2 | 43·9 | 47·0 | 47·8 | 45·4 | +0·2 | +1·2 | 0·0 | 0·0 | +0·1 | +0·6 | 43·9 | 46·3 | 47·0 | 45·0 | + 0·1 | − 0·3 | + 0·2 | + 0·5 |
| 17 | 50·5 | 43·6 | 47·1 | 50·4 | 47·0 | 44·0 | −0·5 | +1·0 | −0·1 | −0·2 | −0·6 | +0·4 | 46·2 | 49·1 | 45·6 | 43·3 | 0·0 | 0·0 | 0·0 | + 0·4 |
| 18 | 45·8 | 37·1 | 37·3 | 43·4 | 45·6 | 39·3 | −0·1 | +0·6 | 0·0 | +0·5 | +0·3 | +0·6 | 37·0 | 41·3 | 43·3 | 37·6 | + 0·2 | + 0·3 | + 0·2 | + 0·4 |
| 19 | 44·6 | 36·5 | 42·0 | 43·9 | 44·4 | 42·7 | −0·4 | +0·5 | 0·0 | −0·1 | −0·2 | +0·1 | 40·3 | 42·3 | 43·2 | 42·4 | − 0·1 | − 0·3 | − 0·3 | − 0·2 |
| 20 | 48·6 | 42·3 | ... | ... | ... | ... | −0·4 | +0·2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 21 | 48·6 | 45·1 | 48·0 | 48·2 | 48·3 | 45·1 | −0·4 | +0·1 | +0·1 | −0·3 | −0·3 | 0·0 | 47·7 | 48·0 | 47·6 | 44·3 | 0·0 | + 0·1 | − 0·2 | 0·0 |
| 22 | 45·7 | 38·1 | 40·3 | 44·8 | 40·6 | 40·2 | +0·2 | +0·5 | −0·2 | +1·4 | +0·2 | 0·0 | 39·3 | 41·5 | 39·1 | 39·1 | − 0·2 | + 0·5 | + 0·2 | + 0·3 |
| 23 | 40·4 | 35·6 | 39·2 | 39·2 | 38·4 | 35·6 | −0·5 | 0·0 | −0·1 | −0·2 | 0·0 | 0·0 | 38·0 | 37·6 | 36·9 | 34·8 | + 0·2 | − 0·2 | + 0·1 | + 0·1 |
| 24 | 37·0 | 34·3 | 35·0 | 36·9 | 37·0 | 36·0 | −0·9 | 0·0 | +0·2 | −0·1 | 0·0 | +0·3 | 33·8 | 35·1 | 35·2 | 35·3 | + 0·1 | 0·0 | + 0·1 | + 0·1 |
| 25 | 39·2 | 36·0 | ... | ... | ... | ... | +0·1 | +0·5 | ... | .. | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 26 | 37·8 | 34·1 | ... | ... | ... | ... | +0·5 | 0·0 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 27 | 35·8 | 25·8 | ... | ... | ... | ... | +0·2 | +0·1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 28 | 29·0 | 24·0 | 25·6 | 29·0 | 28·0 | 24·5 | −0·5 | +1·0 | 0·0 | +0·5 | +0·2 | −0·2 | 23·3 | 24·9 | 23·9 | 22·5 | 0·0 | + 0·5 | + 0·1 | − 0·4 |
| 29 | 25·5 | 19·6 | 20·8 | 20·8 | 20·0 | 23·4 | +0·1 | −0·2 | −0·2 | −0·2 | −0·1 | 0·0 | 20·2 | 20·3 | 20·0 | 23·0 | − 0·7 | − 0·4 | + 0·1 | − 0·1 |
| 30 | 23·6 | 12·5 | 12·5 | 18·9 | 17·7 | 15·0 | −0·4 | +0·4 | +0·4 | −0·2 | +0·9 | −0·2 | 12·5 | 18·6 | 17·6 | 15·0 | + 0·4 | − 0·4 | + 0·8 | 0·0 |
| 31 | 41·6 | 14·9 | 36·8 | 37·7 | 40·1 | 41·0 | −0·7 | −0·1 | +0·2 | −0·1 | −0·4 | +0·6 | 34·9 | 36·5 | 39·9 | 40·9 | + 0·2 | − 0·1 | 0·0 | + 0·7 |
| Means | 43·7 | 35·6 | 38·9 | 41·4 | 41·4 | 39·2 | −0·2 | +0·4 | 0·0 | 0·0 | +0·1 | +0·2 | 37·8 | 39·7 | 39·6 | 38·2 | 0·0 | − 0·1 | + 0·1 | + 0·2 |

(I.)—Readings of a Thermometer whose bulb is sunk to the depth of 25·6 feet (24 French feet) below the surface of the soil, at Noon on every Day of the Year.

1908.

| Days of the Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 53·52 | 52·66 | 51·65 | 50·75 | 50·04 | 49·64 | 49·80 | 50·58 | 51·60 | 52·58 | 53·10 | 53·30 |
| 2 | 53·47 | 52·62 | 51·62 | 50·73 | 50·03 | 49·62 | 49·81 | 50·62 | 51·65 | 52·60 | 53·11 | 53·31 |
| 3 | 53·46 | 52·60 | 51·62 | 50·70 | 50·00 | 49·64 | 49·84 | 50·66 | 51·68 | 52·62 | 53·11 | 53·30 |
| 4 | 53·44 | 52·55 | 51·57 | 50·66 | 49·96 | 49·63 | 49·86 | 50·70 | 51·72 | 52·65 | 53·13 | 53·30 |
| 5 | 53·38 | 52·53 | 51·54 | 50·63 | 49·95 | 49·61 | 49·87 | 50·70 | 51·76 | 52·66 | 53·14 | 53·32 |
| 6 | 53·40 | 52·50 | 51·53 | 50·58 | 49·92 | 49·60 | 49·90 | 50·75 | 51·79 | 52·67 | 53·15 | 53·32 |
| 7 | 53·37 | 52·46 | 51·48 | 50·56 | 49·92 | 49·59 | 49·92 | 50·79 | 51·83 | 52·70 | 53·14 | 53·31 |
| 8 | 53·35 | 52·42 | 51·47 | 50·55 | 49·90 | 49·62 | 49·93 | 50·82 | 51·86 | 52·73 | 53·15 | 53·35 |
| 9 | 53·27 | 52·42 | 51·42 | 50·52 | 49·88 | 49·62 | 49·94 | 50·84 | 51·89 | 52·76 | 53·17 | 53·30 |
| 10 | 53·25 | 52·37 | 51·39 | 50·49 | 49·87 | 49·64 | 49·97 | 50·90 | 51·91 | 52·76 | 53·16 | 53·31 |
| 11 | 53·24 | 52·35 | 51·36 | 50·46 | 49·87 | 49·64 | 50·00 | 50·90 | 51·95 | 52·77 | 53·20 | 53·28 |
| 12 | 53·21 | 52·32 | 51·31 | 50·43 | 49·83 | 49·64 | 50·00 | 50·93 | 52·00 | 52·80 | 53·23 | 53·30 |
| 13 | 53·20 | 52·26 | 51·28 | 50·42 | 49·82 | 49·64 | 50·00 | 50·96 | 52·02 | 52·81 | 53·25 | 53·30 |
| 14 | 53·20 | 52·25 | 51·25 | 50·40 | 49·80 | 49·63 | 50·05 | 51·02 | 52·06 | 52·83 | 53·25 | 53·29 |
| 15 | 53·17 | 52·23 | 51·21 | 50·37 | 49·78 | 49·62 | 50·08 | 51·03 | 52·09 | 52·86 | 53·25 | 53·27 |
| 16 | 53·17 | 52·16 | 51·19 | 50·37 | 49·79 | 49·61 | 50·11 | 51·10 | 52·12 | 52·86 | 53·25 | 53·26 |
| 17 | 53·15 | 52·14 | 51·16 | 50·33 | 49·78 | 49·62 | 50·12 | 51·11 | 52·17 | 52·88 | 53·26 | 53·26 |
| 18 | 53·10 | 52·11 | 51·14 | 50·30 | 49·76 | 49·63 | 50·15 | 51·14 | 52·20 | 52·92 | 53·27 | 53·23 |
| 19 | 53·03 | 52·06 | 51·10 | 50·27 | 49·76 | 49·64 | 50·19 | 51·19 | 52·24 | 52·93 | 53·27 | 53·23 |
| 20 | 53·02 | 52·05 | 51·07 | 50·23 | 49·74 | 49·65 | 50·22 | 51·22 | 52·27 | 52·93 | 53·27 | 53·25 |
| 21 | 52·97 | 52·02 | 51·04 | 50·21 | 49·71 | 49·65 | 50·24 | 51·26 | 52·27 | 52·92 | 53·28 | 53·24 |
| 22 | 52·96 | 51·97 | 51·04 | 50·20 | 49·70 | 49·67 | 50·28 | 51·29 | 52·30 | 52·93 | 53·31 | 53·22 |
| 23 | 52·94 | 51·94 | 50·98 | 50·16 | 49·70 | 49·68 | 50·32 | 51·30 | 52·34 | 52·96 | 53·30 | 53·20 |
| 24 | 52·90 | 51·88 | 50·97 | 50·12 | 49·69 | 49·70 | 50·35 | 51·35 | 52·36 | 52·96 | 53·30 | 53·17 |
| 25 | 52·85 | 51·86 | 50·92 | 50·11 | 49·68 | 49·72 | 50·37 | 51·37 | 52·39 | 52·97 | 53·30 | 53·18 |
| 26 | 52·83 | 51·82 | 50·89 | 50·10 | 49·67 | 49·72 | 50·39 | 51·43 | 52·42 | 53·00 | 53·32 | 53·15 |
| 27 | 52·81 | 51·79 | 50·87 | 50·10 | 49·68 | 49·76 | 50·42 | 51·46 | 52·45 | 53·03 | 53·31 | 53·13 |
| 28 | 52·80 | 51·75 | 50·84 | 50·07 | 49·67 | 49·75 | 50·45 | 51·48 | 52·49 | 53·08 | 53·32 | 53·10 |
| 29 | 52·76 | 51·70 | 50·82 | 50·06 | 49·67 | 49·76 | 50·49 | 51·52 | 52·53 | 53·08 | 55·34 | 53·06 |
| 30 | 52·72 | | 50·80 | 50·04 | 49·65 | 49·78 | 50·52 | 51·57 | 52·56 | 53·10 | 53·34 | 53·06 |
| 31 | 52·71 | | 50·77 | | 49·65 | | 50·55 | 51·60 | | 53·11 | | 53·10 |
| Means | 53·12 | 52·20 | 51·20 | 50·36 | 49·80 | 49·66 | 50·13 | 51·08 | 52·10 | 52·85 | 53·23 | 53·24 |

The mean of the twelve monthly values is 51°·58.

(II.)—Readings of a Thermometer whose bulb is sunk to the depth of 12·8 feet (12 French feet) below the surface of the soil, at Noon on every Day of the Year.

1908.

| Days of the Month. | January. | February. | March. | April. | May. | June | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 51·68 | 48·92 | 47·52 | 46·73 | 46·93 | 48·70 | 51·95 | 54·69 | 56·31 | 56·22 | 55·88 | 53·97 |
| 2 | 51·60 | 48·81 | 47·51 | 46·71 | 46·98 | 48·76 | 52·05 | 54·78 | 56·40 | 56·19 | 55·81 | 53·90 |
| 3 | 51·55 | 48·78 | 47·50 | 46·68 | 46·94 | 48·89 | 52·13 | 54·85 | 56·40 | 56·19 | 55·75 | 53·82 |
| 4 | 51·47 | 48·72 | 47·49 | 46·68 | 46·92 | 48·99 | 52·15 | 54·93 | 56·40 | 56·19 | 55·70 | 53·77 |
| 5 | 51·39 | 48·61 | 47·45 | 46·64 | 46·93 | 49·05 | 52·30 | 54·91 | 56·48 | 56·12 | 55·63 | 53·73 |
| 6 | 51·32 | 48·58 | 47·45 | 46·60 | 46·95 | 49·11 | 52·43 | 55·00 | 56·50 | 56·12 | 55·60 | 53·59 |
| 7 | 51·22 | 48·51 | 47·41 | 46·62 | 46·95 | 49·23 | 52·53 | 55·10 | 56·55 | 56·11 | 55·50 | 53·59 |
| 8 | 51·16 | 48·47 | 47·40 | 46·62 | 47·00 | 49·38 | 52·60 | 55·18 | 56·55 | 56·11 | 55·48 | 53·56 |
| 9 | 51·02 | 48·43 | 47·33 | 46·62 | 47·02 | 49·50 | 52·70 | 55·20 | 56·54 | 56·09 | 55·40 | 53·48 |
| 10 | 50·96 | 48·38 | 47·30 | 46·62 | 47·05 | 49·61 | 52·83 | 55·35 | 56·50 | 56·11 | 55·33 | 53·41 |

(II.)—Readings of a Thermometer whose bulb is sunk to the depth of 12·8 feet (12 French feet) below the surface of the soil, at Noon on every Day of the Year—*concluded.*

1908.

| Days of the Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 11 | 50·82 | 48·34 | 47·25 | 46·62 | 47·11 | 49·74 | 52·94 | 55·38 | 56·50 | 56·10 | 55·38 | 53·31 |
| 12 | 50·75 | 48·26 | 47·21 | 46·62 | 47·17 | 49·87 | 53·01 | 55·41 | 56·50 | 56·10 | 55·34 | 53·30 |
| 13 | 50·68 | 48·19 | 47·19 | 46·68 | 47·19 | 49·98 | 53·10 | 55·49 | 56·48 | 56·10 | 55·29 | 53·21 |
| 14 | 50·60 | 48·16 | 47·16 | 46·67 | 47·26 | 50·09 | 53·25 | 55·61 | 56·50 | 56·10 | 55·21 | 53·17 |
| 15 | 50·52 | 48·10 | 47·12 | 46·68 | 47·30 | 50·20 | 53·35 | 55·64 | 56·49 | 56·12 | 55·14 | 53·08 |
| 16 | 50·43 | 48·01 | 47·13 | 46·71 | 47·39 | 50·30 | 53·43 | 55·73 | 56·47 | 56·11 | 55·07 | 53·00 |
| 17 | 50·33 | 48·00 | 47·10 | 46·70 | 47·48 | 50·40 | 53·53 | 55·80 | 56·50 | 56·12 | 55·00 | 52·95 |
| 18 | 50·20 | 47·92 | 47·08 | 46·70 | 47·50 | 50·55 | 53·60 | 55·80 | 56·47 | 56·12 | 54·92 | 52·85 |
| 19 | 50·00 | 47·88 | 47·06 | 46·70 | 47·60 | 50·65 | 53·76 | 55·89 | 56·45 | 56·10 | 54·84 | 52·80 |
| 20 | 49·93 | 47·78 | 47·03 | 46·70 | 47·64 | 50·76 | 53·85 | 55·93 | 56·46 | 56·05 | 54·78 | 52·77 |
| 21 | 49·83 | 47·82 | 47·01 | 46·74 | 47·72 | 50·85 | 53·94 | 56·02 | 56·35 | 56·01 | 54·70 | 52·70 |
| 22 | 49·73 | 47·73 | 47·00 | 46·77 | 47·79 | 51·02 | 54·09 | 56·05 | 56·30 | 56·01 | 54·60 | 52·60 |
| 23 | 49·66 | 47·72 | 46·93 | 46·75 | 47·86 | 51·14 | 54·18 | 56·10 | 56·30 | 56·02 | 54·55 | 52·52 |
| 24 | 49·55 | 47·66 | 46·92 | 46·75 | 47·95 | 51·25 | 54·25 | 56·15 | 56·28 | 55·98 | 54·47 | 52·46 |
| 25 | 49·43 | 47·65 | 46·90 | 46·78 | 48·03 | 51·36 | 54·29 | 56·18 | 56·24 | 56·00 | 54·40 | 52·40 |
| 26 | 49·42 | 47·60 | 46·85 | 46·82 | 48·13 | 51·45 | 54·32 | 56·20 | 56·23 | 56·06 | 54·36 | 52·30 |
| 27 | 49·35 | 47·57 | 46·83 | 46·87 | 48·24 | 51·54 | 54·40 | 56·25 | 56·20 | 56·00 | 54·29 | 52·24 |
| 28 | 49·24 | 47·55 | 46·78 | 46·88 | 48·32 | 51·63 | 54·46 | 56·27 | 56·24 | 56·04 | 54·20 | 52·16 |
| 29 | 49·15 | 47·52 | 46·78 | 46·89 | 48·41 | 51·73 | 54·52 | 56·30 | 56·24 | 56·01 | 54·19 | 52·06 |
| 30 | 49·05 | | 46·78 | 46·90 | 48·50 | 51·83 | 54·60 | 56·35 | 56·26 | 55·99 | 54·10 | 52·00 |
| 31 | 49·00 | | 46·74 | | 48·61 | | 54·63 | 56·34 | | 55·97 | | 52·01 |
| Means | 50·36 | 48·13 | 47·14 | 46·72 | 47·51 | 50·25 | 53·39 | 55·64 | 56·40 | 56·08 | 55·03 | 52·99 |

The mean of the twelve monthly values is 51°·64.

(III.)—Readings of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet) below the surface of the soil, at Noon on every Day of the Year.

1908.

| Days of the Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 49·05 | 45·75 | 45·61 | 45·24 | 46·58 | 52·40 | 57·12 | 59·77 | 59·99 | 58·13 | 55·91 | 52·34 |
| 2 | 48·87 | 45·63 | 45·58 | 45·34 | 46·68 | 52·55 | 57·30 | 59·89 | 59·94 | 58·15 | 55·80 | 52·31 |
| 3 | 48·67 | 45·63 | 45·59 | 45·40 | 46·80 | 52·82 | 57·50 | 60·03 | 59·83 | 58·19 | 55·70 | 52·30 |
| 4 | 48·50 | 45·56 | 45·53 | 45·50 | 46·95 | 53·08 | 57·55 | 60·14 | 59·70 | 58·20 | 55·63 | 52·26 |
| 5 | 48·22 | 45·56 | 45·42 | 45·60 | 47·22 | 53·39 | 57·81 | 60·09 | 59·60 | 58·21 | 55·55 | 52·20 |
| 6 | 48·07 | 45·49 | 45·34 | 45·67 | 47·44 | 53·67 | 58·07 | 60·20 | 59·50 | 58·29 | 55·50 | 52·18 |
| 7 | 47·83 | 45·39 | 45·23 | 45·77 | 47·69 | 53·94 | 58·25 | 60·37 | 59·38 | 58·28 | 55·38 | 52·01 |
| 8 | 47·58 | 45·29 | 45·18 | 45·83 | 47·90 | 54·22 | 58·32 | 60·40 | 59·22 | 58·29 | 55·31 | 51·91 |
| 9 | 47·38 | 45·28 | 45·10 | 45·88 | 48·10 | 54·40 | 58·46 | 60·40 | 59·05 | 58·30 | 55·18 | 51·81 |
| 10 | 47·12 | 45·24 | 45·10 | 45·90 | 48·28 | 54·57 | 58·60 | 60·52 | 58·90 | 58·20 | 54·98 | 51·72 |
| 11 | 47·03 | 45·23 | 45·11 | 45·93 | 48·50 | 54·68 | 58·70 | 60·50 | 58·84 | 58·13 | 54·87 | 51·61 |
| 12 | 46·90 | 45·25 | 45·16 | 46·00 | 48·71 | 54·79 | 58·73 | 60·50 | 58·79 | 58·12 | 54·62 | 51·58 |
| 13 | 46·80 | 45·25 | 45·22 | 46·09 | 48·90 | 54·90 | 58·75 | 60·50 | 58·69 | 58·10 | 54·40 | 51·40 |
| 14 | 46·67 | 45·27 | 45·25 | 46·14 | 49·10 | 55·02 | 58·90 | 60·50 | 58·61 | 58·04 | 54·18 | 51·28 |
| 15 | 46·50 | 45·30 | 45·25 | 46·20 | 49·27 | 55·20 | 58·95 | 60·53 | 58·48 | 58·01 | 54·00 | 51·10 |

(III.)—Readings of a Thermometer whose bulb is sunk to the depth of 6·4 feet (6 French feet) below the surface of the soil, at Noon on every Day of the Year—*concluded.*

1908.

| Days of the Month. | January | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 16 | 46·32 | 45·29 | 45·29 | 46·28 | 49·47 | 55·30 | 58·95 | 60·53 | 58·35 | 57·95 | 53·88 | 51·00 |
| 17 | 46·15 | 45·32 | 45·24 | 46·31 | 49·63 | 55·42 | 58·99 | 60·49 | 58·30 | 57·90 | 53·80 | 50·90 |
| 18 | 46·02 | 45·33 | 45·19 | 46·37 | 49·72 | 55·60 | 59·05 | 60·39 | 58·21 | 57·88 | 53·72 | 50·80 |
| 19 | 45·98 | 45·33 | 45·14 | 46·42 | 49·90 | 55·71 | 59·17 | 60·38 | 58·16 | 57·79 | 53·63 | 50·78 |
| 20 | 46·00 | 45·33 | 45·10 | 46·48 | 50·03 | 55·80 | 59·13 | 60·30 | 58·11 | 57·70 | 53·51 | 50·78 |
| 21 | 46·00 | 45·39 | 45·04 | 46·55 | 50·28 | 55·86 | 59·10 | 60·28 | 58·00 | 57·64 | 53·45 | 50·68 |
| 22 | 45·97 | 45·42 | 44·99 | 46·60 | 50·50 | 56·00 | 59·12 | 60·30 | 58·00 | 57·60 | 53·30 | 50·59 |
| 23 | 45·94 | 45·51 | 44·90 | 46·60 | 50·76 | 56·12 | 59·10 | 60·30 | 58·05 | 57·57 | 53·15 | 50·53 |
| 24 | 45·89 | 45·58 | 44·86 | 46·58 | 51·00 | 56·24 | 59·09 | 60·30 | 58·08 | 57·40 | 53·03 | 50·46 |
| 25 | 45·72 | 45·65 | 44·85 | 46·60 | 51·09 | 56·28 | 59·03 | 60·27 | 58·07 | 57·20 | 52·91 | 50·41 |
| 26 | 45·77 | 45·70 | 44·80 | 46·60 | 51·36 | 56·42 | 59·10 | 60·25 | 58·10 | 57·09 | 52·83 | 50·30 |
| 27 | 45·72 | 45·72 | 44·87 | 46·60 | 51·55 | 56·48 | 59·18 | 60·20 | 58·09 | 56·84 | 52·71 | 50·22 |
| 28 | 45·65 | 45·70 | 44·92 | 46·58 | 51·68 | 56·60 | 59·30 | 60·15 | 58·14 | 56·70 | 52·61 | 50·10 |
| 29 | 45·65 | 45·70 | 45·00 | 46·50 | 51·82 | 56·77 | 59·40 | 60·16 | 58·13 | 56·49 | 52·60 | 49·90 |
| 30 | 45·70 | | 45·11 | 46·51 | 51·98 | 56·92 | 59·58 | 60·16 | 58·15 | 56·25 | 52·50 | 49·76 |
| 31 | 45·73 | | 45·18 | | 52·18 | | 59·71 | 60·07 | | 56·10 | | 49·60 |
| Means | 46·75 | 45·45 | 45·17 | 46·14 | 49·39 | 55·04 | 58·71 | 60·29 | 58·68 | 57·70 | 54·15 | 51·12 |

The mean of the twelve monthly values is 52°·38.

(IV.)—Readings of a Thermometer whose bulb is sunk to the depth of 3·2 feet (3 French feet) below the surface of the soil, at Noon on every Day of the Year.

1908.

| Days of the Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 43·90 | 41·91 | 42·18 | 43·30 | 45·19 | 55·05 | 60·20 | 62·61 | 59·90 | 58·48 | 53·55 | 49·50 |
| 2 | 43·55 | 41·59 | 41·95 | 43·38 | 45·93 | 55·50 | 60·60 | 62·66 | 59·60 | 58·61 | 53·60 | 49·57 |
| 3 | 43·20 | 41·48 | 41·82 | 43·62 | 46·71 | 56·30 | 61·00 | 62·64 | 59·24 | 58·70 | 53·60 | 49·30 |
| 4 | 42·70 | 41·19 | 41·62 | 43·93 | 47·37 | 56·85 | 61·10 | 62·68 | 58·72 | 58·73 | 53·48 | 49·08 |
| 5 | 42·10 | 41·03 | 41·48 | 44·05 | 47·70 | 57·41 | 61·32 | 62·63 | 58·47 | 58·69 | 53·30 | 48·72 |
| 6 | 41·73 | 40·93 | 41·40 | 43·91 | 48·00 | 57·60 | 61·33 | 62·79 | 58·15 | 58·60 | 53·11 | 48·49 |
| 7 | 41·43 | 41·00 | 41·42 | 43·90 | 48·30 | 57·42 | 61·36 | 62·68 | 58·04 | 58·34 | 52·85 | 48·58 |
| 8 | 41·60 | 41·18 | 41·60 | 43·85 | 48·42 | 57·09 | 61·39 | 62·50 | 58·10 | 58·00 | 52·48 | 48·51 |
| 9 | 41·83 | 41·40 | 41·80 | 43·85 | 48·80 | 56·91 | 61·42 | 62·50 | 58·10 | 57·92 | 51·80 | 48·25 |
| 10 | 41·83 | 41·55 | 42·20 | 43·85 | 49·30 | 57·00 | 61·30 | 62·60 | 58·15 | 57·90 | 51·11 | 48·18 |
| 11 | 41·52 | 41·72 | 42·42 | 44·07 | 49·59 | 57·20 | 61·28 | 62·53 | 57·90 | 58·00 | 50·50 | 48·01 |
| 12 | 41·20 | 41·76 | 42·50 | 44·15 | 49·82 | 57·50 | 61·30 | 62·30 | 57·69 | 57·85 | 50·18 | 47·73 |
| 13 | 40·80 | 41·90 | 42·40 | 44·30 | 50·02 | 57·76 | 61·27 | 61·95 | 57·33 | 57·55 | 50·38 | 47·40 |
| 14 | 40·60 | 41·83 | 42·25 | 44·32 | 50·21 | 57·80 | 61·20 | 61·80 | 57·09 | 57·40 | 50·65 | 47·30 |
| 15 | 40·40 | 41·90 | 42·00 | 44·36 | 50·23 | 58·00 | 61·00 | 61·57 | 57·00 | 57·38 | 50·90 | 47·40 |
| 16 | 40·40 | 41·97 | 41·77 | 44·40 | 50·24 | 57·98 | 60·70 | 61·48 | 57·00 | 57·20 | 50·81 | 47·48 |
| 17 | 40·80 | 42·06 | 41·65 | 44·65 | 50·39 | 58·10 | 60·70 | 61·33 | 57·03 | 57·20 | 50·71 | 47·55 |
| 18 | 41·53 | 42·03 | 41·60 | 44·85 | 50·80 | 58·20 | 60·60 | 61·17 | 57·09 | 57·20 | 50·70 | 47·55 |
| 19 | 41·59 | 42·29 | 41·58 | 44·98 | 51·53 | 58·08 | 60·59 | 61·19 | 57·21 | 57·24 | 50·40 | 47·40 |
| 20 | 41·73 | 42·48 | 41·40 | 44·88 | 52·10 | 58·15 | 60·40 | 61·18 | 57·52 | 57·13 | 50·20 | 47·20 |

(IV.)—Readings of a Thermometer whose bulb is sunk to the depth of 3·2 feet (3 French feet) below the surface of the soil, at Noon on every Day of the Year—*concluded.*

| 1908. | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Days of the Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 21 | 41·64 | 42·60 | 41·18 | 44·55 | 52·70 | 58·22 | 60·20 | 61·27 | 57·72 | 56·88 | 49·89 | 47·16 |
| 22 | 41·52 | 43·01 | 41·17 | 44·30 | 52·86 | 58·35 | 60·20 | 61·20 | 58·05 | 56·35 | 49·60 | 47·28 |
| 23 | 41·30 | 43·32 | 41·20 | 44·30 | 52·90 | 58·30 | 60·26 | 61·05 | 58·00 | 55·61 | 49·55 | 47·29 |
| 24 | 41·20 | 43·30 | 41·41 | 44·40 | 52·90 | 58·43 | 60·61 | 61·05 | 57·90 | 55·00 | 49·60 | 47·06 |
| 25 | 41·04 | 43·15 | 41·60 | 44·10 | 52·86 | 58·58 | 61·00 | 60·90 | 57·90 | 54·49 | 49·40 | 46·71 |
| 26 | 41·11 | 42·95 | 42·03 | 43·80 | 53·02 | 58·90 | 61·50 | 60·88 | 57·90 | 53·91 | 49·40 | 46·25 |
| 27 | 41·38 | 42·83 | 42·35 | 43·68 | 53·26 | 58·95 | 61·80 | 60·81 | 57·79 | 53·60 | 49·35 | 46·00 |
| 28 | 41·95 | 42·73 | 42·53 | 43·81 | 53·54 | 59·30 | 62·03 | 60·78 | 57·76 | 53·29 | 49·30 | 45·51 |
| 29 | 42·30 | 42·60 | 42·75 | 44·19 | 53·92 | 59·60 | 62·25 | 60·70 | 57·88 | 53·20 | 49·28 | 44·91 |
| 30 | 42·25 | | 42·89 | 44·59 | 54·26 | 59·85 | 62·40 | 60·47 | 58·25 | 53·40 | 49·36 | 44·20 |
| 31 | 42·03 | | 43·10 | | 54·61 | | 62·47 | 60·20 | | 53·51 | | 43·67 |
| Means | 41·68 | 42·06 | 41·91 | 44·14 | 50·56 | 57·81 | 61·12 | 61·68 | 57·95 | 56·69 | 50·97 | 47·39 |

The mean of the twelve monthly values is 51°·16.

(V.)—Readings of a Thermometer whose bulb is sunk to the depth of 1 inch below the surface of the soil, at Noon on every Day of the Year.

| 1908. | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Days of the Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 38·5 | 40·0 | 40·0 | 44·5 | 54·2 | 65·0 | 68·5 | 65·1 | 57·1 | 61·9 | 55·0 | 47·5 |
| 2 | 36·2 | 38·8 | 39·2 | 47·9 | 56·1 | 65·6 | 68·0 | 65·2 | 58·0 | 61·1 | 54·0 | 45·7 |
| 3 | 35·0 | 40·0 | 39·4 | 47·4 | 53·0 | 68·0 | 69·0 | 65·9 | 56·0 | 60·9 | 52·0 | 44·4 |
| 4 | 35·2 | 39·0 | 39·1 | 45·8 | 52·0 | 66·0 | 64·0 | 68·0 | 56·5 | 60·2 | 51·2 | 43·7 |
| 5 | 34·6 | 38·7 | 39·0 | 44·4 | 53·5 | 61·2 | 64·3 | 64·9 | 55·0 | 60·1 | 51·2 | 47·0 |
| 6 | 38·8 | 41·8 | 42·5 | 44·5 | 53·5 | 59·0 | 65·8 | 63·5 | 57·8 | 58·2 | 49·8 | 47·1 |
| 7 | 43·6 | 41·7 | 41·9 | 45·2 | 52·5 | 59·0 | 65·9 | 65·0 | 59·0 | 56·2 | 47·5 | 46·1 |
| 8 | 40·4 | 42·6 | 44·1 | 45·0 | 55·0 | 60·1 | 65·0 | 65·0 | 59·0 | 58·6 | 45·2 | 46·0 |
| 9 | 39·9 | 42·5 | 45·0 | 45·0 | 56·0 | 60·1 | 63·8 | 65·0 | 59·0 | 61·1 | 44·8 | 45·9 |
| 10 | 36·8 | 43·0 | 44·3 | 46·2 | 55·0 | 64·1 | 64·9 | 72·5 | 56·0 | 59·9 | 41·0 | 46·3 |
| 11 | 34·7 | 41·7 | 43·3 | 45·6 | 55·0 | 63·8 | 66·2 | 62·3 | 55·5 | 58·0 | 47·4 | 44·3 |
| 12 | 29·5 | 43·3 | 41·4 | 46·0 | 54·8 | 62·9 | 65·0 | 61·0 | 56·0 | 58·0 | 51·3 | 44·1 |
| 13 | 33·0 | 39·4 | 41·3 | 45·4 | 54·6 | 62·1 | 61·3 | 61·0 | 54·0 | 57·5 | 52·1 | 46·2 |
| 14 | 37·5 | 43·0 | 39·8 | 45·0 | 53·3 | 61·2 | 62·0 | 62·1 | 57·1 | 58·0 | 51·2 | 48·0 |
| 15 | 39·2 | 45·0 | 39·0 | 45·8 | 52·8 | 62·0 | 62·0 | 62·2 | 57·5 | 57·0 | 51·0 | 47·2 |
| 16 | 44·2 | 41·0 | 40·3 | 49·5 | 54·3 | 63·8 | 62·5 | 63·0 | 56·0 | 58·5 | 49·3 | 47·0 |
| 17 | 46·5 | 44·8 | 40·3 | 47·5 | 58·2 | 61·3 | 62·5 | 62·3 | 59·2 | 58·8 | 49·0 | 49·0 |
| 18 | 43·5 | 45·0 | 40·2 | 46·5 | 59·2 | 61·2 | 60·3 | 61·0 | 58·9 | 59·1 | 47·2 | 44·0 |
| 19 | 39·6 | 44·3 | 39·0 | 45·0 | 60·2 | 62·0 | 61·0 | 62·9 | 60·8 | 58·0 | 45·0 | 44·0 |
| 20 | 40·4 | 45·1 | 38·0 | 42·5 | 60·0 | 62·0 | 60·5 | 62·8 | 62·8 | 54·5 | 44·6 | 46·6 |
| 21 | 37·6 | 47·2 | 40·0 | 43·0 | 60·0 | 60·2 | 61·0 | 64·0 | 61·0 | 50·9 | 46·0 | 48·0 |
| 22 | 38·0 | 45·7 | 41·2 | 47·0 | 56·2 | 60·6 | 63·1 | 63·4 | 58·0 | 49·4 | 50·0 | 46·0 |
| 23 | 39·0 | 44·3 | 43·0 | 45·0 | 56·0 | 62·3 | 65·0 | 60·0 | 59·6 | 50·3 | 48·8 | 44·0 |
| 24 | 38·0 | 42·5 | 44·0 | 40·8 | 58·0 | 64·2 | 66·9 | 64·0 | 60·0 | 49·2 | 47·0 | 36·4 |
| 25 | 37·9 | 42·5 | 46·0 | 41·2 | 57·1 | 62·0 | 67·2 | 63·0 | 59·0 | 46·1 | 48·0 | 42·1 |

(V.)—Readings of a Thermometer whose bulb is sunk to the depth of 1 inch below the surface of the soil, at Noon on every Day of the Year—*concluded.*

| 1908. | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Days of the Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 26 | 43·0 | 42·0 | 44·0 | 43·0 | 58·2 | 65·2 | 68·0 | 62·0 | 59·0 | 51·1 | 48·0 | 40·5 |
| 27 | 47·0 | 43·3 | 44·6 | 45·8 | 60·5 | 63·4 | 66·0 | 63·2 | 57·5 | 50·0 | 48·8 | 38·9 |
| 28 | 44·0 | 41·8 | 44·5 | 46·8 | 61·0 | 63·2 | 66·2 | 60·5 | 61·0 | 52·5 | 48·5 | 35·8 |
| 29 | 40·6 | 39·0 | 45·0 | 48·1 | 61·8 | 66·2 | 66·2 | 60·0 | 63·0 | 54·2 | 50·4 | 34·0 |
| 30 | 39·2 | | 45·3 | 50·0 | 60·2 | 65·9 | 66·5 | 60·4 | 62·8 | 53·0 | 51·0 | 32·6 |
| 31 | 40·9 | | 45·3 | | 62·0 | | 68·0 | 59·0 | | 55·1 | | 35·3 |
| Means | 39·1 | 42·4 | 41·9 | 45·5 | 56·9 | 62·8 | 64·7 | 63·2 | 58·4 | 56·0 | 48·9 | 43·7 |

The mean of the twelve monthly values is 51°·96.

(VI.)—Readings of a Thermometer within the case covering the deep-sunk Thermometers, whose bulb is placed on a level with their scales, at Noon on every Day of the Year.

| 1908. | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Days of the Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
| d | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° | ° |
| 1 | 33·5 | 38·5 | 38·7 | 47·7 | 66·8 | 75·5 | 75·0 | 67·0 | 55·2 | 67·6 | 55·5 | 42·5 |
| 2 | 30·6 | 37·2 | 38·4 | 54·2 | 68·0 | 70·0 | 75·7 | 69·3 | 59·7 | 65·7 | 52·0 | 41·1 |
| 3 | 30·5 | 41·3 | 39·6 | 50·3 | 50·8 | 77·5 | 79·0 | 72·2 | 57·0 | 64·5 | 50·0 | 38·9 |
| 4 | 36·6 | 39·5 | 37·9 | 45·5 | 58·0 | 75·5 | 60·0 | 74·1 | 54·2 | 59·0 | 50·0 | 38·8 |
| 5 | 28·2 | 36·8 | 37·9 | 42·5 | 55·8 | 62·0 | 65·7 | 61·4 | 56·9 | 60·2 | 50·0 | 46·1 |
| 6 | 43·7 | 42·0 | 46·8 | 45·0 | 55·0 | 55·2 | 70·8 | 63·2 | 61·0 | 60·0 | 48·0 | 48·2 |
| 7 | 49·2 | 42·0 | 43·0 | 49·5 | 58·5 | 55·3 | 69·6 | 69·3 | 65·0 | 57·5 | 43·5 | 43·4 |
| 8 | 39·6 | 42·0 | 50·4 | 50·6 | 57·5 | 61·5 | 64·0 | 66·9 | 68·0 | 60·0 | 44·0 | 46·9 |
| 9 | 35·2 | 44·5 | 45·2 | 51·5 | 63·5 | 62·5 | 65·5 | 69·0 | 62·0 | 65·1 | 43·2 | 43·0 |
| 10 | 32·0 | 42·0 | 46·6 | 48·0 | 58·3 | 67·9 | 66·8 | 72·0 | 56·5 | 59·5 | 37·1 | 48·8 |
| 11 | 28·2 | 43·6 | 42·5 | 45·0 | 61·3 | 67·9 | 68·0 | 64·0 | 55·5 | 58·5 | 52·8 | 42·0 |
| 12 | 33·6 | 46·0 | 42·5 | 46·5 | 58·8 | 65·8 | 67·0 | 62·0 | 55·0 | 60·5 | 53·8 | 43·9 |
| 13 | 34·7 | 37·2 | 41·5 | 47·2 | 57·4 | 65·5 | 58·0 | 59·0 | 55·8 | 57·5 | 54·0 | 51·0 |
| 14 | 42·0 | 46·8 | 40·0 | 45·2 | 54·8 | 61·0 | 63·5 | 64·9 | 61·0 | 57·2 | 50·3 | 48·5 |
| 15 | 43·5 | 48·7 | 38·5 | 49·2 | 52·2 | 67·2 | 65·2 | 64·0 | 60·5 | 62·0 | 48·0 | 47·0 |
| 16 | 50·0 | 41·9 | 41·8 | 56·2 | 61·8 | 65·5 | 64·0 | 68·1 | 57·8 | 59·5 | 45·0 | 46·5 |
| 17 | 51·0 | 50·2 | 40·9 | 52·8 | 67·8 | 60·3 | 65·5 | 66·2 | 66·0 | 59·5 | 47·0 | 49·5 |
| 18 | 41·0 | 45·9 | 40·4 | 47·4 | 65·5 | 66·0 | 58·5 | 59·5 | 65·8 | 59·9 | 48·0 | 40·0 |
| 19 | 37·0 | 47·2 | 39·2 | 43·4 | 69·5 | 66·5 | 61·3 | 64·0 | 66·8 | 57·4 | 47·9 | 43·5 |
| 20 | 38·7 | 48·0 | 37·8 | 41·0 | 61·5 | 65·0 | 61·9 | 62·2 | 72·0 | 49·7 | 43·0 | 47·1 |
| 21 | 32·4 | 49·4 | 41·1 | 45·5 | 66·5 | 60·0 | 61·9 | 67·9 | 59·2 | 44·8 | 46·0 | 48·7 |
| 22 | 35·3 | 48·2 | 46·0 | 52·5 | 56·5 | 63·3 | 71·0 | 65·0 | 58·5 | 46·8 | 55·0 | 42·4 |
| 23 | 36·5 | 45·4 | 45·7 | 44·5 | 61·0 | 67·8 | 72·2 | 58·0 | 62·0 | 48·6 | 48·5 | 39·9 |
| 24 | 34·5 | 42·2 | 52·5 | 37·0 | 63·5 | 71·8 | 74·3 | 68·0 | 60·0 | 44·8 | 49·0 | 36·8 |
| 25 | 34·0 | 43·4 | 46·5 | 43·0 | 59·8 | 64·1 | 71·5 | 65·0 | 57·5 | 43·7 | 46·5 | 39·1 |
| 26 | 46·5 | 42·5 | 42·3 | 45·7 | 63·0 | 74·5 | 72·0 | 65·5 | 59·2 | 50·9 | 50·5 | 36·0 |
| 27 | 51·5 | 45·3 | 47·5 | 51·6 | 70·1 | 64·5 | 70·5 | 65·9 | 58·2 | 48·7 | 49·5 | 32·6 |
| 28 | 43·5 | 40·5 | 45·0 | 46·5 | 68·8 | 64·9 | 71·0 | 60·4 | 66·0 | 58·5 | 50·5 | 28·7 |
| 29 | 37·5 | 36·5 | 50·2 | 52·5 | 69·1 | 73·0 | 71·0 | 64·5 | 67·6 | 58·0 | 52·9 | 34·5 |
| 30 | 36·3 | | 50·5 | 52·2 | 63·7 | 71·5 | 74·0 | 64·0 | 70·7 | 57·0 | 51·4 | 18·5 |
| 31 | 42·5 | | 47·2 | | 69·8 | | 71·5 | 60·0 | | 57·8 | | 37·5 |
| Means | 38·4 | 43·3 | 43·4 | 47·7 | 61·8 | 66·3 | 67·9 | 65·2 | 61·0 | 56·8 | 48·8 | 41·7 |

The mean of the twelve monthly values is 53°·53.

ABSTRACT of the CHANGES of the DIRECTION of the WIND, as derived from the Records of OSLER'S ANEMOMETER in the Year 1908.

(It is to be understood that the direction of the wind was nearly constant in the intervals between the times given in the second column and those next following in the first column.)

*Note.*—The time is expressed in civil reckoning, commencing at midnight and counting from $0^h$ to $24^h$.

| Greenwich Civil Time. | | Change of Direction. | | Amount of Motion. | |
|---|---|---|---|---|---|
| From | To | From | To | Direct. | Retrograde. |
| January. | | | | ° | ° |
| d h | d h | | | | |
| 1. 0½ | 1. 1 | N.E. | E.N.E. | 22½ | |
| 1. 1¾ | 1. 2 | E.N.E. | N.E. | | 22½ |
| 1. 2½ | 1. 3¾ | N.E. | E.S.E. | 67½ | |
| 1. 4¼ | 1. 4½ | E.S.E. | E.N.E. | | 45 |
| 1. 6¾ | 1. 7¼ | E.N.E. | E. | 22½ | |
| 1. 11¾ | 1. 12 | E. | E.N.E. | | 22½ |
| 1. 15 | 1. 16 | E.N.E. | E. | 22½ | |
| 3. 14½ | 3. 16¼ | E. | E.N.E. | | 22½ |
| 4. 8¾ | 4. 9 | E.N.E. | E. | 22½ | |
| 4. 16 | 4. 17 | E. | E.N.E. | | 22½ |
| 4. 19¾ | 4. 20¼ | E.N.E. | E. | 22½ | |
| 4. 21¼ | 4. 21½ | E. | E.S.E. | 22½ | |
| 4. 22 | 4. 23¼ | E.S.E. | E.N.E. | | 45 |
| 5. 5¾ | 5. 6 | E.N.E. | N.E. | | 22½ |
| 5. 11½ | 5. 12 | N.E. | W.N.W. | | 112½ |
| 5. 12¾ | 5. 13 | W.N.W. | W.S.W. | | 45 |
| 5. 13¾ | 5. 14 | W.S.W. | S. | | 67½ |
| 5. 14¾ | 5. 15½ | S. | S.S.E. | | 22½ |
| 5. 15¾ | 5. 16 | S.S.E. | W. | 112½ | |
| 5. 16½ | 5. 17 | W. | S.W. | | 45 |
| 5. 22 | 5. 22¼ | S.W. | W.S.W. | 22½ | |
| 5. 23½ | 6. 0 | W.S.W. | S.W. | | 22½ |
| 6. 1 | 6. 1¾ | S.W. | S.S.W. | | 22½ |
| 6. 5 | 6. 6 | S.S.W. | S.W. | 22½ | |
| 6. 12¾ | 6. 14½ | S.W. | W.S.W. | 22½ | |
| 7. 4¾ | 7. 6½ | W.S.W. | S.W. | | 22½ |
| 7. 19 | 7. 20 | S.W. | S.S.W. | | 22½ |
| 7. 22 | 8. 1 | S.S.W. | E.N.E. | 135 | |
| 8. 1½ | 8. 2½ | E.N.E. | N.N.W. | 90 | |
| 8. 3¼ | 8. 4¼ | N.N.W. | W. | 67½ | |
| 8. 6¼ | 8. 7 | W. | W.N.W. | 22½ | |
| 8. 8½ | 8. 9 | W.N.W. | N.W. | 22½ | |
| 8. 18 | 8. 18¾ | N.W. | N. | 45 | |
| 9. 0 | 9. 1 | N. | N.N.E. | 22½ | |
| 9. 14 | 9. 14½ | N.N.E. | N.E. | 22½ | |
| 10. 17½ | 10. 19 | N.E. | N.N.E. | | 22½ |
| 10. 22¼ | 10. 22½ | N.N.E. | S.W. | | 157½ |
| 10. 23¾ | 11. 0½ | S.W. | W.S.W. | 22½ | |
| 11. 4 | 11. 4½ | W.S.W. | S.W. | | 22½ |
| 11. 9 | 11. 9½ | S.W. | W.S.W. | 22½ | |
| 11. 14½ | 11. 14¾ | W.S.W. | S.W. | | 22½ |
| 11. 17½ | 11. 19½ | S.W. | S. | | 45 |
| 12. 0¾ | 12. 1 | S. | E. | | 90 |
| 12. 1¾ | 12. 2½ | E. | S.S.E. | 67½ | |
| 12. 3¾ | 12. 4¼ | S.S.E. | E. | | 67½ |
| 12. 5½ | 12. 5¾ | E. | S.E. | 45 | |
| 12. 9¼ | 12. 9¾ | S.E. | E.S.E. | | 22½ |
| 12. 11¼ | 12. 12¼ | E.S.E. | S.E. | 22½ | |
| 12. 15½ | 12. 16½ | S.E. | E.S.E. | | 22½ |
| 12. 20½ | 12. 22½ | E.S.E. | S.E. | 22½ | |
| Jan.—*cont.* | | | | ° | ° |
| d h | d h | | | | |
| 13. 2¼ | 13. 2½ | S.E. | E.S.E. | | 22½ |
| 13. 9½ | 13. 10½ | E.S.E. | S.E. | 22½ | |
| 14. 3 | 14. 3½ | S.E. | S.S.E. | 22½ | |
| 14. 4½ | 14. 5 | S.S.E. | S. | 22½ | |
| 14. 9½ | 14. 11 | S. | S.W. | 45 | |
| 14. 12¼ | 14. 12½ | S.W. | S.S.W. | | 22½ |
| 14. 14½ | 14. 15 | S.S.W. | S.W. | 22½ | |
| 14. 16¼ | 14. 17½ | S.W. | S.E. | | 90 |
| 14. 18 | 14. 19½ | S.E. | S. | 45 | |
| 14. 21¾ | 14. 22 | S. | S.S.W. | 22½ | |
| 15. 4 | 15. 5 | S.S.W. | S.W. | 22½ | |
| 15. 9 | 15. 9½ | S.W. | S.S.W. | | 22½ |
| 15. 21 | 15. 21½ | S.S.W. | S.W. | 22½ | |
| 16. 5 | 16. 9½ | S.W. | W.S.W. | 22½ | |
| 16. 11½ | 16. 12 | W.S.W. | S.W. | | 22½ |
| 17. 1¼ | 17. 1¾ | S.W. | W.S.W. | 22½ | |
| 17. 9½ | 17. 11¼ | W.S.W. | S.W. | | 22½ |
| 17. 23¼ | 18. 0½ | S.W. | W.S.W. | 22½ | |
| 18. 13¼ | 18. 15¼ | W.S.W. | S.S.E. | | 90 |
| 18. 19¼ | 18. 19½ | S.S.E. | N.N.E. | | 135 |
| 18. 21 | 18. 21½ | N.N.E. | S.E. | 112½ | |
| 18. 23 | 18. 23¼ | S.E. | N.E. | | 90 |
| 19. 0½ | 19. 1 | N.E. | S.S.W. | 157½ | |
| 19. 2 | 19. 2¼ | S.S.W. | W.S.W. | 45 | |
| 19. 5½ | 19. 6 | W.S.W. | E.S.E. | 225 | |
| 19. 7½ | 19. 7¾ | E.S.E. | E. | | 22½ |
| 19. 12¼ | 19. 12½ | E. | S.E. | 45 | |
| 19. 15 | 19. 15¼ | S.E. | E. | | 45 |
| 19. 17 | 19. 17¼ | E. | S.S.E. | 67½ | |
| 19. 18 | 19. 20 | S.S.E. | N. | 202½ | |
| 19. 21 | 19. 22 | N. | N.N.W. | | 22½ |
| 19. 23½ | 19. 23¾ | N.N.W. | W.N.W. | | 45 |
| 20. 0½ | 20. 0¾ | W.N.W. | N.N.W. | 45 | |
| 20. 5¼ | 20. 5½ | N.N.W. | N. | 22½ | |
| 20. 9½ | 20. 11½ | N. | N.E. | 45 | |
| 20. 17 | 20. 17¼ | N.E. | E.N.E. | 22½ | |
| 20. 22¼ | 20. 23¾ | E.N.E. | S.S.W. | 135 | |
| 21. 0¾ | 21. 1¼ | S.S.W. | E.N.E. | | 135 |
| 21. 6¼ | 21. 6½ | E.N.E. | S. | 112½ | |
| 21. 7¼ | 21. 7½ | S. | E.N.E. | | 112½ |
| 21. 8¼ | 21. 8½ | E.N.E. | S. | 112½ | |
| 21. 9¼ | 21. 9½ | S. | E. | | 90 |
| 21. 11½ | 21. 11¾ | E. | S.E. | 45 | |
| 21. 12¼ | 21. 12½ | S.E. | E.S.E. | | 22½ |
| 21. 23 | 21. 23½ | E.S.E. | S.E. | 22½ | |
| 22. 0 | 22. 1 | S.E. | S.S.E. | 22½ | |
| 22. 20 | 22. 22 | S.S.E. | S.E. | | 22½ |
| 23. 2 | 23. 3 | S.E. | E.S.E. | | 22½ |
| 23. 4½ | 23. 6½ | E.S.E. | S.E. | 22½ | |
| 23. 16¼ | 23. 16½ | S.E. | E.N.E. | | 67½ |
| Jan.—*cont.* | | | | | |
| d h | d h | | | | |
| 23. 17½ | 23. 17¾ | E.N.E. | E.S.E. | 45 | |
| 24. 11¾ | 24. 12 | E.S.E. | E.N.E. | | 45 |
| 24. 13¾ | 24. 14½ | E.N.E. | E. | 22½ | |
| 24. 18¾ | 24. 19 | E. | E.S.E. | 22½ | |
| 24. 22 | 24. 23½ | E.S.E. | S.E. | 22½ | |
| 25. 1¼ | 25. 1½ | S.E. | W.S.W. | 112½ | |
| 27. 11 | 27. 12 | W.S.W. | W. | 22½ | |
| 28. 6¼ | 28. 6½ | W. | W.S.W. | | 22½ |
| 28. 15 | 28. 16 | W.S.W. | W. | 22½ | |
| 28. 18 | 28. 18¾ | W. | W.S.W. | | 22½ |
| 28. 22¾ | 29. 0 | W.S.W. | N. | 112½ | |
| 29. 16 | 29. 16¼ | N. | N.N.W. | | 22½ |
| 29. 18¼ | 29. 18½ | N.N.W. | N. | 22½ | |
| 30. 6¼ | 30. 7¼ | N. | N.N.W. | | 22½ |
| 30. 8¾ | 30. 9 | N.N.W. | N.W. | | 22½ |
| 30. 11¼ | 30. 11¾ | N.W. | W. | | 45 |
| 30. 18½ | 30. 19 | W. | W.S.W. | | 22½ |
| 30. 20 | 30. 22½ | W.S.W. | W. | 22½ | |
| 31. 2½ | 31. 3¾ | W. | W.N.W. | 22½ | |
| 31. 4¾ | 31. 5 | W.N.W. | W. | | 22½ |
| 31. 7½ | 31. 8½ | W. | W.S.W. | | 22½ |
| 31. 10¼ | 31. 12 | W.S.W. | W. | 22½ | |
| 31. 20½ | 31. 21¼ | W. | N.W. | 45 | |
| 31. 22 | 31. 22½ | N.W. | W.N.W. | | 22½ |
| | | | Sums | 3015 | 2767½ |
| February. | | | | | |
| 1. 0 | 1. 1 | W.N.W. | N.N.W. | 45 | |
| 1. 9 | 1. 10 | N.N.W. | N. | 22½ | |
| 2. 12½ | 2. 13¼ | N. | N.N.E. | 22½ | |
| 2. 16 | 2. 17½ | N.N.E. | N. | | 22½ |
| 2. 19¾ | 2. 20 | N. | N.N.E. | 22½ | |
| 2. 21½ | 2. 22 | N.N.E. | S.W. | | 157½ |
| 3. 3¾ | 3. 4¾ | S.W. | W.S.W. | 22½ | |
| 3. 13 | 3. 14¼ | W.S.W. | N.N.W. | 90 | |
| 3. 18 | 3. 18½ | N.N.W. | N.W. | | 22½ |
| 3. 19½ | 3. 20½ | N.W. | N. | 45 | |
| 4. 8¼ | 4. 8¾ | N. | N.N.E. | 22½ | |
| 4. 11¾ | 4. 12¾ | N.N.E. | N. | | 22½ |
| 4. 16 | 4. 16½ | N. | N.N.E. | 22½ | |
| 5. 2¼ | 5. 3 | N.N.E. | N. | | 22½ |
| 5. 9½ | 5. 9¾ | N. | N.N.E. | 22½ | |
| 5. 11½ | 5. 12½ | N.N.E. | S.W. | | 157½ |
| 5. 13 | 5. 13¾ | S.W. | N.N.W. | 112½ | |

## ABSTRACT of the CHANGES of the DIRECTION of the WIND—*continued.*

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| Feb.—*cont.* | | | | ° | ° |
| d h | d h | | | | |
| 5. 17½ | 5. 18¾ | N.N.W. | W.S.W. | | 90 |
| 5. 19 | 5. 19¼ | W.S.W. | W. | 22½ | |
| 5. 19¾ | 5. 20¼ | W. | W.S.W. | | 22½ |
| 6. 0¼ | 6. 0½ | W.S.W. | W. | 22½ | |
| 6. 1¼ | 6. 2 | W. | W.S.W. | | 22½ |
| 6. 10¾ | 6. 11 | W.S.W. | S.W. | | 22½ |
| 6. 13 | 6. 13¼ | S.W. | W.S.W. | 22½ | |
| 6. 14¾ | 6. 15 | W.S.W. | W. | 22½ | |
| 6. 17¼ | 6. 18 | W. | W.S.W. | | 22½ |
| 6. 22½ | 6. 23½ | W.S.W. | W. | 22½ | |
| 7. 2¾ | 7. 3 | W. | N.W. | 45 | |
| 7. 3½ | 7. 4 | N.W. | W. | | 45 |
| 7. 5¾ | 7. 6 | W. | W.S.W. | | 22½ |
| 7. 9¼ | 7. 9½ | W.S.W. | W. | 22½ | |
| 7. 14 | 7. 14¾ | W. | W.N.W. | 22½ | |
| 7. 16¾ | 7. 17½ | W.N.W. | N.N.W. | 45 | |
| 7. 19¼ | 7. 19½ | N.N.W. | W.S.W. | | 90 |
| 7. 20½ | 7. 21¼ | W.S.W. | W.N.W. | 45 | |
| 7. 22¼ | 7. 22½ | W.N.W. | N.N.W. | 45 | |
| 7. 23 | 7. 23½ | N.N.W. | N.W. | | 22½ |
| 8. 0½ | 8. 2 | N.W. | W. | | 45 |
| 8. 10¾ | 8. 11½ | W. | N.W. | 45 | |
| 8. 16½ | 8. 17¾ | N.W. | W.N.W. | | 22½ |
| 8. 19¾ | 8. 20½ | W.N.W. | N.N.W. | 45 | |
| 8. 20½ | 8. 21½ | N.N.W. | W.N.W. | | 45 |
| 8. 23¼ | 8. 23½ | W.N.W. | W. | | 22½ |
| 9. 2¾ | 9. 3 | W. | W.S.W. | | 22½ |
| 9. 5¼ | 9. 5¾ | W.S.W. | N.W. | 67½ | |
| 9. 6¼ | 9. 8 | N.W. | W.S.W. | | 67½ |
| 9. 10½ | 9. 10¾ | W.S.W. | N.N.W. | 90 | |
| 9. 14½ | 9. 15¾ | N.N.W. | W.N.W. | | 45 |
| 9. 22 | 9. 23 | W.N.W. | W. | | 22½ |
| 10. 7½ | 10. 8¼ | W. | W.S.W. | | 22½ |
| 10. 16½ | 10. 17½ | W.S.W. | S.W. | | 22½ |
| 11. 4¾ | 11. 6½ | S.W. | S.S.W. | | 22½ |
| 11. 8 | 11. 9 | S.S.W. | W.S.W. | 45 | |
| 11. 11¾ | 11. 12 | W.S.W. | S.W. | | 22½ |
| 11. 14 | 11. 15½ | S.W. | W.S.W. | 22½ | |
| 12. 2 | 12. 4 | W.S.W. | S.W. | | 22½ |
| 12. 13½ | 12. 13¾ | S.W. | S.S.E. | | 67½ |
| 12. 19 | 12. 21 | S.S.E. | S.E. | | 22½ |
| 13. 1½ | 13. 1¾ | S.E. | E.S.E. | | 22½ |
| 13. 7¾ | 13. 8 | E.S.E. | E. | | 22½ |
| 13. 11 | 13. 12 | E. | S.E. | 45 | |
| 13. 14 | 13. 14¼ | S.E. | S.S.E. | 22½ | |
| 13. 15½ | 13. 15¾ | S.S.E. | W.S.W. | 90 | |
| 13. 17¾ | 13. 18 | W.S.W. | S.W. | | 22½ |
| 13. 19½ | 13. 20½ | S.W. | S.S.W. | | 22½ |
| 13. 22¼ | 13. 22½ | S.S.W. | W.S.W. | 45 | |
| 13. 23 | 13. 23¼ | W.S.W. | S.S.W. | | 45 |
| 14. 0 | 14. 0¾ | S.S.W. | W.S.W. | 45 | |
| 14. 2½ | 14. 2¾ | W.S.W. | S.W. | | 22½ |
| 14. 5¾ | 14. 6 | S.W. | W. | 45 | |
| 14. 6½ | 14. 7½ | W. | S.W. | | 45 |
| 14. 9 | 14. 10 | S.W. | W. | 45 | |
| 14. 16¾ | 14. 17 | W. | N.W. | 45 | |
| 14. 17½ | 14. 19 | N.W. | W.S.W. | | 67½ |
| 14. 23¾ | 15. 1 | W.S.W. | S.W. | | 22½ |
| 15. 8¼ | 15. 10 | S.W. | W.S.W. | 22½ | |
| 15. 12 | 15. 13½ | W.S.W. | S.W. | | 22½ |
| 15. 15¼ | 15. 16½ | S.W. | W.S.W. | 22½ | |
| 15. 17¼ | 15. 17½ | W.S.W. | N. | 112½ | |
| 15. 18¼ | 15. 19½ | N. | N.W. | | 45 |
| 15. 20¾ | 15. 22 | N.W. | W. | | 45 |
| 16. 2½ | 16. 3 | W. | W.S.W. | | 22½ |
| 16. 7½ | 16. 8½ | W.S.W. | W. | 22½ | |
| 16. 10 | 16. 11 | W. | N.W. | 45 | |
| 16. 17½ | 16. 17¾ | N.W. | W. | | 45 |
| 16. 19½ | 16. 19¾ | W. | W.S.W. | | 22½ |
| 16. 22½ | 16. 23¼ | W.S.W. | S.S.W. | | 45 |
| 17. 2 | 17. 2½ | S.S.W. | S. | | 22½ |
| 17. 6¼ | 17. 8¾ | S. | S.W. | 45 | |
| 17. 13 | 17. 14 | S.W. | W. | 45 | |
| 17. 18¾ | 17. 19½ | W. | N.W. | 45 | |
| 18. 0 | 18. 0¼ | N.W. | N.N.W. | 22½ | |
| 18. 2½ | 18. 4½ | N.N.W. | W.N.W. | | 45 |
| 18. 5½ | 18. 6 | W.N.W. | W. | | 22½ |
| 18. 7½ | 18. 9 | W. | S.W. | 45 | |
| 18. 9½ | 18. 11½ | S.W. | N.W. | 90 | |
| 19. 0¼ | 19. 1½ | N.W. | W.N.W. | | 22½ |
| 19. 4½ | 19. 7½ | W.N.W. | W.S.W. | | 45 |
| 19. 7½ | 19. 11¼ | W.S.W. | N.W. | 67½ | |
| 19. 22 | 19. 22¾ | N.W. | W. | 45 | |
| 20. 4 | 20. 4¼ | W. | W.N.W. | 22½ | |
| 20. 5 | 20. 5½ | W.N.W. | W. | | 22½ |
| 20. 6¾ | 20. 7½ | W. | W.S.W. | | 22½ |
| 20. 15¾ | 20. 18 | W.S.W. | W. | 22½ | |
| 21. 2 | 21. 2¾ | W. | W.S.W. | | 22½ |
| 21. 16¾ | 21. 17 | W.S.W. | W. | 22½ | |
| 21. 23½ | 22. 0 | W. | W.S.W. | | 22½ |
| 22. 8¼ | 22. 9¾ | W.S.W. | S.W. | | 22½ |
| 22. 16 | 22. 17½ | S.W. | W. | 45 | |
| 23. 4¼ | 23. 7 | W. | S.W. | | 45 |
| 23. 8¼ | 23. 9¼ | S.W. | W.S.W. | 22½ | |
| 23. 10½ | 23. 11 | W.S.W. | W. | 22½ | |
| 23. 15½ | 23. 16 | W. | W.N.W. | 22½ | |
| 23. 19½ | 23. 20 | W.N.W. | W. | | 22½ |
| 24. 8¼ | 24. 8¾ | W. | W.N.W. | 22½ | |
| 24. 11¼ | 24. 11¾ | W.N.W. | N.W. | 22½ | |
| 24. 15¾ | 24. 16 | N.W. | N.N.W. | 22½ | |
| 24. 19½ | 24. 20 | N.N.W. | N. | 22½ | |
| 24. 20¾ | 24. 21¼ | N. | N.N.W. | | 22½ |
| 25. 5½ | 25. 6¼ | N.N.W. | N.W. | | 22½ |
| 25. 9¼ | 25. 10 | N.W. | N.N.W. | 22½ | |
| 25. 10¾ | 25. 11½ | N.N.W. | W.N.W. | | 45 |
| 25. 15½ | 25. 16½ | W.N.W. | N.N.W. | 45 | |
| 25. 18¼ | 25. 19 | N.N.W. | N. | 22½ | |
| 26. 3¾ | 26. 4¼ | N. | N.N.W. | | 22½ |
| 26. 8¾ | 26. 9 | N.N.W. | W.N.W. | | 45 |
| 26. 11½ | 26. 11¾ | W.N.W. | W. | | 22½ |
| 26. 14¾ | 26. 15 | W. | W.S.W. | | 22½ |
| 26. 19 | 26. 20½ | W.S.W. | W. | 22½ | |
| 27. 6 | 27. 8 | W. | W.S.W. | | 22½ |
| 27. 9¼ | 27. 9¾ | W.S.W. | W. | 22½ | |
| 27. 21½ | 27. 22 | W. | W.S.W. | | 22½ |
| 28. 9 | 28. 10¼ | W.S.W. | W. | 22½ | |
| 28. 12½ | 28. 13½ | W. | N.W. | 45 | |
| 28. 15 | 28. 17 | N.W. | W. | | 45 |
| Feb.—*cont.* | | | | ° | ° |
| d h | d h | | | | |
| 15. 12 | 15. 13½ | W.S.W. | S.W. | | 22½ |
| 15. 15¼ | 15. 16½ | S.W. | W.S.W. | 22½ | |
| 15. 17¼ | 15. 17½ | W.S.W. | N. | 112½ | |
| 15. 18¼ | 15. 19½ | N. | N.W. | | 45 |
| 15. 20¾ | 15. 22 | N.W. | W. | | 45 |
| 16. 2½ | 16. 3 | W. | W.S.W. | | 22½ |
| 16. 7½ | 16. 8½ | W.S.W. | W. | 22½ | |
| 16. 10 | 16. 11 | W. | N.W. | 45 | |
| 16. 17½ | 16. 17¾ | N.W. | W. | | 45 |
| 16. 19½ | 16. 19¾ | W. | W.S.W. | | 22½ |
| 16. 22½ | 16. 23¼ | W.S.W. | S.S.W. | | 45 |
| 17. 2 | 17. 2½ | S.S.W. | S. | | 22½ |
| 17. 6¼ | 17. 8¾ | S. | S.W. | 45 | |
| 17. 13 | 17. 14 | S.W. | W. | 45 | |
| 17. 18¾ | 17. 19½ | W. | N.W. | 45 | |
| 18. 0 | 18. 0¼ | N.W. | N.N.W. | 22½ | |
| 18. 2½ | 18. 4½ | N.N.W. | W.N.W. | | 45 |
| 18. 5½ | 18. 6 | W.N.W. | W. | | 22½ |
| 18. 7½ | 18. 9 | W. | S.W. | 45 | |
| 18. 9½ | 18. 11½ | S.W. | N.W. | 90 | |
| 19. 0¼ | 19. 1½ | N.W. | W.N.W. | | 22½ |
| 19. 4½ | 19. 7½ | W.N.W. | W.S.W. | | 45 |
| 19. 7½ | 19. 11¼ | W.S.W. | N.W. | 67½ | |
| 19. 22 | 19. 22¾ | N.W. | W. | 45 | |
| 20. 4 | 20. 4¼ | W. | W.N.W. | 22½ | |
| 20. 5 | 20. 5½ | W.N.W. | W. | | 22½ |
| 20. 6¾ | 20. 7½ | W. | W.S.W. | | 22½ |
| 20. 15¾ | 20. 18 | W.S.W. | W. | 22½ | |
| 21. 2 | 21. 2¾ | W. | W.S.W. | | 22½ |
| 21. 16¾ | 21. 17 | W.S.W. | W. | 22½ | |
| 21. 23½ | 22. 0 | W. | W.S.W. | | 22½ |
| 22. 8¼ | 22. 9¾ | W.S.W. | S.W. | | 22½ |
| 22. 16 | 22. 17½ | S.W. | W. | 45 | |
| 23. 4¼ | 23. 7 | W. | S.W. | | 45 |
| 23. 8¼ | 23. 9¼ | S.W. | W.S.W. | 22½ | |
| 23. 10½ | 23. 11 | W.S.W. | W. | 22½ | |
| 23. 15½ | 23. 16 | W. | W.N.W. | 22½ | |
| 23. 19½ | 23. 20 | W.N.W. | W. | | 22½ |
| 24. 8¼ | 24. 8¾ | W. | W.N.W. | 22½ | |
| 24. 11¼ | 24. 11¾ | W.N.W. | N.W. | 22½ | |
| 24. 15¾ | 24. 16 | N.W. | N.N.W. | 22½ | |
| 24. 19½ | 24. 20 | N.N.W. | N. | 22½ | |
| 24. 20¾ | 24. 21¼ | N. | N.N.W. | | 22½ |
| 25. 5½ | 25. 6¼ | N.N.W. | N.W. | | 22½ |
| 25. 9¼ | 25. 10 | N.W. | N.N.W. | 22½ | |
| 25. 10¾ | 25. 11½ | N.N.W. | W.N.W. | | 45 |
| 25. 15½ | 25. 16½ | W.N.W. | N.N.W. | 45 | |
| 25. 18¼ | 25. 19 | N.N.W. | N. | 22½ | |
| 26. 3¾ | 26. 4¼ | N. | N.N.W. | | 22½ |
| 26. 8¾ | 26. 9 | N.N.W. | W.N.W. | | 45 |
| 26. 11½ | 26. 11¾ | W.N.W. | W. | | 22½ |
| 26. 14¾ | 26. 15 | W. | W.S.W. | | 22½ |
| 26. 19 | 26. 20½ | W.S.W. | W. | 22½ | |
| 27. 6 | 27. 8 | W. | W.S.W. | | 22½ |
| 27. 9¼ | 27. 9¾ | W.S.W. | W. | 22½ | |
| 27. 21½ | 27. 22 | W. | W.S.W. | | 22½ |
| 28. 9 | 28. 10¼ | W.S.W. | W. | 22½ | |
| 28. 12½ | 28. 13½ | W. | N.W. | 45 | |
| 28. 15 | 28. 17 | N.W. | W. | | 45 |
| Feb.—*cont.* | | | | ° | ° |
| d h | d h | | | | |
| 28. 20 | 28. 21 | W. | W.S.W. | | 22½ |
| 29. 1¼ | 29. 4½ | W.S.W. | W.N.W. | 45 | |
| 29. 5 | 29. 5¼ | W.N.W. | N. | 67½ | |
| 29. 6 | 29. 6¼ | N. | N.W. | | 45 |
| 29. 7½ | 29. 8 | N.W. | W.N.W. | | 22½ |
| 29. 11¼ | 29. 11½ | W.N.W. | N.W. | 22½ | |
| 29. 13 | 29. 13½ | N.W. | N.N.W. | 22½ | |
| 29. 19¼ | 29. 20½ | N.N.W. | W.N.W. | | 45 |
| 29. 21¾ | 29. 23½ | W.N.W. | N. | 67½ | |
| | | | Sums | 2722½ | 2655 |
| March. | | | | | |
| 1. 0¼ | 1. 0¾ | N. | N.N.W. | | 22½ |
| 1. 11½ | 1. 11¾ | N.N.W. | N. | 22½ | |
| 1. 14½ | 1. 15 | N. | N.N.W. | | 22½ |
| 1. 17¼ | 1. 18½ | N.N.W. | W.N.W. | | 45 |
| 1. 19¼ | 1. 21 | W.N.W. | E.N.E. | 135 | |
| 1. 22 | 1. 22¾ | E.N.E. | N.E. | | 22½ |
| 2. 2¼ | 2. 2¾ | N.E. | N.N.E. | | 22½ |
| 2. 3 | 2. 3¾ | N.N.E. | N. | | 22½ |
| 2. 6¾ | 2. 7 | N. | N.N.E. | 22½ | |
| 2. 11 | 2. 12 | N.N.E. | N. | | 22½ |
| 2. 17¾ | 2. 19¼ | N. | N.W. | | 45 |
| 2. 20 | 2. 20¼ | N.W. | W. | | 45 |
| 2. 22 | 2. 22½ | W. | W.S.W. | | 22½ |
| 3. 7 | 3. 8 | W.S.W. | S.W. | | 22½ |
| 3. 9½ | 3. 10 | S.W. | W.S.W. | 22½ | |
| 3. 12¼ | 3. 12½ | W.S.W. | S.E. | | 112½ |
| 3. 14¼ | 3. 14½ | S.E. | S. | 45 | |
| 3. 16½ | 3. 17½ | S. | S.E. | | 45 |
| 3. 19¾ | 3. 20½ | S.E. | E.S.E. | | 22½ |
| 4. 0½ | 4. 2½ | E.S.E. | S.S.E. | 45 | |
| 4. 3½ | 4. 5½ | S.S.E. | E.S.E. | | 45 |
| 4. 7½ | 4. 8½ | E.S.E. | E. | | 22½ |
| 4. 11½ | 4. 11¾ | E. | N.E. | | 45 |
| 4. 14¾ | 4. 15 | N.E. | W. | | 135 |
| 4. 15¾ | 4. 16 | W. | N. | 90 | |
| 4. 18½ | 4. 18¾ | N. | N.W. | | 45 |
| 4. 21½ | 4. 21¾ | N.W. | W.S.W. | | 67½ |
| 4. 22¾ | 4. 23 | W.S.W. | W. | 22½ | |
| 5. 0¾ | 5. 1½ | W. | N.N.W. | 67½ | |
| 5. 1¾ | 5. 2 | N.N.W. | W.N.W. | | 45 |
| 5. 3¼ | 5. 3½ | W.N.W. | W. | | 22½ |
| 5. 8 | 5. 8¼ | W. | W.S.W. | | 22½ |
| 5. 17 | 5. 21 | W.S.W. | S. | | 67½ |
| 6. 6 | 6. 9¾ | S. | S.W. | 45 | |
| 6. 17 | 6. 19¼ | S.W. | W.N.W. | 67½ | |
| 6. 23½ | 7. 0¾ | W.N.W. | N.W. | 22½ | |
| 7. 4¼ | 7. 4½ | N.W. | W.N.W. | | 22½ |
| 7. 7¼ | 7. 7¾ | W.N.W. | W. | | 22½ |
| 7. 16¼ | 7. 18 | W. | W.S.W. | | 22½ |
| 8. 0 | 8. 0¼ | W.S.W. | S.W. | | 22½ |
| 8. 8 | 8. 10½ | S.W. | W.S.W. | 22½ | |

## ABSTRACT of the CHANGES of the DIRECTION of the WIND—*continued.*

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| | | | | ° | ° |
| Mar.—*cont.* | | | | | |
| d h | d h | | | | |
| 8. 16¾ | 8. 17 | W.S.W. | S.W. | | 22½ |
| 9. 0¼ | 9. 2¼ | S.W. | W.S.W. | 22½ | |
| 10. 2 | 10. 3 | W.S.W. | W. | 22½ | |
| 10. 14 | 10. 14¾ | W. | W.N.W. | 22½ | |
| 10. 23 | 10. 23½ | W.N.W. | N.W. | 22½ | |
| 11. 3 | 11. 5½ | N.W. | N. | 45 | |
| 11. 19 | 11. 19¼ | N. | N.E. | 45 | |
| 11. 19¾ | 11. 20¼ | N.E. | W.S.W. | 202½ | |
| 12. 3¼ | 12. 4½ | W.S.W. | N. | 112½ | |
| 12. 6 | 12. 6¼ | N. | S.E. | 135 | |
| 12. 8 | 12. 8¾ | S.E. | E.N.E. | | 67½ |
| 12. 14 | 12. 15½ | E.N.E. | S. | 112½ | |
| 12. 16½ | 12. 17 | S. | S.W. | 45 | |
| 12. 21 | 12. 22 | S.W. | W.S.W. | 22½ | |
| 13. 1¾ | 13. 2¾ | W.S.W. | N. | 112½ | |
| 13. 8½ | 13. 8¾ | N. | N.N.E. | 22½ | |
| 13. 11 | 13. 11¼ | N.N.E. | N. | | 22½ |
| 13. 12¾ | 13. 13 | N. | N.E. | 45 | |
| 13. 16½ | 13. 16¾ | N.E. | E.S.E. | 67½ | |
| 13. 17½ | 13. 17¾ | E.S.E. | S.E. | 22½ | |
| 13. 22¾ | 13. 23¼ | S.E. | S.S.E. | 22½ | |
| 14. 2 | 14. 2½ | S.S.E. | E.S.E. | | 45 |
| 14. 5 | 14. 5¼ | E.S.E. | S.E. | 22½ | |
| 14. 11 | 14. 13½ | S.E. | E. | | 45 |
| 14. 15¾ | 14. 16 | E. | E.N.E. | | 22½ |
| 14. 17¼ | 14. 18½ | E.N.E. | S.E. | 67½ | |
| 14. 20¾ | 14. 21½ | S.E. | E.S.E. | | 22½ |
| 14. 22¾ | 15. 1½ | E.S.E. | N.E. | | 67½ |
| 15. 2½ | 15. 4½ | N.E. | N.N.E. | | 22½ |
| 15. 9¼ | 15. 9½ | N.N.E. | E.N.E. | 45 | |
| 15. 10¾ | 15. 11 | E.N.E. | S.E. | 67½ | |
| 15. 12¼ | 15. 12½ | S.E. | S. | 45 | |
| 15. 19½ | 15. 19¾ | S. | W.N.W. | 112½ | |
| 15. 21¼ | 15. 21½ | W.N.W. | S.W. | | 67½ |
| 16. 1¾ | 16. 2 | S.W. | S. | | 45 |
| 16. 4½ | 16. 5¼ | S. | S.S.W. | 22½ | |
| 16. 8¼ | 16. 9 | S.S.W. | S.W. | 22½ | |
| 16. 10½ | 16. 11½ | S.W. | W.S.W. | 22½ | |
| 16. 15 | 16. 17 | W.S.W. | N. | 112½ | |
| 16. 20 | 16. 21 | N. | N.N.E. | 22½ | |
| 17. 1¾ | 17. 2 | N.N.E. | N. | | 22½ |
| 17. 17¾ | 17. 18 | N. | N.N.E. | 22½ | |
| 18. 1¼ | 18. 1½ | N.N.E. | N. | | 22½ |
| 18. 8½ | 18. 10 | N. | N.E. | 45 | |
| 18. 12¾ | 18. 13 | N.E. | E.N.E. | 22½ | |
| 18. 15¾ | 18. 16 | E.N.E. | E. | 22½ | |
| 18. 19½ | 18. 21 | E. | E.N.E. | | 22½ |
| 19. 3 | 19. 4 | E.N.E. | N.E. | | 22½ |
| 19. 13 | 19. 14 | N.E. | E.N.E. | 22½ | |
| 19. 19¼ | 19. 19½ | E.N.E. | E. | 22½ | |
| 19. 23 | 20. 1½ | E. | N.E. | | 45 |
| 20. 3¼ | 20. 4 | N.E. | N. | | 45 |
| 20. 5 | 20. 5½ | N. | N.E. | 45 | |
| 20. 6¼ | 20. 6½ | N.E. | N.N.E. | | 22½ |
| 20. 11 | 20. 11½ | N.N.E. | N.E. | 22½ | |
| 20. 14¾ | 20. 15¾ | N.E. | S.S.W. | 157½ | |
| 20. 16¼ | 20. 16½ | S.S.W. | W.S.W. | 45 | |
| 20. 17½ | 20. 17¾ | W.S.W. | S.S.E. | 270 | |
| 20. 23½ | 20. 23¾ | S.S.E. | S. | 22½ | |
| 21. 2 | 21. 3¼ | S. | W.S.W. | 67½ | |
| 21. 4¼ | 21. 4½ | W.S.W. | S.S.W. | | 45 |
| 21. 5½ | 21. 5¾ | S.S.W. | W.S.W. | 45 | |
| 21. 7½ | 21. 8½ | W.S.W. | S.S.W. | | 45 |
| 21. 16½ | 21. 16¾ | S.S.W. | S.S.E. | | 45 |
| 21. 20¾ | 21. 21 | S.S.E. | S. | 22½ | |
| 21. 22½ | 21. 23½ | S. | S.S.E. | | 22½ |
| 22. 1½ | 22. 2 | S.S.E. | S. | 22½ | |
| 22. 3½ | 22. 5 | S. | S.S.E. | | 22½ |
| 22. 7¼ | 22. 8½ | S.S.E. | S. | 22½ | |
| 23. 2 | 23. 2½ | S. | W. | 90 | |
| 23. 4¾ | 23. 5¼ | W. | S.W. | | 45 |
| 23. 6 | 23. 7 | S.W. | W. | 45 | |
| 23. 8½ | 23. 9¼ | W. | W.N.W. | 22½ | |
| 23. 17½ | 23. 17¾ | W.N.W. | S. | | 112½ |
| 23. 18½ | 23. 19¼ | S. | W. | 90 | |
| 23. 19½ | 23. 20¼ | W. | S.S.W. | | 67½ |
| 23. 21 | 23. 22½ | S.S.W. | W.S.W. | 45 | |
| 24. 4 | 24. 5 | W.S.W. | S.W. | | 22½ |
| 24. 23 | 25. 8½ | S.W. | S.E. | | 90 |
| 25. 18 | 25. 19 | S.E. | E.S.E. | | 22½ |
| 25. 23½ | 25. 23¾ | E.S.E. | N.E. | | 67½ |
| 26. 0¼ | 26. 2¾ | N.E. | N. | 45 | |
| 26. 7 | 26. 8¼ | N. | N.N.E. | 22½ | |
| 26. 11½ | 26. 11¾ | N.N.E. | N.E. | 22½ | |
| 26. 12½ | 26. 13 | N.E. | N.N.E. | | 22½ |
| 26. 15½ | 26. 16¼ | N.N.E. | E. | 67½ | |
| 26. 17¾ | 26. 18½ | E. | S.E. | 45 | |
| 27. 0 | 27. 1½ | S.E. | S. | 45 | |
| 27. 1¼ | 27. 1½ | S. | S.W. | 45 | |
| 27. 2¾ | 27. 3 | S.W. | S.S.W. | | 22½ |
| 27. 6 | 27. 6½ | S.S.W. | W. | 67½ | |
| 27. 8 | 27. 8¼ | W. | S. | | 90 |
| 27. 9¼ | 27. 9½ | S. | S.W. | 45 | |
| 27. 10¼ | 27. 10¾ | S.W. | S.S.W. | | 22½ |
| 27. 11½ | 27. 11½ | S.S.W. | S.W. | 22½ | |
| 27. 19 | 27. 20¼ | S.W. | S.S.W. | | 22½ |
| 28. 2½ | 28. 3¼ | S.S.W. | S.W. | 22½ | |
| 28. 7¼ | 28. 8¼ | S.W. | N. | 135 | |
| 28. 12½ | 28. 12¾ | N. | N.N.W. | | 22½ |
| 28. 17¾ | 28. 21¼ | N.N.W. | S.W. | | 112½ |
| 28. 22½ | 28. 23 | S.W. | W.S.W. | 22½ | |
| 29. 1½ | 29. 2 | W.S.W. | S.W. | | 22½ |
| 29. 21½ | 29. 22¾ | S.W. | W. | 45 | |
| 30. 0 | 30. 0¼ | W. | W.S.W. | | 22½ |
| 30. 13 | 30. 13½ | W.S.W. | S.W. | | 22½ |
| 30. 22 | 31. 0 | S.W. | W.S.W. | 22½ | |
| 31. 2½ | 31. 3 | W.S.W. | W. | 22½ | |
| 31. 10½ | 31. 10¾ | W. | W.N.W. | 22½ | |
| 31. 17 | 31. 17¼ | W.N.W. | W. | | 22½ |
| 31. 18¾ | 31. 19 | W. | W.S.W. | | 22½ |
| 31. 23½ | 31. 24 | W.S.W. | W. | 22½ | |
| | | | Sums | 4185 | 2835 |
| April. | | | | | |
| d h | d h | | | | |
| 1. 7¾ | 1. 8¾ | W. | N.W. | 45 | |
| 1. 18½ | 1. 19½ | N.W. | W.S.W. | | 67½ |
| 2. 11 | 2. 11½ | W.S.W. | W. | 22½ | |
| 2. 13 | 2. 14 | W. | W.S.W. | | 22½ |
| 2. 20¾ | 2. 21¼ | W.S.W. | S.W. | | 22½ |
| 2. 22½ | 2. 23½ | S.W. | W. | 45 | |
| 3. 0¼ | 3. 0½ | W. | W.S.W. | | 22½ |
| 3. 7 | 3. 7½ | W.S.W. | W. | 22½ | |
| 3. 14½ | 3. 15½ | W. | N.W. | 45 | |
| 3. 18 | 3. 18½ | N.W. | W.N.W. | | 22½ |
| 3. 20 | 3. 21 | W.N.W. | W. | | 22½ |
| 4. 7½ | 4. 8½ | W. | N.W. | 45 | |
| 4. 12¾ | 4. 13 | N.W. | N.N.W. | 22½ | |
| 4. 15½ | 4. 16 | N.N.W. | W.N.W. | | 45 |
| 4. 16 | 4. 16¼ | W.N.W. | N.N.E. | 90 | |
| 4. 18¼ | 4. 22¼ | N.N.E. | N.W. | | 67½ |
| 4. 23½ | 4. 23¾ | N.W. | N.N.W. | 22½ | |
| 5. 1 | 5. 2½ | N.N.W. | N. | 22½ | |
| 5. 14½ | 5. 16 | N. | N.E. | 45 | |
| 5. 21 | 5. 22 | N.E. | N.N.E. | | 22½ |
| 6. 11 | 6. 11¾ | N.N.E. | N.E. | 22½ | |
| 6. 21¾ | 6. 22¾ | N.E. | N.N.E. | | 22½ |
| 7. 11½ | 7. 13 | N.N.E. | N.E. | 22½ | |
| 8. 2¼ | 8. 3¼ | N.E. | N.N.E. | | 22½ |
| 8. 5¼ | 8. 5½ | N.N.E. | N. | | 22½ |
| 8. 7¼ | 8. 11¾ | N. | E.N.E. | 67½ | |
| 8. 15 | 8. 15¾ | E.N.E. | S.E. | 67½ | |
| 9. 1¼ | 9. 1¾ | S.E. | E. | | 45 |
| 9. 4¾ | 9. 5½ | E. | N.N.E. | | 67½ |
| 9. 6¼ | 9. 6½ | N.N.E. | E.N.E. | 45 | |
| 9. 9¾ | 9. 10 | E.N.E. | N.E. | | 22½ |
| 9. 16 | 9. 16¼ | N.E. | S.S.W. | 157½ | |
| 9. 21½ | 10. 0¾ | S.S.W. | N.N.E. | 180 | |
| 10. 19½ | 10. 20¾ | N.N.E. | E.S.E. | 90 | |
| 11. 7½ | 11. 8½ | E.S.E. | S.E. | 22½ | |
| 11. 11½ | 11. 12 | S.E. | E.S.E. | | 22½ |
| 11. 21 | 11. 23½ | E.S.E. | N.E. | | 67½ |
| 12. 3¼ | 12. 3¾ | N.E. | N.N.E. | | 22½ |
| 12. 8½ | 12. 10¾ | N.N.E. | E.N.E. | 45 | |
| 12. 13¾ | 12. 14 | E.N.E. | E. | 22½ | |
| 12. 17¼ | 12. 19½ | E. | S.E. | 45 | |
| 12. 20½ | 12. 22¼ | S.E. | N.E. | | 90 |
| 13. 1¾ | 13. 3 | N.E. | E.N.E. | 22½ | |
| 13. 10 | 13. 10¼ | E.N.E. | E. | 22½ | |
| 13. 16 | 13. 16½ | E. | E.S.E. | 22½ | |
| 13. 18 | 13. 18½ | E.S.E. | E. | | 22½ |
| 13. 19½ | 13. 21 | E. | N.E. | | 45 |
| 14. 2 | 14. 2½ | N.E. | N.N.E. | | 22½ |
| 14. 3¾ | 14. 5¼ | N.N.E. | E.N.E. | 45 | |
| 14. 15¾ | 14. 19 | E.N.E. | N.E. | | 22½ |
| 14. 22¾ | 15. 0¼ | N.E. | N.N.E. | | 22½ |
| 15. 3½ | 15. 7 | N.N.E. | E.N.E. | 45 | |
| 15. 18¼ | 15. 19 | E.N.E. | N.E. | | 22½ |
| 16. 0½ | 16. 1¼ | N.E. | E.N.E. | 22½ | |
| 16. 8¾ | 16. 9¾ | E.N.E. | E. | 22½ | |
| 16. 12¾ | 16. 13¼ | E. | E.N.E. | | 22½ |
| 17. 1¾ | 17. 3½ | E.N.E. | N.E. | | 22½ |
| 17. 9 | 17. 9½ | N.E. | E.N.E. | 22½ | |
| 17. 16 | 17. 16½ | E.N.E. | N.E. | | 22½ |

## ABSTRACT of the CHANGES of the DIRECTION of the WIND—*continued.*

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| Apr.—*cont.* | | | | ° | ° |
| d h | d h | | | | |
| 18. 0 | 18. 1½ | N.E. | N. | | 45 |
| 18. 2¾ | 18. 3¼ | N. | W. | | 90 |
| 18. 4 | 18. 6 | W. | N.E. | 135 | |
| 18. 13½ | 18. 15½ | N.E. | N.N.E. | | 22½ |
| 18. 23 | 19. 1½ | N.N.E. | N. | | 22½ |
| 19. 4¼ | 19. 4½ | N. | N.N.E. | 22½ | |
| 20. 7½ | 20. 8¾ | N.N.E. | N.E. | 22½ | |
| 20. 17¾ | 20. 18¾ | N.E. | N.N.E. | | 22½ |
| 20. 21¼ | 21. 0 | N.N.E. | W. | | 112½ |
| 21. 9 | 21. 11¼ | W. | N.N.W. | 67½ | |
| 21. 12¾ | 21. 13 | N.N.W. | N. | 22½ | |
| 21. 17¾ | 21. 18½ | N. | E.S.E. | 112½ | |
| 21. 22 | 21. 23¼ | E.S.E. | S.S.E. | 45 | |
| 22. 0 | 22. 0½ | S.S.E. | N.E. | | 112½ |
| 22. 3 | 22. 4 | N.E. | W. | 225 | |
| 22. 14½ | 22. 16 | W. | S.W. | | 45 |
| 22. 17¼ | 22. 17½ | S.W. | W.N.W. | 67½ | |
| 22. 18 | 22. 19 | W.N.W. | S.W. | | 67½ |
| 22. 20¾ | 23. 2 | S.W. | N.N.W. | 112½ | |
| 23. 3½ | 23. 5¼ | N.N.W. | N.N.E. | 45 | |
| 23. 7¼ | 23. 7½ | N.N.E. | N.E. | 22½ | |
| 23. 9¾ | 23. 10¼ | N.E. | E.S.E. | 67½ | |
| 23. 14¼ | 23. 14¾ | E.S.E. | E. | | 22½ |
| 23. 17¼ | 23. 18 | E. | N.E. | | 45 |
| 23. 23¾ | 24. 0¼ | N.E. | N.N.E. | | 22½ |
| 24. 2¾ | 24. 4¼ | N.N.E. | N. | | 22½ |
| 24. 14 | 24. 14½ | N. | W.N.W. | | 67½ |
| 24. 16¼ | 24. 16½ | W.N.W. | W. | | 22½ |
| 24. 18¼ | 24. 21¾ | W. | S.S.W. | | 67½ |
| 25. 1 | 25. 2 | S.S.W. | S. | | 22½ |
| 25. 6¾ | 25. 7 | S. | E.S.E. | | 67½ |
| 25. 7¾ | 25. 8½ | E.S.E. | S.E. | 22½ | |
| 25. 19½ | 25. 20 | S.E. | N.W. | | 180 |
| 25. 22 | 25. 22½ | N.W. | W.N.W. | | 22½ |
| 26. 0½ | 26. 2 | W.N.W. | W. | | 22½ |
| 26. 5½ | 26. 6½ | W. | W.N.W. | 22½ | |
| 26. 11¾ | 26. 12 | W.N.W. | W. | | 22½ |
| 26. 18¾ | 26. 19½ | W. | W.S.W. | | 22½ |
| 26. 22¾ | 26. 23¼ | W.S.W. | W. | 22½ | |
| 27. 3 | 27. 3½ | W. | W.S.W. | | 22½ |
| 27. 5½ | 27. 6½ | W.S.W. | S.W. | | 22½ |
| 27. 16¼ | 27. 17 | S.W. | S.E. | | 90 |
| 27. 19½ | 27. 19¾ | S.E. | S.S.E. | 22½ | |
| 27. 22½ | 27. 23¾ | S.S.E. | S.E. | | 22½ |
| 28. 11¾ | 28. 12¼ | S.E. | E.N.E. | | 67½ |
| 28. 23¾ | 29. 0 | E.N.E. | W.S.W. | | 180 |
| 29. 2¾ | 29. 3½ | W.S.W. | S.W. | | 22½ |
| 29. 7¼ | 29. 9½ | S.W. | N.W. | 90 | |
| 29. 12¼ | 29. 12½ | N.W. | N.N.W. | 22½ | |
| 29. 15 | 29. 16½ | N.N.W. | E. | 112½ | |
| 29. 18¾ | 29. 19½ | E. | E.S.E. | 22½ | |
| 30. 2 | 30. 2¼ | E.S.E. | S.E. | 22½ | |
| 30. 4¾ | 30. 6½ | S.E. | S.S.E. | 22½ | |
| 30. 13½ | 30. 14 | S.S.E. | S. | 22½ | |
| 30. 20 | 30. 20½ | S. | S.S.W. | 22½ | |
| | | | Sums | 2835 | 2542½ |

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| May. | | | | ° | ° |
| d h | d h | | | | |
| 1. 2¼ | 1. 2½ | S.S.W. | S.W. | 22½ | |
| 1. 10 | 1. 12 | S.W. | N.N.W. | 112½ | |
| 1. 17¼ | 1. 20 | N.N.W. | S.E. | 157½ | |
| 1. 22¼ | 1. 22½ | S.E. | S.S.E. | 22½ | |
| 1. 23¾ | 2. 0 | S.S.E. | W. | 112½ | |
| 2. 3¾ | 2. 4 | W. | S.S.E. | | 112½ |
| 2. 7¼ | 2. 7½ | S.S.E. | N.N.E. | | 135 |
| 2. 9¼ | 2. 9½ | N.N.E. | S.S.E. | 135 | |
| 2. 10¾ | 2. 12 | S.S.E. | S.E. | | 382½ |
| 2. 13¾ | 2. 14 | S.E. | W.N.W. | 157½ | |
| 2. 15 | 2. 16½ | W.N.W. | N.E. | | 247½ |
| 2. 17 | 2. 17½ | N.E. | S.S.E. | 112½ | |
| 2. 18¼ | 2. 18¾ | S.S.E. | N.E. | | 112½ |
| 2. 19½ | 2. 20½ | N.E. | E.N.E. | 22½ | |
| 4. 7¾ | 4. 10 | E.N.E. | S.E. | 67½ | |
| 4. 11¾ | 4. 12½ | S.E. | S.W. | 90 | |
| 5. 3 | 5. 3½ | S.W. | S.S.W. | | 22½ |
| 6. 11¼ | 6. 11¾ | S.S.W. | S.W. | 22½ | |
| 6. 16 | 6. 16½ | S.W. | W.S.W. | 22½ | |
| 7. 16¼ | 7. 16¾ | W.S.W. | S.W. | | 22½ |
| 8. 11¾ | 8. 12 | S.W. | W.S.W. | 22½ | |
| 9. 5¾ | 9. 6 | W.S.W. | W. | 22½ | |
| 9. 10¼ | 9. 10¾ | W. | W.N.W. | 22½ | |
| 9. 12 | 9. 12¾ | W.N.W. | W.S.W. | | 45 |
| 9. 14¼ | 9. 14½ | W.S.W. | S.W. | | 22½ |
| 10. 12 | 10. 12½ | S.W. | W.S.W. | 22½ | |
| 10. 18¼ | 10. 18½ | W.S.W. | W.N.W. | 45 | |
| 10. 19 | 10. 19½ | W.N.W. | W.S.W. | | 45 |
| 11. 7½ | 11. 7¾ | W.S.W. | S.E. | | 112½ |
| 11. 9¾ | 11. 10¼ | S.E. | S. | 45 | |
| 11. 12 | 11. 12¼ | S. | S.S.E. | | 22½ |
| 11. 13¼ | 11. 13½ | S.S.E. | E.S.E. | | 45 |
| 11. 20¾ | 11. 21 | E.S.E. | E. | | 22½ |
| 11. 22¼ | 11. 22½ | E. | E.N.E. | | 22½ |
| 12. 0 | 12. 0¼ | E.N.E. | N.E. | | 22½ |
| 12. 1½ | 12. 1¾ | N.E. | N.N.W. | | 67½ |
| 12. 3½ | 12. 3¾ | N.N.W. | N. | 22½ | |
| 12. 5¼ | 12. 6¼ | N. | W. | | 90 |
| 12. 10¾ | 12. 11 | W. | N.N.W. | 67½ | |
| 12. 11¼ | 12. 11½ | N.N.W. | W. | | 67½ |
| 12. 13½ | 12. 13¾ | W. | W.S.W. | | 22½ |
| 12. 16¼ | 12. 17½ | W.S.W. | S.W. | | 22½ |
| 12. 19½ | 12. 21½ | S.W. | W. | 45 | |
| 13. 8¾ | 13. 9¾ | W. | W.S.W. | | 22½ |
| 13. 13 | 13. 13½ | W.S.W. | S.W. | | 22½ |
| 13. 14½ | 13. 15¼ | S.W. | W. | 45 | |
| 13. 15¾ | 13. 17 | W. | W.S.W. | | 22½ |
| 13. 19½ | 13. 20¼ | W.S.W. | S.W. | | 22½ |
| 14. 4 | 14. 5 | S.W. | S. | | 45 |
| 14. 9 | 14. 9½ | S. | S.S.W. | 22½ | |
| 14. 10¾ | 14. 11¼ | S.S.W. | S. | | 22½ |
| 14. 16½ | 14. 19¾ | S. | S.W. | 45 | |
| 15. 1¾ | 15. 2¼ | S.W. | S.S.W. | | 22½ |
| 15. 3¾ | 15. 4¾ | S.S.W. | S.W. | 22½ | |
| 15. 17¾ | 15. 18½ | S.W. | W.S.W. | 22½ | |
| 15. 22¾ | 15. 23 | W.S.W. | W. | 22½ | |
| 16. 3 | 16. 4 | W. | W.S.W. | | 22½ |
| 16. 6 | 16. 6½ | W.S.W. | W. | 22½ | |
| 16. 9½ | 16. 10 | W. | W.S.W. | | 22½ |

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| May—*cont.* | | | | | |
| d h | d h | | | | |
| 16. 16½ | 16. 18¾ | W.S.W. | W.N.W. | 45 | |
| 16. 19 | 16. 20 | W.N.W. | W.S.W. | | 45 |
| 17. 15¼ | 17. 15½ | W.S.W. | W. | 22½ | |
| 17. 19¾ | 17. 20¾ | W. | S.W. | | 45 |
| 17. 22¾ | 17. 23 | S.W. | W.S.W. | 22½ | |
| 18. 1¾ | 18. 2 | W.S.W. | W. | 22½ | |
| 18. 7¼ | 18. 7½ | W. | W.S.W. | | 22½ |
| 18. 11¾ | 18. 12 | W.S.W. | W. | 22½ | |
| 18. 16 | 18. 16¾ | W. | N.W. | 45 | |
| 18. 17½ | 18. 18 | N.W. | W.N.W. | | 22½ |
| 18. 22½ | 18. 23 | W.N.W. | W. | | 22½ |
| 19. 0¾ | 19. 1 | W. | W.S.W. | | 22½ |
| 19. 16½ | 19. 18¼ | W.S.W. | N.W. | 67½ | |
| 19. 19¾ | 19. 20 | N.W. | N.N.W. | 22½ | |
| 19. 23 | 20. 0 | N.N.W. | N.N.E. | 45 | |
| 20. 4¼ | 20. 4½ | N.N.E. | N.E. | 22½ | |
| 20. 8¼ | 20. 8½ | N.E. | E.N.E. | 22½ | |
| 20. 11 | 20. 12¾ | E.N.E. | E.S.E. | 45 | |
| 20. 22½ | 20. 23 | E.S.E. | E.N.E. | | 45 |
| 21. 6¾ | 21. 7¾ | E.N.E. | W. | 202½ | |
| 21. 14¼ | 21. 14¾ | W. | W.N.W. | 22½ | |
| 21. 18 | 21. 18½ | W.N.W. | W. | | 22½ |
| 21. 22¾ | 21. 23 | W. | W.S.W. | | 22½ |
| 22. 0¾ | 22. 1¼ | W.S.W. | S.W. | | 22½ |
| 22. 11¼ | 22. 11½ | S.W. | W.S.W. | 22½ | |
| 22. 14¾ | 22. 15 | W.S.W. | W. | 22½ | |
| 22. 18½ | 22. 19 | W. | N.W. | 45 | |
| 23. 3¼ | 23. 4 | N.W. | N.N.W. | 22½ | |
| 23. 6¼ | 23. 6½ | N.N.W. | N. | 22½ | |
| 23. 10 | 23. 10½ | N. | N.N.E. | 22½ | |
| 23. 15¼ | 23. 16½ | N.N.E. | S.E. | 112½ | |
| 23. 22¾ | 23. 23 | S.E. | S. | 45 | |
| 24. 3¼ | 24. 3½ | S. | S.E. | | 45 |
| 24. 7¾ | 24. 9¼ | S.E. | S.W. | | 270 |
| 24. 15¾ | 24. 16½ | S.W. | W. | 45 | |
| 24. 17¼ | 24. 17½ | W. | W.S.W. | | 22½ |
| 24. 20½ | 24. 21 | W.S.W. | S.W. | | 22½ |
| 25. 5 | 25. 6 | S.W. | W.N.W. | 67½ | |
| 25. 6¾ | 25. 7½ | W.N.W. | W. | | 22½ |
| 25. 11¼ | 25. 11½ | W. | W.S.W. | | 22½ |
| 26. 0 | 26. 2¼ | W.S.W. | W. | 22½ | |
| 26. 16 | 26. 16¾ | W. | N.N.W. | 67½ | |
| 26. 19¾ | 26. 20½ | N.N.W. | N.W. | | 22½ |
| 26. 21¾ | 26. 22¼ | N.W. | N.N.W. | 22½ | |
| 27. 3½ | 27. 4¼ | N.N.W. | N. | 22½ | |
| 27. 6½ | 27. 7½ | N. | N.E. | 45 | |
| 27. 17 | 27. 18 | N.E. | E.S.E. | 67½ | |
| 28. 1¼ | 28. 1½ | E.S.E. | E.N.E. | | 45 |
| 28. 8¾ | 28. 9½ | E.N.E. | N.E. | | 22½ |
| 28. 15 | 28. 16¼ | N.E. | E.N.E. | 22½ | |
| 28. 23 | 28. 23½ | E.N.E. | N.E. | | 22½ |
| 29. 11¼ | 29. 12 | N.E. | E.N.E. | 22½ | |
| 29. 21½ | 29. 22 | E.N.E. | N.E. | | 22½ |
| 30. 8¼ | 30. 9½ | N.E. | E.N.E. | 22½ | |
| 30. 12¾ | 30. 13½ | E.N.E. | E. | 22½ | |
| 30. 15½ | 30. 15¾ | E. | S.E. | 45 | |
| 30. 17 | 30. 17¾ | S.E. | S.S.E. | 22½ | |
| 30. 21 | 30. 22 | S.S.E. | E.S.E. | | 45 |
| 31. 14¼ | 31. 14½ | E.S.E. | S.E. | 22½ | |

## ABSTRACT of the CHANGES of the DIRECTION of the WIND—*continued.*

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| | | | | ° | ° |
| **May**—*cont.* | | | | | |
| d h | d h | | | | |
| 31. 17 | 31. 17½ | S.E. | S.S.E. | 22½ | |
| 31. 21 | 31. 22 | S.S.E. | S.E. | | 22½ |
| | | | Sums | 3082½ | 2790 |
| **June.** | | | | | |
| 1. 3¼ | 1. 3½ | S.E. | N.E. | | 90 |
| 1. 4¾ | 1. 5½ | N.E. | S.E. | 90 | |
| 1. 6½ | 1. 6¾ | S.E. | N.E. | | 90 |
| 1. 8¼ | 1. 8½ | N.E. | S.E. | 90 | |
| 1. 10¼ | 1. 10½ | S.E. | S.W. | | 270 |
| 1. 16½ | 1. 17 | S.W. | S. | | 45 |
| 1. 20½ | 1. 21 | S. | E. | | 90 |
| 1. 21¾ | 1. 22 | E. | S.W. | 135 | |
| 2. 1 | 2. 2¼ | S.W. | N.N.E. | | 202½ |
| 2. 3 | 2. 3½ | N.N.E. | S. | | 157½ |
| 2. 5¾ | 2. 6¾ | S. | S.S.W. | 22½ | |
| 2. 9¾ | 2. 10¼ | S.S.W. | S.W. | 22½ | |
| 2. 16½ | 2. 17½ | S.W. | S.S.W. | | 22½ |
| 2. 21½ | 2. 21¾ | S.S.W. | S.S.E. | | 45 |
| 3. 1¼ | 3. 1¾ | S.S.E. | E. | | 67½ |
| 3. 5¾ | 3. 8 | E. | N.E. | | 45 |
| 3. 8 | 3. 9½ | N.E. | E.S.E. | 67½ | |
| 3. 13 | 3. 13¾ | E.S.E. | S.E. | 22½ | |
| 3. 15¼ | 3. 16½ | S.E. | E. | | 45 |
| 3. 16¾ | 3. 17½ | E. | S.E. | 45 | |
| 3. 18¼ | 3. 18½ | S.E. | E.S.E. | | 22½ |
| 4. 2¼ | 4. 3 | E.S.E. | N.E. | 292½ | |
| 4. 4 | 4. 4½ | N.E. | E.N.E. | 22½ | |
| 4. 6 | 4. 6½ | E.N.E. | N.E. | | 22½ |
| 4. 7½ | 4. 7¾ | N.E. | E. | 45 | |
| 4. 8¼ | 4. 11½ | E. | N.N.E. | | 67½ |
| 4. 15½ | 4. 17½ | N.N.E. | S.S.E. | 135 | |
| 4. 18 | 4. 19¾ | S.S.E. | W.N.W. | | 225 |
| 4. 20 | 4. 20¼ | W.N.W. | N. | 67½ | |
| 5. 5 | 5. 5½ | N. | N.N.E. | 22½ | |
| 5. 12¼ | 5. 13 | N.N.E. | N. | | 22½ |
| 5. 16 | 5. 16½ | N. | N.N.W. | | 22½ |
| 5. 21½ | 5. 22¼ | N.N.W. | N.W. | | 22½ |
| 6. 0¾ | 6. 1 | N.W. | W.N.W. | | 22½ |
| 6. 2 | 6. 4¼ | W.N.W. | N. | 67½ | |
| 6. 12 | 6. 12½ | N. | N.N.E. | 22½ | |
| 7. 10½ | 7. 11 | N.N.E. | N. | | 22½ |
| 7. 13 | 7. 14¼ | N. | W.S.W. | | 112½ |
| 7. 17¼ | 7. 17½ | W.S.W. | S.W. | | 22½ |
| 7. 19½ | 7. 20 | S.W. | W.S.W. | 22½ | |
| 8. 7 | 8. 7¼ | W.S.W. | W. | 22½ | |
| 8. 16½ | 8. 17½ | W. | N. | 90 | |
| 9. 0 | 9. 2 | N. | W. | | 90 |
| 9. 6½ | 9. 7½ | W. | W.S.W. | | 22½ |
| 9. 10½ | 9. 11¼ | W.S.W. | W. | 22½ | |
| 9. 17¾ | 9. 18 | W. | N.W. | 45 | |
| 9. 19 | 9. 19¾ | N.W. | W.S.W. | | 67½ |
| 9. 21 | 9. 22 | W.S.W. | W. | 22½ | |
| | | **June**—*cont.* | | | |
| 10. 1½ | 10. 1¾ | W. | W.S.W. | | 22½ |
| 10. 6½ | 10. 7½ | W.S.W. | N.W. | 67½ | |
| 10. 10¾ | 10. 12 | N.W. | N. | 45 | |
| 10. 12½ | 10. 12¾ | N. | W. | | 90 |
| 10. 14¼ | 10. 14½ | W. | N.N.W. | 67½ | |
| 10. 15¼ | 10. 16 | N.N.W. | S.W. | | 112½ |
| 10. 19¾ | 10. 21¼ | S.W. | W.S.W. | 22½ | |
| 11. 8 | 11. 9 | W.S.W. | S.W. | | 22½ |
| 11. 16½ | 11. 17¾ | S.W. | W.S.W. | 22½ | |
| 11. 21 | 11. 23 | W.S.W. | S.W. | | 22½ |
| 12. 8¾ | 12. 9 | S.W. | W.S.W. | 22½ | |
| 12. 16¼ | 12. 16¾ | W.S.W. | N.W. | 67½ | |
| 12. 18¼ | 12. 18½ | N.W. | N.N.W. | 22½ | |
| 12. 20¾ | 12. 21 | N.N.W. | W.S.W. | | 90 |
| 13. 6 | 13. 6¼ | W.S.W. | W. | 22½ | |
| 13. 8¾ | 13. 9 | W. | W.S.W. | | 22½ |
| 13. 16½ | 13. 17½ | W.S.W. | S.W. | | 22½ |
| 14. 1¼ | 14. 2 | S.W. | W.S.W. | 22½ | |
| 14. 6 | 14. 6¼ | W.S.W. | W. | 22½ | |
| 14. 14¼ | 14. 14¾ | W. | N.W. | 45 | |
| 14. 15¾ | 14. 16 | N.W. | N. | 45 | |
| 14. 19½ | 14. 19¾ | N. | N.E. | 45 | |
| 14. 22½ | 15. 0¼ | N.E. | S.E. | 90 | |
| 15. 7 | 15. 7¼ | S.E | S.S.E. | 22½ | |
| 15. 8¾ | 15. 9¾ | S.S.E. | S.W. | 67½ | |
| 16. 7¼ | 16. 7¾ | S.W. | S.S.W. | | 22½ |
| 16. 8½ | 16. 9½ | S.S.W. | W.S.W. | 45 | |
| 16. 12 | 16. 13¼ | W.S.W. | S.W. | | 22½ |
| 17. 2½ | 17. 2¾ | S.W. | E.N.E. | | 157½ |
| 17. 7 | 17. 7¼ | E.N.E. | N.E. | | 22½ |
| 17. 11 | 17. 12¼ | N.E. | W. | 225 | |
| 17. 13½ | 17. 13¾ | W. | E.N.E. | 157½ | |
| 17. 15½ | 17. 15¾ | E.N.E. | S.S.E. | 90 | |
| 17. 17¾ | 17. 18 | S.S.E. | S.W. | 67½ | |
| 17. 19½ | 17. 19¾ | S.W. | W.S.W. | 22½ | |
| 18. 15 | 18. 15¼ | W.S.W. | S.W. | | 22½ |
| 18. 22½ | 18. 23½ | S.W. | W.S.W. | 22½ | |
| 19. 7 | 19. 7¼ | W.S.W. | N.N.E. | 135 | |
| 19. 13¼ | 19. 15½ | N.N.E. | W. | | 112½ |
| 19. 16½ | 19. 16¾ | W. | N.W. | 45 | |
| 19. 18½ | 19. 19¾ | N.W. | N. | 45 | |
| 19. 23 | 19. 23¾ | N. | N.N.E. | 22½ | |
| 20. 7 | 20. 7½ | N.N.E. | N.E. | 22½ | |
| 20. 17¼ | 20. 17½ | N.E. | N.N.E. | | 22½ |
| 20. 19½ | 20. 20 | N.N.E. | N.E. | 22½ | |
| 21. 17¼ | 21. 17½ | N.E. | S.E. | 90 | |
| 21. 20½ | 21. 20¾ | S.E. | E.N.E. | 67½ | |
| 22. 4¼ | 22. 6 | E.N.E. | N.E. | | 22½ |
| 22. 11¼ | 22. 11½ | N.E. | N.N.E. | | 22½ |
| 22. 14 | 22. 14½ | N.N.E. | N.E. | 22½ | |
| 22. 17½ | 22. 17¾ | N.E. | S.E. | 90 | |
| 22. 20¾ | 22. 22¼ | S.E. | N.E. | 270 | |
| 22. 23¾ | 23. 0¾ | N.E. | N.N.W. | 292½ | |
| 23. 2½ | 23. 2¾ | N.N.W. | S.E. | 157½ | |
| 23. 5 | 23. 6½ | S.E. | S.W. | 90 | |
| 23. 8¾ | 23. 9 | S.W. | N. | 135 | |
| 23. 11¼ | 23. 12¾ | N. | N.N.E. | | 337½ |
| 23. 18 | 23. 18¾ | N.N.E. | N.E. | 22½ | |
| 23. 20½ | 23. 21½ | N.E. | E. | 45 | |
| | | **June**—*cont.* | | | |
| 24. 0 | 24. 0¼ | E. | N.E. | | 45 |
| 24. 4½ | 24. 5 | N.E. | N.N.E. | | 22½ |
| 24. 8¼ | 24. 8½ | N.N.E. | N.E. | 22½ | |
| 24. 17½ | 24. 17¾ | N.E. | N.N.E. | | 22½ |
| 24. 19½ | 24. 20 | N.N.E. | N.E. | 22½ | |
| 25. 14 | 25. 15½ | N.E. | S.E. | 90 | |
| 25. 19 | 25. 21 | S.E. | E.S.E. | | 22½ |
| 25. 22¾ | 26. 0 | E.S.E. | E. | | 22½ |
| 26. 1¼ | 26. 1½ | E. | E.N.E. | | 22½ |
| 26. 6¼ | 26. 6½ | E.N.E. | E. | 22½ | |
| 26. 7¾ | 26. 8 | E. | E.N.E. | | 22½ |
| 26. 9¼ | 26. 9½ | E.N.E. | E. | 22½ | |
| 26. 10½ | 26. 10¾ | E. | E.N.E. | | 22½ |
| 26. 13¼ | 26. 13½ | E.N.E. | E. | 22½ | |
| 26. 16 | 26. 17½ | E. | E.S.E. | 22½ | |
| 26. 23 | 26. 23¾ | E.S.E. | N.E. | | 67½ |
| 27. 6½ | 27. 7½ | N.E. | E.N.E. | 22½ | |
| 27. 12 | 27. 13½ | E.N.E. | S.E. | 67½ | |
| 27. 14¼ | 27. 15½ | S.E. | E. | | 45 |
| 28. 9 | 28. 9¼ | E. | S.E. | 45 | |
| 28. 18½ | 28. 19½ | S.E. | S.S.E. | 22½ | |
| 28. 22¾ | 29. 3¼ | S.S.E. | E. | | 67½ |
| 29. 10 | 29. 10½ | E. | S.E. | 45 | |
| 29. 23 | 29. 23½ | S.E. | E.S.E. | | 22½ |
| 30. 1½ | 30. 1¾ | E.S.E. | E. | | 22½ |
| 30. 12½ | 30. 13½ | E. | S.E. | 45 | |
| 30. 22½ | 30. 23¾ | S.E. | E. | | 45 |
| | | | Sums | 4882½ | 3487½ |
| **July.** | | | | | |
| 1. 1½ | 1. 1¾ | E. | E.N.E. | | 22½ |
| 1. 6½ | 1. 6¾ | E.N.E. | E. | 22½ | |
| 1. 8¼ | 1. 8¾ | E. | E.S.E. | 22½ | |
| 1. 18 | 1. 19¼ | E.S.E. | S.E. | 22½ | |
| 1. 22 | 1. 22½ | S.E. | E.S.E. | | 22½ |
| 2. 0 | 2. 2½ | E.S.E. | E.N.E. | | 45 |
| 2. 8¾ | 2. 9 | E.N.E. | E. | 22½ | |
| 2. 11¼ | 2. 13½ | E. | S.E. | 45 | |
| 3. 1½ | 3. 2½ | S.E. | E. | | 45 |
| 3. 8¾ | 3. 9 | E. | E.N.E. | | 22½ |
| 3. 14½ | 3. 14½ | E.N.E. | S.E. | | 292½ |
| 4. 2¾ | 4. 3 | S.E. | E.N.E. | | 67½ |
| 4. 4¾ | 4. 5 | E.N.E. | E.S.E. | 45 | |
| 4. 14½ | 4. 14¾ | E.S.E. | S.E. | 22½ | |
| 4. 17½ | 4. 17¾ | S.E. | S.S.E. | 22½ | |
| 4. 18¼ | 4. 18½ | S.S.E. | E.S.E. | | 45 |
| 5. 2 | 5. 2½ | E.S.E. | E. | | 22½ |
| 5. 6¼ | 5. 7¼ | E. | E.N.E. | | 22½ |
| 5. 9¼ | 5. 11 | E.N.E. | E. | 22½ | |
| 5. 12¾ | 5. 13 | E. | S.E. | 45 | |
| 5. 21¼ | 5. 21½ | S.E. | S.S.E. | 22½ | |
| 6. 7¾ | 6. 8 | S.S.E. | S.W. | 67½ | |
| 6. 10½ | 6. 11½ | S.W. | W. | 45 | |

## ABSTRACT of the CHANGES of the DIRECTION of the WIND—*continued.*

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| July—*cont.* | | | | ° | ° |
| d h | d h | | | | |
| 6. 13¾ | 6. 14½ | W. | W.S.W. | | 22½ |
| 6. 19 | 6. 20 | W.S.W. | S.W. | | 22½ |
| 6. 22 | 6. 22¼ | S.W. | W. | 45 | |
| 6. 23¼ | 6. 23½ | W. | N.N.E. | 112½ | |
| 7. 9 | 7. 9¼ | N.N.E. | W. | | 112½ |
| 7. 15 | 7. 15¾ | W. | W.N.W. | 22½ | |
| 7. 18½ | 7. 19¼ | W.N.W. | W. | | 22½ |
| 7. 20 | 7. 21 | W. | W.N.W. | 22½ | |
| 7. 23 | 7. 23½ | W.N.W. | W. | | 22½ |
| 8. 5¾ | 8. 6 | W. | W.S.W. | | 22½ |
| 8. 22½ | 9. 1¾ | W.S.W. | W. | 22½ | |
| 9. 19½ | 9. 23¼ | W. | S. | | 90 |
| 9. 23½ | 10. 0¾ | S. | S.W. | 45 | |
| 10. 2¾ | 10. 4 | S.W. | W.S.W. | 22½ | |
| 11. 13¼ | 11. 14¾ | W.S.W. | S.W. | | 22½ |
| 11. 18½ | 11. 19½ | S.W. | W.S.W. | 22½ | |
| 12. 2 | 12. 3¼ | W.S.W. | W.N.W. | 45 | |
| 12. 4½ | 12. 4⅜ | W.N.W. | N.N.E. | 90 | |
| 12. 8 | 12. 11¾ | N.N.E. | S. | | 517½ |
| 12. 12 | 12. 12½ | S. | S.W. | | 315 |
| 12. 15¼ | 12. 15½ | S.W. | S.E. | | 90 |
| 12. 16 | 12. 16¼ | S.E. | S.W. | 90 | |
| 12. 17 | 12. 17¼ | S.W. | E.N.E. | | 157½ |
| 12. 17¼ | 12. 17¾ | E.N.E. | E.S.E. | 45 | |
| 12. 19½ | 12. 21½ | E.S.E. | W.S.W. | 135 | |
| 12. 23¼ | 12. 23½ | W.S.W. | S.W. | | 22½ |
| 13. 0 | 13. 0½ | S.W. | W.S.W. | 22½ | |
| 13. 4 | 13. 4¾ | W.S.W. | N.W. | 67½ | |
| 13. 5½ | 13. 7¾ | N.W. | N.N.E. | 67½ | |
| 13. 9½ | 13. 12¾ | N.N.E. | W. | | 112½ |
| 13. 14½ | 13. 14¾ | W. | W.N.W. | 22½ | |
| 13. 16 | 13. 18½ | W.N.W. | S.W. | | 67½ |
| 13. 19½ | 13. 23 | S.W. | W. | 45 | |
| 14. 3 | 14. 4½ | W. | W.S.W. | | 22½ |
| 14. 6¼ | 14. 8 | W.S.W. | W. | 22½ | |
| 14. 10 | 14. 11¼ | W. | S.W. | | 45 |
| 14. 11¾ | 14. 12 | S.W. | W. | 45 | |
| 14. 17¾ | 14. 18½ | W. | W.S.W. | | 22½ |
| 14. 23½ | 15. 1½ | W.S.W. | W. | 22½ | |
| 15. 13½ | 15. 14¼ | W. | S.W. | | 45 |
| 15. 15 | 15. 15½ | S.W. | W. | 45 | |
| 15. 16½ | 15. 16¾ | W. | W.S.W. | | 22½ |
| 15. 23¼ | 16. 0¾ | W.S.W. | S.W. | | 22½ |
| 16. 2¼ | 16. 5½ | S.W. | W.S.W. | 22½ | |
| 17. 8¾ | 17. 12 | W.S.W. | W. | 22½ | |
| 17. 15½ | 17. 16 | W. | W.S.W. | | 22½ |
| 17. 18¾ | 17. 20 | W.S.W. | W. | 22½ | |
| 18. 2¼ | 18. 4¼ | W. | N. | 90 | |
| 18. 8½ | 18. 9¼ | N. | N.N.E. | 22½ | |
| 20. 2½ | 20. 3½ | N.N.E. | N.W. | | 67½ |
| 20. 4¾ | 20. 5 | N.W. | N. | 45 | |
| 20. 6¾ | 20. 8 | N. | N.N.E. | 22½ | |
| 20. 15 | 20. 16¼ | N.N.E. | N.E. | 22½ | |
| 20. 23¼ | 20. 23¾ | N.E. | N.N.E. | | 22½ |
| 21. 8¾ | 21. 9 | N.N.E. | S.W. | | 157½ |
| 21. 11¾ | 21. 12 | S.W. | S.E. | | 90 |
| 21. 14¼ | 21. 14½ | S.E. | S. | 45 | |
| 21. 18 | 21. 18¼ | S. | S.W. | 45 | |
| 22. 6½ | 22. 7½ | S.W. | W. | 45 | |
| July—*cont.* | | | | | |
| 22. 8¾ | 22. 9¼ | W. | W.S.W. | | 22½ |
| 22. 15 | 22. 15½ | W.S.W. | S.W. | | 22½ |
| 23. 1 | 23. 4 | S.W. | W. | 45 | |
| 23. 17½ | 23. 18¾ | W. | N.W. | 45 | |
| 23. 21 | 23. 22 | N.W. | S.S.W. | | 112½ |
| 23. 22¼ | 24. 1 | S.S.W. | W. | 67½ | |
| 24. 7½ | 24. 7¾ | W. | S.W. | | 45 |
| 24. 9½ | 24. 9¾ | S.W. | W.S.W. | 22½ | |
| 24. 18½ | 24. 19½ | W.S.W. | S.W. | | 22½ |
| 24. 23¼ | 25. 0¼ | S.W. | S.S.W. | | 22½ |
| 25. 9¼ | 25. 13½ | S.S.W. | W.S.W. | 45 | |
| 25. 17½ | 25. 19½ | W.S.W. | W. | 22½ | |
| 26. 12 | 26. 12½ | W. | W.S.W. | | 22½ |
| 27. 8¼ | 27. 10½ | W.S.W. | N.W. | 67½ | |
| 27. 11½ | 27. 11¾ | N.W. | W.N.W. | | 22½ |
| 27. 14 | 27. 14¼ | W.N.W. | W. | | 22½ |
| 27. 17½ | 27. 19¾ | W. | N.N.E. | 112½ | |
| 27. 21½ | 27. 21¾ | N.N.E. | N.E. | 22½ | |
| 28. 4¼ | 28. 4½ | N.E. | W.S.W. | | 157½ |
| 28. 5½ | 28. 5¾ | W.S.W. | N.E. | 157½ | |
| 28. 9 | 28. 9½ | N.E. | N.N.E. | | 22½ |
| 28. 14½ | 28. 15½ | N.N.E. | N.E. | 22½ | |
| 28. 17½ | 28. 18¼ | N.E. | E. | 45 | |
| 28. 20 | 28. 22 | E. | N.E. | | 45 |
| 29. 0 | 29. 0½ | N.E. | N.N.E. | | 22½ |
| 29. 4¼ | 29. 4¾ | N.N.E. | N.E. | 22½ | |
| 29. 19½ | 29. 21½ | N.E. | S. | 135 | |
| 30. 0¾ | 30. 1 | S. | W.N.W. | 112½ | |
| 30. 3 | 30. 4¾ | W.N.W. | S.W. | | 67½ |
| 30. 6 | 30. 8 | S.W. | W.N.W. | 67½ | |
| 30. 9½ | 30. 10 | W.N.W. | W. | | 22½ |
| 30. 12½ | 30. 13¼ | W. | N.W. | 45 | |
| 30. 14 | 30. 14¼ | N.W. | W. | | 45 |
| 31. 3 | 31. 6 | W. | N.N.E. | 112½ | |
| 31. 12½ | 31. 13 | N.N.E. | N.E. | 22½ | |
| 31. 15½ | 31. 15¾ | N.E. | N.N.E. | | 22½ |
| 31. 20¾ | 31. 22¼ | N.N.E. | N.E. | 22½ | |
| 31. 23½ | 31. 24 | N.E. | N.N.E. | | 22½ |
| | | | Sums | 3645 | 2992½ |
| August. | | | | | |
| 1. 20 | 1. 21 | N.N.E. | S.E. | 112½ | |
| 2. 0 | 2. 1 | S.E. | E.S.E. | | 22½ |
| 2. 7½ | 2. 8 | E.S.E. | E.N.E. | | 45 |
| 2. 12½ | 2. 13 | E.N.E. | N.E. | | 22½ |
| 2. 18 | 2. 18¼ | N.E. | S.E. | 90 | |
| 2. 20 | 2. 22 | S.E. | S. | 45 | |
| 3. 1 | 3. 2 | S. | E.S.E. | | 67½ |
| 3. 5¾ | 3. 9 | E.S.E. | N.N.E. | 270 | |
| 3. 13½ | 3. 14¼ | N.N.E. | S.W. | 202½ | |
| 3. 21¾ | 3. 22¼ | S.W. | W. | 45 | |
| 4. 2¼ | 4. 2½ | W. | N. | 90 | |
| 4. 3½ | 4. 3¾ | N. | N.N.W. | | 22½ |
| Aug.—*cont.* | | | | | |
| 4. 6¼ | 4. 7 | N.N.W. | W. | | 67½ |
| 4. 9 | 4. 10¼ | W. | N.W. | 45 | |
| 4. 13 | 4. 13½ | N.W. | W.N.W. | | 22½ |
| 4. 18 | 4. 21 | W.N.W. | N. | 67½ | |
| 5. 0¼ | 5. 3¼ | N. | W.N.W. | | 67½ |
| 5. 4½ | 5. 6¼ | W.N.W. | N. | 67½ | |
| 5. 9 | 5. 10¼ | N. | N.N.E. | 22½ | |
| 5. 13 | 5. 13½ | N.N.E. | N.E. | 22½ | |
| 5. 20 | 5. 21½ | N.E. | N.N.E. | | 22½ |
| 6. 2½ | 6. 3 | N.N.E. | N.E. | 22½ | |
| 7. 4 | 7. 5 | N.E. | N.N.E. | | 22½ |
| 7. 14¼ | 7. 14½ | N.N.E. | N.E. | 22½ | |
| 8. 0 | 8. 1 | N.E. | N.N.E. | | 22½ |
| 8. 3 | 8. 3½ | N.N.E. | W.S.W. | | 135 |
| 8. 7¼ | 8. 7½ | W.S.W. | N.N.E. | 135 | |
| 8. 8¾ | 8. 9½ | N.N.E. | W.N.W. | | 90 |
| 8. 13¼ | 8. 14½ | W.N.W. | N.N.E. | 90 | |
| 8. 18¾ | 8. 19 | N.N.E. | N.E. | 22½ | |
| 8. 22¼ | 8. 23¼ | N.E. | W.S.W. | 202½ | |
| 9. 0½ | 9. 0¾ | W.S.W. | W. | 22½ | |
| 9. 1¾ | 9. 2 | W. | N.W. | 45 | |
| 9. 3½ | 9. 3¾ | N.W. | N.N.E. | 67½ | |
| 9. 12 | 9. 12½ | N.N.E. | N. | | 22½ |
| 9. 13½ | 9. 13¾ | N. | W. | | 90 |
| 10. 0 | 10. 2 | W. | W.S.W. | | 22½ |
| 10. 10 | 10. 11 | W.S.W. | W. | 22½ | |
| 10. 18¼ | 10. 18½ | W. | N.N.E. | 112½ | |
| 10. 19¾ | 10. 21 | N.N.E. | N.W. | | 67½ |
| 11. 6¾ | 11. 7¾ | N.W. | N.N.W. | 22½ | |
| 11. 15 | 11. 15½ | N.N.W. | N. | 22½ | |
| 11. 20½ | 11. 21½ | N. | N.N.W. | | 22½ |
| 12. 2¼ | 12. 3¼ | N.N.W. | N. | 22½ | |
| 12. 6½ | 12. 7½ | N. | N.N.E. | 22½ | |
| 12. 11 | 12. 12 | N.N.E. | N. | | 22½ |
| 13. 2¾ | 13. 5 | N. | W. | | 90 |
| 13. 7¼ | 13. 7½ | W. | W.N.W. | 22½ | |
| 13. 8¾ | 13. 9¼ | W.N.W. | N.N.W. | 45 | |
| 13. 17¾ | 13. 19 | N.N.W. | N.W. | | 22½ |
| 13. 20 | 13. 22¼ | N.W. | N.E. | 90 | |
| 13. 23¾ | 14. 0 | N.E. | N. | | 45 |
| 14. 10¼ | 14. 12 | N. | N.E. | 45 | |
| 14. 17½ | 14. 18 | N.E. | N.N.E. | | 22½ |
| 14. 20½ | 14. 23 | N.N.E. | E.N.E. | 45 | |
| 15. 0½ | 15. 2 | E.N.E. | N.E. | | 22½ |
| 15. 10 | 15. 11½ | N.E. | E.S.E. | 67½ | |
| 15. 21½ | 15. 22½ | E.S.E. | E. | | 22½ |
| 16. 1 | 16. 4 | E. | E.N.E. | | 22½ |
| 16. 8 | 16. 8¼ | E.N.E. | E. | 22½ | |
| 16. 12½ | 16. 12¾ | E. | S.E. | 45 | |
| 16. 14¼ | 16. 14½ | S.E. | E.S.E. | | 22½ |
| 16. 23 | 16. 23¾ | E.S.E. | E.N.E. | | 45 |
| 17. 3½ | 17. 4 | E.N.E. | N. | | 67½ |
| 17. 5 | 17. 8¾ | N. | E. | 90 | |
| 17. 8¾ | 17. 10½ | E. | N.E. | | 45 |
| 17. 16¾ | 17. 17 | N.E. | E.N.E. | 22½ | |
| 17. 18¼ | 17. 18½ | E.N.E. | S.E. | 67½ | |
| 17. 22½ | 18. 2½ | S.E. | N.E. | | 90 |
| 18. 6¾ | 18. 7½ | N.E. | E.N.E. | 22½ | |
| 18. 18¾ | 18. 19 | E.N.E. | E.S.E. | 45 | |

ABSTRACT of the CHANGES of the DIRECTION of the WIND—*continued.*

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| | | | | ° | ° |
| Aug.—*cont.* | | | | | |
| d h | d h | | | | |
| 18. 20 | 18. 21 | E.S.E. | E. | | 22½ |
| 19. 0¼ | 19. 0½ | E. | E.N.E. | | 22½ |
| 19. 13¼ | 19. 13¾ | E.N.E. | E. | 22½ | |
| 19. 18 | 19. 19 | E. | S.E. | 45 | |
| 19. 20 | 19. 23 | S.E | E. | | 45 |
| 20. 8¼ | 20. 10 | E. | E.S.E. | 22½ | |
| 20. 17½ | 20. 19 | E.S.E. | E. | | 22½ |
| 20. 22 | 20. 22½ | E. | E.N.E. | | 22½ |
| 21. 2¼ | 21. 2½ | E.N.E. | E.S.E. | 45 | |
| 21. 4½ | 21. 7 | E.S.E. | W. | 157½ | |
| 21. 10¼ | 21. 11¾ | W. | W.S.W. | | 22½ |
| 21. 13 | 21. 14½ | W.S.W. | S.W. | | 22½ |
| 21. 19½ | 21. 20½ | S.W. | S. | | 45 |
| 21. 21¾ | 21. 22¾ | S. | S.S.W. | 22½ | |
| 22. 5¾ | 22. 6 | S.S.W. | S. | | 22½ |
| 22. 10 | 22. 11 | S. | E. | 270 | |
| 22. 12 | 22. 13 | E. | N. | 270 | |
| 22. 18 | 22. 19¼ | N. | N.W. | | 45 |
| 22. 21½ | 22. 22½ | N.W. | W. | | 45 |
| 23. 7¾ | 23. 10½ | W. | S.W. | | 45 |
| 23. 13½ | 23. 14¾ | S.W. | W. | 45 | |
| 23. 20 | 23. 20¼ | W. | W.S.W. | | 22½ |
| 23. 23 | 24. 2 | W.S.W. | S. | | 67½ |
| 24. 3 | 24. 4¾ | S. | W.S.W. | 67½ | |
| 24. 6½ | 24. 7 | W.S.W. | W. | 22½ | |
| 24. 16½ | 24. 17½ | W. | W.S.W. | | 22½ |
| 25. 5½ | 25. 6 | W.S.W. | W. | 22½ | |
| 25. 12½ | 25. 13½ | W. | W.S.W. | | 22½ |
| 25. 16¾ | 25. 18 | W.S.W. | W. | 22½ | |
| 25. 20 | 25. 22½ | W. | W.S.W. | | 22½ |
| 26. 11½ | 26. 12 | W.S.W. | W. | 22½ | |
| 26. 15 | 26. 17 | W. | W.S.W. | | 22½ |
| 26. 21½ | 27. 0 | W.S.W. | S.W. | | 22½ |
| 27. 3 | 27. 6 | S.W. | W. | 45 | |
| 27. 13½ | 27. 15 | W. | W.S.W. | | 22½ |
| 28. 0 | 28. 0½ | W.S.W. | S.W. | | 22½ |
| 28. 2¾ | 28. 4½ | S.W. | W.S.W. | 22½ | |
| 29. 6½ | 29. 8½ | W.S.W. | W. | 22½ | |
| 29. 17½ | 29. 19¾ | W. | W.S.W. | | 22½ |
| 29. 23¾ | 30. 1¼ | W.S.W. | W. | 22½ | |
| 30. 8 | 30. 9 | W. | W.N.W. | 22½ | |
| 30. 10½ | 30. 11 | W.N.W. | W. | | 22½ |
| 31. 4½ | 31. 5½ | W. | W.S.W. | | 22½ |
| 31. 7 | 31. 7½ | W.S.W. | W. | 22½ | |
| 31. 9½ | 31. 10 | W. | W.S.W. | | 22½ |
| 31. 13 | 31. 14 | W.S.W. | S.W. | | 22½ |
| 31. 22 | 31. 23 | S.W. | W. | 45 | |
| | | | Sums | 3825 | 2137½ |
| September. | | | | | |
| 1. 3 | 1. 5 | W. | W.S.W. | | 22½ |
| 1. 9½ | 1. 12 | W.S.W. | W.N.W. | 45 | |
| 1. 19¼ | 1. 19½ | W.N.W | N.W. | 22½ | |

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde |
|---|---|---|---|---|---|
| | | | | ° | ° |
| Sept.—*cont.* | | | | | |
| d h | d h | | | | |
| 1. 22¾ | 1. 23 | N.W. | W.N.W. | | 22½ |
| 2. 1¾ | 2. 2½ | W.N.W. | W. | | 22½ |
| 2. 6½ | 2. 8 | W. | N.W. | 45 | |
| 2. 12 | 2. 13 | N.W. | W.N.W. | | 22½ |
| 2. 15¾ | 2. 16 | W.N.W. | N.N.W. | 45 | |
| 2. 16½ | 2. 17 | N.N.W. | N.W. | | 22½ |
| 2. 17¾ | 2. 18¼ | N.W. | W.N.W. | | 22½ |
| 2. 19¾ | 2. 20¼ | W.N.W. | N.N.W. | 45 | |
| 2. 21 | 2. 22 | N.N.W. | W.N.W. | | 45 |
| 3. 0½ | 3. 1 | W.N.W. | W. | | 22½ |
| 3. 9 | 3. 9¾ | W. | S.W. | | 45 |
| 3. 13 | 3. 14 | S.W. | S.S.E. | | 67½ |
| 3. 17½ | 3. 18¼ | S.S.E. | S.E. | | 22½ |
| 3. 23½ | 3. 23¾ | S.E. | N.E. | | 90 |
| 4. 2¼ | 4. 3 | N.E. | E. | 45 | |
| 4. 4 | 4. 4¼ | E. | E.N.E. | | 22½ |
| 4. 11 | 4. 11½ | E.N.E. | N.E. | | 22½ |
| 4. 17¾ | 4. 18½ | N.E. | N.N.E. | | 22½ |
| 5. 3 | 5. 4 | N.N.E. | N. | | 22½ |
| 5. 5¾ | 5. 6 | N. | W.S.W. | | 112½ |
| 5. 9¼ | 5. 9½ | W.S.W. | W. | 22½ | |
| 5. 15¾ | 5. 16 | W. | N.W. | 45 | |
| 5. 16¼ | 5. 18 | N.W. | W. | | 45 |
| 6. 8 | 6. 9¼ | W. | W.N.W. | 22½ | |
| 6. 10¼ | 6. 10¾ | W.N.W. | W. | | 22½ |
| 6. 16 | 6. 16¼ | W. | W.N.W. | 22½ | |
| 6. 17¼ | 6. 18½ | W.N.W. | W. | | 22½ |
| 7. 2½ | 7. 3½ | W. | W.S.W. | | 22½ |
| 7. 7 | 7. 8½ | W.S.W. | W. | 22½ | |
| 7. 15 | 7. 15½ | W. | W.S.W. | | 22½ |
| 7. 18 | 7. 19½ | W.S.W. | S.W. | | 22½ |
| 8. 9¾ | 8. 11½ | S.W. | W.S.W. | 22½ | |
| 9. 7¼ | 9. 11½ | W.S.W. | W. | 22½ | |
| 10. 12¾ | 10. 13 | W. | W.N.W. | 22½ | |
| 10. 17½ | 10. 18 | W.N.W. | W. | | 22½ |
| 11. 9½ | 11. 9¾ | W. | N.N.E. | 112½ | |
| 11. 14¾ | 11. 15½ | N.N.E. | N.E. | 22½ | |
| 12. 1½ | 12. 1¾ | N.E. | N.N.E. | | 22½ |
| 12. 12¾ | 12. 13 | N.N.E. | N. | | 22½ |
| 12. 15¼ | 12. 15½ | N. | N.N.W. | | 22½ |
| 12. 16¾ | 12. 17½ | N.N.W. | E.N.E. | 90 | |
| 12. 18½ | 12. 18¾ | E.N.E. | N.E. | | 22½ |
| 12. 19½ | 12. 19¾ | N.E. | S.W. | | 180 |
| 12. 20¾ | 12. 22 | S.W. | W. | 45 | |
| 13. 1 | 13. 1¾ | W. | W.S.W. | | 22½ |
| 13. 9¾ | 13. 11¼ | W.S.W. | W.N.W. | 45 | |
| 13. 16¾ | 13. 19½ | W.N.W. | W.S.W. | | 45 |
| 14. 4½ | 14. 5½ | W.S.W. | S.W. | | 22½ |
| 14. 7¼ | 14. 9½ | S.W. | W. | 45 | |
| 14. 14¼ | 14. 15 | W. | W.S.W. | | 22½ |
| 14. 18¼ | 14. 19¾ | W.S.W. | S.W. | | 22½ |
| 15. 9 | 15. 10½ | S.W. | W. | 45 | |
| 15. 14½ | 15. 15¾ | W. | W.S.W. | | 22½ |
| 15. 18¼ | 15. 20 | W.S.W. | N. | 112½ | |
| 15. 20¼ | 15. 20½ | N. | W.N.W. | 67½ | |
| 16. 1½ | 16. 2½ | W.N.W. | W. | | 22½ |
| 16. 5 | 16. 5¼ | W. | W.S.W. | | 22½ |
| 16. 6½ | 16. 7½ | W.S.W. | W. | 22½ | |
| 16. 8½ | 16. 10½ | W. | W.S.W. | | 22½ |

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| | | | | ° | ° |
| Sept.—*cont.* | | | | | |
| d h | d h | | | | |
| 17. 13 | 17. 13½ | W.S.W. | S.W. | | 22½ |
| 18. 0½ | 18. 0¾ | S.W. | S.S.E. | | 67½ |
| 18. 2¾ | 18. 3½ | S.S.E. | E.N.E. | | 90 |
| 18. 5½ | 18. 5¾ | E.N.E. | S.S.E. | 90 | |
| 18. 8 | 18. 8½ | S.S.E. | S.E. | | 22½ |
| 18. 9¼ | 18. 9½ | S.E. | S.S.E. | 22½ | |
| 18. 11¼ | 18. 13½ | S.S.E. | S.W. | | 67½ |
| 18. 14 | 18. 15¼ | S.W. | S. | | 45 |
| 18. 23 | 18. 23½ | S. | S.S.W. | 22½ | |
| 19. 2½ | 19. 3½ | S.S.W. | W.S.W. | 45 | |
| 19. 7½ | 19. 9 | W.S.W. | W. | 22½ | |
| 19. 13¼ | 19. 13½ | W. | S.S.E. | 247½ | |
| 19. 14¼ | 19. 14½ | S.S.E. | S.W. | 67½ | |
| 19. 15½ | 19. 16 | S.W. | S. | | 45 |
| 19. 17¾ | 19. 18 | S. | E.S.E. | | 67½ |
| 19. 23 | 19. 23½ | E.S.E. | E.N.E. | | 45 |
| 20. 1¼ | 20. 1½ | E.N.E. | E.S.E. | 45 | |
| 20. 4½ | 20. 4¾ | E.S.E. | E. | | 22½ |
| 20. 9 | 20. 14½ | E. | S.W. | 135 | |
| 20. 17¾ | 20. 18¾ | S.W. | W.S.W. | 22½ | |
| 21. 7 | 21. 8 | W.S.W. | W. | 22½ | |
| 21. 10½ | 21. 11 | W. | W.N.W. | 22½ | |
| 21. 13½ | 21. 15¾ | W.N.W. | W.S.W. | | 45 |
| 21. 18 | 21. 18½ | W.S.W. | S.W. | | 22½ |
| 21. 20½ | 21. 21 | S.W. | W.S.W. | 22½ | |
| 22. 1½ | 22. 3¼ | W.S.W. | W. | 22½ | |
| 22. 9¼ | 22. 9½ | W. | S.S.E. | | 112½ |
| 22. 10¾ | 22. 11 | S.S.E. | W. | 112½ | |
| 22. 15 | 22. 16½ | W. | S.W. | | 45 |
| 22. 19 | 22. 20¾ | S.W. | S.S.E. | | 67½ |
| 22. 22½ | 22. 23½ | S.S.E. | S.E. | | 22½ |
| 23. 1½ | 23. 1¾ | S.E. | E.S.E. | | 22½ |
| 23. 7¼ | 23. 8 | E.S.E. | S.E. | 22½ | |
| 23. 9½ | 23. 11¼ | S.E. | S. | 45 | |
| 23. 12¼ | 23. 12½ | S. | S.E. | | 45 |
| 23. 19½ | 23. 20½ | S.E. | E. | | 45 |
| 23. 23¾ | 24. 0 | E. | N.E. | | 45 |
| 24. 2½ | 24. 3¼ | N.E. | N.N.E. | | 22½ |
| 24. 4½ | 24. 5¾ | N.N.E. | N.E. | 22½ | |
| 24. 11 | 24. 11¾ | N.E. | N.N.E. | | 22½ |
| 24. 14¼ | 24. 15 | N.N.E. | N.E. | 22½ | |
| 24. 16¼ | 24. 16½ | N.E. | S.W. | 180 | |
| 24. 17 | 24. 18 | S.W. | N.N.E. | 157½ | |
| 24. 22½ | 24. 23¾ | N.N.E. | N.W. | | 67½ |
| 25. 4½ | 25. 5 | N.W. | N.N.E. | 67½ | |
| 25. 6¼ | 25. 6½ | N.N.E. | N. | | 22½ |
| 25. 7½ | 25. 7¾ | N. | W. | | 90 |
| 25. 10½ | 25. 11 | W. | W.S.W. | | 22½ |
| 25. 13¾ | 25. 15 | W.S.W. | S. | | 67½ |
| 25. 15½ | 25. 15¾ | S. | S.S.W. | 22½ | |
| 25. 18¼ | 25. 19 | S.S.W. | S.W. | 22½ | |
| 25. 21¼ | 25. 21¾ | S.W. | S.S.W. | | 22½ |
| 26. 1¾ | 26. 2 | S.S.W. | S.W. | 22½ | |
| 26. 4¾ | 26. 5½ | S.W. | W.S.W. | 22½ | |
| 26. 7 | 26. 7¾ | W.S.W. | W. | 22½ | |
| 26. 12¼ | 26. 12½ | W. | W.N.W. | 22½ | |
| 26. 18¾ | 26. 19½ | W.N.W. | W.S.W. | | 45 |
| 26. 23¼ | 26. 23¾ | W.S.W. | W. | 22½ | |
| 27. 4¼ | 27. 5½ | W. | W.S.W. | | 22½ |

## ABSTRACT of the CHANGES of the DIRECTION of the WIND—*continued.*

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| | | | | ° | ° |
| Sept.—*cont.* | | | | | |
| d h | d h | | | | |
| 27. 8½ | 27. 9¼ | W.S.W. | W. | 22½ | |
| 27. 10¾ | 27. 11 | W. | W.S.W. | | 22½ |
| 27. 14¼ | 27. 19¼ | W.S.W. | S.S.E. | | 90 |
| 28. 0¼ | 28. 0¾ | S.S.E. | S.E. | | 22½ |
| 28. 5 | 28. 7¾ | S.E. | S.W. | 90 | |
| 28. 11 | 28. 13½ | S.W. | W. | 45 | |
| 28. 13¾ | 28. 16 | W. | W.S.W. | | 22½ |
| 28. 19 | 28. 20¼ | W.S.W. | S.W. | | 22½ |
| 29. 8½ | 29. 10 | S.W. | W.S.W. | 22½ | |
| 29. 11¾ | 29. 12¾ | W.S.W. | S.W. | | 22½ |
| 29. 15¼ | 29. 16¼ | S.W. | S.S.W. | | 22½ |
| 29. 17¾ | 29. 18¾ | S.S.W. | S. | | 22½ |
| 30. 2 | 30. 2½ | S. | S.S.W. | 22½ | |
| 30. 7½ | 30. 8¾ | S.S.W. | S.W. | 22½ | |
| 30. 17½ | 30. 17¾ | S.W. | S.S.W. | | 22½ |
| 30. 21¾ | 30. 22 | S.S.W. | S.S.E. | | 45 |
| | | | Sums | 2880 | 2992½ |
| October. | | | | | |
| 1. 1¼ | 1. 1½ | S.S.E. | E.S.E. | | 45 |
| 1. 5 | 1. 5¼ | E.S.E. | E.N.E. | | 45 |
| 1. 9¼ | 1. 9½ | E.N.E. | N.E. | | 22½ |
| 1. 10¼ | 1. 11½ | N.E. | S.W. | 180 | |
| 1. 15½ | 1. 16 | S.W. | S.S.W. | | 22½ |
| 1. 17¼ | 1. 17½ | S.S.W. | S. | | 22½ |
| 1. 21¼ | 1. 22 | S. | S.E. | | 45 |
| 2. 2¼ | 2. 3¼ | S.E. | N.E. | | 90 |
| 2. 4½ | 2. 5¾ | N.E. | E.N.E. | 382½ | |
| 2. 12 | 2. 13 | E.N.E. | S. | 112½ | |
| 2. 15¼ | 2. 15¾ | S. | S.S.E. | | 22½ |
| 2. 20¾ | 2. 22 | S.S.E. | S.E. | | 22½ |
| 2. 23 | 2. 23¼ | S.E. | E. | | 45 |
| 3. 3 | 3. 3¼ | E. | S.S.E. | 67½ | |
| 3. 5 | 3. 5¼ | S.S.E. | E. | | 67½ |
| 3. 12 | 3. 12¼ | E. | S.S.E. | 67½ | |
| 3. 16¾ | 3. 18¼ | S.S.E. | S. | 22½ | |
| 3. 22½ | 3. 23¼ | S. | E. | | 90 |
| 4. 0½ | 4. 1½ | E. | S.E. | 45 | |
| 4. 3¾ | 4. 4 | S.E. | S.W. | 90 | |
| 4. 10¼ | 4. 10½ | S.W. | S. | | 45 |
| 4. 11½ | 4. 12¼ | S. | E.N.E. | 247½ | |
| 4. 21¾ | 4. 22¼ | E.N.E. | W. | | 157½ |
| 5. 3½ | 5. 3¾ | W. | E.S.E. | 202½ | |
| 5. 5 | 5. 5¼ | E.S.E. | E.N.E. | | 45 |
| 5. 8 | 5. 8½ | E.N.E. | E.S.E. | 45 | |
| 5. 23 | 6. 0 | E.S.E. | S.E. | 22½ | |
| 6. 9½ | 6. 11¾ | S.E. | E.S.E. | | 22½ |
| 6. 15¼ | 6. 16½ | E.S.E. | S.E. | 22½ | |
| 7. 11½ | 7. 11¾ | S.E. | S.W. | 90 | |
| 7. 16 | 7. 16½ | S.W. | S.S.W. | | 22½ |
| 7. 22 | 7. 22½ | S.S.W. | W. | 67½ | |
| 8. 1¼ | 8. 2 | W. | S.S.W. | | 67½ |
| 8. 9¾ | 8. 10¼ | S.S.W. | S.W. | 22½ | |

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| | | | | ° | ° |
| Oct.—*cont.* | | | | | |
| d h | d h | | | | |
| 8. 15¼ | 8. 16¾ | S.W. | S.E. | | 90 |
| 8. 20 | 8. 22½ | S.E. | S.S.W. | 67½ | |
| 9. 3½ | 9. 4¾ | S.S.W. | S.W. | 22½ | |
| 9. 6½ | 9. 7¾ | S.W. | W.S.W. | 22½ | |
| 9. 17 | 9. 18½ | W.S.W. | S.S.W. | | 45 |
| 9. 20½ | 9. 20¾ | S.S.W. | S.W. | 22½ | |
| 10. 2½ | 10. 3¾ | S.W. | N.W. | 90 | |
| 10. 6¼ | 10. 7½ | N.W. | W. | | 45 |
| 10. 14½ | 10. 15 | W. | W.S.W. | 22½ | |
| 10. 18¼ | 10. 18¾ | W.S.W. | W. | 22½ | |
| 10. 23 | 11. 1 | W. | W.S.W. | | 22½ |
| 11. 15 | 11. 16¼ | W.S.W. | S.W. | | 22½ |
| 11. 20¼ | 11. 22 | S.W. | S.S.W. | | 22½ |
| 12. 1¼ | 12. 2¼ | S.S.W. | S. | | 22½ |
| 12. 12 | 12. 12¼ | S. | S.S.E. | | 22½ |
| 12. 16½ | 12. 17 | S.S.E. | S.E. | | 22½ |
| 12. 23½ | 13. 0¾ | S.E. | S.S.E. | 22½ | |
| 13. 11½ | 13. 12 | S.S.E. | S.E. | | 22½ |
| 13. 21¼ | 13. 21¾ | S.E. | S.W. | 90 | |
| 13. 23½ | 13. 23¾ | S.W. | S S.E. | | 67½ |
| 14. 3¼ | 14. 3½ | S.S.E. | S.S.W. | 45 | |
| 14. 4¾ | 14. 6¼ | S.S.W. | W.S.W. | 45 | |
| 14. 8¼ | 14. 9½ | W.S.W. | S.W. | | 22½ |
| 14. 11 | 14. 12 | S.W. | W.S.W. | 22½ | |
| 14. 16¾ | 14. 17 | W.S.W. | S.S.E. | | 90 |
| 14. 18¼ | 14. 21 | S.S.E. | W.S.W. | 90 | |
| 14. 21¾ | 14. 23¼ | W.S.W. | S.E. | 247½ | |
| 15. 3 | 15. 4 | S.E. | E. | | 45 |
| 15. 5 | 15. 5¼ | E. | S.E. | 45 | |
| 15. 5¾ | 15. 6 | S.E. | S.S.E. | 22½ | |
| 15. 15 | 15. 16½ | S.S.E. | S.E. | | 22½ |
| 15. 18¼ | 15. 19¾ | S.E. | E.S.E. | | 22½ |
| 16. 19 | 16. 21 | E.S.E. | S.E. | 22½ | |
| 17. 9¾ | 17. 10¼ | S.E. | S. | 45 | |
| 17. 11¾ | 17. 12 | S. | S.E. | | 45 |
| 17. 13¼ | 17. 13½ | S.E. | S.W. | 90 | |
| 17. 15¼ | 17. 16 | S.W. | S.E. | | 90 |
| 18. 11½ | 18. 11¾ | S.E. | S.S.E. | 22½ | |
| 18. 18¼ | 18. 19¾ | S.S.E. | S.E. | | 22½ |
| 18. 23¾ | 19. 0¾ | S.E. | E.S.E. | | 22½ |
| 19. 7¾ | 19. 8½ | E.S.E. | S.E. | 22½ | |
| 19. 18 | 19. 20 | S.E. | S.S.E. | 22½ | |
| 19. 21½ | 19. 22½ | S.S.E. | S.E. | | 22½ |
| 20. 3 | 20. 5½ | S.E. | S.S.E. | 22½ | |
| 20. 7 | 20. 9 | S.S.E. | S.E. | | 22½ |
| 21. 2¼ | 21. 5¼ | S.E. | E.S.E. | | 22½ |
| 21. 22¾ | 22. 1¾ | E.S.E. | E.N.E. | | 45 |
| 22. 6½ | 22. 9¼ | E.N.E. | E.S.E. | 45 | |
| 22. 14½ | 22. 17 | E.S.E. | E.N.E. | | 45 |
| 23. 13¼ | 23. 14 | E.N.E. | N.E. | 22½ | |
| 23. 17 | 23. 19 | N.E. | E.N.E. | 22½ | |
| 23. 21 | 23. 23¼ | E.N.E. | N.N.E. | | 45 |
| 24. 10½ | 24. 12¾ | N.N.E. | E.N.E. | 45 | |
| 24. 16¾ | 24. 18 | E.N.E. | N.E. | | 22½ |
| 24. 23 | 24. 23¼ | N.E. | N.N.E. | | 22½ |
| 25. 5½ | 25. 6 | N.N.E. | N.E. | 22½ | |
| 25. 7 | 25. 8 | N.E. | N.N.E. | | 22½ |
| 26. 4½ | 26. 6 | N.N.E. | N.E. | 22½ | |
| 26. 8 | 26. 9 | N.E. | E. | 45 | |

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| | | | | ° | ° |
| Oct.—*cont.* | | | | | |
| d h | d h | | | | |
| 26. 16¾ | 26. 17¾ | E. | E.S.E. | 22½ | |
| 26. 20½ | 26. 22¾ | E.S.E. | E.N.E. | | 45 |
| 27. 3¼ | 27. 4 | E.N.E. | E. | 22½ | |
| 27. 8¾ | 27. 11½ | E. | S.E. | 45 | |
| 27. 15 | 27. 16½ | S.E. | S. | 45 | |
| 27. 17½ | 27. 19¼ | S. | S.S.W. | 22½ | |
| 28. 0¼ | 28. 1¼ | S.S.W. | S.S.E. | | 45 |
| 28. 2¼ | 28. 3½ | S.S.E. | E.S.E. | | 45 |
| 28. 5½ | 28. 9¼ | E.S.E. | S.W. | 112½ | |
| 28. 17½ | 28. 18½ | S.W. | S.S.W. | | 22½ |
| 29. 5¾ | 29. 7 | S.S.W. | S. | | 22½ |
| 29. 13 | 29. 16¾ | S. | S.E. | | 45 |
| 30. 12 | 30. 13¼ | S.E. | S.S.E. | 22½ | |
| 30. 23 | 31. 1 | S.S.E. | S. | 22½ | |
| 31. 5 | 31. 5½ | S. | W.S.W. | 67½ | |
| 31. 6¾ | 31. 7 | W.S.W. | S.S.W. | | 45 |
| 31. 10 | 31. 11¾ | S.S.W. | W. | 67½ | |
| 31. 13¾ | 31. 14 | W. | W.S.W. | | 22½ |
| 31. 15¼ | 31. 16¾ | W.S.W. | S.S.W. | | 45 |
| 31. 18¾ | 31. 19½ | S.S.W. | W.S.W. | 45 | |
| 31. 20½ | 31. 20¾ | W.S.W. | S.S.E. | | 90 |
| 31. 21½ | 31. 22 | S.S.E. | E. | | 67½ |
| 31. 23¼ | 31. 23¾ | E. | S. | 90 | |
| | | | Sums | 3600 | 2497½ |
| November. | | | | | |
| 1. 1 | 1. 1½ | S. | N.N.E. | | 157½ |
| 1. 2¾ | 1. 3 | N.N.E. | E. | 67½ | |
| 1. 5¾ | 1. 6 | E. | E.N.E. | | 22½ |
| 1. 7 | 1. 8 | E.N.E. | E. | 22½ | |
| 1. 11½ | 1. 12 | E. | E.S.E. | 22½ | |
| 1. 13¾ | 1. 14 | E.S.E. | S.E. | 22½ | |
| 1. 19½ | 1. 19¾ | S.E. | E.S.E. | | 22½ |
| 2. 18¼ | 2. 19½ | E.S.E. | S.E. | 22½ | |
| 2. 23½ | 3. 2¼ | S.E. | E.S.E. | | 22½ |
| 3. 10½ | 3. 12 | E.S.E. | S.E. | 22½ | |
| 3. 19¾ | 3. 20 | S.E. | E. | | 45 |
| 3. 22 | 3. 22½ | E. | E.N.E. | | 22½ |
| 4. 5¼ | 4. 5½ | E.N.E. | N.E. | | 22½ |
| 4. 7¾ | 4. 9½ | N.E. | E. | 45 | |
| 4. 16½ | 4. 16¾ | E. | E.N.E. | | 22½ |
| 4. 20¾ | 4. 21¼ | E.N.E. | E. | 22½ | |
| 5. 8½ | 5. 10½ | E. | E.S.E. | 22½ | |
| 5. 15¾ | 5. 16 | E.S.E. | E.N.E. | | 45 |
| 5. 16¾ | 5. 17¾ | E.N.E. | E. | 22½ | |
| 5. 19 | 5. 20½ | E. | S.E. | 45 | |
| 6. 0½ | 6. 1¾ | S.E. | E.N.E. | | 67½ |
| 6. 3½ | 6. 4 | E.N.E. | E.S.E. | 45 | |
| 6. 11½ | 6. 12½ | E.S.E. | S.E. | 22½ | |
| 7. 14½ | 7. 17½ | S.E. | E.S.E. | | 22½ |
| 8. 0 | 8. 2 | E.S.E. | E.N.E. | | 45 |
| 8. 8 | 8. 10¼ | E.N.E. | E.S.E. | 45 | |
| 8. 11½ | 8. 13 | E.S.E. | E. | | 22½ |

## ABSTRACT of the CHANGES of the DIRECTION of the WIND—*continued.*

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| | | | | ° | ° |
| Nov.—*cont.* | | | | | |
| d h | d h | | | | |
| 8. 19½ | 8. 20 | E. | E.N.E. | | 22½ |
| 9. 8¾ | 9. 10 | E.N.E. | E.S.E. | 45 | |
| 9. 22½ | 9. 23¼ | E.S.E. | S.E. | 22½ | |
| 10. 11¾ | 10. 12 | S.E. | S.S.E. | 22½ | |
| 10. 22¾ | 10. 23 | S.S.E. | S. | 22½ | |
| 11. 2¼ | 11. 3½ | S. | S.W. | 45 | |
| 12. 2½ | 12. 4 | S.W. | W.S.W. | 22½ | |
| 12. 8 | 12. 9 | W.S.W. | W. | 22½ | |
| 12. 14 | 12. 15 | W. | W.S.W. | | 22½ |
| 12. 17 | 12. 18 | W.S.W. | S.W. | | 22½ |
| 12. 22 | 12. 23½ | S.W. | S.S.W. | | 22½ |
| 13. 6 | 13. 8½ | S.S.W. | S.W. | 22½ | |
| 13. 10 | 13. 13 | S.W. | W.N.W. | 67½ | |
| 13. 15½ | 13. 17½ | W.N.W. | S.W. | | 67½ |
| 13. 20½ | 13. 21¼ | S.W. | S. | | 45 |
| 13. 23½ | 14. 0½ | S. | S.S.W. | 22½ | |
| 14. 6½ | 14. 7 | S.S.W. | W.S.W. | 45 | |
| 14. 11 | 14. 12 | W.S.W. | W. | 22½ | |
| 14. 14½ | 14. 15¾ | W. | W.S.W. | | 22½ |
| 14. 18½ | 14. 19 | W.S.W. | N.E. | | 202½ |
| 14. 23 | 15. 0 | N.E. | E.N.E. | 22½ | |
| 15. 1 | 15. 2 | E.N.E. | N.E. | | 22½ |
| 15. 16 | 15. 16½ | N.E. | E.N.E. | 22½ | |
| 15. 18 | 15. 18¼ | E.N.E. | E.S.E. | 45 | |
| 16. 5 | 16. 7½ | E.S.E. | S.S.W. | 90 | |
| 16. 10 | 16. 12 | S.S.W. | W. | 67½ | |
| 16. 12½ | 16. 13¼ | W. | W.S.W. | | 22½ |
| 16. 15¼ | 16. 16½ | W.S.W. | S.W. | | 22½ |
| 16. 19¾ | 16. 20½ | S.W. | W.S.W. | 22½ | |
| 16. 22 | 16. 23 | W.S.W. | W. | 22½ | |
| 17. 9½ | 17. 9¾ | W. | W.N.W. | 22½ | |
| 17. 15¼ | 17. 16½ | W.N.W. | W. | | 22½ |
| 18. 1¼ | 18. 2¼ | W. | W.S.W. | | 22½ |
| 18. 8 | 18. 8¾ | W.S.W. | W. | 22½ | |
| 18. 15½ | 18. 16½ | W. | W.S.W. | | 22½ |
| 19. 0½ | 19. 1½ | W.S.W. | W. | 22½ | |
| 19. 6¼ | 19. 9¾ | W. | N. | 90 | |
| 19. 12 | 19. 13½ | N. | N.N.E. | 22½ | |
| 19. 15½ | 19. 16 | N.N.E. | N. | | 22½ |
| 19. 21½ | 19. 22½ | N. | N.W. | | 45 |
| 19. 23½ | 20. 0 | N.W. | W. | | 45 |
| 20. 2¾ | 20. 3 | W. | W.S.W. | | 22½ |
| 20. 11½ | 20. 12 | W.S.W. | W. | 22½ | |
| 20. 18 | 20. 21½ | W. | N.N.W. | 67½ | |
| 21. 4½ | 21. 5 | N.N.W. | N.W. | | 22½ |
| 21. 8 | 21. 8½ | N.W. | N.N.W. | 22½ | |
| 21. 13¼ | 21. 17¼ | N.N.W. | W.S.W. | | 90 |
| 21. 19 | 21. 20 | W.S.W. | S.W. | | 22½ |
| 21. 23 | 22. 1¼ | S.W. | W. | 45 | |
| 22. 15¾ | 22. 16 | W. | N.W. | 45 | |
| 22. 18½ | 22. 20½ | N.W. | W.N.W. | | 22½ |
| 23. 2 | 23. 5 | W.N.W. | N.N.W. | 45 | |
| 23. 7 | 23. 7¼ | N.N.W. | N. | 22½ | |
| 23. 20¼ | 23. 22½ | N. | W. | | 90 |
| 24. 1 | 24. 1½ | W. | W.S.W. | | 22½ |
| 24. 6½ | 24. 8 | W.S.W. | S.W. | | 22½ |
| 24. 11¼ | 24. 11¾ | S.W. | W.S.W. | 22½ | |
| 24. 15½ | 24. 16¼ | W.S.W. | S.W. | | 22½ |
| 24. 18 | 24. 20 | S.W. | W.S.W. | 22½ | |
| Nov.—*cont.* | | | | | |
| d h | d h | | | | |
| 25. 2½ | 25. 3½ | W.S.W. | N.W. | 67½ | |
| 25. 7½ | 25. 7¾ | N.W. | W. | | 45 |
| 25. 10 | 25. 10½ | W. | W.N.W. | 22½ | |
| 25. 14½ | 25. 17 | W.N.W. | W.S.W. | | 45 |
| 25. 19 | 25. 20 | W.S.W. | W. | 22½ | |
| 27. 0 | 27. 0¾ | W. | W.S.W. | | 22½ |
| 27. 5½ | 27. 6¾ | W.S.W. | S.W. | | 22½ |
| 27. 16¾ | 27. 17½ | S.W. | S.S.W. | | 22½ |
| 28. 0¼ | 28. 1¾ | S.S.W. | S.W. | 22½ | |
| 28. 15½ | 28. 15¾ | S.W. | S.S.W. | | 22½ |
| 28. 19½ | 28. 20½ | S.S.W. | S.W. | 22½ | |
| 30. 13¼ | 30. 13½ | S.W. | W.S.W. | 22½ | |
| 30. 20¼ | 30. 21 | W.S.W. | S.E. | | 112½ |
| | | | Sums | 1800 | 1845 |
| December. | | | | | |
| 1. 0¾ | 1. 1¼ | S.E. | E.S.E. | | 22½ |
| 1. 2¼ | 1. 2½ | E.S.E. | S.S.E. | 45 | |
| 1. 6 | 1. 6¼ | S.S.E. | S.W. | 67½ | |
| 1. 7¾ | 1. 8 | S.W. | S.E. | | 90 |
| 1. 10½ | 1. 10¾ | S.E. | S.S.W. | 67½ | |
| 1. 11½ | 1. 12 | S.S.W. | S. | | 22½ |
| 1. 15¼ | 1. 15¾ | S. | E. | | 90 |
| 1. 16¼ | 1. 16¾ | E. | S.E. | 45 | |
| 1. 18 | 1. 18½ | S.E. | E.S.E. | | 22½ |
| 1. 23 | 1. 23½ | E.S.E. | S.E. | 22½ | |
| 2. 2½ | 2. 3½ | S.E. | S.S.E. | 22½ | |
| 2. 6½ | 2. 6¾ | S.S.E. | S. | 22½ | |
| 2. 8 | 2. 10¼ | S. | S.E. | 315 | |
| 2. 11¾ | 2. 12¼ | S.E. | E. | | 45 |
| 2. 13 | 2. 13¾ | E. | S.S.E. | 67½ | |
| 3. 8½ | 3. 10½ | S.S.E. | S. | 22½ | |
| 3. 23 | 3. 23¼ | S. | S.W. | 45 | |
| 4. 0 | 4. 0½ | S.W. | W.S.W. | 22½ | |
| 4. 9 | 4. 10¼ | W.S.W. | S.W. | | 22½ |
| 5. 0½ | 5. 1½ | S.W. | W.S.W. | 22½ | |
| 5. 13 | 5. 15 | W.S.W. | S.W. | | 22½ |
| 5. 18 | 5. 19½ | S.W. | S.S.W. | | 22½ |
| 6. 1 | 6. 2 | S.S.W. | S.W. | 22½ | |
| 6. 11 | 6. 11½ | S.W. | N.N.E. | 157½ | |
| 6. 12½ | 6. 13½ | N.N.E. | E.S.E. | 90 | |
| 6. 16 | 6. 16¼ | E.S.E. | N.E. | | 67½ |
| 6. 18¾ | 6. 19 | N.E. | E.N.E. | 22½ | |
| 6. 20½ | 6. 20¾ | E.N.E. | N.E. | | 22½ |
| 6. 23¼ | 6. 23½ | N.E. | N.N.E. | | 22½ |
| 7. 12 | 7. 12¼ | N.N.E. | W.N.W. | | 90 |
| 7. 13¾ | 7. 16 | W.N.W. | W.S.W. | | 45 |
| 7. 16½ | 7. 16¾ | W.S.W. | W. | 22½ | |
| 7. 19 | 7. 19¼ | W. | W.S.W. | | 22½ |
| 7. 22½ | 7. 23¾ | W.S.W. | S.W. | | 22½ |
| 8. 22 | 9. 1½ | S.W. | N. | 135 | |
| 9. 3¼ | 9. 4 | N. | W.N.W. | | 67½ |
| 9. 5¼ | 9. 6¼ | W.N.W. | W.S.W. | | 45 |
| Dec.—*cont.* | | | | | |
| d h | d h | | | | |
| 9. 15¾ | 9. 16 | W.S.W. | W. | 22½ | |
| 9. 17¾ | 9. 18¼ | W. | W.S.W. | | 22½ |
| 9. 20 | 9. 20½ | W.S.W. | S.W. | | 22½ |
| 10. 11½ | 10. 12½ | S.W. | W. | 45 | |
| 10. 15 | 10. 15¾ | W. | W.S.W. | | 22½ |
| 10. 18 | 10. 21 | W.S.W. | W.N.W. | 45 | |
| 10. 23 | 11. 1 | W.N.W. | W. | | 22½ |
| 11. 3¼ | 11. 4½ | W. | W.S.W. | | 22½ |
| 11. 7¾ | 11. 8 | W.S.W. | N. | 112½ | |
| 11. 13¼ | 11. 13½ | N. | N.N.W. | | 22½ |
| 11. 15 | 11. 16¼ | N.N.W. | N.W. | | 22½ |
| 12. 2½ | 12. 4 | N.W. | N. | 45 | |
| 12. 8½ | 12. 9 | N. | N.N.W. | | 22½ |
| 12. 10 | 12. 10¾ | N.N.W. | N. | 22½ | |
| 12. 11¾ | 12. 12 | N. | N.N.W. | | 22½ |
| 12. 15½ | 12. 17 | N.N.W. | W.N.W. | | 45 |
| 12. 19 | 12. 20 | W.N.W. | W. | | 22½ |
| 12. 23 | 13. 3 | W. | S.S.E. | | 112½ |
| 13. 4½ | 13. 4¾ | S.S.E. | S.W. | 67½ | |
| 13. 11 | 13. 12 | S.W. | W.S.W. | 22½ | |
| 13. 17 | 13. 18 | W.S.W. | W. | 22½ | |
| 13. 19 | 13. 20 | W. | S.W. | | 45 |
| 14. 1½ | 14. 3 | S.W. | S.S.W. | | 22½ |
| 14. 8¼ | 14. 8¾ | S.S.W. | S.W. | 22½ | |
| 14. 13¾ | 14. 15½ | S.W. | S. | | 45 |
| 14. 15¾ | 14. 16 | S. | W. | 90 | |
| 14. 16¼ | 14. 17¾ | W. | S.W. | | 45 |
| 14. 23½ | 15. 2 | S.W. | W.S.W. | 22½ | |
| 15. 2¼ | 15. 6 | W.S.W. | S.W. | | 22½ |
| 15. 15 | 15. 17 | S.W. | S.S.W. | | 22½ |
| 16. 0½ | 16. 3 | S.S.W. | S. | | 22½ |
| 16. 16½ | 16. 17 | S. | S.S.W. | 22½ | |
| 17. 2 | 17. 3 | S.S.W. | S.W. | 22½ | |
| 17. 11¾ | 17. 13 | S.W. | W.S.W. | 22½ | |
| 17. 15¼ | 17. 15½ | W.S.W. | S.W. | | 22½ |
| 17. 21½ | 17. 21¾ | S.W. | W.S.W. | 22½ | |
| 18. 11 | 18. 12 | W.S.W. | W. | 22½ | |
| 18. 20 | 18. 22½ | W. | W.S.W. | | 22½ |
| 19. 3 | 19. 5¾ | W.S.W. | W. | 22½ | |
| 19. 10½ | 19. 11 | W. | W.S.W. | | 22½ |
| 19. 11¾ | 19. 12 | W.S.W. | W. | 22½ | |
| 19. 14½ | 19. 17 | W. | W.S.W. | | 22½ |
| 19. 18¾ | 19. 19 | W.S.W. | S.S.E. | | 90 |
| 19. 20¼ | 19. 20¾ | S.S.E. | S. | 22½ | |
| 20. 3 | 20. 5 | S. | S.S.W. | 22½ | |
| 20. 11¾ | 20. 12¾ | S.S.W. | S.W. | 22½ | |
| 21. 11¾ | 21. 12 | S.W. | S.S.W. | | 22½ |
| 21. 17½ | 21. 18½ | S.S.W. | S.W. | 22½ | |
| 21. 23½ | 22. 1 | S.W. | S.S.W. | | 22½ |
| 22. 11 | 22. 14½ | S.S.W. | S.W. | 22½ | |
| 22. 21¼ | 22. 21½ | S.W. | W.S.W. | 22½ | |
| 22. 23 | 22. 23¾ | W.S.W. | S.W. | | 22½ |
| 23. 1 | 23. 4 | S.W. | S.S.W. | | 22½ |
| 23. 6¼ | 23. 7½ | S.S.W. | S. | | 22½ |
| 23. 11¾ | 23. 12 | S. | S.S.W. | 22½ | |
| 23. 13¾ | 23. 14¼ | S.S.W. | S.S.E. | | 45 |
| 23. 19 | 23. 19¾ | S.S.E. | S. | 22½ | |
| 23. 23 | 23. 23¼ | S. | S.S.E. | | 22½ |
| 24. 9 | 24. 10½ | S.S.E. | S.E. | | 22½ |

## ABSTRACT of the CHANGES of the DIRECTION of the WIND—*concluded.*

| Greenwich Civil Time. From | Greenwich Civil Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| Dec.—*cont.* | | | | ° | ° |
| d h | d h | | | | |
| 24. 23¾ | 25. 0½ | S.E. | E.S.E. | | 22½ |
| 25. 14 | 25. 14¾ | E.S.E. | E. | | 22½ |
| 26. 0¼ | 26. 1¾ | E. | E.S.E. | 22½ | |
| 26. 13 | 26. 14 | E.S.E. | S.E. | 22½ | |
| 27. 2¼ | 27. 2½ | S.E. | E.S.E. | | 22½ |
| 27. 12½ | 27. 12¾ | E.S.E. | S.E. | 22½ | |
| 27. 23¼ | 28. 0 | S.E. | E.S.E. | | 22½ |
| 28. 4 | 28. 5½ | E.S.E. | E.N.E. | | 45 |
| 28. 5½ | 28. 6¼ | E.N.E. | E.S.E. | 45 | |
| 28. 8¼ | 28. 8¾ | E.S.E. | E. | | 22½ |
| 28. 11¾ | 28. 12 | E. | E.S.E. | 22½ | |
| Dec.—*cont.* | | | | | |
| d h | d h | | | | |
| 28. 20 | 28. 21 | E.S.E. | E. | | 22½ |
| 28. 22 | 28. 22¾ | E. | S.E. | 45 | |
| 29. 2½ | 29. 3¼ | S.E. | S.S.E. | 22½ | |
| 29. 8 | 29. 10 | S.S.E. | S.E. | | 22½ |
| 29. 17¾ | 29. 19¾ | S.E. | N.E. | | 90 |
| 30. 0¼ | 30. 0½ | N.E. | N.N.E. | | 22½ |
| 30. 7¾ | 30. 9 | N.N.E. | W.S.W. | | 135 |
| 30. 11¼ | 30. 12 | W.S.W. | W.N.W. | 45 | |
| 30. 12¾ | 30. 13¾ | W.N.W. | S.W. | | 67½ |
| 30. 15 | 30. 15¾ | S.W. | S.S.W. | | 22½ |
| 30. 18¾ | 30. 19 | S.S.W. | W.S.W. | 45 | |
| Dec.—*cont.* | | | | | |
| d h | d h | | | | |
| 30. 21¾ | 30. 22½ | W.S.W. | S. | | 67½ |
| 30. 23½ | 30. 23¾ | S. | S.S.E. | | 22½ |
| 31. 5¼ | 31. 7½ | S.S.E. | S.W. | 67½ | |
| 31. 9¼ | 31. 10 | S.W. | S.S.W. | | 22½ |
| 31. 11 | 31. 11½ | S.S.W. | S.W. | 22½ | |
| 31. 18½ | 31. 20 | S.W. | W.S.W. | 22½ | |
| 31. 22½ | 31. 23 | W.S.W. | W. | 22½ | |
| | | | Sums | 2542½ | 2407½ |

## Excess of Motion in each Month.

| 1908. | Direct. | Retrograde. |
|---|---|---|
| | ° | ° |
| January | 247½ | |
| February | 67½ | |
| March | 1350 | |
| April | 292½ | |
| May | 292½ | |
| June | 1395 | |
| July | 652½ | |
| August | 1687½ | |
| September | | 112½ |
| October | 1102½ | |
| November | | 45 |
| December | 135 | |

The whole excess of direct motion for the year was 7065°.

MEAN HOURLY MEASURES of the HORIZONTAL MOVEMENT of the AIR in each MONTH, and GREATEST and LEAST HOURLY MEASURES, as derived from the RECORDS of ROBINSON'S ANEMOMETER.

| Hour ending | 1908. | | | | | | | | | | | | Mean for the Year. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | |
| h | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. | Miles. |
| 1 | 12·3 | 14·8 | 12·5 | 11·7 | 9·2 | 8·8 | 8·1 | 9·8 | 9·5 | 6·6 | 11·2 | 9·3 | 10·3 |
| 2 | 11·8 | 15·4 | 11·5 | 12·0 | 9·5 | 8·5 | 8·5 | 10·2 | 8·7 | 6·0 | 11·0 | 8·7 | 10·2 |
| 3 | 12·0 | 14·1 | 11·7 | 12·1 | 9·7 | 8·5 | 8·0 | 9·5 | 8·9 | 6·0 | 10·3 | 8·9 | 10·0 |
| 4 | 12·8 | 14·0 | 11·7 | 11·5 | 9·5 | 8·6 | 8·2 | 9·7 | 8·5 | 6·4 | 10·9 | 9·2 | 10·1 |
| 5 | 12·3 | 13·6 | 11·8 | 11·7 | 9·6 | 8·4 | 8·4 | 9·5 | 8·3 | 6·3 | 9·7 | 9·5 | 9·9 |
| 6 | 13·0 | 13·9 | 11·6 | 11·6 | 9·4 | 8·6 | 7·8 | 9·7 | 8·5 | 6·4 | 10·4 | 9·9 | 10·1 |
| 7 | 12·7 | 13·4 | 12·2 | 12·3 | 10·0 | 8·9 | 8·4 | 10·2 | 8·6 | 7·0 | 10·1 | 10·5 | 10·4 |
| 8 | 13·0 | 12·7 | 11·4 | 13·9 | 10·5 | 9·2 | 8·7 | 10·4 | 9·2 | 6·7 | 10·0 | 10·2 | 10·5 |
| 9 | 13·0 | 13·7 | 12·5 | 15·3 | 11·5 | 9·1 | 9·0 | 11·5 | 9·4 | 6·8 | 10·3 | 10·2 | 11·0 |
| 10 | 13·5 | 14·7 | 14·0 | 15·8 | 12·5 | 10·1 | 10·5 | 11·9 | 11·1 | 7·7 | 11·3 | 10·5 | 12·0 |
| 11 | 13·9 | 15·6 | 13·7 | 16·1 | 13·3 | 10·3 | 11·0 | 11·8 | 11·5 | 8·3 | 12·3 | 10·1 | 12·3 |
| Noon. | 14·7 | 16·4 | 14·0 | 16·2 | 13·5 | 10·7 | 11·6 | 12·3 | 12·6 | 8·7 | 13·1 | 9·9 | 12·8 |
| 13h | 15·4 | 18·1 | 15·0 | 17·3 | 14·1 | 10·7 | 12·4 | 12·6 | 13·0 | 9·0 | 14·4 | 11·3 | 13·6 |
| 14 | 15·6 | 18·6 | 14·6 | 16·3 | 14·4 | 11·4 | 12·3 | 13·8 | 13·5 | 9·4 | 14·1 | 11·3 | 13·8 |
| 15 | 15·4 | 18·2 | 14·0 | 16·8 | 15·0 | 11·8 | 12·8 | 14·3 | 13·5 | 9·1 | 13·6 | 10·4 | 13·7 |
| 16 | 14·9 | 18·1 | 13·8 | 16·5 | 14·4 | 11·9 | 12·9 | 14·0 | 13·0 | 9·2 | 12·3 | 10·2 | 13·4 |
| 17 | 15·3 | 17·2 | 13·5 | 15·4 | 14·1 | 12·2 | 12·4 | 13·7 | 12·5 | 8·4 | 11·9 | 10·4 | 13·1 |
| 18 | 14·5 | 16·6 | 12·2 | 14·5 | 13·9 | 11·4 | 12·2 | 12·8 | 10·9 | 8·3 | 11·5 | 9·8 | 12·4 |
| 19 | 14·2 | 16·2 | 11·2 | 13·1 | 13·1 | 11·5 | 11·5 | 12·2 | 10·6 | 8·1 | 11·7 | 9·8 | 11·9 |
| 20 | 13·6 | 16·2 | 11·5 | 12·5 | 11·7 | 10·6 | 11·4 | 11·4 | 10·0 | 7·6 | 11·9 | 9·1 | 11·5 |
| 21 | 13·7 | 15·9 | 11·9 | 12·7 | 11·4 | 9·6 | 10·6 | 10·7 | 10·5 | 7·3 | 11·2 | 9·5 | 11·2 |
| 22 | 13·6 | 14·3 | 12·5 | 12·9 | 10·6 | 9·7 | 9·7 | 10·1 | 10·5 | 6·3 | 11·0 | 9·4 | 10·9 |
| 23 | 12·9 | 14·9 | 12·1 | 12·5 | 10·0 | 9·1 | 9·3 | 10·3 | 9·3 | 7·0 | 10·8 | 9·6 | 10·7 |
| Midnight. | 12·7 | 15·2 | 12·1 | 12·4 | 9·7 | 8·9 | 8·3 | 10·1 | 8·8 | 6·5 | 11·3 | 10·3 | 10·5 |
| Means..... | 13·6 | 15·5 | 12·6 | 13·9 | 11·7 | 9·9 | 10·2 | 11·4 | 10·5 | 7·5 | 11·5 | 9·9 | 11·5 |
| Greatest Hourly Measures..... | 37 | 43 | 39 | 36 | 30 | 28 | 30 | 33 | 40 | 23 | 43 | 33 | ... |
| Least Hourly Measures..... | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ... |

MEAN ELECTRICAL POTENTIAL of the ATMOSPHERE, from THOMSON'S ELECTROMETER, for each CIVIL DAY.

(Each result is the mean of Twenty-four Hourly Ordinates from the Photographic Register. The scale employed is arbitrary: the sign + indicates positive potential.)

1908.

| Day of Month. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| d 1 | + 542 | +1131 | + 795 | +1029 | + 286 | + 146 | + 480 | + 738 | + 258 | + 114 | + 84 | + 318 |
| 2 | + 510 | +1239 | +1129 | + 636 | + 193 | + 67 | + 540 | + 382 | + 330 | + 123 | + 115 | + 417 |
| 3 | + 841 | + 898 | + 712 | + 652 | + 115 | + 215 | + 592 | + 370 | + 310 | + 97 | + 202 | + 560 |
| 4 | +1118 | +1074 | + 634 | + 877 | + 230 | + 165 | + 535 | + 422 | + 243 | + 135 | + 219 | + 484 |
| 5 | ... | +1074 | + 953 | + 165 | + 269 | + 581 | + 197 | + 482 | + 350 | + 139 | + 248 | + 400 |
| 6 | ... | + 700 | − 96 | + 724 | + 303 | + 869 | + 329 | + 360 | + 189 | + 185 | + 288 | + 256 |
| 7 | + 79 | + 496 | + 909 | + 831 | + 433 | + 725 | + 569 | + 529 | + 229 | + 322 | + 322 | + 436 |
| 8 | + 48 | + 692 | + 459 | + 795 | + 185 | + 508 | + 413 | + 403 | + 228 | + 218 | + 412 | + 337 |
| 9 | + 715 | + 540 | + 446 | + 836 | + 272 | + 627 | + 385 | + 279 | + 148 | + 95 | + 533 | + 410 |
| 10 | +1178 | + 663 | + 663 | + 647 | + 252 | + 450 | + 231 | + 353 | + 366 | + 178 | + 704 | + 211 |
| 11 | +1307 | + 731 | + 970 | + 358 | + 180 | + 385 | + 255 | + 718 | + 371 | + 185 | + 165 | + 611 |
| 12 | +1227 | + 599 | + 998 | + 483 | + 439 | + 512 | + 314 | + 929 | + 371 | + 180 | + 176 | + 793 |
| 13 | +1059 | + 746 | + 945 | + 709 | + 434 | + 478 | + 178 | + 776 | + 365 | + 168 | + 223 | + 211 |
| 14 | + 646 | + 649 | + 657 | + 883 | + 220 | + 305 | + 305 | + 760 | + 347 | + 175 | + 178 | + 124 |
| 15 | + 362 | + 414 | + 761 | + 825 | + 198 | + 255 | + 417 | + 440 | + 201 | + 155 | + 73 | + 209 |
| 16 | + 129 | + 782 | + 532 | + 670 | + 326 | + 268 | + 160 | + 382 | + 384 | + 132 | + 186 | + 221 |
| 17 | + 175 | + 283 | +1032 | + 591 | + 187 | + 295 | + 267 | + 550 | + 235 | + 44 | + 452 | + 153 |
| 18 | + 440 | + 515 | + 918 | + 697 | + 301 | + 509 | + 196 | + 602 | + 268 | + 51 | + 441 | + 531 |
| 19 | + 495 | + 660 | +1026 | + 587 | + 317 | + 883 | + 179 | + 503 | + 183 | + 62 | + 441 | + 456 |
| 20 | + 613 | + 443 | + 936 | + 962 | + 231 | + 589 | + 276 | + 221 | + 96 | + 175 | + 577 | + 140 |
| 21 | +1128 | + 373 | + 692 | + 906 | + 470 | + 438 | + 235 | + 207 | + 215 | + 265 | + 477 | + 147 |
| 22 | + 600 | + 294 | − 91 | + 614 | + 510 | + 801 | + 214 | + 217 | + 395 | + 386 | + 166 | + 357 |
| 23 | + 617 | + 535 | + 741 | + 158 | + 607 | + 705 | + 343 | + 261 | + 177 | + 511 | + 535 | + 473 |
| 24 | + 720 | + 627 | + 756 | + 939 | + 273 | + 635 | + 229 | + 245 | + 147 | + 622 | + 446 | + 444 |
| 25 | + 808 | + 745 | − 283 | + 500 | + 425 | + 577 | + 202 | + 264 | + 188 | + 627 | + 520 | + 380 |
| 26 | + 230 | + 655 | + 407 | + 565 | + 502 | + 486 | + 216 | + 238 | + 272 | + 177 | + 387 | + 347 |
| 27 | + 143 | + 738 | + 621 | + 525 | + 408 | + 373 | + 426 | + 196 | + 222 | + 119 | + 360 | + 372 |
| 28 | + 507 | + 782 | + 700 | + 230 | + 373 | + 299 | + 438 | + 197 | + 107 | + 87 | + 222 | + 759 |
| 29 | +1055 | +1230 | + 479 | + 624 | + 359 | + 355 | + 504 | + 298 | + 55 | + 54 | + 138 | ... |
| 30 | +1034 | | + 392 | + 316 | + 164 | + 406 | + 462 | + 234 | + 83 | + 89 | + 162 | ... |
| 31 | + 921 | | + 754 | | + 162 | | + 548 | + 215 | | + 59 | | ... |
| Means | + 664 | + 700 | + 663 | + 644 | + 310 | + 464 | + 343 | + 412 | + 244 | + 191 | + 315 | + 377 |

MONTHLY MEAN ELECTRICAL POTENTIAL of the ATMOSPHERE, from THOMSON'S ELECTROMETER, at every HOUR of the DAY.

(The results depend on the Photographic Register, using all days of complete record. The scale employed is arbitrary: the sign + indicates positive potential.)

| Hour, Greenwich Civil Time. | 1908. | | | | | | | | | | | | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | |
| Midnight. | + 627 | + 766 | + 687 | + 701 | + 320 | + 460 | + 402 | + 440 | + 252 | + 212 | + 300 | + 348 | + 460 |
| 1h | + 599 | + 685 | + 595 | + 686 | + 308 | + 407 | + 275 | + 400 | + 227 | + 194 | + 275 | + 311 | + 413 |
| 2 | + 564 | + 618 | + 537 | + 640 | + 277 | + 392 | + 319 | + 364 | + 206 | + 185 | + 257 | + 270 | + 386 |
| 3 | + 533 | + 563 | + 501 | + 604 | + 237 | + 388 | + 348 | + 343 | + 192 | + 181 | + 237 | + 254 | + 365 |
| 4 | + 538 | + 534 | + 480 | + 556 | + 241 | + 406 | + 297 | + 330 | + 173 | + 166 | + 225 | + 244 | + 349 |
| 5 | + 532 | + 560 | + 489 | + 568 | + 280 | + 438 | + 273 | + 340 | + 164 | + 165 | + 216 | + 247 | + 356 |
| 6 | + 518 | + 593 | + 536 | + 646 | + 322 | + 449 | + 307 | + 365 | + 175 | + 157 | + 224 | + 253 | + 379 |
| 7 | + 547 | + 604 | + 603 | + 698 | + 353 | + 458 | + 323 | + 398 | + 199 | + 161 | + 233 | + 248 | + 402 |
| 8 | + 551 | + 615 | + 708 | + 717 | + 375 | + 466 | + 334 | + 399 | + 225 | + 163 | + 231 | + 271 | + 421 |
| 9 | + 616 | + 684 | + 775 | + 748 | + 371 | + 493 | + 356 | + 442 | + 256 | + 151 | + 279 | + 343 | + 459 |
| 10 | + 715 | + 785 | + 799 | + 767 | + 352 | + 530 | + 452 | + 505 | + 281 | + 182 | + 350 | + 405 | + 510 |
| 11 | + 760 | + 835 | + 807 | + 700 | + 316 | + 529 | + 374 | + 495 | + 274 | + 185 | + 348 | + 450 | + 506 |
| Noon. | + 722 | + 745 | + 765 | + 557 | + 264 | + 477 | + 298 | + 441 | + 256 | + 174 | + 322 | + 418 | + 453 |
| 13h | + 708 | + 699 | + 701 | + 495 | + 223 | + 459 | + 291 | + 375 | + 256 | + 171 | + 316 | + 423 | + 426 |
| 14 | + 659 | + 652 | + 731 | + 523 | + 227 | + 442 | + 307 | + 304 | + 250 | + 155 | + 319 | + 410 | + 415 |
| 15 | + 714 | + 706 | + 718 | + 543 | + 258 | + 423 | + 309 | + 329 | + 227 | + 164 | + 339 | + 416 | + 429 |
| 16 | + 777 | + 700 | + 669 | + 599 | + 314 | + 409 | + 286 | + 390 | + 243 | + 185 | + 381 | + 446 | + 450 |
| 17 | + 780 | + 696 | + 657 | + 616 | + 348 | + 446 | + 361 | + 432 | + 281 | + 208 | + 412 | + 471 | + 476 |
| 18 | + 778 | + 748 | + 704 | + 635 | + 359 | + 469 | + 353 | + 429 | + 294 | + 224 | + 424 | + 496 | + 493 |
| 19 | + 754 | + 779 | + 722 | + 666 | + 373 | + 480 | + 346 | + 452 | + 313 | + 234 | + 413 | + 517 | + 504 |
| 20 | + 737 | + 781 | + 696 | + 665 | + 335 | + 497 | + 379 | + 464 | + 302 | + 239 | + 385 | + 504 | + 499 |
| 21 | + 736 | + 821 | + 727 | + 680 | + 306 | + 537 | + 420 | + 498 | + 281 | + 252 | + 369 | + 459 | + 507 |
| 22 | + 746 | + 807 | + 629 | + 696 | + 338 | + 556 | + 399 | + 494 | + 272 | + 250 | + 364 | + 429 | + 498 |
| 23 | + 718 | + 829 | + 672 | + 762 | + 354 | + 534 | + 425 | + 456 | + 267 | + 233 | + 342 | + 418 | + 501 |
| 24 | + 665 | + 779 | + 678 | + 682 | + 315 | + 470 | + 407 | + 424 | + 251 | + 212 | + 304 | + 371 | + 463 |
| Means 0h.–23h. | + 664 | + 700 | + 663 | + 644 | + 310 | + 464 | + 343 | + 412 | + 244 | + 191 | + 315 | + 377 | + 444 |
| Means 1h.–24h. | + 665 | + 701 | + 662 | + 644 | + 310 | + 465 | + 343 | + 411 | + 244 | + 191 | + 315 | + 378 | + 444 |
| Number of Days employed. | 29 | 29 | 31 | 30 | 31 | 30 | 31 | 31 | 30 | 31 | 30 | 28 | ... |

MONTHLY MEAN ELECTRICAL POTENTIAL of the ATMOSPHERE, from THOMSON'S ELECTROMETER, on RAINY DAYS, at every HOUR of the DAY.

(The results depend on the Photographic Register, using all days on which the rainfall amounted to or exceeded 0$^{in}$·020. The scale employed is arbitrary: the sign + indicates positive potential.)

| Hour, Greenwich Civil Time. | 1908. | | | | | | | | | | | | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | |
| Midnight. | + 394 | + 747 | + 579 | + 673 | + 353 | + 267 | + 453 | + 404 | + 302 | + 193 | + 276 | + 328 | + 414 |
| 1$^h$ | + 340 | + 658 | + 409 | + 671 | + 357 | + 140 | + 95 | + 357 | + 269 | + 126 | + 222 | + 278 | + 327 |
| 2 | + 276 | + 595 | + 350 | + 590 | + 299 | + 150 | + 272 | + 296 | + 238 | + 102 | + 198 | + 223 | + 299 |
| 3 | + 194 | + 500 | + 316 | + 551 | + 207 | + 218 | + 380 | + 244 | + 208 | + 115 | + 167 | + 198 | + 275 |
| 4 | + 162 | + 430 | + 272 | + 428 | + 196 | + 252 | + 262 | + 208 | + 183 | + 91 | + 141 | + 183 | + 234 |
| 5 | + 292 | + 457 | + 268 | + 444 | + 294 | + 252 | + 191 | + 203 | + 179 | + 65 | + 154 | + 194 | + 249 |
| 6 | + 192 | + 518 | + 274 | + 578 | + 367 | + 233 | + 220 | + 207 | + 178 | + 36 | + 219 | + 199 | + 268 |
| 7 | + 340 | + 577 | + 328 | + 600 | + 409 | + 168 | + 235 | + 249 | + 217 | + 44 | + 248 | + 183 | + 300 |
| 8 | + 362 | + 554 | + 451 | + 578 | + 406 | + 210 | + 277 | + 270 | + 231 | + 78 | + 244 | + 194 | + 321 |
| 9 | + 424 | + 550 | + 538 | + 612 | + 345 | + 235 | + 265 | + 343 | + 246 | + 81 | + 337 | + 285 | + 355 |
| 10 | + 504 | + 624 | + 563 | + 660 | + 263 | + 298 | + 442 | + 407 | + 259 | + 124 | + 440 | + 363 | + 412 |
| 11 | + 518 | + 682 | + 609 | + 587 | + 226 | + 313 | + 283 | + 347 | + 257 | + 131 | + 450 | + 403 | + 400 |
| Noon. | + 476 | + 591 | + 617 | + 383 | + 172 | + 157 | + 188 | + 336 | + 241 | + 109 | + 453 | + 360 | + 340 |
| 13$^h$ | + 594 | + 500 | + 586 | + 286 | + 118 | + 243 | + 242 | + 259 | + 274 | + 117 | + 464 | + 381 | + 339 |
| 14 | + 426 | + 419 | + 619 | + 357 | + 116 | + 280 | + 370 | + 104 | + 274 | + 58 | + 487 | + 376 | + 324 |
| 15 | + 446 | + 514 | + 604 | + 408 | + 196 | + 285 | + 351 | + 184 | + 220 | + 61 | + 521 | + 363 | + 346 |
| 16 | + 546 | + 359 | + 582 | + 556 | + 331 | + 228 | + 240 | + 303 | + 230 | + 121 | + 556 | + 371 | + 369 |
| 17 | + 522 | + 309 | + 536 | + 598 | + 320 | + 255 | + 425 | + 327 | + 318 | + 144 | + 574 | + 372 | + 392 |
| 18 | + 446 | + 472 | + 607 | + 632 | + 343 | + 313 | + 329 | + 293 | + 357 | + 134 | + 548 | + 401 | + 406 |
| 19 | + 322 | + 588 | + 596 | + 596 | + 361 | + 325 | + 267 | + 357 | + 383 | + 170 | + 497 | + 442 | + 409 |
| 20 | + 338 | + 639 | + 506 | + 515 | + 324 | + 290 | + 332 | + 382 | + 342 | + 210 | + 416 | + 443 | + 395 |
| 21 | + 336 | + 735 | + 596 | + 548 | + 285 | + 370 | + 391 | + 451 | + 302 | + 251 | + 363 | + 391 | + 418 |
| 22 | + 358 | + 712 | + 435 | + 605 | + 333 | + 412 | + 326 | + 428 | + 299 | + 271 | + 369 | + 376 | + 410 |
| 23 | + 304 | + 772 | + 529 | + 745 | + 336 | + 377 | + 326 | + 363 | + 314 | + 243 | + 380 | + 362 | + 421 |
| 24 | + 410 | + 724 | + 559 | + 641 | + 269 | + 237 | + 296 | + 339 | + 313 | + 231 | + 357 | + 301 | + 390 |
| Means { 0$^h$.–23$^h$. | + 380 | + 563 | + 490 | + 550 | + 290 | + 261 | + 298 | + 305 | + 263 | + 128 | + 363 | + 320 | + 351 |
| Means { 1$^h$.–24$^h$. | + 380 | + 562 | + 490 | + 549 | + 286 | + 260 | + 292 | + 302 | + 264 | + 130 | + 367 | + 318 | + 350 |
| Number of Days employed. | 5 | 11 | 16 | 13 | 11 | 6 | 10 | 12 | 9 | 8 | 8 | 12 | ... |

MONTHLY MEAN ELECTRICAL POTENTIAL of the ATMOSPHERE, from THOMSON'S ELECTROMETER, on NON-RAINY DAYS, at every HOUR of the DAY.

(The results depend on the Photographic Register, using only those days on which no rainfall was recorded. The scale employed is arbitrary: the sign + indicates positive potential.)

| Hour, Greenwich Civil Time. | 1908. | | | | | | | | | | | | Yearly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | |
| Midnight. | + 738 | + 756 | + 811 | + 750 | + 313 | + 500 | + 387 | + 521 | + 224 | + 196 | + 279 | + 345 | + 485 |
| 1h | + 703 | + 695 | + 775 | + 705 | + 299 | + 471 | + 372 | + 487 | + 202 | + 201 | + 263 | + 325 | + 458 |
| 2 | + 675 | + 623 | + 708 | + 665 | + 288 | + 444 | + 358 | + 463 | + 183 | + 198 | + 251 | + 292 | + 429 |
| 3 | + 657 | + 594 | + 686 | + 643 | + 280 | + 430 | + 352 | + 469 | + 177 | + 196 | + 233 | + 289 | + 417 |
| 4 | + 685 | + 584 | + 694 | + 677 | + 283 | + 438 | + 334 | + 471 | + 158 | + 184 | + 228 | + 296 | + 419 |
| 5 | + 640 | + 592 | + 699 | + 676 | + 277 | + 476 | + 330 | + 485 | + 141 | + 194 | + 206 | + 294 | + 418 |
| 6 | + 635 | + 596 | + 807 | + 705 | + 304 | + 494 | + 365 | + 529 | + 161 | + 194 | + 206 | + 309 | + 442 |
| 7 | + 636 | + 575 | + 889 | + 795 | + 329 | + 517 | + 384 | + 559 | + 183 | + 193 | + 203 | + 311 | + 464 |
| 8 | + 627 | + 605 | + 987 | + 867 | + 358 | + 512 | + 381 | + 543 | + 209 | + 185 | + 199 | + 336 | + 484 |
| 9 | + 679 | + 736 | +1032 | + 883 | + 377 | + 539 | + 418 | + 560 | + 251 | + 168 | + 220 | + 395 | + 522 |
| 10 | + 781 | + 864 | +1063 | + 878 | + 399 | + 569 | + 477 | + 623 | + 269 | + 195 | + 269 | + 446 | + 569 |
| 11 | + 835 | + 901 | +1014 | + 822 | + 369 | + 567 | + 441 | + 655 | + 259 | + 193 | + 263 | + 495 | + 568 |
| Noon. | + 790 | + 819 | + 894 | + 690 | + 316 | + 540 | + 364 | + 563 | + 237 | + 178 | + 235 | + 469 | + 508 |
| 13h | + 739 | + 806 | + 810 | + 636 | + 284 | + 492 | + 326 | + 499 | + 229 | + 166 | + 236 | + 461 | + 474 |
| 14 | + 723 | + 771 | + 831 | + 605 | + 291 | + 465 | + 300 | + 465 | + 231 | + 151 | + 237 | + 433 | + 459 |
| 15 | + 791 | + 795 | + 816 | + 614 | + 312 | + 440 | + 301 | + 463 | + 233 | + 156 | + 248 | + 456 | + 469 |
| 16 | + 853 | + 901 | + 772 | + 611 | + 328 | + 437 | + 315 | + 488 | + 241 | + 156 | + 286 | + 516 | + 492 |
| 17 | + 863 | + 926 | + 811 | + 626 | + 345 | + 469 | + 341 | + 547 | + 244 | + 172 | + 309 | + 565 | + 518 |
| 18 | + 875 | + 921 | + 811 | + 653 | + 357 | + 484 | + 387 | + 563 | + 242 | + 193 | + 332 | + 591 | + 534 |
| 19 | + 866 | + 891 | + 869 | + 704 | + 364 | + 499 | + 409 | + 568 | + 259 | + 193 | + 338 | + 594 | + 546 |
| 20 | + 845 | + 855 | + 921 | + 753 | + 359 | + 528 | + 427 | + 563 | + 266 | + 190 | + 327 | + 566 | + 550 |
| 21 | + 843 | + 858 | + 873 | + 786 | + 337 | + 561 | + 464 | + 576 | + 256 | + 204 | + 318 | + 513 | + 549 |
| 22 | + 855 | + 852 | + 830 | + 763 | + 334 | + 572 | + 461 | + 590 | + 253 | + 209 | + 311 | + 469 | + 542 |
| 23 | + 835 | + 860 | + 839 | + 741 | + 351 | + 552 | + 514 | + 558 | + 244 | + 203 | + 297 | + 458 | + 538 |
| 24 | + 745 | + 803 | + 845 | + 654 | + 331 | + 507 | + 505 | + 525 | + 220 | + 179 | + 268 | + 425 | + 501 |
| Means 0h.–23h. | + 757 | + 766 | + 843 | + 719 | + 327 | + 500 | + 384 | + 534 | + 223 | + 186 | + 262 | + 426 | + 494 |
| Means 1h.–24h. | + 757 | + 768 | + 845 | + 715 | + 328 | + 500 | + 389 | + 534 | + 223 | + 185 | + 262 | + 429 | + 495 |
| Number of Days employed. | 19 | 14 | 10 | 11 | 15 | 23 | 17 | 15 | 16 | 19 | 18 | 12 | ... |

## AMOUNT of RAIN COLLECTED in each MONTH of the YEAR 1908.

| MONTH, 1908. | Number of Rainy Days. | Monthly Amount of Rain collected in each Gauge. | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Self-registering Gauge of Osler's Anemometer. | Second Gauge at Osler's Anemometer. | On the roof of the Octagon Room. | On the roof of the Magnetic Observatory. | On the roof of the Photographic Thermometer Shed. | Gauges partly sunk in the ground. | | |
| | | | | | | | In Magnetic Pavilion Enclosure. | In Observatory Grounds. | In Magnetic Pavilion Enclosure. |
| | | No. 1. | No. 2. | No. 3. | No. 4. | No. 5. | No. 6. | No. 7. | No. 8. |
| | | in. | in. | in. | in. | in. | in. | in. | in. |
| January | 9 | 0·403 | 0·416 | 0·694 | 0·807 | 1·015 | 1·508 | 1·101 | 1·515 |
| February | 13 | 0·525 | 0·526 | 0·910 | 1·091 | 1·342 | 1·459 | 1·404 | 1·462 |
| March | 17 | 1·106 | 1·240 | 1·679 | 1·789 | 2·058 | 2·223 | 2·102 | 2·186 |
| April | 15 | 0·918 | 1·132 | 1·540 | 1·732 | 2·120 | 2·103 | 1·996 | 2·046 |
| May | 15 | 0·831 | 1·027 | 1·285 | 1·340 | 1·445 | 1·527 | 1·455 | 1·499 |
| June | 6 | 1·718 | 1·984 | 2·024 | 2·012 | 2·051 | 2·066 | 2·066 | 2·061 |
| July | 12 | 2·616 | 2·772 | 3·278 | 3·544 | 3·648 | 3·664 | 3·691 | 3·614 |
| August | 14 | 2·026 | 2·249 | 2·637 | 3·076 | 3·260 | 3·283 | 3·251 | 3·229 |
| September | 12 | 0·701 | 0·845 | 1·037 | 1·161 | 1·222 | 1·219 | 1·176 | 1·186 |
| October | 10 | 1·434 | 1·667 | 1·818 | 1·939 | 2·015 | 1·965 | 1·908 | 1·907 |
| November | 12 | 0·348 | 0·377 | 0·613 | 0·592 | 0·717 | 0·764 | 0·740 | 0·752 |
| December | 15 | 1·138 | 1·298 | 1·572 | 1·758 | 1·889 | 2·003 | 1·848 | 1·964 |
| Sums | 150 | 13·764 | 15·533 | 19·087 | 20·841 | 22·782 | 23·784 | 22·738 | 23·421 |
| Height of receiving Surface above the ground | ... | ft. in. 50. 8 | ft. in. 50. 8 | ft. in. 38. 4 | ft. in. 21. 6 | ft. in. 10. 0 | ft. in. 0. 5 | ft. in. 0. 5 | ft. in. 1. 0 |
| Height of receiving Surface above mean sea level | ... | ft. in. 205. 6 | ft. in. 205. 6 | ft. in. 193. 2 | ft. in. 176. 4 | ft. in. 164. 10 | ft. in. 149. 6 | ft. in. 155. 3 | ft. in. 150·1 |

A new gauge (No. 8) of Meteorological Office (improved Snowdon) pattern, was brought into use on 1908 January 1. It was placed in the Magnetic Pavilion Enclosure to the S.W. by W. of the Standard Gauge (No. 6), with a clear space of six feet between the exterior rims.

ROYAL OBSERVATORY, GREENWICH.

# OBSERVATIONS

OF

# LUMINOUS METEORS.

# 1908.

| Month and Day, 1908. | Greenwich Civil Time. | Observer. | Brightness of Meteor in Star Magnitudes. | Colour of Meteor. | Duration of Meteor in Seconds of Time. | Appearance and Duration of Train. | Length of Meteor's Path in Degrees. | Path of Meteor in the Sky. |
|---|---|---|---|---|---|---|---|---|
| | h m s | | | | s | | ° | ° ° to ° ° |
| April 20 | 22. 37. 12 | K & L | 3 | Yellow | 0·4 | None | 13 | 183 + 46 to 170 + 46 |
| „ | 22. 59. 47 | L | 4 | White | 0·3 | Bright | 9 | 273 + 39 to 274 + 48 |
| „ | 23. 12. 54 | L | 2 | Yellow | 1·0 | Bright | 27 | 235 + 68 to 308 + 67 |
| May 17 | 21. 43. | AC | ♀ × 3 | Bluish-white | ... | ... | ... | 170 + 64 to 8 + 56 |
| June 28 | 21. 50. | AC | ♀ | ... | ... | None | 43 | 330 + 45 to 306 + 2 |
| July 29 | 21. 7. | WB | ♀ | White | ... | 2 secs. | ... | 6 + 59 to 285 + 45 |
| July 30 | 21. 40. | K | 2 | Yellow | 0·5 | None | 11 | 40 + 56 to 51 + 55 |
| August 10 | 22. 47. 42 | L | 3 | White | 0·5 | None | 8 | 235 + 45 to 234 + 37 |
| „ | 23. 12. 7 | K & T | 3 | Yellow | 0·2 | Slight | 10 | 325 + 49 to 312 + 45 |
| „ | 23. 12. 34 | E | 1 | Yellowish | 0·5 | Bright | 7 | 46 + 42 to 42 + 35 |
| „ | 23. 23. 22 | T | 1 | Yellow | 0·7 | Long : bright | 8 | 30 + 76 to 357 + 77 |
| „ | 23. 37. 30 | E & L | >1 | Yellow | 0·6 | None | 30 | 225 + 85 to 213 + 55 |
| „ | 23. 45. 39 | E | 2 | Yellow | 0·5 | Slight | 6 | 43 + 48 to 42 + 42 |
| „ | 23. 51. 43 | K | 3 | Yellow | 0·5 | None | 12 | 302 + 47 to 300 + 35 |
| „ | 23. 52. 33 | E | 3 | White | 0·5 | Slight | 10 | 24 + 65 to 24 + 75 |
| August 11 | 0. 2. 50 | K | 4 | Yellow | 0·2 | None | 15 | 348 + 47 to 353 + 32 |
| „ | 0. 20. 29 | L | 3 | White | 0·3 | None | 7 | 20 + 68 to 27 + 62 |
| „ | 0. 25. 10 | L | 1 | Yellow | 0·5 | None | 15 | 105 + 75 to 165 + 75 |
| „ | 0. 39. 42 | L | 3 | White | 0·4 | Slight | 5 | 321 + 44 to 325 + 48 |
| „ | 0. 49. 10 | L | 1 | Yellow | 0·6 | None | 13 | 261 + 33 to 264 + 46 |
| „ | 0. 53. 18 | L | 1 | Yellow | 0·8 | None | 23 | 279 + 64 to 295 + 43 |
| „ | 0. 57. 47 | E & K | >1 | Yellow | 0·4 | Slight | 18 | 353 + 46 to 339 + 31 |
| „ | 1. 32. 18 | L | 2 | White | 0·3 | None | 7 | 40 + 53 to 30 + 50 |
| „ | 1. 32. 45 | T | 4 | Yellow | 0·5 | None | 4 | 225 + 77 to 223 + 73 |
| „ | 1. 34. 0 | L | 3 | White | 0·3 | None | 10 | 5 + 23 to 355 + 18 |
| „ | 1. 35. 33 | L | 2 | Yellow | 0·5 | None | 5 | 344 + 20 to 338 + 20 |
| „ | 1. 49. 35 | K | 4 | Yellow | 0·2 | None | 12 | 210 + 72 to 225 + 63 |
| „ | 1. 54. 55 | T | 1 | Yellow | 1·0 | Bright | 20 | 351 + 54 to 323 + 45 |
| „ | 1. 58. 50 | L | 1 | Yellow | 0·5 | Short : bright | 13 | 96 + 65 to 123 + 74 |
| „ | 2. 10. 43 | L | 1 | Yellow | 0·4 | None | 6 | 72 + 31 to 80 + 28 |
| „ | 2. 11. 54 | H | 4 | White | 0·2 | None | 9 | 17 + 48 to 9 + 56 |
| „ | 2. 41. 31 | L & T | 1 | Yellow | 0·5 | None | 6 | 14 − 6 to 9 − 10 |
| „ | 2. 43. 42 | H, K, L & T | ♀ | White | 0·8 | Very bright | 20 | 29 + 2 to 29 − 18 |
| „ | 2. 51. 54 | K & L | >1 | Yellow | 0·5 | Slight | 7 | 240 + 78 to 218 + 76 |
| „ | 2. 56. 1 | L | 1 | Bluish | 0·6 | Long : 1½ secs. | 25 | 319 + 66 to 303 + 43 |
| „ | 3. 2. 35 | L | 2 | Yellow | 0·4 | None | 11 | 130 + 71 to 165 + 74 |
| „ | 3. 17. 53 | T & L | 3 | Blue | 0·5 | None | 15 | 0 + 28 to 15 + 35 |
| „ | 3. 22. 16 | K | 3 | Yellow | 0·5 | None | 15 | + 90 to 140 + 75 |
| „ | 22. 22. 43 | L & T | 2 | White | 0·4 | None | 10 | 243 + 63 to 222 + 69 |
| „ | 22. 31. 40 | L | 1 | Yellow | 1·0 | Short : bright | 28 | 262 + 35 to 244 + 14 |
| „ | 22. 46. 15 | T | 3 | Yellow | 1·0 | None | 22 | 280 + 46 to 265 + 28 |
| „ | 23. 1. 48 | L | 3 | Bluish-white | 0·2 | None | 7 | 165 + 82 to 183 + 76 |
| „ | 23. 5. 23 | T | 1 | White | 0·5 | Long : bright | 24 | 27 + 63 to 354 + 87 |
| „ | 23. 6. 22 | L & T | 1 | Yellow | 0·5 | Long : bright | 7 | 21 + 44 to 22 + 37 |
| „ | 23. 15. 29 | L | 2 | Red | 0·4 | None | 10 | 252 + 64 to 259 + 54 |
| „ | 23. 18. 47 | T | 1 | White | 0·5 | None | 8 | 345 + 72 to 316 + 75 |

The time is expressed in civil reckoning, commencing at midnight and counting from $0^h$. to $24^h$.

| Month and Day, 1908. | Greenwich Civil Time. | Observer. | Brightness of Meteor in Star Magnitudes. | Colour of Meteor. | Duration of Meteor in Seconds of Time. | Appearance and Duration of Train. | Length of Meteor's Path in Degrees. | Path of Meteor in the Sky. |
|---|---|---|---|---|---|---|---|---|
| | h m s | | | | s | | ° | ° ° ° ° |
| August 11 | 23. 22. 47 | T | 4 | Yellow | 0·5 | None | 21 | 261 + 74 to 264 + 53 |
| ,, | 23. 38. 4 | L | 2 | White | 0·4 | None | 11 | 172 + 67 to 198 + 62 |
| ,, | 23. 39. 55 | E & T | 2 | White | 0·5 | Slight | 8 | 355 + 57 to 3 + 51 |
| ,, | 23. 42. 46 | L | 1 | White | 0·4 | Bright | 9 | 30 + 77 to 48 + 86 |
| ,, | 23. 56. 7 | L | 1 | Yellow | 0·3 | Short : bright | 7 | 267 + 49 to 264 + 56 |
| August 12 | 0. 8. 17 | L & T | 2 | Reddish | 0·4 | None | 19 | 234 + 83 to 231 + 64 |
| ,, | 0. 19. 19 | K | 2 | Red | 0·5 | Slight | 20 | 297 + 45 to 285 + 30 |
| ,, | 0. 22. 44 | E & L | 2 | White | 0·5 | Slight | 23 | 0 + 87 to 232 + 70 |
| ,, | 0. 27. 58 | L | 2 | Yellow | 0·3 | None | 20 | 70 + 78 to 117 + 66 |
| ,, | 0. 37. 27 | L | 2 | White | 0·4 | Slight | 11 | 168 + 78 to 192 + 69 |
| ,, | 0. 44. 6 | L | 3 | Bluish | 0·4 | None | 20 | 322 + 60 to 291 + 48 |
| ,, | 0. 45. 21 | E | 1 | White | 0·5 | Slight | 13 | 37 + 35 to 36 + 23 |
| ,, | 0. 48. 25 | L | 2 | White | 0·4 | None | 20 | 330 + 62 to 300 + 50 |
| ,, | 0. 49. 44 | K & T | 3 | Yellow | 0·5 | None | 20 | 0 + 58 to 320 + 62 |
| ,, | 0. 50. 9 | E & T | 2 | White | 0·3 | 1 sec. | 8 | 22 + 38 to 15 + 34 |
| ,, | 1. 29. 27 | K | 3 | Yellow | 0·5 | None | 18 | 315 + 58 to 295 + 45 |
| ,, | 1. 36. 42 | T | 3 | White | 0·3 | None | 12 | 354 + 24 to 345 + 15 |
| ,, | 1. 37. 20 | T | 3 | White | 0·5 | None | 12 | 28 + 42 to 16 + 34 |
| ,, | 1. 48. 46 | L | 2 | Orange | 0·3 | Slight | 15 | 73 + 42 to 79 + 28 |
| ,, | 1. 55. 32 | L | 2 | White | 0·4 | None | 9 | 22 + 38 to 15 + 32 |
| ,, | 1. 57. 3 | T | 3 | White | 1·0 | None | 33 | 304 + 40 to 264 + 15 |
| ,, | 2. 6. 2 | L | 3 | White | 0·3 | None | 7 | 76 + 57 to 90 + 57 |
| ,, | 2. 14. 40 | T | 2 | Yellow | 0·5 | Faint | 8 | 49 + 46 to 48 + 38 |
| ,, | 2. 20. 14 | L & T | 2 | White | 0·5 | None | 8 | 57 + 50 to 69 + 47 |
| ,, | 2. 23. 3 | T | 3 | White | 0·5 | None | 5 | 303 + 48 to 307 + 44 |
| ,, | 2. 38. 38 | L & T | 1 | White | 0·4 | None | 7 | 79 + 28 to 82 + 21 |
| ,, | 2. 40. 52 | T | 1 | White | 0·5 | Bright : $\frac{1}{2}$ sec. | 13 | 4 + 56 to 16 + 46 |
| ,, | 2. 58. 40 | T | 4 | Yellowish | 0·5 | None | 5 | 135 + 87 to 48 + 86 |
| ,, | 3. 2. 5 | K | 3 | Yellow | 0·5 | None | 6 | 310 + 43 to 307 + 37 |
| ,, | 3. 5. 24 | L | 2 | Yellow | 0·5 | None | 20 | 0 + 28 to 342 + 15 |
| ,, | 3. 7. 33 | T | 1 | White | 0·3 | None | 19 | 21 + 14 to 3 + 8 |
| ,, | 3. 11. 26 | K & T | 2 | White | 0·3 | None | 19 | 12 + 28 to 6 + 10 |
| ,, | 3. 18. 57 | T | 2 | White | 0·2 | None | 11 | 4 + 27 to 357 + 18 |

The time is expressed in civil reckoning, commencing at midnight and counting from $0^{h.}$ to $24^{h.}$