RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH,

IN THE YEAR

1917.

UNDER THE DIRECTION OF

SIR FRANK DYSON, M.A., LL.D., F.R.S.,
ASTRONOMER ROYAL.

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ERRATA.

RESULTS OF METEOROLOGICAL OBSERVATIONS, 1915.

p. E 55 (upper), Col. 13,	January	*for*	85	*read*	85·2.
	February	,,	82	,,	82·0.
	March	,,	80	,,	79·5.
	April	,,	73	,,	72·5.
	May	,,	73	,,	72·8.
	June	,,	72	,,	72·4.
	July	,,	76	,,	76·0.
	August	,,	78	,,	78·2.
	September	,,	76	,,	75·7.
	October	,,	85	,,	85·5.
	November	,,	85	,,	84·7.
	December	,,	86	,,	86·0.
	Mean	,,	79·3	,,	79·2.
p. E 57 (upper), Col. 12	Means	,,	37·4	,,	37·5.
Col. 13	Means	,,	42·3	,,	42·4.
Col. 14	Mean 1^h & 4^h	,,	46·1	,,	46·2.
(lower) Col. 12	Means	,,	35·0	,,	35·2.

RESULTS OF METEOROLOGICAL OBSERVATIONS, 1916.

p. E 55, July 21, Col. 4, *for* WE *read* NE.
p. E 58, Sept. 19, Col. 18, *for* 0·087 *read* 0·097.
p. E 62, Nov. 20, Col. 18, *for* 0·239 *read* 0·282.
p. E 69 (lower), Col. 4, Means *for* 35·3 *read* 35·4.

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pp. E 8 to E 19 at the head of every Column *for* ′ *read* γ.
p. E 17, August 22, Col. 21, *for* 259 *read* 359.
p. E 31, l. 8 insert 3′, 5′.
l. 9 insert 7′, 4′.
last line *for* N.F. *read* V.F.

GREENWICH MAGNETICAL AND METEOROLOGICAL OBSERVATIONS, 1917.

INTRODUCTION.

In the present volume a brief account is given of the instruments and methods of reduction now in use. Fuller information, principally of a historical nature, may be found in the Introductions to the volumes for 1909 and previous years.

§ 1. *Personal Establishment and Arrangements.*

During the year 1917 the personal establishment in the Magnetical and Meteorological Department of the Royal Observatory consisted of Walter William Bryant, Superintendent, aided generally by four Computers. The Computers employed during the year were:—S. W. Palmer, G. F. Wells, E. H. Tibbitts, Miss E. D. Lang, and Miss E. W. Clack.

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

The Magnetic Pavilion is constructed of non-magnetic materials, and stands in an enclosure in Greenwich Park, 350 yards to the east of the Observatory, on a site carefully chosen for its freedom from abnormal magnetic conditions. In the enclosure there are two sets of thermometers used for ordinary eye observations, thermometers for solar and terrestrial radiation, and two rain-gauges.

The anemometers, three rain-gauges, and the sunshine recorder are fixed above the roof of the Octagon Room (the ancient part of the Observatory).

For a detailed description of the New Magnetograph House, which was completed in 1914, reference should be made to the Greenwich Observations for 1915.

The New Magnetograph House stands 50 feet north-west of the Magnetic Pavilion in which the absolute magnetic observations are made. The recording instruments are situated in a small inner chamber 15 feet long, 12 feet wide, and 8 feet high. This chamber is supported on small concrete piers and surrounded by an outer chamber, whose walls of non-conducting material are nearly 2 feet thick. Between the walls of the two chambers is an air space of from 2 to 3 feet. The inner chamber is electrically heated by about 50 suitably insulated low-temperature non-magnetic metallic resistance strips, each consuming 25 watts. The current used is alternating, and is therefore without effect upon the magnetic registration.

The temperature is controlled by a thermostat placed in the centre of the room, at the same level as the magnetic instruments. This actuates a relay, which switches the electric current into or out of the heating circuits.

The centres of the three instrument piers are situated as follows: For the north force instrument, 2 feet south and 2 feet 6 inches east of the north-west angle of the room; for the declination instrument, 5 feet 6 inches south and 5 feet east of the same angle; for the vertical force instrument, 2 feet north and 3 feet west of the south-east angle. The two piers which support the recording mechanism occupy the north-east and south-west corners of the room, their longer sides being in the direction of the meridian. The clocks can be wound and the recording drums inserted or removed through shuttered openings in the wall of the inner chamber. The temperature in the chamber is read daily from a thermometer attached to the north force instrument, by means of a small telescope, projecting into the room.

The Magnetograph House contains also the photographic and standard barometers. The former is mounted on the south wall of the instrument room, $5\frac{1}{2}$ feet from the south-east corner of the room. The standard barometer is situated in the passage way, being supported on a board screwed to the north-west corner pillar of the inner room.

The north force and declination instruments record on the north-east drum; the vertical force instrument and the barometer record on the other drum. Both drums are horizontal and are 10 inches long by $5\frac{1}{2}$ inches in diameter. Their normal period of revolution is 30 hours and the scale 15 mm. to the hour. The

registering beams of light are focussed on the drum by an adjustable cylindrical lens. Two horizontal straight filament lamps mounted at suitable heights on the east and west walls of the chamber provide the time registration for the photographic sheets. The lamps are illumined for a period of one second centred at each exact hour of Greenwich time, the current being controlled by a relay connected to the Mean Solar clock in the Clock Room of the Observatory. The effect is to produce narrow dark hour lines right across the photographic records.

The new declination and north force variometers were in use as standards throughout the year 1917, and the new vertical force instrument, designed by Prof. W. Watson, and for a time used at Eskdalemuir, was brought into use in 1917 March. The photographic barometer was transferred to the New Magnetograph House on 1916 September 25. Until 1917 March 28, hourly readings of the standard barometer were taken throughout the day and night. The standard barometer was transferred to the New Magnetograph House on 1917 April 3.

The photographic wet and dry bulb thermometers were transferred to the Magnetic Enclosure on 1917 February 21, and after this date all the magnetic and meteorological photographic registers were developed in the dark room of the New Magnetograph House.

§ 3. *Subjects of Observation in the year* 1917.

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; eye observations of the ordinary meteorological instruments, including the barometer, dry and wet bulb thermometers, radiation and earth thermometers; 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; 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.

Since 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, except in regard to the sunshine registers (see p. E xviii).

§ 4. *Magnetic Instruments.*

DECLINATION MAGNET FOR ABSOLUTE DETERMINATIONS.—Since 1899 January 1, regular observations of declination have been made in the Magnetic Pavilion. The hollow cylindrical magnet Elliot No. 75 is used in conjunction with a telescope by Troughton and Simms, placed on a pier about 2 feet south of the magnet. The magnet is about 4 inches long, and at one end is an engraved glass scale for collimation. The telescope is 21 inches long, and the aperture of its object-glass is 2 inches; its horizontal circle is 16·6 inches in diameter, divided to 5′ and read by verniers to 5″. It has no vertical circle. The eye-piece has one fixed horizontal wire and one vertical wire, moved by a micrometer screw, the value of one revolution of which is 1′ 34″·2. The adopted collimation reading was $100^{r}\cdot140$.

The vertical axis of the telescope is adjusted by means of a fixed level, one division of which corresponds to 1″·15. The level correction for inequality of the pivots of the axis of the telescope was found in 1898 to be $-6^{div.}\cdot0$ or −6″·9.

Since 1913 September the magnet has been suspended by a tungsten wire of 0·02 mm. diameter, and about 25 cm. length. The effect of 90° of torsion is to turn the magnet through about 4′. The torsion is found to change little or not at all; it is checked at intervals, and a correction on this account is made when necessary. The collimation error is eliminated by reversing the magnet in the middle of each month, so that half the observations are made with the scale direct and half with the scale reversed (by turning the magnet through 180° in its carrier, about the longitudinal axis).

The reading of the azimuth circle corresponding to the astronomical meridian is determined by observations of Polaris, taken once a week whenever practicable.

Declination observations have been made at least thrice weekly throughout 1917.

ABSOLUTE HORIZONTAL FORCE INSTRUMENT.—This instrument is of the Kew pattern, and rests on a slate slab in the Magnetic Pavilion. A full account of its construction and use is given in earlier volumes, and will not be repeated here.

Observations of the absolute horizontal magnetic force are made twice weekly. Observations of the moment of inertia of the deflecting magnet are made occasionally.

DIP INDUCTOR.—The dip inductor is used in conjunction with a Broca mirror galvanometer, with electric light and scale. Observations are made in four positions to eliminate any small errors arising from slight asymmetry in the instrument. After the first adjustment, the ring is reversed about a horizontal axis and a second adjustment obtained: the instrument is then reversed in azimuth and two further adjustments made. The circles for the measurement of inclination and azimuth are each 8 inches in diameter, and are read by means of screw micrometers to one second of arc. The levels on the base can likewise be read to one second. A detailed description of the dip inductor will be found in the volume for 1915.

The observations are made thrice weekly.

THE DECLINATION VARIOMETER.—This instrument consists essentially of a magnet and mirror suspended by a fine phosphor bronze strip 30 cm. long. The torsion head to which the top of the fibre is attached is adjusted so that there shall be no torsion in the mean position of the magnet. A quarter revolution of the torsion head deflects the magnet through 8′.

The magnet consists of nine short pieces of steel 4·5 cm. long and of 1 mm. diameter, supported in an aluminium holder. The mounting of the movable mirror attached to this holder is also of aluminium. It can be turned relative to the magnet, so that the beam of light can be suitably adjusted in azimuth. The fixed mirror for base-line registration is situated beneath the magnet and mirror system. Both mirrors are of silvered glass, 2·5 cm. long and 1 cm. wide, and possess the necessary adjustments for tilt and orientation. The magnet is surrounded by copper blocks, rendering the instrument almost dead-beat.

The instrument rests on three foot-screws, which provide adjustment for level. It is completely enclosed by a tall brass cylinder with lid, resting on the concrete pier; this protects the instrument from dust, draughts, and accidental displacements. The lens which focusses the beam of light passing from lamp to mirror and mirror to drum is mounted in the side of this cylinder, the mirror chamber of the instrument itself being closed by a plane glass window.

The distance from the mirrors to the centre of the slit of the drum box is such that the scale value at the middle of the photographic sheets is 0′·585 per millimetre; at the present time (1915–20) this angle represents 3·17 γ, in terms of force. Since the beam of light, when directed towards the centre of the slit, makes an angle 11°·42′ with the normal to the drum, the scale value is not the

same right across the sheet, the percentage difference of scale between the centre and edges being 0·5. This is allowed for, when necessary, in measuring the photographic traces.

The photographic sheets are changed generally at about 11 a.m. The time scale is 15 mm. per hour. The base-line value is determined from the absolute declination observations.

THE NORTH FORCE VARIOMETER.—The general construction of this instrument resembles that of the declination variometer. The suspension is of quartz, however, 20 cm. long, and the magnet system contains a single magnet similar to those in the declination instrument. In other respects the magnet and mirror systems of the two instruments are identical.

The torsion head is adjusted so that the magnetic axis of the magnet system is kept in the (geographical) east-west direction. The angle between this direction and the line joining the mirror to the middle of the slit of the drum is 7°·30′. The mirror was adjusted relative to the magnetic axis so that the angle between the latter and the normal to the mirror agreed with the above angle to within a few minutes of arc. The magnet can consequently be maintained in the right direction by keeping the beam of light directed towards the middle of the photographic sheet.

The instrument is enclosed in a brass cylinder, in which is mounted the focussing lens, as in the case of the declination variometer. Through apertures in this casing also project two arms, one to the north and the other to the south of the instrument, to which they are attached. These are designed to support a deflecting magnet for the determination of the scale value of the variometer. The deflecting magnet is similar to those in the magnet system itself, but is cased in brass so as to be preserved from rust and made convenient for handling; its external diameter and length are 5 mm. and 7 cm. respectively. Deflections are made at two distances along both north and south arms, and in each position the magnet is used with its axis directed to the north and also to the south. Thus eight deflections are involved in each determination of scale value. The deflected positions are recorded on the photographic sheet, and the measurement is performed subsequently. The two adopted distances of the deflecting magnet from the magnet system are 27 cm. and 32 cm. The deflecting forces at these two distances are determined monthly by deflecting the absolute horizontal force magnet in the same way; the moment of the latter being known, the angle of deflection enables the deflecting force to be calculated readily in absolute measure. It is found

that the magnetic moment of the deflecting magnet is slowly diminishing; the deflecting forces at the above two distances were 247·9 γ and 150·4 γ in the mean of 1917, and the present rates of diminution of their values are 4·4 γ and 2·8 γ per year.

The scale value determinations for the north force instrument are made once weekly. Since the instrument was installed the scale value has been found to be slowly diminishing. It has been treated as constant throughout each month, the difference from month to month being very small (about ·01 γ per mm.). The adopted scale value for the month of 1917 January was 3·09 γ per mm., and for 1918 January was 3·25 γ per mm.

The base-line value of the instrument is determined by means of the absolute horizontal force observations, together with the absolute and photographic declination determinations. The base line is steadily changing (though at a decreasing rate), owing to the gradual diminution of the moment of the magnet system. The mean rate of change of base-line value during 1917 was 0·82 γ, and the mean annual decrease in this rate of change is 0·15 γ. The progressive change of base-line value is allowed for in the reductions.

The instrument is kept at a constant temperature, and therefore the records require no temperature correction in general. When the instrument was first set up, however, its temperature correction was determined by electrically heating the interior of the outer casing by heating coils wrapped round the outside of the latter. It was found that a rise of temperature through 1°C. increased the base-line value of the instrument by 2γ. During the periods when the thermostat was out of order and under repair, the observations were corrected for temperature according to this determination.

THE QUARTZ-THREAD VERTICAL FORCE VARIOMETER.—For a detailed description of this instrument reference may be made to the *Philosophical Magazine*, vol. vii., sixth series, p. 393, 1904. The base of the instrument consists of a metal casting with uprights at the two ends, carrying attachments for the ends of the quartz fibre which supports the magnet system. The latter consists of two magnets, 8 cms. long and 1 mm. in diameter, which are attached by small platinum stirrups to two rods of fused quartz; these are fused to a quartz plate, the upper surface of which is optically worked and platinised to form a plane mirror. The quartz rods are drawn out at their other ends into fibres of about 0·008 to 0·010 cm. diameter; one of these is attached to a coiled quartz spring. The quartz spring and the other fibre are soldered to small brass rods fitting into clamps

at the two ends of the metal base. The thread is under sufficient tension to stretch the spring through about two millimetres. A right-angled prism is supported in a frame above the mirror, so as to reflect the light in a horizontal direction ; a single lens is placed beneath to focus the light on the recording drum. The prism frame is adjustable in azimuth in order to enable the trace to be brought to any desired part of the sheet. An adjustable mirror beneath the quartz fibre and adjacent to the mirror of the magnet system serves to give a base line.

The sensitiveness of the instrument is varied by adjusting the centre of gravity of the movable system. For this purpose a small vertical quartz arm is fixed to one of the rods attached to the mirror and a small piece of brass can slide on this arm, being fixed into any desired position by means of a little shellac. The sensitiveness adopted until the end of 1919 was 3·6 γ per mm. on the sheet. At the beginning of 1920 this was increased to 2·0 γ per mm.

The variometer was not at first compensated for temperature changes and was found to possess a temperature coefficient of 25 γ per 1° C. The gradual change in the thermostat control temperature necessitated compensation ; the adjustment was made by means of a small stirrup sliding on one of the magnets, and the chamber was alternately heated and cooled until, with a range in temperature of 8° C., there was no measurable displacement of the photographic trace.

SCALE VALUE OF VERTICAL FORCE VARIOMETER.—The scale value of the instrument is determined by the methods of deflections, which in this case are produced electro-magnetically. The deflecting coil consists of two equal parallel circular rings of wire separated by a distance equal to their own radii. The wire is laid in V-grooves on a vulcanised fibre framework which rests permanently on the instrument pier. The leads and connections between the two separate rings are laid side by side. With such an arrangement a very uniform magnetic field is produced at the centre of the coil, when an electric current circulates in the same direction round the two circles. The diameter of each circular turn of wire is 55·7 cm., and the distance between their two centres is 27·7 cm. If x, ρ represent axial and radial co-ordinates, measured in cms. from the centre of the coil as origin, the value of the axial force magnetic force at (x, ρ), due to a current of strength A ampères, is—

$$3239A\left[1-0\cdot0129\frac{x^2-\frac{1}{2}\rho^2}{R^2}-1\cdot782\frac{x^4-3x^2\rho^2+\frac{3}{8}\rho^4}{R^4}\ldots\right]$$

where R is 31·06 cms., being the distance from the centre of the coil to a point on the circumference of either ring. The coil is placed so that its centre plane is horizontal, and with its centre as nearly as possible coincident with the vertical

force magnets; there is no horizontal magnetic field produced by the coil in the plane of the magnets, and the vertical force produced is constant to within 0·5 per cent. throughout the space occupied by the magnets. Within this limit of error, also, an inclination of the magnets to the horizontal even by several degrees would not affect the vertical force to which they would be subject; and the horizontal forces on them, besides being inappreciable, would have a force and not a couple resultant.

In this making scale value determinations, the current is supplied by a small portable battery, and is measured by an ammeter. The current strength used is 100 milliampères, which from the above formula, allowing for the slight non-centrality of the magnets with respect to the coil, is found to produce a deflecting force of 323 γ*, and a movement of the trace on the photographic sheets through about 92 mm. The scale value is found to be uniform across the sheets.

The scale value determinations are made weekly. The scale value was found to be constant. The adopted value is 3·66 γ per mm.

The base line value is determined from the dip observations, in conjunction with the recorded values of north force and declination. It is at present slowly decreasing.

§ 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 or north 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 no days in the year 1917 which are classed as days of great disturbance. Days of lesser disturbance are January 4–5, February 15–16, June 24,

* In the introduction to the 1916 volume, an incorrect value for this deflecting force was given owing to an error in computation. The deduced scale value with which the vertical force registers for the year 1917 were reduced (3·66γ per mm.) therefore requires to be decreased by 4 per cent. The resulting corrections are in general, very small. To allow for the error, in Table III the differences between the hourly values on any day and the mean for the day, should be reduced by 4 per cent.; all figures in Tables XII, XIII, XIV, and XV, and in the Vertical Force portion of Table XVI, and columns 8 and 11 of Table XIX require a similar percentage reduction. The values of the V.F. changes given on pages E.30 to E.40 and the V.F. scale value shown on the plates require also to be decreased by 4 per cent.

August 9–10, August 13–15, August 21–22, and December 16–17. 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.

The mean ordinates for each complete form are measured by the aid of a transparent-celluloid scale, and from the tables of these measures, for each calendar month, are obtained the mean monthly values for each hour of the day, and the mean daily value of the element for each day of the month. The daily mean is taken from the 24 mean ordinates. Tables I to XV contain the results for declination, north force, and vertical force. For each element the mean daily value and daily range are given for every day of the year, together with the monthly and annual mean diurnal inequalities for all days and for quiet and disturbed days (as selected by the International Committee). 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. No days were omitted on account of great disturbance in the formation of these Tables.

The variations of declination are given in arc and those of north force and vertical force in C.G.S. measure.

The magnetic diurnal inequalities of declination, north force, and vertical force, for each month and for the year, as given in Tables IV, VIII, and XII, have been treated by the method of harmonic analysis, and the results are given in Table XVI.

In Table XVII the absolute determinations of horizontal force are given, both as observed and also as reduced to the mean value for the month. The latter was effected by application of the difference between the north force ordinate at the time of observation and the mean value for the month, as obtained from the photographic register, taking into account also the change of declination.

As regards magnetic dip, the result of each observation of dip with the dip inductor is given in Table XVIII ; these have not been reduced to the mean value for the month, but a correction has been applied on account of the diurnal variation of dip (as deduced from Tables VIII and XII) in forming the monthly mean values of dip given in Table XIX.

Table XIX contains an annual summary of the magnetic elements, giving the mean monthly values, the monthly mean diurnal ranges, and sums of hourly deviations from mean.

In Tables VI, X, and XIV are given mean diurnal inequalities of declination, horizontal force, and vertical force derived from five quiet days each month. In Tables VII, XI, and XV are given similar inequalities derived from five disturbed days each month, both sets of days being selected by the International Committee.

Reduced copies of the magnetograms for certain disturbed days (mentioned on pp. E ix & x) have been printed in each volume since 1882. The list of these days since the year 1889 has been selected in concert with M. Mascart, or his successor M. Angot, 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. As far as possible the days of greater disturbance are those selected by the International Committee.

The plates are followed by a brief description of other significant magnetic motions (superposed on the ordinary diurnal movement) recorded during the year.

With regard to the plates, on each day three distinct registers are usually given, viz. : declination, north force, and vertical force.

At the foot of each plate, scales, in C.G.S. measure, are given for each of the magnetic registers.

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

[TABLE

Year.	Declination West.	Horizontal Force,† C.G.S. Unit.	Dip.‡	Year.	Declination West.	Horizontal Force,† C.G.S. Unit.	Dip.‡
	° ′		° ′		° ′		° ′
1841	23·16·2	..	..	1879	18·40·5	0·1805	67·37·0
1842	23·14·6	..	..	1880	18·32·6	0·1805	67·35·7
1843	23·11·7	..	69· 0·6	1881	18·27·1	0·1807	67·34·7
1844	23·15·3	..	69· 0·3	1882	18·22·3	0·1806	67·34·2
1845	22·56·7	..	68·57·5	1883	18·15·0	0·1812	67·31·7
1846	22·49·6	0·1731	68·58·1	1884	18· 7·6	0·1814	67·29·7
1847	22·51·3	0·1736	68·59·0	1885	18· 1·7	0·1817	67·28·0
1848	22·51·8	0·1731	68·54·7	1886	17·54·5	0·1818	67·27·1
1849	22·37·8	0·1733	68·51·3	1887	17·49·1	0·1819	67·26·6
1850	22·23·5	0·1738	68·46·9	1888	17·40·4	0·1822	67·25·6
1851	22·18·3	0·1744	68·40·4	1889	17·34·9	0·1823	67·24·3
1852	22·17·9	0·1745	68·42·7	1890	17·28·6	0·1825	67·23·0
1853	22·10·1	0·1748	68·44·6	1891	17·23·4	0·1827	67·21·5
1854	22· 0·8	0·1749	68·47·7	1892	17·17·4	0·1829	67·20·0
1855	21·48·4	0·1756	68·44·6	1893	17·11·4	0·1831	67·17·9
1856	21·43·5	0·1759	68·43·5	1894	17· 4·6	0·1831	67·17·4
1857	21·35·4	0·1769	68·31·1	1895	16·57·4	0·1834	67·16·1*
1858	21·30·3	0·1762	68·28·3	1896	16·51·7*	0·1835*	67·15·1*
1859	21·23·5	0·1761	68·26·9	1897	16·45·8*	0·1838	67·13·5*
1860	21·14·3	..	68·30·1	1898	16·39·2*	0·1840	67·12·1
1861	21· 5·5	0·1773	68·24·6	1899	16·34·2	0·1843	67·10·5
		0·1759	68·15·8	1900	16·29·0	0·1846	67· 8·8
1862	20·52·6	0·1763	68· 9·6	1901	16·26·0	0·1850	67· 6·4
1863	20·45·9	0·1764	68· 7·0	1902	16·22·8	0·1852	67· 3·8
1864	..	0·1767	68· 4·1	1903	16·19·1	0·1852	67· 1·2
1865	20·33·9	0·1767	68· 2·7	1904	16·15·0	0·1854	66·57·6
1866	20·28·0	0·1773	68· 1·3	1905	16· 9·9	0·1854	66·56·3
1867	20·20·5	0·1777	67·57·2	1906	16· 3·6	0·1854	66·55·6
1868	20·13·1	0·1779	67·56·5	1907	15·59·8	0·1855	66·56·2
1869	20· 4·1	0·1782	67·54·8	1908	15·53·5	0·1854	66·56·3
1870	19·53·0	0·1784	67·52·5	1909	15·47·6	0·1854	66·54·1
1871	19·41·9	0·1786	67·50·3	1910	15·41·2	0·1855	66·52·8
1872	19·36·8	0·1789	67·47·8	1911	15·33·0	0·1855	66·52·1
1873	19·33·4	0·1793	67·45·8	1912	15·24·3	0·1855	66·51·8
1874	19·28·9	0·1797	67·43·6	1913	15·15·2	0·1853	66·50·5
1875	19·21·2	0·1797	67·42·4	1914	15· 6·3	0·1853	66·51·2
1876	19· 8·3	0·1799	67·41·0	1915	14·56·5	0·1851	66·52·0
1877	18·57·2	0·1800	67·39·7	1916	14·46·9	0·1850	66·52·8
1878	18·49·3	0·1802	67·38·2	1917	14·37·1	0·1848	66·53·0

* Corrected for the effect of the iron in the new buildings.

† The values of the Horizontal Force from 1861 differ from those given in previous volumes, on account of the correction mentioned on p. E iv, 1914 volume.

‡ These values of the dip differ slightly in some instances from those given in previous volumes, on account of the correction mentioned on p. E v, 1912 volume.

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. From 1914 the Dip was determined with the Inductor.

§ 6. *Meteorological Instruments.*

STANDARD BAROMETER.—The standard barometer 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 $0^{in.}\cdot05$, subdivided by vernier to $0^{in.}\cdot002$. The barometer was mounted in 1840 on the southern wall of the western arm of the Upper Magnet Room at a height above mean sea level of 159 feet. It was transferred to the New Magnetograph House on 1917 April 3, where the height above mean sea level is 152 feet.

The barometer is read at 9^h, 12^h (noon), 15^h, 21^h (civil reckoning) every day. Each reading is corrected by application of an index-correction, and reduced to the temperature 32°. The readings thus found are used to determine the value of the instrumental base line on the photographic record.

THE PHOTOGRAPHIC BAROMETER.—In consequence of the use of a horizontal drum for the new vertical force instrument, it became necessary to modify the lever mechanism of the photographic barometer on its removal to the Magnetograph House in 1916. On account of the optical magnification associated with a moving mirror at some distance from the instrument, the new mechanism had to be such as would reduce the motion of the plunger to a smaller amount at the end of the lever which carried the mirror. In the actual arrangement two levers are used, the one connected to the arm of the plunger resting in the free surface of the mercury, being 12 inches long from plunger to pivot. A pin with a rounded conical point is screwed into this lever at a distance of 1 inch from the pivot. On this pin rests the plane under-surface of a shorter lever, which is 4 inches long from its pivots to this pin, and is set at right angles to the first lever. Both levers are approximately horizontal in their mean position. On the short lever is mounted the moving mirror of the instrument. This mirror is $2\cdot5$ cm. long and 1 cm. wide, and is mounted horizontally in a suitable frame attached to the lever, just above its pivots. The first lever lies east and west, so that the axis about which the mirror turns is in the same direction. The motion of the beam of light is transformed so as to be horizontal by a fixed right-angled prism supported above the mirror. A lens of suitable focus is mounted in a vertical plane in front of the prism, and brings the beam of light from

the straight filament lamp, which also illuminates the vertical force variometer, to a focus on the drum. A base-line mirror, similar to the moving mirror, is mounted in a vertical plane behind the lower half of this lens. Provision is made for all necessary adjustments of level and azimuth and tilt of the base line and moving beams of light.

The barometer is mounted on the south wall of the instrument chamber, at a distance of 3 feet from the vertical force instrument. The levers and optical parts are screwed to a brass plate supported on a small shelf by the side of the barometer. The instrument is 12 feet from the recording drum, and consequently the scale value of the record is 3 cm. on the sheet for 1 cm. change of height of the mercury column of the standard barometer. In the photographic barometer both arms are, near the surface of the mercury, of the same bore, so that the plunger moves through only half the change of height of the standard barometer.

The photographic sheets being 24 cm. wide, the whole range of barometric motion can be included without changing the zero, as was formerly necessary, when the scale value was 4 to 1 in place of 3 to 1 as now.

The metal parts of the instrument are all of brass or aluminium, except the cast-iron plunger disc (which is 24 mm. in diameter and 4 mm. thick) and four small pivot screws, which are of steel. These are sufficiently far from the vertical force instrument to ensure that they do not affect its records. The weight of the plunger and lever mechanism is relieved by a balance weight on the far side of the pivot, so that the plunger rests on the mercury surface without appreciably depressing it. There is some evidence of a slight difference of behaviour according to whether the barometer is rising or falling.

The scale value of the instrument is actually determined experimentally by comparison with the readings of the standard photographic barometer. Readings of the latter are taken four times daily, and from them the base-line value of the barometer is adopted, having regard to the tendency referred to in the preceding paragraph.

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 George Airy. This, together with details of the thermometers and the corrections applicable to them, may be found fully described in the volumes for 1912 and previous years.

Since 1899 January 4 this stand has stood in an open position in the Magnetic Pavilion enclosure.

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 dry- and wet-bulb thermometers are read at 9^h, 12^h (noon), 15^h, 21^h (civil reckoning) every day. Readings of the maximum and minimum thermometers are taken at 9^h, 15^h, and 21^h every day. Those of the dry- and wet-bulb thermometers are employed to correct the indications of the photographic dry- and wet-bulb thermometers.

PHOTOGRAPHIC DRY-BULB AND WET-BULB THERMOMETERS.—The apparatus which has been in use since 1887 was designed by Sir William Christie, and from 1899 to 1917 stood in the same position in the Magnet Ground. It was transferred to the Magnetic Pavilion Enclosure on 1917 February 21. It is placed in a shed 8 feet square, standing upon posts about 8 feet high, and open to the north. The apparatus is screened from the direct rays of the sun, without impeding the circulation of the air. The recording mechanism is similar in general plan to that already described in connection with the magnetometers in the Magnet Basement, the illumination being by gaslight. The traces consist of broad bands, due to the free passage of light to the drum, above the mercury column in the dry-bulb, and through an air-bubble in that of the wet-bulb, crossed by fine lines caused by the shadows of the graduations on the thermometer tubes. The two traces fall on the same part of the cylinder as regards time scale. 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. Further details of the thermometers and recording arrangements may be found in the volume for 1912. The scale value of the records is approximately 10° per inch.

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 was Negretti and Zambra, No. 165157. The thermometer for radiation to the sky was a self-registering spirit minimum thermometer, Negretti and Zambra, No. 140216, until 1917 June 17 when it was broken. It was replaced on the following day by Negretti and Zambra No. 165654. The thermometers are laid on short grass and freely exposed to the sky ; they require no correction for index-error.

EARTH THERMOMETERS.—These four thermometers, the bulbs of which are sunk to depths of 25·6, 12·8, 6·4, and 3·2 feet below the surface, are fully described in earlier volumes. The shortest thermometer is read daily at noon, the readings being given (subject to an unknown small index correction) in the daily results. The other thermometers are read weekly on Monday at noon, but the results are not published, as the daily readings previously printed for many years seem to offer all the information which these thermometers are likely to afford. A discussion by Professor Everett of the observations up to 1859 was given in an appendix to the volume for 1860.

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. The direction of the wind is registered by means of a large vane (9ft. 2in. in length), connected by gearing with a rack-work carrying a pencil; the latter marks on a flat horizontally moving sheet of paper. 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.

A circular pressure plate with an area of 192 square inches is attached 2 feet below the vane ; moving with the latter, it is always kept directed against the wind. A light wind causes the plate to compress slender springs, the motion being registered on the horizontal sheet by a pencil connected with the plate by a flexible brass chain, which is always in tension. Higher wind pressures bring stiffer

springs into play behind the plate, and the two sets of springs are adjusted by screws and clamps so as to afford fixed scales on the sheet, the scale for light winds being double that for heavy winds. The scale is determined experimentally in lbs. per square foot from time to time.

The recording sheet is changed daily at noon. The time scale, ordinarily the same as that of the magnetic registers, can be increased 24-fold by altering the gearing.

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

ROBINSON'S ANEMOMETER.—This instrument, for registration of the horizontal movement of the air, is mounted above the roof of the Octagon Room. It was brought into use in 1866, and is of smaller size than that now usual, the four hemispherical cups being 5 inches in diameter, the centre of each cup being 15 inches distant from the vertical axis of rotation. The 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. A motion of the recording pencil through 1 inch corresponds to horizontal motion of the air through 100 miles. The time scale is the same as for the magnetic registers, and the sheet is changed daily at noon.

In preceding volumes the values of wind velocity V given in the tables are three times the actual velocity v of the cups. From some tests of the Browning instrument, made by Mr. W. H. Dines at Hersham in 1889, on his whirling machine, it would appear that the relation between V and v is more correctly given by

$$V = 4 \cdot 0 + 2 \cdot 0\, v,$$

and that the instrument fails to record wind velocities less than 4 miles per hour. The values of the wind velocity given by the formula $V = 3\, v$ would thus be too high when V exceeds 12. Since the two formulæ agree, however, for $V = 12$, the mean values of the wind velocity (which seldom differ much from 12) will be approximately correct in either case; therefore, for the sake of continuity and simplicity, the formula $V = 3\, v$ will continue to be used. In this volume, however, the greatest hourly measures (p. E xx) are given according to both formulæ, and the least hourly measures omitted.

RAIN GAUGES.—During the year 1917 three rain gauges were employed, placed at different elevations above the ground, for which see page E 74 of the Meteorological Results.

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 apparatus is fully described in earlier volumes.

Gauges Nos. 2 and 3 are no longer read, and Nos. 4, 5, and 7 have been removed.

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. 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, No. 8 is used as a check on the readings of No. 6. No. 6 is read daily, usually at 9^h, 15^h, and 21^h Greenwich civil time, and No. 8 at 9^m only as a rule.

The present height of the Standard gauge above mean sea-level is 5 feet 9 inches less than in its old position in the Observatory Grounds, before its 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 quadrant electrometer, made by White, of Glasgow. It is situated in a small hut in the Magnetic Enclosure and has the usual arrangements for photographic registration. The time scale is the same as for the magnetic registers, the hourly break of trace being made by the driving-clock itself. The Electrometer is connected by a fine wire directly with a small radium collector, carried on an insulated support, at a height of about 7 feet.

SUNSHINE RECORDER.—The instrument in use is of the Campbell-Stokes pattern, with 4-inch glass globe. The recorded durations are those of *bright* sunshine, no register being obtained when the sun shines faintly through fog or cloud, or is very near the horizon. The hourly results relate to *apparent* time.

§ 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, 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, 15^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 for the elements mentioned are measured direct from the photographic curves, and reduced so as to be based fundamentally, both as regards scale and zero, on the readings of the standard barometer and dry- and wet-bulb thermometers.

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 table of factors for this purpose may be found in the Introductions for 1910 and previous years.

In the same way the mean hourly values of the dew-point temperature and degree of humidity in each month (pages E 69 and E 70) have been calculated from the corresponding mean hourly values of air and evaporation temperatures (pages E 68 and E 69).

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 Table VII, *Reduction of the Greenwich Meteorological Observations*, Part IV, and also in the Introduction for 1910.

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 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 E 67 and E 74, is formed from the records of this gauge. In this numeration only those days are counted on which the fall amounted to or exceeded $0 \cdot^{in.} 005$.

The indications of atmospheric electricity are derived from Thomson's Electrometer.

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 E 43 to E 65, and in the abstract table, page E 67, is the mean found from observations made 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).

As regards the notation for clouds and weather, the following are the symbols which denote actual phenomena :—

a,	*aurora*	h,	*haze*	s,	*stratus*
ci,	*cirrus*	ha,	*halo*	sc,	*scud*
cl,	*clouds*	hl,	*hail*	sh, shs,	*shower* (*s*)
co,	*corona*	l,	*lightning*	sl,	*sleet*
cu,	*cumulus*	m,	*mist*	sm,	*storm*
d,	*dew*	n,	*nimbus*	sn,	*snow*
f,	*fog*	prh,	*parhelion*	sq, sqs,	*squall* (*s*)
fr,	*frost*	prs,	*paraselene*	t,	*thunder*
g,	*gale*	r,	*rain*	w,	*wind*
glm,	*gloom*				

The following are qualifying symbols used in conjunction with the above :—

c,	*continued*	li,	*light*	so,	*solar*
fq,	*frequent*	lu,	*lunar*	st,	*strong*
fr,	*frozen*	m,	*misty*	th,	*thin*
gt,	*great*	oc,	*occasional*	tk,	*thick*
ho,	*hoar*	p-cl,	*partially cloudy*	v,	*variable*
hy,	*heavy*	slt,	*slight*	vv,	*very variable*

These symbols are used in combination : thus c-hy-r denotes continued heavy rain ; t-sm, thunderstorm ; p-cl, partially cloudy ; m-r, misty rain ; and so on. In regard to clouds, cl is omitted when the type is specified : thus ci-cu denotes cirro-cumulus clouds.

Howard's nomenclature is used for clouds, and the figure indicates the proportion of sky covered by cloud, an overcast sky being represented by 10.

The following is the notation employed for electricity :—

N,	*negative*	m,	*moderate*	s,	*strong*
P,	*positive*	w,	*weak*	v,	*variable*
ss,	*very strong*	ww,	*very weak*	vv,	*very variable*

Zero potential is indicated by 0, and a dash (—) indicates accidental failure of the apparatus.

F. W. DYSON.

ROYAL OBSERVATORY, GREENWICH,
1921 *December* 30.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL OBSERVATIONS,

1917.

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION.

January. 14°+Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	
1	42·0	43·0	44·0	42·0	40·0	42·0	43·0	43·0	43·0	45·0	45·5	46·5	47·0	48·0	46·0	44·5	42·0	43·0	43·0	42·8	41·8	40·8	40·0	41·0	43·3	
2	41·5	42·0	42·0	42·5	43·0	43·0	43·5	43·2	43·0	44·0	45·2	45·0	45·8	45·2	44·9	44·1	43·0	42·8	43·7	38·7	40·0	41·8	42·2	42·3	43·0	
3*	43·0	42·4	42·0	42·0	42·6	42·9	43·1	42·0	42·5	43·6	44·0	45·6	46·0	45·4	44·0	43·3	43·0	43·0	43·0	42·0	42·0	42·2	42·8	42·7	43·1	
4**	42·8	42·2	40·0	40·5	42·0	42·5	42·5	43·0	43·0	44·2	48·0	47·0	47·0	45·7	45·7	45·0	43·8	48·0	29·0	30·5	20·9	18·0	25·5	28·0	39·4	
5**	33·2	28·0	37·0	33·5	35·7	39·0	41·5	42·5	44·2	46·0	46·0	44·0	45·0	46·6	45·0	43·3	47·2	46·0	41·2	41·2	41·5	41·6	42·0	42·8	41·4	
6	42·1	42·0	42·0	42·2	42·3	41·9	41·8	41·9	42·1	43·5	45·0	46·3	46·0	45·1	44·0	43·6	42·7	41·9	36·6	43·0	42·4	38·7	41·0	39·0	42·4	
7	44·0	43·1	42·5	42·0	42·0	42·0	41·5	41·9	42·0	43·0	46·0	44·9	44·5	45·6	45·5	43·0	44·8	43·0	40·0	41·0	40·2	41·0	43·6	37·0	42·7	
8	37·0	41·0	41·0	39·2	37·5	41·5	42·0	43·5	41·2	42·0	45·0	45·5	46·2	47·0	46·4	44·6	43·5	44·0	43·0	43·0	43·4	38·0	39·0	36·6	42·1	
9	37·2	41·0	42·5	42·0	42·0	42·0	42·0	41·8	41·9	42·5	43·2	43·5	44·7	45·3	45·0	44·4	44·6	45·0	42·0	42·7	42·0	40·2	38·0	37·0	42·2	
10	39·1	38·9	39·2	40·1	41·3	41·0	41·5	41·3	41·3	43·0	44·6	44·6	44·6	46·0	47·0	46·0	45·7	44·0	44·2	42·1	41·8	41·9	40·0	38·0	42·4	
11	38·1	40·8	41·6	42·4	41·2	41·2	41·7	41·4	41·1	42·2	43·6	43·1	43·3	43·8	44·2	44·1	39·8	39·7	42·8	41·1	39·8	40·0	40·1	38·3	41·5	
12**	39·3	40·5	41·4	42·1	40·8	40·6	41·5	41·1	41·2	42·6	44·6	44·6	44·6	45·1	44·9	45·6	47·1	43·6	38·1	36·9	37·1	41·6	40·6	39·1	41·9	
13	39·1	34·1	37·1	37·4	39·1	41·5	42·6	42·1	42·1	43·4	36·1	36·3	37·2	38·1	39·6	38·6	39·6	37·9	38·1	40·7	38·9	38·1	38·9	40·5	39·0	
14	42·1	40·1	41·1	40·6	41·1	42·3	42·4	43·8	45·1	44·6	44·4	46·3	46·5	46·4	45·7	45·1	40·8	43·3	43·7	41·1	42·0	43·1	41·1	40·9	43·1	
15*	41·1	41·9	42·1	42·3	43·1	42·9	43·0	41·9	41·2	42·9	42·8	44·8	45·6	45·9	45·3	43·1	42·1	42·0	41·9	41·6	41·4	41·1	41·0	41·1	42·6	
16	41·1	41·1	41·3	41·9	41·9	41·6	41·9	41·3	40·8	41·7	42·4	44·1	45·1	46·1	44·6	45·6	44·1	41·1	41·9	41·9	41·1	39·6	40·1	40·1	42·2	
17	37·5	42·3	37·1	36·6	39·7	40·9	41·1	41·1	41·4	41·8	42·1	43·3	43·6	43·4	44·1	43·8	43·1	43·3	44·1	43·6	41·6	41·6	41·5	37·1	41·5	
18*	36·1	35·4	38·4	40·0	40·1	40·8	42·1	42·4	42·1	42·5	42·5	44·3	44·9	45·8	44·3	43·1	43·1	43·2	43·1	42·4	41·8	41·5	40·1	39·9	41·7	
19	40·1	40·4	41·5	41·0	41·1	41·1	41·1	41·1	41·1	41·6	42·1	42·4	43·6	45·1	43·7	42·5	43·1	43·4	43·5	42·4	41·8	38·1	39·1	40·1	41·7	
20	40·1	39·5	36·6	37·4	38·8	40·6	41·9	42·1	42·1	42·5	42·1	42·4	44·6	45·9	43·3	45·1	45·6	46·3	46·1	44·7	43·1	42·4	38·1	38·1	42·1	
21	38·1	40·8	40·6	41·7	41·3	41·1	41·1	41·3	41·5	41·7	41·9	42·4	44·1	45·1	43·3	43·1	39·1	44·9	43·6	41·6	39·7	41·1	41·5	39·1	41·7	
22**	39·7	41·1	41·5	42·1	40·9	40·3	41·7	43·5	43·3	43·4	43·6	44·6	46·6	44·1	43·8	41·1	40·1	40·9	32·1	40·1	39·8	36·1	39·6	36·4	41·1	
23**	42·1	41·8	41·4	41·1	42·1	42·1	42·3	43·1	43·3	43·1	42·3	47·1	45·1	44·1	42·1	40·1	39·1	38·6	40·1	40·6	39·6	40·6	38·4	38·7	41·6	
24	39·1	41·3	41·9	39·1	41·1	41·5	40·9	40·8	41·0	41·3	42·3	44·6	46·6	46·4	44·8	43·1	43·1	43·1	40·6	38·8	41·1	40·1	40·1	40·9	41·8	
25	41·6	40·6	44·1	43·1	40·1	41·6	44·3	42·1	44·1	43·1	45·6	44·4	43·3	44·2	43·6	42·3	40·7	42·4	40·3	46·5	38·9	35·5	40·1	39·7	42·2	
26	40·9	41·1	43·1	41·8	39·6	42·6	42·1	43·1	42·1	41·6	43·1	44·6	48·1	46·3	40·6	39·9	41·6	41·9	41·3	40·8	40·4	39·1	39·1	38·6	41·8	
27	40·3	40·5	40·7	42·3	41·1	40·6	41·6	42·2	42·7	43·0	43·1	43·1	45·3	45·1	42·3	41·9	38·8	38·1	40·7	39·5	39·8	40·1	40·4	40·6	41·4	
28*	41·3	40·4	40·8	40·9	40·5	40·7	40·4	40·8	41·1	41·9	43·1	44·5	46·1	45·9	44·1	42·5	41·7	41·4	41·8	41·5	40·3	40·1	41·1	41·1	41·8	
29*	41·1	41·1	40·9	39·5	39·7	39·1	39·3	39·4	40·4	42·1	44·8	45·5	46·4	46·1	44·6	43·1	42·1	42·1	41·9	42·1	40·3	38·1	37·9	36·6	41·4	
30	39·1	42·0	40·2	40·1	38·6	39·3	40·3	39·9	40·0	42·2	43·9	46·3	48·1	49·8	45·6	45·9	43·1	42·1	41·6	40·6	40·3	38·6	39·0	38·4	41·9	
31	38·9	41·3	41·1	41·1	40·7	40·7	40·9	39·5	39·1	40·3	42·8	45·4	46·1	46·1	45·9	43·1	42·3	39·8	34·4	35·8	35·9	37·6	38·6	40·1	40·7	
Mean	40·0	40·4	40·9	40·7	40·7	41·3	41·8	41·9	42·0	42·8	43·6	44·3	45·2	45·5	44·3	43·4	42·7	42·6	40·9	41·0	40·0	39·3	39·7	39·0	41·8	
Mean*	40·5	40·2	40·8	40·9	41·2	41·3	41·6	41·3	41·5	42·6	43·4	44·9	45·8	45·8	44·5	43·0	42·4	42·3	42·3	41·9	41·2	40·6	40·6	40·3	42·1	
Mean**	39·4	38·7	40·3	39·9	40·3	40·9	41·9	42·7	43·0	43·9	44·9	45·5	45·7	45·1	44·3	43·0	43·5	43·4	36·1	37·9	35·8	35·6	37·2	37·0	41·1	

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	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	
1*	41·0	40·2	41·5	41·3	41·1	40·5	40·0	39·6	39·2	39·8	40·9	43·1	45·1	45·6	44·1	43·1	42·6	40·1	40·8	41·7	40·5	40·4	40·3	40·6	41·4	
2	40·9	41·1	41·3	41·1	41·4	40·1	40·1	39·8	39·8	40·6	41·6	43·4	44·9	45·1	44·1	43·1	42·5	41·3	41·7	41·5	40·9	40·3	38·1	38·3	41·4	
3	38·1	40·1	40·3	42·1	42·1	40·1	40·1	39·7	39·1	39·1	41·1	44·1	46·6	46·6	45·1	43·3	42·2	41·2	41·6	39·9	40·0	40·3	40·9	40·9	41·4	
4	40·9	41·1	41·0	40·4	40·1	40·1	39·9	39·1	38·1	38·6	44·3	45·4	44·8	44·1	43·1	42·1	41·9	42·1	41·3	41·1	40·9	40·6	40·3	39·9	41·3	
5	39·8	41·1	39·9	39·8	39·3	39·4	38·4	38·6	38·1	38·9	39·8	41·1	45·6	47·1	46·6	45·1	42·1	40·7	42·9	42·3	38·5	38·4	39·8	39·4	40·9	
6	39·9	39·3	40·3	40·3	40·1	39·7	39·7	39·1	38·9	38·3	39·4	45·1	46·8	46·5	47·1	44·6	42·9	42·6	38·3	40·1	40·6	40·1	39·9	38·6	41·2	
7	38·1	38·6	39·1	40·1	38·3	38·6	38·9	39·3	38·7	38·3	39·1	44·5	45·7	48·1	47·6	46·1	45·1	43·5	43·1	42·1	41·1	39·6	33·6	36·1	41·0	
8	33·7	33·5	37·1	39·1	40·1	39·1	39·9	39·1	38·1	38·1	38·9	43·3	44·3	45·3	44·1	43·3	42·3	38·9	38·1	40·0	37·9	36·2	39·1	40·3	39·6	
9*	40·4	41·1	41·1	41·1	41·0	40·2	39·9	39·1	38·1	38·3	40·1	42·9	45·5	45·1	44·3	43·1	42·1	42·1	42·1	41·1	39·4	40·6	40·1	38·6	41·1	
10	39·3	38·6	38·6	37·1	35·3	37·7	39·1	38·6	37·1	37·6	38·6	44·1	44·1	44·9	44·9	43·1	42·3	43·1	43·3	42·9	40·1	38·6	39·6	39·6	40·4	
11	39·6	38·4	38·1	40·2	40·0	39·1	40·5	40·1	38·7	38·7	40·3	42·6	44·1	44·8	45·1	44·6	44·1	43·6	41·4	41·1	38·8	38·1	38·1	38·4	40·9	
12*	39·4	40·4	40·5	40·1	39·4	39·7	39·9	39·3	38·2	38·1	39·1	40·1	41·9	43·1	44·1	44·5	43·8	42·7	42·1	41·8	41·1	41·1	40·6	39·7	40·9	
13*	40·1	38·8	39·4	39·9	39·6	39·3	39·8	39·6	38·9	37·6	39·1	42·1	43·1	45·6	45·6	44·8	43·1	42·1	40·4	42·1	40·9	40·3	39·3	39·1	40·9	
14	39·6	40·1	40·3	40·1	40·1	40·1	39·9	39·3	38·1	38·6	41·1	42·3	44·1	45·1	45·3	44·1	43·1	42·6	42·9	43·7	41·3	36·9	34·1	34·9	40·7	
15**	35·9	33·7	32·6	37·1	38·5	39·1	39·6	40·1	41·6	42·1	42·3	44·6	46·6	50·3	54·1	54·6	50·1	46·1	47·3	38·1	35·6	33·6	26·1	28·3	40·8	
16**	35·1	45·1	45·1	34·6	36·3	37·1	39·3	38·1	37·4	37·1	38·1	41·4	44·1	45·6	45·9	43·8	42·6	41·4	41·6	41·1	40·6	40·1	40·1	40·1	40·5	
17	39·8	39·8	39·8	40·1	40·1	40·1	40·1	39·6	38·4	38·1	38·6	41·6	42·8	43·2	44·1	44·0	43·7	43·4	44·1	43·1	40·1	40·6	40·6	40·8	41·1	
18**	38·1	34·1	33·6	29·6	33·1	33·1	35·8	37·4	38·7	39·5	41·1	42·7	46·1	47·1	47·7	45·9	44·8	43·4	42·5	42·5	41·1	40·3	40·1	37·9	39·8	
19**	36·6	37·9	35·6	32·1	33·6	33·3	35·1	36·9	37·9	39·5	40·6	44·1	46·1	46·0	45·2	43·8	42·8	42·1	42·4	41·4	42·1	35·1	33·8	32·3	39·0	
20**	34·3	37·1	39·1	39·3	38·9	41·1	41·3	42·3	41·3	41·3	44·6	42·1	44·1	46·6	46·6	40·1	38·3	40·1	39·3	37·1	38·1	39·3	38·3	38·1	40·4	
21	40·1	40·6	40·6	40·9	41·0	40·2	40·3	39·9	40·1	39·6	39·9	43·1	42·5	43·3	43·3	43·1	40·8	39·6	37·1	38·6	39·8	39·1	36·1	37·9	40·3	
22	39·1	40·1	40·5	41·1	40·7	41·1	40·1	39·8	38·1	38·1	38·3	42·3	44·1	45·6	45·1	44·1	42·6	41·6	41·1	39·4	35·1	38·8	33·1	34·1	40·2	
23	39·1	39·1	40·1	43·1	40·1	40·1	41·9	41·1	39·3	39·3	39·6	42·9	44·1	45·5	45·1	44·1	42·7	42·1	41·9	40·6	38·6	36·9	35·6	38·6	40·9	
24	37·9	37·1	39·1	42·6	39·9	39·8	40·3	40·1	39·9	39·3	39·9	42·1	44·3	45·1	44·1	42·3	40·6	41·1	41·1	40·9	40·3	39·6	39·6	39·4	40·7	
25	39·9	40·3	41·1	40·9	39·9	39·1	39·1	39·3	39·5	40·1	43·1	44·6	45·9	45·9	43·5	40·6	42·1	41·1	40·1	37·1	36·1	36·6	37·1	39·3	40·5	
26	40·1	40·4	40·8	39·5	39·3	41·5	40·9	44·1	39·9	40·1	41·6	45·1	46·9	47·1	47·9	45·1	43·3	42·1	41·3	41·1	40·1	39·1	38·1	38·3	41·8	
27*	39·1	39·6	39·8	40·0	40·1	39·6	39·1	38·2	37·8	38·7	40·3	42·5	45·1	46·1	45·6	45·1	41·1	40·6	42·1	41·1	39·7	41·5	36·9	38·3	40·8	
28	38·1	38·0	38·1	38·6	39·6	40·5	40·2	39·0	38·6	40·1	41·1	43·1	44·1	45·1	45·6	43·7	41·1	40·5	40·1	37·1	39·1	39·8	39·9	39·6	40·4	
Mean	38·7	39·1	39·4	39·4	39·3	39·3	39·6	39·5	38·8	39·1	40·4	43·1	44·7	45·7	45·5	44·1	42·7	41·9	41·5	40·7	39·6	39·0	37·9	38·2	40·7	
Mean*	40·0	40·0	40·5	40·5	40·2	39·9	39·7	39·2	38·4	38·5	39·9	42·1	44·1	45·1	44·7	44·1	42·5	41·5	41·5	41·6	40·3	40·8	39·4	39·3	41·0	
Mean**	36·0	37·6	37·2	34·5	36·1	36·7	38·2	39·0	39·4	39·9	41·3	43·0	45·4	47·1	47·9	45·6	43·7	42·6	42·6	40·0	39·5	37·7	35·7	35·3	40·1	

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION.—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
March													14°+Tabular Quantities.													Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	39·6	39·7	40·1	39·5	39·6	39·4	39·1	38·8	38·1	38·9	40·5	43·1	45·1	46·1	45·6	43·9	40·6	40·9	40·1	38·1	39·1	39·3	38·3	38·3	40·5	
2*	39·6	40·1	39·9	40·0	39·9	39·4	39·3	38·6	38·1	38·1	40·6	42·6	44·4	44·4	44·5	44·4	43·1	42·1	41·3	40·9	40·5	40·1	39·8	39·7	40·9	
3*	39·7	39·6	39·6	39·5	39·5	39·1	39·1	38·9	37·7	37·3	40·9	45·9	46·3	45·3	44·4	43·1	42·1	41·8	40·9	40·3	40·1	39·9	39·1	39·3	40·8	
4**	37·7	39·1	39·5	39·3	39·1	38·1	37·3	36·3	36·1	36·1	38·6	42·8	46·1	49·1	49·6	51·1	47·5	45·1	44·4	43·1	37·1	37·3	36·2	39·1	41·1	
5**	38·6	38·1	37·9	35·1	37·1	38·1	44·1	39·1	38·6	39·1	40·6	41·3	43·1	48·1	47·1	43·8	42·4	37·1	30·6	36·9	36·9	37·3	39·1	37·3	39·5	
6	38·1	38·1	39·3	41·1	37·6	38·1	37·6	38·3	38·7	39·1	40·6	43·1	46·6	47·1	46·1	43·6	41·4	38·8	38·3	39·1	38·9	38·6	37·9	38·3	40·2	
7	39·9	39·3	38·1	39·6	38·1	37·1	37·1	37·1	37·6	39·1	42·1	44·4	45·1	46·1	45·1	42·1	40·6	40·6	40·1	38·1	35·7	36·9	38·1	38·7	39·9	
8**	39·6	41·1	37·1	34·6	36·8	37·1	36·9	39·1	40·3	40·8	42·6	45·4	46·6	48·1	45·1	43·9	42·3	35·1	39·1	35·1	33·4	35·8	38·1	36·1	39·6	
9	36·1	34·1	33·9	35·9	34·1	33·7	35·9	36·5	36·1	37·7	42·1	44·1	45·5	46·1	44·7	43·4	41·8	40·9	40·3	40·1	40·1	40·1	39·6	39·6	39·3	
10	38·6	37·1	36·9	36·1	34·6	35·9	36·1	46·3	47·3	38·6	41·6	44·1	45·3	45·1	44·4	43·1	41·8	41·1	41·1	41·1	40·6	40·1	39·7	39·5	40·7	
11	38·1	37·1	37·2	36·5	37·6	36·9	37·3	36·1	36·1	37·1	39·9	43·1	45·9	46·6	44·3	42·6	41·3	41·1	41·1	40·3	39·9	39·6	39·6	39·5	39·8	
12	39·6	39·6	39·3	38·9	39·1	38·1	37·1	34·8	34·8	37·1	40·7	44·5	45·1	45·5	45·7	44·8	43·1	42·4	42·1	41·4	38·8	39·3	35·5	46·6	40·6	
13	37·1	36·3	35·6	34·9	33·9	34·5	34·4	35·1	35·8	39·1	42·6	46·1	47·1	49·4	49·6	47·6	41·8	42·1	40·7	40·3	39·8	38·4	36·6	38·7	39·9	
14	39·1	39·1	39·3	38·9	38·1	38·1	38·1	37·1	37·1	37·8	40·1	42·6	44·6	46·1	44·9	43·1	41·9	41·1	39·9	40·1	39·1	36·8	38·7	39·1	40·0	
15	39·3	39·3	39·1	39·1	39·1	38·7	38·1	36·6	36·1	38·1	39·6	44·1	46·7	48·1	47·5	47·6	43·6	41·5	38·7	40·1	38·1	38·6	38·1	36·6	40·5	
16	38·3	39·3	39·1	39·1	39·3	39·3	38·6	37·3	36·6	38·1	41·1	44·1	47·1	46·9	46·7	45·8	44·1	42·5	39·3	39·1	37·1	38·8	39·4	39·7	40·7	
17	39·6	39·1	38·9	38·6	38·1	38·1	37·8	36·8	36·7	37·3	38·6	42·1	44·1	44·6	44·3	43·1	41·6	41·1	41·1	39·1	37·1	36·9	36·6	36·6	39·5	
18	37·6	33·8	35·4	36·3	37·1	37·6	36·1	35·5	36·7	38·3	42·3	45·6	47·6	47·9	47·1	44·6	42·9	41·1	40·6	39·9	38·3	39·1	39·3	38·6	40·0	
19	38·6	38·3	37·9	37·6	37·1	37·1	37·1	36·6	36·6	38·3	39·6	44·1	46·3	46·6	45·1	43·7	42·1	41·1	41·6	41·6	41·1	40·1	36·6	35·1	40·0	
20	34·5	34·7	36·5	37·1	37·1	36·7	35·8	34·4	34·8	37·1	42·9	44·6	46·6	47·1	46·1	44·1	42·1	41·5	40·7	39·3	39·9	39·8	37·1	38·1	39·5	
21**	37·6	39·6	41·1	39·6	37·1	36·1	35·1	36·6	36·6	38·1	42·6	47·1	48·8	47·7	45·4	42·5	41·1	38·1	34·6	40·6	40·6	40·4	39·8	39·9	40·3	
22	39·1	38·1	38·9	38·3	38·3	37·9	37·1	35·6	34·8	38·1	41·1	46·1	49·1	49·5	47·1	44·7	42·1	40·3	40·3	37·7	37·6	38·1	39·8	39·1	40·4	
23	39·6	39·1	39·1	38·6	39·6	39·5	37·7	38·1	39·1	39·1	41·1	45·1	48·1	48·1	45·7	43·1	40·5	39·4	39·1	39·6	38·8	37·1	39·1	39·6	40·6	
24	49·1	40·1	40·0	39·7	39·0	38·3	37·5	36·7	36·1	35·9	39·8	43·1	46·4	47·5	46·3	43·9	41·3	40·1	39·4	39·9	39·6	39·1	39·3	39·4	40·4	
25**	39·4	39·1	39·3	39·1	39·1	39·8	38·5	35·9	35·7	34·1	36·9	41·3	46·6	48·1	47·3	46·1	42·1	38·6	40·9	40·6	39·1	37·6	36·6	37·6	40·0	
26	38·6	40·1	40·1	39·1	38·6	38·6	38·9	36·6	34·1	34·6	37·6	41·1	44·6	46·6	46·6	44·9	43·1	41·6	40·9	40·5	39·7	36·9	38·1	38·5	40·0	
27	38·8	38·7	38·7	39·4	39·1	39·1	38·1	35·1	33·6	34·1	37·6	42·6	45·1	46·5	47·5	43·4	41·1	41·1	40·1	39·1	39·6	38·6	39·1	38·4	39·8	
28*	38·8	38·6	38·8	39·4	38·6	38·1	37·1	35·1	33·9	35·1	36·4	42·1	44·4	46·1	46·1	44·3	43·6	42·5	41·3	40·7	40·1	39·5	38·6	39·8	40·0	
29*	39·1	38·6	38·6	38·1	38·1	38·5	38·1	35·7	34·1	35·6	39·1	42·6	45·7	46·1	46·1	43·5	41·6	41·1	40·6	40·6	40·1	40·1	39·6	39·1	40·0	
30*	37·4	37·2	38·1	38·1	38·1	38·1	37·6	36·1	34·6	36·9	40·1	43·1	46·1	47·1	45·1	43·3	41·3	40·3	40·1	40·4	40·3	40·1	39·9	39·3	39·9	
31	38·9	38·3	38·3	38·6	38·3	37·9	37·1	35·1	34·7	36·5	40·6	42·1	44·1	44·6	45·6	43·1	42·1	41·6	41·6	41·6	41·9	40·3	39·8	39·4	40·1	
Mean	38·6	38·4	38·4	38·3	38·0	37·8	37·6	37·0	36·7	37·5	40·3	43·7	45·9	46·9	46·0	44·3	42·2	40·8	40·0	39·9	39·0	38·7	38·5	38·9	40·1	
Mean*	38·9	38·8	39·0	39·0	38·8	38·6	38·2	36·9	35·7	36·6	39·4	43·3	45·4	45·8	45·2	43·7	42·3	41·6	40·8	40·6	40·2	39·9	39·4	39·4	40·3	
Mean**	38·6	39·4	39·0	37·5	37·8	37·8	38·4	37·4	37·5	37·6	40·3	43·6	46·2	48·2	46·9	45·5	43·1	38·8	37·9	39·3	37·4	37·7	38·0	38·0	40·1	
April													14°+Tabular Quantities.													Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	35·1	34·3	35·1	36·3	36·6	35·6	35·1	34·1	35·6	37·1	41·9	43·9	45·3	45·3	44·2	42·1	41·0	40·3	40·1	40·0	40·1	34·1	33·6	38·2	38·5	
2	39·6	38·3	37·9	38·6	38·1	36·1	38·1	35·6	34·1	35·6	38·1	43·5	45·4	46·8	46·3	44·7	41·9	40·1	40·1	36·6	38·1	37·6	36·1	36·1	39·3	
3	36·1	38·1	37·3	38·1	36·1	36·3	36·1	35·7	34·4	36·8	40·1	44·5	46·7	46·9	45·5	44·3	42·1	39·1	38·6	36·6	36·6	35·6	35·3	36·5	38·9	
4	37·8	35·9	36·1	34·6	34·1	35·1	35·1	35·1	37·7	38·1	39·6	45·5	46·3	46·7	44·9	42·6	41·1	40·1	39·4	39·1	39·1	39·1	39·1	38·6	39·2	
5**	35·6	34·1	36·1	38·1	39·1	37·9	36·9	35·5	35·6	37·4	39·6	44·1	45·8	45·1	46·3	44·1	38·1	39·1	38·1	37·8	36·7	34·5	34·4	32·1	38·4	
6**	33·1	30·9	32·1	40·1	42·1	47·6	39·6	34·6	34·6	38·1	40·1	43·8	46·6	47·1	45·1	44·6	42·6	40·1	38·1	38·9	37·6	32·6	39·1	39·1	39·5	
7	38·9	38·6	38·1	38·1	39·1	38·1	36·4	34·1	34·1	37·1	40·1	43·6	44·3	46·1	45·1	43·3	41·1	39·3	38·9	36·1	38·1	36·8	33·1	34·4	38·9	
8	33·6	32·1	35·3	35·1	34·9	37·1	35·9	33·7	33·5	34·1	38·1	42·9	46·3	48·6	47·1	44·6	43·6	41·3	39·9	39·1	33·1	35·3	35·1	32·5	38·0	
9**	33·1	38·1	34·9	39·1	35·6	35·1	35·1	37·1	37·7	42·1	43·1	45·6	49·1	48·1	47·1	46·1	45·1	40·4	40·1	39·5	35·3	33·1	37·1	38·1	39·8	
10*	38·4	38·1	37·8	37·1	37·6	37·6	36·8	33·4	31·7	33·3	35·1	40·6	45·1	46·6	46·3	44·4	42·8	41·6	40·6	40·1	39·6	39·6	39·1	39·1	39·3	
11*	38·6	38·6	38·1	38·1	37·6	37·6	36·6	34·6	33·6	35·1	37·6	41·6	45·6	46·3	44·3	41·8	40·1	39·6	39·8	39·6	39·6	38·4	38·1	38·8	39·2	
12	38·6	38·6	38·4	38·1	38·1	37·5	35·7	33·8	32·8	33·4	38·1	42·1	44·8	46·1	45·4	43·1	41·1	39·6	39·1	38·6	38·1	35·4	37·6	38·8	38·9	
13	36·6	35·6	36·6	37·8	37·4	37·3	35·9	36·1	36·3	35·4	37·1	40·5	43·8	45·4	45·3	43·9	42·1	40·7	40·1	39·8	39·4	39·3	38·9	38·6	39·4	
14*	38·4	38·3	37·9	37·9	37·4	37·2	36·4	35·8	34·1	35·1	36·7	40·3	43·5	45·1	45·3	43·6	41·6	40·1	39·3	39·9	39·7	40·1	39·3	38·9	39·3	
15	38·4	38·1	38·1	37·8	36·5	35·3	37·3	36·1	35·1	35·6	37·1	40·6	42·6	45·1	46·3	45·1	43·5	41·3	40·1	38·6	37·3	37·9	37·6	36·3	39·1	
16**	37·1	33·1	33·9	34·1	34·8	37·1	37·6	39·3	37·4	36·6	38·1	40·1	42·1	45·1	47·1	49·4	48·1	43·1	41·6	40·1	39·8	39·4	38·3	37·1	39·6	
17	33·1	33·1	34·1	35·1	34·1	34·3	36·3	37·3	34·6	33·6	33·1	44·6	45·6	46·1	45·9	44·3	43·6	42·3	41·1	41·1	38·1	32·1	32·1	37·6	38·0	
18	36·1	37·1	37·6	37·1	37·6	37·8	36·6	32·6	32·4	33·8	37·6	43·1	45·9	47·1	45·1	43·6	41·3	39·3	38·1	38·3	36·1	34·6	35·6	35·8	38·3	
19	38·1	38·6	38·6	39·1	39·1	37·1	35·6	33·8	33·1	34·4	36·6	40·3	42·4	42·8	42·1	40·6	38·9	37·9	37·1	37·6	38·1	38·6	39·1	39·1	38·3	
20*	38·9	38·7	38·5	38·1	37·1	36·3	34·8	33·1	31·6	32·6	34·8	39·1	42·4	43·9	43·1	41·1	39·6	38·6	38·1	38·1	38·1	38·6	39·3	39·4	38·1	
21	37·9	38·3	38·6	38·4	37·6	37·8	37·5	35·1	34·1	34·7	38·6	41·8	45·4	46·1	44·1	41·3	40·1	39·1	39·1	39·1	39·1	39·1	38·9	39·2		
22	38·5	38·3	37·7	37·1	35·9	35·3	35·6	33·3	33·1	33·5	37·1	42·2	45·6	46·1	45·6	43·3	41·6	39·5	38·3	37·7	38·3	38·6	38·1	34·9	39·5	
23	38·1	37·1	37·1	37·1	37·1	35·9	35·1	34·8	35·9	39·1	43·1	46·6	47·6	45·6	43·1	40·6	39·1	38·6	38·5	38·7	38·3	36·1	37·1	39·1		
24	37·4	39·3	41·6	38·1	35·4	34·8	34·1	34·4	35·1	37·1	39·1	42·8	44·4	45·0	45·2	44·1	40·6	39·1	39·1	39·6	39·3	39·3	38·9	38·9	39·3	
25	38·1	38·3	39·1	37·9	36·4	35·1	34·1	33·8	33·6	35·1	39·6	43·1	45·6	46·1	46·1	44·3	43·1	41·6	40·9	40·1	36·1	36·6	38·1	38·6	39·2	
26**	38·9	37·6	37·1	36·9	39·1	36·1	35·1	34·5	38·1	38·6	39·6	42·5	48·2	50·1	47·6	47·6	44·1	42·1	36·1	36·1	34·8	37·4	37·6	38·1	39·7	
27*	38·6	38·6	38·1	37·6	36·7	36·5	36·1	35·5	34·7	35·8	37·4	41·1	42·6	43·6	42·8	41·6	40·8	40·3	39·7	38·5	38·4	38·3	38·1	38·1	38·7	
28	37·6	36·9	36·9	36·9	35·8	34·1	33·1	31·8	32·1	33·4	36·6	39·9	42·7	43·4	43·1	42·3	41·4	40·5	39·7	39·1	39·1	38·6	38·1	37·6	38·0	
29	37·6	37·1	35·9	36·3	39·5	36·1	33·6	34·1	35·4	35·6	38·1	40·6	44·1	45·3	44·5	44·1	42·7	40·6	39·4	39·8	38·1	39·1	38·6	37·1	38·9	
30	36·4	36·3	35·6	34·9	33·1	32·3	32·4	35·1	35·8	36·5	38·7	43·1	46·1	47·5	47·1	45·1	43·1	40·9	39·3	38·9	38·5	38·3	36·3	33·1	38·5	
Mean	37·1	36·9	37·0	37·3	37·0	36·7	35·9	34·8	34·6	35·7	38·2	42·4	45·0	46·0	45·3	43·8	41·9	40·2	39·3	38·8	38·0	37·2	37·2	37·3	38·9	
Mean*	38·6	38·5	38·1	37·8	37·3	37·0	36·1	34·5	33·1	34·4	36·3	40·5	43·8	45·1	44·4	42·5	41·0	40·0	39·5	39·2	39·1	39·0	38·8	38·9	38·9	
Mean**	35·6	34·8	34·8	37·7	38·1	38·8	36·9	36·2	36·7	38·6	40·1	43·2	46·4	47·1	46·6	46·4	43·6	41·0	38·8	38·5	36·8	35·4	37·3	36·9	39·4	

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
May.	14°+Tabular Quantities.																								Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1**	31·6	33·1	34·1	35·0	35·1	33·5	33·8	33·6	34·7	37·6	40·1	42·4	45·2	44·8	44·2	44·5	43·1	42·1	35·1	33·1	33·4	33·6	34·6	34·8	37·2
2**	33·1	31·1	31·1	29·9	31·0	30·1	32·3	36·1	36·8	38·1	42·1	46·1	48·6	41·6	48·1	44·7	41·5	41·3	40·9	46·5	45·7	44·3	44·6	45·6	39·6
3**	45·4	46·6	46·1	44·5	47·1	44·6	44·1	43·3	44·1	47·8	38·1	40·1	42·7	46·1	45·1	43·9	42·6	42·1	40·1	38·6	33·1	33·1	31·3	32·1	41·8
4	33·1	32·1	33·9	36·1	34·6	33·6	34·3	33·4	34·4	36·1	39·6	41·2	43·6	44·4	43·8	42·3	40·6	39·1	38·1	37·6	37·6	37·1	38·1	36·9	37·6
5	36·6	33·1	33·1	34·5	34·5	34·6	35·3	37·8	37·8	38·1	38·6	42·1	41·8	42·7	42·5	41·3	39·4	38·4	37·2	37·1	37·6	37·1	37·1	37·1	37·7
6*	37·6	37·4	37·1	36·1	35·6	33·8	32·8	32·1	33·1	34·6	38·1	40·4	42·3	42·9	42·1	40·8	40·1	39·1	38·1	38·1	38·3	37·9	37·9	37·3	37·7
7	37·3	36·3	34·3	34·9	33·4	32·1	31·6	33·1	33·3	36·9	39·6	42·1	44·4	45·1	43·6	41·7	40·3	38·5	37·7	37·1	37·1	36·6	36·1	35·1	37·4
8*	36·6	37·3	37·4	37·5	37·1	35·7	34·5	34·3	35·1	37·1	38·6	41·1	44·3	45·3	44·2	42·6	41·6	40·1	39·6	38·1	38·1	38·1	37·9	38·1	38·8
9	37·6	37·6	37·7	37·2	36·1	34·1	33·4	32·5	33·1	34·6	36·1	40·6	43·1	43 8	44 3	43 6	42·7	40·5	37·1	37·1	38·1	35·7	36·5	40·1	38·1
10	36·5	36·3	37·1	37·1	36·3	35·5	34·7	34 3	34 5	35·9	37·1	38·8	40·4	43·6	45·1	44·6	43·1	41·3	40·9	38·6	38·1	38·3	38·1	37·4	38·5
11	36·1	35·1	34·9	37·1	38·1	35·1	34·6	34·9	35·9	36·6	35·5	36 6	39·4	41·9	43·1	43·7	43·3	42·1	40·5	39·3	38·1	38·1	37·8	36·9	38·1
12	36 1	36·1	36·1	36·3	35·9	35·1	34·5	34·4	34·4	34·4	36·8	38·1	40·5	42·6	43·8	43·4	42·3	41·9	40·8	39·6	39·4	39·1	35·1	33·6	37·9
13*	34·6	35·6	35·6	37·4	34·9	36·1	36·3	34·8	35·3	36·1	38·6	41·1	43·6	44·8	46·1	42·5	41·1	39·9	38·9	38·5	37·3	36·3	35·1	34·9	38·1
14	33·9	32·9	33·1	34·5	35·4	35·5	35·1	34·3	34·8	36·1	38·1	41·1	42·8	43·1	43·5	43·1	41·9	41·4	40·3	38·9	34·4	34·8	37·5	37·1	37·7
15	37·7	38·6	38·1	36·0	35·1	33·6	33·5	32·2	33·4	34·1	37·1	38·6	40·3	40·9	40·1	39·3	39·1	38·4	37·8	36·5	37·4	38·1	38·7	37·1	37·2
16**	35·7	37·5	37·8	37·6	34·4	32·6	36·7	37·1	33·5	36·6	38·8	41·4	42·3	41·9	41·1	40·3	38·8	38·4	38·1	38·1	38·1	38·1	36·8	37·4	37·9
17	37·5	38·1	37·7	40·6	38·8	32·6	30·4	30·1	31·6	34·6	35·7	37·5	40·1	40·1	39·6	39·3	38·6	38·6	38·7	38·6	38·1	38·1	37·6	37·1	37·1
18	37·1	35·6	35·6	35·6	34·6	33·1	31·9	30·9	31·6	34·6	38·1	42·3	44·4	44·4	42·9	41·3	39·8	38·7	38·1	38·1	37·8	38·1	38·4	38·1	37·5
19*	38·1	37·6	36·8	36·4	34·6	32·9	31·3	31·3	32·1	33·3	34·3	36·6	40·1	42·6	42·3	41·4	40·1	38·8	38·1	37·8	37·8	37·7	38·1	37·9	37·0
20*	37·5	37·5	37·1	36·6	34·7	32·1	30·9	30·9	32·5	36·1	39·9	44·1	45·8	44·4	42·1	39·9	38·3	36¹6	37·1	37·4	36·1	37·1	38·8	38·6	37·6
21	38·6	38·6	38·1	38·5	36·9	34·3	33·1	31·9	32·7	34·0	36·2	43·1	46·3	46·1	43·9	42·9	41·5	40·3	39·3	38·3	38·1	38·4	38·3	38·1	38·6
22	38·1	38·1	38·1	36·9	34·3	33·3	32·1	30·9	31·1	33·4	37·1	40·1	44·8	46·4	45·4	43·8	42·5	37·1	37·4	38·1	38·8	39·1	38·7	38·5	38·1
23	38·1	37·9	37·1	36·6	35·1	32·9	31·6	31·7	31·5	33·6	36·4	42·8	45·1	44·9	44·1	42·6	41·4	40·1	39·3	38·1	36·1	36·9	37·3	37·6	37·9
24	37·1	36·9	36·6	36·1	34·3	32·6	32·1	32·6	32·6	35·3	40·1	43·6	44·5	45·1	44·3	43·1	40·9	39·6	39·8	39·8	38·3	38·1	38·1	37·5	38·3
25	36·9	36·9	36·9	36·1	35·1	33·3	32·1	31·7	31·3	33·1	35·6	41·4	44·2	45·7	45·1	43·9	42·1	41·1	40·1	38·1	37·3	38·4	38·3	37·3	38·0
26	38·1	39·3	36·9	36·1	33·6	33·0	32·2	31·5	33·1	35·6	38·1	42·1	44·4	44·3	45·2	43·1	40·4	38·6	37·5	37·2	37·3	37·6	37·1	37·0	37·9
27	36·5	36·1	34·9	34·3	33·6	32·1	32·0	31·2	32·6	35·8	39·6	43·1	45·6	46·4	46·9	43·1	40·4	39·5	38·8	38·3	36·6	31·9	33·1	35·1	37·4
28**	34·1	34·2	33·5	34·2	33·9	37·7	36·6	33·4	34·1	36·1	41·1	42·5	43·7	43·1	43·8	42·9	42·6	39·3	36·7	34·9	35·1	37·5	37·1	35·3	37·6
29	33·1	31·3	30 1	35·3	37·7	40·4	38·3	34·0	34·4	36·1	39·1	42·3	43·1	43·6	43·9	43·1	41·1	37·8	38·4	35·9	33·9	33·5	34·6	32·5	37·2
30	35·6	36·3	35·1	36·1	36·4	33·1	30·9	30·9	32·5	34·4	36·9	39·6	42·6	43·1	44·1	42·5	38·4	38·7	38·5	38·1	38·1	38·3	37·9	38·3	37·3
31	36·7	35·1	36·2	35·1	34·3	33·5	32·1	31·2	31·4	34·0	38·1	40·9	42·8	43·4	43·1	41·3	39·4	37·9	37·1	37·5	37·7	37·4	37·8	37·8	37·2
Mean	36·5	36·3	36·1	36·3	35·6	34·3	33·7	33·3	33·8	35·8	38·0	41·1	43·3	43·8	43·8	42·5	40·9	39·6	38·6	38·0	37·4	37·2	37·2	37·0	37·9
Mean*	36·9	37·1	36·8	36·8	35·4	34·1	33·2	32·7	33·6	35·4	37·9	40·7	43·2	44·0	43·4	41·4	40·2	38·9	38·4	38·0	37·5	37·4	37·6	37·4	37·8
Mean**	36·0	36·5	36·5	36·2	36·3	35·7	36·7	36·7	36·6	39·2	40·0	42·5	44·5	43·5	44·5	43·3	41·7	40·6	38·2	38·2	37·1	37·3	36·9	37·0	38·8
June.	14°+Tabular Quantities.																								Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1*	37·1	36·9	36·1	35·1	33·8	31·6	31·1	31·6	33·1	35·1	38·0	41·2	43·5	44·9	44·8	43·1	41·4	39·3	37·7	37·1	37·1	37·1	36·9	35·8	37·5
2*	35·1	35·1	36·0	36·2	34·1	32·3	30·6	29·5	29·1	32·0	35·1	38·6	42·1	43·9	43·9	42·9	41·1	39·6	38·4	37·3	36·9	37·0	37·5	37·1	36·7
3	36·3	36·5	36·1	35·6	34·4	32·8	31·3	30·9	30·9	33·5	38·1	41·3	44·9	47·6	47·6	45·8	44·3	41·3	38·7	39·1	38·8	36·9	35·4	29 3	37·8
4	29·4	30·1	30·1	33·1	31·5	29·7	29·1	30·1	29·3	32·4	37·1	41·3	43·1	44·4	44·9	43·4	42·1	39·6	37·8	36·6	37·1	37·1	37·1	37·3	36·0
5	37·8	37·4	36·9	36·1	35·1	33·1	31·6	29·9	29·3	31·6	35·7	39·5	43·1	45·1	45·1	44·6	42·6	39·8	37·1	35·6	35·6	35·8	36·6	36·6	37·2
6	36·6	36·7	37·1	37·1	36·1	34·1	32·1	30·5	30·1	32·3	37·6	41·1	43·9	46·1	45·9	44·3	42·6	41·1	39·1	37·6	37·4	36·3	36·1	36·3	37·8
7**	36·3	36·1	35·9	35·6	34·1	32·1	31·1	31·1	33·1	34·9	40·1	43·8	45·4	47·6	47·1	46·3	36·3	42·1	38·6	38·6	33·7	32·1	35·3	35·1	37·6
8	37·4	36·8	34·6	38·9	37·1	34·3	33·6	33·1	33·9	35·1	36·9	39·6	41·5	41·9	40·8	39·6	39·6	38·1	37·1	36·6	37·1	37·3	38·1	38·1	37·4
9	38·9	36·1	33·3	34·1	32·1	32·1	33·1	34·1	33·1	34·9	37·1	39·3	42·5	44·3	43·7	43·1	42·1	40·8	39·6	38·6	38·1	37·6	37·1	38·1	37·7
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11	35·1	36·6	37·5	36·9	33·1	31·9	30·3	29·4	28·6	30·1	33·3	37·8	40·4	42·7	43·4	43·1	41·4	39·9	39·1	36·1	37·9	39·1	38·5	37·5	36·7
12	37·1	35·9	36·3	35·8	34·5	31·9	30·8	30·4	30·9	33·6	37·7	41·4	44·3	45·5	45·6	44·7	42·5	39·6	38·5	38·4	37·8	37·2	37·9	37·6	37·5
13**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	37·1	36·1	37·5	38·0	35·3	35·1	33·1	30·6	32·6	35·1	37·1	41·1	43·1	43·6	43·1	42·1	40·9	38·8	37·7	37·4	38·1	38·1	38·1	38·3	37·8
16	38·1	37·8	39·1	34·1	33·3	31·4	29·3	29·7	31·1	35·4	41·1	43·7	45·1	43·8	41·8	40·1	38·7	37·1	38·1	38·1	38·3	37·3	38·1	36·9	37·4
17	36·8	35·9	35·1	33·5	33·5	32·7	31·8	31·4	32·9	36·3	41·1	44·4	44·5	43·1	43·1	42·3	41·4	40·5	40·1	38·9	38·3	39·1	39·1	38·6	38·1
18	38·1	38·3	38·1	37·1	34·4	32·1	31·5	32·1	33·1	36·1	38·6	41·9	43·6	42·6	41·8	40·7	39·6	39·4	39·1	38·8	38·8	39·1	39·9	38·6	38·1
19*	38·1	37·6	37·4	36·8	36·3	33·1	31·1	30·6	31·9	34·1	37·1	41·6	44·1	45·1	44·6	42·5	40·1	38·3	36·9	38·1	38·1	38·1	37·8	37·4	37·8
20*	36·7	36·3	36·3	36·2	35·1	34·0	32·6	32·1	32·3	33·7	37·1	40·6	43·3	44·1	44·7	43·1	41·3	39·8	38·1	37·1	37·1	37·1	37·1	37·1	37·6
21	36·9	36·6	36·1	35·9	34·1	32·5	32·1	32·4	33·7	35·6	38·3	42·4	45·6	45·6	44·3	43·3	41·7	39·8	38·9	38·1	37·1	37·1	37·1	37·6	38·0
22	38·5	37·1	35·1	34·9	33·1	32·3	32·6	31·2	30·6	32·1	35·1	38·1	40·1	41·8	43'1	42·1	41·4	41·1	41·1	40·3	40·1	39·1	37·3	37·1	37·3
23**	38·1	40·1	35·6	32·6	30·5	30·7	30·3	30·1	30·1	30·6	33·1	37·8	41·6	44·8	47·4	46·1	43·3	42·1	42·1	37·1	31·1	34·8	37·1	34·1	36·7
24**	32·1	32·7	33·8	36·4	37·5	39·4	36·9	33·3	32·1	33·1	34·5	38·8	42·1	45·1	50·9	49·7	45·3	47·6	42·6	41·5	36·1	32·1	33·7	35·8	38·5
25**	32·1	33·1	29·6	32·3	31·6	34·8	33·1	31·1	31·9	34·6	39·1	43·4	45·4	46·1	45·1	43·6	42·1	40·1	39·1	37·1	37·5	35·1	36·7	35·1	36·7
26	36·7	35·8	36·5	35·1	33·9	33·1	32·9	30·8	29·1	30·1	31·1	37·6	38·9	42·9	43·1	42·3	40·8	39·1	38·1	38·1	37·1	36·9	36·3	35·9	36·3
27	36·4	36·4	36·1	36·1	35·1	34·3	33·1	32·1	31·9	33·1	36·1	40·6	44·1	45·3	45·1	42·4	40·1	39·1	39·1	38·6	38·1	38·1	37·9	37·1	37·8
28	36·7	35·1	31·4	35·4	33·8	32·2	32·1	32·9	32·1	33·3	35·8	40·3	43·3	44·1	43·5	42·1	41·3	39·4	38·1	37·4	36·5	36·9	37·3	38·1	37·0
29	38·1	34·6	33·1	32·1	30·1	30·1	31·1	31·6	31·1	32·1	34·1	38·1	40·3	43·1	43·4	43·3	42·1	41·1	40·1	38·6	38·6	38·1	37·1	35·1	36·5
30*	34·1	34·1	33·5	33·1	33·1	32·7	32·1	32·1	32·4	33·5	35·1	38·1	41·1	43·1	43·8	43·1	42·1	40·1	39·1	38·4	38·1	37·1	36·1	36·1	36·7
Mean	36·4	35·6	35·3	35·3	33·9	32·8	31·9	31·3	31·5	33·5	36·7	40·5	43·0	44·4	44·5	43·3	41·4	40·2	38·9	38·0	37·3	36·9	37·2	36·6	37·4
Mean*	36·2	36·0	35·9	35·5	34·5	32·7	31·5	31·2	31·8	33·7	36·5	40·0	42·8	44·2	44·4	42·9	41·2	39·4	38·0	37·6	37·5	37·3	37·1	36·6	37·5
Mean**	34·7	35·5	33·7	34·2	33·4	34·3	32·9	31·4	31·8	33·3	36·7	41·0	43·6	45·9	47·6	46·4	41·8	43·0	40·6	38·6	34·6	33·5	35·7	35·0	37·4

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
July													14°+Tabular Quantities.													Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	35·6	35·6	35·3	35·1	34·6	33·1	32·4	31·9	32·9	35·1	36·5	39·1	42·3	44·5	43·5	43·1	42·8	41·1	40·1	39·4	38·3	38·9	38·4	37·8	37·8	
2**	36·6	36·6	38·9	36·1	32·9	36·1	36·9	28·0	35·1	35·1	38·1	41·0	43·3	45·3	45·1	43·3	43·1	39·9	39·3	39·3	39·1	37·1	36·9	36·3	38·7	
3	35·6	35·5	34·5	33·9	33·3	31·4	29·1	29·6	31·1	31·1	32·6	39·1	44·3	43·9	43·6	41·8	40·1	38·3	37·5	36·7	36·9	37·1	36·8	35·6	35·8	
4	36·0	34·0	33·1	32·3	31·9	33·3	31·6	30·3	30·5	33·1	37·7	41·6	44·1	45·1	44·9	43·1	41·3	39·3	38·9	38·4	37·4	36·1	35·7	36·1	36·9	
5	36·1	35·3	36·7	35·9	33·9	32·5	32·1	32·3	32·1	34·3	38·1	41·5	43·1	43·7	43·1	41·6	40·1	39·1	37·6	36·4	36·8	37·1	37·1	36·9	37·2	
6*	36·3	36·1	35·9	35·1	33·1	30·1	29·1	29·1	30·1	31·6	33·6	38·1	42·1	44·6	44·6	43·1	42·1	39·1	37·4	37·1	37·4	37·9	37·5	36·9	36·6	
7	36·1	36·5	35·1	31·7	29·9	31·1	30·9	29·9	30·3	32·7	35·9	40·6	43·1	42·3	45·1	44·4	41·9	39·8	40·0	39·1	38·3	37·1	36·9	36·5	36·9	
8	36·1	36·1	36·1	35·9	34·1	32·1	30·6	30·3	31·3	33·1	36·1	39·1	42·3	43·5	43·4	41·8	39·3	38·1	37·3	37·1	36·9	35·7	36·9	37·1	36·7	
9	36·4	36·1	36·1	36·1	34·8	32·9	31·1	31·1	32·1	35·1	38·1	42·1	45·1	46·1	46·1	44·5	42·3	40·1	37·7	36·6	36·9	37·6	37·3	36·6	37·9	
10	36·1	35·1	35·1	34·1	32·8	32·1	31·4	29·9	29·1	31·3	32·9	38·8	42·4	44·1	43·3	42·1	41·1	40·6	40·3	40·1	38·6	38·1	38·1	37·3	36·9	
11	36·4	35·6	31·6	32·1	33·1	32·1	31·1	36·6	36·6	37·8	39·5	39·7	41·1	40·9	40·3	40·3	40·1	40·1	40·8	39·1	36·1	36·1	37·6	37·1	37·2	
12	35·4	34·8	34·5	33·7	32·3	31·6	31·1	31·1	31·1	32·1	33·7	36·4	39·3	41·4	43·1	41·3	40·1	38·1	37·1	37·4	37·8	38·1	38·3	38·9	36·2	
13**	35·4	32·4	35·1	40·1	41·1	39·1	41·4	41·2	37·1	37·3	40·1	42·3	42·1	43·6	41·1	37·6	36·8	38·1	38·9	40·1	38·3	36·1	37·1	37·1	38·7	
14	33·1	31·6	31·3	30·9	30·8	31·1	30·9	31·1	30·1	31·6	36·4	36·8	42·1	43·1	41·6	39·9	38·3	37·9	37·6	37·9	37·8	37·4	37·3	37·5	35·7	
15	36·3	36·1	35·8	37·3	37·9	37·4	35·9	34·8	33·9	34·1	37·1	39·9	43·3	44·4	43·3	40·4	38·5	37·1	36·9	37·1	36·8	37·1	37·1	36·3	37·7	
16*	36·3	35·9	35·1	34·9	33·8	31·6	30·1	30·1	30·5	33·7	36·3	39·3	43·1	43·6	42·5	40·6	38·8	37·4	36·1	36·1	36·4	37·1	36·9	37·1	36·4	
17*	36·4	36·1	36·1	35·3	34·9	34·1	33·1	31·6	30·8	31·1	33·6	36·6	39·1	41·1	41·5	40·7	39·4	38·3	37·1	36·6	37·1	37·1	37·6	37·1	36·3	
18*	36·9	37·1	37·3	36·1	34·1	33·3	32·1	30·3	30·1	32·1	35·1	39·9	43·4	44·5	42·5	40·3	38·6	37·4	37·1	37·1	36·6	37·1	37·1	37·6	36·8	
19	37·6	36·9	36·3	35·6	34·1	32·1	30·6	30·6	31·1	32·6	36·3	39·6	42·9	44·9	43·8	41·1	39·8	37·1	37·6	38·1	37·9	37·6	36·1	35·6	36·9	
20*	34·3	34·3	35·1	35·1	34·1	32·1	31·1	30·9	30·7	32·3	35·1	39·3	42·9	46·5	48·1	45·1	40·6	37·6	35·9	35·7	35·8	35·3	35·1	35·4	36·6	
21	35·9	36·1	35·6	35·1	33·7	32·6	31·1	30·1	30·1	32·3	36·5	40·6	43·6	45·1	45·1	43·1	40·6	39·1	39·1	37·9	35·1	33·7	28·8	32·1	36·4	
22**	30·6	29·1	30·6	30·1	32·6	30·1	30·6	30·6	32·1	33·1	35·1	39·4	42·6	44·1	43·1	41·3	39·1	37·4	35·1	36·1	35·8	36·4	36·6	36·8	34·8	
23	34·1	33·6	34·1	34·1	32·3	32·1	31·4	31·1	32·6	34·1	36·1	40·1	42·6	43·3	42·9	41·1	39·8	38·1	36·4	36·1	36·1	36·1	35·1	34·1	36·1	
24	34·1	33·8	33·1	33·1	32·1	33·1	32·1	30·1	30·3	32·1	34·6	36·6	40·1	42·4	42·9	41·1	39·5	38·1	37·1	35·1	35·1	36·1	36·1	34·1	35·5	
25	33·7	35·5	34·1	33·1	32·3	31·3	30·1	29·7	30·1	31·6	34·1	37·1	40·4	43·3	44·3	44·1	41·7	39·1	37·1	36·5	35·9	35·8	35·1	34·4	35·8	
26	33·8	33·1	33·1	33·6	33·1	32·6	32·1	31·4	31·8	33·3	35·2	38·1	41·3	43·1	42·6	41·4	40·3	38·9	37·8	36·4	36·4	36·6	36·6	36·1	36·2	
27	35·1	34·4	34·3	34·1	33·1	31·6	31·1	31·1	33·1	35·6	38·6	42·8	44·1	44·4	45·4	44·3	42·6	40·6	40·3	40·1	38·1	36·1	37·1	36·4	37·7	
28	33·1	33·9	34·1	34·1	32·9	30·5	29·6	29·5	30·1	32·9	36·7	39·9	43·6	45·1	45·1	42·1	39·3	38·9	38·4	39·1	37·1	33·6	32·3	33·4	36·0	
29**	34·1	29·4	32·8	30·1	30·8	36·1	38·1	36·6	37·1	36·1	41·1	41·1	43·3	42·3	41·1	39·3	37·1	37·1	37·4	37·6	37·3	36·9	36·1	36·3	36·2	
30	35·1	33·1	33·5	34·1	34·8	33·9	34·1	34·4	34·7	35·3	38·1	41·3	44·9	45·7	45·3	42·9	40·1	38·9	38·3	38·1	37·1	36·3	35·4	34·6	37·5	
31**	34·1	33·4	33·3	32·1	30·6	29·3	29·6	30·6	32·1	35·6	39·1	44·6	50·1	53·1	50·6	48·1	46·6	39·1	39·6	37·6	37·8	36·1	35·4	32·6	38·0	
Mean	35·3	34·5	34·3	34·0	33·4	32·7	31·8	31·6	31·8	33·5	36·4	39·8	42·8	44·2	43·8	42·1	40·4	38·7	38·0	37·6	37·1	36·6	36·3	36·0	36·8	
Mean*	36·0	35·9	35·9	35·3	34·0	32·2	31·1	30·4	30·4	32·2	34·7	38·6	42·1	44·1	43·8	42·0	39·9	38·0	36·7	36·5	36·7	36·9	36·8	36·8	36·5	
Mean**	34·2	32·2	34·1	33·7	33·6	34·1	35·3	33·4	34·7	35·4	38·7	41·7	44·3	45·7	44 2	41·9	40·5	38·3	38·1	38·1	37·7	36·5	36·4	35·8	37·4	
August													14°+Tabular Quantities.													Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	37·6	31·6	29·6	29·4	29·3	29·6	29·3	34·5	36·6	36·3	36·6	39·1	41·4	42·8	41·1	39·6	39·1	37·1	36·1	34·1	32·9	35·6	35 6	35·6	35·4	
2	35·1	34·4	34·1	33·1	32·8	32·1	32·3	31·6	33·4	35·1	38·1	43·6	46·1	46·1	43·1	40·3	38·1	37·1	36·1	35·6	35·1	35 6	36·9	34·1	36·7	
3	33·1	37·1	35·1	33·8	32·4	30·5	29·3	28·9	29·6	31·6	35·1	41·1	44·6	45·1	43·1	40·4	38·6	37·1	36·1	34·8	35·1	36·3	35·9	35·6	35·8	
4	35·1	34·1	34·1	33·1	33·3	31·9	31·9	33·1	33·1	34·3	34·9	41·1	47·1	48·8	46·6	43·1	40·1	38·1	37·1	35·9	34·1	35·1	35·8	35·7	37·0	
5*	34·7	34·5	35·1	35·3	34·6	33·6	33·4	33·1	34·1	35·1	38·5	43·6	47·1	48·1	45·9	42·1	39·1	37·1	36·1	36·1	36·1	35·4	36·1	36·1	37·5	
6*	35·6	35·1	34·6	33·5	33·1	31·1	30·1	30·1	31·1	33·1	35·4	38·5	41·9	44·1	44·8	43·1	40·1	38·1	37·1	36·3	35·4	36·1	34·1	33 3	36·1	
7	35·1	36·1	35·1	34·5	34·1	32·7	31·8	30·1	29·1	30·1	32·8	38·4	41·1	46·4	46·4	43·1	41·5	39·6	38·1	38·4	38·1	35·8	34·6	34·4	36·6	
8	35·1	35·3	35·1	38·1	32·6	33·6	34·3	32·3	31·1	33·3	36·1	40·4	44·5	47·1	46·1	43·1	39·3	36·1	34·1	34·6	36·1	36·1	35·9	34·1	36·9	
9**	34·6	36·3	34·1	35·5	55·6	49·1	31·5	36·4	31·4	39·1	43·1	35·8	40·8	40·7	40·4	39·5	39·3	40·1	38·1	37·1	35·1	41·1	38·1	30·6	38·5	
10**	18·6	25·6	30·6	33·1	30·6	27·3	26·1	29·9	29·9	32·8	35·6	39·1	39·1	39·8	39·1	38·3	37·1	37·9	35·1	34·1	34·1	36·1	36·1	36·1	33·4	
11	36·3	35·4	36·6	35·1	34·5	35·7	33·4	33·1	33·1	34·6	36·1	37·9	39·3	39·4	38·9	38·8	38·6	38·1	37·3	37·1	36·3	36·9	36·1	35·3	36·4	
12	34·7	34·1	34·1	33·9	32·8	31·9	31·3	31·1	31·8	33·8	37·1	40·8	43·1	43·1	42·1	38·9	37·4	36·9	37·1	37·1	36·9	36·5	36·4	36·1	36·2	
13**	32·9	33·9	34·0	33·1	31·9	29·9	28·6	29·1	32·1	35·6	39·1	41·3	43·4	44·5	44·4	44·1	42·1	38·1	39·1	38·1	38·1	39·1	36·6	35·6	36·9	
14**	34·1	33·1	35·3	35·6	34·6	32·1	30·9	31·4	32·8	35·9	38·1	43·6	47·1	45·9	47·1	47·9	42·3	36·6	32·1	30·6	25·3	30·9	31·6	30·6	36·1	
15	23·1	26·6	17·1	31·1	36·1	29·1	29·3	33·4	32·1	36·1	37·3	43·1	46·6	47·1	42·9	42·3	40·3	37·6	36·6	34·6	33·6	35·3	35·6	34·1	35·0	
16	32·6	30·1	32·1	32·1	32·1	32·1	32·6	32·1	32·1	33·8	37·4	40·9	43·6	44·6	42·1	41·1	38·6	35·7	36·3	32·1	32·1	36·1	35·1	34·6	35·5	
17	34·6	34·8	34·4	33·5	32·0	34·2	32·1	30·7	31·3	33·9	37·6	42·1	45·3	45·1	41·6	38·5	35·7	32·8	34·3	35·4	36·3	36·1	36·1	35·6	36·0	
18	35·5	35·8	42·1	30·7	28·6	28·4	29·6	29·3	31·1	34·1	37·1	41·3	43·6	43·1	41·6	39·1	36·5	35·1	35·1	34·4	34·1	33·1	34·6	34·6	34·9	
19*	33·1	31·3	31·9	31·8	31 4	29·8	28·4	29·1	31·3	34·1	37·4	40·6	43·1	43·9	42·3	40·1	37·6	35·6	34·6	34·9	35·1	34·6	34·1	34·8	35·0	
20	34·3	34·1	34·1	33·9	33·1	32·1	31·4	32·3	32·1	34·3	37·1	43·1	48·1	47·1	43·9	40·3	39·1	38·3	38·1	37·9	37·5	36·1	33·4	32·1	36·8	
21**	29·1	24·6	25·6	29·1	29·1	25·1	29·1	33·1	35·6	39·5	42·1	45·4	45·1	47·4	48·1	44·6	38·1	38·1	28·9	25·1	27·3	21·1	31·3	40·6	34·3	
22	35·1	30·1	34·6	34·1	41·6	40·1	36·1	37·1	35·1	35·6	38·1	41·1	43·1	42·6	40·5	37·1	34·1	33·1	32·1	31·3	30·3	30·1	27·6	32·1	35·5	
23	29·1	32·1	29·1	30 4	30·1	31·1	29·6	28·8	29·1	32·1	36·1	40·1	43·1	43·1	43·1	40·6	38·6	33·4	33·1	33·1	33·6	32·6	35·1	35·1	34·3	
24	34·8	35·1	37·4	37·1	34·1	33·6	33·3	32·4	31·1	33·8	37·1	38·9	41·3	42·1	41·3	38·9	36·9	35·8	35·6	35·8	35·7	35·6	35·3	35·1	36·2	
25	34·8	34·6	33·9	34·1	32·1	31·4	30·8	30·1	29·6	31·6	35·6	40·6	44·1	46·1	45·6	42·6	40·3	37·1	36·6	36·9	35·1	36·6	34·1	33·1	36·1	
26	33·3	33·6	27·6	21·6	25·6	27·1	26·6	27·6	31·1	33·4	36·1	39·1	41·1	41·6	40·1	38·1	35·6	35·1	34·4	34·4	34·1	33·1	32·1	34·5	33·2	
27	34·1	33·9	33·6	32·9	31·8	30·3	29·1	28·3	29·9	33·8	38·9	40·9	43·7	44·1	41·9	38·6	36·1	34·6	33·9	34·3	35·1	35·9	34·6	35·1	35·2	
28*	33·7	33·6	33·1	33·3	32·4	31·5	31·1	30·6	31·6	33·1	37·1	40·6	44·1	44·3	41·7	39·9	36·5	34·4	35·3	35·6	36·1	36·1	35·1	34·1	35·6	
29*	34·8	35·1	35·9	34·1	33·1	32·1	30·4	28·3	28·6	30·6	34·6	38·1	41·1	42·1	40·9	39·1	37·1	35·1	35·1	35·3	35·8	35·2	35·1	35·1	35·1	
30	35·1	34·5	33·8	33·4	31·3	30·1	28·7	27·3	28·9	31·3	35·6	39·1	42·6	45·1	45·1	41·4	37·7	36·9	36·9	35·5	33·3	32·1	33·1	33·3	35·1	
31	31·8	31·6	32·1	32·1	30·1	29·1	28·6	28·4	30·1	33·5	37·1	40·9	44·1	43·3	41·4	39·1	36·8	35·9	35·8	35·1	33·7	35·1	35·1	35·1	34·8	
Mean	33·3	33·1	32·8	33·0	33·1	31·9	30·7	31·1	31·6	34·0	37·1	40·7	43·6	44·4	43·0	40·8	38·3	36·5	35·6	34·7	34·4	34·9	34·7	34·6	35·7	
Mean*	34·4	33·9	34·1	33·6	32·9	31·6	30·7	30·2	31·3	35·2	36·6	40·3	43·5	44·5	43·1	40·9	38·1	36·1	35·6	35·6	35·7	35·5	34·9	34·7	35·9	
Mean**	29·9	30·7	31·9	33·3	36·3	32·7	29·2	32·0	32·4	36·6	39·6	41·0	43·1	43·7	43·8	42·9	39·8	38·2	34·7	33·0	32·0	33·7	34·7	34·7	35·8	

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
September.													14°+Tabular Quantities.													Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1*	35·1	34·9	34·4	34·1	33·3	32·1	30·8	30·1	30·6	33·6	38·1	43·3	45·9	45·4	44·6	42·1	38·9	38·1	37·9	37·1	36·3	35·9	35·1	34·9	36·8	
2**	34·7	34·4	34·1	34·1	33·1	32·5	29·8	28·3	31·1	34·9	39·1	42·6	45·3	47·1	44·9	41·8	40·1	37·1	36·4	35·9	34·1	33·7	33·1	30·1	36·2	
3	32·1	34·8	31·4	34·5	34·3	34·3	33·1	34·1	34·9	34·3	37·1	40·1	43·4	43·1	41·8	39·5	36·3	33·4	33·4	34·1	34·1	33·6	29·6	28·8	35·3	
4	36·1	32·1	32·1	32·1	32·1	31·6	30·8	30·1	31·6	34·1	37·4	43·9	46·1	45·6	44·9	42·3	39·1	37·1	36·1	35·9	35·3	35·1	35·1	33·6	36·3	
5**	33·4	33·6	33·3	34·8	35·1	34·1	39·4	36·6	32·1	31·1	38·6	44·6	45·1	44·1	42·9	41·3	39·1	32·7	33·3	33·3	22·9	25·8	23·9	26·6	34·9	
6	30·6	32·1	33·3	33·1	32·9	31·9	30·3	29·6	29·6	31·9	36·1	39·3	43·3	43·1	42·1	38·6	36·1	34·9	34·4	34·6	34·3	33·1	33·1	35·1	34·7	
7	34·8	34·6	34·3	34·2	34·6	33·1	31·3	30·9	31·1	33·3	36·1	39·9	42·3	43·1	41·4	38·8	37·1	34·4	35·1	35·1	33·6	33·6	34·1	35·1	35·5	
8	33·3	33·4	33·6	33·3	33·1	33·4	33·4	32·1	32·9	33·3	37·1	40·1	41·8	42·1	40·9	39·3	37·9	36·3	35·8	35·3	35·1	33·6	31·1	33·1	35·5	
9**	27·6	31·1	32·1	34·6	32·1	30·4	30·6	35·6	33·1	35·9	37·5	41·1	42·6	42·1	39·7	36·1	36·1	35·1	33·6	34·6	35·1	34·1	32·6	34·1	34·9	
10	34·1	34·1	34·3	36·1	34·1	33·1	33·1	33·1	33·6	36·1	36·6	39·8	41·7	42·1	40·4	38·5	37·1	36·4	36·1	35·6	35·1	35·1	34·6	34·1	36·0	
11*	33·6	34·1	33·6	33·4	33·5	33·1	31·6	30·7	31·1	32·8	36·1	39·9	41·3	42·1	38·8	37·6	36·4	35·3	35·4	35·3	35·1	35·1	34·9	35·1	35·3	
12	34·4	35·4	34·3	33·8	33·4	32·8	31·3	31·1	31·4	32·6	35·1	38·6	40·8	42·4	42·1	40·8	38·1	37·3	37·1	36·9	36·6	35·6	30·1	31·6	35·6	
13	26·6	26·6	29·1	29·1	30·1	31·1	31·6	31·6	31·9	34·1	36·1	39·6	40·9	40·8	38·6	37·4	36·3	36·6	36·1	35·6	35·1	35·3	34·1	32·9	34·1	
14	32·7	31·1	32·1	32·1	31·1	32·9	31·1	31·1	31·1	34·1	38·6	42·6	44·1	43·4	41·3	39·6	37·1	36·9	36·9	36·1	35·3	35·1	35·1	35·7		
15	34·3	33·8	32·1	29·4	29·1	30·9	29·6	29·8	29·6	32·1	35·1	38·1	41·1	42·1	38·8	39·1	37·4	37·1	36·4	34·8	35·1	35·1	34·6	34·1	34·6	
16	34·1	34·1	34·1	33·3	33·1	32·6	30·9	29·9	30·6	33·1	35·1	35·6	42·1	41·3	39·6	37·6	36·6	33·6	34·1	34·9	35·1	35·1	34·6	34·3	34·8	
17	31·3	31·6	30·4	31·3	31·8	31·9	30·1	30·9	30·6	34·1	37·6	41·6	42·7	41·9	40·9	39·9	36·6	35·1	35·1	34·6	33·6	31·3	32·1	32·1	34·6	
18	33·6	34·1	33·1	33·1	32·9	31·3	30·6	30·1	30·6	32·8	35·4	39·6	41·1	41·4	40·8	39·7	38·5	37·3	35·1	36·3	35·7	33·6	28·6	30·1	34·8	
19**	35·1	35·1	32·1	32·1	35·4	36·1	32·8	31·7	33·1	34·5	37·1	40·3	45·3	46·1	44·3	41·3	39·3	39·1	37·1	36·3	35·6	35·1	34·9	34·4	36·8	
20	34·1	34·1	33·6	33·1	32·9	35·6	34·9	32·1	31·7	33·9	37·6	41·7	45·1	44·6	45·1	44·1	40·5	39·1	35·8	35·4	27·3	29·1	31·1	31·9	36·0	
21	30·1	30·1	27·1	30·1	31·6	32·1	31·9	30·6	29·9	31·1	36·5	41·3	44·6	44·1	42·6	40·6	37·1	37·9	37·1	36·6	35·3	35·1	33·6	33·6	35·0	
22	33·6	33·3	30·1	28·3	32·1	31·4	30·9	30·1	30·6	33·1	36·3	41·1	41·6	41·1	40·1	39·1	37·9	36·9	36·1	34·9	34·1	34·7	34·3	34·1	34·8	
23*	34·1	33·6	34·1	33·1	33·6	33·6	32·1	30·1	28·9	29·3	32·6	36·6	39·3	40·6	40·1	38·6	37·4	36·9	36·1	35·7	35·1	35·1	34·6	34·5	34·8	
24	34·1	33·6	33·1	32·4	30·3	32·1	31·1	29·1	29·1	31·1	36·1	40·1	41·9	42·1	41·1	39·1	37·6	36·3	36·1	34·6	34·1	34·1	34·3	34·1	34·9	
25*	34·1	34·1	33·1	32·6	32·6	32·1	31·1	29·1	28·6	30·1	34·1	39·1	42·3	43·3	41·9	40·6	39·6	38·4	37·3	36·6	35·6	35·1	35·1	34·6	35·5	
26*	34·3	34·1	33·9	32·3	32·1	32·4	32·1	31·1	30·1	31·3	34·6	37·1	40·1	41·1	40·1	39·4	37·8	36·9	36·1	35·1	35·1	35·1	34·1	34·1	35·0	
27	33·6	33·3	33·1	33·1	33·1	32·6	31·6	30·1	29·6	30·9	34·1	35·8	38·9	40·1	40·8	40·1	37·1	36·1	35·7	35·6	34·6	32·1	32·9	30·6	34·4	
28	28·3	30·1	31·3	32·1	32·1	32·1	31·1	29·7	29·1	31·3	33·6	36·1	39·1	40·1	39·3	37·1	37·1	36·6	36·1	35·1	35·1	35·4	35·1	31·6	33·9	
29	32·5	33·1	33·4	33·1	32·7	32·1	32·1	31·1	31·1	32·4	34·6	39·6	39·6	39·6	39·1	38·1	36·3	36·9	35·8	35·1	33·4	32·6	34·3	33·1	34·6	
30**	33·1	30·9	34·1	29·6	31·1	33·1	36·3	37·1	35·1	36·6	38·6	42·1	42·6	41·6	40·6	39·1	37·1	34·3	33·6	32·1	31·6	30·6	30·1	31·1	35·1	
Mean	33·0	33·0	32·7	32·6	32·6	32·6	31·9	31·3	31·2	33·0	36·3	40·0	42·4	42·6	41·3	39·6	37·7	36·3	35·7	35·3	34·2	33·8	33·0	33·0	35·2	
Mean*	34·2	34·2	33·8	33·1	33·0	32·7	31·5	30·2	29·9	31·4	35·1	39·2	41·8	42·5	41·1	39·7	38·0	37·1	36·6	36·0	35·4	35·3	34·8	34·6	35·5	
Mean**	32·8	33·0	33·1	33·0	33·4	33·2	33·8	33·9	32·9	34·6	38·2	42·1	44·2	44·2	42·5	39·9	38·3	35·7	34·8	34·4	31·9	31·9	30·9	31·3	35·6	
October.													14°+Tabular Quantities.													Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	31·1	33·1	31·1	32·1	34·6	35·1	33·6	31·6	30·1	32·6	35·6	40·6	42·1	41·3	40·9	38·6	36·3	35·3	33·4	34·1	30·1	29·1	34·1	32·6	34·6	
2	31·6	32·1	32·6	30·6	35·6	32·1	31·1	30·1	30·3	32·1	36·9	40·6	44·3	43·1	41·4	38·6	37·3	31·1	29·1	33·6	30·1	25·1	30·1	30·6	33·8	
3**	33·3	31·1	30·1	31·6	32·9	32·9	33·1	34·1	35·1	35·6	38·3	41·1	43·1	41·1	39·1	36·3	36·1	35·1	33·6	25·1	19·6	26·1	27·1	21·6	33·1	
4	26·1	24·1	27·3	32·1	35·1	34·1	31·6	32·1	34·1	37·3	39·1	41·1	42·1	42·1	40·6	38·1	33·9	34·4	35·1	33·6	31·8	33·6	34·1	33·1	34·4	
5	31·1	31·1	33·1	33·4	32·9	33·3	32·6	30·6	31·1	33·1	36·9	40·1	43·1	43·6	40·6	40·1	38·4	37·1	36·6	35·1	34·1	28·1	27·6	24·1	34·8	
6	31·9	31·1	32·8	36·6	36·1	34·8	34·9	33·6	34·1	37·1	37·6	38·1	40·1	40·6	40·1	38·6	36·3	35·3	34·7	34·3	34·3	33·7	33·6	33·6	35·6	
7	33·4	33·1	33·3	33·4	33·3	33·1	32·6	30·3	28·9	28·6	31·1	34·9	37·3	39·1	38·9	38·1	36·6	36·4	36·1	35·1	32·1	30·3	32·3	33·4	33·8	
8	34·1	33·1	32·9	32·4	32·3	32·8	32·1	30·9	30·1	30·9	34·5	38·1	42·8	41·1	40·9	40·6	39·6	37·6	35·1	34·6	35·1	34·1	34·1	34·1	35·2	
9	33·4	33·4	32·6	32·3	32·1	32·1	30·6	29·5	29·3	30·1	33·6	38·1	40·1	40·4	40·1	39·1	35·9	35·3	34·1	34·1	34·1	34·1	34·1	34·1	34·3	
10	34·6	32·3	30·9	34·3	35·1	32·1	31·6	29·9	28·6	29·6	32·6	37·6	39·6	40·6	40·1	38·3	38·1	35·4	35·3	35·1	34·9	34·3	34·1	34·3	34·6	
11	33·6	33·1	33·1	34·1	36·6	34·9	33·1	30·6	29·6	31·3	33·1	37·6	39·8	41·8	30·7	38·1	37·1	29·9	27·1	34·1	33·1	30·9	31·3	33·3	34·1	
12	33·6	33·4	33·3	33·1	32·6	33·1	31·6	30·6	30·1	31·3	35·1	37·6	41·1	40·1	38·4	37·6	36·1	36·6	36·1	35·9	34·6	33·3	33·6	33·8	34·7	
13**	33·6	33·3	33·1	33·4	33·1	32·8	32·1	30·1	29·9	31·1	34·6	37·3	39·1	38·6	37·9	37·3	36·3	38·1	34·6	33·1	33·1	30·6	32·1	31·1	34·0	
14**	30·6	27·9	26·3	25·6	29·6	31·1	33·1	34·1	33·1	36·6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
15	—	—	—	—	—	—	—	—	—	—	33·1	35·1	37·1	38·3	38·3	36·9	33·3	32·9	34·1	34·1	33·1	32·1	32·1	29·9	—	
16*	31·3	33·1	33·3	33·4	33·3	33·1	32·1	30·8	31·3	33·1	35·6	38·6	39·6	39·6	39·1	37·6	36·6	36·1	35·4	34·8	34·1	33·8	33·4	33·6	34·7	
17	33·3	33·1	33·1	33·1	32·3	31·6	30·1	29·6	31·4	35·1	39·1	41·9	42·9	41·6	39·6	38·1	36·3	34·4	33·6	33·3	32·1	34·4	31·1	34·8		
18	32·6	33·6	33·6	33·6	34·1	33·1	31·9	29·8	28·6	29·8	33·1	37·1	39·4	40·8	39·6	38·1	35·1	35·1	35·4	34·3	33·9	33·3	33·4	33·8	34·3	
19*	34·1	33·3	33·1	33·1	33·3	32·6	32·1	29·6	29·1	31·6	34·6	37·6	38·6	38·7	38·1	37·5	36·1	36·1	36·3	35·6	34·6	34·1	33·1	33·1	34·4	
20*	33·1	33·4	33·3	33·3	33·1	32·6	31·6	29·6	28·6	29·1	31·6	36·1	38·4	39·6	39·1	38·1	37·6	36·6	35·6	34·8	34·1	33·1	32·4	31·1	34·0	
21*	29·6	30·1	31·1	31·6	32·1	31·6	31·1	29·6	28·3	29·1	31·9	35·8	38·1	39·4	38·6	37·1	35·9	35·3	35·1	34·6	34·1	33·6	33·6	33·4	33·4	
22*	33·1	33·3	33·4	33·6	33·8	33·1	32·9	31·3	30·1	30·1	32·9	36·1	41·1	41·6	42·4	40·1	38·3	37·1	35·6	34·6	34·1	33·5	33·1	33·1	34·9	
23	33·1	32·8	33·1	33·1	33·1	33·6	33·1	31·1	29·4	30·3	34·6	36·6	39·4	39·4	40·5	38·9	35·1	31·1	35·3	35·3	33·7	33·3	33·6	34·1	34·3	
24	33·5	33·4	33·1	31·8	31·7	33·9	32·8	31·1	29·6	30·6	34·1	36·6	37·6	37·6	36·6	35·1	34·3	34·1	34·6	32·9	29·1	27·1	26·6	26·1	32·7	
25	26·6	25·6	24·6	25·1	29·1	33·3	34·6	41·6	36·1	33·6	34·6	39·1	40·6	42·3	42·3	40·6	40·6	38·6	35·6	35·1	33·6	33·1	33·1	33·1	34·7	
26	32·6	32·8	32·6	32·4	32·3	32·1	31·6	30·9	30·1	30·6	33·1	36·1	37·9	37·3	36·3	35·1	34·4	34·4	34·1	34·8	35·1	33·8	33·1	33·1	33·6	
27	33·3	33·3	33·1	32·3	32·1	31·9	31·9	30·3	29·7	30·4	33·6	37·1	39·1	39·1	38·1	39·1	39·1	39·4	37·1	34·1	33·3	33·1	32·6	31·1	34·3	
28**	32·8	33·1	33·1	32·6	32·1	31·9	32·1	32·1	31·3	33·1	37·1	44·8	44·4	39·9	39·1	38·6	37·1	35·1	36·6	36·3	30·4	27·1	24·6	24·6	34·2	
29**	29·6	30·6	30·6	35·1	32·1	32·1	33·1	33·6	36·6	33·6	37·6	40·4	42·1	40·3	41·1	41·4	31·1	26·1	29·1	29·6	31·1	29·1	28·6	27·1	33·4	
30	27·1	31·6	29·1	31·6	32·8	32·4	31·9	31·1	31·8	32·6	35·6	37·1	40·1	38·1	38·1	36·8	34·1	33·4	33·1	30·8	24·1	28·4	28·3	30·4	32·6	
31	30·6	32·1	29·1	31·6	33·6	34·1	34·4	32·1	30·6	30·8	33·6	35·6	38·1	39·6	38·1	34·6	35·6	34·6	33·6	33·1	25·6	29·1	29·6	31·1	33·0	
Mean	32·0	31·9	31·7	32·4	33·1	32·9	32·4	31·4	30·8	31·9	34·7	38·0	40·3	40·3	39·6	38·2	36·4	35·0	34·4	33·9	32·1	31·4	31·8	31·6	34·1	
Mean*	32·2	32·6	32·8	33·0	33·1	32·6	32·0	30·2	29·5	30·6	33·3	36·8	39·2	39·8	39·5	38·1	36·9	36·2	35·6	34·9	34·2	33·6	33·1	32·9	34·3	
Mean**	32·3	32·0	31·7	33·2	32·6	32·4	32·6	32·5	33·2	33·4	36·9	40·9	42·2	40·0	39·3	38·4	35·1	33·6	33·5	31·0	28·6	28·2	28·1	26·1	33·7	

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION—*continued.*

November. 14° + Tabular Quantities. Mean.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	30·5	31·9	33·1	33·7	34·9	34·1	32·6	32·6	31·1	31·1	33·1	37·3	40·6	40·1	39·3	38·1	37·1	34·8	34·4	31·6	31·1	32·6	31·6	33·1	34·2
2	33·6	34·6	33·1	34·1	35·1	34·1	32·1	31·1	29·6	30·6	34·1	37·6	40·1	39·6	39·3	38·1	36·1	34·4	34·1	32·6	32·1	30·6	30·1	31·1	34·1
3	33·1	33·3	33·3	33·2	34·1	33·1	32·1	31·1	29·6	30·1	33·1	34·9	38·9	40·1	39·1	38·1	36·1	35·6	34·6	33·6	31·6	33·1	32·8	32·8	34·1
4	33·1	33·3	33·3	33·2	33·1	32·9	32·3	31·1	30·1	30·6	33·3	36·1	37·9	38·1	37·1	36·1	35·1	34·6	34·1	33·7	33·3	33·1	33·1	32·9	33·8
5	33·1	33·4	33·1	33·1	33·1	32·8	32·3	31·9	30·9	31·1	33·1	36·1	37·1	37·3	37·0	36·2	35·8	34·9	35·1	35·1	34·1	33·4	32·6	31·6	33·9
6	31·4	32·1	32·8	32·1	32·6	31·9	31·1	31·5	30·7	31·9	35·9	37·5	37·7	38·6	37·3	37·1	35·7	36·1	35·1	35·6	33·5	31·1	32·9	33·1	34·0
7	32·7	32·3	32·3	31·3	31·1	31·3	32·1	31·9	31·1	31·9	35·1	36·9	37·5	37·8	37·7	37·1	36·5	35·9	35·7	36·1	33·6	33·8	33·1	33·1	34·1
8	32·9	31·1	31·6	30·6	31·3	32·6	32·6	31·9	31·3	31·9	32·9	35·3	37·3	38·1	37·1	35·6	35·3	35·1	34·6	34·1	33·6	33·3	33·1	32·9	33·6
9*	33·1	32·9	33·1	32·8	32·9	32·4	32·1	32·1	31·1	31·1	33·5	36·1	37·1	37·1	37·1	36·1	35·1	34·6	34·4	34·3	33·6	33·3	32·9	33·1	33·8
10*	32·6	32·3	32·4	32·4	32·8	32·6	32·1	31·9	31·1	31·1	32·6	35·6	37·1	37·6	37·1	37·6	36·1	33·6	34·6	33·6	33·1	33·1	33·1	33·1	33·7
11	32·1	32·1	31·6	32·1	32·6	31·9	32·1	31·9	31·3	32·1	34·6	34·6	36·3	36·9	36·4	35·8	35·3	34·4	34·1	32·3	32·3	33·1	32·7	32·6	33·4
12**	32·9	33·1	33·1	33·1	33·1	32·1	32·3	32·6	34·1	39·1	37·6	37·6	38·6	37·1	41·1	39·1	35·1	34·1	30·6	27·6	27·1	27·1	24·6	30·1	33·5
13	31·6	32·3	35·1	34·1	34·1	32·9	32·1	31·6	30·6	31·1	33·1	35·6	37·1	37·6	37·6	36·6	36·1	36·1	34·6	34·6	33·6	32·1	29·6	26·6	33·6
14**	32·1	31·1	32·1	31·6	29·1	31·1	31·1	31·6	32·1	32·1	37·6	37·6	36·9	37·1	36·3	34·9	33·6	32·9	32·9	32·5	32·1	32·1	32·1	32·1	33·1
15*	32·9	33·1	33·1	33·3	33·1	32·6	32·1	31·1	30·1	30·3	32·4	34·9	36·3	36·9	36·6	35·9	34·5	33·6	33·6	33·1	32·3	31·1	32·3	32·9	33·3
16*	33·1	32·9	33·1	33·1	33·1	32·4	32·1	31·3	30·6	30·3	32·6	35·1	36·5	36·7	35·9	35·3	35·1	34·1	33·6	33·1	32·3	32·1	32·1	32·1	33·3
17	32·3	32·4	32·4	32·9	32·8	32·4	32·1	31·1	30·6	31·1	33·6	35·5	37·3	36·9	36·6	36·1	36·1	34·5	33·9	33·1	32·1	31·9	31·1	30·6	33·3
18	30·6	31·9	32·6	32·9	33·3	33·1	32·3	32·1	31·1	31·3	32·6	34·4	36·1	38·1	38·1	37·9	36·1	35·1	34·1	33·1	32·6	32·1	30·8	29·1	33·4
19	29·1	30·1	31·6	32·6	32·1	32·1	34·7	33·8	33·9	33·6	33·5	36·9	37·9	39·3	36·3	35·6	34·9	33·6	32·3	30·9	30·9	30·1	31·1	31·3	33·3
20	32·1	36·1	33·1	32·7	35·5	31·6	32·1	33·1	32·4	33·1	34·3	35·1	36·8	37·1	37·1	36·8	32·1	30·8	35·0	34·1	33·1	30·6	31·1	31·9	33·6
21	32·1	32·9	33·1	33·3	32·9	31·6	31·6	31·9	31·8	32·1	33·4	35·6	36·1	36·3	35·9	35·3	34·9	34·3	34·3	33·8	33·4	32·9	32·6	32·6	33·5
22	32·6	32·6	32·8	32·8	32·0	32·7	32·2	31·7	31·3	31·6	33·3	35·4	36·1	36·1	35·5	35·1	34·7	34·1	34·1	34·1	33·3	32·9	31·6	31·1	33·3
23*	31·1	31·6	32·1	32·3	32·1	31·9	31·8	31·9	31·9	32·5	34·3	35·6	36·3	36·1	35·1	34·9	34·6	34·1	34·1	33·6	33·6	32·6	32·6	32·3	33·3
24	32·1	32·8	32·4	32·1	32·3	32·6	32·1	32·1	31·9	31·6	33·6	35·6	37·6	37·7	37·9	37·3	35·5	34·6	34·6	33·3	29·4	29·6	29·1	28·6	33·2
25**	31·1	31·9	33·3	32·4	33·1	33·6	31·6	31·8	31·1	31·1	33·1	35·1	37·1	37·3	37·6	38·1	40·6	38·1	32·6	29·6	23·6	28·6	30·6	27·1	32·9
26**	25·1	29·6	29·6	35·9	33·3	32·1	32·3	32·9	33·4	33·3	34·1	36·3	39·4	42·1	40·4	41·3	37·1	34·1	31·6	26·1	26·1	29·1	24·6	25·1	32·7
27**	30·1	28·9	29·6	31·6	30·6	33·6	32·6	32·1	33·1	33·1	34·4	38·1	38·1	38·6	36·6	36·9	30·6	27·1	32·6	27·1	29·6	28·6	29·6	31·1	32·2
28	28·3	31·6	32·3	31·4	34·9	33·3	32·1	31·9	31·6	32·1	33·6	35·3	37·1	36·6	36·1	36·1	34·6	33·9	32·6	26·3	29·1	31·3	31·9	32·1	32·8
29	32·8	32·4	32·6	33·1	32·1	32·1	32·1	33·1	32·9	32·9	33·5	35·9	36·9	37·1	38·5	37·1	36·1	32·1	33·3	32·1	31·9	31·3	31·8	32·1	33·6
30	32·8	32·4	32·6	33·3	32·1	32·8	32·1	31·1	30·3	31·4	33·3	36·1	36·9	37·1	36·3	35·6	35·1	33·9	33·3	32·1	31·4	30·6	30·3	30·4	33·0
Mean	31·7	32·3	32·5	32·8	32·9	32·9	32·2	31·9	31·4	31·9	33·8	36·0	37·4	37·8	37·3	36·7	35·4	34·2	33·8	32·4	31·6	31·6	31·2	31·3	33·5
Mean*	32·6	32·6	32·8	32·8	32·8	32·4	32·0	31·7	31·0	31·1	33·1	35·5	36·7	36·9	36·4	36·0	35·1	34·0	34·1	33·5	33·0	32·4	32·6	32·7	33·5
Mean**	30·3	30·9	31·5	32·9	31·8	32·5	32·0	32·2	32·8	33·7	35·4	36·9	38·0	38·3	38·4	38·1	35·4	33·3	32·1	28·6	27·7	29·1	28·3	29·1	32·9

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	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	31·1	32·1	33·3	32·9	32·9	32·1	31·9	32·3	31·9	31·9	33·1	35·1	36·4	37·3	36·4	35·9	34·8	33·6	32·6	29·9	32·1	31·9	30·1	24·1	32·7
2	26·1	30·6	31·4	32·8	32·3	32·1	32·1	32·1	32·1	33·7	34·1	36·4	38·6	37·3	39·4	37·1	34·3	37·1	35·1	33·6	32·6	32·1	31·8	31·4	33·6
3	31·8	32·1	32·3	32·3	32·1	31·9	31·7	31·9	31·3	32·1	33·6	35·9	38·1	35·1	37·9	36·1	34·6	33·6	33·6	34·1	28·6	27·1	30·1	30·6	32·9
4	30·8	29·4	26·9	25·4	31·7	32·1	32·1	32·1	31·6	31·3	32·3	34·4	36·6	37·6	38·6	37·6	38·1	37·6	35·1	32·1	32·1	30·3	28·9	25·6	32·7
5	28·6	31·3	33·1	32·6	32·1	31·9	31·6	31·9	31·9	32·3	33·6	36·1	36·6	36·3	36·1	34·1	36·6	35·1	31·1	30·1	30·1	32·1	24·1	26·6	32·3
6	26·6	25·1	30·1	31·1	31·9	32·1	32·1	32·1	31·3	31·3	32·6	33·3	34·8	35·4	35·6	35·1	34·6	34·1	34·1	32·9	32·3	32·1	31·6	31·1	32·2
7	29·6	29·9	30·6	31·1	31·3	30·8	31·1	32·1	31·6	31·1	33·1	34·6	34·9	35·6	35·1	34·3	35·6	36·6	38·1	35·1	32·6	32·1	31·9	31·6	32·9
8**	32·1	31·9	31·6	35·1	32·9	28·8	29·3	31·6	30·6	31·6	33·6	35·7	36·5	38·6	35·9	35·4	34·9	35·1	26·1	31·6	27·9	25·1	30·1	30·6	32·2
9	31·6	29·1	31·6	32·1	32·1	32·3	31·9	32·1	31·8	32·1	33·4	33·4	34·8	35·1	35·1	34·6	33·6	33·1	32·9	32·3	32·1	31·1	29·3	30·4	32·4
10*	31·1	31·3	31·3	31·9	31·1	31·3	31·3	31·6	31·9	31·6	32·6	33·9	34·6	35·1	35·1	35·1	33·6	32·1	32·6	32·6	32·1	31·1	30·6	31·6	32·4
11	32·1	32·6	32·9	32·1	32·1	31·8	31·6	31·4	31·1	31·3	33·9	35·1	35·6	35·1	34·6	34·1	33·4	32·6	32·1	31·3	31·6	31·6	32·1	32·1	32·7
12	32·9	33·1	32·6	32·3	31·6	31·6	31·6	31·6	31·3	32·1	32·9	35·1	36·1	37·4	36·6	35·6	33·3	32·4	32·1	31·8	31·4	30·9	31·1	31·1	32·9
13*	31·3	32·9	31·9	31·8	32·1	31·9	31·9	31·5	30·1	30·3	32·1	33·1	35·1	36·6	36·3	34·9	35·1	33·6	32·9	32·3	31·3	30·6	30·9	31·6	32·6
14	31·8	32·4	33·1	33·1	32·6	32·1	31·9	31·9	31·1	30·5	32·1	33·1	35·1	36·1	35·1	37·1	35·1	34·1	34·1	32·1	31·3	31·1	30·6	30·1	32·8
15	30·6	31·6	32·3	32·3	32·1	33·1	33·1	33·1	32·1	32·1	33·1	33·3	35·1	36·4	36·3	35·1	34·1	33·4	32·9	32·5	31·7	31·1	30·6	31·6	32·9
16**	31·9	32·3	33·1	33·1	32·8	32·1	31·1	31·1	31·4	33·4	34·1	37·1	33·8	37·6	43·4	42·6	51·1	46·8	42·6	28·6	27·6	10·6	18·1	28·6	33·5
17**	32·6	32·1	40·1	31·9	31·9	33·5	33·1	31·9	31·1	31·1	31·6	33·6	35·6	35·4	34·3	33·9	33·8	33·6	32·9	31·3	30·9	30·3	31·1	31·1	32·9
18**	31·1	31·3	31·6	31·8	32·3	33·1	33·3	33·1	31·4	30·1	29·6	33·1	35·1	35·4	35·6	32·1	33·1	34·1	35·3	31·9	27·6	29·1	30·6	29·6	32·1
19	30·1	30·6	30·1	31·1	31·1	32·1	32·1	31·3	31·4	31·1	32·6	35·5	36·3	36·7	37·1	36·6	35·6	35·6	33·9	33·3	31·1	25·1	29·6	32·1	32·6
20	31·1	31·1	31·1	31·9	32·6	32·6	32·3	33·1	34·9	32·1	33·1	34·3	35·1	36·9	36·1	35·6	33·6	32·9	33·3	32·4	30·4	29·5	27·1	27·1	32·5
21	26·1	27·1	29·6	31·6	32·1	31·6	31·6	31·9	31·1	30·1	31·6	32·3	34·1	35·4	34·6	33·6	33·3	33·1	33·3	32·7	31·3	30·9	30·1	30·1	31·6
22*	30·6	29·6	30·1	31·1	31·1	31·1	31·1	31·1	30·1	30·1	32·1	33·3	35·3	35·4	35·1	34·6	33·1	32·5	32·7	32·1	31·9	31·1	30·8	31·4	32·0
23*	31·3	31·1	31·1	30·6	30·9	31·1	30·9	30·3	29·1	29·1	30·6	32·3	34·9	36·1	35·4	34·8	32·3	33·1	33·1	32·3	31·1	29·1	30·0	31·1	31·7
24	—	—	—	—	—	—	—	—	—	—	—	—	35·9	36·1	35·3	34·3	33·1	32·6	32·6	32·1	31·1	31·1	31·6	31·9	—
25	31·9	31·9	31·9	31·9	31·8	31·3	30·9	30·1	30·1	30·9	31·9	33·5	35·3	36·5	36·1	36·6	37·6	38·9	36·6	32·3	27·1	25·6	26·6	26·6	32·3
26**	27·6	31·3	32·4	33·3	32·8	31·6	31·6	31·1	30·9	29·9	30·6	31·9	33·6	35·3	36·4	35·3	37·1	35·3	34·6	30·1	25·1	30·7	30·5	31·1	32·1
27	31·3	31·4	31·8	33·1	32·1	32·6	31·4	30·6	29·9	29·6	31·1	33·1	35·1	36·6	34·9	34·9	33·5	34·1	32·6	30·1	27·9	30·1	30·3	31·1	32·1
28	31·1	31·1	31·6	32·1	32·3	32·1	31·9	31·1	29·9	29·1	29·9	32·3	34·3	35·1	35·1	33·7	33·1	32·6	32·3	32·1	31·5	31·1	30·9	30·7	32·0
29	31·1	31·8	32·1	32·3	32·1	31·9	31·9	31·6	30·6	31·6	32·1	34·1	35·6	36·8	37·1	35·1	33·1	32·6	32·4	32·1	31·1	31·1	31·1	31·1	32·6
30	31·3	32·3	32·4	32·6	32·6	32·1	31·9	32·1	30·4	29·1	29·9	31·6	33·3	34·4	34·6	34·1	33·6	33·1	32·3	32·1	30·3	29·9	30·6	30·9	32·0
31*	30·9	31·1	31·3	31·9	31·1	30·6	30·6	30·9	29·9	29·1	30·1	33·1	35·1	35·9	35·3	35·1	34·1	33·1	32·3	31·6	31·1	30·9	30·3	30·3	31·9
Mean	30·6	31·1	31·8	32·2	32·0	31·8	31·7	31·7	31·1	31·1	32·2	34·0	35·4	36·2	36·2	35·4	35·0	34·5	33·5	32·0	30·5	29·5	29·7	30·1	32·5
Mean*	31·0	31·2	31·1	31·5	31·3	31·2	31·2	31·1	30·2	30·0	31·5	33·1	35·0	35·8	35·4	34·9	33·6	32·9	32·7	32·2	31·5	30·6	30·5	31·2	32·1
Mean**	31·1	31·8	33·8	33·0	32·5	31·8	31·7	31·8	31·1	31·2	31·9	34·3	34·9	36·5	37·1	35·9	38·0	37·0	34·3	30·7	27·8	25·2	28·1	30·2	32·6

TABLE II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
January.													17000 γ + Tabular Quantities.												Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	843	848	855	859	858	856	848	841	841	837	832	817	804	819	827	833	838	848	849	845	846	843	841	841	840
2	843	843	842	840	844	852	850	847	842	835	831	828	830	836	841	844	840	839	833	834	838	838	843	847	840
3*	850	847	847	850	853	853	854	847	841	832	825	825	832	831	838	847	846	843	843	847	851	850	849	847	844
4**	850	853	851	846	848	864	878	870	856	839	851	813	799	816	802	795	769	763	749	753	789	739	730	778	813
5**	794	766	749	782	802	794	800	799	786	788	791	792	796	801	802	805	801	796	808	803	816	820	818	819	797
6	816	818	819	819	821	822	824	820	820	822	827	811	819	823	821	825	828	821	824	828	832	828	828	822	823
7	811	827	828	828	829	832	833	834	832	828	825	831	828	821	824	823	821	825	829	830	833	831	827	826	828
8	837	830	833	838	849	842	833	829	828	814	800	822	821	818	826	834	837	837	826	835	835	822	819	823	829
9	819	826	828	829	830	833	834	836	834	822	821	829	828	826	826	830	835	837	828	845	846	832	830	831	831
10	840	843	836	840	849	852	843	842	840	836	833	841	843	838	822	827	833	843	840	835	842	827	825	840	838
11	855	855	856	852	859	862	862	859	856	856	850	856	860	865	867	867	863	870	866	862	862	870	872	888	862
12**	879	872	872	871	885	887	885	877	875	852	850	859	862	861	863	871	861	846	833	883	876	864	871	881	868
13	860	879	891	892	875	899	873	870	865	860	853	854	860	864	871	866	870	860	864	876	868	863	867	876	870
14	877	871	874	875	879	874	883	865	858	854	852	852	849	849	856	858	871	871	870	878	871	876	874	873	867
15*	874	871	873	874	874	881	885	882	877	868	865	859	862	867	872	877	879	880	882	884	884	882	881	881	876
16	880	880	881	881	882	882	884	881	878	871	866	860	863	863	863	864	869	867	874	875	876	872	871	871	873
17	885	885	898	883	876	877	879	882	876	874	873	865	862	868	864	867	868	870	873	876	873	873	877	876	875
18*	866	867	873	873	876	878	880	878	876	870	863	860	862	864	868	872	874	873	871	878	882	881	882	883	873
19	877	875	876	877	880	881	882	881	880	879	877	874	874	877	871	870	885	889	888	887	877	857	857	868	877
20	873	876	897	888	885	884	888	881	880	878	875	862	872	875	863	871	867	869	864	868	875	869	887	875	876
21	872	872	872	870	872	878	883	882	880	882	879	878	876	870	863	862	842	848	864	870	863	863	868	890	871
22**	864	867	876	877	883	887	879	891	858	862	857	864	863	865	868	851	853	845	892	864	873	903	876	870	870
23**	871	878	877	876	872	884	891	886	873	871	877	837	830	837	857	855	870	873	874	874	880	884	893	879	871
24	874	875	879	877	874	875	872	861	850	844	843	846	856	860	856	862	870	872	867	872	875	879	881	876	867
25	881	879	879	879	898	887	906	884	899	847	847	850	853	862	865	859	840	864	864	868	872	900	872	872	872
26	873	873	871	876	876	868	874	869	857	857	854	828	837	836	852	869	875	871	875	880	881	880	885	879	866
27	874	874	876	873	878	884	886	907	902	892	890	891	880	872	863	859	861	875	878	888	890	886	887	883	881
28*	883	881	880	881	883	884	883	879	873	870	864	863	867	877	885	886	886	884	887	890	890	894	891	890	881
29*	892	891	890	889	889	891	897	888	883	868	859	854	870	873	876	879	881	881	882	885	888	885	884	887	882
30	874	878	885	883	889	891	890	888	876	867	858	858	850	846	869	871	869	879	883	891	890	897	898	894	878
31	886	881	883	888	894	898	900	891	882	879	868	860	848	861	867	877	879	876	891	873	867	872	880	882	878
Mean	860	861	862	863	867	869	870	866	860	853	850	846	847	850	852	854	854	856	857	861	863	861	860	863	859
Mean*	873	871	873	873	875	875	882	875	870	861	855	852	859	862	869	872	873	872	873	877	879	878	877	878	871
Mean**	852	847	845	850	858	863	867	865	850	842	845	833	830	836	838	835	831	825	831	835	847	842	838	845	844
February.													17000 γ + Tabular Quantities.												Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1*	886	881	873	877	880	886	891	889	883	873	866	859	861	868	873	880	885	886	886	886	889	888	888	886	880
2	886	886	887	886	889	894	893	892	884	876	868	867	867	868	868	879	873	860	868	881	887	887	891	887	880
3	900	887	887	886	887	890	891	890	884	874	865	857	857	866	874	882	884	885	883	890	888	888	888	888	882
4	888	888	891	889	889	893	897	891	883	880	874	868	866	870	883	885	889	903	914	890	893	893	892	892	888
5	889	904	893	887	886	895	895	892	886	875	863	859	861	864	864	871	868	876	876	862	865	873	883	881	878
6	881	881	880	879	882	887	886	884	878	868	862	847	850	865	874	877	884	885	879	882	887	890	889	894	878
7	900	900	885	880	885	888	893	890	888	877	867	854	855	854	859	868	881	890	879	890	888	885	911	885	881
8	889	898	867	870	871	881	879	879	874	868	864	850	853	858	864	872	876	883	892	883	890	886	878	881	875
9*	883	881	881	879	882	887	891	892	885	874	867	856	867	868	877	884	887	890	887	887	884	887	889	885	881
10	893	890	890	900	870	889	890	883	875	863	855	852	857	866	874	873	886	880	864	871	887	889	888	885	878
11	898	894	892	881	880	887	883	885	885	879	872	863	864	867	872	873	872	874	879	873	883	884	892	887	880
12*	884	886	887	883	882	886	891	890	886	876	869	861	861	865	873	878	882	887	889	890	891	888	890	887	882
13*	886	888	887	886	890	894	894	896	896	887	878	871	869	871	868	872	879	878	880	881	882	883	886	887	883
14	885	884	884	886	887	892	901	904	899	883	866	872	875	875	877	879	884	891	890	876	875	880	881	876	883
15**	876	876	886	885	886	892	897	898	892	879	868	858	860	867	848	841	853	841	806	808	840	855	848	842	863
16**	840	826	848	867	873	867	871	859	860	859	852	840	840	843	843	862	865	871	874	879	880	883	883	883	861
17	880	877	877	876	877	881	885	886	891	883	878	869	867	864	869	870	866	869	869	866	874	884	883	873	876
18**	869	867	877	887	879	889	881	854	858	869	861	852	847	844	840	846	861	867	867	875	879	885	883	888	868
19**	880	874	884	885	885	892	895	892	879	862	866	855	848	845	856	864	869	878	879	877	876	876	865	875	873
20**	894	883	887	896	893	892	897	894	894	877	841	862	857	841	826	846	865	868	865	885	887	878	881	885	875
21	877	878	878	881	881	885	892	890	887	875	870	863	853	866	866	866	864	878	878	878	883	882	907	890	878
22	883	882	884	884	885	890	899	895	892	882	871	853	859	863	863	870	869	880	882	876	887	885	906	890	880
23	881	883	882	886	884	892	892	890	890	877	871	868	866	865	873	872	867	873	881	888	903	897	892	891	882
24	889	888	879	877	892	890	895	880	875	866	861	855	865	872	876	873	868	879	881	882	884	887	885	885	879
25	883	884	887	884	884	887	888	887	879	866	858	858	867	869	863	856	869	879	882	888	896	887	883	881	878
26	883	884	885	887	888	884	884	862	873	870	859	851	842	852	857	862	874	880	878	881	887	886	891	886	874
27*	884	883	883	886	887	888	890	886	875	864	854	852	852	854	865	874	861	871	878	886	889	884	886	886	876
28	890	896	887	887	889	887	888	886	878	861	852	856	855	859	859	866	870	881	884	883	890	887	887	886	878
Mean	885	883	882	883	884	888	890	886	882	873	864	858	859	862	865	869	873	876	878	878	884	884	887	884	877
Mean*	885	884	882	882	884	888	891	891	885	875	867	860	862	865	871	878	879	882	884	886	887	886	888	886	880
Mean**	872	865	876	884	883	886	888	879	877	869	858	853	850	848	843	852	863	865	858	865	872	875	872	875	868

TABLE II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
March.	17000 γ + Tabular Quantities.																									Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	885	884	884	884	886	888	890	887	867	857	862	857	846	851	855	867	878	885	885	898	890	889	886	887	877	
2*	884	883	885	886	888	889	890	890	885	875	866	855	857	863	872	873	875	878	884	886	888	888	887	887	880	
3*	887	887	885	886	887	890	891	893	891	887	880	879	874	877	882	885	888	892	895	897	896	898	891	903	888	
4**	901	890	889	892	892	897	895	890	888	888	877	874	869	878	886	881	868	878	884	881	860	871	884	890	883	
5**	888	885	887	893	877	882	864	881	864	847	850	844	838	837	837	864	867	863	871	870	883	878	885	873	868	
6	873	871	877	876	870	876	870	865	866	851	848	850	861	848	860	871	874	882	880	880	892	892	883	880	871	
7	881	884	889	880	879	884	877	873	865	859	852	851	867	875	875	872	874	880	878	887	900	881	876	875	875	
8**	877	891	898	891	877	879	883	860	852	832	818	849	860	868	863	863	856	886	873	886	872	872	869	887	869	
9	889	877	883	880	881	876	873	866	862	860	856	855	855	861	864	866	871	878	884	882	884	884	884	892	873	
10	888	890	887	887	891	888	901	890	879	867	862	864	869	873	875	877	876	886	880	880	885	885	887	885	881	
11	891	897	885	895	899	888	884	878	867	854	852	852	856	866	870	877	879	880	884	889	890	890	890	889	879	
12	887	887	887	887	887	890	892	893	880	877	867	866	859	865	870	875	874	884	887	871	883	880	882	883	880	
13	885	885	885	887	889	897	897	891	883	871	849	842	844	844	849	845	858	859	871	883	886	892	892	876	873	
14	881	883	887	893	889	883	884	885	880	872	866	864	864	866	862	871	881	883	887	888	890	889	887	887	880	
15	885	887	889	889	891	895	897	889	878	863	857	855	860	863	870	880	871	869	883	882	888	888	893	898	880	
16	892	889	888	889	886	889	896	892	886	878	870	869	864	859	873	872	872	875	873	887	899	887	888	885	882	
17	884	882	883	884	887	890	890	893	891	884	877	865	862	863	864	868	873	878	886	894	893	892	895	900	882	
18	900	894	884	883	880	885	891	884	877	874	868	866	866	869	867	867	874	881	886	892	890	890	887	886	881	
19	886	887	891	893	897	899	902	896	894	883	874	876	876	878	883	887	889	888	887	891	893	899	904	898	890	
20	892	894	891	891	894	899	902	898	888	881	880	871	880	888	887	891	889	889	895	901	909	909	927	904	894	
21**	895	901	887	892	895	896	896	881	873	861	852	861	862	867	883	890	896	888	890	888	894	896	897	896	885	
22	903	898	893	892	895	897	898	891	882	858	853	854	867	868	878	884	888	891	894	904	909	897	897	897	887	
23	898	895	895	896	895	894	902	887	871	867	861	854	852	856	866	881	891	895	894	895	894	899	896	896	885	
24	894	894	893	893	895	895	906	905	884	868	865	851	855	858	869	881	890	895	906	901	903	901	901	901	888	
25**	900	898	898	897	900	894	903	902	887	884	866	857	854	842	845	870	885	876	873	882	882	884	898	887	882	
26	882	881	880	882	882	886	889	888	886	874	868	846	846	852	858	871	883	886	892	892	896	896	892	891	879	
27	889	892	890	889	892	894	900	903	895	879	865	862	853	850	861	859	878	878	878	887	896	901	905	901	883	
28*	890	888	887	885	886	893	897	896	888	893	854	850	851	857	862	869	879	890	894	897	899	899	900	895	883	
29*	895	895	894	895	892	892	899	900	892	874	867	859	853	866	874	881	887	890	896	900	900	900	900	900	888	
30*	900	898	896	895	896	898	902	897	892	879	868	868	868	866	871	880	890	895	901	903	904	904	902	901	891	
31	900	900	900	900	902	905	906	906	895	881	878	874	874	877	883	879	890	898	903	906	906	904	906	902	895	
Mean	890	889	889	889	889	887	892	889	880	870	862	859	860	863	868	874	879	883	886	890	892	891	893	891	881	
Mean*	891	890	889	889	890	892	896	895	890	882	867	862	861	865	872	878	884	889	894	897	897	898	896	897	886	
Mean**	892	893	892	893	888	890	888	883	873	862	853	857	857	858	863	874	874	878	878	881	878	880	887	887	877	
April.	17000 γ + Tabular Quantities.																									Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	909	896	901	893	898	901	903	901	889	873	872	871	871	875	880	885	894	897	897	900	902	908	900	885	892	
2	893	905	900	882	900	904	883	886	880	864	860	847	848	850	857	869	878	886	883	899	901	892	884	883	881	
3	881	882	887	902	909	896	884	881	875	858	841	850	853	861	865	875	876	883	882	887	884	887	883	885	878	
4	892	894	898	893	888	890	887	878	861	855	850	849	853	858	864	870	878	883	888	892	893	893	897	908	880	
5**	908	899	895	896	908	909	913	902	884	868	860	834	837	852	872	865	875	876	880	882	878	877	879	889	881	
6**	885	892	882	884	882	865	892	887	871	858	841	849	841	853	864	889	887	886	886	875	881	889	876	877	875	
7	881	879	880	881	882	890	887	880	868	847	837	844	853	860	865	870	874	892	899	900	903	891	886	881	876	
8	892	892	889	893	891	886	892	882	876	869	859	846	846	849	858	876	886	892	897	895	905	910	904	906	883	
9**	890	887	893	885	893	893	898	877	840	809	816	819	816	814	832	846	855	855	877	886	884	894	911	894	865	
10*	888	885	886	884	886	892	892	892	881	864	855	850	848	858	873	882	887	890	896	899	898	898	896	896	882	
11*	893	894	896	896	899	900	901	896	887	871	859	856	862	873	884	891	895	897	900	906	906	900	897	898	890	
12	898	898	899	899	900	902	904	900	886	872	861	848	850	863	876	887	895	903	906	913	913	900	893	897	890	
13	916	908	896	893	896	901	900	893	886	882	868	865	864	866	880	891	892	894	900	900	900	899	900	900	891	
14*	900	900	900	899	900	901	903	903	899	891	884	876	875	876	881	889	895	901	904	908	907	907	905	905	896	
15	906	907	905	906	911	917	913	914	902	874	864	869	874	862	871	878	878	894	898	903	903	915	903	904	895	
16**	913	920	906	910	917	918	898	889	884	873	873	870	859	834	848	862	861	871	876	888	897	895	895	901	886	
17	899	890	886	894	894	885	880	889	896	889	885	865	863	862	874	881	900	900	894	902	904	924	907	910	891	
18	909	901	894	898	902	902	905	903	895	881	869	862	847	848	867	878	887	890	898	905	903	899	905	902	890	
19	892	887	889	889	892	891	895	891	887	880	872	871	870	870	876	881	887	893	895	899	896	893	893	893	887	
20*	895	896	895	894	896	899	901	899	894	884	873	862	860	867	876	884	892	898	901	903	902	903	911	914	892	
21	911	903	906	875	909	910	905	906	895	877	865	858	863	875	887	895	903	912	902	911	913	912	913	915	897	
22	914	914	912	912	910	906	911	913	905	896	890	877	871	871	877	889	896	903	902	906	907	909	917	914	901	
23	914	907	906	902	904	908	912	905	894	880	874	871	870	877	883	894	899	909	910	913	913	912	915	916	900	
24	905	906	911	912	904	909	909	906	901	890	882	876	876	885	897	897	908	913	906	911	910	910	910	908	902	
25	907	908	904	903	905	909	910	908	901	892	853	849	843	846	872	873	885	894	908	910	906	896	895	901	891	
26**	901	899	899	900	896	900	893	868	860	855	862	838	837	803	826	842	852	866	876	876	863	875	874	864	868	
27*	863	861	860	861	861	863	863	864	861	850	838	839	843	853	861	865	872	875	878	876	876	876	878	878	863	
28	882	879	874	874	876	881	885	882	876	866	851	845	844	850	858	841	882	888	888	888	888	889	893	887	874	
29	887	884	881	880	875	884	887	881	866	858	849	851	850	849	853	870	878	879	887	886	884	885	888	884	874	
30	882	884	883	888	888	889	885	868	868	869	863	854	843	848	851	829	858	879	884	886	880	880	907	906	874	
Mean	897	895	894	893	896	897	896	891	882	870	861	855	854	857	868	875	884	890	893	897	897	897	897	897	885	
Mean*	888	887	887	887	888	891	892	891	884	872	862	857	858	865	875	882	888	892	896	898	898	897	897	898	885	
Mean**	899	899	895	895	899	897	899	884	868	853	850	842	838	831	848	861	866	871	879	881	881	886	887	885	875	

TABLE II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
May.	17000γ+Tabular Quantities.																									
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1**	908	897	892	890	886	889	881	880	880	880	877	871	869	863	876	887	881	902	930	906	881	881	877	878	886	
2**	897	872	878	883	885	878	863	854	840	815	816	811	839	845	851	891	887	880	885	878	870	873	864	869	864	
3**	879	885	890	875	881	873	871	866	841	851	858	855	853	861	855	858	880	885	890	891	883	887	883	873	872	
4	892	889	872	875	878	866	862	858	858	856	850	847	848	850	859	870	874	878	883	882	882	886	900	889	871	
5	891	897	891	889	875	880	863	855	854	853	843	843	853	867	874	881	883	886	885	886	884	884	884	883	874	
6*	880	877	880	879	880	880	881	877	872	868	865	865	862	878	881	888	894	893	894	890	887	890	892	893	881	
7	888	894	897	887	886	892	891	891	889	874	862	866	868	868	878	882	880	885	895	890	892	893	898	901	885	
8*	889	886	890	888	892	897	895	889	883	878	874	871	876	871	878	884	885	886	892	896	897	896	895	896	887	
9	896	896	893	894	897	897	897	893	888	888	885	863	864	873	888	879	889	893	897	901	899	896	892	899	890	
10	898	892	889	890	898	898	894	887	882	875	868	869	875	880	883	887	891	889	896	897	899	902	903	913	890	
11	913	899	893	887	892	898	901	900	891	893	892	887	882	879	882	880	884	885	895	900	897	896	894	893	892	
12	892	892	896	895	894	893	895	893	893	887	879	871	871	873	881	891	889	901	907	903	904	904	911	920	893	
13*	899	893	893	889	894	887	895	888	887	884	881	873	864	864	861	871	884	893	899	899	904	903	900	897	888	
14	894	898	894	899	903	902	900	894	886	882	879	870	870	866	876	885	895	908	920	911	910	902	892	895	893	
15	893	895	892	892	898	898	897	898	896	890	881	874	872	871	872	881	889	893	898	897	901	896	899	900	891	
16**	894	894	892	891	900	911	904	918	922	901	866	851	836	854	854	858	869	878	889	886	883	886	886	887	884	
17	884	883	889	883	892	894	893	894	886	867	873	882	880	878	880	884	887	898	899	899	899	894	893	894	888	
18	903	898	894	893	898	900	900	897	894	887	876	869	868	881	883	894	915	909	906	903	902	901	898	897	894	
19*	898	896	895	898	900	902	899	895	892	885	881	879	876	876	876	882	886	901	908	907	905	904	900	899	893	
20*	900	899	899	900	901	901	896	884	880	875	867	863	869	874	884	895	903	909	903	906	900	905	900	898	892	
21	898	900	897	891	894	897	897	892	885	883	881	870	873	873	890	926	907	909	914	919	911	916	913	908	898	
22	906	906	905	904	905	903	896	889	884	874	868	869	876	877	900	913	933	911	909	901	905	906	901	901	898	
23	904	900	900	902	906	906	901	892	891	884	881	874	871	872	880	900	907	908	913	913	913	899	893	891	896	
24	892	895	896	898	901	901	896	887	878	868	868	859	864	882	889	899	902	906	908	909	913	913	906	908	893	
25	906	906	904	903	901	903	900	902	903	903	898	881	885	885	893	888	900	915	926	926	915	915	912	915	904	
26	913	916	915	912	916	914	905	891	885	873	885	878	871	874	883	892	900	906	910	911	908	906	902	903	899	
27	905	906	908	903	913	914	912	903	893	868	863	858	867	875	888	887	892	904	909	911	915	919	898	898	896	
28**	898	910	907	894	889	888	903	899	863	814	845	862	873	855	864	869	886	897	918	928	906	900	902	905	886	
29	907	916	900	883	888	898	889	875	860	852	849	847	849	862	875	893	909	900	918	919	915	908	896	905	888	
30	887	885	890	883	888	896	892	885	882	884	884	880	880	873	885	900	901	899	910	906	900	895	894	899	891	
31	905	901	891	895	895	897	899	894	886	877	874	861	860	866	876	889	896	908	913	906	905	900	897	896	891	
Mean	897	896	894	892	894	895	893	888	881	873	870	865	867	870	877	887	893	897	904	902	900	899	896	897	889	
Mean*	893	890	891	891	893	893	893	887	883	878	874	870	869	873	876	884	890	896	899	900	899	900	897	897	888	
Mean**	895	892	892	887	888	888	884	883	869	852	852	850	854	856	860	873	881	888	902	898	885	885	882	882	878	
June.	17000γ+Tabular Quantities.																									Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1*	896	894	894	893	899	905	897	886	876	872	878	875	870	866	870	882	890	894	900	904	904	904	907	906	890	
2*	900	898	896	900	906	906	908	902	896	885	883	872	867	867	878	883	895	904	911	911	911	908	906	906	896	
3	905	901	901	934	908	907	906	902	896	884	878	877	881	885	885	892	902	922	921	929	928	905	906	906	903	
4	905	879	883	878	893	889	876	867	866	857	852	842	851	855	863	870	888	896	910	904	900	897	894	891	879	
5	890	891	891	892	896	898	892	889	884	876	867	853	850	854	863	879	891	900	903	914	909	901	896	897	886	
6	898	901	901	900	901	899	893	887	881	871	867	866	869	872	881	888	896	912	921	919	918	921	921	921	896	
7**	925	928	928	928	929	929	927	916	900	888	872	855	864	875	889	910	916	910	934	940	926	894	887	886	906	
8	898	903	895	892	901	898	880	873	861	858	859	856	847	849	860	867	874	887	898	900	898	896	896	893	881	
9	906	915	917	915	918	914	895	890	882	874	871	865	865	868	885	898	906	914	915	909	907	906	897	..	..	
10	..	..	..	..	..	..	..	..	..	..	..	..	837	842	842	838	831	824	811	815	815	812	808	799	..	
11	..	..	..	..	..	..	..	..	897	892	883	868	858	864	872	880	897	908	915	927	918	908	908	908	..	
12	908	906	905	908	910	911	906	902	894	877	868	868	873	878	897	909	913	914	925	922	909	906	904	902	901	
13**	900	903	904	907	904	909	909	906	904	898	886	893	895	898	892	923	886	895	910	907	908	910	907	914	903	
14	905	901	905	907	909	917	907	895	901	897	888	876	874	881	883	883	900	903	901	902	903	901	901	899	897	
15	899	894	893	897	899	899	900	894	888	882	888	881	869	868	874	872	881	891	901	909	909	907	905	906	892	
16	905	904	906	903	910	910	907	899	887	877	867	876	880	889	898	902	893	903	904	914	913	917	908	899	899	
17	898	898	897	899	901	900	896	885	876	868	862	865	866	876	878	880	887	893	903	914	911	908	905	902	890	
18	902	900	897	900	905	906	897	882	874	851	844	847	853	872	881	888	887	895	903	906	903	900	896	898	887	
19*	898	898	901	901	901	898	892	888	878	870	867	861	862	867	873	885	900	910	912	903	902	903	902	899	890	
20*	899	898	899	899	902	902	900	899	896	886	882	871	870	875	877	884	898	903	907	913	912	909	906	904	895	
21	904	905	906	907	908	909	906	897	891	876	864	858	856	870	891	898	899	905	910	917	920	919	916	912	898	
22	913	914	916	919	927	922	917	910	895	884	870	875	872	867	892	905	914	917	925	927	940	932	932	923	909	
23**	920	927	912	921	926	930	914	907	896	889	877	859	851	863	878	878	887	897	940	917	903	890	881	891	898	
24**	897	892	893	897	894	887	885	875	856	835	836	838	841	872	931	898	879	914	898	902	916	902	876	879	883	
25**	901	921	903	886	881	867	864	858	855	837	837	839	846	859	861	875	879	892	895	896	909	895	891	888	876	
26	886	889	886	889	891	890	878	886	884	872	858	844	841	847	862	879	896	900	903	906	903	901	898	893	883	
27	890	891	891	893	896	894	890	881	879	867	857	852	863	879	894	897	904	907	907	910	901	898	901	905	890	
28	904	909	902	887	902	910	902	901	897	888	880	865	849	852	865	884	899	903	899	902	899	905	902	902	892	
29	912	903	909	913	912	915	905	890	883	872	864	868	872	873	873	891	894	899	903	900	896	896	900	907	894	
30*	897	893	895	901	905	901	897	887	880	870	864	863	860	863	874	885	894	900	907	904	905	905	905	905	890	
Mean	902	902	901	902	905	904	898	891	885	874	868	863	862	868	879	887	893	900	906	908	907	902	899	898	893	
Mean*	898	896	897	899	903	902	899	892	885	877	875	868	866	868	874	884	895	902	907	907	907	906	905	904	892	
Mean**	909	914	908	908	907	904	900	892	882	869	862	857	859	873	890	897	889	902	915	912	912	898	888	892	893	

TABLE II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE.

July. 17000 γ+Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	907	907	907	910	910	907	904	904	891	879	879	879	879	888	891	894	889	908	911	918	914	914	911	908	900	
2**	905	905	905	924	952	949	924	917	914	911	899	883	883	889	914	908	933	902	914	908	911	911	908	908	911	
3	908	911	908	911	918	917	921	908	900	884	865	868	871	884	903	903	906	909	915	919	909	906	903	903	902	
4	907	907	909	915	910	894	888	885	882	869	856	872	882	894	894	894	897	904	913	920	916	910	910	904	897	
5	902	902	908	905	908	905	895	886	883	879	873	880	889	892	895	895	889	892	908	917	912	906	903	903	897	
6*	903	903	903	906	906	912	903	890	898	871	868	868	877	890	890	899	907	916	926	926	916	910	904	900	899	
7	900	910	919	923	919	916	904	897	888	881	888	878	883	886	892	905	898	908	923	917	917	914	920	917	904	
8	914	911	908	908	908	908	898	889	880	868	858	862	865	871	890	902	909	912	912	912	915	912	909	909	897	
9	906	909	909	912	916	919	910	900	888	872	866	872	875	872	881	894	907	913	929	922	907	907	907	907	900	
10	911	911	911	914	917	920	917	904	895	889	879	876	879	889	889	898	911	917	923	926	928	927	928	931	908	
11	927	928	934	924	924	927	921	896	887	874	874	880	877	871	883	890	910	913	922	935	913	913	910	903	906	
12	903	900	900	903	906	910	903	897	887	881	872	866	857	863	885	888	914	901	914	923	911	914	911	904	896	
13**	923	917	907	904	914	907	889	895	874	855	858	830	852	855	896	902	921	912	889	890	902	886	877	889	889	
14	883	893	896	893	891	881	875	869	865	862	856	850	859	862	875	878	884	891	894	894	897	894	897	897	880	
15	898	898	895	891	895	898	885	888	882	869	854	847	851	847	863	879	885	895	898	898	902	905	899	899	884	
16*	899	896	896	896	899	899	896	886	883	874	864	867	867	874	883	896	903	903	906	906	903	903	903	903	892	
17*	903	900	900	903	906	909	909	903	897	890	881	875	876	879	882	898	901	904	907	910	907	907	907	904	898	
18*	904	904	907	907	907	904	898	895	889	880	877	877	883	886	892	895	899	905	908	908	908	908	908	911	898	
19	911	908	905	905	909	912	909	906	900	890	878	881	887	893	903	906	912	906	906	912	912	909	906	903	903	
20*	904	904	901	901	904	907	904	901	891	882	869	869	863	866	882	901	898	901	907	913	914	914	911	914	897	
21	911	908	905	908	911	914	911	905	899	880	867	870	880	883	893	903	912	928	947	937	915	909	928	896	905	
22**	890	903	903	909	893	896	899	881	849	846	837	846	847	853	860	866	878	901	916	916	907	907	894	900	883	
23	894	897	891	897	904	897	894	885	867	854	848	848	848	854	861	867	876	892	902	908	908	905	901	898	883	
24	898	898	905	908	906	893	893	893	887	881	877	874	874	874	884	906	909	912	915	918	915	909	909	918	898	
25	910	903	907	904	903	907	900	894	888	875	859	863	875	875	888	907	904	913	916	913	917	904	901	898	897	
26	901	905	901	904	908	905	895	886	879	873	876	879	886	886	889	898	902	902	909	915	915	915	905	909	898	
27	909	906	909	909	915	915	905	893	884	877	880	890	900	894	906	903	910	919	941	948	935	941	941	941	911	
28	919	906	910	913	916	919	919	910	904	892	886	885	892	882	892	898	901	904	917	908	914	920	904	895	904	
29**	904	889	907	949	921	896	896	880	849	833	823	864	836	855	871	887	890	896	896	908	905	902	905	905	886	
30	906	910	893	894	894	894	891	881	872	869	862	862	865	869	894	884	894	909	910	919	907	904	904	901	891	
31**	904	901	898	901	904	895	885	882	876	879	882	888	904	917	926	948	927	874	867	861	864	877	886	867	892	
Mean	905	905	905	908	909	907	901	894	885	875	868	869	873	877	889	896	902	905	912	914	910	908	907	905	897	
Mean*	903	901	901	903	904	906	902	895	892	879	872	871	873	879	886	898	902	906	911	913	910	908	907	906	897	
Mean**	905	903	904	917	917	909	899	891	872	865	860	862	864	874	893	902	910	897	896	897	898	897	894	894	892	

August. 17000 γ+Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	867	867	893	867	871	867	864	855	842	836	849	855	862	862	865	878	887	894	906	900	900	890	887	887	873	
2	891	894	894	894	894	894	887	884	868	859	862	875	881	878	881	887	890	894	897	900	903	903	910	917	889	
3	914	895	901	901	904	904	901	898	885	873	866	863	866	873	879	895	898	907	913	917	917	910	910	914	896	
4	913	917	910	907	901	901	895	888	874	864	861	864	864	867	870	880	889	893	899	911	911	908	902	902	891	
5*	902	902	902	905	905	905	902	889	877	861	855	848	855	874	883	896	902	905	912	909	909	909	903	903	892	
6*	903	903	903	903	906	906	903	897	884	871	856	859	868	871	871	884	893	903	909	912	922	922	925	919	896	
7	916	915	912	909	913	917	916	917	916	901	888	879	869	876	885	888	907	920	935	926	910	901	895	891	904	
8	907	913	916	913	907	907	901	898	885	866	854	857	853	854	861	877	883	889	905	911	908	905	902	899	890	
9**	902	905	905	902	905	839	798	817	763	769	813	851	839	826	833	839	861	867	867	877	877	943	892	820	855	
10**	846	837	830	811	827	843	843	818	811	802	796	811	821	846	846	849	855	865	878	884	887	874	871	871	843	
11	874	874	874	868	871	874	881	856	852	846	841	850	844	847	847	860	869	879	882	885	885	882	882	885	867	
12	885	885	885	882	882	882	879	879	875	860	844	847	850	856	875	875	891	898	897	898	895	895	898	902	880	
13**	905	886	886	886	889	886	880	870	854	851	851	854	861	876	883	943	996	996	924	905	902	892	886	889	894	
14**	886	883	880	876	880	880	877	868	862	849	846	837	846	912	903	921	953	881	868	846	859	833	833	817	871	
15	821	817	868	881	824	821	811	777	754	755	751	783	817	846	868	859	859	869	885	904	885	872	869	866	836	
16	882	882	875	882	882	875	866	856	847	844	844	847	860	853	841	859	875	897	904	897	891	882	882	872	871	
17	878	882	886	889	883	873	870	867	879	883	839	845	857	860	876	898	905	889	889	886	886	886	889	889	878	
18	889	892	892	889	892	889	886	876	867	861	842	842	843	846	858	871	884	890	906	902	896	893	890	890	879	
19*	896	899	890	893	890	893	893	880	868	862	861	858	855	862	868	877	887	893	893	896	896	899	897	894	883	
20	894	897	897	897	897	897	891	881	881	881	888	875	878	888	894	891	910	900	903	904	907	907	916	897	895	
21**	913	910	900	900	910	903	875	844	829	801	794	826	845	851	857	933	961	926	886	889	842	848	863	835	873	
22	857	864	845	860	845	845	854	841	829	807	797	791	813	838	851	860	870	882	880	883	871	852	858	871	849	
23	874	861	874	874	874	874	874	858	852	846	836	839	830	839	846	858	883	969	905	890	883	883	871	865	869	
24	864	871	874	874	872	875	866	859	850	837	836	856	859	862	859	865	875	875	888	888	888	888	884	881	869	
25	884	884	884	884	891	894	891	884	869	850	837	828	840	853	863	867	885	901	901	926	948	936	936	923	886	
26	907	898	898	863	873	870	860	833	813	813	826	829	832	829	838	848	857	873	879	882	882	892	889	873	861	
27	874	877	877	877	877	877	871	874	867	858	852	858	864	868	867	874	883	886	886	893	893	893	902	896	877	
28*	886	886	886	890	893	890	880	871	864	855	847	840	846	856	865	878	884	884	897	897	903	900	903	900	879	
29*	891	887	887	891	891	887	884	881	869	853	846	847	846	856	862	872	878	887	894	897	898	898	895	895	879	
30	895	895	895	895	898	898	895	885	876	866	854	851	863	879	885	882	873	885	901	873	898	904	901	904	885	
31	904	904	901	901	901	898	883	877	867	855	852	855	867	874	886	893	896	899	899	902	902	899	899	899	888	
Mean	888	887	888	886	885	883	877	867	856	846	841	846	851	861	867	879	892	897	896	896	895	894	892	886	877	
Mean	896	895	894	896	897	896	892	884	872	860	853	850	854	864	870	881	889	894	901	902	906	906	905	902	886	
Mean**	890	884	880	875	882	870	855	843	824	814	820	836	842	862	864	897	925	907	885	880	873	878	869	846	867	

TABLE II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
September.													17000γ+Tabular Quantities.													Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	
1*	906	906	906	906	906	903	896	890	878	868	868	874	884	890	912	915	906	918	912	909	912	909	912	912	900	
2**	915	915	918	918	918	915	912	903	881	852	846	855	868	890	871	877	887	893	912	909	906	903	899	903	895	
3	907	913	913	904	907	904	900	875	875	860	850	850	847	853	866	882	888	897	901	904	904	904	900	897	887	
4	891	910	897	897	897	904	897	885	860	853	853	844	847	853	869	875	885	891	897	901	907	904	907	919	885	
5**	901	902	901	895	898	902	876	908	886	829	791	794	807	851	857	861	854	876	889	883	895	898	867	857	870	
6	857	876	870	870	873	876	873	864	851	845	838	835	839	845	854	870	889	883	889	889	886	889	889	886	868	
7	890	884	884	887	887	887	887	871	865	849	830	830	843	852	858	865	877	884	896	899	902	899	896	896	876	
8	903	899	896	893	896	887	884	880	871	865	865	858	855	858	862	874	887	893	899	899	899	906	903	890	884	
9**	903	894	904	900	913	903	894	872	847	853	844	842	840	859	859	885	888	891	888	897	897	900	900	897	882	
10	897	897	897	894	900	900	891	875	859	853	856	863	869	869	869	875	885	888	894	900	900	900	904	903	885	
11*	901	898	898	898	901	901	901	889	879	873	867	867	867	870	870	886	886	895	898	901	905	904	905	901	890	
12	901	901	901	901	901	904	901	895	889	883	882	876	873	876	879	886	892	901	905	904	911	914	914	908	896	
13	912	899	899	902	896	890	887	884	880	874	871	871	874	880	880	890	890	890	896	902	902	905	902	899	891	
14	899	909	899	899	899	896	896	883	877	871	871	868	874	877	880	890	884	893	899	905	906	905	909	909	892	
15	910	910	916	919	913	907	906	897	888	872	869	869	875	875	878	885	891	900	903	906	903	903	907	910	896	
16	906	903	903	903	900	903	903	897	888	875	872	869	872	885	891	894	900	900	903	903	906	907	906	910	896	
17	914	908	901	901	901	901	904	889	889	876	857	860	860	867	873	879	882	898	911	907	904	904	895	901	891	
18	898	901	904	901	901	901	895	886	876	870	863	870	876	882	889	895	901	911	898	895	889	879	895	882	890	
19**	886	905	905	902	899	896	890	871	858	849	846	858	858	852	845	858	861	880	893	899	893	893	896	896	879	
20	899	899	899	899	899	890	896	896	880	864	852	833	842	839	852	858	855	864	883	890	905	896	883	883	877	
21	903	891	903	894	897	897	897	891	881	872	865	843	837	840	850	859	881	884	884	891	897	900	894	897	881	
22	900	900	919	891	887	894	891	884	878	872	862	862	859	862	869	872	878	891	900	897	891	891	894	894	885	
23*	895	895	895	895	895	898	895	895	882	873	857	860	860	866	876	882	892	892	901	898	898	898	898	901	887	
24	901	904	907	904	901	901	904	901	892	876	857	848	860	870	876	882	885	888	895	901	904	904	901	898	890	
25*	899	902	902	902	899	899	899	899	893	883	871	855	852	861	871	886	893	896	902	905	905	905	905	902	891	
26*	905	905	908	905	908	908	908	905	896	880	867	864	861	864	867	883	890	896	902	905	908	908	908	911	895	
27	909	909	906	906	906	906	906	903	897	887	875	872	868	865	868	872	884	887	897	897	903	900	897	913	893	
28	903	900	900	900	903	903	909	912	913	881	875	872	872	872	881	884	894	897	903	900	906	909	906	906	896	
29	901	901	901	901	904	904	907	907	895	882	876	876	876	873	876	879	876	882	895	898	901	901	901	904	892	
30**	910	901	898	917	913	910	888	892	882	876	857	847	847	854	863	860	869	866	863	873	885	885	907	891	882	
Mean	901	901	902	900	901	900	896	890	880	867	858	856	859	865	870	879	884	891	897	899	901	901	900	899	887	
Mean*	901	901	902	901	902	902	900	896	886	875	866	864	865	870	879	890	893	899	903	904	906	905	906	905	893	
Mean**	903	903	905	906	908	905	892	889	871	852	837	839	844	861	859	868	872	881	889	892	895	896	894	889	882	
October.													17000γ+Tabular Quantities.													Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	
1	889	886	893	886	883	902	896	889	883	867	851	858	867	867	867	874	880	880	877	889	886	896	893	911	882	
2	908	892	889	899	899	896	899	889	867	855	845	842	845	848	855	867	877	867	893	880	886	918	889	883	879	
3**	889	905	892	893	886	889	892	877	864	852	826	823	839	848	867	871	878	884	881	890	915	875	890	900	877	
4	903	903	900	890	859	884	887	875	843	831	827	827	840	846	859	862	865	881	884	887	893	887	887	890	871	
5	897	881	881	884	897	900	900	903	890	868	853	852	856	859	859	865	875	884	890	897	897	903	903	903	883	
6	903	894	897	906	906	909	898	888	872	857	857	860	850	850	860	872	882	891	894	895	898	894	898	898	885	
7	898	898	898	901	904	904	907	907	898	879	863	860	857	863	869	879	891	895	904	894	888	898	904	901	890	
8	901	907	898	901	910	913	920	917	904	885	872	866	860	860	869	879	860	860	879	894	891	892	892	896	888	
9	899	899	902	899	899	902	902	889	880	873	842	839	845	861	870	877	886	899	899	902	902	902	905	914	887	
10	905	905	905	899	905	908	905	899	886	867	854	851	851	864	877	889	892	899	902	905	902	902	905	908	891	
11	908	905	908	896	905	908	895	892	880	858	858	858	859	859	865	871	884	897	906	893	900	912	909	900	889	
12	900	903	900	900	903	903	903	896	887	881	868	868	868	865	878	890	890	893	897	900	896	900	900	900	891	
13**	900	900	900	903	906	906	906	897	887	878	871	871	874	884	890	900	900	912	896	887	890	915	909	915	896	
14**	906	912	912	909	896	890	887	900	887	852	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
15	—	—	—	—	—	—	—	—	—	—	874	868	868	871	874	878	887	890	887	890	890	887	893	906	—	
16*	900	893	897	896	897	900	903	896	881	871	868	862	865	868	874	881	887	890	898	901	901	901	901	897	888	
17	898	897	898	901	901	904	904	894	879	872	866	853	850	856	860	856	869	875	885	891	888	897	904	898	883	
18	891	888	891	894	894	897	901	898	882	869	856	853	857	866	866	866	879	885	891	894	897	898	897	898	884	
19*	897	901	901	901	904	907	904	898	882	870	867	864	870	876	883	889	892	898	902	902	902	902	902	905	892	
20*	905	905	905	908	908	911	911	902	889	883	867	864	864	873	883	889	889	895	899	902	902	905	905	902	894	
21*	908	902	898	899	898	902	905	902	889	876	861	858	861	867	876	886	892	898	899	902	902	905	902	905	891	
22*	903	903	903	903	906	909	909	903	893	881	868	862	855	852	858	865	871	887	896	900	903	903	903	903	889	
23	906	903	903	903	903	906	903	896	887	871	858	852	852	859	871	874	887	899	903	893	896	903	903	903	889	
24	903	906	906	906	903	903	909	909	900	877	862	855	858	868	877	885	891	894	901	885	888	885	885	888	889	
25	888	891	900	919	913	901	863	847	853	853	841	844	847	850	850	853	853	856	872	875	878	885	882	882	871	
26	878	878	878	882	885	885	885	882	875	866	856	853	853	859	869	878	882	888	891	894	888	888	891	891	878	
27	894	894	894	894	894	891	898	898	892	883	876	873	864	861	876	883	883	879	886	895	905	905	901	908	889	
28**	905	905	905	908	911	911	905	905	892	879	848	839	848	835	857	864	873	883	889	867	867	854	854	901	879	
29**	879	876	879	883	889	879	873	848	839	854	838	813	807	829	832	839	864	889	848	851	873	880	874	912	860	
30	884	893	902	880	877	874	877	868	852	824	811	821	836	840	836	858	858	868	880	877	877	899	890	887	865	
31	884	890	893	877	874	887	887	884	871	855	843	836	843	849	843	868	871	871	871	880	906	887	902	912	874	
Mean	898	897	898	897	897	899	898	892	879	866	855	852	854	858	865	874	880	886	890	890	894	896	896	901	884	
Mean*	903	901	901	901	903	906	906	900	887	876	866	862	863	867	875	882	886	894	899	901	902	903	903	902	891	
Mean**	893	897	894	897	898	896	894	882	871	866	846	837	842	849	861	869	879	892	878	874	886	881	882	907	878	

TABLE II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE.

November. 17000γ+Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	883	887	883	886	883	893	896	877	867	854	838	809	823	842	852	862	868	875	878	878	888	887	888	887	870	
2	888	891	887	884	881	891	891	884	868	849	833	826	829	842	855	865	871	884	881	881	884	884	881	881	871	
3	881	881	881	881	878	888	891	891	878	858	845	842	842	846	849	849	865	875	881	884	894	887	884	888	872	
4	887	888	884	884	884	887	888	887	878	862	846	842	849	858	868	875	878	881	884	884	884	887	888	887	877	
5	888	891	891	891	894	897	897	897	887	878	868	865	865	871	878	881	889	888	889	892	892	892	898	898	887	
6	895	892	895	895	895	898	895	888	882	872	863	850	856	869	876	879	879	885	889	888	889	898	895	895	884	
7	892	895	895	895	895	895	895	895	888	879	869	866	869	879	882	889	885	895	898	892	898	895	895	895	889	
8	898	895	888	892	895	901	905	901	889	876	869	872	872	879	885	892	895	898	901	901	901	898	895	895	891	
9*	895	895	895	895	895	898	898	895	888	879	876	872	872	876	882	889	892	895	898	901	906	906	906	902	892	
10*	899	899	899	899	899	899	899	899	893	886	883	880	877	880	873	873	883	893	893	899	899	899	896	896	892	
11	899	899	899	899	902	906	906	902	902	896	889	883	883	890	893	893	893	893	896	902	905	902	902	902	897	
12**	902	902	902	906	906	912	909	909	877	867	880	880	870	880	870	838	857	847	886	864	851	851	864	860	879	
13	870	873	870	873	873	877	880	886	880	864	857	854	854	864	870	877	883	880	880	877	886	893	886	883	875	
14**	878	881	891	887	890	884	891	907	900	878	842	848	852	855	849	858	868	878	881	881	881	881	878	881	876	
15*	878	881	881	884	884	884	887	887	878	868	858	852	852	861	871	871	871	884	887	887	887	894	887	887	878	
16*	887	887	887	891	891	894	894	887	878	874	868	861	861	871	881	884	887	890	894	894	894	894	897	897	885	
17	894	894	897	897	900	900	900	897	887	884	874	861	858	858	868	871	878	881	884	887	891	890	891	890	885	
18	887	891	890	891	895	898	901	898	898	879	869	866	862	856	856	856	869	875	885	891	895	892	888	898	883	
19	891	898	888	892	891	898	892	888	882	879	856	846	846	846	856	859	866	866	872	862	872	885	888	888	875	
20	882	891	888	888	892	891	892	885	879	875	869	866	866	862	862	859	866	882	853	859	862	869	872	875	874	
21	879	879	879	879	882	885	885	882	882	872	866	859	859	866	872	875	879	882	885	885	885	885	885	885	878	
22	885	885	885	885	885	885	891	892	880	870	860	860	863	873	876	880	886	886	889	886	886	886	883	880	881	
23*	880	880	883	886	889	889	892	889	883	876	870	867	870	873	880	883	886	889	893	892	889	886	889	889	884	
24	886	883	886	889	893	896	896	892	886	880	870	860	854	854	857	857	867	867	860	870	873	876	883	896	876	
25**	883	883	880	883	883	896	896	893	889	883	873	870	867	863	867	867	844	841	863	857	841	863	870	896	873	
26**	892	873	880	873	880	883	883	880	860	873	873	863	861	832	823	839	855	864	877	897	897	884	877	897	872	
27**	881	900	884	881	897	877	871	881	874	861	851	852	851	858	864	864	861	868	848	881	868	858	864	881	870	
28	887	874	871	877	868	881	881	871	861	855	848	842	845	852	855	858	868	871	874	887	874	871	871	871	867	
29	877	877	874	874	881	881	881	877	874	864	858	855	851	842	845	852	858	871	874	877	881	881	881	877	869	
30	877	877	877	877	877	871	877	881	871	861	832	835	842	848	851	855	859	869	872	875	878	878	878	878	867	
Mean	887	887	886	887	889	891	892	890	881	872	862	857	857	862	866	868	874	878	882	884	884	885	885	888	879	
Mean*	888	888	889	891	892	893	894	891	884	877	871	866	866	872	877	880	884	890	893	895	895	896	895	894	886	
Mean**	887	888	887	886	891	890	890	894	880	872	864	863	860	858	855	853	857	860	871	876	868	867	871	883	874	

December. 17000γ+Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	878	882	878	882	882	882	885	882	882	878	862	862	865	862	865	865	872	875	882	885	885	882	895	875	877	
2	875	878	878	878	882	882	885	888	869	865	862	865	859	865	859	852	862	853	862	875	885	888	888	885	873	
3	888	888	888	888	891	891	894	891	891	872	862	865	862	856	862	865	878	885	895	891	891	894	885	904	883	
4	914	911	891	872	882	888	891	891	891	891	888	885	872	872	872	869	869	875	865	891	896	892	895	889	885	
5	886	883	883	883	886	886	889	889	886	879	876	873	873	883	886	892	883	879	905	902	886	892	896	889	886	
6	886	889	883	889	889	895	896	895	896	889	883	879	883	886	886	892	892	892	892	889	889	889	892	889	889	
7	892	889	889	889	890	893	900	896	893	890	890	887	880	880	884	887	887	884	877	874	890	893	890	887	888	
8**	887	887	893	887	906	897	893	880	880	867	871	874	874	867	871	877	880	861	880	871	871	880	874	877	879	
9	887	887	874	874	877	884	884	874	864	867	861	858	865	865	868	872	878	885	888	888	888	885	897	894	878	
10*	888	881	881	878	881	888	891	894	888	885	881	878	875	878	875	875	881	891	891	888	885	885	888	891	884	
11	891	888	888	888	891	891	898	897	901	898	888	888	885	881	881	891	894	888	892	899	902	902	898	895	892	
12	899	898	899	898	902	902	899	895	895	889	876	876	869	853	856	869	889	895	899	895	895	895	895	895	889	
13*	892	892	892	892	895	895	895	895	892	879	863	863	866	869	873	876	879	886	889	892	892	889	886	889	885	
14	889	886	887	887	890	896	896	893	893	887	877	874	877	867	841	864	877	887	887	870	883	893	893	890	883	
15	893	890	887	887	890	893	906	896	890	883	874	867	870	874	874	877	883	890	887	883	887	887	887	890	885	
16**	890	893	893	893	893	893	893	890	893	877	881	875	875	884	888	833	797	797	797	765	742	800	846	810	854	
17**	816	813	830	826	849	842	855	855	852	852	839	832	804	813	839	842	855	855	862	865	868	865	865	865	844	
18**	862	865	865	868	875	891	894	888	891	871	829	820	836	852	836	852	862	868	853	860	863	869	869	869	863	
19	879	863	866	863	866	876	882	872	869	853	853	853	859	863	866	863	866	866	872	869	872	876	889	892	869	
20	889	889	889	895	898	902	895	882	872	885	876	866	866	869	863	869	872	879	882	882	872	889	882	885	881	
21	889	889	883	883	883	886	890	890	890	883	880	870	870	873	877	883	886	886	883	883	880	883	890	886	883	
22*	893	896	886	886	890	893	893	893	886	880	864	857	864	867	873	873	883	886	890	893	893	890	890	890	884	
23*	893	896	902	899	896	896	896	893	890	883	878	871	871	874	874	871	881	887	887	891	887	881	887	894	887	
24	..	..	..	..	..	..	..	..	..	..	..	..	862	861	874	884	887	891	894	894	897	897	897	894	..	
25	894	894	894	897	897	900	904	900	897	887	884	874	874	874	871	871	868	861	856	850	866	875	869	892	881	
26**	885	882	882	885	892	895	898	905	892	872	879	872	866	866	869	862	872	863	862	840	850	872	879	879	876	
27	875	879	875	879	882	879	885	885	885	879	859	853	853	856	859	866	872	875	879	882	892	885	888	892	876	
28	892	892	893	893	893	893	896	896	893	886	873	870	..	..	..	..	..	..	..	..	..	..	..	..	..	
29	..	..	..	..	..	..	..	..	..	..	..	..	864	867	870	876	883	893	899	899	899	899	899	896	..	
30	896	896	896	896	902	902	909	905	899	893	887	877	877	881	884	887	890	890	894	897	897	900	897	897	894	
31*	897	897	897	894	897	903	903	897	897	890	881	871	865	868	874	884	890	894	900	900	903	903	903	900	892	
Mean	886	885	884	884	888	890	893	890	887	880	872	867	866	867	869	871	876	877	880	879	880	884	887	886	880	
Mean*	893	892	892	890	892	895	896	894	891	883	873	868	868	871	874	876	883	889	891	893	892	890	891	893	886	
Mean**	868	868	873	872	883	884	887	884	882	868	860	854	851	856	861	853	853	849	851	840	839	857	867	860	863	

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
January.																									
February.																									

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE—*continued.*

March. 43000 γ+Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	
1	257	261	261	261	261	265	261	265	261	257	254	246	250	254	261	265	272	276	268	268	265	265	265	261	262	
2*	261	257	261	257	261	261	261	261	265	261	254	254	254	254	257	257	265	268	268	268	265	265	261	261	261	
3*	262	262	262	258	258	262	266	262	262	262	255	247	247	247	251	255	258	258	262	262	262	262	262	262	259	
4**	258	255	255	255	258	258	258	258	262	258	255	251	247	247	255	266	266	266	269	273	284	291	288	273	263	
5**	267	263	263	263	—	—	—	—	—	—	263	263	259	267	274	278	281	292	303	292	278	274	274	256	270	
6	263	263	263	256	263	267	267	267	267	263	259	259	259	267	281	289	289	285	281	278	274	270	267	267	269	
7	268	264	260	260	257	260	264	264	264	—	257	257	260	260	264	271	275	279	279	279	271	271	268	268	266	
8**	265	261	254	250	257	261	265	265	265	261	261	261	257	268	283	294	294	301	294	287	276	276	272	272	271	
9	262	262	258	258	255	266	266	266	269	266	262	262	269	273	277	277	277	277	277	277	273	273	273	269	268	
10	266	266	269	269	269	269	269	266	262	258	251	255	258	262	269	273	277	277	277	277	277	273	273	269	268	
11	273	270	266	266	266	266	270	270	270	270	266	266	266	270	277	281	277	273	273	273	273	273	273	270	271	
12	272	272	272	272	272	272	275	275	272	264	257	257	257	261	268	279	283	286	286	290	290	286	286	283	274	
13	278	274	274	274	274	271	267	263	263	260	260	260	263	267	271	282	296	300	293	289	278	282	274	274	274	
14	274	274	271	267	267	271	274	271	267	263	260	260	263	267	271	278	278	274	274	274	274	278	274	271	271	
15	268	268	268	272	272	272	272	272	272	268	257	253	253	257	268	286	301	305	301	290	283	283	275	272	275	
16	268	268	268	268	272	275	275	279	279	268	261	257	261	264	272	275	283	290	294	290	283	279	275	272	274	
17	273	273	273	273	273	273	269	273	269	262	258	254	258	262	265	269	273	269	276	276	276	276	273	265	269	
18	260	256	260	264	267	267	271	271	267	260	253	249	249	256	267	275	278	278	275	275	275	275	275	275	267	
19	272	272	268	268	268	268	268	272	272	265	257	254	257	261	265	272	279	276	276	276	276	276	276	272	269	
20	272	268	268	268	268	272	272	276	272	265	246	246	250	257	261	268	272	272	272	272	268	268	261	261	266	
21**	262	258	251	247	258	262	266	273	269	262	255	255	258	266	273	277	277	280	288	280	277	273	273	269	267	
22	267	264	267	267	267	271	271	275	275	—	260	256	256	267	278	282	282	282	278	275	271	271	267	267	270	
23	268	268	268	268	272	272	272	272	268	265	257	261	265	268	276	283	287	283	279	279	276	276	272	272	272	
24	265	265	269	269	269	269	269	273	269	265	258	254	254	262	273	273	276	273	273	269	269	269	265	265	267	
25**	266	269	269	269	269	269	269	269	269	269	258	258	262	266	280	302	324	321	299	284	284	284	280	273	278	
26	273	269	273	273	277	277	280	280	277	273	262	458	258	262	266	273	277	277	280	277	273	277	277	273	273	
27	274	274	270	270	274	274	278	281	281	270	263	256	256	259	267	278	292	292	296	289	285	278	274	270	275	
28*	267	267	271	271	271	275	275	275	271	260	249	242	242	245	253	260	267	271	275	271	271	271	271	271	265	
29*	271	271	271	271	271	275	275	275	271	264	253	253	257	257	264	271	275	279	279	275	275	275	275	275	270	
30*	271	271	271	271	271	271	271	271	268	257	249	246	253	260	264	271	271	275	275	275	271	271	271	271	267	
31	272	272	272	272	272	272	272	276	272	261	254	254	258	261	265	269	269	265	269	269	269	272	272	272	268	
Mean	268	266	266	265	267	272	269	270	268	263	256	255	257	261	268	275	280	281	280	278	275	275	272	269	269	
Mean*	266	266	267	266	266	269	270	269	267	261	252	248	251	253	258	263	267	270	272	270	269	269	268	268	264	
Mean**	264	261	258	257	261	262	265	266	266	263	258	258	257	263	273	283	288	292	291	283	280	280	277	269	270	

April. 43000 γ+Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	
1	269	269	269	269	269	269	272	272	269	265	261	261	261	261	265	269	272	272	272	272	276	276	280	272	269	
2	270	263	259	259	259	259	263	267	270	267	259	259	259	259	270	270	281	289	289	289	281	278	281	274	270	
3	274	270	270	263	256	259	267	270	270	267	256	248	252	267	270	274	285	296	300	292	285	281	278	274	272	
4	270	267	267	263	264	264	268	268	268	268	260	260	260	268	271	275	279	279	279	279	275	275	275	275	270	
5**	268	268	268	268	260	260	268	271	271	268	264	260	260	260	271	282	301	304	304	301	297	290	282	275	276	
6**	268	260	257	253	242	242	246	257	253	253	257	260	260	264	268	279	290	297	308	304	297	290	286	282	270	
7	279	279	279	279	275	279	279	279	272	269	258	258	258	265	272	280	283	283	287	287	283	283	283	283	276	
8	276	272	269	261	269	265	265	272	272	269	261	258	258	265	272	280	287	283	283	283	283	276	272	272	272	
9**	269	261	254	258	250	254	261	261	261	261	258	258	265	276	283	287	298	305	302	298	291	287	280	276	273	
10*	276	276	276	280	283	280	280	280	276	272	261	254	255	259	273	277	277	277	277	277	277	277	277	277	274	
11*	271	275	271	275	279	275	279	279	275	271	264	253	249	253	260	271	275	279	279	275	275	275	275	271	271	
12	271	271	271	271	275	275	279	282	279	271	264	260	253	253	260	268	271	275	275	275	279	275	275	271	271	
13	268	264	268	271	271	275	275	275	271	264	253	249	246	246	257	275	280	276	276	276	276	272	272	269	268	
14*	274	275	271	274	278	278	278	274	271	267	256	252	249	252	260	267	271	274	274	274	274	274	271	271	269	
15	274	274	274	274	274	270	266	270	266	266	252	248	252	259	263	270	274	281	285	285	285	281	277	274	271	
16**	267	256	260	260	256	249	252	256	252	252	249	252	252	260	282	307	300	293	285	282	283	279	279	279	269	
17	272	268	264	268	268	268	268	275	275	—	—	297	283	275	275	279	283	290	294	290	290	286	283	264	279	
18	264	268	272	275	275	275	279	279	275	268	261	257	257	257	264	272	279	283	283	279	279	283	275	264	272	
19	277	277	280	280	280	284	284	295	288	277	269	262	258	266	277	284	284	288	284	280	280	280	277	277	279	
20*	278	278	278	278	281	281	281	281	274	263	252	252	248	256	267	270	274	278	278	274	274	274	274	274	272	
21	270	274	274	274	274	274	274	278	278	270	263	259	259	263	267	270	270	278	278	278	274	274	274	270	272	
22	270	270	274	274	274	274	274	274	270	263	259	252	252	259	267	270	278	278	281	281	281	278	274	267	271	
23	265	261	261	265	268	273	273	269	269	269	251	251	255	262	266	277	277	280	277	273	273	269	269	262	267	
24	266	269	262	258	269	273	273	269	266	258	251	247	247	251	266	277	288	291	288	280	277	273	269	269	268	
25	274	274	274	274	278	278	274	274	274	267	259	259	259	252	241	266	273	273	273	273	277	281	273	266	269	
26**	261	261	261	261	265	261	261	261	265	258	251	251	258	269	284	291	291	295	298	298	288	277	269	269	271	
27*	271	271	275	275	275	275	271	275	271	264	257	249	242	246	257	264	267	271	271	271	271	271	271	271	267	
28	264	264	264	268	271	271	271	275	264	253	249	242	246	253	260	260	260	264	271	271	271	271	264	264	263	
29	267	263	263	267	263	252	256	256	256	256	260	252	249	253	261	264	271	275	275	275	275	275	271	268	263	
30	268	268	268	264	261	257	261	261	264	257	246	246	257	268	275	286	290	290	286	283	283	275	275	268	269	
Mean	270	269	268	269	269	260	270	272	269	265	258	250	255	260	267	275	280	283	284	282	280	278	275	272	271	
Mean	274	275	274	276	279	278	278	278	273	267	258	252	249	253	263	270	273	276	276	274	274	274	274	273	271	
Mean**	267	261	260	260	255	253	258	261	260	258	256	256	259	266	278	289	296	299	299	297	291	285	279	276	272	

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE.

May. 43000 γ + Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1**	262	265	265	262	265	265	265	265	262	254	251	251	251	258	262	269	276	276	295	298	291	280	258	269	267	
2**	258	254	243	254	265	262	262	265	262	262	269	273	284	298	298	316	324	324	316	313	305	298	291	284	283	
3**	273	262	240	247	243	243	258	262	258	262	258	254	251	254	265	276	291	298	305	298	291	276	269	265	267	
4	265	261	265	266	259	266	270	277	273	270	259	255	255	262	266	277	288	292	288	284	277	281	277	270	271	
5	263	263	255	244	244	252	255	263	263	259	252	248	248	255	263	266	270	274	274	274	270	270	270	270	261	
6*	266	270	270	274	270	270	270	266	263	259	248	248	252	259	263	270	274	277	285	277	277	277	270	270	268	
7	266	266	263	259	259	264	264	260	256	253	242	231	234	249	264	271	275	278	278	275	275	275	271	264	262	
8*	259	262	262	266	266	266	262	262	259	244	240	237	240	244	251	262	270	270	270	266	266	262	262	262	259	
9	267	267	267	267	271	271	271	271	271	260	253	249	249	249	260	271	278	286	289	286	278	275	271	267	269	
10	256	260	264	267	271	271	271	272	268	265	250	246	246	250	257	261	268	272	276	276	272	268	268	265	264	
11	261	261	265	261	265	265	265	268	265	268	265	265	265	269	276	284	291	295	295	295	295	291	291	291	276	
12	293	293	293	293	297	297	297	293	293	289	271	267	260	264	271	282	286	289	297	297	293	297	293	282	287	
13*	278	282	286	282	282	282	278	275	275	272	268	261	261	268	272	279	283	290	290	294	294	298	294	290	281	
14	290	286	286	290	290	290	286	290	286	271	260	260	268	271	282	290	301	308	315	319	319	312	308	301	291	
15	297	297	290	293	297	297	297	297	293	286	279	275	279	282	290	293	297	301	304	304	301	297	297	290	293	
16**	287	287	283	283	290	290	287	283	283	276	268	269	280	295	302	313	321	324	324	321	317	313	306	306	296	
17	293	293	293	293	297	293	293	293	293	289	286	282	278	282	286	293	300	304	300	300	300	297	297	297	293	
18	293	293	293	297	297	297	293	289	286	282	278	278	275	278	286	293	297	304	308	308	308	304	297	297	293	
19*	297	297	293	297	300	300	297	300	293	286	282	278	278	283	290	294	294	298	298	298	298	294	294	290	293	
20*	290	294	294	294	294	294	290	290	290	283	272	268	272	276	283	294	298	298	298	298	298	298	294	290	290	
21	290	290	290	294	294	294	294	294	290	294	283	276	272	279	287	298	298	298	298	294	294	294	290	290	291	
22	287	290	290	294	298	301	301	298	298	294	283	276	272	276	283	291	306	310	306	302	299	295	291	288	293	
23	288	288	288	291	295	299	299	299	288	277	273	266	269	273	280	288	295	299	299	295	295	291	291	288	288	
24	288	288	288	291	295	295	295	291	288	280	269	262	266	273	280	288	295	295	291	288	291	291	288	288	286	
25	288	288	291	291	295	295	291	291	277	273	262	258	262	269	280	288	291	296	296	296	296	292	289	285	285	
26	287	283	283	283	291	291	291	291	283	276	258	250	258	265	269	283	291	298	298	298	294	291	291	287	283	
27	287	287	287	287	287	287	291	291	291	283	280	276	276	283	291	298	302	302	302	298	302	298	291	291	290	
28**	287	283	280	276	283	280	276	280	272	265	272	272	269	272	280	287	294	298	302	310	310	303	295	292	285	
29	291	287	280	287	287	280	284	287	284	287	287	287	287	291	291	298	309	313	320	313	309	302	295	287	293	
30	281	281	284	292	292	292	292	292	288	288	284	277	277	281	295	306	314	310	303	295	295	295	295	292	292	
31	292	288	288	292	295	295	292	292	292	292	288	273	270	277	288	299	303	303	303	299	299	296	293	293	292	
Mean	280	280	278	280	282	282	282	282	279	274	267	263	265	270	278	286	293	296	298	296	294	291	287	284	282	
Mean*	278	281	281	283	282	282	279	279	276	269	262	258	261	266	272	280	284	287	288	287	287	286	283	280	278	
Mean**	273	270	262	264	269	268	270	271	267	264	264	264	267	275	281	292	301	304	308	308	303	294	284	283	280	

June. 43000 γ + Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1*	291	291	287	291	294	294	298	294	294	291	283	280	276	280	280	287	294	298	298	294	291	291	291	291	290	
2*	293	293	293	293	293	296	293	289	289	285	285	278	274	274	282	289	293	296	300	300	300	296	296	293	291	
3	291	291	291	291	294	294	291	291	287	283	280	276	280	280	283	287	294	298	298	302	302	302	302	291	291	
4	281	277	281	281	284	292	295	292	281	277	277	266	273	277	284	292	299	299	306	303	299	295	295	292	287	
5	292	292	292	292	295	295	292	288	281	270	266	262	262	270	277	284	292	295	299	299	295	295	292	292	286	
6	292	292	292	295	299	299	303	303	292	281	277	273	273	277	281	288	295	295	295	292	292	288	288	284	289	
7**	284	284	284	288	292	292	288	284	282	274	260	263	263	278	293	304	318	333	340	329	322	304	296	289	293	
8	289	293	296	300	296	296	300	300	296	285	282	282	285	289	300	304	311	307	307	307	300	300	296	296	297	
9	293	289	285	289	289	293	293	293	289	282	282	278	274	278	285	293	296	304	304	296	296	293	293	289	290	
10	291	287	287	291	295	298	295	291	284	276	265	265	269	273	280	292	303	310	314	314	307	303	299	299	291	
11	290	286	283	286	283	286	290	290	286	279	268	264	264	268	275	283	290	294	301	301	297	294	290	290	285	
12	286	286	290	290	294	294	294	294	290	283	272	268	272	275	283	290	301	308	308	305	305	301	297	294	291	
13**	290	290	294	294	297	294	286	286	279	268	264	257	264	268	283	297	312	323	330	327	316	301	295	287	292	
14	283	291	294	298	298	294	294	294	291	291	287	283	283	287	291	298	302	302	298	298	294	294	294	291	293	
15	291	291	291	291	291	294	294	298	291	276	265	265	269	272	276	283	294	298	298	294	294	294	291	291	287	
16	292	292	288	281	288	288	288	292	292	281	277	277	285	288	292	292	296	299	299	296	292	292	288	288	289	
17	291	291	291	295	295	296	292	288	281	274	270	270	277	277	288	288	292	296	296	299	296	292	288	288	288	
18	300	300	300	296	296	300	296	296	289	278	267	267	267	274	285	292	296	296	296	296	296	292	292	292	290	
19*	289	292	292	296	296	296	292	292	289	278	270	274	278	289	292	296	303	303	307	307	303	300	296	296	293	
20*	288	288	288	291	295	295	295	291	291	284	273	262	259	270	281	289	296	300	296	296	296	292	296	292	288	
21	274	278	278	282	289	289	293	293	289	278	267	267	274	274	285	296	300	304	300	300	300	300	300	296	288	
22	289	289	286	289	289	289	293	293	286	278	264	256	260	267	275	282	286	286	282	286	286	289	286	286	282	
23**	286	282	275	278	278	278	286	286	278	278	271	278	267	275	278	289	300	308	311	316	320	309	305	279	288	
24**	279	283	276	268	272	276	279	287	290	290	287	283	283	283	301	334	345	342	338	327	316	298	290	294	297	
25**	287	279	268	276	287	290	298	301	298	290	290	279	276	279	294	305	309	312	309	309	305	301	298	298	293	
26	298	294	298	298	301	305	301	305	298	290	287	276	283	287	290	298	305	301	301	301	305	301	298	298	297	
27	298	298	299	299	299	299	299	302	299	291	288	280	280	288	299	306	306	306	302	299	302	302	299	295	297	
28	291	288	284	284	284	284	288	295	295	284	280	273	273	269	277	291	302	310	313	310	306	302	299	299	291	
29	284	280	288	280	288	284	295	299	295	288	284	280	273	288	299	310	317	324	324	317	310	310	306	295	297	
30*	295	295	295	299	299	295	299	295	291	281	274	270	274	281	289	300	303	303	307	303	303	300	303	300	294	
Mean	289	288	288	289	292	292	293	293	289	281	275	272	273	278	286	295	302	305	306	304	302	298	295	292	291	
Mean*	291	292	291	294	295	295	295	292	291	284	277	273	272	279	285	292	298	300	302	300	299	296	296	294	291	
Mean**	285	284	279	281	285	286	287	289	285	280	274	272	271	277	290	306	317	324	326	322	316	303	297	289	293	

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
July.	43000γ + Tabular Quantities.																									
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	300	296	300	300	300	303	300	300	296	292	292	289	292	292	303	307	303	303	303	303	303	303	300	300	299	
2**	300	300	296	289	281	281	281	281	278	281	285	281	281	289	300	303	314	318	314	311	307	307	303	300	295	
3	300	300	300	303	303	300	292	292	292	285	285	285	281	289	296	303	311	311	311	311	311	307	303	303	299	
4	300	296	296	300	300	296	296	296	292	285	281	278	281	285	296	292	296	300	300	300	303	303	303	303	295	
5	300	300	300	300	303	303	303	300	300	300	292	289	289	289	296	303	311	311	307	311	307	303	300	300	301	
6*	300	300	303	303	307	307	303	300	292	286	275	271	264	268	275	286	297	308	315	312	312	304	301	301	295	
7	301	301	293	293	297	293	293	293	290	282	275	268	279	290	290	297	304	308	308	301	301	297	301	297	294	
8	297	297	301	301	304	304	301	304	304	297	290	286	286	290	293	293	297	304	301	304	304	301	301	301	298	
9	297	301	297	301	304	304	304	304	301	290	275	271	275	282	293	304	312	315	319	319	312	308	304	301	300	
10	301	301	301	301	301	301	304	301	290	275	260	253	260	271	275	286	290	293	297	301	301	301	297	297	290	
11	297	293	290	293	301	301	304	301	297	286	286	293	293	297	312	312	315	319	315	319	319	312	308	304	303	
12	304	304	304	308	304	304	301	301	297	283	276	276	280	287	298	302	305	313	313	316	313	309	305	298	300	
13**	294	291	294	298	294	294	291	294	294	298	294	302	313	338	335	397	404	393	375	360	331	324	320	305	322	
14	294	291	287	294	298	305	313	309	309	305	294	294	294	298	302	302	305	305	309	305	302	302	302	302	301	
15	302	298	298	294	291	291	291	294	294	298	287	287	287	283	302	305	302	302	305	302	302	302	298	298	296	
16*	298	298	298	302	305	305	305	302	302	294	294	287	287	291	302	305	309	313	313	313	313	313	309	309	303	
17*	305	305	305	305	309	309	309	309	302	291	283	283	283	287	298	305	313	313	313	309	309	309	305	305	303	
18*	302	302	302	302	306	306	306	306	302	296	289	270	274	281	292	303	311	311	307	307	307	307	303	303	300	
19	300	300	303	303	307	311	303	307	307	300	292	300	300	307	311	314	322	322	318	314	311	311	311	307	308	
20*	307	307	303	307	311	311	307	303	300	296	292	289	289	289	292	296	303	307	307	307	303	303	300	300	301	
21	303	303	303	306	310	310	310	303	299	295	292	284	277	281	284	292	299	306	314	321	321	321	299	303	302	
22**	295	292	288	284	284	292	299	303	299	295	292	295	295	303	310	317	321	325	325	321	317	310	306	299	303	
23	296	300	296	296	300	300	300	300	300	296	292	289	292	300	307	311	311	311	311	311	311	311	307	303	302	
24	301	301	297	297	301	301	301	301	305	302	298	287	280	280	298	309	317	313	313	309	306	302	302	295	301	
25	297	297	301	301	308	312	312	312	308	297	286	279	275	283	294	316	308	312	312	312	308	308	305	301	302	
26	301	297	297	297	301	301	297	297	290	290	283	279	283	283	290	297	297	301	305	301	305	297	297	297	295	
27	304	307	307	307	311	311	311	311	304	293	289	282	282	282	282	289	293	296	300	304	307	315	307	300	300	
28	291	298	298	305	305	309	309	305	294	291	287	287	283	291	305	309	313	320	320	316	316	313	305	309	303	
29**	289	285	285	274	263	260	256	260	271	285	293	304	329	340	348	351	348	337	333	326	322	322	318	318	305	
30	305	305	297	305	308	305	301	301	305	298	291	291	295	302	306	317	328	331	328	320	317	320	320	317	309	
31**	305	305	308	312	312	308	312	312	308	305	301	297	294	308	341	396	436	440	407	389	360	338	334	327	336	
Mean	300	299	298	299	301	301	300	300	297	292	287	285	286	292	301	310	316	318	317	315	312	309	306	303	302	
Mean*	302	302	302	304	308	308	306	304	300	293	287	280	279	283	292	299	307	310	311	310	309	307	304	304	300	
Mean**	297	295	294	291	287	287	288	290	290	293	293	296	302	316	327	353	365	363	351	341	327	320	316	310	312	
August.	43000γ + Tabular Quantities.																									Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	324	309	295	306	313	313	309	317	313	317	317	306	302	313	317	324	331	328	331	331	331	328	324	324	318	
2	320	320	320	320	320	317	313	313	313	313	309	298	298	302	313	317	320	320	320	317	320	320	317	313	315	
3	309	306	309	317	320	320	324	320	309	306	302	287	280	291	302	306	313	317	317	317	317	313	309	309	309	
4	309	309	309	313	313	313	309	309	306	302	298	295	291	295	309	320	324	324	324	324	320	320	317	317	310	
5*	313	317	317	317	317	317	320	317	309	298	295	298	298	295	306	313	320	320	320	317	313	313	313	313	311	
6*	306	310	310	314	317	314	314	310	306	303	303	292	281	277	292	303	306	310	314	314	314	310	306	306	306	
7	306	303	303	306	310	310	306	306	303	303	295	284	277	295	297	312	327	330	327	327	323	323	316	316	309	
8	315	311	308	293	300	308	315	315	308	300	297	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
9**	—	—	—	—	—	—	—	—	—	—	—	310	317	325	336	339	347	347	347	343	347	325	233	156	—	
10**	211	295	309	309	324	335	339	335	335	331	324	324	328	335	339	342	339	346	346	346	342	339	331	331	326	
11	324	324	320	313	313	313	313	320	317	309	309	317	320	320	324	328	331	331	331	331	331	331	331	328	322	
12	326	326	326	326	326	329	329	326	318	315	315	311	322	326	333	337	333	329	329	326	326	326	322	318	325	
13**	312	312	315	319	323	326	323	319	312	304	304	304	308	315	330	345	363	410	385	392	370	363	348	341	335	
14**	332	332	329	329	329	329	325	325	321	310	307	303	307	365	423	460	512	457	423	384	354	332	310	292	354	
15	280	269	266	247	233	247	255	266	280	295	310	321	335	361	365	357	357	357	350	346	339	335	335	335	310	
16	325	321	325	329	329	325	325	325	321	310	296	296	299	310	325	336	343	347	347	343	340	332	325	325	325	
17	325	325	321	314	318	318	321	321	321	318	310	307	310	318	329	336	340	340	336	325	325	325	321	321	323	
18	321	318	318	318	321	318	314	310	307	299	299	303	299	310	318	325	329	329	329	325	325	325	325	321	317	
19*	321	318	318	318	318	318	318	314	310	307	299	299	296	303	310	318	321	325	325	321	321	321	318	318	315	
20	319	319	319	322	322	322	319	319	315	300	286	282	286	293	308	319	330	326	322	319	319	319	322	322	314	
21**	315	311	304	300	297	286	282	275	282	282	289	311	341	359	392	436	454	450	417	381	355	333	282	282	334	
22	249	282	275	286	289	282	293	308	319	322	326	337	344	348	355	359	366	366	363	259	352	344	326	304	323	
23	307	307	311	318	322	325	329	329	325	322	318	311	311	322	340	358	373	402	377	366	347	329	325	329	333	
24	326	330	326	322	326	330	330	337	337	326	311	311	308	311	326	333	333	330	330	330	330	330	326	326	326	
25	322	326	326	326	326	330	330	326	326	322	315	308	300	300	319	322	330	333	333	333	330	322	319	311	322	
26	314	314	245	278	311	325	333	333	325	318	311	318	318	322	329	333	340	340	340	340	340	336	333	329	322	
27	322	326	330	330	333	330	330	330	319	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
28*	—	—	—	—	—	—	—	—	—	—	—	308	308	315	322	337	337	337	333	333	330	330	286	286	—	
29*	322	322	322	326	330	333	333	333	333	326	319	311	308	308	311	322	326	326	326	326	326	326	322	323		
30	322	322	322	326	326	326	330	330	322	315	304	304	304	304	299	330	330	326	326	330	330	330	326	326	321	
31	322	319	319	319	322	322	322	322	319	311	308	304	300	304	311	319	322	322	319	322	330	326	322	322	318	
Mean	311	313	310	312	315	316	317	317	315	310	306	305	307	315	327	337	345	346	341	337	333	328	318	313	321	
Mean*	315	317	317	319	321	320	321	319	315	308	304	300	296	296	305	314	318	320	321	320	318	318	316	315	314	
Mean**	293	313	314	314	318	319	317	314	312	307	306	311	321	344	371	396	417	416	393	376	355	342	318	312	338	

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE—*continued.*

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
September.	43000 γ + Tabular Quantities.																									Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1*	322	322	322	322	322	322	322	322	319	308	300	297	300	308	311	319	322	322	322	326	330	322	326	322	318	
2**	322	322	322	322	322	322	322	319	315	311	308	300	300	315	326	326	337	337	337	337	333	333	330	322	323	
3	319	304	304	308	304	311	315	326	326	322	319	311	315	326	333	341	348	344	341	337	337	333	326	319	324	
4	315	308	311	319	326	326	333	326	322	315	308	300	304	308	315	319	337	333	330	330	326	326	326	311	320	
5**	314	318	318	321	318	318	314	307	299	299	299	307	318	325	325	332	343	365	365	362	343	321	307	307	323	
6	321	325	332	336	340	340	340	340	336	332	321	318	314	325	332	343	365	358	351	343	340	336	336	332	336	
7	326	326	326	329	329	333	333	333	329	326	322	318	311	315	322	329	337	337	329	329	329	329	329	326	327	
8	318	322	322	322	326	326	329	326	322	318	315	311	315	318	318	326	326	329	326	326	326	326	326	304	322	
9**	298	309	309	305	302	309	316	316	316	316	313	313	313	316	327	338	335	331	331	331	327	327	324	324	318	
10	317	317	317	313	313	317	317	317	317	306	306	302	306	310	313	317	321	321	317	317	317	317	317	317	315	
11*	316	312	312	316	316	316	316	320	320	309	301	294	298	305	312	316	316	316	316	316	320	316	316	316	313	
12	314	310	310	314	314	314	314	314	310	303	296	288	292	296	303	314	314	314	314	314	314	314	314	314	309	
13	300	304	307	311	311	311	307	304	300	293	289	289	289	293	296	300	304	304	304	307	307	311	311	311	303	
14	309	305	305	309	309	305	305	302	294	291	287	283	283	291	298	309	309	305	305	309	309	309	309	305	302	
15	307	307	304	304	304	307	307	304	304	300	293	289	289	293	296	300	304	307	307	311	311	307	311	307	303	
16	307	307	307	307	307	307	307	304	300	293	285	282	289	293	300	307	315	318	318	315	311	311	307	307	304	
17	306	306	306	310	310	310	314	317	314	303	292	288	292	299	306	306	314	317	317	317	317	317	317	314	309	
18	314	310	310	310	310	314	314	314	310	306	303	299	303	306	310	314	314	321	325	325	328	332	328	325	314	
19**	321	306	306	310	306	303	299	303	303	299	295	292	295	303	317	328	328	325	321	317	317	317	317	314	310	
20	312	312	312	312	312	312	304	304	301	301	301	301	304	304	312	326	334	330	330	330	323	319	315	304	313	
21	306	303	303	306	310	310	317	317	314	306	295	288	292	303	310	328	336	332	328	325	321	317	317	317	313	
22	315	312	297	301	304	315	315	315	308	304	297	286	286	290	293	301	308	308	312	319	319	319	315	312	306	
23*	311	311	311	307	307	307	311	314	311	303	292	285	289	296	300	303	311	314	314	314	311	311	311	311	306	
24	313	309	309	305	305	309	309	313	305	305	294	291	294	294	302	309	313	316	316	313	316	316	313	313	308	
25*	313	309	309	309	313	313	313	316	313	302	294	287	287	291	298	305	309	309	309	313	313	313	313	313	307	
26*	313	309	305	305	305	309	309	309	305	305	302	294	298	302	302	305	309	309	309	309	313	313	309	309	307	
27	307	303	303	303	303	303	307	307	303	300	292	289	289	292	300	307	318	318	318	314	314	314	314	307	305	
28	303	303	303	303	307	307	307	303	296	292	292	292	292	292	300	303	307	307	307	311	311	311	314	311	303	
29	310	310	310	306	306	306	306	306	306	306	302	295	295	295	299	310	313	313	317	317	317	313	313	310	308	
30**	306	302	299	291	291	288	295	291	291	295	295	299	310	313	313	324	328	339	335	332	324	324	317	310	309	
Mean	312	311	310	311	312	313	314	314	310	306	300	296	299	304	310	317	322	323	322	322	321	319	318	314	313	
Mean*	315	313	312	312	313	313	314	316	314	305	298	291	294	300	305	310	313	314	314	316	317	315	315	314	310	
Mean**	312	311	311	310	308	308	309	307	305	304	302	302	307	314	322	330	334	339	338	336	329	324	319	315	317	
October.	43000 γ + Tabular Quantities.																									Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	307	307	299	303	307	303	307	307	307	299	292	299	307	310	318	318	318	321	321	318	318	318	314	307	309	
2	299	299	303	307	303	299	310	314	307	299	296	292	299	307	310	318	321	332	329	325	321	314	303	303	309	
3**	303	288	296	299	310	314	314	314	310	309	306	306	309	313	317	328	328	324	324	320	320	313	306	298	311	
4	293	282	274	260	263	315	293	311	318	318	311	307	311	315	315	322	326	322	318	315	315	315	311	311	306	
5	307	304	307	311	311	311	311	311	311	311	307	304	300	307	315	318	318	322	317	317	317	317	317	310	312	
6	303	299	306	295	295	299	306	310	310	310	306	306	306	306	310	314	321	317	314	317	317	314	314	314	309	
7	314	314	314	314	317	317	317	325	325	321	317	310	306	306	310	317	321	317	317	325	328	325	321	321	317	
8	312	305	309	311	311	311	311	311	311	308	304	300	304	308	315	326	341	348	337	333	326	322	319	319	317	
9	315	311	311	311	311	315	311	315	315	311	304	304	308	308	311	315	322	319	319	319	319	319	315	311	313	
10	308	304	308	308	304	304	308	315	315	315	311	308	307	307	307	314	314	318	314	314	314	318	314	314	311	
11	310	310	310	307	299	299	303	310	314	314	310	307	310	314	318	321	325	329	332	329	325	321	314	314	314	
12	318	314	314	314	314	314	318	321	321	318	314	310	314	318	321	321	321	321	321	318	318	317	320	317	317	
13**	317	313	313	313	313	313	317	317	313	313	309	306	309	309	313	313	313	313	317	331	324	320	306	302	314	
14**	295	299	299	299	306	306	310	306	303	303	299	303	310	317	328	336	332	332	325	321	314	314	314	314	312	
15	310	310	314	310	310	314	313	313	309	309	305	302	305	305	313	316	324	320	320	320	324	327	324	316	314	
16*	316	316	319	319	319	319	319	319	316	312	308	308	308	312	316	316	319	316	316	316	316	316	316	316	316	
17	316	316	316	316	316	316	316	316	312	308	301	297	301	308	319	318	322	322	322	322	322	318	311	311	314	
18	311	315	315	315	315	318	318	318	318	311	307	304	304	307	315	318	322	322	318	315	315	315	315	315	314	
19*	315	311	311	315	315	315	315	318	318	315	307	304	307	307	311	315	318	315	315	315	315	312	312	312	313	
20*	307	311	311	311	311	311	314	314	314	311	303	303	303	307	311	314	311	311	311	311	314	311	311	311	310	
21*	310	314	314	314	314	317	317	321	321	314	310	306	306	306	310	314	314	310	310	310	310	310	310	310	312	
22*	310	306	306	312	314	314	314	317	314	310	305	302	298	305	313	320	327	320	316	316	313	313	313	309	312	
23	309	309	309	309	309	309	309	309	309	309	309	298	298	305	309	313	316	324	313	313	313	316	313	309	310	
24	309	309	305	305	309	305	305	305	309	309	309	298	302	305	309	316	320	316	316	319	326	323	319	312	311	
25	312	308	304	297	293	290	297	301	304	308	308	312	319	319	326	334	337	334	334	330	326	326	323	319	315	
26	316	316	316	316	312	312	316	316	312	312	309	309	305	305	305	309	312	312	316	316	320	323	323	320	314	
27	308	308	308	308	307	307	307	307	304	304	300	296	300	307	311	315	318	318	318	315	315	311	311	311	309	
28**	309	309	309	306	306	306	309	306	302	295	295	295	309	309	309	313	313	313	324	335	346	349	339	306	313	
29**	292	306	306	295	295	303	306	310	314	314	314	321	332	335	338	338	349	349	342	345	338	331	320	305	321	
30	308	297	286	294	305	312	323	327	330	330	330	327	327	338	334	338	334	330	330	330	327	319	319	319	321	
31	316	305	301	305	308	308	308	312	316	312	312	312	312	316	330	338	334	334	330	327	327	323	318	304	317	
Mean	309	307	307	306	307	310	311	313	313	311	307	305	308	311	316	320	323	323	321	321	321	319	316	312	313	
Mean*	312	312	312	314	315	315	316	318	317	312	307	305	304	307	312	316	318	314	314	314	314	312	312	312	313	
Mean**	303	303	305	302	306	308	311	311	308	307	305	306	314	317	321	326	327	326	326	330	328	325	317	305	314	

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE.

November. 43000 γ + Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	302	309	309	313	313	309	309	313	313	317	313	312	316	316	319	323	330	327	323	319	319	316	312	312	315	
2	315	311	311	311	315	315	315	319	319	315	311	311	311	311	319	326	330	330	326	326	322	322	315	315	318	
3	311	310	310	314	314	310	310	310	314	314	307	310	310	310	314	321	325	321	318	318	314	314	314	314	314	
4	310	310	310	310	310	310	314	310	310	307	307	310	310	314	318	318	314	313	317	317	313	313	313	313	312	
5	310	306	306	306	310	310	306	306	310	306	303	295	299	303	306	310	310	310	306	306	310	310	306	303	306	
6	303	303	303	303	306	306	306	306	306	305	302	302	302	305	305	305	309	309	309	309	309	313	309	305	306	
7	305	305	302	302	305	305	305	305	305	302	302	298	302	302	305	309	309	305	305	309	309	309	309	305	305	
8	305	304	304	304	308	308	304	304	308	304	304	304	301	304	308	308	308	312	312	308	308	308	308	304	306	
9*	304	304	301	301	301	304	301	301	304	301	297	293	301	301	304	308	312	307	303	303	307	307	303	303	303	
10*	301	298	298	298	301	301	301	298	301	298	294	294	294	301	305	309	309	309	305	301	301	301	301	301	301	
11	301	301	301	301	298	298	298	298	294	293	289	289	293	300	300	300	304	304	308	304	304	308	308	304	300	
12**	297	297	294	294	297	297	294	290	294	290	286	286	294	301	312	327	345	341	334	323	330	337	334	323	309	
13	307	304	304	307	307	307	307	307	304	304	300	296	300	304	307	311	311	311	315	318	315	315	315	318	308	
14**	315	315	311	293	300	304	300	296	296	300	289	293	300	304	311	318	315	314	310	306	310	310	310	310	305	
15*	310	310	310	310	314	310	310	306	303	303	303	306	306	310	314	314	314	314	310	310	306	306	306	306	309	
16*	304	301	301	301	304	304	304	301	304	303	296	300	300	303	307	311	311	307	303	303	303	303	300	300	303	
17	297	297	297	297	300	300	297	300	300	297	293	293	297	304	311	311	311	311	311	311	308	308	308	308	303	
18	303	303	303	303	303	303	307	303	299	296	285	285	288	292	288	299	307	307	310	307	307	303	303	303	300	
19	302	288	291	291	299	299	295	295	295	291	288	291	295	302	306	313	313	312	312	316	316	309	309	305	301	
20	301	290	290	294	290	290	294	290	290	290	290	290	290	294	301	309	312	316	316	316	316	316	312	305	300	
21	306	303	303	306	306	306	303	303	306	302	298	298	298	302	302	302	305	305	298	302	305	305	302	298	303	
22	298	298	298	298	302	302	298	298	298	298	298	298	294	294	298	298	302	302	302	298	302	305	302	302	299	
23*	299	294	294	294	294	290	290	290	290	290	287	287	290	290	290	290	290	294	290	294	290	290	294	294	291	
24	288	288	285	285	285	285	288	288	288	285	277	281	285	292	292	292	299	291	298	302	302	302	291	287	290	
25**	284	284	284	284	284	280	280	280	280	280	276	284	284	287	291	298	298	309	320	313	327	284	313	302	292	
26**	291	287	284	276	280	287	287	287	287	283	279	283	290	305	319	312	312	312	312	312	308	305	305	297	296	
27**	290	272	283	286	286	286	290	294	290	290	290	294	290	297	297	305	308	312	316	308	305	305	305	294	296	
28	286	289	289	289	293	293	293	296	296	293	293	296	300	300	300	304	304	300	296	300	300	296	296	296	296	
29	293	289	289	289	293	293	289	289	289	289	289	293	293	300	300	300	307	306	299	299	295	295	292	288	294	
30	288	288	288	288	292	292	292	292	288	284	281	284	288	288	292	295	299	295	295	295	295	295	292	292	291	
Mean	301	299	298	298	300	300	300	299	299	298	294	295	297	301	305	308	311	310	309	308	309	307	306	304	302	
Mean*	304	301	301	301	303	302	301	299	300	299	295	296	298	301	304	306	307	306	302	302	301	301	301	301	301	
Mean**	295	291	291	287	289	291	290	289	289	289	284	288	292	299	306	312	316	318	318	312	316	308	313	305	300	

December. 43000 γ + Tabular Quantities.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	288	284	284	284	288	288	284	284	280	277	277	280	284	284	284	291	291	295	295	295	291	291	288	284	286	
2	288	280	280	279	283	283	283	279	279	276	272	276	279	287	294	305	309	309	305	305	301	298	294	290	289	
3	288	288	288	288	288	288	287	287	284	280	276	280	284	295	295	295	298	295	295	295	295	295	291	284	289	
4	273	258	269	280	284	287	287	287	287	283	279	275	279	283	290	297	297	301	305	305	301	297	294	294	287	
5	288	288	284	284	288	288	288	284	284	284	284	284	287	287	291	291	294	294	294	291	291	291	291	291	288	
6	287	287	287	287	287	287	287	287	287	283	280	276	280	280	283	286	290	290	290	290	293	290	290	286	286	
7	288	288	288	284	284	284	284	284	281	281	277	277	281	284	288	288	288	288	291	294	294	291	291	287	286	
8**	289	289	285	282	267	271	274	278	282	282	282	282	289	296	296	296	296	300	311	304	300	303	299	295	290	
9	288	284	288	292	292	292	288	288	288	284	288	288	292	292	295	295	295	295	292	292	292	292	292	288	291	
10*	283	287	287	291	291	287	287	287	291	291	283	283	287	291	294	298	294	294	291	291	291	294	294	291	290	
11	289	285	285	284	288	288	284	280	280	280	277	277	280	284	288	288	288	288	288	288	288	288	284	284	285	
12	282	278	278	278	278	278	277	277	281	281	277	277	285	288	296	292	292	288	288	285	285	285	285	285	283	
13*	282	282	282	278	278	278	278	278	278	281	273	273	277	281	284	284	284	284	284	281	281	281	281	281	280	
14	286	286	286	286	282	282	282	282	282	282	278	275	274	277	288	288	292	288	288	288	288	285	285	285	284	
15	281	277	277	277	281	281	274	274	274	277	281	285	288	285	288	287	287	287	287	287	287	287	287	284	283	
16**	282	278	278	278	278	278	282	274	274	267	267	267	278	278	285	318	366	465	464	464	420	310	273	292	313	
17**	292	289	234	230	259	281	281	285	292	289	292	299	299	296	296	296	299	296	296	296	299	295	295	291	287	
18**	289	289	289	289	289	286	282	278	278	278	275	289	289	286	300	318	311	300	304	300	307	304	296	293	292	
19	282	274	278	282	282	282	282	282	282	282	285	285	282	285	289	292	296	296	296	303	303	311	300	292	288	
20	289	285	282	281	281	281	281	277	277	277	277	273	—	—	—	—	—	—	—	—	—	—	—	—	—	
21	—	—	—	—	—	—	—	—	—	—	—	—	—	276	279	283	283	287	283	283	287	287	283	283	—	
22*	279	272	272	276	279	279	279	283	287	287	279	279	283	283	283	287	287	283	283	283	283	283	279	279	281	
23*	279	276	276	276	276	276	279	279	283	279	276	276	276	279	287	290	290	287	287	287	287	290	290	287	282	
24	286	282	282	275	275	275	279	282	282	279	279	279	281	285	285	285	285	281	281	281	281	281	281	281	281	
25	278	278	278	278	278	278	278	275	275	275	275	270	275	278	281	285	289	292	300	311	307	307	300	292	285	
26**	278	278	278	278	278	278	278	278	278	278	275	275	270	278	285	285	289	300	304	314	318	304	296	289	286	
27	285	281	281	281	281	281	281	281	285	281	278	275	274	277	288	295	291	295	291	291	291	288	288	284	284	
28	280	280	280	280	280	280	277	277	280	280	277	277	277	284	288	288	291	288	284	284	284	280	280	277	281	
29	277	273	273	277	277	277	274	274	269	269	269	274	280	280	284	284	288	288	284	284	280	280	280	277	278	
30	277	277	277	277	277	277	277	274	274	269	266	266	268	265	273	276	283	283	279	279	276	276	276	276	275	
31*	276	276	276	276	276	276	276	273	273	273	273	273	273	273	276	279	283	279	279	276	276	276	276	276	276	
Mean	283	281	279	280	281	282	281	280	281	280	278	278	281	283	288	292	294	298	298	298	296	291	288	286	286	
Mean*	280	279	279	279	280	279	280	280	282	282	277	277	279	281	285	288	288	285	285	284	284	285	284	283	282	
Mean**	286	285	273	271	274	279	279	279	281	279	278	282	285	287	292	303	312	333	336	336	329	303	292	292	294	

TABLE IV.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of MAGNETIC DECLINATION WEST
(*The results in each month are diminished by the smallest hourly value.*)

1917.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
	′	′	′	′	′	′	′	′	′	′	′	′	′
Midnight	1·0	0·8	1·9	2·5	3·2	5·1	3·7	2·6	1·8	1·2	0·5	1·1	1·49
1h.	1·4	1·2	1·7	2·3	3·0	4·3	2·9	2·4	1·8	1·1	1·1	1·6	1·44
2	1·9	1·5	1·7	2·4	2·8	4·0	2·7	2·1	1·5	0·9	1·3	2·3	1·46
3	1·7	1·5	1·6	2·7	3·0	4·0	2·4	2·3	1·4	1·6	1·6	2·7	1·58
4	1·7	1·4	1·3	2·4	2·3	2·6	1·8	2·4	1·4	2·3	1·7	2·5	1·35
5	2·3	1·4	1·1	2·1	1·0	1·5	1·1	1·2	1·4	2·1	1·7	2·3	0·97
6	2·8	1·7	0·9	1·3	0·4	0·6	0·2	0·0	0·7	1·6	1·0	2·2	0·49
7	2·9	1·6	0·3	0·2	0·0	0·0	0·0	0·4	0·1	0·6	0·7	2·2	0·12
8	3·0	0·9	0·0	0·0	0·5	0·2	0·2	0·9	0·0	0·0	0·2	1·6	0·00
9	3·8	1·2	0·8	1·1	2·5	2·2	1·9	3·3	1·8	1·1	0·7	1·6	1·20
10	4·6	2·5	3·6	3·6	4·7	5·4	4·8	6·4	5·1	3·9	2·6	2·7	3·53
11	5·3	5·2	7·0	7·8	7·8	9·2	8·2	10·0	8·8	7·2	4·8	4·5	6·52
Noon	6·2	6·8	9·2	10·4	10·0	11·7	11·2	12·9	11·2	9·5	6·2	5·9	8·64
13h.	6·5	7·8	10·2	11·4	10·5	13·1	12·6	13·6	11·4	9·5	6·6	6·7	9·36
14	5·3	7·6	9·3	10·7	10·5	13·2	12·2	12·3	10·1	8·8	6·1	6·7	8·77
15	4·4	6·2	7·6	9·2	9·2	12·0	10·5	10·1	8·4	7·4	5·5	5·9	7·40
16	3·7	4·8	5·5	7·3	7·6	10·1	8·8	7·6	6·5	5·6	4·2	5·5	5·80
17	3·6	4·0	4·1	5·6	6·3	8·9	7·1	5·8	5·1	4·2	3·0	5·0	4·59
18	1·9	3·6	3·3	4·7	5·3	7·6	6·4	4·9	4·5	3·6	2·6	4·0	3·74
19	2·0	2·8	3·2	4·2	4·7	6·7	6·0	4·0	4·1	3·1	1·2	2·5	3·08
20	1·0	1·7	2·3	3·4	4·1	6·0	5·5	3·7	3·0	1·3	0·4	1·0	2·15
21	0·3	1·1	2·0	2·6	3·9	5·6	5·0	4·2	2·6	0·6	0·4	0·0	1·73
22	0·7	0·0	1·8	2·6	3·9	5·9	4·7	4·0	1·8	1·0	0·0	0·2	1·59
23	0·0	0·3	2·2	2·7	3·7	5·3	4·4	3·9	1·8	0·8	0·1	0·6	1·52
Means	2′·83	2′·82	3′·44	4′·30	4′·62	6′·05	5′·18	5′·04	4′·01	3′·29	2′·26	2′·97	3′·27

TABLE V.—DIURNAL RANGE of DECLINATION, on each CIVIL DAY, as deduced from the TWENTY-FOUR HOURLY MEASURES of ORDINATES of the PHOTOGRAPHIC REGISTERS.

1917.

Day of Month.	January.	February.	March.	April	May.	June.	July.	August.	September.	October.	November.	December.
d.	′	′	′	′	′	′	′	′	′	′	′	′
1	8·0	6·4	8·0	11·7	13·6	13·8	12·6	13·5	15·8	13·0	10·1	13·2
2	7·1	7·0	6·4	12·7	18·7	14·8	10·2	14·5	18·8	19·2	10·5	13·3
3	4·0	8·5	9·0	12·5	16·5	18·3	19·2	16·2	14·6	23·5	10·5	11·0
4	30·0	7·3	15·0	12·6	12·3	15·8	14·8	16·9	16·0	18·0	8·0	13·0
5	19·2	9·0	17·5	14·2	9·6	15·8	11·6	15·0	22·2	16·0	6·4	12·5
6	9·7	8·8	9·5	16·2	10·8	16·0	15·5	14·7	13·7	9·5	7·9	10·5
7	9·0	14·5	10·4	13·0	13·5	16·5	15·2	17·3	12·2	10·5	6·7	8·2
8	10·4	11·8	14·7	16·5	11·0	8·8	13·2	16·0	11·0	12·7	7·5	13·5
9	8·3	7·4	12·4	16·0	11·8	12·2	15·0	25·0	15·0	11·1	6·0	6·0
10	9·0	9·6	10·7	14·9	10·8	—	15·0	21·2	9·0	12·0	6·5	4·5
11	6·1	7·0	10·5	12·7	9·1	14·8	10·0	6·3	11·4	14·7	5·6	4·5
12	10·2	6·4	10·9	13·3	10·2	15·2	12·0	12·0	12·3	11·0	16·5	6·5
13	9·3	8·0	15·7	10·0	11·5	—	11·2	15·9	14·3	9·2	11·0	6·5
14	6·4	11·2	9·3	11·2	10·6	—	13·0	21·8	13·0	—	8·5	7·0
15	4·9	28·5	12·0	11·2	8·7	13·0	10·5	30·0	13·0	—	6·8	5·8
16	6·5	11·3	10·5	16·3	9·7	15·8	13·5	14·5	12·2	8·8	6·4	40·5
17	7·5	6·0	8·0	14·0	10·5	13·1	10·7	14·6	12·6	13·3	6·7	9·8
18	10·4	18·1	14·1	14·7	13·5	12·1	14·4	15·2	12·8	12·2	9·0	8·0
19	7·0	14·0	11·5	9·7	11·3	14·5	14·3	15·5	14·4	9·6	10·2	12·0
20	9·7	12·3	12·7	12·3	14·9	12·6	17·4	16·7	17·8	11·0	6·5	9·8
21	7·0	7·2	14·2	12·0	14·4	13·5	16·9	27·0	17·5	11·1	4·7	9·3
22	14·5	12·5	14·7	13·0	15·5	12·5	18·5	15·5	13·3	12·3	5·0	8·8
23	8·7	9·9	11·0	12·8	13·6	17·3	12·2	14·3	11·7	11·1	5·2	7·0
24	7·8	8·0	11·6	11·1	13·0	18·8	12·8	11·0	13·0	11·5	9·3	—
25	11·0	9·8	14·0	12·5	14·4	23·0	14·6	16·5	14·7	17·7	17·0	13·3
26	9·5	9·8	12·5	15·6	13·7	14·0	11·7	20·0	11·0	7·8	16·7	11·3
27	7·2	9·2	13·9	8·9	15·7	13·4	14·3	15·8	11·2	9·7	11·0	8·7
28	6·0	8·5	12·2	11·6	10·4	12·7	15·6	13·7	11·8	20·2	10·8	6·0
29	9·8		12·0	11·7	13·8	13·3	19·9	13·8	8·5	16·0	7·2	6·5
30	11·4		12·5	15·2	13·2	11·7	12·6	17·8	13·0	16·0	6·8	5·5
31	11·7		10·9		12·2		23·8	15·7		14·0		6·8
Means	9′·6	10′·3	11′·9	13′·0	12′·5	14′·6	14′·3	16′·6	13′·6	13′·2	8′·7	10′·0

The mean of the twelve monthly values is 12′·36.

TABLE VI.—MONTHLY and ANNUAL DIURNAL INEQUALITIES of MAGNETIC DECLINATION WEST from HOURLY ORDINATES, on FIVE SELECTED QUIET DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on five quiet days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January 3, 15, 18, 28, 29.	April 10, 11, 14, 20, 27.	July 6, 16, 17, 18, 20.	October 16, 19, 20, 21, 22.
February 1, 9, 12, 13, 27.	May 6, 8, 13, 19, 20.	August 5, 6, 19, 28, 29.	November 9, 10, 15, 16, 23.
March 2, 3, 28, 29, 30.	June 1, 2, 19, 20, 30.	September 1, 11, 23, 25, 26.	December 10, 13, 22, 23, 31.

1917.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
	′	′	′	′	′	′	′	′	′	′	′	′	′
Midnight	0·3	1·6	3·2	5·5	4·2	5·0	5·6	4·2	4·3	2·7	1·6	1·0	2·9
1h.	0·0	1·6	3·1	5·4	4·4	4·8	5·5	3·7	4·3	3·1	1·6	1·2	2·8
2	0·6	2·1	3·3	5·0	4·1	4·7	5·5	4·1	3·9	3·3	1·8	1·1	2·9
3	0·7	2·1	3·3	4·7	4·1	4·3	4·9	3·4	3·2	3·5	1·8	1·5	2·7
4	1·0	1·8	3·1	4·2	2·7	3·3	3·6	2·7	3·1	3·6	1·8	1·3	2·3
5	1·1	1·5	2·9	3·9	1·4	1·5	1·8	1·4	2·8	3·1	1·4	1·2	1·6
6	1·4	1·3	2·5	3·0	0·5	0·3	0·7	0·5	1·6	2·5	1·0	1·2	1·0
7	1·1	0·8	1·2	1·4	0·0	0·0	0·0	0·0	0·3	0·7	0·7	1·1	0·2
8	1·3	0·0	0·0	0·0	0·9	0·6	0·0	1·1	0·0	0·0	0·0	0·2	0·0
9	2·4	0·1	0·9	1·3	2·7	2·5	1·8	5·0	1·5	1·1	0·1	0·0	1·2
10	3·2	1·5	3·7	3·2	5·2	5·3	4·3	6·4	5·2	3·8	2·1	1·5	3·4
11	4·7	3·7	7·6	7·4	8·0	8·8	8·2	10·1	9·3	7·3	4·5	3·1	6·5
Noon	5·6	5·7	9·7	10·7	10·5	11·6	11·7	13·3	9·9	9·7	5·7	5·0	8·7
13h.	5·6	6·7	10·1	12·0	11·3	13·0	13·7	14·3	12·6	10·3	5·9	5·8	9·7
14	4·3	6·3	9·5	11·3	10·7	13·2	13·4	12·9	9·2	10·0	5·4	5·4	8·9
15	2·8	5·7	8·0	9·4	8·7	11·7	11·6	10·7	9·8	8·6	5·0	4·9	7·7
16	2·2	4·1	6·6	7·9	7·5	10·0	9·5	7·9	8·1	7·4	4·1	3·6	6·2
17	2·1	3·1	5·9	6·9	6·2	8·2	7·6	5·9	7·2	6·7	3·0	2·9	5·1
18	2·1	3·1	5·1	6·4	5·7	6·8	6·3	5·4	6·7	6·1	3·1	2·7	4·6
19	1·7	3·2	4·9	6·1	5·3	6·4	6·1	5·4	6·1	5·4	2·5	2·2	4·2
20	1·0	1·9	4·5	6·0	4·8	6·3	6·3	5·5	5·5	4·7	2·0	1·5	3·8
21	0·4	2·4	4·2	5·9	4·7	6·1	6·5	5·3	5·4	4·1	1·4	0·6	3·5
22	0·4	1·0	3·7	5·7	4·9	5·9	6·4	4·7	4·9	3·6	1·6	0·5	3·2
23	0·1	0·9	3·7	5·8	4·7	5·4	6·4	4·5	4·7	3·4	1·7	1·2	3·1
Means	1′·9	2′·6	4′·6	5′·8	5′·1	6′·1	6′·1	5′·8	5′·4	4′·8	2′·5	2′·1	4′·0

TABLE VII.—MONTHLY and ANNUAL DIURNAL INEQUALITIES of MAGNETIC DECLINATION WEST from HOURLY ORDINATES, on FIVE SELECTED DISTURBED DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on five disturbed days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January 4, 5, 12, 22, 23.	April 5, 6, 9, 16, 26.	July 2, 13, 22, 29, 31.	October 3, 13, 14, 28, 29.
February 15, 16, 18, 19, 20.	May 1, 2, 3, 16, 28.	August 9, 10, 13, 14, 21.	November 12, 14, 25, 26, 27.
March 4, 5, 8, 21, 25.	June 7, 13, 23, 24, 25.	September 2, 5, 9, 19, 30.	December 8, 16, 17, 18, 26.

1917.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
	′	′	′	′	′	′	′	′	′	′	′	′	′
Midnight	3·8	1·5	1·2	0·8	0·3	3·3	2·0	0·7	1·9	6·2	2·6	5·9	0·7
1h.	3·1	3·1	2·0	0·0	0·8	4·1	0·0	1·5	2·1	5·9	3·2	6·6	0·9
2	4·7	2·7	1·6	0·0	0·8	2·3	1·9	2·7	2·2	5·6	3·8	8·6	1·3
3	4·3	0·0	0·1	2·9	0·5	2·8	1·5	4·1	2·1	7·1	5·2	7·8	1·4
4	4·7	1·6	0·4	3·3	0·6	2·0	1·4	7·1	2·5	6·5	4·1	7·3	1·7
5	5·3	2·2	0·4	4·0	0·0	2·9	1·9	3·5	2·3	6·3	4·8	6·6	1·6
6	6·3	3·7	1·0	2·1	1·0	1·5	3·1	0·0	2·9	6·5	4·3	6·5	1·4
7	7·1	4·5	0·0	1·4	1·0	0·0	1·2	2·8	3·0	6·4	4·5	6·6	1·4
8	7·4	4·9	0·1	1·9	0·9	0·4	2·5	3·2	2·0	7·1	5·1	5·9	1·7
9	8·3	5·4	0·2	3·8	3·5	1·9	3·2	7·4	3·7	7·3	6·0	6·0	2·9
10	9·3	6·8	2·9	5·3	4·3	5·3	6·5	10·4	7·3	10·8	7·7	6·7	5·1
11	9·9	8·5	6·2	8·4	6·8	9·6	9·5	11·8	11·2	14·8	9·2	9·1	7·8
Noon	10·1	10·9	8·8	11·6	8·8	12·2	12·1	13·9	13·3	16·1	10·3	9·7	9·7
13h.	9·5	12·6	10·8	12·3	7·8	14·5	13·5	14·5	13·3	13·9	10·6	11·3	9·4
14	8·7	13·4	9·5	11·8	8·8	16·2	12·0	14·6	11·6	13·2	10·7	11·9	9·2
15	7·4	11·1	8·1	11·6	7·6	15·0	9·7	13·7	9·0	12·3	10·4	10·7	8·7
16	7·9	9·2	5·7	8·8	6·0	10·4	8·3	10·6	7·4	9·0	7·7	12·8	6·9
17	7·8	8·1	1·4	6·2	4·9	11·6	6·1	9·0	4·8	7·5	5·6	11·8	5·3
18	0·5	8·1	0·5	4·0	2·5	9·2	5·9	5·5	3·9	7·4	4·4	9·1	3·3
19	2·3	5·5	1·9	3·7	2·5	7·2	5·9	3·8	3·5	4·9	0·9	5·5	2·2
20	0·2	5·0	0·0	2·0	1·4	3·2	5·5	2·8	1·0	2·5	0·0	2·6	0·4
21	0·0	3·2	0·3	0·6	1·6	2·1	4·3	4·5	1·0	2·1	1·4	0·0	0·0
22	1·6	1·2	0·6	2·5	1·2	4·3	4·2	5·5	0·0	2·0	0·6	2·9	0·4
23	1·4	0·8	0·6	2·1	1·3	3·6	3·6	5·5	0·4	0·0	1·4	5·0	0·3
Means	5′·5	5′·6	2′·7	4′·6	3′·1	6′·1	4′·4	6′·6	4′·7	7′·6	5′·2	7′·4	3′·5

TABLE VIII.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of MAGNETIC NORTH FORCE.
(*The results are expressed in C.G.S. Units and in each case diminished by the smallest hourly value*).

1917.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	14γ	27γ	31γ	43γ	32γ	40γ	37γ	47γ	45γ	46γ	30γ	20γ	33·6γ
1h.	15	25	30	41	31	40	37	46	45	45	30	19	33·0
2	16	24	30	40	29	39	37	47	46	46	29	18	32·7
3	17	25	30	39	27	40	40	45	44	45	30	18	32·6
4	21	26	30	42	29	43	41	44	45	45	32	22	34·3
5	23	30	31	43	30	42	39	42	44	47	34	24	35·1
6	24	32	33	42	28	36	33	36	40	46	35	27	33·6
7	20	28	30	37	23	29	26	26	34	40	33	24	28·5
8	14	24	21	28	16	23	17	15	24	27	24	21	20·5
9	7	15	11	16	8	12	7	5	11	14	15	14	10·5
10	4	6	3	7	5	6	0	0	2	3	5	6	3·2
11	0	0	0	1	0	1	1	5	0	0	0	1	0·0
Noon	1	1	1	0	2	0	5	10	3	2	0	0	1·4
13h.	4	4	4	3	5	6	9	20	9	6	5	1	5·6
14	6	7	9	14	12	17	21	26	14	13	9	3	11·9
15	8	11	15	21	22	25	28	38	23	22	11	5	18·4
16	8	15	20	30	28	31	34	51	28	28	17	10	24·3
17	10	18	24	36	32	38	37	56	35	34	21	11	28·6
18	11	20	27	39	39	44	44	55	41	38	25	14	32·4
19	15	20	31	43	37	46	46	55	43	38	27	13	33·8
20	17	26	33	43	35	45	42	54	45	42	27	14	34·6
21	15	26	32	43	34	40	40	53	45	44	28	18	34·1
22	14	29	34	43	31	37	39	51	44	44	28	21	33·9
23	17	26	32	43	32	36	37	45	43	49	31	20	33·5
Means	12·5	19·4	22·6	30·7	23·6	29·8	29·0	36·3	31·4	31·8	21·9	14·3	24·5

TABLE IX.—DIURNAL RANGE of MAGNETIC NORTH FORCE, on each CIVIL DAY, as deduced from the TWENTY-FOUR HOURLY MEASURES of ORDINATES of the PHOTOGRAPHIC REGISTERS.
(*The results are corrected for Temperature and are expressed in C.G.S. units.*)

1917.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d.												
1	55γ	30γ	52γ	38γ	67γ	41γ	39γ	70γ	50γ	60γ	87γ	33γ
2	24	34	35	58	86	44	69	58	72	76	65	36
3	28	43	29	68	50	57	56	54	66	92	52	48
4	148	48	41	59	53	68	64	56	75	76	46	45
5	71	45	56	79	54	64	44	64	117	51	32	32
6	21	47	44	51	32	55	58	69	54	59	48	17
7	23	57	49	66	39	85	45	66	72	50	32	26
8	49	48	80	64	26	56	57	63	51	60	36	39
9	27	36	37	102	38	—	63	180	73	75	34	39
10	30	48	37	51	45	—	55	91	51	57	26	19
11	38	35	47	50	34	—	64	44	38	54	23	21
12	54	30	34	65	49	57	66	58	41	38	74	49
13	46	28	55	52	43	37	93	145	41	44	39	32
14	34	38	31	33	54	43	47	136	41	—	65	55
15	26	92	43	53	30	41	58	153	50	—	42	39
16	24	57	40	86	86	50	42	63	41	41	36	151
17	36	27	38	62	32	52	35	66	57	54	42	64
18	23	49	34	58	47	62	34	64	48	48	45	74
19	32	50	30	29	31	51	34	44	59	43	52	39
20	35	71	56	54	46	43	51	41	72	47	39	39
21	48	54	46	57	56	64	80	167	66	50	26	20
22	58	53	56	46	65	73	79	91	60	57	32	39
23	63	38	50	46	42	89	60	139	44	54	26	31
24	38	40	55	37	54	96	44	52	59	54	42	—
25	66	40	61	67	45	84	58	120	53	78	55	54
26	57	49	50	98	45	65	42	94	50	41	74	65
27	48	38	55	40	61	58	71	50	48	47	52	39
28	31	44	50	49	114	61	38	63	41	76	45	—
29	43		47	39	72	51	126	52	34	105	39	—
30	52		38	78	37	47	57	53	70	91	49	32
31	52		32		53		87	52		76		38
Means	44·5	45·3	45·4	57·8	51·2	58·3	58·6	81·2	56·5	60·5	45·2	43·4

The mean of the twelve monthly values is 54·0 γ.

TABLE X.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of MAGNETIC NORTH FORCE from HOURLY ORDINATES, on FIVE SELECTED QUIET DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on five quiet days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January	3, 15, 18, 28, 29.	April	10, 11, 14, 20, 27.	July	6, 16, 17, 18, 20.	October	16, 19, 20, 21, 22.
February	1, 9, 12, 13, 27.	May	6, 8, 13, 19, 20.	August	5, 6, 19, 28, 29.	November	9, 10, 15, 16, 23.
March	2, 3, 28, 29, 30.	June	1, 2, 19, 20, 30.	September	1, 11, 23, 25, 26.	December	10, 13, 22, 23, 31.

1917.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	21γ	25γ	30γ	31γ	24γ	32γ	32γ	46γ	37γ	41γ	22γ	25γ	30·2γ
1h.	19	24	29	30	21	30	30	45	37	39	22	24	28·9
2	21	22	28	30	22	31	30	44	38	39	23	24	29·0
3	21	22	28	30	22	33	32	46	37	39	25	22	29·5
4	23	24	29	31	24	37	33	47	38	41	26	24	31·1
5	23	28	31	34	24	36	35	46	38	44	27	27	32·5
6	30	31	35	35	24	33	31	42	36	44	28	28	32·8
7	23	31	34	34	28	26	34	34	32	38	25	26	30·1
8	18	25	29	27	14	19	21	22	22	25	18	23	21·6
9	9	15	21	15	9	11	8	10	11	14	11	15	12·1
10	3	7	6	5	5	9	1	3	2	4	5	5	4·3
11	0	0	1	0	1	2	0	0	0	0	0	0	0·0
Noon	7	2	0	1	0	0	2	4	1	1	0	0	1·2
13h.	10	5	4	8	4	2	8	14	6	5	6	3	6·0
14	17	11	11	18	7	8	15	20	15	13	11	6	12·4
15	20	18	17	25	15	18	27	31	26	20	14	8	19·6
16	21	19	23	31	21	29	31	39	29	24	18	15	24·7
17	20	22	28	35	27	36	35	44	35	32	24	21	29·6
18	21	24	33	39	30	41	40	51	39	37	27	23	33·5
19	25	26	36	41	31	41	42	52	40	39	29	25	35·3
20	27	27	36	41	30	41	39	56	42	40	29	24	35·7
21	26	26	37	40	31	40	37	56	41	41	30	22	35·3
22	25	28	35	40	28	39	36	55	42	41	29	23	34·8
23	26	26	36	41	28	38	35	52	41	40	28	25	34·4
Means	19·0	20·3	24·9	27·6	19·6	26·3	26·4	35·8	29·4	29·2	19·9	18·3	24·4

TABLE XI.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of MAGNETIC NORTH FORCE from HOURLY ORDINATES, on FIVE SELECTED DISTURBED DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on five disturbed days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January	4, 5, 12, 22, 23.	April	5, 6, 9, 16, 26.	July	2, 13, 22, 29, 31.	October	3, 13, 14, 28, 29.
February	15, 16, 18, 19, 20.	May	1, 2, 3, 16, 28.	August	9, 10, 13, 14, 21.	November	12, 14, 25, 26, 27.
March	4, 5, 8, 21, 25.	June	7, 13, 23, 24, 25.	September	2, 5, 9, 19, 30.	December	8, 16, 17, 18, 26.

1917.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	27γ	29γ	39γ	68γ	45γ	52γ	45γ	76γ	66γ	56γ	34γ	29γ	40·2γ
1h.	22	22	40	68	42	57	43	70	66	60	35	29	39·2
2	20	33	39	64	42	51	44	66	68	57	34	34	39·0
3	25	41	40	64	37	51	57	61	69	60	33	33	40·6
4	33	40	35	68	38	50	57	68	71	61	38	44	43·3
5	38	43	37	66	38	47	49	56	68	59	37	45	41·6
6	42	45	35	68	34	43	39	41	55	57	37	48	38·3
7	40	36	30	53	33	35	31	29	52	45	41	45	32·2
8	25	34	20	37	19	25	12	10	34	34	27	43	19·7
9	17	26	9	21	2	12	5	0	15	29	19	29	8·3
10	20	15	0	19	2	5	0	6	0	9	11	21	2·0
11	8	10	4	11	0	0	2	22	2	0	10	15	0·0
Noon	5	7	4	7	4	2	4	28	7	5	7	12	0·7
13h.	11	5	5	0	6	16	14	48	24	12	5	17	6·6
14	13	0	10	17	10	33	33	50	22	24	2	22	12·7
15	10	9	21	30	23	40	42	83	31	32	0	14	20·9
16	6	20	21	35	31	32	50	111	35	42	4	14	26·4
17	0	22	25	40	38	45	37	93	44	55	7	10	27·7
18	6	15	25	48	52	58	36	71	52	31	18	12	28·3
19	10	22	28	50	48	55	37	66	55	37	23	1	29·0
20	22	29	25	50	35	55	38	59	58	49	15	0	29·3
21	17	32	27	55	35	41	37	64	59	44	14	18	29·9
22	13	29	34	56	32	31	34	55	57	45	18	28	29·0
23	20	32	34	54	32	35	34	32	52	70	30	21	30·2
Means	18·8	24·8	24·5	43·7	28·3	36·3	32·5	52·7	44·3	40·5	20·8	24·3	25·6

TABLE XII.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of VERTICAL MAGNETIC FORCE.

(*The results are expressed in C.G.S. units, and in each case diminished by the smallest hourly value.*)

1917.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Ten Months.
Midnight	—	—	13γ	15γ	17γ	17γ	15γ	6γ	16γ	4γ	7γ	5γ	11·3γ
1h.	—	—	11	14	17	16	14	8	15	2	5	3	10·3
2	—	—	11	13	15	16	13	5	14	2	4	1	9·2
3	—	—	10	14	17	17	14	7	15	1	4	2	9·9
4	—	—	12	14	19	20	16	10	16	2	6	3	11·6
5	—	—	17	13	19	20	16	11	17	5	6	4	12·6
6	—	—	14	15	19	21	15	12	18	6	6	3	12·7
7	—	—	15	17	19	21	15	12	18	8	5	2	13·0
8	—	—	13	14	16	17	12	10	14	8	5	3	11·0
9	—	—	8	10	11	9	7	5	10	6	4	2	7·0
10	—	—	1	3	4	3	2	1	4	2	0	0	1·8
11	—	—	0	1	0	0	0	0	0	0	1	0	0·0
Noon	—	—	2	0	2	1	1	2	3	3	3	3	1·8
13h.	—	—	6	5	7	6	7	10	8	6	7	5	6·5
14	—	—	13	12	15	14	16	22	14	11	11	10	13·6
15	—	—	20	20	23	23	25	32	21	15	14	14	20·5
16	—	—	25	25	30	30	31	40	26	18	17	16	25·6
17	—	—	26	28	33	33	33	41	27	18	16	20	27·3
18	—	—	25	29	35	34	32	36	26	16	15	20	26·6
19	—	—	23	27	33	32	30	32	26	16	14	20	25·1
20	—	—	20	25	31	30	27	28	25	16	15	18	23·3
21	—	—	20	23	28	26	24	25	23	14	13	13	20·7
22	—	—	17	20	24	23	21	13	22	11	12	10	17·1
23	—	—	14	17	21	20	18	8	18	7	10	8	13·9
Means	—	—	14·0	15·6	19·0	18·7	16·8	15·7	16·5	8·2	8·3	7·7	13·9

TABLE XIII.—DIURNAL RANGE of VERTICAL MAGNETIC FORCE, on each CIVIL DAY, as deduced from the TWENTY-FOUR HOURLY MEASURES of ORDINATES of the PHOTOGRAPHIC REGISTERS.

(*The results are corrected for Temperature and expressed in C.G.S. units.*)

1917.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d.												
1	—	—	30γ	19γ	47γ	22γ	18γ	36γ	33γ	29γ	28γ	18γ
2	—	—	14	30	81	26	40	22	37	40	19	37
3	—	—	19	52	65	26	30	44	44	40	18	22
4	—	—	44	19	37	40	25	33	37	66	11	47
5	—	—	47	44	30	37	22	25	66	22	15	10
6	—	—	30	66	37	30	51	40	51	26	11	17
7	—	—	22	29	47	80	40	53	26	22	11	17
8	—	—	51	29	33	29	18	—	25	48	11	44
9	—	—	22	55	40	30	48	—	40	18	19	11
10	—	—	26	29	30	49	51	135	19	14	15	15
11	—	—	15	30	34	37	33	22	26	33	19	11
12	—	—	33	29	37	40	40	26	26	11	59	19
13	—	—	40	34	37	73	113	106	22	29	22	11
14	—	—	18	29	59	19	26	220	26	41	29	18
15	—	—	52	37	29	33	22	132	22	25	11	14
16	—	—	37	58	56	22	26	51	36	11	15	198
17	—	—	22	33	26	29	30	33	29	25	18	69
18	—	—	29	26	33	33	41	30	33	18	25	43
19	—	—	25	37	22	37	30	29	36	14	28	37
20	—	—	30	33	30	41	22	48	33	11	26	—
21	—	—	41	19	26	37	44	179	48	15	8	—
22	—	—	26	29	38	37	41	117	33	29	11	15
23	—	—	30	29	33	53	22	95	29	26	12	14
24	—	—	22	44	33	77	37	29	25	28	25	11
25	—	—	66	40	38	44	41	33	29	47	51	41
26	—	—	22	47	48	29	26	95	19	18	43	48
27	—	—	40	33	26	26	33	—	29	22	44	21
28	—	—	33	33	41	44	37	—	22	54	18	14
29	—		26	23	40	51	95	25	22	54	19	19
30	—		29	44	37	37	40	31	51	52	18	18
31	—		22		33		146	30		37		10
Means	—	—	31·1	35·3	38·8	38·9	41·5	63·7	32·5	29·8	22·0	30·0

TABLE XIV.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of VERTICAL MAGNETIC FORCE from HOURLY ORDINATES, on FIVE SELECTED QUIET DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on five quiet days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January 3, 15, 18, 28, 29.	April 10, 11, 14, 20, 27.	July 6, 16, 17, 18, 20.	October 16, 19, 20, 21, 22
February 1, 9, 12, 13, 27.	May 6, 8, 13, 19, 20.	August 5, 6, 19, 29.	November 9, 10, 15, 16, 23.
March 2, 3, 28, 29, 30.	June 1, 2, 19, 20, 30.	September 1, 11, 23, 25, 26.	December 10, 13, 22, 23, 31.

1917.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Ten Months.
Midnight	—	—	18γ	25γ	20γ	19γ	23γ	19γ	24γ	8γ	9γ	3γ	15·7γ
1h.	—	—	18	26	23	20	23	21	22	8	6	2	15·8
2	—	—	19	25	23	19	23	21	21	8	6	2	15·6
3	—	—	18	27	25	22	25	23	21	10	6	2	16·8
4	—	—	18	30	24	23	29	25	22	11	8	3	18·2
5	—	—	21	29	24	23	29	24	22	11	7	2	18·1
6	—	—	22	29	21	23	27	25	23	12	6	3	18·0
7	—	—	21	29	21	20	25	23	25	14	4	3	17·4
8	—	—	19	24	18	19	21	19	23	13	5	5	15·5
9	—	—	13	18	11	12	14	12	14	8	4	5	10·0
10	—	—	4	9	4	5	8	8	7	3	0	0	3·7
11	—	—	0	3	0	1	1	4	0	1	1	0	0·0
Noon	—	—	3	0	3	0	0	0	3	0	3	2	0·3
13h.	—	—	5	4	8	7	4	0	9	3	6	4	3·9
14	—	—	10	14	14	13	13	9	14	8	9	8	10·1
15	—	—	15	21	22	20	20	18	19	12	11	11	15·8
16	—	—	19	24	26	26	28	22	22	14	12	11	19·3
17	—	—	22	27	29	28	31	24	23	10	11	8	20·2
18	—	—	24	27	30	30	32	25	23	10	7	8	20·5
19	—	—	22	25	29	28	31	24	25	10	7	7	19·7
20	—	—	21	25	29	27	30	22	26	10	6	7	19·2
21	—	—	21	25	28	24	28	22	24	8	6	8	18·3
22	—	—	20	25	25	24	25	20	24	8	6	7	17·3
23	—	—	20	24	22	22	25	19	23	8	6	6	16·4
Means	—	—	16·4	21·5	20·0	19·0	21·5	17·9	19·1	8·7	6·3	4·9	14·4

TABLE XV.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of VERTICAL MAGNETIC FORCE from HOURLY ORDINATES, on FIVE SELECTED DISTURBED DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on five disturbed days in each month, selected by the International Committee for comparsion with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January 4, 5, 12, 22, 23.	April 5, 6, 9, 16, 26.	July 2, 13, 22, 29, 31.	October 3, 13, 14, 28, 29.
February 15, 16, 18, 19, 20.	May 1, 2, 3, 16, 28.	August 10, 13, 14, 21.	November 12, 14, 25, 26, 27.
March 4, 5, 8, 21, 25.	June 7, 13, 23, 24, 25.	September 2, 5, 9, 19, 30.	December 8, 16, 17, 18, 26.

1917.

Hour, Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Ten Months.
Midnight	—	—	7γ	14γ	11γ	14γ	10γ	0γ	10γ	1γ	11γ	15γ	5·5γ
1h.	—	—	4	8	8	13	8	19	9	1	7	14	5·3
2	—	—	1	7	0	8	7	21	9	3	7	2	2·7
3	—	—	0	7	2	10	4	21	8	0	3	0	1·7
4	—	—	4	2	7	14	0	25	6	4	5	3	3·2
5	—	—	5	0	6	15	0	26	6	6	7	8	4·1
6	—	—	8	5	8	16	1	24	7	9	6	8	5·4
7	—	—	9	8	9	18	3	21	5	9	5	8	5·7
8	—	—	9	7	5	14	3	19	3	6	5	10	4·3
9	—	—	6	5	2	9	6	14	2	5	5	8	2·4
10	—	—	1	3	2	3	6	13	0	3	0	7	0·0
11	—	—	1	3	2	1	9	18	0	4	4	11	1·5
Noon	—	—	0	6	5	0	15	28	5	12	8	14	5·5
13h.	—	—	6	13	13	6	29	51	12	15	15	16	13·8
14	—	—	16	25	19	19	40	78	20	19	22	21	24·1
15	—	—	26	36	30	35	66	103	28	24	28	32	37·0
16	—	—	31	43	39	46	78	124	32	25	32	41	45·3
17	—	—	35	46	42	53	76	123	37	24	34	62	49·4
18	—	—	34	46	46	55	64	100	36	24	34	65	46·6
19	—	—	26	44	46	51	54	83	34	28	28	65	42·1
20	—	—	23	38	41	45	40	62	27	26	32	58	35·4
21	—	—	23	32	32	32	33	49	22	23	24	32	26·4
22	—	—	20	26	22	26	29	25	17	15	29	21	19·2
23	—	—	12	23	21	18	23	19	13	3	21	21	13·6
Means	—	—	12·8	18·6	17·4	21·7	25·2	44·4	14·5	12·0	15·5	22·6	16·7

TABLE XVI.—VALUE of the COEFFICIENTS and PHASE ANGLES in the PERIODICAL EXPRESSION.

$$V_t = m + a_1 \cos t + b_1 \sin t + a_2 \cos 2t + b_2 \sin 2t + a_3 \cos 3t + b_3 \sin 3t + a_4 \cos 4t + b_4 \sin 4t$$
$$= m + c_1 \sin (t + a_1) + c_2 \sin (2t + a_2) + c_3 \sin (3t + a_3) + c_4 \sin (4t + a_4),$$

in which t represents the time from the middle of the hour commencing at Greenwich mean midnight converted into arc at the rate of 15° to each hour, and V_t the annual or monthly mean hourly value of the magnetic element at time t, as given in Tables IV, VIII and XII.

The coefficients, a, b, c, are given in units of 1 γ (0·00001 C.G.S. unit) for N.F. and V.F. and in minutes of arc ($1' = 5{\cdot}39\ \gamma$) for Declination.

If the inequalities are expressed relative to time reckoned from apparent midnight, the new phase angles a'_1, a'_2, a'_3, a'_4 may be obtained from a_1, a_2, a_3, a_4 by adding respectively a, $2a$, $3a$, $4a$, the value of a for each month being as follows :—

Jan.	+ 2°·19′.	Apr.	+ 0°·4′.	July	+ 1°·21′.	Oct.	− 3°·28′.
Feb.	+ 3°·29′.	May	− 0°·52′.	Aug.	+ 0°·59′.	Nov.	− 3°·47′.
Mar.	+ 2°·12′.	June	+ 0°·4′.	Sept.	− 1°·11′.	Dec.	− 1°·6′.

Month, 1917.	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	c_1	a_1	c_2	a_2	c_3	a_3	c_4	a_4
	DECLINATION WEST.															
	′	′	′	′	′	′	′	′	′	°	′	°	′	°	′	°
January ..	− 2·38	+ 0·12	+ 0·51	+ 0·56	− 0·22	+ 0·05	+ 0·23	+ 0·15	2·38	272·8	0·76	42·6	0·23	282·7	0·27	56·5
February..	− 2·47	− 1·22	+ 0·65	+ 1·37	− 0·60	− 0·29	+ 0·40	+ 0·40	2·75	243·6	1·52	25·2	0·67	244·1	0·57	45·5
March	− 2·72	− 1·89	+ 1·77	+ 1·45	− 0·94	− 0·58	+ 0·45	+ 0·15	3·31	235·2	2·29	50·8	1·10	238·5	0·47	71·5
April	− 2·82	− 2·35	+ 1·71	+ 1·91	− 1·10	− 0·59	+ 0·44	+ 0·04	3·67	230·2	2·56	41·8	1·25	241·9	0·44	85·6
May	− 2·48	− 2·66	+ 1·87	+ 1·40	− 0·79	− 0·23	+ 0·05	− 0·09	3·64	223·0	2·34	53·3	0·82	254·0	0·10	150·0
June	− 2·56	− 3·86	+ 2·18	+ 1·85	− 0·84	− 0·35	+ 0·17	− 0·10	4·63	213·5	2·86	49·7	0·97	247·2	0·20	121·2
July	− 2·77	− 3·55	+ 2·03	+ 1·46	− 0·98	− 0·57	+ 0·21	+ 0·09	4·50	218·0	2·50	54·4	1·13	240·0	0·23	67·4
August ..	− 3·69	− 2·59	+ 2·64	+ 1·28	− 1·21	− 0·57	+ 0·12	− 0·14	4·51	234·9	2·93	64·1	1·34	244·8	0·18	138·7
September.	− 3·42	− 2·26	+ 1·91	+ 1·35	− 1·24	− 0·28	+ 0·55	+ 0·01	4·10	236·6	2·34	54·8	1·27	257·1	0·55	89·2
October....	− 3·11	− 1·43	+ 1·30	+ 1·65	− 1·05	− 0·41	+ 0·63	− 0·13	3·42	245·3	2·10	38·4	1·13	248·7	0·65	101·6
November	− 2·19	− 0·79	+ 0·84	+ 1·46	− 0·59	− 0·20	+ 0·29	− 0·04	2·33	250·1	1·68	29·8	0·62	250·9	0·29	97·1
December	− 2·11	− 0·76	+ 0·22	+ 1·66	− 0·21	− 0·00	+ 0·37	+ 0·09	2·24	250·1	1·67	7·6	0·21	279·2	0·38	75·8
For the Year	− 2·73	− 1·94	+ 1·47	+ 1·45	− 0·81	− 0·34	+ 0·33	+ 0·04	3·35	234·6	2·06	45·5	0·88	247·6	0·33	89·3
	NORTH FORCE.															
January ..	+ 6·7	+ 3·0	− 4·8	+ 0·3	+ 0·0	− 2·4	+ 0·4	+ 0·8	7·3	65·6	4·8	273·9	2·4	179·8	0·9	27·8
February..	+ 10·9	+ 3·1	− 6·0	− 1·2	+ 2·1	− 2·8	+ 0·0	+ 0·6	11·3	74·3	6·1	258·4	3·5	142·6	0·6	0·0
March	+ 14·1	− 0·1	− 7·1	− 0·1	+ 1·5	− 2·4	+ 0·4	+ 1·0	14·1	90·3	7·1	268·9	2·8	148·0	1·1	22·5
April	+ 18·6	− 0·9	− 9·9	+ 0·4	+ 2·6	− 1·9	+ 0·4	+ 0·3	18·6	92·8	9·9	272·3	3·2	125·8	0·5	55·0
May.....	+ 13·2	− 5·3	− 7·9	+ 1·6	+ 1·7	− 0·5	+ 1·0	+ 0·1	14·2	111·7	8·1	281·6	1·8	105·7	1·0	85·9
June.....	+ 17·1	− 3·6	− 10·3	+ 3·0	+ 0·8	− 0·1	+ 0·1	+ 0·8	17·5	101·9	10·7	286·4	0·8	100·1	0·8	9·0
July.....	+ 16·2	− 6·0	− 9·1	+ 4·8	− 0·2	− 1·6	+ 0·4	+ 0·5	17·3	110·4	10·3	297·8	1·6	186·1	0·6	36·4
August....	+ 18·5	− 12·3	− 9·0	+ 6·9	+ 0·2	− 1·6	+ 0·9	− 0·4	22·2	123·7	11·3	307 4	1·6	173·5	1·0	112·3
September	+ 20·4	− 1·7	− 8·5	+ 2·8	+ 0·7	− 1·9	+ 0·7	+ 1·4	20·5	94·8	9·0	288·0	2·0	160·5	1·6	27·2
October ..	+ 20·8	+ 1·1	− 8·8	+ 2·1	+ 2·4	− 3·2	+ 1·0	+ 0·5	20·8	87·1	9·0	283·6	4·0	143·1	1·1	64·0
November	+ 12·9	+ 3·3	− 7·2	+ 0·3	+ 2·0	− 2·2	+ 0·9	+ 1·2	13·3	75·5	7·2	272·0	3·0	137·7	1·5	38·4
December	+ 8·1	+ 4·9	− 4·8	− 1·5	+ 2·3	− 2·0	+ 0·4	− 0·1	9·5	58·7	5·0	252·3	3·0	131·3	0·4	108·8
For the Year	+ 14·8	− 1·2	− 7·8	+ 1·6	+ 1·3	− 1·9	+ 0·6	+ 0·6	14·8	94·6	8·0	281·6	2·3	144·9	0·8	45·3
	VERTICAL FORCE.															
March	+ 3·3	− 6·0	− 6·8	+ 1·2	+ 2·5	− 1·4	− 0·3	+ 0·0	6·8	151·1	6·9	280·2	2·9	119·6	0·3	270·0
April	+ 4·9	− 6·7	− 7·1	+ 0·1	+ 2·6	− 0·2	− 0·8	+ 0·4	8·3	144·0	7·1	271·1	2·6	94·9	0·9	297·5
May	+ 6·0	− 7·9	− 8·8	+ 0·5	+ 2·1	− 0·7	− 0·7	+ 0·2	9·9	142·7	8·8	273·3	2·2	108·1	0·7	287·0
June.....	+ 6·1	− 7·0	− 9·4	+ 1·0	+ 2·3	− 1·0	− 0·4	+ 0·2	9·3	139·1	9·5	276·1	2·5	112·3	0·4	300·0
July.....	+ 4·6	− 9·0	− 8·0	+ 2·0	+ 2·4	− 0·8	− 0·8	− 0·2	10·1	152·6	8·2	283·9	2·5	109·0	0·8	254·7
August....	− 0·6	− 13·6	− 10·3	+ 3·3	+ 2·6	− 0·7	− 1·4	+ 0·2	13·6	182·3	10·8	287·7	2·7	105·4	1·4	279·0
September	+ 4·8	− 5·7	− 6·6	+ 0·8	+ 2·2	− 1·5	− 0·8	+ 0·3	7·5	140·0	6·6	277·1	2·7	125·3	0·8	291·3
October ..	− 0·5	− 6·5	− 4·3	− 0·6	+ 1·6	− 1·4	− 0·9	+ 0·4	6·5	184·1	4·3	261·7	2·1	131·1	1·0	295·3
November	+ 1·1	− 5·9	− 2·9	+ 0·7	+ 1·0	− 1·5	− 0·6	− 0·1	6·0	169·2	3·0	283·6	1·8	147·4	0·6	256·4
December	+ 0·8	− 8·5	− 4·2	+ 0·1	+ 0·3	− 0·1	+ 0·0	+ 0·1	8·5	174·7	4·2	271·2	0·3	110·4	0·1	29·1
For the 10 months	+ 3·1	− 7·7	− 6·8	+ 0·9	+ 2·0	− 0·9	− 0·7	+ 0·2	8·3	158·2	6·9	277·6	2·2	115·6	0·7	282·9

TABLE XVII.—RESULTS of DETERMINATIONS of the ABSOLUTE VALUE of HORIZONTAL MAGNETIC FORCE in the YEAR 1917, from OBSERVATIONS made with the GIBSON INSTRUMENT in the MAGNETIC PAVILION.

Greenwich Civil Time, 1917.	In C.G.S. Units. Value of Horizontal Force. as observed.	reduced to Mean of Month.	Observer.	Greenwich Civil Time, 1917.	In C.G.S. Units. Value of Horizontal Force. as observed.	reduced to Mean of Month.	Observer.	Greenwich Civil Time, 1917.	In C.G.S. Units. Value of Horizontal Force. as observed.	reduced to Mean of Month.	Observer.
d h	·18000+	·18000+		d h	·18000+	·18000+		d h	·18000+	·18000+	
Jan. 2. 12	468	487	B	May 1. 10	483	489	B	Sept. 4. 13	471	485	B
5. 12	423	488	B	4. 14	473	493	B	7. 13	456	476	B
9. 12	462	486	B	8. 15	492	490	B	11. 13	469	478	B
11. 12	474	499	B	11. 11	492	493	B	14. 13	484	480	B
16. 12	476	490	B	15. 14	479	491	B	18. 11	462	475	B
19. 13	486	495	B	18. 14	489	490	B	21. 12	443	476	B
23. 15	460	496	B	22. 14	498	495	B	25. 15	474	479	B
26. 12	453	486	B	25. 13	500	495	B	28. 12	468	475	B
30. 15	481	482	B	29. 13	473	496	B				
				June 1. 11	479	488	B	Oct. 2. 16	473	478	B
Feb. 2. 15	481	480	B	5. 14	467	493	B	5. 14	459	477	B
6. 12	467	487	B	8. 14	453	487	B	9. 14	466	468	B
9. 12	459	472	B	12. 14	489	489	B	12. 16	488	478	B
13. 15	482	481	B	15. 14	481	488	B	16. 15	464	462	B
16. 12	440	478	B	19. 14	488	498	B	19. 14	479	473	B
20. 16	471	485	B	22. 14	480	491	B	23. 15	469	477	B
23. 12	476	479	B	26. 14	468	494	B	26. 15	465	471	B
27. 15	491	489	B	29. 14	480	491	B	30. 15	446	465	B
				July 3. 13	500	493	B				
March 2. 12	471	482	B	6. 13	508	498	B	Nov. 2. 12	435	475	B
6. 12	478	483	B	10. 14	502	493	B	6. 14	467	470	B
9. 12	459	475	B	13. 14	493	495	B	9. 10	461	465	B
13. 12	455	482	B	17. 14	477	488	B	13. 12	441	459	B
16. 15	479	479	B	20. 13	481	491	B	16. 12	448	456	B
20. 14	500	483	B	24. 13	475	489	B	20. 14	456	465	B
23. 12	462	481	B	27. 13	508	497	B	23. 12	472	474	B
27. 15	455	477	B	31. 13	516	502	B	27. 12	450	467	B
30. 15	486	481	B					30. 12	445	475	B
				Aug. 3. 14	479	471	B				
April 3. 14	485	491	B	7. 14	497	477	B	Dec. 4. 14	471	464	B
5. 12	442	483	B	10. 14	446	473	B	7. 12	470	463	B
10. 14	476	487	B	14. 14	492	474	B	11. 12	485	473	B
12. 14	484	478	B	17. 14	468	472	B	14. 12	468	465	B
17. 14	472	479	B	21. 14	466	464	B	18. 12	438	465	B
20. 14	473	481	B	24. 14	458	465	B	21. 12	449	455	B
24. 14	500	483	B	28. 14	464	465	B	24. 12	442	455	B
27. 15	483	501	B	31. 11	454	462	B	28. 12	456	456	B

TABLE XVIII.—RESULTS of OBSERVATIONS of MAGNETIC DIP made with the DIP INDUCTOR in the YEAR 1917.

Greenwich Civil Time.	Magnetic Dip.	Observer.	Greenwich Civil Time.	Magnetic Dip.	Observer.	Greenwich Civil Time.	Magnetic Dip.	Observer.	Greenwich Civil Time.	Magnetic Dip.	Observer.
d h	° ′		d h	° ′		d h	° ′		d h	° ′	
Jan. 2. 15	66. 52·5	B	April 3. 12	66. 52·3	B	July 3. 12	66. 53·2	B	Oct. 2. 15	66. 54·7	B
4. 13	66. 55·7	B	4. 14	66. 51·9	B	4. 10	66. 53·2	C	4. 16	66. 55·1	C
6. 12	66. 55·0	B	5. 12	66. 54·4	B	6. 12	66. 52·5	B	5. 13	66. 54·0	B
9. 12	66. 53·9	B	10. 13	66. 52·7	B	10. 12	66. 52·2	B	9. 13	66. 55·6	B
11. 12	66. 53·9	B	12. 14	66. 52·6	B	11. 11	66. 52·2	C	10. 12	66. 55·0	C
12. 22	66. 54·2	B	14. 12	66. 51·8	B	13. 14	66. 56·6	B	12. 13	66. 54·2	B
16. 12	66. 53·6	B	17. 13	66. 52·8	B	17. 13	66. 52·3	B	16. 13	66. 54·1	B
18. 14	66. 53·5	B	19. 14	66. 53·1	B	19. 12	66. 54·0	C	17. 12	66. 54·2	C
19. 17	66. 51·7	B	20. 14	66. 52·8	B	20. 13	66. 52·8	B	19. 12	66. 53·2	B
23. 15	66. 55·2	B	24. 14	66. 53·8	B	24. 13	66. 53·0	B	23. 12	66. 55·2	B
24. 13	66. 53·8	B	25. 12	66. 52·5	B	26. 9	66. 53·4	C	24. 13	66. 54·2	C
29. 11	66. 54·0	B	27. 14	66. 52·2	B	27. 12	66. 51·1	B	26. 15	66. 54·5	B
30. 13	66. 54·6	B				31. 12	66. 53·5	B	30. 13	66. 56·8	B
			May 1. 10	66. 51·5	B				31. 12	66. 56·2	C
Feb. 1. 13	66. 53·0	B	3. 15	66. 52·6	B	Aug. 2. 13	66. 52·7	C			
2. 16	66. 52·3	B	4. 14	66. 54·4	B	3. 13	66. 52·4	B	Nov. 2. 12	66. 56·5	B
6. 12	66. 53·5	B	9. 12	66. 53·2	B	7. 13	66. 50·9	B	6. 13	66. 54·3	B
8. 15	66. 52·5	B	10. 11	66. 52·6	B	9. 12	66. 56·6	B	7. 11	66. 53·2	C
9. 12	66. 53·5	B	11. 12	66. 51·8	B	10. 12	66. 58·4	B	9. 9	66. 53·5	B
13. 15	66. 53·2	B	15. 11	66. 52·9	B	14. 14	66. 51·9	B	13. 12	66. 55·2	B
15. 12	66. 53·4	B	17. 12	66. 51·5	B	16. 11	66. 54·4	C	14. 11	66. 55·0	C
16. 11	66. 54·9	B	18. 14	66. 51·2	B	17. 14	66. 54·8	B	16. 12	66. 53·4	B
20. 16	66. 56·4	B	22. 13	66. 51·4	B	21. 12	66. 55·5	B	20. 13	66. 53·0	B
22. 17	66. 52·9	B	24. 9	66. 53·4	B	23. 11	66. 56·0	B	21. 12	66. 54·1	C
23. 12	66. 51·8	B	25. 9	66. 52·1	B	24. 12	66. 54·7	B	23. 12	66. 52·6	B
27. 13	66. 53·3	B	29. 12	66. 54·2	B	28. 12	66. 55·3	B	27. 12	66. 54·9	B
28. 12	66. 53·0	B	31. 13	66. 53·4	B	29. 12	66. 55·4	B	28. 13	66. 55·0	C
						31. 11	66. 54·9	B	30. 12	66. 54·8	B
Mar. 2. 16	66. 52·0	B	June 1. 8	66. 53·8	B						
6. 12	66. 52·4	B	5. 12	66. 53·7	B	Sept. 4. 11	66. 54·7	B	Dec. 4. 13	66. 54·1	B
7. 12	66. 53·4	B	7. 12	66. 52·4	B	5. 11	67. 0·1	C	6. 12	66. 53·3	C
10. 11	66. 53·4	B	8. 12	66. 55·3	B	7. 12	66. 55·8	B	7. 12	66. 52·0	B
12. 13	66. 53·1	B	12. 11	66. 53·1	B	11. 12	66. 53·4	B	11. 12	66. 51·9	B
15. 13	66. 51·8	B	14. 13	66. 53·0	B	13. 13	66. 52·7	B	13. 12	66. 53·7	B
16. 15	66. 52·2	B	15. 14	66. 52·2	B	14. 12	66. 53·2	B	14. 12	66. 52·1	B
20. 13	66. 50·5	B	19. 14	66. 53·2	B	18. 11	66. 54·2	B	18. 12	66. 56·4	B
21. 13	66. 51·8	B	20. 12	66. 52·1	B	19. 11	66. 54·2	C	20. 12	66. 54·4	C
23. 12	66. 53·5	B	22. 13	66. 53·5	B	21. 12	66. 54·9	B	21. 12	66. 54·7	B
27. 15	66. 52·4	B	26. 14	66. 54·3	B	25. 13	66. 54·3	B	24. 12	66. 55·1	B
30. 15	66. 51·6	B	28. 9	66. 52·4	B	27. 13	66. 53·9	C	27. 16	66. 54·6	B
31. 13	66. 51·7	B	29. 13	66. 52·7	B	28. 12	66. 53·1	B	28. 12	66. 54·4	B

The initials B and C are those of Messrs. Bryant and Chapman.

TABLE XIX.—ANNUAL SUMMARY of the MAGNETIC ELEMENTS.

Month, 1917.	Mean Value of				Monthly Mean Diurnal Range of			Sum of Hourly Deviations from Mean of		
	Westerly Declination.	North Force C.G.S.	Vertical Force, C.G.S.	Dip.	Declination.	North Force.	Vertical Force.	Declination	North Force.	Vertical Force
	° ′			° ′				′		
January	14. 41·8	·17859			6·5	24 γ	γ	36·2	131 γ	γ
February	14. 40·7	·17877			7·8	32		46·8	197	
March	14. 40·1	·17881	·43269	·66. 52·1	10·2	34	26	57·6	239	136
April.....	14. 38·9	·17885	·43271	66. 52·0	11·4	43	29	65·4	311	152
May	14. 37·9	·17889	·43282	66. 52·2	10·5	39	35	60·7	237	175
June.....	14. 37·4	·17893	·43291	66. 52·2	13·2	46	34	76·4	292	179
July	14. 36·8	·17897	·43302	66. 52·3	12·6	46	33	73·5	295	180
August.....	14. 35·7	·17877	·43321	66. 54·3	13·6	56	41	76·4	370	262
September	14. 35·2	·17887	·43313	66. 53·5	11·4	46	27	70·1	339	138
October.....	14. 34·1	·17884	·43313	66. 53·8	9·5	49	18	60·2	340	121
November	14. 33·5	·17879	·43302	66. 53·9	6·6	35	17	42·8	228	106
December.....	14. 32·5	·17880	·43286	66. 53·4	6·7	27	20	41·1	160	145
			(10 mths.)	(10 mths.)			(10 mths.)			(10 mths.)
The Year	14. 37·1	·17882	·43295	66. 53·0	10·0	39·8	28·0	59·0	261·6	159·3

ROYAL OBSERVATORY, GREENWICH.

MAGNETIC DISTURBANCES.

1917.

MAGNETIC DISTURBANCES in DECLINATION, NORTH FORCE, and VERTICAL FORCE, recorded at the ROYAL OBSERVATORY, GREENWICH, in the Year 1917.

The following notes give a brief description of all magnetic movements (superposed on the ordinary diurnal movement) exceeding 3′ in Declination, 20γ in North Force, or 12γ in Vertical Force, as taken from the photographic records of the respective Magnetometers. The movements in North and Vertical Force are expressed in C. G. S. units. 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 movement in the same direction; " oscillations " 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 oscillations the sign $\pm$ 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).

1917.

January

1d 2h to 2½h Wave in Dec. (+ 3′). 11½h to 13½h Wave in N.F. (− 36).

2d 19¼h to 20½h Wave in Dec. (− 5′).

4d 5h to 5d 5h. *See* Plate I.

5d 13½h to 15h Two successive waves in Dec. (− 3′, − 4′). 14¼h to 16½h Irregular wave in N.F. (−35). 17h to 17½h Decrease in Dec. (− 5′), followed till 19h by a double wave (+ 6′, − 9′). 17¾h to 19h Double wave in N.F. (− 20, + 28) both portions truncated.

6d 17½h to 18½h Irregular wave in N.F. (− 40). 17¾h to 19h Wave in Dec. (− 10′). 20¾h to 22¼h Wave in Dec. (− 6′), followed till 7d 0¾h by an irregular double wave (−6′, + 6′). 23¾h to 24h Irregular sharp decrease in N.F. (−40).

7d 0h to 0½h Decrease in V.F. (−12). 13½h to 14¼h Wave in N.F. (−21). 15¾h to 16¼h Wave in N.F. (− 23). 16h to 17h Wave in Dec. (−4′). 22¾h to 24h Irregular waves in Dec. (+ 9′), and N.F. (− 32): decrease in V.F. (− 22).

8d 0¾h to 2¾h Irregular wave in Dec. (+ 5′). 3¼h to 4¾h Flattened wave in N.F. (+ 26). 3½h to 4¾h Wave in Dec. (− 5′). 18h to 19¾h Wave in N.F. (−24). 18¼h to 19¼h Wave in Dec. (−3′). 21¼h to 22½h Irregular double-crested wave in Dec. (− 8′). 21½h Sharp decrease in N.F. (− 22), followed till 9d 0½h by two successive irregular waves (+ 25, + 36). 8d 23¼h to 9d 0½h Double-crested wave in Dec. (− 8′).

9d 17½h to 19h Double wave in Dec. (+3′, −5′): wave in N.F. (− 44). 21¼h to 21¾h Decrease in Dec. (−7), followed till 22¼h by a sharp wave (+ 8′). 21¾h to 22h Sharp wave in N.F. (+ 21). 22½h to 23¼h Truncated wave in N.F. (− 21).

10d 0½h to 1½h Sharp double wave in Dec. (+ 4′, −5′): double-crested wave in N.F. (+ 29). 0½h to 1h Decrease in V.F. (− 12). 3¾h to 4¼h Truncated wave in Dec. (+ 6′): decrease in V.F. (− 14). 20¾h to 22¼h Irregular flat-crested wave in N.F. (+25), with sharp wave (−24) superposed at 22h. 21h to 22¼h Double-crested wave in Dec. (+ 5′). 10d 23h to 11d 0¼h Wave in Dec. (− 5′).

11d 16¼h to 18h Truncated wave in Dec. (−8′). 19¾h to 20½h wave in Dec. (−5′). 22½h to 23¾h Double wave in N.F. (−22, + 34), sharp except first movement. 23¼h to 24h Two successive waves in Dec. (−5′, −4′).

12d 4h to 5¾h Two successive waves in Dec. (− 5′, − 5′). 4h to 5½h Increase in N.F. (− 25). 9h to 10¾h Rounded wave in N.F. (− 30). 17h to 19¾h Wave in V.F. (+ 16). 17¼h to 19½h Wave in N.F. (− 57), with pause on return from 18½h to 19h. 17½h to 19h Wave in Dec. (− 11′). 19½h to 21h Wave in Dec. (− 16′), steep at commencement: double wave in N.F. (+ 60, − 20). 23¼h to 23¾h Increase in N.F. (+ 37).

13d 0½h to 1h Decrease in Dec. (− 7′). 1h to 3¼h Irregular double wave in N.F. (− 22, + 33). 2¼h Sharp increase in Dec. (+ 4′). 2¼h to 5h Flat-crested wave in V.F. (− 13). 15¾h to 16¾h Waves in Dec. (− 6′) and N.F. (+ 21).

14d 7½h to 8½h Wave in Dec. (+ 4′). 16h to 17½h Flat-crested wave in Dec. (− 5′). 21½h Sharp wave in Dec. (+ 3′).

15d 17¼h to 18h Wave in N.F. (− 24). 17½h to 18½h Wave in Dec. (− 7′).

1917.

January

17d 0h to 4h Slow triple wave in Dec. (− 3′, + 5′, − 5′). 1h to 4h Waves in N.F. (+ 30) and V.F. (− 12). 23h to 23½h Decrease in Dec. (− 6′).

19d 20¼h to 22½h Irregular increase in V.F. (+ 23). 21h to 22½h Irregular hollow-crested wave in Dec. (− 4′).

20d 2h to 2¼h Decrease in Dec. (− 5′). 2h to 2½h Sharp increase in N.F. (+ 48), followed till 3h by slower return (− 28). 2h to 3h Irregular decrease in V.F. (− 13). 21½h to 22h Sharp decrease in Dec. (− 10′), followed till 23½h by a double-crested wave (+ 4′). 22¾h to 23¼h Increase in N.F. (+ 39).

21d 15¾h to 18¾h Irregular double wave in Dec. (− 7′, + 5′). 15¾h to 18h Irregular wave in N.F. (− 36′). 16h to 18h Wave in V.F. (+ 12). 21h to 22h Irregular double wave in Dec. (− , +), the second portion double-crested, followed till 23½h by two successive waves (+ , +), the first irregular. 21h to 21½h Sharp wave in N.F. (+ 22). 22h Sharp increase in N.F. (+ 34). 22h to 24h Irregular wave in V.F. (− 14). 22½h to 23½h Sharp double wave in N.F. (− 37, + 34).

22d 12h to 12¾h Truncated wave in Dec. (+ 4′). 14¼h to 16h Irregular double wave in Dec. (+ 4′, − 4′). 18h to 19h Very sharp wave in Dec. (− 20′). 18h to 18½h Sharp increase in N.F. (+ 116), followed till 19h by slower partial return (− 80). 21h to 22½h Irregular double-crested wave in N.F. (+ 40). 21¼h to 23¾h Irregular triple wave in Dec. (− 5′, + 3′, − 4′). 22d 23h to 23d 1½h Wave in V.F. (+ 12).

23d 0h to 1½h Double-crested wave in Dec. (+ 5′). 2½h to 3½h Wave in Dec. (− 4′). 11½h to 12¾h Serrated wave in N.F. (− 26). 12h to 13h Serrated wave in Dec. (− 4′). 14½h to 16h Double wave in Dec. (+ 3′, − 4′). 15h to 15¾h Wave in N.F. (− 36). 16h to 18½h Two successive waves in Dec. (− 4′, − 6′). 22½h to 23½h Wave in Dec. (− 7′). 23h to 23½h Decrease in N.F. (− 24).

24d 0h to 2h Flat-crested wave in Dec. (+ 8′). 2¼h to 3½h Domed wave in N.F. (+ 21). 18h to 20h Wave in Dec. (− 5′).

25d 2h to 3h Wave in Dec. (+ 9′). 2½h to 3½h Wave in N.F. (+ 28). 2½h to 3h Decrease in V.F. (− 12). 3¼h to 4½h Wave in Dec. (+ 7′). 4h to 6h Wave in N.F. (+ 35). 6h to 9½h Serrated wave in N.F. (+ 37). 6¼h to 8h Wave in Dec. (− 4′). 8½h to 10h Serrated wave in Dec. (−4′). 15¾h to 17h Wave in N.F. (− 31). 18¾h to 20h Wave in Dec. (− 5′). 20½h to 22¼h Irregular wave in N.F. (+ 52). 21h to 22h Irregular wave in Dec. (− 7′).

26d 2¼h to 3¼h Wave in Dec. (+ 7′). 3h to 4h Wave in N.F. (+ 26). 12h to 13½h Irregular wave in Dec. (+ 6′). 14h to 16h Waves in Dec. (− 8′) and V.F. (+ 14). 14½h to 14¾h Sharp increase in N.F. (+ 33). 22½h to 23½h Wave in N.F. (+ 22). 23½h to 23¾h Increase in Dec. (+ 3′).

27d 13½h to 15h Irregular rounded wave in Dec. (− 4′). 16½h to 17¾h Irregular wave in Dec. (− 5′).

30d 12¾h to 14¼h Wave in Dec. (+ 6′).

31d 18h to 19h Irregular waves in Dec. (− 7′) and N.F. (+ 28).

February

2d 23½h to 24h Wave in Dec. (+ 5′). 2d 23¾h to 3d 1h Wave in N.F. (+25).

3d 3½h to 4½h Wave in Dec. (+3′).

4d 17h to 18h Wave in N.F. (− 26).

5d 1h to 2½h Double Wave in Dec. (+ 3′, − 3′). 1¼h to 2¼h Wave in N.F. (+ 33). 4½h to 5½h Wave in Dec. (+ 3′). 16½h to 18h Wave in Dec. (− 6′). 16½h to 17¼h Wave in N.F. (− 21). 19½h to 20h Decrease in Dec. (− 6′).

6d 12¼h to 12¾h Wave in Dec. (+ 4′). 17¾h to 19½h Wave in Dec. (− 6′).

7d 0h to 1h Wave in Dec. (− 3′). 0¼h to 0¾h Increase in N.F. (+ 22). 13¼h to 14¼h Wave in Dec. (+ 4′). 18¼h to 19h Wave in N.F. (− 21). 22h to 23¼h Waves in Dec. (− 12′) and N.F. (+ 65), both steep at commencement. 7d 23¾h to 8d 0½h Waves in Dec. (− 4′) and N.F. (+ 20), the latter followed till 3h by an irregular double wave (+ 32, − 24). 1h to 2½h Irregular wave in Dec. (− 5′).

8d 17¼h to 19h Wave in Dec. (− 5′). 17½h to 19h Wave in N.F. (+ 21).

10d 3¾h to 5¼h Slow wave in Dec. (− 3′).

11d 18¼h to 19h Wave in Dec. (− 5′). 18½h to 19¼h Wave in N.F. (+ 25).

14d 20½h to 21h Decrease in Dec. (− 6′). 21h to 21¾h Wave in N.F. (+ 28).

15d 12h to 16d 12h. See Plate I.

17d 19½h to 20¼h Irregular wave in N.F. (− 22) 23h to 24h Wave in N.F. (− 22).
17d 23½h to 18d 0¼h Wave in Dec. (− 3′).

18d 0h to 1h Wave in N.F. (− 26). 0½h to 1h Decrease in Dec. (− 7′). 2½h to 4¾h Irregular double-crested wave in Dec. (− 8′) followed till 6½h by a similar wave (− 5′). 2½h to 4½h Double crested wave in N.F. (+ 21). 4¾h to 6½h Truncated wave in N.F. (+ 20).

19d 1¾h to 2¾h Wave in N.F. (+ 25) followed till 3h by an increase (+ 22). 2½h to 3h Decrease in Dec. (− 7′). 20½h to 23h Two successive waves in N.F. (− 40, − 36) followed till 24h by an irregular decrease (− 30). 20¾h to 22¾h Truncated wave in Dec. (− 14′) followed till 20d 1h by an irregular flat-crested wave (− 8′). 21h to 23h Flat-crested wave in N.F. (− 12).

1917.

February. 20d 0h Sharp increase in N.F. (+ 45), followed till 1h by irregular partial return (— 27). 1¼h to 1¾h Wave in N.F. (+ 20). 3h to 4¾h Two successive sharp waves in Dec. (— 4′, — 5′). 7¼h to 8½h Wave in Dec. (+ 6′). 9¼h to 10h Decrease in N.F. (— 33) continued till 11h by a wave (— 24). 14½h to 15½h Irregular double-crested wave in N.F. (+ 24) followed till 15¾h by a sharp increase (+ 47). 15¼h to 16½h Wave in Dec. (— 9′). 15½h to 16½h Wave in V.F. (+ 16). 18¾h to 19¾h Wave in Dec. (— 5′). 19h to 20h Wave in N.F. (+ 39) followed till 21h by slower wave (+ 20). 22½h to 23½h Wave in N.F. (+ 20).

21d 16¾h to 17h Increase in N.F. (+ 20). 22¼h to 23½h Irregular wave in Dec. (— 5′). 22¼h to 23h Wave in N.F. (+ 34).

22d 13¼h to 13¾h Double-crested wave in Dec. (+ 4′). 20h to 21h Domed wave in Dec. (— 6′) : wave in N.F. (+ 20). 22h to 23½h Wave in N.F. (+ 44). 22¼h to 23½h Truncated wave in Dec. (— 11′)

23d 3¾h to 4¾h Wave in Dec. (+ 7′). 20h to 20¼h Wave in Dec. (— 3′) : increase in N.F. (+ 25). 22h to 23¼h Wave in Dec. (— 4′).

24d 3¼h to 4½h Wave in Dec. (+ 7′).

25d 14½h to 16h Wave in Dec. (— 3). 14½h to 15h Decrease in N.F. (— 22). 15h to 17¼h Wave in V.F. (+ 15). 19½h to 20½h Wave in Dec. (— 4′).

26d 5h to 8h Two successive waves in Dec. (+ 4′, + 7′). 5½h to 8h Double wave in N.F. (+ 30, — 24).

28d 10¼h to 10½h Decrease in N.F. (— 25). 11½h to 12h Wave in Dec. (+ 4′). 19h to 20½h Wave in Dec. (— 4′).

March 1d 19½h to 20h Wave in Dec. (— 5′) 19½h to 20¼h Wave in N.F. (+ 34).

3d 11h to 11½h Increase in Dec. (+ 5′). 23½h Sharp increase in N.F. (+ 22).

4d 12¾h to 13h Sharp increase in Dec. (+ 5′) and N.F. (+ 20). 14¼h to 16½h Irregular slow wave in Dec. (+ 4′) with superposed fluctuations on first portion : fluctuations also in N.F. 17h to 20½h Irregular flat-crested wave in N.F. (+ 36). 19¾h to 20½h Irregular decrease in Dec. (— 8′). 20h to 23½h Wave in V.F. (+ 18).

5h 3h to 4¼h Irregular wave in N.F. (+ 23). 3¼h to 4½h Wave in Dec. (— 4′). 3½h to 10½h Loss of V.F. register. 5¼h to 6½h Triple-crested wave in Dec. (+ 9′). 6h to 7¼h Wave in N.F. (— 55). 11h to 12h Wave in Dec. (— 4′). 13h to 14¾h Two successive waves in Dec. (+ 8′, + 7′). 13¼h to 15¼h Two successive waves in N.F. (— 24, — 24). 17h to 18h Wave in N.F. (— 24). 17½h to 19¼h Double-crested wave in Dec. (— 13′). 17½h to 19½h Wave in V.F. (+ 22). 20h to 21½h Wave in N.F. (+ 23). 22h to 23h Wave in N.F. (+ 24). 22½h to 23½h Wave in Dec. (+ 5′). 22¾h to 23¼h Decrease in V.F. (— 18).

6d 2½h to 3¾h Irregular wave in Dec. (+ 4′) : in V.F. (— 12). 6¼h to 7¾h Wave in N.F. (— 22). 9h to 9½h Decrease in N.F. (— 36). 12¼h to 13¼h Wave in Dec. (+ 5′). 13h to 14¼h Wave in N.F. (— 24). 13¾h to 14½h Wave in Dec. (— 4′). 17¼h to 17¾h Wave in Dec. (— 4′).

7d 3h to 3¾h Decrease in N.F. (— 28). 3½h to 4h Wave in Dec. (+ 3′). 11¼h to 12h Wave in Dec. (+ 3′). 19¼h to 22h Irregular triple-crested wave in Dec. (— 6′). 19¼h to 21¾h Irregular wave in N.F. (+ 36).

8d 0½h to 1¾h Wave in Dec. (+ 3′). 1h to 5h Wave in V.F. (— 14). 1¼h to 4h Irregular double-crested wave in N.F. (+ 24). 2½h to 4h Wave in Dec. (— 5′). 7¼h to 8½h Wave in N.F. (— 25). 8¾h to 12h Slow wave in N.F. (— 39). 14h to 20h Slow truncated wave in V.F. (+ 35). 14¼h to 15¾h Wave in Dec. (— 4′). 17h to 18¼h Sharp wave in Dec. (— 13′) with irregular return : double wave in N.F. (— 20, + 68) with pause from 17¾h to 18h in last movement. 19¼h to 21½h Irregular triple wave in Dec. (— 5′, + 4′, — 8′). 19½h Sharp increase in N.F. (+ 28). 20h to 20½h Wave in N.F. (— 33). 8d 23¼h to 9d 0¼h Wave in Dec. (— 5′). 8d 23½h to 9d 1h Truncated wave in N.F. (+ 33).

9d 3½h to 4½h Wave in Dec. (+ 5′).

11d 0¼h to 1¼h Wave in N.F. (— 20). 3¾h to 4¾h Wave in Dec. (+ 3′).

12d 19h to 19¾h Wave in Dec. (+ 4′). 19h to 20¼h Wave in N.F. (— 22).

13d 15h to 20½h Wave in V.F. (+ 20). 16h to 17¼h Wave in Dec. (— 5′). 21¾h to 23h Waves in Dec. (— 6′) and N.F. (+ 33), both steep at commencement.

15d 15h to 19½h Slow wave in V.F. (+ 20). 16½h to 19h Two successive waves in Dec. (— 4′, — 6′), the second double-crested. 17¾h Sharp increase in N.F. (+ 27). 23h to 23½h Wave in Dec. (— 3′).

16d 17¾h to 18¾h Irregular wave in N.F. (— 30). 18h to 20¾h Two successive waves in Dec. (— 6′, — 7′). 19¾h to 21h Double-crested wave in N.F. (+ 30).

20d 12½h to 13½h Wave in N.F. (+ 24). 13h to 13½h Sharp wave in Dec. (+ 3′). 19½h to 20¼h Wave in Dec. (— 4′). 21¾h to 23½h Irregular wave in N.F. (+ 48). 22h to 22¼h Decrease in Dec. (— 4′).

21d 1h to 4h Two successive waves in Dec. (+ 5′, + 9′). 1h to 4h Irregular wave in V.F. (— 12). 1½h to 3h Double wave in N.F. (+ 20, — 20). 17¼h to 18½h Wave in N.F. (— 20). 17½h to 19h Wave in Dec. (— 9).

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March

22d 19¼h to 20¾h Wave in Dec. (− 7′).

24d 10h to 10½h Increase in Dec. (+ 6′).

25d 14h to 19½h Irregular wave in V.F. (+ 50). 16¼h to 18h Serrated wave in Dec. (− 8′). 16¾h Very sharp wave in N.F. (+ 25). 22h to 22¾h Wave in N.F. (+ 24).

26d 20¾h to 22h Wave in Dec. (− 3′).

27d 14½h to 16h Increase in V.F. (+ 29). 14¾h to 16h Wave in N.F. (− 33). 15½h to 15¾h Decrease in Dec. (− 5′).

April

1d 0h to 1¾h Wave in Dec. (− 4′). 21h to 23h Wave in Dec. (− 9′).

2d 2h to 5h Slow wave in N.F. (− 34). 3½h to 5h Wave in Dec. (+ 5′). 19½h to 20h Wave in Dec. (− 5′), steep at end. 19½h to 20¾h Irregular wave in N.F. (+ 42), steep at commencement.

3d 3¼h to 4h Wave in Dec. (+ 3′). 20¼h to 21½h Flat-crested wave in Dec. (+ 3′). 21¾h to 23h Truncated wave in N.F. (− 20).

4d 0h to 1h Wave in Dec. (+ 3′). 0¼h to 2h Wave in N.F. (+ 25).

5d 0h to 3¾h Irregular slow wave in Dec. (− 7′). 14d 23½h Wave in V.F. (+ 45). 15¾h to 16h Decrease in Dec. (− 6′). 16h to 16½h Increase in N.F. (+ 25). 19½h to 20½h Wave in Dec. (+ 3′). 21¼h to 22½h Irregular wave in N.F. (− 24). 5d 23¼h to 6d 1h Wave in Dec. (− 8′), followed till 7h by a double wave (− 6′, + 15′), with a wave (− 4′) superposed from 4h to 5h.

6d 1h to 2¾h Wave in N.F. (+ 35). 1h to 4¼h Irregular decrease in V.F. (−23). 4¾h to 6h Wave in N.F. (− 50). 15½h to 21h Wave in V.F. (+ 25). 16h to 17¼h Wave in N.F. (− 29). 17½h to 18h Irregular increase in N.F. (+ 20). 20¾h to 22h Waves in Dec. (− 6) and N.F. (+ 23).

7d 19¼h to 20h Wave in Dec. (− 3′). 19½h to 20½h Wave in N.F. (+ 23). 22¼h to 23½h Wave in Dec. (− 5′).

8d 0¼h to 1¾h Wave in N.F. (+ 27). 0¾h to 1½h Truncated wave in Dec. (− 5′). 5¼h to 7h Wave in Dec. (+ 5′). 20h to 21h Wave in Dec. (− 6′), steep at commencement. 20h to 20¼h Sharp increase in N.F. (+ 25). 8d 23h to 9d 2h Irregular double wave in Dec. (− 5′, + 5′).

9d 0½h to 2h Irregular wave in N.F. (− 30). 1h to 4h Slow oscillations in V.F., with net decrease (− 20). 3h to 4½h Irregular wave in Dec. (+ 8′). 7½h to 8¼h Decrease in N.F. (− 36). 8h to 9h Wave in Dec. (− 4′). 8¾h to 9¼h Irregular decrease in N.F. (− 45). 11¾h to 12½h Serrated wave in Dec. (+ 4). 12½h to 22½h Wave in V.F. (+ 47). 13¼h to 13½h Increase in N.F. (+ 30). 16h to 17h Irregular wave in N.F. (− 23). 20¼h to 22½h Irregular wave in Dec. (− 8′). 20½h to 22h Irregular wave in N.F. (+ 30).

12d 21h to 21½h Wave in Dec. (− 5′).

13d 0¾h to 1¼h Wave in Dec. (− 3′). 0¾h to 1¾h Wave in N.F. (+ 41), very steep at commencement, irregular afterwards. 8½h to 16h Slow wave in V.F. (− 32).

15d 22h to 22½h Decrease in N.F. (− 30).

16d 1¼h to 2h Wave in N.F. (+ 25), steep at commencement. 3½h to 4¼h Wave in Dec. (+ 4′). 13h to 19h Wave in V.F. (+ 48). 14h to 14¾h Increase in N.F. (+ 36). 16¼h to 17¼h Wave in N.F. (− 36). 23¾h to 24h Decrease in Dec. (− 4′).

17d 0¾h to 1¼h Wave in Dec. (+ 3′). 1¾h to 2½h Wave in Dec. (+ 4′). 21h Sharp decrease in Dec. (− 8′), with sharp partial return (+ 5′). 21h to 22h Wave in N.F. (+ 40), steep at commencement. 21½h to 22¾h Wave in Dec. (− 6′). 22½h to 23½h Irregular wave in N.F. (+ 27). 23h to 24h Wave in Dec. (+ 9′): decrease in V.F. (− 28), followed by partial return till 18d 0¼h.

18d 0¼h to 1h Wave in Dec. (+ 4′). 20½h to 22h Irregular wave in Dec. (− 6′), followed till 23h by a wave (− 3′).

22d 22½h to 24h Irregular wave in Dec. (− 6′). 23¼h to 24h Decrease in N.F. (− 35).

23d 22h to 22½h Decrease in Dec. (− 5′). 22h to 23½h Wave in N.F. (+ 25).

24d 2½h to 3¼h Wave in Dec. (+ 4′). 15¼h to 19½h Wave in V.F. (+ 18). 16¼h to 16½h Sharp increase in N.F. (+ 40).

25d 14½h to 15¾h Irregular wave in N.F. (+ 33). 18½h Increase in N.F. (+ 20). 19½h to 20h Decrease in N.F. (− 26). 20½h to 21½h Waves in Dec. (− 5′) and N.F. (+ 20).

26d 4½h to 5½h Wave in Dec. (+ 5′). 8½h to 9½h Irregular wave in N.F. (+ 25). 11½h Sharp decrease in Dec. (− 4′). Sharp wave in N.F. (− 23). 12¾h to 14¾h Wave in N.F. (− 40), with sharp truncated wave (− 30) superposed from 13½h to 13¾h. 13h to 14h Double-crested wave in Dec. (+ 5) Decrease in V.F. (+ 18). 16½h to 16¾h Increase in N.F. (+ 25). 17h to 20½h Wave in V.F. (+ 15). 17¾h to 18¾h Truncated wave in N.F. (+ 20), followed till 19½h by a wave (+ 35). 18¾h to 19¼h Wave in Dec. (−7′). 21h to 22h Decrease in V.F. (− 15). 21¼h to 22h Wave in N.F. (+ 22).

29d 4h to 5¼h Wave in Dec. (+ 5′).

30d 6¼h to 7h Wave in Dec. (− 3′). 13¾h to 14½h Wave in N.F. (+ 39). 16h to 16¼h Sharp increase in N.F. (+ 37), followed till 16½h by a sharp wave (− 21). 22½ Sharp increase in N.F. (+ 46).

1917.

May

1d 16h to 16½h Wave in N.F. (— 25). 17¾h to 18h Increase in N.F. (+ 45). 18¼h to 20h Irregular wave in Dec. (— 6′). 19¼h to 20¼h Irregular decrease in N.F. (— 50). 21h to 22¼h Sharp double-crested wave in Dec. (+ 8′). 21½h to 22½h Double wave in N.F. (+ 30, — 20). 21½h to 23¼h Wave in V.F. (— 30). 1d 23h to 2d 0½h Wave in Dec. (+ 6′).

2d 0½h to 2¼h Triple wave in Dec. (+ 4′, — 3′, + 4′), continued till 4h by an irregular double-crested wave (— 4′). 1½h to 2¼h Wave in N.F. (— 35). 2h to 3h Wave in V.F. (— 18). 4½h to 5½h Flat-crested wave in N.F. (+ 24). 6¼h to 6¾h Wave in Dec. (— 4′). 12h to 12¾h Wave in Dec. (+ 3′). 15h to 16h Increase in V.F. (+ 27). 15¾h to 16h Wave in Dec. (— 5′). 15¾h to 17h Double wave in N.F. (+ 36, — 28). 17½h to 18½h Irregular wave in N.F. (— 24). 23h to 24h Wave in Dec. (+ 4′).

3d 1h to 2½h Double wave in N.F. (— 24, + 28), the second portion truncated. 1½h to 3¼h Wave in V.F. (— 14). 4h to 5¼h Wave in Dec. (+ 4′). 8¼h to 10h Domed wave in N.F. (— 36). 13h to 13½h Increase in Dec. (+ 4′) and N.F. (+ 20). 14¼h to 16h Irregular wave in N.F. (— 36). 16½h Increase in N.F. (+ 21). 19¼h to 21¼h Sharp double wave in N.F. (+ 33, — 28). 19½h to 20h Sharp wave in Dec. (+10′). 20¾h to 21½h Sharp waves in Dec. (— 6′) and N.F. (+ 30). 22h to 24h Irregular flat-crested wave in Dec. (— 8′).

4d 0h to 1½h Wave in N.F. (+ 30). 0¾h Sharp decrease in Dec. (— 4′). 3h to 4¼h Wave in Dec. (+ 7′). 3¾h to 5h Wave in N.F. (+ 25). 22h to 23¼h Wave in Dec. (+ 5′). 22¼h to 23½h Truncated wave in N.F. (+ 23).

5d 3h to 4½h Wave in N.F. (+ 28). 3¾h to 4¼h Wave in Dec. (— 4′). 4¾h to 6½h Wave in N.F. (+ 28).

9d 23½h to 10d 0¼h Wave in Dec. (+ 7′). Decrease in V.F. (— 14).

11d 0h to 1½h Wave in N.F. (+ 22).

12d 22½h Sharp increase in N.F. (+ 23).

13d 3h to 3¼h Increase in Dec. (+ 4′).

14d 16h to 17h Wave in N.F. (+ 23), followed till 17¾h by an increase (+ 36). 19¼h to 20¾h Two successive waves in N.F. (— 25, — 27). 20h to 22h Wave in Dec. (— 11′), steep at commencement, with wave (+ 4′) superposed from 20½h to 21¼h.

16d 5¾h Sharp decrease in Dec. (— 3′), followed till 8h by a serrated wave (+ 8′). 6¼h Sharp decrease in N.F. (— 23). 12½h to 14h Double wave in N.F. (— 24, + 20).

17d 1½h to 3h Slow wave in Dec. (— 4′). 3¼h to 4½h Wave in N.F. (— 25).

18d 0h to 0½h Wave in Dec. (+ 3′). 16½h to 17½h Two successive waves in N.F. (+ 30, + 22).

19d 12¾h to 13h Sudden wave in V.F. (+ 25).

21d 15¾h to 16h Waves in Dec. (+ 3′) and N.F. (+ 40) both very steep at commencement.

22d 14¼h to 15¼h Wave in N.F. (+22), followed till 17¼h by an irregular truncated wave (+ 43) with small waves superposed, followed till 18½h by a wave (+ 36) steep at end. 17h to 18½h Slow wave in Dec. (— 4′).

26d 7¼h to 10¾h Loss of Dec. and N.F. registers. 12h to 14½h Irregular serrated double wave in N.F. (— 25, + 23).

27d 14¼h to 15½h Truncated wave in N.F. (+ 30). 20½h to 21¾h Truncated wave in N.F. (+ 28). 21h to 22½h Wave in Dec. (— 6′).

28d 0½h to 1½h Truncated wave in Dec. (+ 3′). 8h to 8¾h Decrease in N.F. (— 35) continued till 11h by a wave (— 60). 16¼h to 16½h Increase in N.F. (+ 20). 18h to 20½h Truncated wave in N.F. (+ 35).

29d 1h to 2¾h Wave in N.F. (+ 25). 1¼h to 3h Wave in Dec. (— 5′). 4¾h to 6h Hollow-crested wave in Dec. (+ 6′). 4¾h to 5½h Wave in N.F. (+ 26). 6¼h to 7h Wave in Dec. (+ 3′). 11¼h to 12¾h Irregular wave in N.F. (— 27). 16¾h to 18½h Flat-crested wave in N.F. (— 25). 20½h Decrease in Dec. (— 4′). 20½h to 21h Wave in N.F. (+ 20). 22¾h to 23¾h Wave in N.F. (+ 25). 29d 23h to 30d 0¼h Irregular wave in Dec. (— 5′).

30d 14h to 19h Wave in V.F. (+ 27). 15½h to 16½h Wave in N.F. (+ 23).

June

3d 22½h to 4d 3h Slow wave in Dec. (— 10′) with two waves (— 3′, — 3′) superposed from 3d 23½h to 4d 0¼h and 4d 0¼h to 1½h.

4d 0h to 2h Double wave in N.F. (+ 23, — 21). 0h to 3¾h Irregular wave in V.F. (— 15). 5h to 5½h Wave in Dec. (+ 3′).

6d 17¼h Sudden increase in N.F. (+ 20). 18¼h to 18½h Sharp serrated wave in N.F. (+ 22). 21h Sharp increase in N.F. (+ 21).

7d 9¾h to 10¼h Wave in N.F. (+20), followed by small sharp fluctuations. 12¾h to 13h Sharp wave in N.F. (+21), followed till 14½h by an irregular wave (+30) with sharp superposed fluctuations, followed till 14¾h by a sharp increase (+ 48). 15¼h to 21½h Serrated wave in V.F. (+33). 16½h to 17h Wave in N.F. (+ 37), steep at commencement. 17½h to 18½h Rounded wave in Dec. (— 3′). 19¼h to 19¾h Sharp wave in N.F. (— 40). 20h to 20¼h Decrease in Dec. (— 6′). 20¼h to 20½h Sharp wave in N.F. (— 30). 21¼h to 22¾h Wave in Dec. (— 9′). 21¼h to 21¾h Decrease in N.F. (— 36). 22¾h to 23½h Irregular wave in N.F. (+ 26). 23h to 24h Double-crested wave in Dec. (— 6′).

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June

8d 1½h to 3h Irregular double-crested wave in Dec. (− 5′).

9d 22¾h to 10d 12h Loss of Dec. register. 9d 22¾h to 10d 21h Loss of N.F. register.

13d 10¾h to 14d 11¾h Loss of Dec. register. 13d 13¾h to 17½h Irregular triple wave in N.F. (− 44, + 43, − 41), the second portion double-crested, and the third triple-crested. 14½h to 24h Irregular wave in V.F. (+ 60). 13d 23½h to 14h 0¼h Wave in N.F. (+ 28).

15d 14½h to 15¼h Wave in N.F. (+ 24).

16d 2h to 3½h Double wave in Dec. (+ 4′, − 3′). 16¼h to 17½h Wave in N.F. (− 29).

17d 8¼h to 8¾h Wave in Dec. (− 3′).

23d 0¾h to 2h Irregular waves in Dec. (+ 5′) and N.F. (+ 25), the former double-crested. The latter triple-crested. 8h to 8½h Very sharp wave in Dec. (− 10′): sharp wave in N.F. (− 25). 12¼h to 13¼h Wave in N.F. (− 21). 17½h to 20h Irregular wave in N.F. (+ 60) followed till 21h by a wave (+ 32). 20h to 21h Wave in Dec. (− 5′). 22½h to 23½h Wave in Dec. (+ 7′): decrease in V.F. (− 30). 22¾h to 23¼h Wave in N.F. (− 25).

24d 2h to 3½h Double wave in Dec. (− 4′, + 4′). 24d 12h to 25d 12h. *See* Plate II.

28d 1¾h to 2¼h Decrease in Dec. (−5′). 3h to 4h Wave in N.F. (− 20). 3½h Increase in Dec. (+ 3′). 28d 23½h to 29d 0½h Wave in Dec. (+ 4′).

29d 0h to 3h Wave in V.F. (− 14). 14¾h to 15h Increase in N.F. (+ 21). 22¾h to 24h Wave in N.F. (+ 20).

July

1d 17h to 18¼h Wave in N.F. (+ 25).

2d 2h to 3½h Wave in Dec. (+ 5′). 2½h to 3h Increase in N.F. (+ 20). 3¾h to 4h Wave in Dec. (+ 4′) very steep at commencement. 3¾h to 6¾h Wave in N.F. (+ 43). 4h to 5¼h. Wave in Dec. (− 6′). 6¾h to 7¾h Irregular wave in Dec. (+ 4′). 15¼h to 15¾h Three successive sharp waves in N.F. (− 20, − 25, − 28), the third double-crested. 16½h to 17h Truncated wave in N.F. (+ 27), followed till 18¼h by sharp irregular double wave (+ 25, − 63). 17h to 17½h Irregular decrease in Dec. (− 7′). 18¼h to 18½h Wave in N.F. (− 20). 18¾h to 19¼h Sharp double wave in N.F. (+ 20, − 20).

3d 5½h to 6½h Two successive waves in Dec. (− 4.′, − 5′). 7h to 8h Very irregular double wave in Dec. (− 7′, + 6′), with fluctuations superposed on the first movement till 7¾h, very steep for remainder. 17¼h to 18h Wave in N.F. (+ 22).

7d 12½h to 14¼h Irregular wave in N.F. (− 44). 15¾h to 16h Shārp wave in N.F. (+ 24). 16¼h to 17½h Irregular triple-crested wave in N.F. (− 20).

10d 14½h to 15¾h Wave in N.F. (− 28).

11d 1¼h to 1½h Serrated increase in Dec. (+ 3′), followed till 2h by a decrease (− 7′). 9½h to 10h Wave in Dec. (− 3′). 16¼h to 17¾h Double-crested wave in N.F. (+ 27). 18h to 20½h Irregular wave in N.F. (+ 45).

12d 12h to 13½h Truncated wave in N.F. (− 23). 14½h to 15¼h Wave in N.F. (+ 21). 16h to 17¾h Irregular double-crested wave in N.F. (+ 36). 18h to 18¾h Increase in N.F. (+ 39).

13d 0½h Sudden increase in N.F. (+ 30). 0¾h to 3¼h Irregular double-crested wave in Dec. (− 6′). 4h to 6h Irregular wave in Dec. (− 6′). 6½h to 7½h Wave in N.F. (− 25). 12½h to 13h Wave in N.F. (+ 22). 13h to 13¾h Double crested wave in N.F. (− 25), continued till 14h by an increase (+ 27). 13h to 20½h Wave in V.F. (+ 130) with superposed fluctuations. 16h to 17h Sharp double waves in Dec. (− 6′, + 4′) and N.F. (+ 50, − 25). 19¾h to 21h Double wave in N.F. (+ 40, − 26), the second portion double-crested. 20¼h to 21h Sharp double-crested wave in Dec. (+ 10′). 23¼h to 24h Sharp movements in Dec. (+ 5′, − 10′). 23¼h to 23¾h Sharp wave in N.F. (+ 30). 23½h to 23¾h Decrease in V.F. (− 18)

15d 13½h to 14½h Wave in N.F. (− 30).

21d 17¼h to 18h Increase in N.F. (+ 50). 20h Decrease in N.F. (− 30). 21h to 22¾h Double wave in N.F. (− 25, + 45). 21¾ to 23¼ Wave in V.F. (− 21). 22½h to 23½h Wave in Dec. (− 11′).

22d 0h to 0¼h Decrease in Dec. (− 6′), 3h to 4¼h Wave in Dec. (− 8′): double wave in N.F. (+ 24, − 25), the first portion truncated.

25d 17h to 17¾h Wave in N.F. (+ 23).

26d 21h to 22h Wave in N.F. (+ 20).

27d 14h Sudden increase in Dec. (+ 3′) and N.F. (+ 35). 20¾h to 21½h Wave in Dec. (− 4′). 23¼h to 23¾h Wave in Dec. (+ 4′). 23¼h to 23½h Sharp double-crested wave in N.F. (+ 22). 27d 23¼h to 28d 1h Wave in V.F. (− 15). 27d 23¾h to 28d 0¼h Double-crested wave in N.F. (+ 20).

28d 0h to 0½h Decrease in Dec (− 5′) with sharp superposed fluctuations. 0¼h Sharp decrease in N.F. (− 30). 18¾h to 19½h Two successive sharp waves in N.F. (+ 34, + 28). 20¼h to 20¾h Decrease in Dec. (− 8′). 20½h to 22h Slow wave in N.F. (+ 25). 21¼h to 22h Truncated wave in Dec. (+ 5′). 28d 23¾h to 29d 1h Wave in Dec. (+ 8′). 28d 23¾h to 29d 0¼h Wave in N.F. (+ 25).

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July.

29d 0h to 2¼h Wave in V.F. (— 20). 1¼h to 5h Irregular wave in Dec. (— 11′), with sharp wave (+ 9′) superposed from 3h to 3½h. 1¼h to 2¼h Wave in N.F. (—) 3h to 5½h Irregular double wave in N.F. (+45,—20). 3¼h to 3½h Decrease in V.F. (— 18). 5¼h to 6¼h Wave in Dec. (— 4′). 7h to 7¾h Decrease in N.F. (— 45). 11¾h to 13½h Irregular truncated wave in N.F. (+ 50).

30d 1½h to 2¼h Wave in Dec. (+ 3′). 14½h to 16¼h Irregular wave in N.F. (+ 30). 20h to 21¼h Two successive waves in N.F. (+ 28, + 30), the second very irregular.

31d 9¼h to 9½h Sharp wave in Dec. (— 3′). 13¼h to 13½h. Sharp decrease in N.F. (— 28). 13½h to 21½h Wave in V.F. (+ 133) with small wave (— 14) superposed from 16½h to 17½h. 14¼h to 15¼h Two waves separated by a triple wave in Dec. (+ 3′, + 4′, — 3′, + 3′, + 4′). 14¾h to 14¾h Wave and double wave in N.F. (+ 28, + 28, — 28). 15¼h to 15¾h Sharp double wave in Dec. (+ 5′, — 8′). 15½h Very sharp wave in N.F. (— 30). 15¾h to 16h Wave in N.F. (+ 20), followed till 16½h by a sharp wave (+ 60). 16h to 16¾h Irregular triple wave in Dec. (— 4′, + 4′, — 4′), followed till 17½h by irregular movements (—3′,+8′,—14′). 16¾h to 17h Sharp increase in N.F. (+40). 17¼h to 17½h Sharp decrease in N.F. (— 88), followed till 18h by a wave (+ 29). 18¼h to 19½h Double-crested wave in N.F. (—36). 19¾h to 20½h Irregular double wave in N.F. (+ 30, — 30). 20h to 20¾h Wave in Dec. (— 4′). 22¾h to 23¼h Very sharp wave in N.F. (+ 46). 23¼h to 23½h Decrease in Dec. (— 6′).

August

1d 0¾h to 2½h Irregular wave in Dec. (+ 9′). 9¾h to 3½h Irregular double wave in N.F. (— 20, + 50). 1¼h to 4h Wave in V.F. (— 27). 19½h to 20¾h Double-crested wave in Dec. (— 5′).

2d 22h to 23h Wave in Dec. (+ 3′).

3d 0¾h to 1¼h Decrease in N.F. (— 28). 1h to 2h Wave in Dec.(+ 7′).

8d 2¼h to 3½h Wave in N.F. (— 27). 2½h to 4¼h Wave in Dec. (+ 10′). 3h to 4¾h Wave in V.F. (— 14).

8d 10½h to 9d 11h Loss of V.F. register. 8d 23¼h to 9d 0¼h Wave in Dec. (— 4′).

9d 4h to 10d 4h. *See* Plate II.

10d 7h to 9h Serrated wave in N.F. (— 27). 12¾h Sharp increase in N.F. (+ 26). 18¾h to 19½h Wave in N.F. (+ 22).

11d 6h to 7½h Wave in N.F. (— 21).

12d 23¼h to 13d 1½h Wave in N.F. (+ 26). 12d 23¾h to 13d 0½h Decrease in Dec. (— 6′).

13d 13½h to 13¾h Sharp serrated increase in N.F. (+ 26). 13d 14h to 15d 14h. *See* Plate II.

15d 17¼h to 17¾h Increase in N.F. (+ 32). 19h to 21h Two successive waves in Dec. (— 5′, — 5′) and N.F. (+ 44, + 20), the first double-crested.

16d 0¼h to 0¾h Increase in N.F. (+ 23). 13½h to 15¼h Irregular wave in N.F. (— 30). 17h to 18½h Wave in N.F. (+ 25). 19h to 20½h Wave in Dec. (— 7′).

17d 3½h to 5h Slow hollow-crested wave in Dec. (— 4′).

18d 1¼h to 2h Wave in Dec. (+ 3′).

19d 0h to 0½h Wave in Dec. (+ 3′).

20d 8½h Very sharp movements in Dec. (+ 2′, — 5′). 11¼h to 12h Irregular wave in N.F. (— 25). 12h to 13¾h Irregular flat-crested wave in Dec. (+ 6′). 12¾h to 14½h Two successive truncated waves in N.F. (— 25, — 27). 15¾h to 16¾h Serrated double-crested wave in N.F. (+ 28). 21½h to 22¾h Irregular wave in N.F. (+ 23). 23¾h to 24h Sharp waves in Dec. (— 6′) and N.F. (— 38) in V.F. small.

21d 0h to 3½h Irregular decrease in V.F. (— 32). 0¼h to 3¼h Triple-crested wave in Dec. (— 10′). 0¼h to 1½h Irregular wave in N.F. (+ 36). 4h to 6h Slow wave in N.F. (+ 32). 5¼h to 5¾h Wave in Dec. (— 5′). 21d 6h to 22d 6h. *See* Plate III.

22d 22h to 22¼h Sharp increase in Dec. (+6′), followed till 23h by a sharp wave (— 14′). 22¼h to 23h Sharp double wave in N.F. (— 24, + 36), followed till 23¼h by an increase (+ 28). 22¼h to 23½h Irregular decrease in V.F. (— 33), followed by slow fluctuations. 22d 23¾h to 23d 0¾h Irregular wave in Dec. (— 5′).

23d 0½h to 2h Double-crested wave in N.F. (— 30). 1h to 2h Irregular wave in Dec. (+ 6′). 12½h to 16½h Increase in V.F. (+ 65), followed till 18h by an irregular wave (+ 45). 16¾h to 18½h Sharp wave in N.F. (+136), with sharp waves (—30, —70), superposed at 17¾h and 18h. 17¼h to 17½h Sharp wave in Dec. (— 6′). 17¾h to 18h Sharp wave in Dec. (+ 7′), followed till 18½h by a small wave (+ 3′). 18½h to 21¾h Decrease in V.F. (— 50). 19¼h to 19½h Wave in N.F. (+ 40), very steep at commencement. Small waves in Dec. 21h to 21¾h waves in Dec. (— 6′) and N.F. (+ 36).

24d 2½h Sharp increase in Dec. (+ 3′). 9h to 10½h Wave in N.F. (— 24).

25d 16¼h to 16¾h Irregular increase in N.F. (+ 28). 19½h to 19¾h Sharp movements in N.F. (+ 66, — 32). 20h to 21h Irregular wave in Dec. (— 7′). 20¼h to 23¼h Four successive irregular serrated waves in N.F. (+40, +28, +30, +23). 22¼h to 23h Wave in Dec. (— 5′). 25d 23h to 26d 1½h Wave in V.F. (— 13).

1917

August

26d 1¾h Sudden increase in Dec. (+ 10′). 1¾h to 4h Irregular double wave in N.F. (+ 63, − 50), followed till 5h by two successive waves (− 20, − 20). 1¾h to 5h Truncated wave in V.F. (− 75), steep at commencement with sharp wave (− 18), superposed from 2h to 2½h. 2¼h to 2½h Sharp decrease in Dec. (− 23′), followed till 3h by a truncated wave (+ 13′) with superposed fluctuations. 3¼h to 3¾h Wave in Dec. (+ 4′). 4h to 4¾h Two successive waves in Dec. (+ 3′, + 5′). 21h to 22h Wave in Dec. (− 5′), followed till 23¼h by a double-crested wave (− 4′). 22h to 22½h Wave in N.F. (+ 21).

27d 9h to 28d 9h. Loss of V.F. register.

September

1d 14h to 16h Wave in N.F. (+ 27).

2d 13¼h to 15¼h Irregular double waves in Dec. (+ 5, − 3) and N.F. (+ 20, − 30). 21½h to 22¼h Waves in Dec. (− 4′) and N.F. (− 20).

3d 0½h to 1½h Wave in Dec. (+ 7′). 1h to 1¾h Decrease in V.F. (− 20). 3½h to 4½h Wave in Dec. (+ 8′). 3½h to 4¼h Wave in N.F. (− 26). 11¼h to 12h Wave in Dec. (− 3′).

4d 0h to 1½h Wave in Dec. (+ 12′) steep at commencement. 0½h to 2½h Wave in N.F. (+ 22). 0½h to 0¾h Decrease in V.F. (− 14). 22¾h to 23¼h Serrated wave in Dec. (+ 3′). 22¾h to 23½h Wave in N.F. (+ 28).

5d 6¼h Very sharp movements in Dec. (− 3′, + 5′, −4′) followed till 7¾h by an irregular wave (+ 17′). 6¼h Very sharp movements in N.F. (+ 30, − 60). followed till 7h by an irregular wave (− 50). 8h to 9½h Serrated decrease in N.F. (− 110). 12¼h to 13h Wave in Dec. (+ 4′). 12¼h to 13½h Irregular increase in N.F. (+ 70). 16h to 19h Irregular double wave in N.F. (− 25, + 27), both portions double-crested. 16¾h to 20½h Irregular flat-crested wave in V.F. (+30). 17h to 18h Wave in Dec. (−4′). 19¼h to 20h Wave in Dec. (+ 4′) continued till 20¼h by a decrease (− 10′). 20¼h to 21¼h Sharp triple wave in N.F. (+ 60, − 34, + 56). 20½h to 21½h Sharp triple wave in Dec. (+ 9′, − 6′, + 9′) followed till 22½h by a double wave (+ 7′, − 4′). 21h to 22¼h Decrease in V.F. (− 25). 21½h to 21¾h Wave in N.F. (+ 24) continued till 22h by a decrease (− 24). 23h to 24h Double wave in Dec. (− 3′, + 5′) : wave in N.F. (− 25) with sharp wave (− 18) superposed at 23½h. 23h Irregular wave in V.F. (− 12) followed till 6d 0¾h by a small irregular double wave.

6d 0¼h to 1¼h Irregular wave in Dec. (+ 4′). 16h to 17¼h Wave in N.F. (+ 20).

7d 20½h to 21¼h Wave in Dec. (− 4′).

8d 22¾h to 9h 0½h Irregular double wave in Dec. (+ 10′, − 4′). 8d 22¾h to 9d 1½h Wave in V.F. (− 29), the first movement steep, the next slow and oscillatory. 8d 23¼h to 9d 0¼h Wave in N.F. (− 36).

9d 1¾h to 2¾h Wave in Dec. (− 4′). 3½h to 4½h Wave in Dec. (+ 6′). 6¾h to 8¼h Serrated wave in Dec. (+ 6′).

12d 21¾h to 23½h Wave in Dec. (− 6′) followed till 13d 0½h by a decrease (− 8′). 22¼h to 24h Wave in N.F. (− 32).

16d 17¾h to 18¼h Wave in Dec. (− 5′).

17d 20h to 21h Double wave in Dec. (+ 3′, − 3′). 20¾h to 21h Increase in N.F. (+ 22).

18d 22h Sharp decrease in Dec. (− 5′). 22h to 23h Truncated wave in N.F. (+ 27). 23½h to 23¾h Increase in Dec. (+ 4′).

19d 0½h to 2½h Wave in Dec. (+ 10′), very steep at commencement, with slow return. 0½h to 1h Decrease in V.F. (− 18). 3¼h to 6¼h Very irregular double-crested wave in Dec. (+ 7′).

20d 20½h to 21½h Sharp wave in Dec. (− 11′). 20¾h to 21¼h Wave in N.F. (+ 32). 22½ to 24h Double-crested wave in Dec. (+ 5′) : triple-crested wave in N.F. (− 25).

21d 1½h to 3½h Wave in Dec. (− 5′). 15¾h to 16¾h Wave in Dec. (− 4′).

22d 1½h to 4h Double wave in Dec. (+ 5′, −7′). 1¾h to 3¼h Wave in N.F. (+ 30). 1¾h to 2½h Decrease in V.F. (− 18).

28d 9h to 9¼h Sharp double wave in Dec. (− 3′, + 4′). 9¼h Sudden decrease in N.F. (− 35).

30d 0¼h to 1h Wave in Dec. (+ 4′). 1¾h to 3h Truncated wave in N.F. (− 22). 2¼h to 4½h Double wave in Dec. (+ 4′, − 5′). 11½h to 14h Wave in V.F. (+ 14). 16½h to 17¾h Wave in N.F. (+ 25). 21½h to 22h Wave in Dec. (− 3′). 21½h to 21¾h Decrease in N.F. (− 20) followed till 23½h by an irregular wave (+ 46). 22h to 23h Decrease in V.F. (− 18). 22¼h to 23h Wave in Dec. (− 6′).

October

1d 17½h to 18¾h Wave in N.F. (− 22). 20½h to 22h Wave in Dec. (− 11′). 20¾h to 21h Sharp increase in N.F. (+ 27).

2d 4h to 5¼h Wave in Dec. (+ 8′). 17h to 19¼h Irregular wave in Dec. (− 10′). 17¼h to 19h Irregular double wave in N.F. (− 28, + 31). 17¾h to 18h Increase in V.F. (+ 14). 20¾h to 22¼h Irregular waves in Dec. (− 11′) and N.F. (+ 44).

1917.

October

3d 0½h to 1½h Wave in Dec. (+ 5′): decrease in V.F. (− 17). 7¾h to 8¾h Serrated wave in Dec. (+ 3′). 8½h to 9¼h wave in N.F. (+ 20). 19½h to 21¾h Irregular wave in Dec. (− 18′). 19¾h to 22¾h Very irregular double wave in N.F. (+ 42, − 33). 22½h Sharp decrease in Dec. (− 5′) continued till 24h by a sharp double-crested wave (− 10′). 22½h to 23h Decrease in V.F. (− 17). 23h to 24h Sharp movements in N.F. (+ 24, − 40, + 30).

4d 0½h to 3¾h Irregular double wave in Dec. (− 6′, + 5′), the first portion double-crested, followed till 6h by an irregular wave (+ 8′). 1¼h to 2¼h Wave in N.F. (+ 25). 1½h to 5h Slow irregular wave in V.F. (− 20). 3¾h to 5¼h Wave in N.F. (− 40)

5d 0½h to 1½h Wave in Dec. (− 4′). 21½h to 21¾h Sharp decrease in Dec. (− 12′) followed till 22h by partial return (+ 4′). 23½h to 24h Sharp wave in Dec. (+ 5′).

6d 1h to 2h Wave in Dec. (− 6′). 2¾h to 3½h Wave in Dec. (+ 6′).

8d 12¼h to 13h Flat-crested wave in Dec. (+ 4′). 17¾h to 18h Increase in Dec. (+ 5′). 18½h to 20h Wave in Dec. (− 6′). 18½h to 19½h Wave in N.F. (+ 23).

9d 23½h to 10d 0½h Wave in Dec. (− 3′).

10d 3h to 5h Irregular wave in Dec. (+ 6′).

11d 3h to 4¾h Wave in N.F. (− 36). 3¾h to 5h Wave in Dec. (+ 8′). 4h to 4½h Decrease in V.F. (− 14). 17¼h to 19½h Truncated wave in Dec. (− 12′). 17½h to 18¾h Truncated wave in N.F. (+ 35). 21¾h to 22½h Wave in N.F. (+ 30).

13d 15½h to 16½h Two successive sharp waves in Dec. (+ 4′, + 5′) and N.F. (+ 23, + 30) each with sharp superposed fluctuations. 16¾h Very sharp increase in Dec. (+ 4′) and N.F. (+ 40), followed till 18h by very sharp fluctuations. 18h to 19¼h Irregular serrated wave in N.F. (− 40), followed till 21h by a very irregular wave (− 45). 18¼h to 19½h Sharp wave in Dec. (− 11′). 18¾h to 19h Increase in V.F. (+ 19). 20½h to 22h Irregular wave in Dec. (− 8′) followed till 22¼h by a sharp wave (− 7′). 21¾h to 23¼h Two successive sharp waves in N.F. (− 37, − 45). 23¼h to 24h Truncated wave in Dec. (− 4′).

14d 0½h to 2h Slow wave in Dec. (−6) followed till 4¼h by a sharper wave (− 8′), with sharp fluctuations superposed after 3¾h. 7¼h Sharp waves in Dec. (− 4′) and N.F. (− 20). 8½h to 9h Wave in Dec. (− 5′) with superposed fluctuations. 14d 10½h to 15d 10½h Loss of Dec. and N.F. registers.

17d 22h to 23h Wave in Dec. (+ 4′).

23d 12¼h to 12¾h Wave in Dec. (+ 3′). 14h to 14¾h Wave in Dec. (+ 4′), steep at commencement. 16½h to 18¼h Truncated wave in Dec. (− 8′). 17h to 17¼h Increase in N.F. (+ 25).

25d 1¼h to 1½h Decrease in Dec. (− 5′). 4h to 4½h Increase in Dec. (+ 5′). 6¾h to 8¼h Truncated wave in Dec. (+ 9′). 13½h to 15h Wave in Dec. (+ 5′).

27d 9¾h to 11h Oscillatory increase in Dec. (+ 8′), followed till 13½h by an irregular double-crested wave (+ 9′). 11½h to 14h Flat-crested wave in N.F. (− 46). 11¾h to 12½h Increase in V.F. (+ 22). 21h to 22½h Irregular triple-crested wave in N.F. (− 35), followed till 22¾h by a sharp decrease (− 22). 21¾h to 22¾h Irregular wave in Dec. (− 10′), steep at end, followed till 24h by an irregular double wave (− 14′, + 6′), the middle portion very steep. 23¼h to 23½h Steep increase in N.F. (+ 98), followed till 23¾h by steep partial return (− 60). 23½h to 23¾h Sharp decrease in V.F. (− 50), followed till 29d 3½h by a slow wave (+ 32).

29d 0h to 0¼h Decrease in N.F. (− 30). 1¾h to 3½h Irregular double wave in Dec. (− 5′, + 4′). 2¾h to 3¼h Wave in N.F. (− 30). 7h to 7¾h Decrease in N.F. (− 35). 7¾h to 9h Serrated triple-crested wave in Dec. (+ 7′). 11¼h to 12½h Waves in Dec. (+ 6′) and N.F. (− 30). 15¾h to 16½h Irregular sharp decrease in Dec. (− 12′) continued till 18¼h by two successive sharp waves (−10′, − 8′). 16½h to 18½h Irregular wave in N.F. (+ 90) with sharp movements superposed (− 50) at 17¼h and (+ 23) at 17½h. 18½h to 18¾h Decrease in Dec. (− 4′): increase in N.F. (+ 20). 21¾h to 22¼h Wave in Dec. (+ 3′). 22¾h to 23¾h Double wave in Dec. (+ 4′, − 6′), 29d 22¾h to 30d 0¼h Irregular wave in N.F. (+ 63). 23h to 23¼h Decrease in V.F. (−18).

30d 0¾h to 3¼h Irregular triple wave in Dec. (− 5′, + 6′, − 5′). 1h to 4h Irregular wave in V.F. (− 22). 12¼h to 13¼h Wave in Dec. (+ 4′). 19¾h to 21h Two successive waves in N.F. (+ 28, + 44). 20h to 21h Sharp wave in Dec. (− 11′).

31d 1h to 4h Irregular wave in V.F. (− 12). 2h to 3¾h Wave in Dec. (− 8′). 14h to 15¼h Wave in N.F. (− 30). 14¼h to 15h Decrease in Dec. (− 7′). 19¾h to 21h Irregular wave in Dec. (− 10′). 20h to 21½h Irregular wave in N.F. (+ 41). 22½h to 23h Wave in Dec. (− 4′). 22½h to 24h Sharp wave in N.F. (+ 65). 23h to 23½h Decrease in V.F. (− 14).

November

1d 11¼h to 12¼h Wave in N.F. (− 28). 19½h to 20¼h Wave in Dec. (− 4′).

2d 16¼h to 17¾h Loss of Dec., N.F., and V.F. registers.

6d 1½h to 2½h Wave in Dec. (+ 5′). 20½h to 22h Wave in Dec. (− 4′).

11d 17½h to 18¾h Wave in Dec. (− 4′).

1917.

November

12d 8¼h to 10h Serrated wave in N.F. (− 48). 8½h to 10h Wave in Dec. (+ 6′). 11h to 11¼h Wave in Dec. (− 3′). 12¼h to 14h Wave in Dec. (− 5′). 13h to 15h Slow wave in N.F. (+ 30). 15¼h to 16¼h Two successive waves in Dec. (− 4′, − 4′), followed till 16½h by a very sharp wave (− 6′), followed till 17¾h by an irregular quadruple-crested wave (− 7′). 16¼h to 16¾h Very sharp double wave in N.F. (− 20, + 42), Sharp wave in V.F. (+ 13). 17h to 17½h Irregular wave in N.F. (− 26). 18h to 19h Very sharp movements in Dec. (− 12′, + 17′, − 15′). 18¼h to 19h Sharp wave in N.F. (+ 95), followed till 20h by a wave (+ 49) steep at commencement. 19¼h to 20¼h Irregular wave in Dec. (+ 6′). 19½h to 20h Decrease in V.F. (− 25). 20¾h to 22¾h Triple waves in Dec. (− 4′, + 4′, − 5′) and N.F. (+ 20, − 20, + 25), the former followed till 23¼h by a wave (− 4′). 12d 23h to 13d 0¼h Decrease in V.F. (− 24).

13d 22¾h to 23¼h Wave in N.F. (+ 24). 23¼h to 23½h Decrease in Dec. (− 6′), followed till 14d 2¼h by a flat-crested wave (+ 7′), followed till 4h by a double-crested wave (+ 11′). 2¼h to 3¼h Truncated wave in N.F. (+ 30), followed till 3½h by an increase (+ 20). 2½h to 3¼h Irregular decrease in V.F. (−22).

14d 13h to 13½h Wave in Dec. (+ 4′).

18d 23h to 19d 0½h Wave in N.F. (+ 23). 18d 23½h to 19d 0¾h Wave in Dec. (− 4′).

19d 1¼h to 1½h Sharp wave in N.F. (+ 20). 1½h to 2½h Wave in Dec. (− 5′). 12h to 12¾h Serrated wave in Dec. (− 4′).

20d 0¾h to 2h Wave in Dec. (+ 6′). 1h to 2h Decrease in V.F. (− 14). 4h to 5h Irregular wave in Dec. (+ 6′). 4¼h to 5¼h Wave in N.F. (+ 25). 16¼h to 18h Wave in Dec. (− 10′). 16¼h to 18¼h Wave in N.F. (+ 48).

25d 16h to 17¼h Wave in Dec. (+ 4′). 17½h to 18¼h Decrease in Dec. (− 7′). 18¼h to 18½h Increase in N.F. (+ 30). 19h to 21½h Irregular wave in N.F. (− 36). 19¼h to 21¾h Wave in Dec. (− 12′) 25d 23h to 26d 1¼h Wave in Dec. (− 8′). 25d 23h to 26d 1h Double-crested wave in N.F. (+ 48).

26d 2¾h to 5h Wave in Dec. (+ 9′). 8h to 9¼h Truncated wave in N.F. (− 22). 13h to 15½h Two successive irregular waves in Dec. (+ 5′, + 4′). 13½h to 14½h Truncated wave in N.F. (− 27). 19¼h to 20¾h Triple-crested wave in Dec. (− 8′). 20½h to 20¾h Decrease in N.F. (− 26). 22¼h to 24h Waves in Dec. (− 9), and N.F. (+ 40).

27d 0¾h to 2¼h Double wave in Dec. (+ 4′, − 5′) Truncated wave in N.F. (+ 29): wave in V.F. (− 15). 16½h to 17h Sharp decrease in Dec. (− 14′), followed till 19h by an oscillatory increase (+ 12′), followed till 20h by sharp movements (− 8′, + 3′, − 7′, + 5′). 17h to 18h Wave in N.F. (+ 37) steep at commencement. 19h to 20½h Truncated wave in N.F. (+ 36) with wave (+ 30) superposed from 19½h to 20h. 27d 20¼h to 28d 0¼h Slow wave in V.F. (+ 14). 27d 23h to 28d 1½h Double-crested wave in N.F. (+ 28).

28d 0h to 1¼h Wave in Dec. (− 7′). 18¾h to 20h Truncated waves in Dec. (− 8′) and N.F. (+ 22).

29d 16¾h to 18h Wave in Dec. (− 4′).

December

1d 18½h to 20h Wave in Dec. (− 4′). 1d 23 to 2d 0½h Flat-crested wave in Dec. (− 7′). 1d 23h to 2d 0¼h Wave in N.F. (+ 22).

2d 15¼h to 15½h Wave in Dec. (− 3′), followed till 17h by an irregular wave (− 7′). 16¼h to 16¾h Wave in N.F. (+ 20).

3d 12¼h to 13¾h Wave in N.F. (− 32). 12½h to 14½h Double wave in Dec. (+ 4′, − 6′). 20h to 22h Irregular wave in Dec. (− 10′). 22¼h to 23¼h Wave in N.F. (− 24).

4d 0h to 3h Wave in V.F. (− 19). 0¾h to 1¼h Wave in N.F. (+ 28). 1¼h to 3½h Irregular wave in Dec. (− 6′). 2½h to 4h Irregular wave in N.F. (− 24). 12½h to 13¼h Wave in Dec. (− 5′). 17¼h to 18½h Wave in Dec. (+ 4′). 17½h to 19h Wave in N.F. (− 30). 4d 22¾h to 5d 0¼h Wave in Dec. (− 7′).

5d 18½h to 19h Sharp movements in Dec. (− 7′, + 6′, − 5′), and N.F. (+ 48, − 32). 19½h to 20½h Wave in Dec. (+ 4′). 19½h to 20h Decrease in N.F. (− 27). 21¼h to 23h Double wave in Dec. (+ 7′, − 7′).

6d 0¾h to 1¼h Decrease in Dec. (− 4′), followed till 2½h by an increase (+ 9′).

8d 3h to 4½h Wave in Dec. (+ 7′). 3h to 4h Wave in N.F. (− 23). 3¾h to 4½h Decrease in V.F. (− 14). 13h to 14h Double-crested wave in Dec. (+ 4′). 13¼h to 14¾h Wave in N.F. (− 26). 16¾h to 19h Irregular double wave in N.F. (− 26, + 43), the second movement steep. 18h to 19h Steep wave in Dec. (− 12′), followed till 19½h by a domed wave (− 3′). 19h to 20¼h Double wave in N.F. (+ 20, − 22). 20¾h to 22h Truncated wave in Dec. (− 8′).

9d 0h to 2h Irregular double wave in Dec. (+ 4′, − 4′). 0¼h to 2h Wave in V.F. (− 12).

12d 13h to 14h Wave in Dec. (+ 3′).

14d 13½h to 15h Flat-crested wave in N.F. (− 32).

16d 8h to 17d 8h. *See* Plate III.

17d 12h to 14h Irregular truncated wave in N.F. (− 45).

1917.
December

18d 4¾h Very sharp waves in Dec. (+ 8′) and N.F. (+ 27). 9½h to 10h Very sharp fluctuations in N.F. followed till 10¾h by a serrated decrease(— 80), with partial return by 11h (+ 35). 9¾h to 10h. Two successive very sharp irregular waves in Dec. (+ 5′, + 5′). 11h Sharp increase in Dec. (+ 4′). 11¼h. to 12¼h Wave in Dec. (+ 4′). 14h to 17½h Wave in V.F. (+ 25). 14¼h to 15¼h Wave in N.F. (— 25). 14½h to 15¼h Decrease in Dec. (— 6′). 18h to 19¼h Wave in N.F. (— 24). 20h to 21½h Truncated wave in Dec. (— 5′). 18d 23¾h to 19d 0¾h Wave in N.F. (+ 25).

19d 0h to 1h Irregular decrease in V.F. (— 14). 17¾h to 18½h Waves in Dec. (— 4′) and N.F. (+ 20). 20¾h to 22¼h Double-crested wave in Dec. (— 9′). 21¼h to 21¾h Wave in N.F. (+ 27).

20d 11¾h to 13½h Loss of V.F. register.

20d 21½h to 22¼h Sharp wave in N.F. (+ 41). 22h to 22½h Wave in Dec. (— 3′).

24d 0h to 12h Loss of Dec. and N.F. registers.

25d 20½h to 22h Wave in Dec. (— 6′). 23¼h to 24h Two successive waves in Dec. (+ 4′, + 4′): wave in N.F. (+ 41): decrease in V.F. (— 18).

26d 15¼h to 17h Wave in N.F. (+ 29). 16h to 17½h Wave in Dec. (+ 5′). 17½h to 18½h Irregular wave in N.F. (+ 38). 18h Sharp wave in Dec. (+ 4′). 18½h to 22h Irregular wave in V.F. (+ 22). 18¾h to 19¼h Double wave in Dec. (+ 4′, — 2′): wave in N.F. (— 24). 20h to 20¾h Steep wave in Dec. (— 10′).

27d 19¾h to 21¼h Wave in Dec. (— 5′).

28d 11¾h to 29d 11¾h Loss of N.F. register.

EXPLANATION OF THE PLATES.

The magnetic motions figured on the Plates are those for days of disturbance selected by the International Committee—January 4d 5h to 5d 5h; February 15d 12h to 16d 12h; June 24d 12h to 25d 12h; August 9d 4h to 10d 4h; August 13d 14h to 15d 14h; August 21d 6h to 22d 6h; December 16d 8h to 17d 8h.

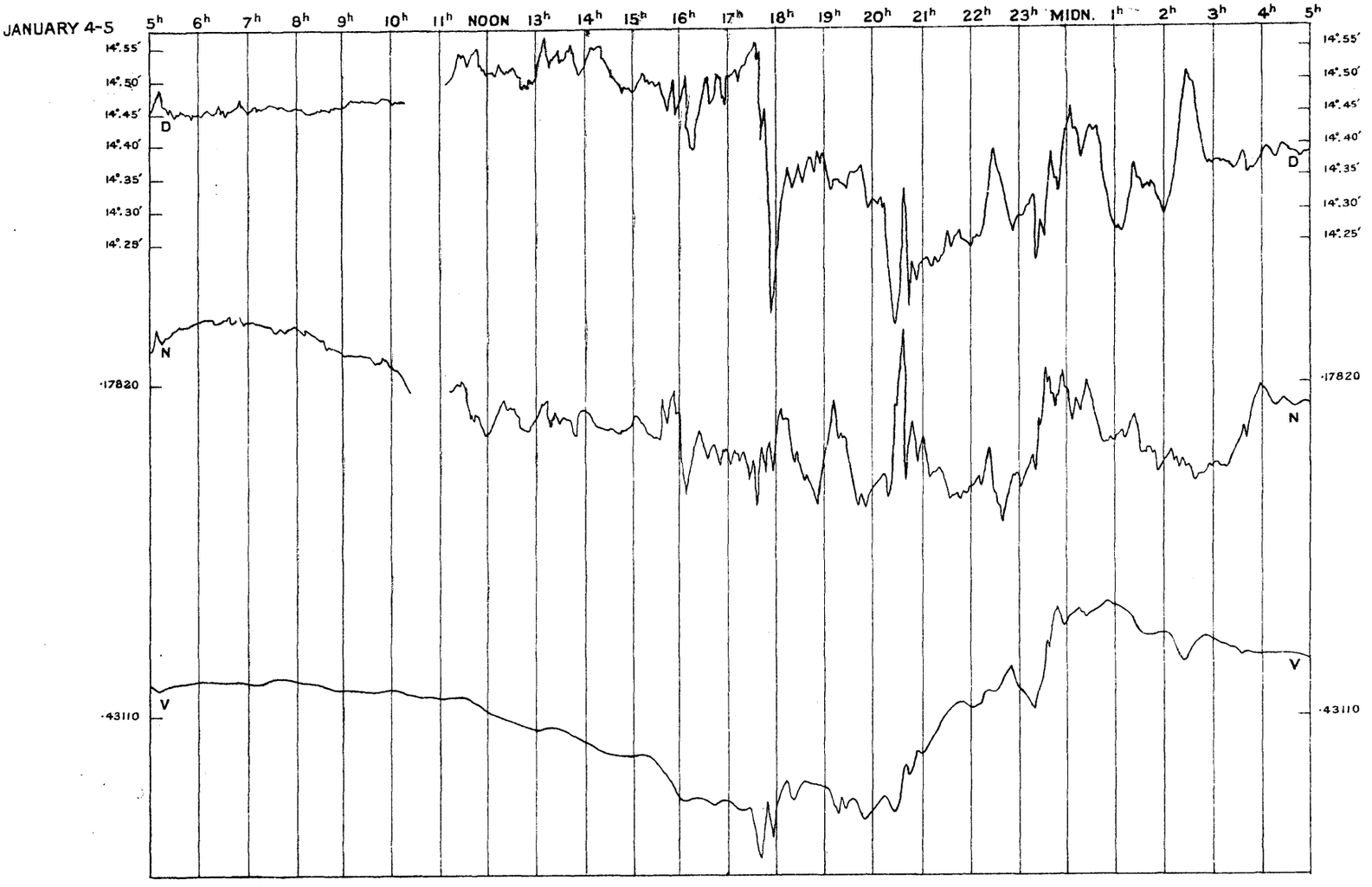
The time is Greenwich Civil Time (commencing at midnight, and counting the hours from 0 to 24).

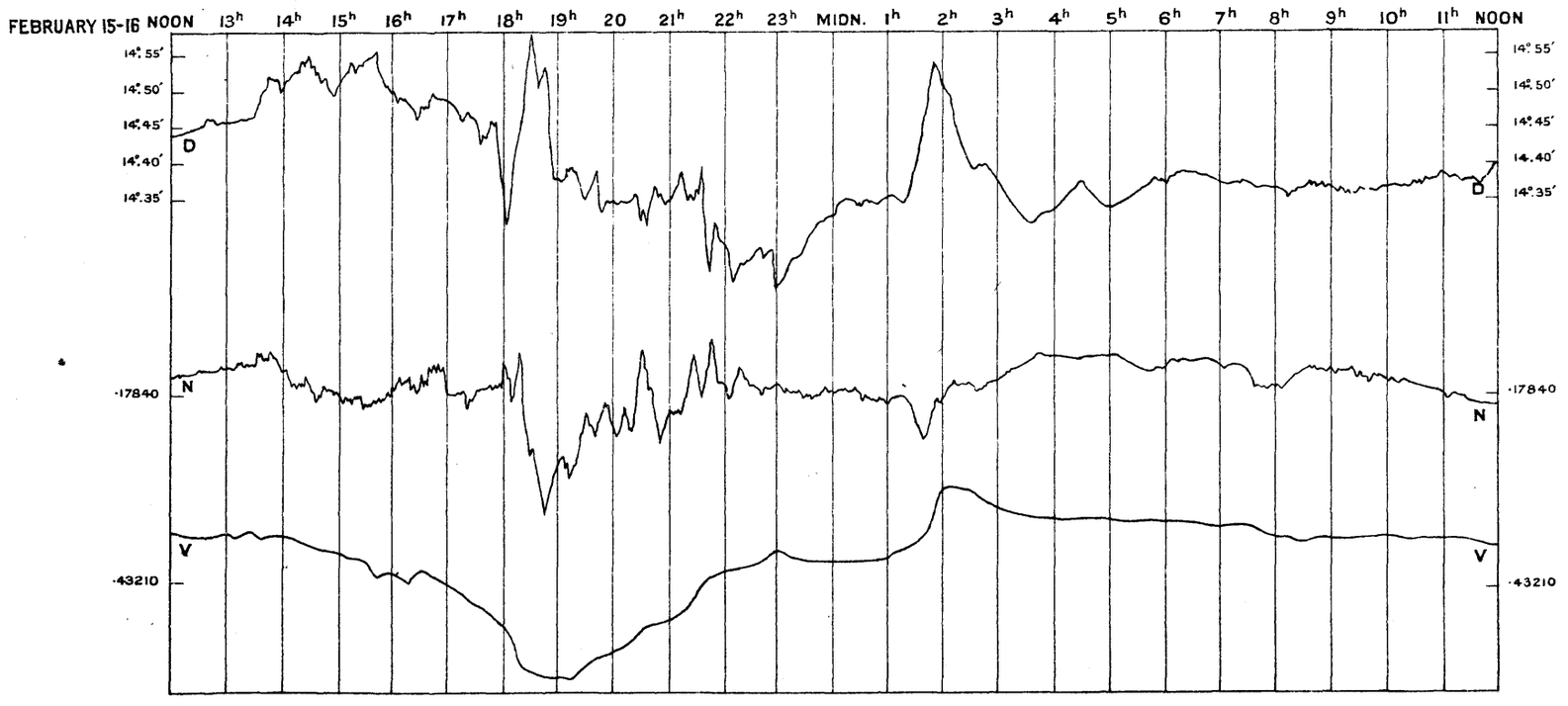
The magnetic declination, north force, and vertical force are indicated by the letters D., N., and V. respectively; the declination (west) is expressed in minutes of arc, the unit for north and vertical force is 1 γ (0·00001 C.G.S.), the corresponding scales being given on the sides of each diagram. 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 $0^{in.}\cdot69 = 17\cdot4^{mm.}$ in the declination curve, by $0^{in.}\cdot69 = 17\cdot5^{mm.}$ in the north force curve, and by $0^{in.}\cdot60 = 15\cdot3^{mm.}$ in the vertical force curve.

Upward motion indicates increase of declination, north force, and vertical force.

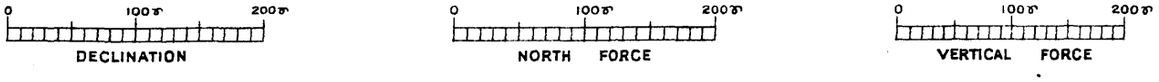
MAGNETIC DISTURBANCES RECORDED AT THE ROYAL OBSERVATORY, GREENWICH, 1917.

Plate I.





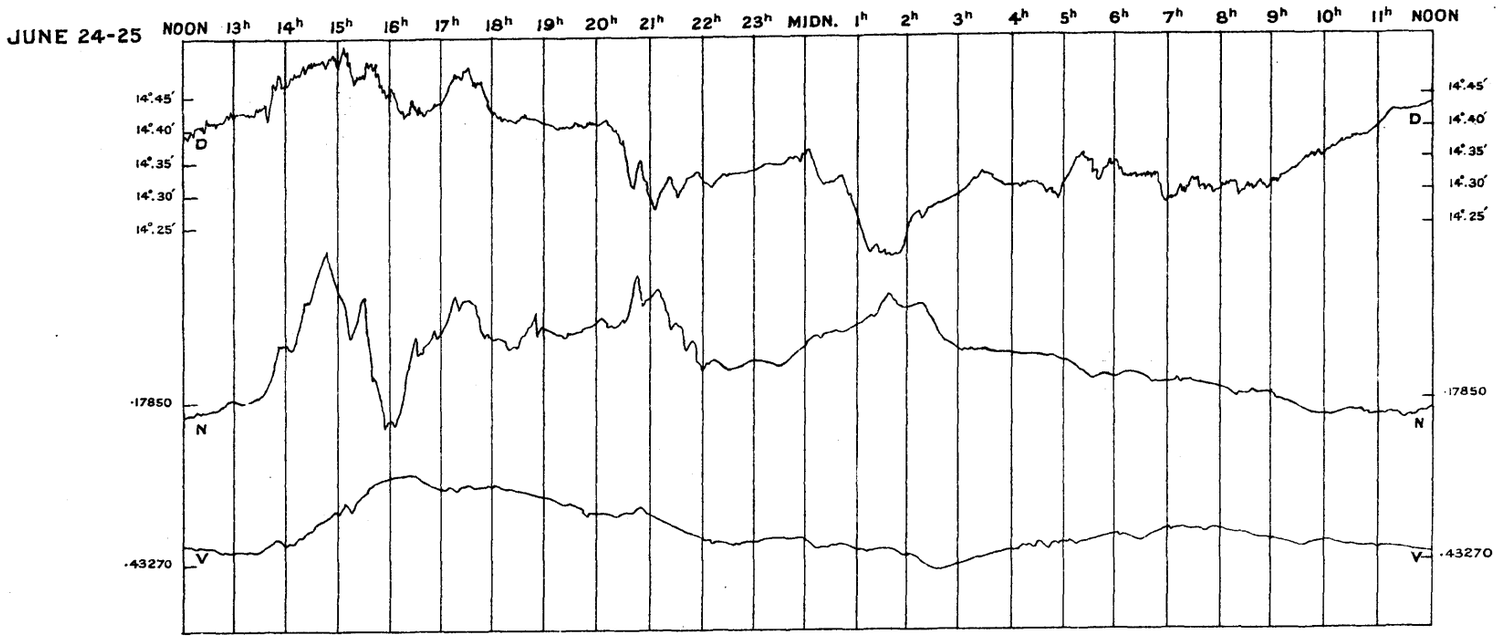
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.

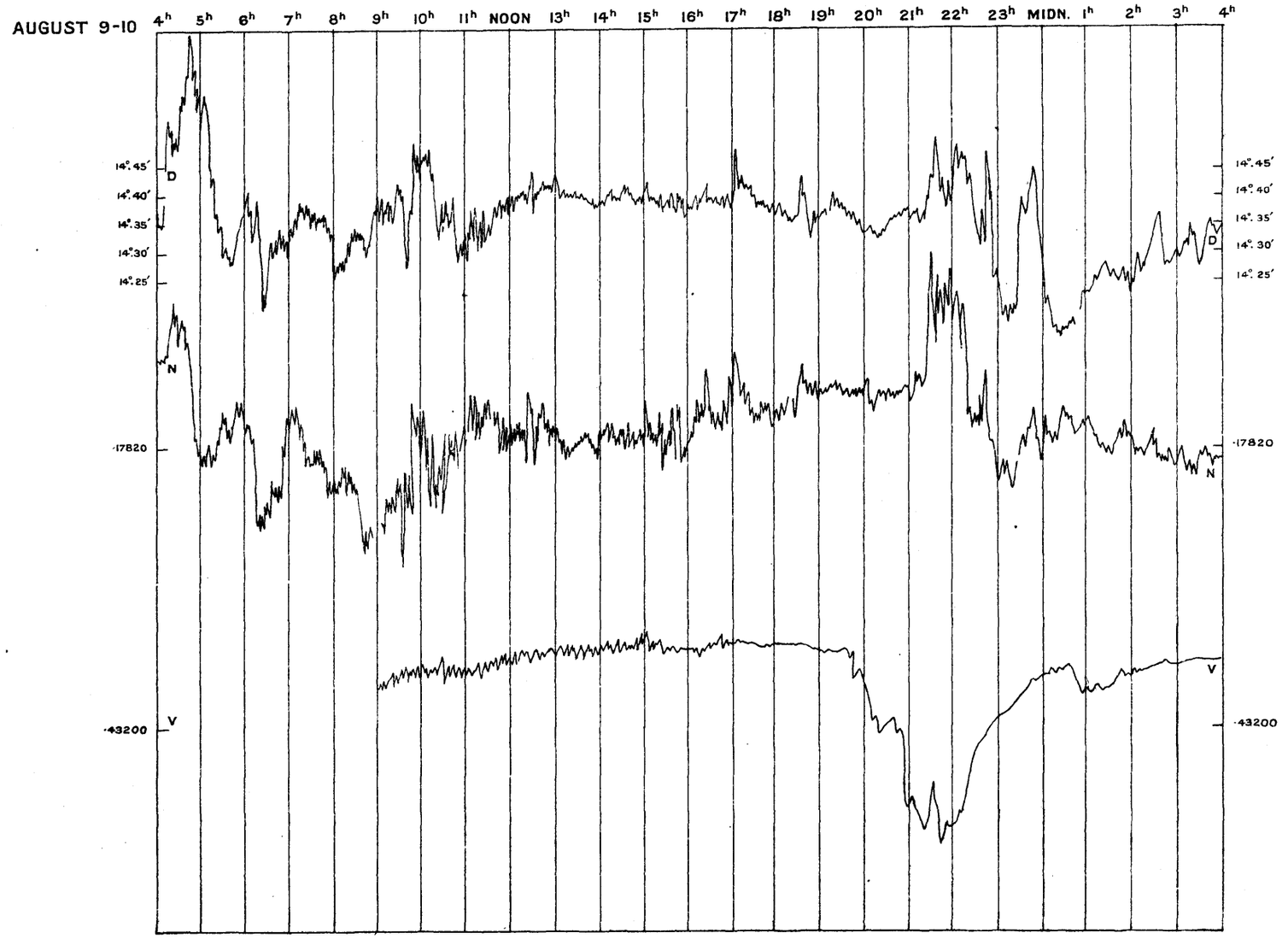


W.119.B. Wt.10482A/67-368. 500. 10. 21.

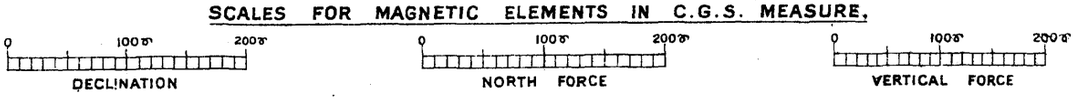
MAGNETIC DISTURBANCES RECORDED AT THE ROYAL OBSERVATORY, GREENWICH, 1917.

Plate II.



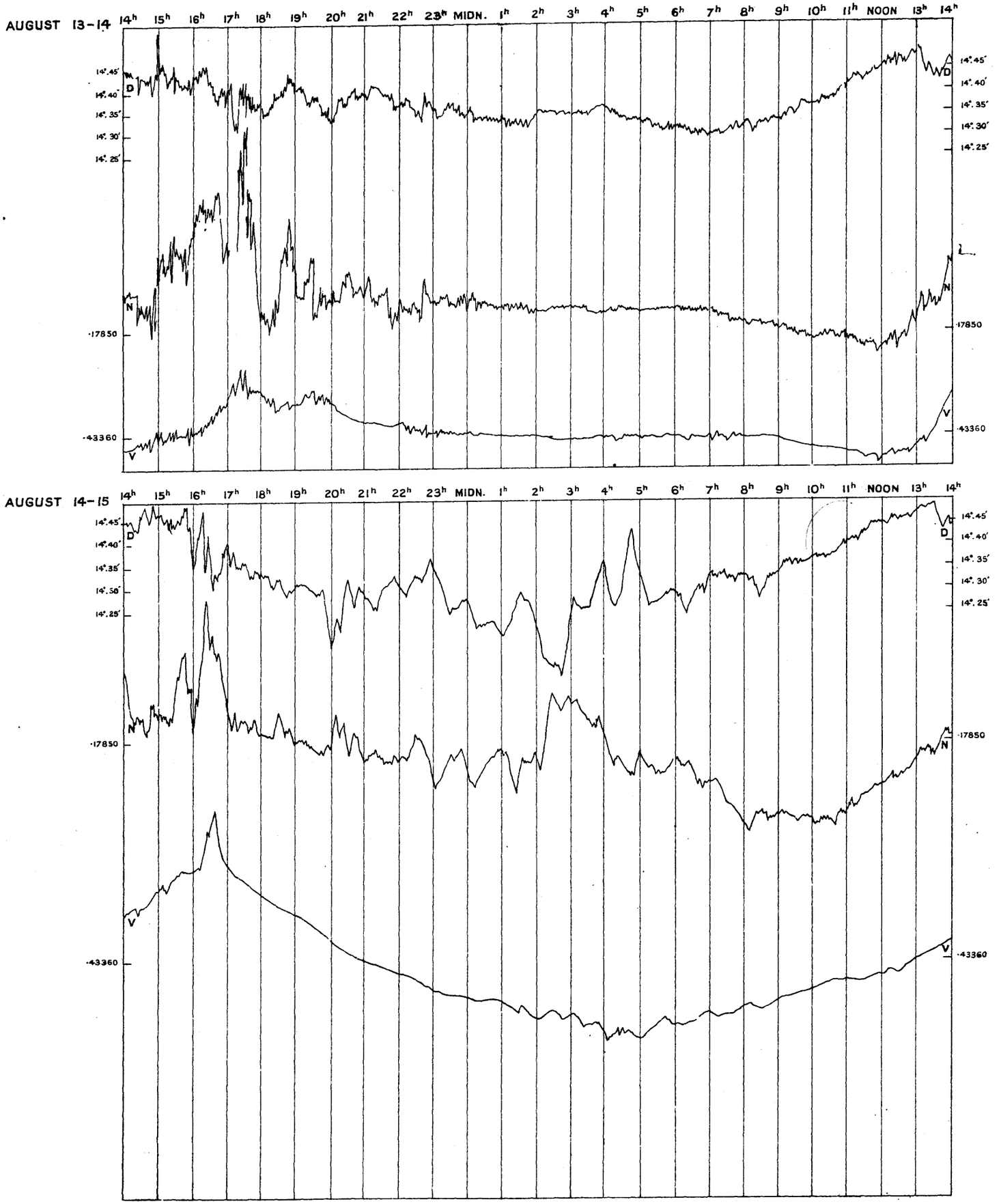


SCALES FOR MAGNETIC ELEMENTS IN C.G.S. MEASURE.

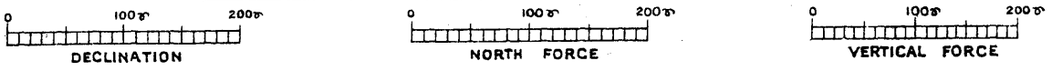


W.119.8. W.10462 A/87-368. 500. 10. 21.

MAGNETIC DISTURBANCES RECORDED AT THE ROYAL OBSERVATORY, GREENWICH, 1917.

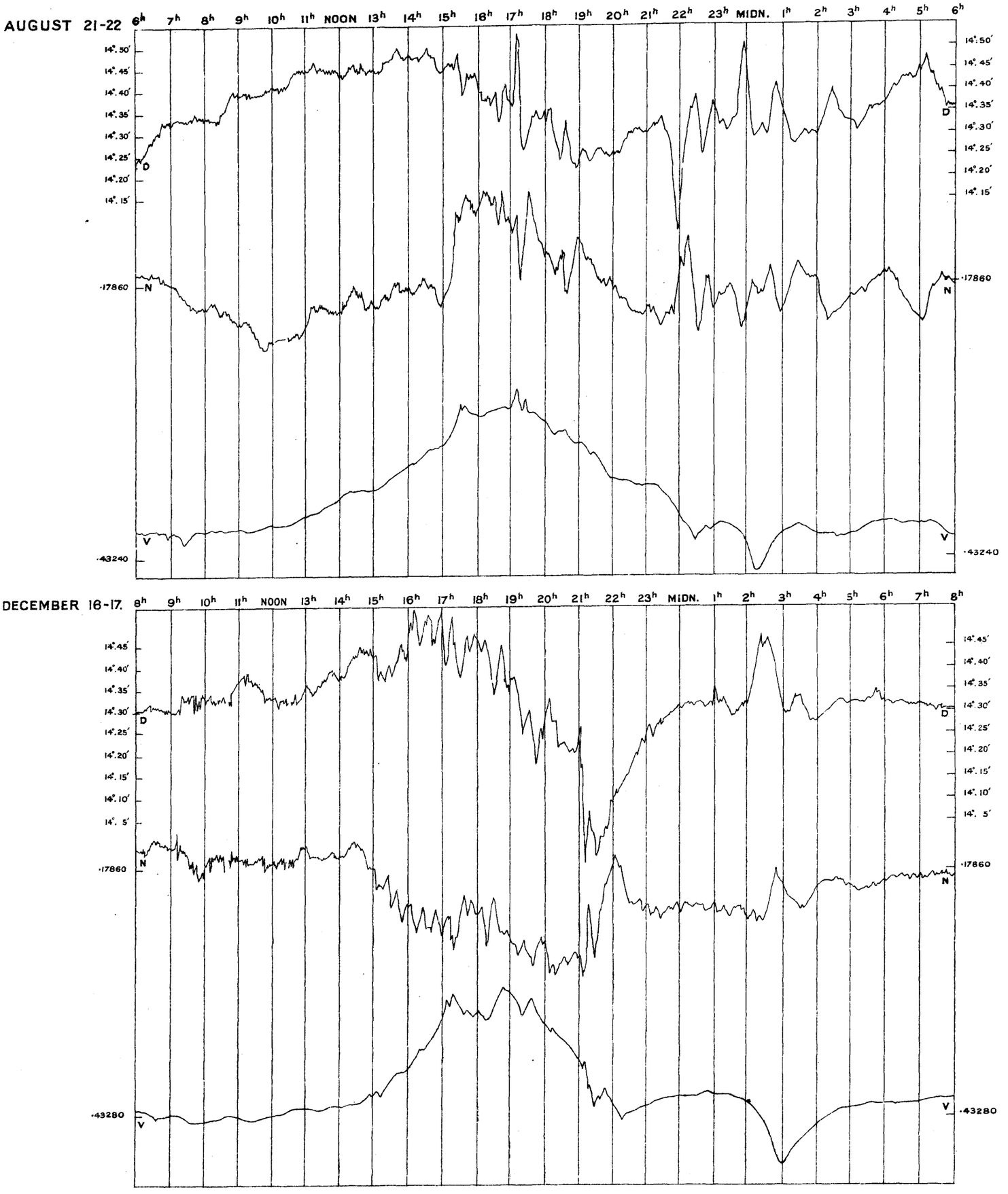


SCALES FOR MAGNETIC ELEMENTS IN C.G.S. MEASURE.

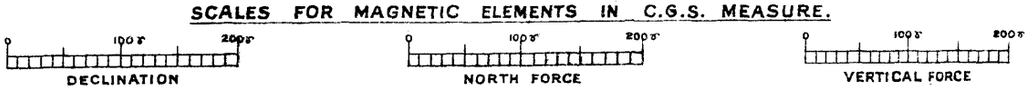


W.11S.B.Wt.10482 A/67-368. 500. 10.21.

MAGNETIC DISTURBANCES RECORDED AT THE ROYAL OBSERVATORY, GREENWICH, 1917.



SCALES FOR MAGNETIC ELEMENTS IN C.G.S. MEASURE.



W. 119. B. Wt. 10482A/67-368. 500. 10. 21.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1917.

MONTH and DAY, 1917.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 3 ft. 2 ins. below the Surface of the Soil.		
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	
Jan 1	30·023	54·5	48·2	6·3	50·9	+ 12·3	49·0	47·0	3·9	8·9	0·2	87	60·1	41·5	43·39	0·000	wwP
2	29·972	52·0	47·9	4·1	50·3	+ 11·9	47·9	45·4	4·9	6·7	3·3	83	56·1	41·2	43·90	0·000	wwP
3	29·826	52·7	48·3	4·4	50·7	+ 12·4	48·3	45·8	4·9	8·7	1·6	84	61·8	43·6	44·32	0·000	wwP
4	29·688	48·3	37·1	11·2	44·8	+ 6·5	40·9	36·4	8·4	13·5	3·8	72	64·4	30·1	44·79	0·001	wwP : wP : wP
5	29·913	41·9	35·4	6·5	38·8	+ 0·6	36·4	33·2	5·6	8·3	1·1	81	49·2	28·8	44·92	0·208	wP : wP, wN
6	29·826	42·0	34·6	7·4	39·4	+ 1·3	37·7	35·5	3·9	7·3	0·4	87	52·2	28·7	44·73	0·000	wP : mP : wP
7	29·666	44·3	32·1	12·2	38·0	+ 0·0	36·7	34·9	3·1	6·4	0·0	89	53·0	27·8	44·49	0·062	wP : wP, wwN
8	29·719	46·3	34·0	12·3	38·9	+ 1·0	37·3	35·1	3·8	6·4	1·5	88	40·8	33·4	44·20	0·153	wwP : wwP, wN : wP
9	29·288	39·1	34·6	4·5	36·9	− 1·0	35·1	32·6	4·3	9·0	1·2	85	45·0	30·2	43·89	0·047	wP
10	29·794	36·1	28·2	7·9	33·2	− 4·7	31·5	28·2	5·0	7·4	3·4	81	46·9	25·0	43·62	0·000	wP
11	29·555	41·2	29·2	12·0	35·7	− 2·2	35·2	34·4	1·3	7·3	0·0	95	46·1	26·0	43·30	0·258	wP : wN, wP : wP, wwP
12	29·285	41·2	34·0	7·2	38·9	+ 1·0	37·0	34·4	4·5	8·0	2·3	85	52·9	30·5	43·32	0·029	wwP : wP : wP
13	29·176	37·0	34·1	2·9	35·5	− 2·5	34·1	32·0	3·5	6·8	1·5	87	51·0	32·3	42·64	0·041	wwP : wP : wP
14	29·300	35·9	32·1	3·8	34·4	− 3·6	33·3	31·4	3·0	4·8	1·8	88	49·0	28·9	42·48	0·000	wP
15	29·419	34·7	30·1	4·6	32·7	− 5·4	31·9	30·4	2·3	4·1	1·2	90	43·1	24·1	42·32	0·008	wP
16	29·419	36·1	30·1	6·0	33·2	− 5·1	32·0	29·7	3·5	6·4	1·6	87	55·2	24·1	42·12	0·066	wP
17	29·588	35·8	32·9	2·9	34·3	− 4·2	32·4	29·2	5·1	8·0	2·9	81	44·0	30·1	41·79	0·001	wwP : wP : wP, wwP
18	29·790	36·9	33·1	3·8	34·8	− 3·8	33·8	32·2	2·6	5·7	0·0	90	41·8	31·5	41·58	0·030	wwP : wP
19	29·990	36·7	33·5	3·2	35·5	− 3·2	34·0	31·7	3·8	6·0	1·5	86	37·8	32·6	41·31	0·004	wP : mP : wP
20	30·026	33·5	31·3	2·2	32·3	− 6·5	31·5	29·9	2·4	5·7	0·0	90	33·5	30·3	41·24	0·024	wP : wP, mP : mP, wwP
21	30·052	32·7	30·9	1·8	32·0	− 6·8	30·8	28·0	4·0	5·4	1·3	84	33·2	30·1	41·17	0·000	wwP
22	30·153	33·8	30·0	3·8	32·1	− 6·7	31·6	30·5	1·6	2·4	0·0	93	36·5	30·4	40·82	0·032	wwP : mP, wP
23	30·154	33·9	29·9	4·0	31·7	− 7·2	30·7	28·4	3·3	2·0	0·7	87	45·2	28·8	40·63	0·000	wP : wwP, mP : mP, wP
24	30·004	32·4	27·6	4·8	30·5	− 8·4	29·5	26·7	3·8	3·0	0·8	85	41·0	29·2	40·42	0·031	wwP : wwP, wP : wP
25	29·848	31·8	28·1	3·7	29·6	− 9·5	28·4	24·5	5·1	6·8	0·0	81	42·0	26·6	40·21	0·001	wwP : wwP, wP : wP
26	29·824	30·3	27·2	3·1	28·8	− 10·5	27·1	20·8	8·0	12·6	2·4	72	51·2	23·9	39·93	0·000	wP
27	29·755	34·0	26·9	7·1	29·6	− 9·9	27·9	22·3	7·3	13·2	0·9	73	70·2	23·2	39·79	0·000	wP : mP, wP
28	29·735	31·0	26·6	4·4	29·2	− 10·4	27·4	21·1	8·1	9·1	2·5	71	46·6	19·3	39·48	0·000	wwP : wP : wP, mP
29	29·742	32·0	24·4	7·6	28·4	− 11·3	26·0	16·7	11·7	14·6	7·7	60	72·2	18·5	39·29	0·000	mP : . .
30	29·687	32·0	24·1	7·9	28·7	− 11·0	26·9	20·2	8·5	15·2	6·8	70	50·7	18·1	39·17	0·000	. . : mP
31	29·747	34·8	28·3	6·5	31·9	− 7·8	30·5	27·3	4·6	6·5	0·4	82	40·1	25·2	38·93	0·060	mP : mP, wP : wP, wwP
Means	29·709	38·2	32·4	5·8	35·5	− 3·1	34·0	30·8	4·7	7·6	1·7	83·0	48·8	28·8	40·07	Sum 1·056	. .
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The results apply to the civil day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) 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 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self registering thermometers.

The mean reading of the *Barometer* for the month was $29^{in}\cdot709$, being $0^{in}\cdot085$ *lower* than the average for the 65 years, 1841–1905.

Temperature of the Air.

The highest in the month was 54°·5 on January 1; the lowest in the month was 24°·1 on January 30; and the range was 30°·4.
The mean of all the highest daily readings in the month was 38°·2, being 4°·9 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 32°·4, being 1°·3 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 5°·8, being 3°·6 *less* than the average for the 65 years 1841–1905.
The mean for the month was 35°·5, being 3°·1 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1917.	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	7·9	WSW : W	W : WSW	8·6	0·69	589	10 : 10	10 : 9 :v.-cl,th.-cl.
2	0·0	7·9	WSW : W	WSW	7·2	0·54	519	10 : v.-cl : 8	10 : 8, sh, lu.-ha, w : 10, w
3	0·2	7·9	WSW	WSW : W	8·7	0·83	608	10 : 10 : 10	9, m.-r. : 9, w : 10, w
4	3·0	7·9	WSW : WNW	WNW : WSW	7·5	0·83	560	10, w : 9, slt.-r : p.-cl, s, cu.-w	7, cu.-n : 1
5	0·6	7·9	WSW : WNW : W	WNW : NW : SW	1·8	0·17	318	0 : 2 : p.-cl,th.-cl	7, th.-cl : 10, r, sl : 10, r
6	0·8	8·0	N : W : WNW	NW : N : W	2·2	0·13	288	10 : 10 : 8	10, m.-r.-sh : 8 : 7
7	0·1	8·0	WSW : Calm	SSW : S	2·1	0·08	274	8, lu.-ha : 9 :	10, so.-ha : 10, r
8	0·0	8·0	S : SW : WSW	SW : N	6·8	0·50	463	10, oc.-r : 10 :10,oc.-m.-r	10, r, sl : 10 : 10
9	0·1	8·1	N	N	13·5	1·70	648	10, m.-r, sl, w. : 10, w : 10, cc.-r,-sl,-sn	8, oc.-slt.-sn : 9, oc.-r,-sn
10	1·8	8·1	N	N : Calm : SW	4·0	0·30	280	10 : p.-cl,ho.-fr: 2, th.-cl	3 : 3, f, ho.- fr : v.-cl, f, lu.-ha
11	0·0	8·1	Calm : S	SSW : WSW : W	1·3	0·11	279	10 : 10, sn : 10,m.-r,sl	10, m.-r : 10, fq.-m.-r : 10
12	0·3	8·2	WNW : W : WSW	W : WNW : NW	4·1	0·46	452	10 : 10 : 9, r, m.-r	10,sn,slt.-r : 9, fq.-slt.-r : 10, fq.-m.-r
13	0·2	8·2	NW	NW : WNW : N	2·9	0·35	375	10, m.-r : 10, m.-r : 8, slt.-sn	10, m.-r, sl : 10, r, m.-r : 10
14	0·0	8·2	N : NNE	N : NNE	2·0	0·19	270	10 : 10	9, m.-r.-sh : 9
15	0·0	8·3	NNE : NE	NE : E : Calm	0·9	0·04	205	10, sn : 10, sn.-shs: 10, sn	9 : 9, sn.-sh
16	0·8	8·3	NNE	NNE : N	2·0	0·19	306	10 : 10, sn : 10, sn	9,cu.-n,fq.-m.-r,sn: 10, fq.-m.-r
17	0·0	8·3	N	N	3·2	0·33	355	10 : 10, slt.-sh	8 : 9
18	0·0	8·4	N : NNW	N : NNE	2·0	0·18	283	10 : 10 : 10, slt.-sn	10, m.-r : 10, shs, m.-r : 10, slt.-r
19	0·0	8·4	NE : ENE	NE : NNE	3·3	0·24	332	10, m.-r : 10, fq.-m.-r	10, fq.-m.-r : 10, fq.-m.-r
20	0·0	8·5	NNE : ENE	NE : E : ESE	2·0	0·11	266	10 : 10, m.-r : 10, sn, sl	10, sn, sl : 10, oc.-m.-r
21	0·0	8·5	E : ESE	E : Calm	1·2	0·02	164	10,oc.-m.-r : 10 : 10, oc.-sl	10 : 10, m.-r, sl : 10,slt.-sn.-sh
22	0·0	8·6	NE : E	E : NNE	1·4	0·04	206	10, slt.-sn : 10 slt.-r : 10, slt.-sn	10 : 10, sn.-sh : 10
23	0·6	8·6	ENE : NNE : NE	NE : NNE	4·0	0·37	393	10 : 10 : 9	9 : 10 : 10
24	0·0	8·7	ENE : NE	E : NNE	6·3	0·53	415	10 : 10 : 8, sn	8, slt.-sn : 10 : 10
25	0·0	8·7	ESE : E : ENE	E : ESE	4·0	0·28	315	10 : 10 : 10	9, sn.-sh : 10 : 10
26	0·0	8·8	E : ESE	E	10·8	0·84	460	10 : 9	10, th.-cl : 9 : 10
27	4·4	8·8	E	E : ESE	12·5	1·51	546	1, ho.-fr : 8	v.-cl : 3 : p.-cl
28	0·7	8·9	ESE :	ESE : E	9·5	1·00	471	p.-cl : 8, cu.-n, slt.-sn.-sh	v.-cl,cu.-n : v.-cl : 1, ho.-fr
29	1·1	8·9	E : ESE	E : ENE : SE	4·0	0·37	344	v.-cl : 10 : 8	9, oc.-slt.-sn : v.-cl : 1
30	0·1	9·0	E : Calm : NNE	NE : NNE : N	5·2	0·27	326	v.-cl : 10 : 9, oc.-slt.-sn	9,oc.-slt.-sr : 10 : 10, fq.-sn
31	0·0	9·0	N : NNE	N : NNW	2·1	0·23	285	10 : 10, fq.-sn	10, fq.-sn : 10 : 10
Means	0·5	8·4	..	..	..	0·43	374		
Number of Column for Reference	18	19	20	21	22	23	24	25	26

The mean *Temperature of Evaporation* for the month was 34°·0, being 3°·2 *lower* than
The mean *Temperature of the Dew Point* for the month was 30°·8, being 4°·7 *lower* than
The mean *Degree of Humidity* for the month was 830, being 50 *less* than
The mean *Elastic force of Vapour* for the month was 0in.172, being 0in.034 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs.0, being 0grs.4 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 556 grains, being 2 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 8·7.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·057. The maximum daily amount of *Sunshine* was 4·4 hours on January 27.

The highest reading of the *Solar Radiation Thermometer* was 72°·2 on January 29; and the lowest reading of the *Terrestrial Radiation Thermometer* was 18°·1 on January 30.

The *Proportions of Wind* referred to the cardinal points were N. 11, E. 10, S. 3, W. 6, One day was calm.

The *Greatest Pressure of the Wind* in the month was 13·5 lbs. on the square foot on January 9. The mean daily *Horizontal Movement of the Air* for the month was 374 miles; the greatest daily value was 648 miles on January 9; and the least daily value was 164 miles on January 21.

Rain (0in.005 or over) fell on 14 days in the month, amounting to 1in.056 as measured by gauge No. 6 partly sunk below the ground; being 0in.825 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1917.	BAROMETER.	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 3 ft. 2 ins. below the Surface of the Soil.		
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	°	
Feb. 1	29·795	33·4	25·9	7·5	30·4	− 9·2	29·4	26·5	3·9	4·9	1·4	85	49·0	24·1	38·79	0·002	wwP : wP
2	29·776	29·1	23·3	5·8	26·5	− 13·0	25·1	18·4	8·1	14·3	2·4	70	44·1	22·5	38·70	0·016	wP : mP : mP, wP
3	29·743	36·0	22·9	13·1	28·2	− 11·3	26·6	20·2	8·0	12·0	4·2	71	45·9	19·5	38·53	0·000	wP : mP
4	29·703	36·3	20·9	15·4	29·2	− 10·3	28·0	23·9	5·3	9·5	1·7	79	50·2	18·0	38·44	0·200	wP : wP, mP : wP, wwP
5	29·837	32·1	22·4	9·7	28·0	− 11·6	27·3	24·4	3·6	15·9	0·0	86	57·3	24·0	38·31	0·000	wwP : wwP : mP, wP
6	29·991	34·8	23·5	11·3	28·5	− 11·1	27·5	23·7	4·8	12·1	0·0	82	68·9	21·0	38·21	0·000	wP : mP : mP
7	30·207	36·5	17·9	18·6	26·1	− 13·4	24·4	15·9	10·2	11·4	4·7	63	69·5	16·5	38·13	0·000	mP
8	30·300	35·2	18·4	16·8	26·9	− 12·4	25·2	17·3	9·6	8·7	1·2	66	73·2	18·6	37·98	0·000	mP : mP : sP, mP
9	30·185	37·0	21·3	15·7	28·7	− 10·4	26·9	20·2	8·5	6·3	0·6	69	72·1	17·7	37·87	0·000	mP : mP, wwP : wwP, wP
10	30·044	35·5	25·3	10·2	32·5	− 6·4	30·9	27·5	5·0	7·5	0·6	82	47·0	16·8	37·67	0·000	wP : wwP : wwP
11	29·809	35·9	33·5	2·4	34·6	− 4·2	33·4	31·4	3·2	5·3	1·1	88	45·0	31·4	37·58	0·016	wwP : wP : wP
12	29·808	36·2	32·9	3·3	34·5	− 4·3	32·7	29·7	4·8	8·0	0·3	82	39·9	30·9	37·49	0·002	wP : mP : mP, wP
13	30·055	41·3	33·0	8·3	35·6	− 3·4	34·0	31·6	4·0	8·8	0·9	85	80·6	30·1	37·41	0·001	wP
14	30·118	36·8	32·1	4·7	34·1	− 5·2	32·0	28·4	5·7	9·4	0·3	78	56·2	25·8	37·41	0·000	wP : mP, wP : mP, wwP
15	30·036	38·5	29·5	9·0	33·9	− 5·5	32·2	29·2	4·7	6·8	0·0	83	79·3	24·3	37·41	0·000	wwP : wwP : wP, wwP
16	29·841	40·7	24·4	16·3	33·1	− 6·4	31·7	29·0	4·1	7·2	0·0	84	60·9	18·5	37·42	0·144	wwP
17	29·829	51·2	35·6	15·6	42·0	+ 2·4	41·2	40·2	1·8	6·1	0·0	94	79·5	29·3	37·42	0·035	wwP
18	29·898	43·3	35·1	8·2	39·2	− 0·3	38·8	38·3	0·9	4·4	0·0	97	60·2	30·0	37·60	0·001	wwP : wP : wP, wwP
19	29·944	45·0	37·0	8·0	39·9	+ 0·4	39·3	38·5	1·4	4·4	0·0	95	59·1	36·1	38·01	0·030	wwP
20	29·655	45·8	37·7	8·1	41·9	+ 2·4	41·5	41·0	0·9	3·5	0·0	97	55·6	35·6	38·42	0·278	wwP
21	29·720	45·0	41·3	3·7	42·8	+ 3·4	42·6	42·2	0·6	2·0	0·0	98	49·0	31·6	38·81	0·010	wwP
22	30·009	41·4	36·9	4·5	38·3	− 1·4	37·3	35·9	2·4	3·9	0·0	92	46·1	36·6	39·21	0·001	wwP : wP : wP
23	30·088	44·6	36·1	8·5	40·0	+ 0·2	38·2	35·9	4·1	8·0	0·2	86	75·6	35·3	39·62	0·090	wwP : wP : wP
24	30·072	45·7	39·5	6·2	42·2	+ 2·2	41·3	40·2	2·0	9·1	0·2	93	56·1	35·9	39·78	0·002	wwP : wP : wwP
25	30·047	48·0	39·8	8·2	42·6	+ 2·5	41·4	40·0	2·6	9·8	0·0	90	61·9	38·1	39·96	0·008	wwP : wP : wP, wwP
26	30·108	48·1	34·3	13·8	41·4	+ 1·2	39·0	36·0	5·4	12·3	0·0	82	74·5	29·1	40·32	0·000	wwP : . . : . ., wwP
27	30·207	46·7	30·3	16·4	39·0	− 1·3	37·5	35·6	3·4	10·0	0·0	88	58·0	25·1	40·51	0·000	wwP : wP : mP, wP
28	30·094	46·9	39·8	7·1	43·0	+ 2·7	40·0	36·4	6·6	10·9	2·5	78	61·2	36·9	40·45	0·006	wP : mP : wP
Means	29·961	40·3	30·4	9·9	35·1	− 4·4	33·8	30·6	4·5	8·3	0·8	83·7	59·9	27·1	38·48	Sum 0·842	. .
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The results apply to the civil day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) 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 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14, are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was 29in.·961, being 0in.·159, *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 51°·2 on February 17; the lowest in the month was 17°·9 on February 7; and the range was 33°·3.
The mean of all the highest daily readings in the month was 40°·3, being 4°·9 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the months was 30°·4, being 3°·8 *lower* than the average for 65 years, 1841–1905.
The mean of the daily ranges was 9°·9, being 1°·1 *less* than the average for the the 65 years, 1841–1905.
The mean for the month was 35°·1, being 4°·4 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1917.	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	0·5	9·1	N : NW : NE	ESE : Calm	0·6	0·02	152	10 : 10 : 10, sn	p.-cl, cu.-n : 10
2	0·0	9·2	Calm : SE	S : W : Calm	0·5	0·01	100	10, sn.-sh : 10, oc.-slt.-sn	10 : 10, sn : 10
3	0·0	9·2	Calm : W	Calm : S	0·1	0·00	165	9, th.-cl : 8, m, h	1,h,m,so-ha : 1, lu.-ha : 9
4	1·3	9·3	Calm : SW	W : N	1·1	0·07	208	9 : v-cl, ho.-fr : 1, h	10, h, sn : 10, sn
5	0·2	9·3	N	N : NNE : NE	4·1	0·38	361	10, oc.-sn : v.-cl : v.-cl,cu.-n	10, oc.-slt.-sn: v.-cl : 0, h
6	7·2	9·4	NE : NNE	NE : NNE	2·1	0·19	337	0, slt.-h : 0, slt.-h	0 : 0
7	4·2	9·4	NNE : Calm	ENE : Calm	1·7	0·05	175	0, h : 0, h, ho.-fr	1 : 0, h
8	5·8	9·5	Calm : NE	ENE : NE	3·3	0·20	253	1 : 1, h, ho.-fr	1 : 1, lu.-ha
9	7·8	9·6	NE : ENE	ENE : NE	3·7	0·24	281	0, lu.-ha : 0, h	0 : 0
10	0·0	9·6	Calm : ENE : E	ENE : E	4·0	0·20	262	9, ho.-fr : 8	10 : 10
11	0·0	9·7	ENE : E	NNE : N	0·7	0·04	200	10 : 10 : 10, slt.-r	10, fq.-m.-r : 10, fq.-m.-r
12	0·0	9·7	N : NNW	N : NNE	0·8	0·07	190	10, oc.-m.-r : 10, h, sn	10, h : 10, h : 9, h
13	1·0	9·8	NE : E	E : ENE	2·9	0·21	282	10 : 10, m.-r.	8, : 7 : 10
14	2·1	9·9	E	E : ENE	3·8	0·48	364	10 : 10 : v.-cl	10 : 0
15	2·9	9·9	E : ESE	E	4·8	0·49	355	10, oc.-m.-r : 10, n	1, ci.-cu : 0, ho.-fr
16	0·6	10·0	E : Calm	E : Calm	0·4	0·01	117	0, ho.-fr : 0, ho.-fr, f : v.-cl,m,so.-ha	10, h, so.-ha, r : 10, m, r
17	0·2	10·0	Calm : SSW	SSW : Calm	0·4	0·01	131	10, r : 10, f, m.-r.-sh	9, cu.-n : 10
18	0·0	10·1	Calm : SW	Calm : S	0·2	0·00	122	10 : 10 : 10, m, oc.-m.-r	p.-cl : 10, m.-r.-sh
19	0·0	10·2	Calm : S	S : SSW : SSE	0·6	0·01	158	10, oc.-m.-r : 10, n, m	10, n, r, oc.-m.-r : 10, oc.-m.-r
20	0·0	10·2	SSE : SE	S : Calm : SSW	0·3	0·01	180	10, sh : 10, n, r	10,r,oc.-m.-r : 10 : v.-cl
21	0·0	10·3	W : Calm	Calm : W	0·2	0·00	103	10, m, m.-r : 10, f, m.-r : 10, tk.-f	10, f : 10 : 10, m.-r
22	0·0	10·4	N : NNE	NNE : Calm	0·4	0·04	176	10, oc.-m.-r : 10, n	10. n : 10
23	1·9	10·4	Calm : SSE : SW	SSW : S	1·0	0·05	201	10 : 10 : v.-cl,ci.-cu	10, n : 10, r, m.-r
24	0·0	10·5	S : SSE	Calm : S	0·9	0·03	165	10, oc.-m.-r : 9, n	10, n : 10, n : 10, oc.-m.-r
25	0·4	10·6	SSE : S	SW : WSW : WNW	1·8	0·11	279	10, oc.-slt.-r : 10, n, oc.-m.-r	9, cu, n : 10 : 10, m.-r
26	3·5	10·6	NW : WNW : NNW	NW : NNW	2·4	0·16	279	0, slt.-ho.-fr : p.-cl, cu	v.-cl, cu.-n : v.-cl : 0
27	0·6	10·7	Calm : W	Calm : W : NNW	0·2	0·01	172	0, h, ho.-fr : 10, th.-cl, f	v.-cl : 10
28	0·1	10·8	NW : W : WSW	W : WSW	1·2	0·10	277	10 : 10, n, m.-r.-sh	10, n : 10, n, r : 10
Means	1·4	9·9	..	..	..	0·11	216		
Number of Column for Reference	18	19	20	21	22	23	24	25	26

The mean *Temperature of Evaporation* for the month was 33°·8, being 3°·9 *lower* than
The mean *Temperature of the Dew Point* for the month was 30°·6, being 4°·8 *lower* than
The mean *Degree of Humidity* for the month was 83·7, being 1·8 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.171, being 0in.036 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs.1, being 0gr.3 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 561 grains, being 8 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 6·9.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·145. The maximum daily amount of *Sunshine* was 7·8 hours on February 9.

The highest reading of the *Solar Radiation Thermometer* was 80°·6 on February 13; and the lowest reading of the *Terrestrial Radiation Thermometer* was 16°·5 on February 7.

The *Proportions of Wind* referred to the cardinal points were N. 7, E. 7, S. 5, W. 4. Five days were calm.

The *Greatest Pressure of the Wind* in the month was 4·8 lbs. on the square foot on February 15; The mean daily *Horizontal Movement of the Air* for the month was 216 miles; the greatest daily value was 364 miles on February 14; and the least daily value was 100 miles on February 2.

Rain (0in.005 or over) fell on 11 days in the month, amounting to 0in.842 as measured by gauge No. 6 partly sunk below the ground; being 0in.638 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1917.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point. Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 3 ft. 2 ins. below the Surface of the Soil.		
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	
Mar. 1	30·067	48·0	39·7	8·3	42·4	+ 2·0	39·9	36·8	5·6	11·1	0·4	81	87·7	34·5	40·51	0·000	wP : wP : mP
2	29·903	42·0	29·9	12·1	37·4	— 3·0	36·3	34·8	2·6	5·0	0·0	91	59·8	24·5	40·59	0·000	wP : wP : wP, mP
3	29·722	39·9	29·2	10·7	34·5	— 6·0	33·1	30·8	3·7	9·6	0·0	85	94·7	20·2	40·79	0·000	wP : wP, mP : mP
4	29·490	44·0	29·8	14·2	35·2	— 5·5	32·6	28·5	6·7	14·5	0·0	76	88·9	21·9	40·71	0·023	wP
5	29·207	38·1	31·3	6·8	34·4	— 6·5	34·0	33·4	1·0	3·8	0·5	96	48·8	30·3	40·63	0·165	wP : wP : mP
6	29·217	41·0	33·5	7·5	36·6	— 4·4	36·1	35·4	1·2	3·6	0·0	96	64·3	28·6	40·48	0·031	mP : wP, wwP
7	29·062	35·2	26·1	9·1	30·4	— 10·6	30·0	28·9	1·5	10·7	0·0	94	67·5	23·9	40·30	0·000	wwP : wwP : mP
8	29·408	33·6	22·8	10·8	27·5	— 13·6	26·9	24·4	3·1	3·4	0·0	88	78·8	18·5	40·11	0·004	wP, mP : mP, sP : sP
9	29·574	36·7	19·3	17·4	28·5	— 12·5	27·8	25·2	3·3	3·9	0·0	87	52·7	15·8	39·69	0·032	wP, wwP : wwP, sP : wP
10	29·586	49·4	31·7	17·7	40·4	— 0·5	39·7	38·8	1·6	5·5	0·0	94	79·0	26·9	39·30	0·098	wP : wP : wwP
11	29·370	52·0	44·0	8·0	47·9	+ 6·9	47·0	46·0	1·9	3·9	0·4	94	65·9	41·0	39·12	0·450	wwP : wwN, wwP
12	29·374	44·2	36·7	7·5	41·6	+ 0·5	41·0	40·3	1·3	3·4	0·0	95	50·3	33·2	39·60	0·173	wwP.v : wP : wP
13	29·593	49·8	33·9	15·9	40·8	— 0·5	39·6	38·1	2·7	6·0	0·0	90	81·1	28·7	40·18	0·005	wwP
14	29·507	46·0	34·2	11·8	41·9	+ 0·4	40·7	39·2	2·7	5·1	0·2	91	64·2	28·0	40·36	0·194	wN, wwP : wwP, wP
15	30·115	43·8	30·2	13·6	36·6	— 5·1	35·2	33·2	3·4	6·0	0·0	88	65·1	25·0	40·59	0·000	wP
16	30·445	50·5	34·0	16·5	41·8	— 0·1	39·0	35·5	6·3	12·4	0·5	79	86·3	29·8	40·70	0·000	wwP : wP : wP
17	30·300	58·1	38·1	20·0	45·8	+ 3·8	40·9	35·4	10·4	22·2	2·8	67	101·1	32·0	40·71	0·000	wwP : wP : wP
18	30·261	54·1	39·5	14·6	46·5	+ 4·5	42·1	37·1	9·4	17·3	2·0	71	106·1	32·4	40·90	0·000	wwP : wP : wP
19	29·851	50·4	39·1	11·3	43·9	+ 2·0	41·6	38·9	5·0	11·3	0·2	83	87·8	32·0	41·20	0·055	wP, wwP : wP
20	29·414	46·0	34·9	11·1	39·7	— 2·2	36·5	32·4	7·3	12·5	1·4	76	90·5	30·9	41·49	0·041	wP : mP : wP
21	29·622	42·0	32·3	9·7	35·4	— 6·5	33·5	30·5	4·9	9·7	1·1	82	82·2	27·2	41·25	0·003	wP : mP, v : mP
22	29·684	41·7	29·3	12·4	33·3	— 8·7	31·6	28·4	4·9	10·1	0·0	82	83·1	25·1	41·48	0·028	wP : mP : mP
23	30·010	40·0	28·1	11·9	32·7	— 9·5	31·2	28·1	4·6	9·4	0·8	83	77·9	23·6	41·19	0·012	mP
24	30·172	44·8	25·2	19·6	34·5	— 7·9	31·3	25·9	8·6	17·2	0·0	71	96·3	20·2	40·79	0·000	mP
25	29·893	48·4	28·4	20·0	39·6	— 3·1	38·3	36·6	3·0	5·4	0·5	90	58·8	22·6	40·46	0·000	mP, wP : wP, wwP : wwP, wP
26	29·489	42·7	32·4	10·3	38·1	— 4·9	36·2	33·6	4·5	7·9	0·6	84	82·1	28·2	40·38	0·062	wP : . .
27	29·764	42·6	29·9	12·7	34·8	— 8·5	32·5	28·8	6·0	10·2	0·7	78	103·0	26·8	40·50	0·037	. . : mP
28	29·712	45·8	27·0	18·8	37·9	— 5·8	35·7	32·7	5·2	10·5	0·0	82	83·1	23·2	40·39	0·000	mP : wP
29	29·241	51·8	37·6	14·2	43·2	— 0·9	40·4	37·1	6·1	14·9	0·4	79	106·8	34·9	40·32	0·026	wwP : wP : mP
30	29·142	51·8	34·2	17·6	40·9	— 3·6	37·2	32·6	8·3	17·5	1·4	72	108·5	29·0	40·52	0·000	wP : mP : mP
31	29·231	40·0	32·1	7·9	35·4	— 9·5	34·4	32·8	2·6	3·6	0·0	90	57·3	27·0	40·70	0·308	mP, v : wwP, wP : wP, mP
Means	29·659	45·0	32·1	12·9	38·1	— 3·8	36·2	33·6	4·5	9·3	0·4	84·4	79·3	27·3	40·51	Sum 1·747	. .
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The results apply to the civil day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) 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 9) is the difference between the numbers in Columns 5 and 8 and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was 29in.659, being 0in.087 *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 58°·1 on March 17; the lowest in the month was 19°·3 on March 9; and the range was 38°·8.
The mean of all the highest daily readings in the month was 45°·0, being 4°·8 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 32°·1, being 3°·0 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 12°·9, being 1°·8 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 38°·1, being 3°·8 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1917.	Daily Duration of Sunshine.	Sun above Horizon.	Wind as Deduced from Self-Registering Anemometers. Oslers. 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.		
Mar. 1	2·6	10·8	NW : NNE : Calm	NE : E : Calm	0·5	0·02	137	10 : 10 : 9, cu.-n	8, cu.-n. : 10 : 10, n,oc.-m.-r
2	0·0	10·9	Calm : S	Calm : E	0·3	0·00	115	10, oc.-m.-r : 10, fq.-m.-r	10 : 6 : 0, f
3	3·0	11·0	Calm : ESE	SE : ESE : Calm	0·8	0·02	120	10 . 10 : 8	p.-cl, cu : p.-cl, cu
4	3·5	11·0	ESE	SE : ESE : E	7·8	0·48	316	10 : 10, cu.-n	7, s, w : 10, sn
5	0·0	11·1	E : ESE	ESE : SE : E	2·5	0·13	235	10, sn : 10 : 10, n	10, oc.-shs : v.-cl
6	0·1	11·2	E : ENE	E	13·0	1·22	515	1, slt.-f : 10, slt.-f : 10, n, w	10,n, w : 10, n, w, r : 10, r
7	2·2	11·2	ENE : NE	ENE : NE	16·3	2·62	829	10, w : 10, w : 10, oc.-slt.-sn, w	8, s.-cu, w : 10, w
8	5·7	11·3	NNE : N	N : NW : Calm	6·7	0·52	377	10 : p.-cl : v.-cl,oc.-sn	v.-cl, cu.-ns, : 2, h
9	0·0	11·4	Calm : ESE	SE : S : Calm	2·1	0·09	201	0, h : 10, lu.-ha : 10,n,fq.-sn	10, fq.-sn,-r : 10, fq.-slt.-sn,-r
10	0·0	11·4	Calm	SE : SSE : S	1·0	0·04	160	7, f : 10, f	10, r : 10, r : 10, th.-cl
11	0·0	11·5	SSW : SW	Calm : NE	2·1	0·09	205	10 : 10 :10,oc.-m.-r	10, slt.-r : 10, r, m : 10,oc.-m.-r,m
12	0·0	11·6	NE : E : Calm	N : Calm	0·7	0·02	183	10, fq.-r : 10, m, oc.-slt.-r	10 : 10 : v.-cl
13	1·0	11·6	SW : Calm	SW : S : Calm	0·8	0·05	212	2 : 10 : 9, n	10, oc.-m.-r : 6, h, oc-m.-r
14	0·0	11·7	Calm : E : NE	NNE : NE	1·9	0·10	246	10, r : 10, oc.-m.-r	10, oc.-m.-r : 10, oc.-m.-r : 1
15	2·0	11·7	Calm : N	N : E	1·9	0·13	206	0, h, ho.-fr : 0, ho.-fr : v.-cl, h	10 : 10 : 10, m.-r
16	1·0	11·8	Calm : SSW	SW : WSW	2·0	0·14	275	10 : 10	v.-cl, s, cu.-n : v.-cl
17	8·1	11·9	WSW : W	WSW : SW	4·1	0·40	435	1 : 1 : 9, ci	p.-cl, ci : 10 : 1
18	6·2	11·9	WSW : NW	NW : WNW : WSW	2·9	0·25	341	v.-cl : v.-cl : 3	9 : 9 : 1
19	0·5	12·0	WSW	WSW : W	8·0	0·72	529	1 : 9 : 9, w, n	10, shs, w : v.-cl, sh, w
20	5·1	12·1	W : NNW : N	N : NNE	10·0	1·18	552	10, sh, w : 8, w : 10, w	v.-cl, sn, hl, sl, w : 10, r, w : 10, sn
21	1·9	12·1	NNE : N	N : NNE	5·0	0·40	331	10 : 8 : 10, oc.-slt.-sn	v.-cl, sn.-sqs : v.-cl
22	7·1	12·2	N : NNE	N : NNE	6·4	0·47	356	v.-cl,ho.-fr : v.-cl : 6	v.-cl, oc.-sn : 8, oc.-sn : 0
23	3·4	12·3	N : NNE : NE	ENE : NE	4·8	0·35	358	0 : v.-cl, oc.-sn : 9,cu.-n, sn	8, cu.-n,sn : 0, ho.-fr
24	8·9	12·3	NE : ENE	NE : ESE : Calm	1·8	0·10	224	0, ho.-fr : 0,ho.-fr : 1	1 : 7 : 10
25	0·0	12·4	Calm : SW : W	WSW : SW	1·5	0·05	237	0, ho-fr : 10 : 10, m,-r, sh	9, slt.-sh : 1
26	1·2	12·5	SW : NW : N	N	12·8	1·00	464	10 : 9, oc.-r : 8,oc.-r,w	v.-cl, fq.-slt-r, w : 9, oc.-slt.-sn
27	3·4	12·5	N	NNE : E : Calm	6·0	0·50	331	6 : 8, cu.-n, slt,-sn.-sh	9, cu.-n, oc.-su, sl : 10, oc.-sn, r : p.-cl, cu.-n
28	1·0	12·6	Calm : SW	SW : SSW	1·5	0·13	296	1, ho.-fr : 3, ho.-fr : 10, s.-cu, r	10, oc.-m.-r : 10 : 1
29	3·1	12·7	SSW : SW	W : SW	5·9	0·67	512	7 : 7, slt.-sh : 9, m.-r.-sh	9, cu.-n, oc.-r : 1
30	8·1	12·7	SW : WSW : W	W : WSW : SW	3·0	0·31	402	1 : 1 : 6, cu.-n	p.-cl : v.-cl : 0
31	0·0	12·8	Calm : S : E	SW : NNW	1·9	0·06	202	0 : 10, sn, sl, r: 10, m.-r	10 : 10, oc.-slt.-r : 9, cu
Means	2·5	11·8	..	..	..	0·40	319		
Number of Column for Reference.	18	19	20	21	22	23	24	25	26

The mean *Temperature of Evaporation* for the month was 36°·2, being 3°·2 *lower* than
The mean *Temperature of the Dew Point* for the month was 33°·6, being 2°·7 *lower* than
The mean *Degree of Humidity* for the month was 84·4, being 3·9 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.193, being 0in.021 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs.2, being 0gr.3 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 552 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 7·4.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·216. The maximum daily amount of *Sunshine* was 8·9 hours on March 24.
The highest reading of the *Solar Radiation Thermometer* was 108°·5, on March 30; and the lowest reading of the *Terrestrial Radiation Thermometer* was 15°·8 on March 9.
The *Proportions of Wind* referred to the cardinal points were N. 9. E. 7, S. 5, W. 6, Four days were calm.
The *Greatest Pressure of the Wind* in the month was 16·3 lbs. on the square foot on March 7. The mean daily *Horizontal Movement of the Air* for the month was 319 miles; the greatest daily value was 829 miles on March 7; and the least daily value was 115 miles on March 2.
Rain (0in.005 or over) fell on 17 days in the month, amounting to 1in.747 as measured by gauge No. 6 partly sunk below the ground; being 0in.227 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1917.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 3 ft. 2 in. below the Surface of the Soil.		
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	
Apr. 1	29·292	41·0	26·8	14·2	32·9	− 12·4	31·4	28·4	4·5	11·9	0·0	83	76·6	22·0	40·72	0·060	mP, wP : v, wP : mP
2	29·124	41·7	26·5	15·2	33·6	− 12·1	32·4	30·2	3·4	13·2	0·3	87	84·3	21·5	40·48	0·510	mP, wP : v : v
3	29·188	44·7	32·0	12·7	35·5	− 10·5	34·2	32·2	3·3	10·4	0·3	88	101·0	27·7	40·13	0·090	wP : wP, v : wP, mP
4	29·406	43·8	31·0	12·8	36·0	− 10·2	33·6	30·0	6·0	11·5	0·0	79	79·5	26·0	39·77	0·004	wP : mP : mP
5	29·609	51·3	28·6	22·7	40·1	− 6·2	36·6	32·1	8·0	16·8	0·3	73	104·8	25·0	39·75	0·012	mP
6	29·643	44·4	30·7	13·7	38·1	− 8·2	36·1	33·4	4·7	11·4	0·0	83	93·0	26·2	39·79	0·233	wP, wN : v, wP : mP
7	29·764	47·1	26·1	21·0	36·5	− 9·8	33·4	28·9	7·6	13·5	0·0	74	99·7	24·1	40·15	0·002*	wP : wwP, mP : mP, wP
8	29·665	52·0	27·0	25·0	40·6	− 5·5	37·1	32·7	7·9	12·0	0·9	73	103·9	20·9	40·10	0·000	wP
9	29·338	44·9	33·1	11·8	38·0	− 8·0	35·7	32·6	5·4	12·3	0·5	81	104·0	28·9	40·18	0·109	wP, mP : v, mP
10	29·540	41·9	29·2	12·7	34·2	− 11·7	31·8	27·7	6·5	16·2	0·3	77	96·8	25·0	40·34	0·051	mP : sP : sP
11	29·264	47·3	32·1	15·2	37·3	− 8·5	35·8	33·7	3·6	9·5	0·5	87	96·1	28·5	40·33	0·229	mP, wP : mP, wP : v, wwP
12	29·360	47·5	32·1	15·4	36·7	− 9·2	34·6	31·6	5·1	14·4	0·0	83	91·8	27·8	40·21	0·012	wwP : mP
13	29·578	50·9	30·4	20·5	38·2	− 7·9	37·1	35·6	2·6	14·7	0·4	90	107·1	25·9	40·31	0·039	mP : mP, wP : v, mP
14	29·287	49·0	35·4	13·6	41·9	− 4·5	40·4	38·5	3·4	5·8	0·0	89	71·5	29·5	40·39	0·147	mP, wP : wP : wP
15	29·437	51·2	34·9	16·3	41·6	− 5·2	37·2	31·8	9·8	17·8	1·3	68	106·0	27·6	40·53	0·006	wP, mP : mP : mP
16	29·627	48·1	32·1	16·0	40·2	− 7·0	38·1	35·4	4·8	12·5	0·7	83	106·2	26·0	40·85	0·080	mP : mP,wP : . . : wP
17	29·884	47·5	36·2	11·3	40·7	− 6·9	36·5	31·2	9·5	18·8	1·2	69	96·2	28·0	41·08	0·002	wP, mP : mP : sP
18	29·816	49·2	35·4	13·8	43·1	− 4·9	41·9	40·5	2·6	10·4	0·4	90	61·0	27·9	41·19	0·162	v : wP : wwP, wP
19	29·888	61·7	43·2	18·5	50·1	+ 1·8	47·5	44·5	5·6	11·1	0·6	82	105·5	37·9	41·49	0·050	wP
20	30·070	56·3	40·1	16·2	48·3	− 0·2	43·0	37·2	11·1	17·1	4·5	65	106·1	33·0	41·86	0·000	wP : mP : mP
21	30·184	54·3	40·1	14·2	47·1	− 1·6	43·9	40·3	6·8	11·4	2·5	78	84·0	31·9	42·30	0·008	wP : wP : wP, mP
22	30·294	51·0	34·1	16·9	43·1	− 5·6	39·9	36·1	7·0	12·4	2·5	77	87·2	26·0	42·80	0·000	sP : mP : wP
23	30·294	53·0	34·1	18·9	42·5	− 6·1	39·2	35·2	7·3	15·2	0·0	76	116·9	23·2	42·90	0·000	wP : mP : mP
24	30·270	59·1	32·3	26·8	45·6	− 3·0	41·1	35·9	9·7	18·7	0·0	70	115·3	20·5	43·19	0·000	mP - mP : mP, wP
25	30·355	54·8	37·0	17·8	46·7	− 1·9	42·2	37·1	9·6	15·2	4·2	70	109·1	25·8	43·55	0·000	wP : mP : mP
26	30·339	56·5	30·1	26·4	44·0	− 4·6	39·2	33·5	10·5	20·3	0·0	66	101·5	21·4	43·93	0·000	mP : sP, mP : nP, wP
27	30·069	58·9	42·6	16·3	50·2	+ 1·5	45·5	40·6	9·6	15·1	3·2	70	93·2	36·5	44·23	0·000	wP : mP : mP
28	29·926	63·6	41·8	21·8	52·3	+ 3·5	46·9	41·4	10·9	15·7	3·3	67	117·7	33·0	44·62	0·000	mP
29	29·815	62·0	48·6	13·4	54·3	+ 5·3	46·9	39·7	14·6	19·9	8·5	58	119·9	39·5	45·00	0·000	wP : wwP, wP, mP
30	29·893	62·2	39·1	23·1	52·2	+ 3·1	46·3	40·3	11·9	18·2	3·6	65	114·0	28·0	45·59	0·000	mP
Means	29·741	51·2	34·1	17·1	42·1	− 5·2	38·8	34·9	7·1	14·1	1·3	76·7	98·3	27·5	41·59	Sum 1·806	. .
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The results apply to the civil day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) 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 9) is the difference between the numbers in Columns 5 and 8 and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bub and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

* Rainfall (Column 16). The amount entered on April 7 is derived from frost.

The mean reading of the *Barometer* for the month was 29$^{in.}$·741, being 0$^{in.}$·007 *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 63°·6 on April 28 ; the lowest in the month was 26°·1 on April 7 ; and the range was 37°·5.
The mean of all the highest daily readings in the month was 51°·2, being 6°·0 *lower* than the average for the 65 years 1841–1905.
The mean of all the lowest daily readings in the month was 34°·1 being 4°·9 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 17°·1, being 1°·1 *less* than the average for the 65 years 1841–1905.
The mean for the month was 42°·1, being 5°·2 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1917.	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	1·5	12·9	NW : Calm : SSW	WNW : N : SE	2·0	0·10	205	v.-cl : 10, sn : 9, slt.-sn	9, cu.-n, sn : 0 : 0, h
2	1·9	12·9	SE : S : SW	S : ESE : Calm	8·5	0·21	244	10 : 10, sn	10, sn : v.-cl : 10, sn
3	5·8	13·0	N : W : SW	SSW : S	5·5	0·28	333	10, oc.-sn : 2	10, r, sl, sn : v.-cl : 7, slt.-ho.-fr
4	3·3	13·1	SW : NNW	NNW : Calm	0·8	0·04	180	9, slt.-sn.-sh : 10, n : 8	8 : 1 : 9, th.c-l, m
5	8·4	13·1	Calm : SW	SW : SSW	3·4	0·25	329	10, ho.-fr : 0, h, ho.-fr	3, : 9, slt.-r : 9, shs
6	2·6	13·2	SSW : N	N : NNE Calm	2·0	0·17	240	9, : 9, r, sn : 10, n, sn, oc.-m.-r	9, cu.-n : v.-cl, m, lu.-ha : 2, th.-cl, m, lu.-ha
7	3·9	13·3	Calm	N : Calm : E	0·4	0·01	105	6, ho.-fr : 1, m, ho.-fr : 0, m, cu.-n	9 : 8 : 0, lu.-ha, ho.-fr
8	5·3	13·3	Calm : S : SSW	SSW	7·0	0·28	312	0, ho.-fr : 2 : 1, cu.-n	9 : 10
9	5·3	13·4	SSW : WSW : W	WSW : W : SW	9·3	0·80	517	10, r : 3 : 9, oc.-sn, w	10, oc.-r, sl.-sn, w : 1
10	6·7	13·5	SSW : WSW : SW	WNW : WSW : SSW	6·7	0·78	478	p.-cl, sn, lu.-ha : v.-cl, oc.-sn, w : v.-cl, sn.-sh, w	v.-cl, sn.-shs.-w : v.-cl
11	2·4	13·5	S : SSW	SSW : SSE : WSW	10·5	0·60	437	10, r, w : 10, r, sl, sn, w	9, cu.-n, sh : 8, oc.-shs : 10, hy.-sn, r
12	3·8	13·6	W : SW	WSW : VAR : Calm	5·1	0·34	387	10, slt.-r : 7 : 10, slt.-r	9, cu.-n, r : v.-cl, r : 0
13	8·0	13·6	SW	SW : SSW	5·4	0·20	325	1, ho.-fr : 1, ho.-fr	p.-cl, sh : 10, fq.-r : 1
14	0·2	13·7	SSW : S	SSW : SW : NNW	7·7	0·65	464	3 : 10 : 10, oc.-m.-r.-w	10, oc-m.-r, w : 10, oc.-m.-r, shs : 10
15	8·3	13·8	NNW : N	N	3·9	0·23	262	10 : 10 : v.-cl, cu.-n	v.-cl, cu.-n, sh : v.-cl, cu
16	3·7	13·8	N : W : SW	SSW : W : NW	6·7	0·43	408	1, ho.-fr : 1, ho.-fr : v.-cl, slt.-r	10, fq.-slt.-r, hy.-r, h, t, l, w : 9, fq.-m.-r
17	5·7	13·9	NNW : N	NNW : NW : SW	10·0	1·02	455	10, slt.-sh, w : 9, w : v.-cl, n, oc.-slt.-sn	v.-cl, n : v.-cl : 8
18	0·0	14·0	SW : W : NW	NNW : N : Calm	1·2	0·09	235	10, r, slt.-sn : 1 : 10, r, m.-r	10, slt.-r : 10, r, slt.-r
19	1·8	14·0	Calm : NW : W	W : NW : NNW	3·2	0·23	292	10, slt.-sh : 10, slt.-f, m.-r : 10, oc.-m.-r	10, cu : 0 : 0
20	9·0	14·1	NW : NNW : N	NNW : NW	2·2	0·28	307	0 : 0 : v.-cl, cu.-n	p.-cl : p.-cl : 0
21	0·7	14·1	NW : NNW	N : NNE	3·0	0·23	293	9 : 10 : 10, n, m.-r	10, n, r : v.-cl
22	2·9	14·2	N : NNE	N : NNE	2·0	0·11	231	0, ho.-fr : 1 : 10, n	9 : 10 : 10
23	9·7	14·3	NNE : ENE	ENE : E : Calm	2·4	0·12	250	3 : 7 : p.-cl	0 : 0, ho.-fr
24	10·2	14·3	Calm : NNE	Calm : NE : N	1·0	0·01	157	0, ho.-fr : 10 : 0	0 : 8 : 10
25	3·9	14·4	Calm : NE : N	N : NNE	2·8	0·21	273	10 : 1 : 10	9, cu.-n : v.-cl : 0
26	9·0	14·4	Calm : NE	N : S : Calm	1·1	0·02	144	2, slt.-f, ho.-fr : p.-cl : 1	0 : 10 : 10
27	0·6	14·5	Calm : SW : NW	NW : WNW	2·9	0·28	365	10, slt.-sh : 10 : 10, n	9, n : 0, h, lu.-ha
28	3·5	14·6	W : WSW : NW	NW : W	1·5	0·10	276	1 : 7, cu, cu.-n	7, cu.-n : 7, cu.-n : 10, n
29	7·8	14·6	WNW : W : WSW	NW : N : Calm	2·2	0·13	260	10 : 8 : 9	3, cu : 9
30	1·9	14·7	Calm : SW : N	NNE : Calm	0·3	0·00	103	3, h, f, slt.-ho.-fr : 6 : 10	10 : 9 : 1, h, lu.-ha
Means	4·6	13·8	..	..	..	0·27	296		
Number of Column for Reference	18	19	20	21	22	23	24	25	26

The mean *Temperature of Evaporation* for the month was 38°·8, being 5°·1 *lower* than
The mean *Temperature of the Dew Point* for the month was 34°·9, being 5°·2 *lower* than
The mean *Degree of Humidity* for the month was 76·7, being 0·9 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in.203, being 0in.045 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs.4, being 0gr.5 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 549 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 6·6.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·333. The maximum daily amount of *Sunshine* was 10·2 hours on April 24.

The highest reading of the *Solar Radiation Thermometer* was 119°·9 on April 29 and ; the lowest reading of the *Terrestrial Radiation Thermometer* was 20°·5 on April 24.

The *Proportions of Wind* referred to the cardinal points were N. 10, E. 2, S. 7, W. 8. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 10.5 lbs. on the square foot on April 11. The mean daily *Horizontal Movement of the Air* for the month was 296 miles ; the greatest daily value was 517 miles on April 9 ; and the least daily value was 103 miles on April 30.

Rain (0in.005 or over) fell on 16 days in the month, amounting to 1in.806 as measured by gauge No. 6 partly sunk below the ground ; being 0in.240 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1917.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point. Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 3 ft. 2 ins. below the Surface of the Soil.		
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	
May 1	30·085	66·9	38·3	28·6	51·7	+ 2·4	46·8	41·8	9·9	21·7	0·0	69	124·2	28·3	46·19	0·000	wP : wP, wwP
2	30·142	71·1	38·1	33·0	53·5	+ 4·0	47·7	41·9	11·6	24·2	0·0	65	121·0	27·1	46·49	0·000	wP
3	30·147	64·6	40·1	24·5	52·5	+ 2·7	47·8	43·0	9·5	20·3	0·0	70	131·8	28·1	46·79	0·000	wP : wwP, wP, wP
4	29·949	70·9	44·1	26·8	56·7	+ 6·7	51·4	46·5	10·2	24·3	0·7	68	133·1	44·5	47·30	0·000	wP : ..
5	29·816	68·0	40·9	27·1	53·9	+ 3·6	49·9	46·0	7·9	16·1	1·9	75	109·1	35·0	47·84	0·011	.. : wP
6	30·049	51·6	37·4	14·2	43·8	− 6·7	39·9	35·3	8·5	15·9	0·0	72	130·7	27·8	48·00	0·000	mP
7	29·823	60·5	36·1	24·4	48·4	− 2·3	43·0	37·1	11·3	22·0	0·5	65	132·0	26·0	48·50	0·000	mP : wP, mP
8	29·682	62·4	38·1	24·3	49·4	− 1·6	43·6	37·4	12·0	20·9	3·3	63	126·9	29·5	48·62	0·000	mP : mP : wP, mP
9	29·847	59·0	37·3	21·7	46·8	− 4·4	43·2	39·1	7·7	14·9	0·0	76	127·9	30·0	48·89	0·000	mP : wP, wwP
10	29·829	67·0	42·6	24·4	54·3	+ 2·8	50·4	46·6	7·7	14·1	1·5	75	116·9	37·3	49·28	0·000	wwP, wP : wwP
11	29·818	78·9	44·9	34·0	61·0	+ 9·2	54·7	49·2	11·8	23·0	0·2	66	146·1	33·3	49·83	0·000	wP : wwP : wwP
12	29·761	71·1	51·2	19·9	60·2	+ 8·1	54·9	50·3	9·9	18·4	1·6	70	132·7	41·8	50·18	0·000	wwP : wP : wP
13	29·767	79·9	52·3	27·6	64·5	+ 12·1	56·5	49·9	14·6	26·7	0·8	59	140·0	41·5	50·84	0·000	wP : wP : wwP, mP
14	29·745	79·8	54·7	25·1	64·3	+ 11·7	57·6	52·0	12·3	22·2	2·7	64	133·2	44·9	51·58	0·000	wP
15	29·852	68·8	46·3	22·5	56·1	+ 3·3	52·8	49·7	6·4	14·5	0·8	79	122·1	44·5	52·29	0·000	wP : wP, mP : wP
16	29·960	56·9	43·5	13·4	48·0	− 5·0	45·0	41·7	6·3	13·7	0·0	79	116·0	37·0	52·71	0·000	wP : mP : mP
17	29·712	51·0	42·1	8·9	46·6	− 6·5	45·7	44·7	1·9	6·5	0·0	94	56·3	36·9	52·69	0·698	wP : v, wP : wP
18	29·486	64·7	43·1	21·6	54·1	+ 0·8	52·5	50·9	3·2	8·7	0·2	89	123·0	34·8	52·41	0·009	wP : wwP
19	29·526	66·4	54·1	12·3	58·7	+ 5·2	57·6	56·6	2·1	8·4	0·2	93	97·0	52·1	52·12	0·338	wwP
20	29·576	67·1	50·9	16·2	59·1	+ 5·3	57·4	55·9	3·2	9·1	0·0	90	126·9	51·0	52·21	0·430	wwP : wwP : wwP, v
21	29·563	70·7	54·0	16·7	59·7	+ 5·5	58·0	56·5	3·2	12·7	0·0	90	128·6	53·1	52·59	0·278	v, wwP : wwP : wwP
22	29·774	71·1	52·1	19·0	59·8	+ 5·2	56·2	53·0	6·8	14·9	0·8	79	140·1	43·5	53·08	0·000	wwP
23	29·801	73·5	50·1	23·4	61·0	+ 6·1	55·1	50·0	11·0	22·5	0·6	68	141·0	40·0	53·60	0·137	wwP
24	29·896	69·0	52·9	16·1	58·4	+ 3·1	44·1	50·2	8·2	13·8	1·7	75	127·3	43·9	54·19	0·010	wwP : wwP : wP
25	30·108	73·3	49·0	24·3	60·4	+ 4·9	56·3	52·8	7·6	13·3	0·8	76	123·0	40·3	54·60	0·000	wP
26	30·001	77·0	50·4	26·6	62·2	+ 6·4	57·7	53·9	8·3	16·0	0·0	75	138·5	38·8	55·15	0·000	wwP : wwP : wP
27	29·723	77·4	51·9	25·5	65·5	+ 9·5	59·3	54·2	11·3	21·4	1·0	68	138·0	42·5	55·59	0·000	wwP
28	29·657	75·0	51·3	23·7	64·4	+ 8·2	57·6	52·0	12·4	22·4	0·6	64	143·0	39·9	56·24	0·000	wwP : wwP : wwP, wP
29	29·676	76·9	51·3	25·6	60·0	+ 3·6	56·5	53·5	6·5	17·8	0·8	79	132·8	44·3	56·88	0·698	wP : ..
30	29·721	69·0	51·7	17·3	58·7	+ 2·0	53·7	49·3	9·4	16·7	0·4	71	125·2	40·5	57·49	0·000	.. : wP
31	29·798	70·2	50·1	20·1	58·7	+ 1·6	53·6	49·1	9·6	18·5	1·4	70	138·8	40·0	57·63	0·000	wP
Means	29·816	68·7	46·5	22·2	56·5	+ 3·5	52·1	48·1	8·5	17·3	0·7	74·1	126·6	38·7	51·67	Sum 2·609	..
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The results apply to the civil day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) 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 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was 29^{in} 816, being $0^{in}\cdot022$ *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 79°·9 on May 13; the lowest in the month was 36°·1 on May 7; and the range was 43°·8.
The mean of all the highest daily readings in the month was 68°·7, being 4°·8 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 46°·5, being 2°·8 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 22°·2, being 2°·0 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 56°·5, being 3°·5 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1917.	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.		
May 1	7·4	14·8	Calm : ENE	ENE : E : Calm	0·6	0·01	96	1, f, slt.-ho.-fr : 1, h	p,-cl : 0, f, a : 0, m
2	9·1	14·8	Calm	N : E : Calm	2·3	0·07	133	0, slt.-ho.-fr, h : 0, h	8, th.-cl : 3, th.-cl : 0
3	11·5	14·9	Calm : ENE : E	E : ENE	3·2	0·24	264	0 : 1, th.-cl : p. cl, th.-cl	p.-cl, th.-cl : p.-cl, th.-cl : 10, th.-cl, lu.-ha
4	12·1	14·9	ENE : NE	ENE : E : Calm	4·0	0·23	295	p.-cl : 1 : 1	1 : 1
5	1·2	15·0	Calm : NNE : NE	ENE : NNE	7·1	0·49	328	8 : 9 : 9, cu	6, cu.-n, r, m.-r : 9 : v.-cl
6	13·4	15·0	NE : ENE	ENE : NE	9·5	1·08	520	v.-cl : 3, cu	0 : 0, ho.-fr
7	12·4	15·1	ENE : NNE	E : ENE : NE	5·5	0·32	319	8, ho.-fr : 1	0 : 0 : 8
8	11·4	15·1	NNE : ENE	NE : E : ENE	4·0	0·35	343	6, slt.-ho.-fr: p.-cl : 0	0 : 0
9	9·9	15·2	NNE : ENE : E	E : ENE	2·6	0·28	297	10, ho.-fr : 9 : 2	0 : 2, th.-cl
10	0·6	15·3	E	E : Calm	2·0	0·16	214	9, sh : 9, cu	9, m.-r.-sh : 9 : v.-cl, h
11	7·9	15·3	Calm : E	SE : E : Calm	0·9	0·01	105	1, m, h : p.-cl, h : v.-cl, cu.-n, h	9, cu.-n : 9 : p.-cl, th.-cl
12	2·6	15·4	Calm : ENE : E	ENE : Calm	5·5	0·26	236	v.-cl, m : v.-cl : 7	8 : 10, oc.-th.-r,l: 8
13	11·1	15·4	SSW : SW	SW : Calm : S	1·9	0·07	196	p.-cl, hy.-d : 0 : 0	3, ci, th.-cl : v.-cl, so.-ha : 9
14	5·0	15·5	Calm : E : SW	WSW : W	2·8	0·19	237	9 : 9 : p.-cl	v.-cl, cu, ci : 6 : 1, l
15	0·6	15·5	WSW : W : NW	N : NNE	2·3	0·19	261	v.-cl : 10 : 9, n	9 : 10
16	1·4	15·6	NNE : NE	NE : ENE	2·0	0·30	347	10, m.-r.-sh : 10 : 10, oc.-m.-r	10, cu.-n : p.-cl : 10
17	0·0	15·6	NNE : N	NE : ESE : S	1·3	0·06	188	10, r : 10, r, m	10, r, m.-r : 10, m.-r, sh : 10
18	0·7	15·7	E	E : SE	2·2	0·18	232	10 : 10, n	10, oc.-slt.-r : 10, r
19	0·6	15·7	Calm : SE	Calm : SE	0·2	0·00	67	10, r : v.-cl : 10, cu.-n, shs	10, r, n : 10, slt.-r : 10, n, oc.-slt.-r, n
20	0·7	15·8	Calm : E	E : ENE : NE	4·1	0·09	192	10, slt.-r, f : 10, n	10, oc.-slt.-r : 10, oc.-slt.-r : 10, r, t.-sm
21	3·1	15·8	NNE : NE	E : S	1·5	0·13	239	10, r : 10, oc.-r : 10, n,oc, slt.-r	8, r : 7 : 10, n, l
22	5·0	15·8	SSW : Calm	S : Calm	0·5	0·01	140	10 : 10, m, m.-r.-sh : 9	v.-cl : 6 : 6
23	8·3	15·9	Calm : SE	S : SE	3·1	0·12	212	v.-cl : v.-cl, cu	3, ci : 9 : 9, cu.-n, r
24	7·9	15·9	S : SSW	SSW	3·8	0·43	358	10, slt.-r : 8 : 9	p.-cl. : 3, so.-ha : 1, th.-cl
25	4·7	16·0	SSW : S : SW	SW : Calm : E	1·1	0·03	183	1, th.-cl : 1, h : 9	10 : 10 : 0, h
26	13·8	16·0	Calm : SE : SSE	ESE : E	3·4	0·17	215	0, h, hy.-d : 0, hy.-d : 1, cu	0, cu, h : 0, h
27	10·7	16·0	E : Calm : SE	E : Var. : Calm	2·1	0·09	179	1, h : : 1, ci	2, cu, ci : v.-cl : 7, ci, n
28	14·1	16·1	Calm : ENE : ESE	E : ENE : NE	4·0	0·24	255	1 : p.-cl : 1	2 : 0 : 0
29	7·1	16·1	N : NNW	NNW : SSW	1·8	0·05	195	0, m : p.-cl, th.-cl, h : 1	3 : 10, oc.-t.-sms: 8
30	8·5	16·2	Calm : W	WNW : NW : Calm	0·9	0·04	172	8, m : 8, h	2 : 1 : 6
31	11·7	16·2	Calm : SW	SSW : S	2·6	0·23	292	8 : 1, cu	7, cu, cu.-n, ci.-cu : 9
Means	6·9	15·5	..	..	..	0·20	236		
Number of Column for Reference	18	19	20	21	22	23	24	25	26

The mean *Temperature of Evaporation* for the month was 52°·1, being 3°·1 *higher* than
The mean *Temperature of the Dew Point* for the month was 48°·1, being 3°·1 *higher* than
The mean *Degree of Humidity* for the month was 74·1, being 0·1 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.336, being 0in.037 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs.8, being 0gr.4 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 534 grains, being 4 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 5·1.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·446. The maximum daily amount of *Sunshine* was 14·1 hours on May 28.

The highest reading of the *Solar Radiation Thermometer* was 146°·1 on May 11; and the lowest reading of the *Terrestrial Radiation Thermometer* was 26°·0 on May 7.

The *Proportions of Wind* referred to the cardinal points were N. 6, E. 11, S. 5, W. 2. Seven days were calm.

The *Greatest Pressure of the Wind* in the month was 9·5 lbs. on the square foot on May 6. The mean daily *Horizontal Movement of the Air* for the month was 236 miles; the greatest daily value was 520 miles on May 6, and the least daily value was 67 miles on May 19.

Rain (0in.005 or over) fell on 9 days in the month, amounting to 2in.609, as measured by gauge No. 6 partly sunk below the ground; being 0in.694 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1917.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 3 ft. 2 ins. below the Surface of the Soil.		
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	
June 1	29·814	68·0	52·8	15·2	59·1	+ 1·7	54·7	50·7	8·4	14·7	1·6	74	123·0	44·2	57·90	0·000	wP : wwP : wP
2	29·913	68·3	49·2	19·1	56·5	− 1·3	52·0	47·8	8·7	17·0	0·8	72	128·2	40·6	58·08	0·025	wP : wP : wP, wwP
3	30·127	68·9	46·1	22·8	57·0	− 1·1	51·3	46·1	10·9	17·3	2·8	67	136·6	38·0	58·22	0·000	wwP : wP : wP
4	30·019	76·0	45·2	30·8	62·1	+ 3·8	54·8	48·5	11·6	23·6	1·1	61	140·0	33·7	58·20	0·000	wP : wwP : wP
5	29·964	77·9	46·7	31·2	61·6	+ 3·2	56·0	51·2	10·4	20·6	0·0	69	127·1	33·9	58·42	0·000	wP : wwP
6	29·961	67·8	50·7	17·1	58·8	+ 0·5	55·0	51·6	7·2	14·2	0·6	77	134·0	47·9	58·69	0·009	wP, wwP : wwP
7	29·858	83·3	54·1	29·2	67·0	+ 8·8	61·4	56·9	10·1	19·1	1·1	70	148·0	45·4	59·20	0·035	wP, wwP : wwP
8	29·940	74·1	53·6	20·5	63·9	+ 5·8	58·6	54·2	9·7	17·4	2·8	71	115·5	39·5	59·49	0·000	wP : wwP
9	30·015	76·7	53·1	23·6	63·7	+ 5·7	58·2	53·6	10·1	19·8	0·0	70	136·2	41·0	59·89	0·000	wwP : wP : wwP
10	30·014	75·4	48·2	27·2	62·8	+ 4·7	55·7	49·6	13·2	21·5	2·1	63	141·9	35·2	60·12	0·000	.. : ..
11	29·882	80·0	52·3	27·7	64·4	+ 6·2	58·8	54·1	10·3	24·1	0·0	69	145·0	42·8	60·31	0·000	.. : wP : wwP
12	29·807	80·1	54·6	25·5	65·5	+ 7·1	59·5	54·6	10·9	23·5	0·0	69	142·0	42·2	60·63	0·000	wP : wP, wwP : wwP
13	29·849	85·1	54·0	31·1	67·9	+ 9·4	61·2	55·9	12·0	22·2	0·4	64	143·9	44·0	61·19	0·000	wwP : wwP : wP
14	30·055	82·2	54·4	27·8	67·1	+ 8·4	60·9	56·0	11·1	22·0	1·5	67	154·1	42·4	61·69	0·000	wP : wwP : wP
15	30·058	83·0	49·6	33·4	67·0	+ 8·2	58·9	52·4	14·6	26·4	1·0	60	146·7	37·5	62·13	0·000	wP : wwP, wP
16	29·987	83·2	54·2	29·0	68·2	+ 9·3	62·7	58·4	9·8	19·9	0·7	71	137·2	44·0	62·67	0·000	wP : v, wwP
17	29·860	93·2	59·3	33·9	74·5	+ 15·5	65·3	58·6	15·9	34·6	0·0	57	151·3	47·0	63·16	0·000	wwP
18	29·685	86·8	59·2	27·6	70·4	+ 11·2	63·9	58·9	11·5	25·1	2·8	67	146·8	48·0	63·70	0·095	wwP : wP
19	29·520	76·4	57·2	19·2	64·8	+ 5·3	59·7	55·5	9·3	19·9	0·4	72	129·2	47·4	64·15	0·080	wwP : vv : v, wwP
20	29·457	79·0	53·1	25·9	64·3	+ 4·4	58·6	53·8	10·5	21·6	0·6	69	148·0	42·5	64·16	0·000	wP : wwP : wwP
21	29·562	68·1	49·8	18·3	58·8	− 1·5	53·2	48·2	10·6	18·3	1·2	68	131·9	40·7	63·85	0·003	wwP
22	29·691	68·3	46·9	21·4	56·4	− 4·2	50·7	45·4	11·0	18·9	0·6	67	116·0	35·0	63·68	0·000	wwP, wP : wP : wP
23	29·849	65·4	45·2	20·2	55·7	− 5·2	51·7	47·9	7·8	14·8	0·9	76	110·9	29·6	63·21	0·002	wP : wwP : wwP, wP
24	29·826	69·9	52·3	17·6	60·2	− 1·0	54·7	49·9	10·3	17·7	3·0	69	136·1	42·0	62·90	0·000	wwP
25	29·878	74·2	55·3	18·9	61·3	− 0·1	55·8	51·1	10·2	23·2	0·0	70	131·2	44·5	62·56	0·107	wwP, wP : wP : wP
26	29·901	72·1	49·9	22·2	58·7	− 2·8	52·8	47·6	11·1	24·1	1·0	67	141·1	37·3	62·30	0·000	wP
27	29·845	71·0	48·5	22·5	58·7	− 2·9	54·4	50·5	8·2	17·4	0·0	74	148·8	36·0	62·22	0·000	wP
28	29·704	74·0	56·3	17·7	62·9	+ 1·3	59·9	57·4	5·5	14·4	0·8	82	125·3	48·9	62·41	0·159	wwP
29	29·786	58·3	50·2	8·1	55·2	− 6·4	54·3	53·4	1·8	4·5	0·2	94	65·1	47·8	62·51	1·698	v, wwP : wwP : wwP
30	30·067	60·5	51·2	9·3	54·5	− 7·0	49·9	45·4	9·1	13·9	5·1	71	96·1	46·5	62·01	0·000	wwP, wP : wP : wP
Means	29·863	74·9	51·8	23·1	62·3	+ 2·9	56·8	52·2	10·1	19·7	1·1	70·0	132·6	41·5	61·31	Sum 2·213	..
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The results apply to the civil day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) 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 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was $29^{in.}·863$, being $0^{in.}·048$ *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 93°·2 on June 17; the lowest in the month was 45°·2 on June 4 and 23; and the range was 48°·0.
The mean of all the highest daily readings in the month was 74°·9, being 4°·2 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 51°·8, being 1°·9 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 23°·1, being 2°·3 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 62°·3, being 2°·9 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1917.	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	3·8	16·2	S	S : SSW	3·2	0·18	273	9 : 10, m.-r.-sh : 9, n	6, ci, cu, n : 7, th.-cl, ci.-s
2	9·0	16·3	SSW : SW	SSW : SW : W	5·7	0·35	344	7 : 8	8 : 6, r : 1
3	12·1	16·3	SSW : WSW	SW : SSW	3·2	0·25	348	0, h : p.-cl, cu	8 : p.-cl : 0
4	15·3	16·3	Calm : SSW	S : SSW : Calm	2·0	0·10	211	0 : 0	0 : 0
5	14·4	16·4	Calm : NE	NNE : ENE : E	5·7	0·24	234	0, h : 0, h	1 : 1 : 10
6	5·8	16·4	ENE	ENE : E	3·5	0·37	349	10 : 10 : 9, oc.-slt.-r	2 : 1 : 10
7	10·8	16·4	NE : Calm : SW	SSW : SW	1·4	0·06	203	10, r : 6, oc.-r : v.-cl, cu	v.-cl : 6 : 1
8	5·2	16·4	Calm : WSW	SSW : SW	1·0	0·04	203	0 : 1 : 10, th.-cl, so.-ha	10, th.-cl, so-ha : 9, th.-cl : 9
9	8·5	16·4	Calm : N	NNE : NE : E	1·0	0·03	160	1, h : 1, h : 3, h	p.-cl : 6
10	7·5	16·4	Calm : NNE	NNE : N	2·3	0·08	225	2, h : 1, h : 6, ci.-s, ci.-cu	9, ci.-s, oc.-so.-ha : 9, slt.-sh
11	9·1	16·5	N : NNE : NE	NE : E : Calm	2·0	0·10	227	10, oc.-l : 10, oc.-l : 9, cu, s	v.-cl, cu.-n : 0
12	11·6	16·5	NE : Calm	E : Calm	1·0	0·05	163	0, m : 1, m, h	1, ci, cu : 1, so.-ha : 1
13	10·3	16·5	Calm : SW	SW : WSW	2·5	0·09	216	0, m : 1	3, so.-ha : 1
14	10·8	16·5	SW	SW : SSW : Calm	1·7	0·08	221	1 : 10 : 6, cu.-n	6, cu.-n : 1 : 0
15	15·2	16·5	Calm : SSW	SW : S : Calm	0·5	0·04	147	0 : 1	1 : 1
16	9·8	16·5	Calm : NE : E	ENE : Calm	1·0	0·03	139	1, m, hy.-d, h : 3, m, hy.-d, h : 1, h	1 : 6, oc.-t.-l : 2
17	11·4	16·5	Calm : NE	S : Calm	1·0	0·02	134	9, f : f : 0	3 : 1 : 1
18	6·7	16·6	Calm : SW	W : SW : Calm	4·4	0·07	217	1, h, m : 1, h, m : 7, shs	v.-cl, t, l, hy.-r : 1, sh : 1
19	3·5	16·6	Calm : SW	Calm : S	1·1	0·03	163	2, slt.-m : 6, t : 9, shs, t	9, s, shs, so.-ha : 6, so.-ha : 6
20	9·2	16·6	Calm : S	S : SSW	2·7	0·20	241	6 : 6 : v.-cl, cu.-n	v.-cl : v.-cl, m.-r, sh : 9
21	8·1	16·6	SSW : SW : S	S : W : SW	1·8	0·17	250	10 : 1 : 3	9, fq.-slt.-shs : 1
22	4·6	16·6	Calm : N	NW : N	3·5	0·13	232	0 : 8, m : 7, cu.-n	v.-cl, cu.-n : 4, shs : 1, cu.-n, ci
23	4·6	16·6	Calm : SW	SW : SSW	2·6	0·13	297	1, : 3 : 10, cu.-n, r	10, cu-n, oc.-m.-r : 9 : 8
24	3·8	16·6	SSW : SW	SSW	4·0	0·29	396	6 : : 7	9 : 9, sh
25	2·5	16·6	SSW : SW	SW : NNW	0·6	0·01	175	10 : 10, r : 9, r	9, cu.-n : 6 : v.-cl
26	7·0	16·6	Calm : NW : SW	SW : SSW	2·1	0·09	220	8, sh : 9, cu, cu.-n	8, slt.-sh : 8, th.-cl : 3, th.-cl
27	4·8	16·5	Calm : S : SSE	SE : E	0·9	0·03	178	3 : 10 : 10	8, : 6, h
28	0·4	16·5	ENE : E	E : NE : NNE	1·9	0·07	181	9, m : 9, n, cu.-n	10, sh : 10, r
29	0·0	16·5	NNE : N : NNW	N	4·4	0·45	435	10, t.-sm, r, hy.-r : 10, m.-r	10, li.-r : 10, m.-r : 10
30	0·0	16·5	N : NNE	NNE : N	4·8	0·48	437	10, oc.-slt.-r : 10, n	10, n : 9
Means	7·5	16·5	..	..	..	0·14	241		
Number of Column for Reference	18	19	20	21	22	23	24	25	26

The mean *Temperature of Evaporation* for the month was 56°·8, being 1°·9 *higher* than
The mean *Temperature of the Dew Point* for the month was 52°·2, being 1°·3 *higher* than
The mean *Degree of Humidity* for the month was 70·0, being 3·6 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.391, being 0in.018 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs.3, being 0gr.1 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 529 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 5·5.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·457. The maximum daily amount of *Sunshine* was 15·3 hours on June 4.
The highest reading of the *Solar Radiation Thermometer* was 154°·1 on June 14; and the lowest reading of the *Terrestrial Radiation Thermometer* was 29°·6 on June 23.
The *Proportions of Wind* referred to the cardinal points were N. 5, E. 5, S. 11, W. 5. Four days were calm.
The *Greatest Pressure of the Wind* in the month was 5·7 lbs. on the square foot on June 2 and 5. The mean daily *Horizontal Movement of the Air* for the month was 241 miles; the greatest daily value was 437 miles on June 30; and the least daily value was 134 miles on June 17.
Rain (0in.005 or over) fell on 8 days in the month, amounting to 2in.213, as measured by gauge No. 6 partly sunk below the ground; being 0in.175 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1917.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 3 ft. 2 ins. below the Surface of the Soil.		
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	
July 1	30·061	69·2	48·8	20·4	57·9	− 3·6	52·1	46·9	11·0	18·9	4·1	67	138·5	39·2	61·58	0·000	wP
2	30·018	73·2	46·8	26·4	59·8	− 1·8	53·9	48·7	11·1	22·9	0·0	67	140·1	37·2	61·29	0·000	wP : wP, wwP : wP
3	30·013	74·9	51·4	23·5	63·6	+ 1·8	55·9	49·5	14·1	24·7	3·0	60	142·9	41·2	61·40	0·000	wP
4	30·017	61·6	54·0	7·6	57·4	− 4·7	54·9	52·7	4·7	8·4	0·4	84	83·8	51·2	61·63	0·116	wP : wP, wwP : wwP, wP
5	30·127	69·2	51·2	18·0	57·9	− 4·4	52·3	47·3	10·6	18·8	2·2	68	137·1	42·9	62·00	0·000	wP
6	30·064	69·1	46·5	22·6	57·3	− 5·1	52·4	47·9	9·4	20·3	0·2	71	139·0	36·7	61·89	0·000	wP : wP : wP, mP
7	29·807	70·9	49·5	21·4	60·4	− 2·0	55·0	50·3	10·1	20·4	0·6	69	139·0	40·0	62·01	0·000	mP : wwP
8	29·583	57·6	53·2	4·4	56·2	− 6·2	55·1	54·1	2·1	6·5	0·2	93	66·2	51·8	62·11	0·630	wwP
9	29·670	63·7	50·2	13·5	55·2	− 7·2	53·4	51·7	3·5	10·8	0·0	88	85·0	45·7	62·21	0·317	wwP
10	29·898	67·4	48·0	19·4	56·4	− 6·1	51·5	46·9	9·5	17·7	2·1	70	135·8	38·4	61·79	0·000	wwP : wwP : wwP, wP
11	30·065	71·6	45·3	26·3	58·4	− 4·3	53·5	49·1	9·3	16·8	0·2	72	126·5	34·8	61·32	0·000	wP : vP : mP
12	30·111	78·7	47·0	31·7	61·8	− 1·1	55·5	50·1	11·7	24·6	0·0	66	138·9	40·1	61·32	0·000	mP : mP : mP, . .
13	29·966	78·6	55·0	23·6	67·7	+ 4·6	60·1	54·1	13·6	24·5	2·3	62	142·6	43·1	61·70	0·000	. . : mP
14	29·737	84·7	62·3	22·4	71·1	+ 7·8	63·3	57·4	13·7	20·7	6·7	62	144·9	51·5	62·29	0·000	mP : mP : mP, sP
15	29·753	72·9	56·8	16·1	63·0	− 0·4	58·3	54·3	8·7	18·4	1·0	73	138·1	52·7	62·90	0·196	mP : mP, v : wP
16	29·806	71·1	54·0	17·1	60·5	− 2·9	57·5	54·9	5·6	11·6	0·6	83	138·1	44·8	63·41	0·243	wP, mP : wP
17	29·807	77·3	51·3	26·0	63·3	− 0·1	58·9	55·2	8·1	19·7	0·0	75	138·8	41·1	63·51	0·010	wP : wP : wP, mP
18	29·651	71·1	57·1	14·0	62·6	− 0·7	61·1	59·8	2·8	6·4	0·7	91	118·3	57·1	63·28	0·458	wP
19	29·709	75·8	59·3	16·5	66·0	+ 2·8	60·3	55·7	10·3	22·6	1·3	69	130·2	51·2	63·39	0·001	wP : mP : sP
20	29·943	78·6	54·0	24·6	64·4	+ 1·2	59·8	56·0	8·4	21·4	0·4	74	140·9	47·6	63·40	0·010	mP
21	30·033	74·2	56·1	18·1	63·5	+ 0·3	59·6	56·3	7·2	18·2	0·0	78	137·0	48·1	63·51	0·000	mP : mP : wP
22	30·113	78·0	49·3	28·7	64·8	+ 1·7	58·0	52·4	12·4	23·4	0·6	64	140·2	41·0	63·88	0·000	mP : wP
23	30·093	81·9	52·3	29·6	66·8	+ 3·8	58·5	51·8	15·0	26·4	2·8	60	132·1	40·8	64·18	0·000	mP : sP, mP : mP, sP
24	30·034	82·3	58·1	24·2	68·4	+ 5·5	61·3	55·8	12·6	23·2	1·9	64	142·5	52·9	64·49	0·000	mP : vP : mP
25	29·921	80·8	59·2	21·6	67·4	+ 4·7	62·5	58·6	8·8	18·1	0·0	73	142·4	52·8	64·75	0·004	mP
26	29·911	75·3	58·0	17·3	65·0	+ 2·5	62·0	59·5	5·5	14·9	0·2	83	133·9	50·8	65·13	0·000	mP
27	29·885	80·9	59·2	21·7	68·0	+ 5·6	62·8	58·7	9·3	20·4	0·0	72	143·0	51·7	65·49	0·000	mP
28	29·824	81·3	57·1	24·2	67·6	+ 5·3	61·8	57·2	10·4	23·0	0·0	69	148·1	48·0	65·70	0·000	mP : sP : mP, sP
29	29·684	74·2	54·5	19·7	62·0	− 0·3	59·2	56·8	5·2	14·0	0·0	83	131·7	43·8	65·92	0·139	mP : mP, wP
30	29·682	66·3	54·6	11·7	58·4	− 3·9	56·1	54·0	4·4	10·0	0·0	85	86·3	54·2	65·89	0·401	wP, mP : sP : mP, wP
31	29·762	56·1	53·1	3·0	54·4	− 7·8	53·1	51·8	2·6	5·0	1·2	91	72·7	52·0	65·53	1·430	vv : wP : mP
Means	29·895	73·2	53·3	19·8	62·2	− 0·5	57·4	53·4	8·8	17·8	1·1	73·7	128·2	45·9	63·19	3·955	. .
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The results apply to the civil day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) 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 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was $29^{in.}·895$, being $0^{in.}·096$ *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 84°·7 on July 14; the lowest in the month was 45°·3 on July 11; and the range was 39°·4.
The mean of all the highest daily readings in the month was 73°·2, being 1°·0 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 53°·3, being *equal to* the average for the 65 years, 1841–1905.
The mean of the daily ranges was 19°·8, being 1°·1 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 62°·2, being 0°·5 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1917.	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.		
July 1	12·0	16·5	N : NNE	NNE : N	2·8	0·25	340	8 : 7 : 7	7, cu, cu.-n : 1
2	10·3	16·5	N : NNE : NE	ENE : E : NE	2·7	0·15	289	v.-cl, m : 10 : v.-cl, cu.-n	v.-cl, cu.-n : 1 : 1
3	13·9	16·5	NNE : NE : ENE	ENE : E	3·3	0·32	339	1, th.-cl : 1 : 1	1 : 2 : 7
4	0·0	16·4	ENE : NE	E : Calm : N	1·0	0·10	185	10, slt.-sh : 10, r.	10, r, oc.-m.-r : 10, oc.-m.-r
5	7·7	16·4	N	N : E	1·1	0·09	206	10 : 10, n : 9	6 : 7, th.-cl : 7, th.-cl
6	11·0	16·4	Calm : E	E	1·1	0·03	176	7, th.-cl : 10 : 8	0 : 2 : v.-cl, th.-cl
7	11·5	16·4	ENE : E	E : ENE : NE	6·7	0·48	365	1, m : v.-cl, th.-cl, so.-ha	1, w : 1, th.-cl : v.-cl
8	0·0	16·3	NE : NNE	NNE : N : NNW	1·2	0·13	220	10, m : 10, r : 10, r	10, r : 10, r : 10, r, m.-r
9	2·4	16·3	NNW : WNW : N	N	3·3	0·33	353	10, r : 10, n, r, m.-r	10, m.-r : v.-cl
10	12·9	16·3	N : NNW	N : NNE : NE	2·0	0·18	266	6, h, d : p.-cl : v.-cl, cu.-n	v.-cl, cu.-n : p.-cl : v.-cl, th.-cl
11	9·0	16·3	Calm : NE	Calm : S : SSE	0·6	0·01	118	8, hy.-d : p.-cl, h : 0, h	p.-cl : 6 : 1
12	12·8	16·2	Calm : SSE : S	SSW : S : SE	0·5	0·05	156	v.-cl, m : 1, so.-ha	p.-cl, th.-cl, so.-ha : 1
13	10·2	16·2	SE : SSE	S : SSE	3·7	0·17	227	2 : 8 : 4 th.-cl, so.-ha	p.-cl, th.-cl : 10
14	9·9	16·2	SSE : SE : SW	WSW : W : WNW	2·8	0·12	242	10, l : 10 : p.-cl, ci, cu	p.-cl, cu : p.-cl : 8
15	8·4	16·1	WSW : SW	SW : SSW	6·8	0·38	373	10 : p.-cl : v.-cl, t.-sm	8 t.-sm, r : 1, h
16	4·6	16·1	SW : SSW	SW : SSW	2·2	0·15	259	v.-cl th.cl, hy.-d: v.-cl : 9, cu.-n, shs	9, shs : 9, sh : 1
17	7·5	16·0	SSW : Calm	SSW	1·3	0·06	184	1, hy.-d, m: 9, slt.-r : p.-cl	8, cu.-n : 10, r, m.-r, l
18	0·3	16·0	SSW : S	SSW : SW	5·9	0·59	406	10, r : 10, r, w	10, r, t, w : 10, w : 10, w
19	8·3	16·0	SW : WSW	WSW : W : WNW	4·8	0·74	483	10, oc.-slt.-r : 10	p.-cl : 0
20	9·4	15·9	SW	SW : var : Calm	1·5	0·07	180	1, hy.-d : 9, th.-cl	9, cu.-n, so.-ha : 9, r, m.-r : 8
21	9·6	15·9	Calm : N : NE	N : NNE : E	3·5	0·05	157	0, h : 6, m : 7, h	7, cu, cu.-n : 1 : 10, th.-cl
22	12·0	15·9	Calm	Calm : SSW	0·7	0·04	141	4, th.-el, hy.-d, h: 0	7 : 1, th.-cl
23	9·2	15·8	SW : WSW	SW : WSW : Calm	0·9	0·05	197	0, h, d : 1, th.-cl, h	p.-cl, th.-cl : 2, so.-ha : v.cl, th.-cl
24	1·9	15·8	Calm : SSW	SW : SSW : S	1·0	0·04	170	10 : 10, n	9, n, oc.-m.-r : 9, cu.-n : 9
25	7·3	15·7	SSW : SW	SW	1·4	0·10	206	10, slt.-sh : 9, cu, cu.-n, ci, so.-ha	7, cu.-n : 0, h
26	3·0	15·7	SW : WSW	SW : SSW	2·4	0·15	254	8, m, f : 10, m.-r.-sh	8, oc.-m.-r : 10, cu.-n : v.-cl
27	7·8	15·6	SW	SSW : S : SW	1·7	0·15	243	p.-cl : 7 : 3	p.-cl : p.-cl
28	7·2	15·6	SW : Calm : WSW	SW : Calm	1·1	0·04	150	0, h, m, d : v.-cl : 9, so.-ha	7, ci.-cu, so.-ha : v.-cl : p.-cl
29	1·4	15·5	Calm : NNE	E : Calm : NNW	6·3	0·15	190	p.-cl, m, h, d : 10, s	10 : 10, r : : 10, r
30	0·0	15·5	NNW	NNW : NNE : N	4·4	0·20	282	10, r : 10	10, oc.-m.-r, sh : 10, r
31	0·0	15·4	N	N : NNW	5·4	0·53	407	10, r : 10, r	10, r : 10, m.-r.-sh
Means	7·1	16·0	..	..	..	0·19	250		
Number of Column for Reference	18	19	20	21	22	23	24	25	26

The mean *Temperature of Evaporation* for the month was 57°·4, being 0°·5 *lower* than
The mean *Temperature of the Dew Point* for the month was 53°·4, being 0°·4 *lower* than
The mean *Degree of Humidity* for the month was 73·7, being 0·9 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in.409, being 0in.6 *less* than
The mean *Weight of Vapour in a Cubic foot of Air* for the month was 4grs.5, being 0grs.1 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 529 grains, being 2 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 5·7.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·445. The maximum daily amount of *Sunshine* was 13·9 hours on July 3.
The highest reading of the *Solar Radiation Thermometer* was 148°·1 on July 28; and the lowest reading of the *Terrestrial Radiation Thermometer* was 34°·8 on July 11.
The *Proportions of Wind* referred to the cardinal points were N. 8, E. 5, S. 9, W. 5. Four days were calm.
The *Greatest Pressure of the Wind* in the month was 6·8 lbs. on the square foot on July 15. The mean daily *Horizontal Movement of the Air* for the month was 250 miles; the greatest daily value was 483 miles on July 19; and the least daily value was 118 miles on July 11.
Rain (0in.005 or over) fell on 11 days in the month, amounting to 3in.955, as measured by gauge No. 6 partly sunk below the ground; being 1in.556 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1917.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 3 ft. 2 ins. below the Surface of the Soil.		
	Mean of 24 Hourly Value (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	
Aug. 1	29·650	56·6	52·8	3·8	54·5	− 7·7	53·7	52·9	1·6	4·8	0·0	94	62·6	51·7	64·61	1·517	wP, wwP : wwP
2	29·528	62·9	56·6	6·3	58·7	− 3·4	57·2	55·9	2·8	5·3	0·4	90	73·5	52·5	63·39	0·052	wwP
3	29·552	62·0	57·2	4·8	59·1	− 3·0	57·0	55·1	4·0	7·3	1·1	87	73·3	55·2	62·82	0·118	wwP
4	29·529	66·1	58·3	7·8	60·9	− 1·2	59·5	58·3	2·6	8·5	0·0	92	116·2	56·3	62·41	0·531	wwP
5	29·752	73·5	56·6	16·9	62·2	+ 0·1	60·9	59·8	2·4	7·9	0·4	92	126·0	54·6	62·23	0·111	wwP
6	29·781	73·3	57·7	15·6	63·8	+ 1·6	61·6	59·8	4·0	12·5	0·4	88	132·1	49·2	62·40	0·001	wwP
7	29·719	77·3	55·2	22·1	64·6	+ 2·4	61·8	59·5	5·1	15·4	0·2	84	132·0	46·8	62·75	0·000	wwP
8	29·528	70·0	56·2	13·8	61·3	− 1·0	59·6	58·1	3·2	7·7	0·0	90	115·9	52·8	63·00	0·152	wwP
9	29·400	70·4	53·1	17·3	60·7	− 1·6	57·1	54·0	6·7	14·3	0·6	79	132·3	49·1	63·32	0·002	wwP : wwP : wP
10	29·521	73·0	55·1	17·9	62·1	− 0·2	57·6	53·8	8·3	17·2	0·0	74	140·1	48·4	63·45	0·073	wwP : wwP : wP
11	29·475	70·8	57·3	13·5	62·4	− 0·0	58·0	54·3	8·1	15·4	1·5	75	126·9	52·2	63·41	0·007	wwP : wP : wP
12	29·572	72·9	55·0	17·9	62·1	− 0·4	57·8	54·1	8·0	17·1	0·0	76	130·1	49·0	63·59	0·002	wP
13	29·575	72·8	53·9	18·9	62·5	− 0·0	58·0	54·2	8·3	17·6	0·0	74	138·0	48·9	63·72	0·096	v, wP : wP : wP
14	29·466	71·9	53·6	18·3	62·0	− 0·5	58·3	55·1	6·9	14·4	0·0	79	137·5	44·2	63·81	0·128	wP, wwP : wP : wP
15	29·495	71·0	54·1	16·9	60·6	− 1·8	57·6	55·0	5·6	12·4	0·0	83	137·7	49·1	63·88	0·280	wP
16	29·725	71·2	54·8	16·4	62·2	− 0·1	57·0	52·5	9·7	17·8	1·0	71	126·7	49·1	63·83	0·006	wP : mP : mP
17	29·774	71·2	55·1	16·1	62·1	− 0·0	58·4	55·2	6·9	13·6	1·0	78	126·4	48·9	63·78	0·004	wP
18	29·667	72·1	55·2	16·9	62·3	+ 0·4	58·2	54·7	7·6	19·6	1·6	77	132·8	48·2	63·74	0·148	wP
19	29·825	73·4	53·3	20·1	61·7	− 0·0	56·3	51·7	10·0	20·7	1·9	70	135·7	43·5	63·72	0·005	wP
20	29·870	73·5	50·8	22·7	60·5	− 1·0	55·7	51·5	9·0	17·4	1·4	72	137·4	41·2	63·55	0·001	wP
21	29·836	71·9	53·1	18·8	61·2	− 0·1	56·6	52·6	8·6	17·8	0·0	74	147·3	44·7	63·61	0·000	wP : mP, wP : mP
22	29·648	77·5	54·6	22·9	65·9	+ 4·8	60·5	56·1	9·8	20·6	1·1	71	146·5	45·4	63·71	0·000	wP
23	29·474	71·7	55·9	15·8	63·4	+ 2·5	58·7	54·7	8·7	16·1	2·4	74	138·7	49·7	63·80	0·126	wP, wwP ; wP : mP
24	29·587	69·0	54·7	14·3	60·4	− 0·4	56·0	52·2	8·2	14·7	2·7	74	129·3	49·5	63·94	0·051	wP
25	29·852	67·9	53·0	14·9	58·4	− 2·3	52·9	48·0	10·4	18·2	3·7	69	127·5	45·6	63·90	0·000	wP : mP : mP
26	29·566	67·2	51·0	16·2	57·3	− 3·4	53·9	50·8	6·5	14·9	0·0	79	129·6	43·5	63·75	0·318	wP, wwP : wP : wN, wP
27	29·156	64·2	50·2	14·0	56·5	− 4·1	53·8	51·3	5·2	11·3	0·8	83	116·3	45·1	63·40	0·485	wP : mP, wP : wwP
28	29·817	61·9	54·1	7·8	56·7	− 3·7	53·8	51·1	5·6	10·0	1·2	82	106·1	49·5	62·93	0·261	wwP : wwP, wwN : wP
29	29·230	66·0	55·2	10·8	58·1	− 2·2	54·8	51·8	6·3	11·1	2·9	79	113·9	50·4	62·50	0·014	wwP : wP
30	29·648	66·1	53·1	13·0	57·0	− 3·1	53·9	51·0	6·0	11·7	0·4	80	124·2	48·0	62·19	0·070	wwP : wP : wP, wwP
31	29·668	68·0	51·8	16·2	58·8	− 1·1	54·3	50·2	8·6	18·0	0·6	74	120·8	43·0	61·80	0·000	wwP : wP, mP : sP, mP
Means	29·577	69·6	54·5	15·1	60·6	− 1·0	57·1	54·0	6·6	13·9	0·9	79·5	123·7	48·6	63·32	Sum 4·559	..
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The results apply to the civil day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) 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 9) is the difference between the numbers in Columns 5 and 8), and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was 29$^{in.}$·577, being 0$^{in.}$·206 *lower* than the average for the 65 years, 1841–1905.

Temperature of the Air.

The highest in the month was 77°·5 on August 22 ; the lowest in the month was 50°·2 on August 27 ; and the range was 27°·3.
The mean of all the highest daily readings in the month was 69°·6, being 3°·1 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 54°·5, being 1°·5 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 15°·1, being 4°·6 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 60°·6, being 1°·0 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1917.	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	0·0	15·4	NNW : NW	NNW : N : NW	3·3	0·31	343	10, oc.-shs : 10, c.-r	10, r : 10, r, m,-r : 10, r, m.-r
2	0·0	15·3	NNW : NW	NNW	4·0	0·48	374	10, slt.-r : 10, oc.-slt.-r, shs	10, oc.-shs : 10, oc.-m.-r : 10
3	0·0	15·3	NW : WNW	NNW : NW	4·0	0·47	400	10, fq.-r : 10, oc.m.-r	10, oc.-m.-r : 10, r
4	1·1	15·2	NW : NNW : N	ENE : NE	3·0	0·35	348	10, r : 10, r, shs	8, cu.-n, sh : 10, sh
5	3·0	15·2	NNE : N	N : NNE : Calm	2·5	0·05	186	10, slt.-m.-r : 10, n	9, r, slt.-r : 3 : 8
6	4·6	15·1	Calm	NE : Calm	0·4	0·00	109	10, slt.-r, m : 10, n	p.-cl, cu : v.-cl : 1, h
7	7·4	15·1	Calm : SW	SW : SSW	0·9	0·05	168	v.-cl, th.-cl, m, h: v.-cl, th.-cl, m	p.-cl, cu, cu.-n : 1 : 10, th.-cl
8	0·2	15·0	Calm : SE	SE : SSW	1·0	0·06	162	10, th.-cl : 10, sh	10, oc.-slt.-r : 9, t.-sm : 9
9	12·5	14·9	SW : SSW	SSW	4·1	0·38	366	6, hy.-d : v.-cl, slt.-shs : 8, oc.-r	v.-cl, oc.-slt.-r, cu. cu.-n : 1
10	9·4	14·9	SSW : SW	SW : SSW : SE	3·1	0·33	351	8, a, r : 7, cu, cu.-n	7, slt.-sh, cu, ci : v.-cl : 9, sh
11	8·8	14·8	SSW	SW : SSW	5·1	0·60	415	8 : v.-cl, oc.-r	p.-cl, oc.-r, w: p.-cl, oc.-r, w : 1
12	10·6	14·8	SSW : SW	SW : SSW	4·7	0·31	335	0 : p.-cl : 7, cu.-n	7, sh : 8, so.-ha : 1
13	9·9	14·7	S : SSW	SSW : S	2·0	0·13	222	8, r : 8, m : v.-cl, cu.-n	v.-cl, cu.-n : 1 : 10, oc.-r
14	10·4	14·7	S : SSW	SSW	2·8	0·19	285	v.-cl : v.-cl, cu : 8, sh	8, r, m.-r : 7 : 1, th.-cl
15	6·2	14·6	SSW : SW : WSW	SSW : WSW	1·3	0·08	252	0, hy.-d : v.-cl, shs : 9, shs	8, cu.-n, shs, t : p.-cl : 1
16	9·6	14·5	WSW : W	W : WSW : SSW	4·0	0·23	352	7, slt.-r, h : 7, cu.-n	8, cu.-n : p.-cl : 1
17	6·6	14·5	SSW	SSW : S	8·0	0·53	395	1 : v.-cl : 9, sh	10 n, m.-r, w : p.-cl, w : v.-cl
18	7·0	14·4	S : SSW	SW : SSW	4·6	0·33	358	8 : 8, slt.-shs : 9, r	p.-cl, cu.-n : v.-cl, t.-sm : 1
19	12·2	14·4	SSW : SW	SW : WSW	2·5	0·25	335	0, hy.-d : v.-cl, th.-cl : v.-cl, cu.-n	7, cu.-n, ci, shs : 3 : 0
20	10·7	14·3	SW	SW : WSW	1·8	0·09	211	0, hy.-d, m : 0 : 6, oc.-sl.-r	v.-cl, cu.-n : v.-cl : 10, m.-r
21	7·5	14·2	SW	SW : SSW : S	1·5	0·10	210	9 : 7 : 8, cu.-n	9, cu, n : 9, th.-cl, so.-ha : 9, th.-cl
22	8·0	14·2	SSE : S	S : SSE	3·2	0·20	255	9, th.-cl : : 8, ci, cu	7, ci,-cu : 7, 1 : p.-cl, 1
23	10·0	14·1	S : SSW : SW	SSW : SW	7·0	0·77	473	8, m.-r : v.-cl, sh, w : p.-cl, cu.-n, w	v-cl, r m.-r w : 2, w : 0, w
24	8·6	14·0	SSW : SW	SW	10·5	1·24	622	10, m.-r, oc.-r, w : 9, oc.-m.-r, w	9, w : v.-cl, w, sh : p.-cl
25	5·9	14·0	SW : WSW	SW : SSW : S	3·0	0·28	387	10 : 8, cu.-n	8 : p.-cl : 1
26	4·6	13·9	S : SSW	S : SSE : SW	4·8	0·15	283	1 : v.-cl : v.-cl, cu.-n	v.-cl : 10, r : 10, r, slt.-r
27	5·4	13·9	SW : S	S : SE : ESE	7·8	0·43	410	7, w : 2 : 6, shs	10, r : 10, c.-r : 10, r, m.-r, sh, w
28	1·4	13·8	S : SSW : SW	SW : SSW	13·2	1·81	685	10 m.-r, r, w : 10, fq.-r, w : 10, n, r, w	10, slt.-sh, w : 10, oc.-r, n, r, w : 9
29	1·7	13·7	SSW : SW : WSW	WSW : SW	6·3	0·62	525	10 m.-r, slt.-sh : 10, oc.-slt.-r : 10 fq.-slt.-r, sh	10, sh, w : p.-cl, w : v.-cl
30	1·5	13·7	WSW : SW	SW : SSW	3·6	0·35	380	v.-cl : 9, cu.-n, sh	10, cu.-n : 10, : 10, r, m.-r
31	4·3	13·6	SW : W : NNW	NW : W : SW	1·3	0·16	268	10, : 10, slt.-r : 8, cu.-n	v.-cl : 2, : v.-cl
Means	6·1	14·5	..	..	..	0·37	338		
Number of Column for Reference	18	19	20	21	22	23	24	25	26

The mean *Temperature of Evaporation* for the month was 57°·1, being 0°·4 *lower* than
The mean *Temperature of the Dew Point* for the month was 54°·0, being *equal* to
The mean *Degree of Humidity* for the month was 79·5, being 3·2 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in.418, being *equal* to
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs.7, being 0gr.1 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 525 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 6·9.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·420. The maximum daily amount of *Sunshine* was 12·5 hours on August 9.

The highest reading of the *Solar Radiation Thermometer* was 147°·3 on August 21; and the lowest reading of the *Terrestrial Radiation Thermometer* was 41°·2 on August 20.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 1, S. 15, W. 10. Two days were calm.

The *Greatest Pressure of the Wind* in the month was 13·2 lbs. on the square foot on August 28. The mean daily *Horizontal Movement of the Air* for the month was 338 miles; the greatest daily value was 685 miles on August 28; and the least daily value was 109 miles on August 6.

Rain (0in.005 or over) fell on 21 days in the month, amounting to 4in.559, as measured by gauge No. 6 partly sunk below the ground; being 2in.·215 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1917.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 3 ft. 2 ins. below the Surface of the Soil.		
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	
Sept. 1	29·601	65·9	52·6	13·3	57·8	— 2·0	54·5	51·6	6·2	15·9	1·2	80	107·9	43·8	61·68	0·018	wP, wwP,: wwP : wP
2	29·758	67·5	51·2	16·3	57·8	— 1·9	52·8	48·3	9·5	17·7	2·0	71	126·3	43·1	61·50	0·000	wwP : m : wP, wwP
3	30·007	72·8	47·4	25·4	58·5	— 1·1	54·4	50·7	7·8	17·2	0·0	76	132·0	37·0	61·33	0·000	wwP : wP : wP, wwP
4	29·920	70·9	45·1	25·8	58·8	— 0·7	54·7	51·0	7·8	19·0	0·6	75	131·5	35·0	61·31	0·000	wwP : wP : wP, wwP
5	29·699	70·9	48·9	22·0	60·4	+ 1·0	56·9	53·9	6·5	16·0	0·6	79	126·7	37·8	61·38	0·570	wP, wwP : wP : wwP
6	29·692	72·8	57·0	15·8	62·6	+ 3·4	60·2	58·2	4·4	13·7	0·0	86	124·0	51·7	61·49	0·090	wwP
7	29·872	69·5	57·8	11·7	62·1	+ 3·1	59·0	56·3	5·8	10·1	1·3	82	108·0	52·1	61·70	0·001	wwP
8	29·956	75·0	50·2	24·8	61·3	+ 2·5	58·3	55·7	5·6	13·2	0·2	82	121·1	42·8	61·95	0·000	wwP : wP, wwP : wwP
9	29·951	67·0	56·0	11·0	59·8	+ 1·2	58·7	57·8	2·0	4·9	0·7	93	99·0	48·2	61·93	0·056	wwP
10	30·063	67·9	53·1	14·8	60·0	+ 1·6	58·0	56·2	3·8	8·6	0·6	88	118·1	44·7	62·00	0·000	wwP : wwP : wP
11	29·956	74·5	52·3	22·2	62·2	+ 4·1	58·9	56·1	6·1	16·6	0·0	80	123·1	43·8	62·09	0·247	wP
12	29·992	64·0	50·0	14·0	56·9	— 1·1	52·0	47·5	9·4	16·1	2·2	70	113·7	42·1	61·95	0·000	wP : mP : sP, mP
13	29·943	62·7	47·7	15·0	54·8	— 3·0	52·6	50·5	4·3	10·3	0·0	85	94·5	40·9	61·81	0·031	wP : wP : wwP
14	29·844	70·2	51·7	18·5	60·0	+ 2·3	55·7	51·9	8·1	15·7	0·4	75	126·1	40·9	61·57	0·000	wwP : mP, wP : mP, wP
15	29·933	71·1	51·0	20·1	59·5	+ 1·9	54·8	50·6	8·9	19·5	0·0	72	122·6	39·8	61·33	0·000	wP : sP, mP : mP, wP
16	29·803	70·3	53·2	17·1	60·0	+ 2·5	57·0	54·4	5·6	15·3	0·9	82	130·6	46·1	61·44	0·000	wP : wwP, wP : wP
17	29·650	67·2	55·6	11·6	61·0	+ 3·8	57·9	55·2	5·8	13·4	0·0	82	110·8	47·1	61·42	0·014	wwP : wP : wwP
18	29·670	67·3	58·2	9·1	61·5	+ 4·6	59·6	58·0	3·5	7·8	0·8	89	90·0	57·0	61·63	0·442	wwP
19	29·688	64·9	58·6	6·3	62·4	+ 5·9	60·7	59·2	3·2	6·3	0·4	90	72·9	57·0	61·60	0·180	wwP
20	29·836	65·0	52·1	12·9	57·4	+ 1·2	54·5	51·9	5·5	10·5	0·8	82	110·4	42·0	61·57	0·013	wwP
21	30·064	65·5	47·9	17·6	55·3	— 0·6	51·1	47·1	8·2	16·8	0·8	74	118·0	37·6	61·43	0·002*	wwP : mP : mP, wwP
22	30·060	65·0	48·1	16·9	56·2	+ 0·6	53·2	50·4	5·8	13·0	0·6	81	115·9	40·0	61·09	0·000	wwP : wP : wwP
23	29·994	69·7	53·2	16·5	59·6	+ 4·2	56·7	54·2	5·4	10·4	1·1	83	112·7	44·2	60·80	0·000	wwP
24	29·996	71·2	46·7	24·5	58·2	+ 2·9	54·9	51·9	6·3	15·9	0·0	75	118·0	38·0	60·69	0·000	wwP : wP : wP, mP
25	29·886	73·1	49·1	24·0	59·4	+ 4·2	56·3	53·5	5·9	14·5	0·6	82	117·7	38·2	60·68	0·000	wP
26	29·767	66·5	56·3	10·2	60·1	+ 4·9	57·5	55·2	4·9	9·3	0·6	85	104·0	52·4	60·61	0·037	wP, wwP : wP : wP
27	30·031	65·9	46·2	19·7	55·2	+ 0·1	51·8	48·5	6·7	15·2	0·0	79	114·5	35·2	60·70	0·000	wP : mP : mP
28	30·119	64·2	43·2	21·0	53·5	— 1·4	50·3	47·2	6·3	12·6	0·0	79	109·8	33·1	60·40	0·000	wP : mP : mP, wP
29	30·196	66·4	45·2	21·2	54·6	— 0·1	52·1	49·7	4·9	14·8	0·0	83	117·8	36·7	60·25	0·000	wP
30	30·164	69·0	41·0	28·0	53·6	— 0·8	50·8	48·1	5·5	14·1	0·2	81	113·1	34·0	60·09	0·000	wP, mP : mP, wP : wP
Means	29·904	68·5	50·9	17·6	58·7	+ 1·4	55·5	52·7	6·0	13·5	0·6	80·7	114·4	42·7	61·31	Sum 1·701	..
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The results apply to the civil day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) 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 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

* Rainfall. (Column 16). The amount entered on September 21 is derived from dew.

The mean reading of the *Barometer* for the month was $29^{in}\cdot904$, being $0^{in}\cdot093$ *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 75°·0 on September 8; the lowest in the month was 41°·0 on September 30; and the range was 34°·0.

The mean of all the highest daily readings in the month was 68°·5, being 1°·2 *higher* than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 50°·9, being 1°·8 *higher* than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 17°·6, being 0°·6 *less* than the average for the 65 years, 1841–1905.

The mean for the month was 58°·7, being 1°·4 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1917.	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.		
Sept. 1	4·1	13·6	SSW	SW : WSW	8·5	0·61	459	10 : 10, n, oc.-slt.-shs	9, cu.-n, oc.-slt.-shs : 1, w : 1
2	11·0	13·5	SW : WSW : W	W : WSW	5·0	0·52	458	0, lu.-ha : 6, cu.-n	v.-cl, cu.-n, w : 0, lu.-ha
3	10·3	13·4	WSW : Calm	SW : Calm	0·6	0·05	203	0, hy.-cl : 3	p.-cl : 8 : 0, slt.-h
4	10·7	13·4	Calm : S	SE : Calm	0·8	0·05	152	0, m : 0, m	0 : 1 : 3, th.-cl
5	6·7	13·3	Calm : E	E : NE : SW	1·6	0·10	189	3, th.-cl,m : p.-cl,th.-cl : 1, ci	6 : 9, t.-sm, hy.-r : 10, r, l, t
6	2·0	13·2	SW : W : Calm	SW : W : Calm	1·2	0·01	141	10, slt.-r, m : 10, m.-r.-sh,th.-cl	9, n : 10, r : 10, c.-r
7	1·1	13·2	W : NW : N	N : NNE	3·2	0·16	242	10, oc.-m.-r : 10, n, slt.-sh, oc.-m.-r	10, n : 10, m.-r.-sh : 8
8	7·9	13·1	N : Calm : SSW	SW : SSW	1·0	0·06	177	10 : f : 0, m	p.-cl, cu.-n : p.-cl, slt.-m : 1, slt.-m
9	0·0	13·0	Calm	SSW : Calm : ENE	0·5	0·00	100	10, r, m.-r : 10, oc.-m.-r	10, th.-cl : 10, l
10	4·4	13·0	ENE : E : ESE	E : Calm	1·3	0·05	169	10, oc.-m.-r : 9, n	6 : 0 : 0
11	6·0	12·9	Calm : ESE	NNW : N	1·0	0·01	116	v.-cl, th.-cl, hy.-d, m : 2, h, m	7, cu, h : v.-cl, slt.-m.-r, l : 10, t.-sm, hy.-r
12	9·5	12·8	N : NNW	NNW : NW : W	3·9	0·32	338	10 : p.-cl : p.-cl	7 : p.-cl : 0
13	0·6	12·8	WSW : SW	SW	4·5	0·40	382	0 : 9, th.-cl : 10	10, sh, m.-r : 10, oc.-r, w : 10, w
14	8·8	12·7	WSW : W : WNW	WSW : Calm : SW	2·7	0·18	270	8 : 8, cu	8, cu.-n, ci : p.-cl : 0, h
15	8·9	12·7	WSW : WNW : NNW	WSW : SSW	0·8	0·05	201	7 : 2, th.-cl : 1, ci	p.-cl, ci, cu : v.-cl : 8
16	8·0	12·6	SSW : SW	SSW	1·1	0·06	234	2 : 7 : 6, th.-cl	1 : v.-cl : p.-cl, l
17	4·8	12·5	SSW : SW	SSW	3·5	0·34	376	v.-cl : v.-cl : 6	9, oc.-slt.-r, so.-ha : p.-cl : 10, slt.-r
18	0·0	12·4	SSW	SSW	4·8	0·45	409	10, r : 10, oc.-m.-r	10, slt.-r : 10, r, w
19	0·0	12·4	SSW	SW : W	7·1	0·62	387	10, oc.-slt.-r, w : 10, oc.-m.-r	10, fq.-r : 10, r
20	4·6	12·3	WSW : SW	SSW : SW	5·7	0·41	398	v.-cl, m.-r.-sh : 7, cu.-n	9, m.-r.-sh, w : 0
21	10·3	12·3	SSW : SW	W : SW : Calm	3·0	0·18	299	0, d : 2	2 : 2
22	4·5	12·2	Calm : SW	SW : SSW	3·3	0·19	292	9 : 8 : 9, th.-cl, so.-ha	9 : 1
23	0·9	12·1	SW : WSW	SW : Calm	0·8	0·03	193	0, hy.-d : 9 : 9, n	9 : 9
24	9·3	12·1	Calm : SSW	SSW : Calm	0·9	0·02	175	1, hy.-d, tk.-f : 1, cu	2, cu : 1
25	8·5	12·0	Calm : SW	SSW	1·1	0·04	208	0, h, hy.-d, f : 0, h, f	1 : 1 : 9
26	1·9	11·9	Calm : SSW	SSW : SW : WNW	3·5	0·29	323	10 : 9, slt.-sh : 9, m.-r.-sh	10 : 10, sh
27	9·2	11·9	WNW : SW	WSW : Calm	1·2	0·06	211	1, slt.-m, d : 1, slt.-m,d : 1	2, cu.-n : 1 : 0, h
28	3·9	11·8	Calm : SW	WSW : W : Calm	1·8	0·06	230	0 : v-cl : 8, cu.-n	9, cu.-n : 5 : 8
29	8·9	11·7	Calm : NNW	N : Calm	0·3	0·00	111	v.-cl, hy.-d, m : 1, m, h	1, h : 0, h, m : 0, m
30	9·6	11·7	Calm : W	SW : Calm	0·2	0·00	101	1, m, hy.-d : 0, m	2 : 1, m : 0, hy.-d, m
Means	5·9	12·6	..	..	..	0·18	251		
Number of Column for Reference	18	19	20	21	22	23	24	25	26

The mean *Temperature of Evaporation* for the month was 55°·5, being 1°·4 higher than
The mean *Temperature of the Dew Point* for the month was 52°·7, being 1°·5 *higher* than
The mean *Degree of Humidity* for the month was 80·7, being 0·5 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in.399, being 0in.022 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs.4, being 0grs.2 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 533 grains, being *equal to*
} 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 0·466. The maximum daily amount of *Sunshine* was 11·0 hours on September 2.

The highest reading of the *Solar Radiation Thermometer* was 132°·0 on September 3; and the lowest reading of the *Terrestrial Radiation Thermometer* was 33°·1 on September 28.

The *Proportions of Wind* referred to the cardinal points were N. 2, E. 1, S. 11, W. 10. Six days were calm.

The *Greatest Pressure of the Wind* in the month was 8·5 lbs. on the square foot on September 1. The mean daily *Horizontal Movement of the Air* for the month was 251 miles; the greatest daily value was 459 miles on September 1; and the least daily value was 100 miles on September 9.

Rain (0in.005 or over) fell on 11 days in the month, amounting to 1in.701, as measured by gauge No. 6 partly sunk below the ground; being 0in.447 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1917.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 3 ft. 2 ins. below the Surface of the Soil.		
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	
Oct. 1	30·024	69·9	42·1	27·8	53·1	— 1·0	50·3	47·5	5·6	20·5	0·2	81	119·5	34·5	59·65	0·000	mP, wP : wP : wP, mP
2	29·760	73·0	43·9	29·1	56·8	+ 3·1	54·3	52·0	4·8	14·4	0·2	84	111·0	33·9	59·39	0·001*	mP : mP, wP : wP
3	29·659	67·7	53·1	14·6	58·1	+ 4·8	54·4	51·1	7·0	16·9	0·6	78	115·0	46·0	59·25	0·000	wwP : wP : mP, wP
4	29·391	60·8	47·8	13·0	56·9	+ 3·9	54·9	53·1	3·8	6·9	0·6	87	65·1	43·2	59·20	0·571	wwP : wwP : wP, mP
5	29·746	54·1	41·3	12·8	46·8	— 6·0	43·2	39·1	7·7	14·0	1·9	76	99·1	33·9	59·13	0·003	mP : sP : sP
6	29·775	50·3	35·6	14·7	43·6	— 8·9	39·8	35·3	8·3	19·5	0·0	73	94·8	26·7	58·59	0·130	mP, mN : mP, sP : ssP
7	29·445	59·5	32·4	27·1	44·8	— 7·5	42·5	39·8	5·0	12·0	0·0	83	87·6	25·0	57·87	0·241	sP, mP : wwP : mP, wP
8	29·293	57·4	44·6	12·8	50·2	— 1·8	47·1	43·8	6·4	12·0	0·6	79	84·0	38·0	57·03	0·236	wP : mP, v : wwP, wP
9	29·226	54·9	41·2	13·7	49·6	— 2·0	45·0	40·1	9·5	12·6	3·3	70	85·1	31·5	56·37	0·009	wP : mP : sP, mP
10	29·328	51·7	36·6	15·1	43·6	— 7·7	41·1	38·2	5·4	12·1	0·0	81	93·0	29·6	55·97	0·000	wP : wP, mP : mP
11	29·662	51·1	38·1	13·0	43·8	— 7·1	40·2	36·0	7·8	14·9	3·0	74	86·2	29·2	55·45	0·050	mP : sP : sP, v
12	29·019	53·1	41·9	11·2	48·2	— 2·4	46·2	44·0	4·2	13·9	0·6	86	77·1	38·0	55·01	0·529	wwP, wP : mP : wP
13	28·920	52·2	39·5	12·7	45·8	— 4·5	43·5	40·9	4·9	8·9	1·1	84	103·6	32·3	54·50	0·104	wP : mP : mP
14	29·486	52·9	35·7	17·2	42·5	— 7·6	40·5	38·1	4·4	13·8	0·0	85	79·2	28·9	54·15	0·000	mP
15	29·798	50·5	33·0	17·5	41·7	— 8·2	39·3	36·3	5·4	10·7	0·0	82	93·0	25·7	53·71	0·000	mP : sP, mP
16	29·778	55·8	40·8	15·0	50·6	+ 0·8	49·0	47·3	3·3	5·3	0·7	89	79·1	31·1	53·37	0·216	wP : wwP
17	29·632	58·2	44·2	14·0	53·1	+ 3·5	51·9	50·7	2·4	6·0	1·1	92	74·8	39·4	53·10	0·182	wwP
18	29·733	53·3	38·1	15·2	44·5	— 4·8	42·5	40·2	4·3	11·7	0·7	85	92·0	31·0	53·11	0·039	wP : mP : v, mP
19	29·981	52·7	34·7	18·0	44·3	— 4·8	41·5	38·2	6·1	12·4	0·5	79	89·2	26·9	53·05	0·000	mP
20	30·136	55·8	33·1	22·7	43·7	— 5·1	41·3	38·5	5·2	12·5	0·5	81	92·0	25·9	52·78	0·000	mP : mP, wP : wP, mP
21	30·127	58·3	39·1	19·2	49·2	+ 0·6	46·1	42·8	6·4	13·0	0·9	79	97·5	28·2	52·40	0·000	wP : wP : mP, wP
22	29·991	59·8	46·2	13·6	51·1	+ 2·8	48·1	45·0	6·1	13·4	0·8	80	103·3	37·0	52·12	0·007	wwP, wP : wP : mP
23	29·579	52·9	37·5	15·4	47·1	— 1·0	43·7	39·9	7·2	14·9	0·2	77	96·8	31·7	52·23	0·068	wP, wwP : mP, sP : v, sP
24	29·563	54·0	34·6	19·4	44·0	— 3·9	41·4	38·3	5·7	11·2	0·2	80	81·0	28·3	52·27	0·118	sP, mP : sP, mP : wwP
25	29·373	54·0	41·9	12·1	47·5	— 0·2	42·6	37·2	10·3	18·6	3·4	68	87·9	33·8	51·82	0·000	wwP, vP : ssP, sP : mP
26	29·489	51·1	37·4	13·7	44·6	— 3·0	41·1	37·0	7·6	11·4	3·8	74	80·3	29·8	51·69	0·003	wP : mP : mP, sP
27	29·479	48·9	32·8	16·1	39·0	— 8·5	36·4	33·0	6·0	13·1	1·4	80	82·1	23·4	51·32	0·000	mP : sP : ssP, sP
28	29·552	43·9	28·7	15·2	35·2	— 12·2	32·9	29·3	5·9	13·2	0·8	78	62·6	21·1	50·89	0·000	sP : sP : ssP
29	29·687	48·6	31·4	17·2	40·4	— 6·9	38·1	35·2	5·2	10·4	1·5	82	82·0	24·9	50·31	0·004	sP, mP : mP
30	29·430	53·9	43·1	10·8	48·4	+ 1·2	45·9	43·2	5·2	10·9	0·8	83	82·0	34·2	49·87	0·220	wwP, wwN : wwN, wP : mP
31	29·717	56·2	36·8	19·4	46·4	— 0·7	44·2	41·7	4·7	12·7	0·2	85	92·0	28·2	49·71	0·000	mP
Means	29·606	55·4	38·9	16·4	46·9	— 3·1	44·2	41·1	5·9	12·7	1·0	80·5	89·3	31·3	54·36	Sum 2·731	..
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The results apply to the civil day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) 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 9) is the difference between the numbers in Columns 5 and 8), and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

* Rainfall. (Column 16). The amount entered on October 2 is derived from fog.

The mean reading of the *Barometer* for the month was 29in.606, being 0in.115 *lower* than the average for the 65 years 1841–1905.

Temperature of the Air.

The highest in the month was 73°·0 on October 2; the lowest in the month was 28°·7 on October 28; and the range was 44°·3.

The mean of all the highest daily readings in the month was 55°·4, being 2°·1 *lower* than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 38°·9, being 4°·3 *lower* than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 16°·4, being 2°·1 *greater* than the average for the 65 years, 1841–1905.

The mean for the month was 46°·9, being 3°·1 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1917.	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	7·8	11·6	Calm : SE	SSE : E : Calm	0·5	0·00	90	o : f : o, f	o : o, h
2	7·2	11·5	Calm : SSW	SSW : SW	0·9	0·05	142	o, tk.-f : 1, f	1, cu : 1 : 10
3	3·2	11·5	SSW : SW	SW	10·0	0·55	391	10, oc.-m.-r : 10, oc.-m.-r: 8	p.-cl, th.-cl : 10, w : 10, m.-r.-sh, w
4	0·0	11·4	SW : SSW	SW : W : WNW	12·2	1·02	533	10, m.-r : 10, r, w	10, r : v.-cl, oc.-slt.-r : p.cl
5	6·4	11·3	WSW : WNW	WNW : WSW : W	2·7	0·30	369	o : v.-cl, cu.-n	v.-cl, cu.-n, shs : 2
6	5·4	11·3	SW : NNW	NNW:WNW:WSW	3·7	0·21	286	9 : 10, r : 9, cu	7 : 3 : 1, ho.-fr
7	1·1	11·2	SW : Calm : S	SSW : WSW	10·6	0·65	468	1, ho.-fr : : 10, r	8, r, slt.-t.-sm, w : v.-cl, oc.-slt.-shs : 1
8	2·6	11·2	WSW	SW : S	11·8	0·69	561	1 : 1, th.-cl : p.-cl, so.-ha	10, r : 10, r, slt.-r : 10, w
9	3·8	11·1	SW : WSW	W : WSW : SW	13·8	1·03	512	10 : 8 : 9, ci, cu.-sh	9, oc.-slt.-r : 2, slt.-sh : v.-cl
10	4·9	11·0	SW : Calm	W : NW	2·3	0·12	263	1 : 7 : v.-cl, m.-r.-sh	v.-cl, cu : v.-cl : o
11	6·8	10·9	NW : NNW	NW : W : SSW	2·2	0·15	269	o : o, h : 2	7, cu, cu.-n : 10, r
12	0·2	10·9	S : SW : W	SW : Var	5·0	0·28	335	10, r, oc-m.-r : 8 : 9, n, th.-cl	10, slt.-r : 10, r : 9, m, r
13	2·4	10·8	WSW : SW : SSW	NW : W	4·0	0·18	270	6, sh : 2 : 10, r	10, sh : 10 : 9
14	5·7	10·8	Calm : W	W : Calm	0·5	0·01	154	9, m : 1, m : 0, slt.-f	p.-cl : 0, slt.-f : v.-cl, f
15	6·8	10·7	Calm : SW	WSW : S	0·6	0·02	204	o, ho.-fr, m : 1, m : p.-cl, n, h, m	p.-cl, h : 1 : 2, th.-cl, ho.-fr
16	0·1	10·6	S : SSW	SSW : S	6·1	0·60	470	9 : 10, slt.-r : 10, m.-r	10, m.-r, w : 10, r : 10, r, m.-r
17	0·2	10·6	SSW : S	SSW : SW	4·0	0·39	371	10, r : 10, r, m.-r	10, oc.-m.-r : 10, r : 1
18	5·7	10·5	SW : WSW	W : WNW : WSW	2·0	0·06	226	0, h, hy.-d : : 0, h, hy.-d	8, cu.-n : 8, oc.-shs : v.-cl, cu.-n
19	4·2	10·5	Calm : W : NW	NW : W : Calm	1·3	0·03	207	1, : 2, m : p.-cl	p.-cl : 0, m : 1, h, m
20	2·1	10·4	Calm : S	S : Calm	1·1	0·04	167	0, h, ho.-fr: 3 : 9, cu.-n	10, th.-cl : 0 : 1, h, ho.-fr
21	7·9	10·3	Calm : S	SSW	2·6	0·16	257	1, th.-cl ho.-fr : p.-cl, th.-cl : v.cl, th.-cl	1 : 10, m.-r
22	6·5	10·2	SW : W	SW : SSW	4·0	0·28	330	10, m.-r : 10, m.-r,f : v.-cl, cu	8, cu.-n : v.-cl : 10, r
23	5·3	10·2	SW : NW	WNW : W : WSW	3·6	0·42	413	10, m.-r : 10, oc.-slt.-r : p.-cl	p.-cl : 6, slt-sh, slt.-h : v.-cl, slt.-m, h
24	3·6	10·1	WSW	SW : SSW	9·2	0·59	285	2, th.-cl, ho.-fr: 2 : 2, th.-cl, n	10, r : 10, r, w : 10, slt.-sh
25	8·1	10·1	SW : WSW : W	WSW : SW	18·8	1·65	748	10, w : 3, w : 3, w	1, cu : 3, slt.-sh : 8, slt.-sh
26	1·7	10·0	SW	WSW : SW	5·1	0·43	464	9, m.-r.-sh : 8 : 10, cu.-n	6, cu.-n : 7, sh : 1, lu.-ha
27	5·8	10·0	SW	SW : Calm	2·6	0·13	263	1, ho.-fr : 1, ho.-fr : p.-cl,th.-cl,so.ha	6, cu.-n : p.-cl, m : 10, th.-cl,ho.-fr,m
28	3·0	9·9	Calm : SW	NW : W : SW	0·5	0·00	172	1, m, ho.-fr : f : 1, f	1, th.-cl : 1 : v.-cl, slt.-f
29	4·4	9·8	SW : Calm	SSW : S	9·0	0·20	290	v.cl.- f, ho.-fr : 2 : 0, h	v.-cl, so.-ha : v.-cl, oc.-slt.-r : 8, m.-r, w
30	2·3	9·8	S : SSW	SSW : SW	9·4	0·60	453	10, slt.-r, w : 10 fq.-slt.-r	6, : p.-cl : 0, h
31	5·0	9·7	SW : Calm	SSW : S : Calm	0·5	0·01	186	0, ho.-fr, m : 0	7, n, cu : 10 : 9, slt.-sh
Means	4·2	10·6	..	..	..	0·35	334		
Number of Column for Reference	18	19	20	21	22	23	24	25	26

The mean *Temperature of Evaporation* for the month was 44°·2, being 3°·7 *lower* than
The mean *Temperature of the Dew Point* for the month was 41°·1, being 4°·6 *lower* than
The mean *Degree of Humidity* for the month was 80·5, being 4·5 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.258, being 0in.049 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs.0, being 0gr.5 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 541 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 5·6.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·395. The maximum daily amount of *Sunshine* was 8·1 hours on October 25.

The highest reading of the *Solar Radiation Thermometer* was 119°·5 on October 1; and the lowest reading of the *Terrestrial Radiation Thermometer* was 21°·1 on October 28.

The *Proportions of Wind* referred to the cardinal points were N. 2, E. 0, S. 13, W. 13. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 18·8 lbs. on the square foot on October 25. The mean daily *Horizontal Movement of the Air* for the month was 334 miles; the greatest daily value was 748 miles on October 25; and the least daily value was 90 miles on October 1.

Rain (0in.005 or over) fell on 15 days in the month, amounting to 2in.732, measured by gauge No. 6 partly sunk below the ground; being 0in.050 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1917.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 3 ft. 2 in. below the Surface of the Soil.		
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	
Nov. 1	29·803	54·1	45·5	8·6	50·5	+ 3·5	49·9	49·3	1·2	3·2	0·0	96	61·5	36·9	49·69	0·017	wP
2	29·897	58·2	50·0	8·2	54·8	+ 8·0	53·8	52·8	2·0	3·8	0·6	93	68·0	49·0	49·93	0·023	wP
3	30·077	51·7	47·9	3·8	49·8	+ 3·2	49·4	48·9	0·9	2·5	0·0	97	56·7	44·9	50·31	0·562	wwP
4	30·094	52·1	34·7	17·4	45·8	− 0·6	43·7	41·3	4·5	11·9	0·5	85	88·9	25·9	50·65	0·000	wwP : wP : mP
5	29·943	52·7	30·9	21·8	43·7	− 2·4	42·5	41·1	2·6	6·3	0·3	90	68·0	25·0	50·68	0·000	mP : wP, wwP : wwP
6	29·614	53·5	41·1	12·4	49·7	+ 3·9	46·7	43·5	6·2	11·6	1·2	80	76·5	29·9	50·31	0·080	wwP : wP : mP, wP
7	29·503	47·9	36·0	11·9	43·1	− 2·3	40·3	37·0	6·1	11·1	1·3	79	84·0	29·6	50·33	0·098	wP, wwP : wP, mP : mP
8	29·547	51·0	34·8	16·2	41·7	− 3·3	40·2	38·3	3·4	9·1	0·0	89	63·0	29·0	50·17	0·147	wP : wP, wwP
9	29·197	51·2	42·5	8·7	46·5	+ 1·9	43·5	40·1	6·4	12·8	1·4	80	89·2	35·1	49·69	0·039	wwP, wP : wP
10	29·225	45·2	41·0	4·2	43·9	− 0·4	41·6	38·9	5·0	8·9	2·0	83	54·8	33·6	49·48	0·002	wwP, wP : wP : wP
11	29·803	45·8	36·2	9·6	41·9	− 2·1	39·7	37·0	4·9	8·2	1·0	84	68·9	29·4	49·26	0·000	wwP : wP : wP, wwP
12	30·012	50·9	35·9	15·0	44·4	+ 0·7	42·7	40·7	3·7	8·4	0·0	87	62·2	29·2	49·09	0·000	wwP, wP : wwP
13	30·132	47·0	34·6	12·4	41·6	− 1·9	41·5	41·4	0·2	1·5	0·0	99	61·1	28·0	48·76	0·000	wwP
14	30·114	52·6	37·6	15·0	45·3	+ 2·0	43·8	42·1	3·2	4·9	0·2	89	59·1	28·7	48·78	0·000	wwP
15	30·297	43·9	31·1	12·8	38·7	− 4·2	37·9	36·8	1·9	3·1	0·0	94	58·5	24·9	48·62	0·000	wwP
16	30·294	47·0	31·7	15·3	40·0	− 2·8	39·1	37·9	2·1	4·7	0·0	93	54·2	27·3	48·40	0·000	wwP
17	30·359	46·0	30·2	15·8	40·5	− 2·1	39·4	38·0	2·5	4·5	0·0	91	58·1	27·0	48·10	0·000	wwP
18	30·418	47·9	45·0	2·9	46·6	+ 4·2	44·0	41·0	5·6	6·1	3·4	82	49·3	42·4	47·87	0·000	wwP
19	30·328	48·8	44·7	4·1	46·5	+ 4·2	43·5	40·1	6·4	9·0	3·0	80	55·9	39·2	47·83	0·000	wwP
20	30·145	56·8	45·1	11·7	52·0	+ 9·8	50·3	48·6	3·4	5·4	1·4	88	69·2	39·2	47·99	0·049	wwP
21	29·994	57·6	52·3	5·3	55·1	+ 13·0	53·4	51·8	3·3	6·1	2·0	89	58·2	49·9	48·20	0·028	wwP
22	30·108	53·9	50·4	3·5	52·0	+ 9·9	49·9	47·8	4·2	6·6	0·6	85	57·8	43·9	48·60	0·003	wwP
23	30·089	57·1	49·5	7·6	52·2	+ 10·2	49·7	47·2	5·0	9·1	2·0	83	76·2	43·2	49·12	0·000	wwP
24	29·748	57·8	46·2	11·6	51·9	+ 9·9	48·7	45·5	6·4	9·6	3·8	79	73·2	41·0	49·33	0·000	wwP
25	29·510	53·2	33·8	19·4	42·2	+ 0·3	38·5	34·0	8·2	12·6	2·0	74	68·1	29·0	49·37	0·111	wwP : wP, v : wP
26	30·015	46·5	32·1	14·4	36·1	− 5·7	32·6	27·4	8·7	12·9	1·0	70	45·3	25·0	49·11	0·481	wP : wP, wwP : wwP
27	29·703	57·1	46·5	10·6	52·6	+ 10·9	50·3	48·0	4·6	7·3	1·3	85	73·7	43·0	48·49	0·064	wwP
28	29·979	54·8	49·1	5·7	52·8	+ 11·3	50·4	48·0	4·8	6·9	2·8	84	65·6	42·1	48·18	0·000	wwP
29	30·089	55·5	48·0	7·5	51·4	+ 10·2	48·9	46·3	5·1	8·3	2·5	83	79·9	41·7	48·42	0·000	wwP
30	30·039	52·7	48·0	4·7	50·5	+ 9·5	47·1	43·5	7·0	8·9	4·7	78	57·8	45·0	48·62	0·000	wwP
Means	29·936	51·7	41·1	10·6	46·8	+ 3·3	44·8	42·5	4·3	7·5	1·3	85·6	65·4	35·3	49·11	1·704	..
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The results apply to the civil day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) 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 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

The mean reading of the *Barometer* for the month was $29^{in.}·936$, being $0^{in.}·178$ *higher* than the average for the 65 years, 1841–1905.

Temperature of the Air.

The highest in the month was 58°·2 on November 2; the lowest in the month was 30°·2 on November 17; and the range was 28°·0.
The mean of all the highest daily readings in the month was 51°·7, being 2°·7 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 41°·1, being 3°·2 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 10°·6, being 0°·5 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 46°·8, being 3°·3 ***higher*** than the average for the 65 years, 1841–1905.

MONTH and DAY, 1917.	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	0·0	9·6	Calm : E : SE	SE : Calm : S	0·4	0·00	126	10, oc.-m.-r : 10, fq.-m.-r	10, m.-r : 10, slt.-r : 10, m.-r
2	0·0	9·6	SW	W : NW : N	0·8	0·04	228	10, m.-r : 10, n, oc.-m.-r	10, n, oc.-m.-r : 10, oc.-m.-r
3	0·0	9·5	NE : E	E	0·7	0·01	204	10, oc.-m.-r : 10, oc.-m.-r: 10, n, r	10, sh : 10, r : 8
4	5·3	9·4	E	E : Calm	1·6	0·06	225	7 : 7	2 : 0, m : 1, m
5	0·1	9·4	Calm : S	SSW	3·6	0·17	293	1, ho.-fr : v.-cl : 10, th.-cl	10, n, m.-r.-sh : 10
6	3·3	9·3	SSW : W	WSW : SSW	5·2	0·39	419	10, m.-r : 10, oc.-m.-r: 8, th.-cl, so.-ha	7, ci, n : 4 : 8, slt.-sh
7	3·1	9·3	SSW : WSW : W	WNW : WSW	4·5	0·28	411	10,m.-r.-sh : 9,oc.-shs : 8	7, sh : 3 : 0
8	0·4	9·2	WSW : SW	SW : SSW	3·0	0·23	406	0 : 0, ho.-fr : 9, th.-cl	10, slt.-r : 10, r : 10, oc.-slt.-r
9	5·0	9·2	SW : WSW	WSW : SW	3·2	0·37	473	v.-cl, slt.-sh : v.-cl, cu.-n	v.-cl, slt.-sh: 0 : 10, r, hl
10	1·3	9·1	WSW : W : NW	NNW	4·4	0·45	452	9, slt.-r : 8 : 7, oc.-slt.-r	9, oc.-slt.-r : 9 : v.-cl, th.-cl
11	2·9	9·1	NNW : N	NNW : W : SW	3·9	0·22	275	9, m.-r-sh : 3, th.-cl, h	10, cu, n : 9, h, m
12	0·0	9·0	S : SW	SW : NW : Calm	0·4	0·00	178	10 : 10, cu.-n, m	10, oc.-m.-r : 10, m
13	0·0	9·0	Calm : SW	Calm : WSW	0·3	0·00	158	10, th.-cl, m, f : 10, f	10, th.-cl, f : 10, slt.-f : 9, th.-cl, slt.-f
14	0·0	8·9	SW : WSW	WSW : NW : NNW	1·0	0·05	234	10, slt.-f : 10, m	10, m : p.-cl, slt.-m : 1, m
15	0·9	8·9	SW : NW : N	SW	0·2	0·00	145	0, m, ho.-fr : 10, f, m : p.-cl, m	p.-cl, m, f : 9, m, f : 8, f
16	0·0	8·8	Calm : SW	SW : Calm	0·3	0·00	190	1, m, slt.-f : 9, m	5, slt.-m : 1, f
17	0·9	8·7	Calm : S : SW	SW : SSW	0·3	0·00	162	1, f : 10, tk.-f : f	7, m : 9 : 10
18	0·0	8·7	SW	SW : W	0·4	0·00	208	10 : 10, n	10, n : 10
19	0·0	8·6	WSW : SW	WSW : SW	5·0	0·24	354	10 : 10	10 : 10 : 9
20	1·1	8·6	SW	SW	2·3	0·25	398	9, m.-r : 8	9 : 10, r
21	0·0	8·5	SW : W : NW	NW : NNW	3·5	0·48	441	10, m.-r.-sh, sh : 10, r, m.-r	10, n :10, oc.-m.-r : 10, n
22	0·0	8·5	NW : WSW : SW	SW : W	0·9	0·04	219	10, m.-r.-sh : 10, m, fq.-m.-r	8, cu.-n, oc-m.-r : 10 : 9
23	4·2	8·5	SW : WSW	WSW : SW	4·5	0·33	413	10, m.-r.-sh : 8 : 1, cu	v.-cl. : 9, th.-cl
24	1·1	8·4	SW	WSW	17·6	1·48	767	7 : 10, n, cu, w	v.-cl, w : v.-cl, w : 8, w
25	4·3	8·4	WSW : W : WNW	W : NW	15·5	1·68	759	10 oc.-slt.-r, sq,w: 1, w : 1, r, sn, sl,w	6, th.-cl, w : 1
26	0·8	8·3	NW : NNW	W : SW : SSW	6·2	0·45	430	1 : 1, h, so.-ha	10 : 10, r : 10, r, sl, w
27	2·4	8·3	SW : WSW	WSW : SW	5·6	0·57	542	10, oc.-r : 9 : 3, n	8, n : 10-oc.-m,-r : 9, n
28	1·5	8·3	WSW : SW	SW	4·0	0·45	472	9 : 9 : v.-cl	9 : 9, slt.-sh
29	2·9	8·2	SW	SW : SSW	3·6	0·38	451	8 : v.-cl : 1, cu	10, th.-cl : 10 : 9, th.-cl
30	0·0	8·2	SW	WSW : SW	1·8	0·20	356	10 : 10, n	10, n : 10
Means	1·4	8·9	..	..	..	0·29	346		
Number of Column for Reference	18	19	20	21	22	23	24	25	26

The mean *Temperature of Evaporation* for the month was 44°·8, being 2°·9 *higher* than
The mean *Temperature of the Dew Point* for the month was 42°·5, being 2°·5 *higher* than
The mean *Degree of Humidity* for the month was 85·6, being 1·7 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.272, being 0in.025 *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 547 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 7·9.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·156. The maximum daily amount of *Sunshine* was 5·3 hours on November 4.
The highest reading of the *Solar Radiation Thermometer* was 89°·2 on November 9; and the lowest reading of the *Terrestrial Radiation Thermometer* was 24°·9 on November 15.
The *Proportions of Wind* referred to the cardinal points were N. 3, E. 2, S. 10, W. 13. Two days were calm.
The *Greatest Pressure of the Wind* in the month was 17·6 lbs. on the square foot on November 24. The mean daily *Horizontal Movement of the Air* for the month was 346 miles; the greatest daily value was 767 miles on November 24; and the least daily value was 126 miles on November 1.
Rain (0in.005 or over) fell on 12 days in the month, amounting to 1in.·704, as measured by gauge No. 6 partly sunk below the ground; being 0in.·516 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1917.	Barometer.	Temperature.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	Temperature.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 3 ft. 2 ins. below the Surface of the Soil.		
	Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.			
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.	
Dec. 1	29·685	52·8	39·3	13·5	47·3	+ 6·4	43·5	39·3	8·0	15·0	3·1	75	78·8	33·5	48·82	0·000	wwP : wP : wP, mP
2	29·955	39·3	31·0	8·3	36·0	— 4·9	32·7	27·8	8·2	12·2	4·4	72	54·7	23·8	48·75	0·000	wP : mP : mP, wP
3	30·274	39·3	29·7	9·6	34·0	— 7·1	31·5	27·1	6·9	9·9	2·0	75	47·8	21·8	48·39	0·000	wP, wwP : wP
4	30·295	38·5	23·3	15·2	31·7	— 9·6	29·3	23·6	8·1	10·7	0·7	71	52·0	19·0	47·50	0·000	..
5	30·248	42·1	26·6	15·5	35·5	— 6·0	33·0	29·2	6·3	13·6	0·0	76	64·1	17·7	46·67	0·000	..
6	30·169	46·8	25·9	20·9	36·6	— 4·9	34·5	31·5	5·1	9·8	0·0	82	56·9	16·8	46·00	0·000	..
7	29·957	52·8	43·0	9·8	48·7	+ 7·4	47·3	45·8	2·9	5·1	1·2	90	60·2	35·3	45·55	0·010	..
8	29·803	45·7	37·9	7·8	42·6	+ 1·6	41·1	39·3	3·3	7·0	0·0	88	50·8	31·2	45·47	0·004	..
9	29·514	39·0	35·2	3·8	38·1	— 2·5	37·0	35·5	2·6	4·2	1·4	90	39·1	30·1	45·51	0·441	..
10	29·810	43·0	36·1	6·9	39·5	— 0·9	38·4	37·0	2·5	6·0	0·5	91	52·5	29·5	45·40	0·087	..
11	30·187	41·0	28·6	12·4	36·5	— 3·7	35·3	33·6	2·9	7·4	0·5	90	47·7	22·5	45·20	0·004*	..
12	30·279	36·4	28·1	8·3	32·5	— 7·8	31·6	29·7	2·8	6·1	0·5	89	37·1	22·1	44·90	0·004*	..
13	30·220	48·2	36·2	12·0	42·3	+ 1·8	41·3	40·1	2·2	4·2	0·7	92	60·9	32·2	44·52	0·006*	..
14	30·112	50·5	38·4	12·1	45·6	+ 4·9	43·3	40·7	4·9	9·9	0·9	84	57·0	31·6	44·24	0·000	..
15	30·186	41·7	34·9	6·8	37·7	— 3·1	34·8	30·9	6·8	9·2	0·8	77	54·2	28·7	44·27	0·000	..
16	29·540	41·5	33·2	8·3	36·6	— 4·1	35·1	33·0	3·6	8·3	0·0	87	51·1	30·0	44·30	0·249	..
17	29·826	35·3	29·8	5·5	32·6	— 7·8	31·3	28·6	4·0	7·8	0·6	85	40·7	25·3	43·95	0·072	..
18	30·145	36·2	28·4	7·8	32·0	— 8·0	30·3	26·4	5·6	8·2	0·8	78	52·0	21·5	43·60	0·000	..
19	30·134	27·6	17·2	10·4	22·0	— 17·5	21·7	19·8	2·2	9·3	0·0	91	30·8	15·5	43·11	0·000	..
20	29·921	29·9	21·4	8·5	26·1	— 12·9	25·9	25·0	1·1	4·3	0·0	96	35·2	22·0	42·55	0·000	..
21	29·939	37·5	28·1	9·4	32·8	— 5·9	31·9	30·1	2·7	8·1	0·5	90	37·3	27·0	42·10	0·000	..
22	30·181	37·6	33·2	4·4	35·2	— 3·2	31·8	26·5	8·7	10·9	5·2	69	43·5	29·9	41·27	0·000	..
23	30·240	33·5	26·1	7·4	30·4	— 7·8	28·9	24·6	5·8	8·0	0·4	77	32·0	23·0	41·46	0·000	..
24	30·068	44·1	31·4	12·7	39·3	+ 1·1	38·2	36·8	2·5	4·7	0·9	91	45·9	23·9	41·23	0·010	..
25	29·992	44·7	32·6	12·1	38·2	— 0·2	34·9	30·4	7·8	13·7	1·3	73	50·0	28·0	41·17	0·008	..
26	29·963	35·0	30·3	4·7	32·9	— 5·7	31·9	29·9	3·0	7·4	0·0	89	46·1	25·9	41·11	0·000	..
27	30·055	37·0	30·0	7·0	32·9	— 5·9	31·7	29·3	3·6	10·9	0·0	87	48·3	24·1	41·03	0·000	..
28	30·053	37·5	30·1	7·4	34·0	— 4·9	32·7	30·4	3·6	8·1	0·0	86	49·0	25·0	40·83	0·021	..
29	30·058	36·1	33·5	2·6	35·1	— 3·9	33·6	31·3	3·8	7·7	1·0	85	45·3	31·0	40·70	0·074	..
30	30 037	37 0	32·8	4·2	35·1	— 3·8	34·7	34·1	1·0	3·8	0·8	96	38·1	32·1	40·62	0·066	..
31	30·012	37·4	30·7	6·7	33·1	— 5·6	31·9	29·5	3·6	9·4	0·0	87	48·2	29·5	40·55	0·022	..
Means	30·028	40·2	31·1	9·1	35·9	— 4·0	34·2	31·5	4·5	8·4	0·9	84·2	48·6	26·1	43·90	1.078	..
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

The results apply to the civil day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841–1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) 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 9) is the difference between the numbers in Columns 5 and 8, and the Greatest and Least Differences (Columns 10 and 11) are deduced from the 24 hourly photographic measures of the Dry-bulb and Wet-bulb Thermometers. The readings in Column 15 are taken daily at noon.

The values given in Columns 2, 3, 4, 13, and 14 are derived from eye-readings of self-registering thermometers.

* Rainfall. (Column 16). The amounts entered on December 11, 12, and 13 are derived from dew, fog or frost.

The mean reading of the *Barometer* for the month was 30$^{in.}$·020, being 0$^{in.}$·243 *higher* than the average for the 65 years, 1841–1905.

Temperature of the Air.

The highest in the month was 52°·8 on December 1 and 7; the lowest in the month was 17°·2 on December 19; and the range was 35°·6.
The mean of all the highest daily readings in the month was 40°·2, being 4°·0 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 31°·1, being 3°·9 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 9°·1, being 0°·1 *less* than the average for the 65 years 1841–1905.
The mean for the month was 35°·9, being 4°·0 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1917.	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	1·5	8·1	SW : SSW	WSW : WNW	10·0	0·79	557	10 : 10 : 10, m.-r	7, w : 9 : v.-cl
2	6·1	8·1	W : WNW	NW : WNW	9·5	0·90	566	1, ho.-fr, slt.-sn : 1, cu, slt.-sn	1, w : 0 : 0, ho.-fr
3	4·0	8·1	WNW : W	SW : Calm	3·8	0·29	395	0, ho.-fr : 1, th.-cl	1 : 1, ho.-fr
4	0·8	8·0	SW : Calm	SW : SSE	0·4	0·01	174	1, ho.-fr : 0, h : p.-cl, cu, sh	8 : 3, h : 1, h
5	4·0	8·0	SSE : S	S : SSE : Calm	1·2	0·04	190	9 : 10 : 7, ci.-cu	1 : 0, ho.-fr
6	5·8	8·0	Calm : S : SW	SW	2·1	0·06	269	0, ho.-fr : 0, slt.-f, ho.-fr	2, th.-cl : 10 : 10, n
7	0·0	7·9	SSW : SW	SW	4·0	0·32	376	9 : 9, fq.-slt.-r	10, fq.-slt.-r : 10 fq.-slt.-r : 1, h
8	0·7	7·9	SW : WSW	W : Calm	1·8	0·12	272	10, th.-cl,sh: 1 : 10,th.-cl,so.-ha	9 th.-cl : 10, th.-cl: : 10
9	0·0	7·9	NE : N	N	6·0	0·52	403	10, slt.-sl, r : : 10, c.-r	10, r : 10, fq.-slt.-r : 10, slt.-r
10	0·3	7·9	NNE : NE	ENE : E	4·2	0·38	369	10, oc.-slt.-r: 10,oc.-slt.-r : 10,fq.-slt.-r	2 : 1, h
11	1·5	7·9	ENE : NE	NNE : NE	1·1	0·04	204	1, h : 1, h : 5, m	p.-cl : 0 : 0, h, ho.-fr
12	0·0	7·8	Calm : WSW	WSW	0·4	0·00	172	v.-cl, th.-cl, ho.-fr : 9, th.-cl,slt.-f,ho.- fr : f	f : 9, m : v.-cl
13	0·8	7·8	WSW : W	W : WSW	0·8	0·00	244	9, d : 8	8 : v.-cl, m : 5, m
14	0·4	7·8	WSW : W	WSW : W : WNW	5·5	0·45	481	10, f : 10, n, slt.-sh	8 : 1, slt.-sh
15	3·7	7·8	W : WNW	WNW : WSW	3·2	0·28	417	0, slt.-ho.-fr : 0, h	2 : 1 : 5
16	0·5	7·8	SW : SSW : S	SE : E : NE	4·5	0·38	366	10 : 9	10, r : 10, oc.-r,-sl : 10, oc.-r,-sl
17	2·4	7·8	NE : NNE : N	N : NNE	8·9	0·81	507	10, oc.-sn, w: 7, w : 2, cu	1 : 0 : 0, ho.-fr
18	5·1	7·8	N : NNE : NE	NNE : NE	2·6	0·12	274	0, ho.-fr : 2 : 1, cu	2, cu : 1 : 0
19	0·0	7·8	NE : Calm	SE : Calm	0·2	0·00	89	0, ho.-fr : 0, f, ho.-fr : f	f, ho.-fr : f, ho.-fr : f, ho.-fr
20	0·0	7·8	Calm : SE	Calm : E	0·1	0·00	47	10, f,ho.-fr : 10, f, ho.-fr	10, f, ho.-fr : 10, f, ho.-fr
21	0·0	7·8	ENE : E : NNE	NE : ENE	1·5	0·09	231	10, ho.-fr : 10, ho.-fr : 10, m	10, n : 10, cu
22	0·0	7·7	NE	NNE : NE	1·3	0·07	261	10 : 10	10 : 9 : 9
23	0·0	7·8	NNE : E: Calm	Calm : W : SW	0·4	0·00	148	10, ho.-fr : 1, m, ho.-fr	0, ho.-fr, f : 0, slt.-f : 1, ho.-fr
24	0·0	7·8	SW : WSW	W: WNW	1·5	0·07	301	9 : 10, oc.-sl, r : 10, n	10, n : 10, oc.-m.-r : 10, oc.-m.-r
25	3·1	7·8	NW : N	N	4·6	0·48	414	10, oc.-m.-r : p.-cl : p.-cl	0 : 2 : v.-cl, th.-cl h
26	0·8	7·8	N	N	5·1	0·52	396	p.-cl, th.-cl, ho.-fr: 8, th.-cl : v.-cl, sn	9, n, s : 9 slt.-sn : 9, slt.-sl
27	1·3	7·8	N	NNE : N	2·7	0·19	269	10 : : 7	5 : 1 : 6
28	1·9	7·8	N : NNE : NE	NNE : NE	4·6	0·31	365	10 : 9, slt.-sl.-shs	1 : p.-cl : 10, oc.-sn
29	0·0	7·8	NE : ENE : E	NE : NNE	3·0	0·22	325	10, r, m.-r : 9, r, m.-r : 9 n	10 : 10, r, m.-r
30	0·0	7·8	NE : ENE	NE	3·5	0·38	421	10, sn, r : 10, n, m.-r	10, n, oc.-m.-r : 10, n, oc.-m.-r : 10
31	0·5	7·8	NE : ENE	NE : ENE : NNE	5·0	0·43	432	10, sl, r, m.-r : 10, m.-r : 9	9 : 9 : 10
Means	1·5	7·9	..	..	..	0·27	320		
Number of Column for Reference	18	19	20	21	22	23	24	25	26

The mean *Temperature of Evaporation* for the month was 34°·2, being 4°·3 *lower* than
The mean *Temperature of the Dew Point* for the month was 31°·5, being 5°·2 *lower* than
The mean *Degree of Humidity* for the month was 84·2, being 4·4 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.177, being 0in.041 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs.0, being 0grs.6 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 562 grains, being 10 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 5·8.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·185. The maximum daily amount of *Sunshine* was 6·1 hours on December 2.

The highest reading of the *Solar Radiation Thermometer* was 78°·8 on December 1; and the lowest reading of the *Terrestrial Radiation Thermometer* was 15°·5 on December 19.

The *Proportions of Wind* referred to the cardinal points were N. 10, E. 6, S. 5, W. 7. Three days were calm.

The *Greatest Pressure of the Wind* in the month was 10·0 lbs. on the square foot on December 1; The mean daily *Horizontal Movement of the Air* for the month was 320 miles; the greatest daily value was 566 miles on December 2; and the least daily value was 47 miles on December 20.

Rain (0in.005 or over) fell on 12 days in the month, amounting to 1in.078, as measured by gauge No. 6 partly sunk below the ground; being 0in.749 *less* 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 REGISTERS.

MAXIMA.		MINIMA.		MAXIMA.		MINIMA.		MAXIMA.		MINIMA.	
Greenwich Civil Time, 1917.	Reading.	Greenwich Civil Time, 1917.	Reading.	Greenwich Civil Time, 1917.	Reading.	Greenwich Civil Time, 1917.	Reading.	Greenwich Civil Time, 1917.	Reading.	Greenwich Civil Time, 1917.	Reading.
January		January		May		May		September		September	
d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.
1. 20. 0	30·071	2. 4. 5	29·975	9. 20. 50	29·879	12. 20. 55	29·669	15. 12. 15	29·974	17. 4. 5	29·573
2. 11. 15	30·060	4. 4. 55	29·565	13. 10. 0	29·809	14. 15. 5	29·722	17. 21. 20	29·700	18. 5. 10	29·622
5. 11. 0	30·003	6. 4. 0	29·773	16. 10. 0	29·994	18. 17. 0	29·417	18. 14. 0	29·706	19. 4. 0	29·628
6. 22. 30	29·924	8. 14. 25	29·550	20. 10. 0	29·601	21. 2. 15	29·501	20. 9. 0	29·877	20. 17. 15	29·771
10. 9. 45	29·862	12. 22. 35	29·142	22. 21. 0	29·837	23. 21. 50	29·756	21. 21. 0	30·134	26. 15. 55	29·710
22. 17. 55	30·206	30. 13. 35	29·657	25. 10. 15	30·139	28. 3. 55	29·640	29. 21. 55	30·226		
February		February		June		June		October		October	
1. 11. 0	29·818	4. 6. 35	29·693	3. 9. 30	30·159	4. 18. 30	29·938			4. 12. 25	29·249
8. 4. 0	30·337	12. 3. 15	29·693	5. 21. 0	30·027	7. 3. 50	29·836	5. 20. 5	29·893	6. 12. 30	29·734
14. 10. 55	30·157	17. 3. 30	29·788	9. 23. 0	30·065	12. 16. 0	29·766	6. 23. 50	29·806	7. 14. 45	29·166
19. 11. 5	29·991	20. 16. 0	29·572	14. 21. 40	30·118	20. 18. 0	29·428	8. 10. 40	29·475	8. 21. 15	28·982
22. 23. 0	30·130	24. 6. 15	30·021	26. 23. 0	29·930	29. 3. 5	29·621	9. 12. 30	29·318	10. 6. 25	29·209
24. 21. 15	30·145	25. 16. 45	29·999	30. 23. 25	30·123			11. 11. 0	29·747	12. 22. 35	28·700
27. 8. 45	30·256							15. 21. 0	29·887	17. 18. 45	29·572
				July		July		20. 21. 0	30.175	23. 15. 0	29.526
March		March						24. 9. 40	29·735	25. 1. 40	29·022
						2. 18. 45	29·978	25. 19. 20	29·585	26. 15. 55	29·436
		5. 6. 0	29·173	5. 10. 0	30·159	8. 6. 5	29·557	27. 9. 0	29·526	27. 20. 55	29·458
6. 0. 15	29·278	7. 13. 50	29·005	12. 8. 50	30·143	15. 4. 0	29·701	29. 10. 0	29·747	30. 6. 0	29·332
9. 2. 0	29·690	9. 17. 30	29·493	16. 7. 0	29·826	18. 23. 30	29·570				
10. 10. 30	29·661	12. 4. 0	29·265	22. 8. 0	30·133	29. 17. 0	29·611				
13. 10. 0	29·661	14. 6. 0	29·359	31. 19. 40	29·784			November		November	
16. 7. 45	30·518	18. 4. 30	30·212								
18. 12. 55	30·307	20. 2. 45	29·250					4. 8. 25	30·120	6. 7. 10	29·520
21. 9. 10	29·675	21. 14. 30	29·599	August		August		6. 17. 35	29·668	7. 5. 5	29·404
24. 10. 0	30·228	26. 6. 0	29·395					8. 8. 0	29·670	10. 3. 25	29·002
27. 21. 20	29·881	30. 4. 5	29·085			2. 12 30	29·470	13. 10. 30	30·162	14. 5. 30	30·067
				2. 22. 55	29·645	4. 6. 30	29·439	18. 10. 30	30·446	21. 6. 30	29·900
				6. 11. 0	29·800	9. 16. 0	29·384	22. 10. 30	30·144	23. 2. 30	30·063
April		April		10. 14. 0	29·558	11. 4. 45	29·461	23. 10. 10	30·134	25. 3. 40	29·293
				12. 23. 55	29·634	14. 17. 0	29·416	26. 10. 0	30·165	27. 4. 20	29·613
1. 0. 55	29·318	1. 12. 45	29·234	16. 22. 0	29·830	18. 6. 35	29·594	29. 10. 40	30·118		
1. 21. 10	29·366	3. 1. 5	28·970	20. 9. 0	29·891	23. 7. 55	29·410				
7. 23. 0	29·838	9. 1. 0	29·287	23. 20. 20	29·538	24. 3. 30	29·464				
10. 17. 5	29·660	11. 21. 0	29·014	25. 12. 0	29·894	28. 7. 0	28·562	December		December	
13. 9. 5	29·640	14. 15. 50	29·172	30. 11. 0	29·707	31. 3. 10	29·544				
16. 6. 0	29·756	16. 18. 5	29·457	31. 21. 5	29·777					1. 15. 0	29·519
17. 20. 30	30·011	18. 10. 45	29·748					4. 10. 45	30·336	9. 13. 20	29·455
23. 8. 55	30·318	24. 17. 30	30·226					12. 10. 45	30·316	14. 15. 0	30·022
25. 22. 40	30·445	29. 15. 5	29·779	September		September		15. 10. 55	30·249	16. 15. 20	29·275
						1. 14. 10	29·501	18. 19. 55	30·193	20. 22. 0	29·829
May		May		3. 9. 0	30·036	5. 22. 40	29·640	23. 10. 30	30·287	25. 4. 0	29·957
				7. 23. 55	30·034	8. 17. 30	29·866	25. 10. 5	30·038	26. 12. 35	29·926
3. 7. 40	30·189	5. 12. 0	29·760	10. 9. 35	30·103	11. 17. 20	29·890	27. 21. 0	30·130	29. 0. 30	29·935
6. 9. 15	30·095	8. 4. 30	29·639	13. 0. 15	30·092	13. 22. 35	29·755	29. 10. 0	30.128		

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 was 159 feet until the end of March, when the instrument was transferred to the new Magnetograph House, the new height is 152 feet, but the readings for the first three months have been increased by ·007 inch to agree with the rest of the year. 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 1917.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Highest	30·206	30·337	30·518	30·445	30·189	30·159	30·159	29·894	30·226	30·175	30·446	30·336
Lowest	29·142	29·572	29·005	28·970	29·417	29·428	29·557	28·562	29·501	28·700	29·002	29·275
Range	1·064	0·765	1·513	1·475	0·772	0·731	0·602	1·332	0·725	1·475	1·444	1·061

The highest reading in the year was $30^{in.}·518$ on March 16. The lowest reading in the year was $28^{in.}·562$ on August 28. The range of reading in the year was $1^{in.}·956$.

MONTHLY RESULTS of METEOROLOGICAL ELEMENTS for the YEAR 1917.

MONTH, 1917.	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 the Average of 65 Years.	Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean Degree of Humidity. (Saturation = 100).
	in.	°	°	°	°	°	°	°	°	°	°	
January	29·709	54·5	24·1	30·4	38·2	32·4	5·8	35·5	− 3·1	34·0	30·8	83·0
February	29·961	51·2	17·9	33·3	40·3	30·4	9·9	35·1	− 4·4	33·8	30·6	83·7
March	29·659	58·1	19·3	38·8	45·0	32·1	12·9	38·1	− 3·8	36·2	33·6	84·4
April	29·741	63·6	26·1	37·5	51·2	34·1	17·1	42·1	− 5·2	38·8	34·9	76·7
May	29·816	79·9	36·1	43·8	68·7	46·5	22·2	56·5	+ 3·5	52·1	48·1	74·1
June	29·863	93·2	45·2	48·0	74·9	51·8	23·1	62·3	+ 2·9	56·8	52·2	70·0
July	29·895	84·7	45·3	39·4	73·2	53·3	19·8	62·2	− 0·5	57·4	53·4	73·7
August	29·577	77·5	50·2	27·3	69·6	54·5	15·1	60·6	− 1·0	57·1	54·0	79·5
September	29·904	75·0	41·0	34·0	68·5	50·9	17·6	58·7	+ 1·4	55·5	52·7	80·7
October	29·606	73·0	28·7	44·3	55·4	38·9	16·4	46·9	− 3·1	44·2	41·1	80·5
November	29·936	58·2	30·2	28·0	51·7	41·1	10·6	46·8	+ 3·3	44·8	42·5	85·6
December	30·028	52·8	17·2	35·6	40·2	31·1	9·1	35·9	− 4·0	34·2	31·5	84·2
		Highest	Lowest	Annual Range								
Means	29·808	93·2	17·2	76·0	56·4	41·4	15·0	48·4	− 1·2	45·4	42·1	79·7

MONTH, 1917.	Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean Weight of a Cubic Foot of Air.	Mean Temperature at Noon of the Earth 3 ft. 2 in. below the surface of the soil.	Mean Amount of Cloud (0-10.)	RAIN. Number of Rainy Days (0.005 or over).	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	0·172	2·0	556	42·07	8·7	14	1·056	189	97	169	22	31	69	107	43	17	0·43	374
February	0·171	2·1	561	38·48	6·9	11	0·842	101	99	94	20	84	57	66	26	125	0·11	216
March	0·193	2·2	552	40·51	7·4	17	1·747	148	89	94	49	36	134	66	30	98	0·40	319
April	0·203	2·4	549	41·59	6·6	16	1·806	164	39	15	19	84	142	83	97	77	0·27	296
May	0·336	3·8	534	51·67	5·1	9	2·609	59	111	197	33	73	62	26	15	168	0·20	236
June	0·391	4·3	529	61·32	5·5	8	2·213	66	67	77	8	157	203	22	13	107	0·14	241
July	0·409	4·5	529	63·19	5·7	11	3·955	131	89	64	24	106	178	44	23	85	0·19	250
August	0·418	4·7	525	63·32	6·9	21	4·559	41	18	6	28	203	301	55	52	40	0·37	338
September	0·399	4·4	533	61·31	5·4	11	1·701	44	8	36	11	115	280	72	20	134	0·18	251
October	0·258	3·0	541	54·36	5·6	15	2·732	12	0	3	10	138	348	113	59	61	0·35	334
November	0·272	3·1	547	49·11	7·9	12	1·704	36	3	41	5	61	346	119	55	54	0·29	346
December	0·177	2·0	562	43·90	5·8	12	1·078	136	156	48	19	34	120	116	33	82	0·34	320
Sums	..	..	..	..	..	157	26·002	1127	776	844	248	1122	2240	889	466	1048	..	..
Means	0·283	3·2	543	50·90	6·5	..	..	..	..	..	..	..	..	..	..	..	0·27	293

The greatest recorded pressure of the wind on the square foot in the year was 18·8 lbs. on October 25.
The greatest recorded daily horizontal movement of the air in the year was 829 miles, on March 7.
The least recorded daily horizontal movement of the air in the year was 47 miles, on December 20.

MONTHLY MEAN READING of the BAROMETER at every HOUR of the DAY, as deduced from the PHOTOGRAPHIC RECORDS.

Hour, Greenwich Civil Time.	1917. 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	29·708	29·964	29·681	29·735	29·827	29·867	29·908	29·586	29·904	29·603	29·930	30·035	29·812
1h	29·703	29·961	29·673	29·732	29·822	29·866	29·906	29·581	29·901	29·600	29·923	30·031	29·808
2	29·704	29·959	29·664	29·731	29·819	29·863	29·901	29·574	29·900	29·596	29·917	30·029	29·805
3	29·704	29·956	29·652	29·729	29·817	29·860	29·895	29·567	29·895	29·595	29·913	30·024	29·801
4	29·702	29·954	29·649	29·727	29·816	29·860	29·894	29·561	29·893	29·599	29·914	30·020	29·799
5	29·699	29·954	29·651	29·729	29·819	29·864	29·894	29·561	29·895	29·603	29·915	30·018	29·800
6	29·699	29·954	29·653	29·735	29·822	29·869	29·897	29·565	29·899	29·607	29·918	30·021	29·803
7	29·703	29·957	29·660	29·740	29·825	29·874	29·902	29·569	29·909	29·617	29·928	30·025	29·809
8	29·713	29·963	29·664	29·745	29·829	29·875	29·904	29·574	29·915	29·628	29·940	30·031	29·815
9	29·722	29·968	29·669	29·750	29·828	29·874	29·902	29·578	29·921	29·632	29·948	30·038	29·819
10	29·727	29·971	29·668	29·754	29·826	29·871	29·901	29·582	29·923	29·631	29·956	30·044	29·821
11	29·727	29·976	29·665	29·754	29·823	29·869	29·902	29·582	29·916	29·627	29·955	30·039	29·820
Noon	29·718	29·968	29·662	29·747	29·815	29·866	29·899	29·581	29·911	29·617	29·946	30·028	29·813
13h	29·708	29·960	29·655	29·743	29·813	29·861	29·896	29·580	29·904	29·610	29·942	30·017	29·807
14	29·705	29·953	29·647	29·738	29·806	29·856	29·891	29·579	29·899	29·603	29·935	30·009	29·802
15	29·705	29·947	29·645	29·730	29·800	29·849	29·887	29·576	29·892	29·597	29·934	30·008	29·798
16	29·707	29·948	29·641	29·729	29·796	29·844	29·882	29·573	29·887	29·593	29·937	30·011	29·796
17	29·708	29·952	29·643	29·731	29·794	29·844	29·878	29·573	29·887	29·595	29·943	30·017	29·797
18	29·709	29·957	29·652	29·734	29·798	29·848	29·879	29·574	29·890	29·598	29·948	30·026	29·801
19	29·709	29·964	29·659	29·740	29·804	29·853	29·881	29·579	29·898	29·601	29·948	30·034	29·806
20	29·709	29·969	29·665	29·751	29·812	29·861	29·888	29·586	29·908	29·599	29·948	30·037	29·811
21	29·708	29·971	29·667	29·755	29·820	29·871	29·896	29·588	29·912	29·598	29·946	30·041	29·814
22	29·706	29·973	29·666	29·758	29·822	29·876	29·899	29·588	29·915	29·596	29·942	30·042	29·815
23	29·706	29·974	29·664	29·759	29·824	29·877	29·899	29·587	29·916	29·592	29·937	30·041	29·815
24	29·702	29·974	29·657	29·759	29·821	29·877	29·897	29·585	29·916	29·592	29·934	30·037	29·813
Means 0h.–23h.	29·709	29·961	29·659	29·741	29·816	29·863	29·895	29·577	29·904	29·606	29·936	30·028	29·808
Means 1h.–24h.	29·709	29·962	29·658	29·742	29·816	29·864	29·895	29·577	29·905	29·606	29·936	30·028	29·808
Number of Days employed	31	28	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.	1917. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	35·3	33·5	36·1	38·6	50·0	55·3	56·7	56·9	54·8	44·5	45·5	35·0	45·2
1h	35·2	33·1	35·7	37·9	49·3	54·3	55·7	56·5	54·2	44·1	45·2	34·7	44·7
2	35·2	32·9	35·3	37·1	48·8	53·7	55·1	56·2	53·7	43·8	45·3	34·8	44·3
3	35·2	32·5	34·9	36·8	48·2	53·3	54·6	56·1	53·2	43·5	45·0	34·8	44·0
4	35·1	32·2	34·6	36·3	47·7	53·0	54·2	55·9	52·6	43·0	45·0	34·9	43·7
5	35·0	32·0	34·4	36·2	48·2	53·9	54·8	55·9	52·3	42·6	44·9	34·8	43·8
6	34·8	31·7	34·4	36·5	50·0	56·4	56·4	56·8	52·7	42·6	44·9	34·7	44·3
7	34·9	31·8	34·9	38·3	53·0	59·7	59·0	58·6	54·4	43·0	44·8	34·5	45·6
8	35·0	32·6	36·0	40·7	56·0	62·7	61·6	60·5	57·2	44·3	45·1	34·5	47·2
9	35·1	33·7	37·5	42·7	59·2	65·4	63·6	62·4	60·2	46·7	46·0	34·9	48·9
10	35·5	34·9	39·2	44·5	61·8	67·2	65·6	63·8	62·0	49·5	47·4	36·1	50·6
11	35·8	36·5	40·3	45·7	63·6	68·8	67·0	64·4	63·7	51·2	48·5	37·3	51·9
Noon	36·4	38·0	41·4	47·1	65·1	69·7	68·7	65·1	65·0	52·7	49·2	38·2	53·1
13	36·7	38·8	42·2	48·1	65·7	70·6	69·4	65·8	65·9	53·1	49·8	39·0	53·8
14	36·8	39·0	42·8	48·4	65·8	71·2	70·2	66·4	66·1	52·8	49·9	39·0	54·0
15	36·5	39·2	42·3	48·5	65·3	71·1	70·3	66·5	65·8	52·1	49·5	38·4	53·8
16	36·2	38·7	42·0	47·4	64·2	70·1	69·7	65·9	64·9	50·9	48·7	37·4	53·0
17	36·0	37·8	41·0	46·7	63·1	68·9	69·0	64·7	63·3	49·3	48·1	36·9	52·1
18	35·8	37·1	39·9	45·2	60·6	67·2	67·2	63·1	60·9	47·9	47·9	36·3	50·8
19	35·7	36·3	39·1	43·4	58·2	65·0	64·6	61·1	59·0	46·9	47·4	35·9	49·4
20	35·4	35·5	38·3	42·1	55·6	62·6	62·1	59·5	57·6	46·2	46·6	35·5	48·1
21	35·3	35·2	37·5	41·1	53·8	60·2	60·1	58·4	56·7	45·9	46·5	35·1	47·1
22	35·0	34·7	36·8	40·3	52·5	58·2	58·7	57·8	56·0	45·5	46·2	34·9	46·4
23	34·8	34·3	36·3	39·7	51·2	56·7	57·6	57·4	55·4	45·0	45·8	34·5	45·7
24	34·7	33·8	35·7	39·0	50·3	55·2	56·7	56·9	54·6	44·5	45·5	34·5	45·1
Means 0h.–23h.	35·5	35·1	38·0	42·1	56·5	62·3	62·2	60·6	58·7	46·9	46·8	35·9	48·4
Means 1h.–24h.	35·5	35·1	38·0	42·1	56·5	62·3	62·2	60·6	58·7	46·9	46·8	35·9	48·4
Number of Days employed	31	28	31	30	31	30	31	31	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.	1917. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	34·0	32·5	35·0	36·4	48·4	53·2	54·6	55·3	53·6	42·8	43·9	33·6	43·6
1h	33·9	32·2	34·6	36·0	47·8	52·8	54·1	55·0	53·0	42·5	43·8	33·4	43·3
2	33·9	32·0	34·3	35·3	47·5	52·2	53·5	54·7	52·6	42·2	43·8	33·4	43·0
3	34·0	31·7	33·9	35·1	47·1	51·9	53·1	54·6	52·1	41·8	43·4	33·4	42·7
4	33·9	31·5	33·6	34·7	46·7	51·8	52·8	54·6	51·7	41·3	43·1	33·5	42·4
5	33·8	31·3	33·3	34·9	47·1	52·4	53·4	54·6	51·3	41·1	43·1	33·5	42·5
6	33·6	30·9	33·4	35·3	48·5	54·2	54·6	55·3	51·5	41·2	43·1	33·4	42·9
7	33·6	31·0	33·9	36·7	50·4	56·0	56·1	56·5	52·8	41·6	43·1	33·2	43·7
8	33·5	31·7	34·9	38·3	52·3	57·5	57·4	57·5	54·8	42·7	43·4	33·3	44·8
9	33·5	32·8	36·0	39·4	54·2	58·7	58·4	58·1	56·3	44·4	44·3	33·6	45·8
10	33·7	33·8	37·1	40·4	55·6	59·6	59·5	58·6	57·3	46·0	45·2	34·4	46·8
11	34·1	35·0	37·9	41·3	56·3	60·0	60·0	58·9	58·0	46·8	45·9	35·2	47·4
Noon	34·4	36·0	38·5	42·0	56·9	60·2	60·7	59·2	58·6	47·6	46·4	35·8	48·0
13h	34·6	36·5	39·0	42·7	57·1	60·8	61·0	59·5	59·3	47·4	46·7	36·2	48·4
14	34·5	36·7	39·3	42·7	57·3	60·9	61·3	59·7	59·5	47·3	46·8	36·4	48·5
15	34·4	36·8	39·0	43·1	57·1	61·0	61·4	59·6	59·3	46·9	46·6	36·0	48·4
16	34·4	36·5	38·7	42·4	56·3	60·5	61·1	59·4	59·0	46·5	46·2	35·4	48·0
17	34·4	36·0	38·2	41·8	55·6	60·0	60·7	58·8	58·3	45·8	45·9	35·0	47·5
18	34·3	35·3	37·6	40·9	54·5	59·3	60·0	58·3	57·5	45·1	45·7	34·6	46·9
19	34·0	34·8	37·1	39·7	53·2	58·2	58·7	57·6	56·6	44·5	45·4	34·3	46·2
20	33·8	34·3	36·7	38·9	51·7	57·3	57·5	57·0	55·9	43·9	45·0	34·0	45·5
21	33·7	34·0	36·1	38·3	50·8	56·1	56·6	56·5	55·2	43·7	44·9	33·6	45·0
22	33·5	33·6	35·6	37·9	49·9	55·1	55·8	56·0	54·7	43·4	44·5	33·3	44·4
23	33·4	33·2	35·1	37·3	49·2	54·1	55·2	55·6	54·0	43·1	44·3	33·2	44·0
24	33·4	32·8	34·6	36·8	48·6	53·1	54·7	55·3	53·5	42·7	43·8	33·2	43·5
Means. 0h.–23h.	34·0	33·8	36·2	38·8	52·1	56·8	57·4	57·1	55·5	44·2	44·8	34·2	45·4
Means. 1h.–24h.	33·9	33·8	36·2	38·8	52·2	56·8	57·4	57·1	55·5	44·2	44·8	34·2	45·4
Number of Days employed	31	28	31	30	31	30	31	31	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.	1917. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	32·0	30·7	33·4	33·4	46·7	51·2	52·7	53·9	52·4	40·8	42·0	31·4	41·7
1h	31·9	30·4	33·0	33·4	46·2	51·3	52·6	53·6	51·8	40·6	42·2	31·3	41·5
2	31·9	30·2	32·7	32·8	46·1	50·7	52·0	53·3	51·5	40·3	42·1	31·1	41·2
3	32·1	30·0	32·3	32·8	45·9	50·5	51·6	53·2	51·0	39·8	41·5	31·1	41·0
4	32·1	30·0	32·0	32·4	45·6	50·6	51·4	53·4	50·8	39·3	40·9	31·2	40·8
5	31·9	29·7	31·5	33·0	45·9	50·9	52·0	53·4	50·3	39·3	41·0	31·4	40·9
6	31·7	29·1	31·7	33·6	46·9	52·1	52·9	54·0	50·3	39·5	41·0	31·2	41·2
7	31·5	29·2	32·3	34·5	47·8	52·7	53·5	54·6	51·2	39·9	41·1	31·1	41·6
8	31·1	29·9	33·2	35·3	48·8	53·1	53·8	54·9	52·6	40·8	41·4	31·3	42·2
9	31·0	31·2	34·0	35·4	49·7	53·2	54·0	54·5	52·9	41·8	42·4	31·5	42·6
10	31·0	32·1	34·4	35·6	50·3	53·5	54·5	54·2	53·3	42·3	42·8	31·9	43·0
11	31·6	32·8	34·8	36·3	50·2	53·1	54·4	54·3	53·2	42·2	43·1	32·3	43·2
Noon	31·5	33·3	34·9	36·3	50·1	52·9	54·5	54·4	53·4	42·5	43·4	32·6	43·3
13h	31·6	33·4	35·1	36·8	50·1	53·2	54·5	54·4	53·9	41·7	43·4	32·5	43·4
14	31·3	33·7	35·1	36·5	50·4	53·1	54·4	54·3	54·1	41·8	43·5	33·0	43·4
15	31·3	33·7	35·0	37·2	50·4	53·3	54·5	54·0	54·0	41·6	43·5	32·8	43·4
16	31·7	33·5	34·6	36·8	49·8	53·1	54·5	54·1	54·1	41·9	43·5	32·6	43·3
17	32·0	33·6	34·7	36·3	49·3	53·1	54·3	53·9	54·1	42·1	43·5	32·3	43·3
18	32·1	32·8	34·6	36·0	49·2	53·0	54·3	54·3	54·6	42·0	43·3	32·1	43·2
19	31·4	32·6	34·5	35·3	48·7	52·7	53·8	54·6	54·4	41·8	43·2	31·9	42·9
20	31·3	32·4	34·5	35·0	48·0	52·8	53·6	54·8	54·4	41·3	43·2	31·7	42·8
21	31·3	32·1	34·2	34·8	47·9	52·5	53·6	54·8	53·9	41·2	43·1	31·3	42·6
22	31·1	31·8	33·9	34·8	47·3	52·3	53·2	54·4	53·5	41·0	42·6	30·7	42·2
23	31·1	31·3	33·4	34·2	47·1	51·7	53·1	54·0	52·6	40·9	42·6	31·1	41·9
24	31·2	31·0	33·0	33·9	46·8	51·1	52·9	53·9	52·4	40·6	41·8	31·1	41·6
Means. 0h.– 23h.	31·6	31·6	33·7	34·9	48·3	52·4	53·5	54·1	52·8	41·1	42·5	31·7	42·4
Means. 1h.–24h.	31·5	31·7	33·7	35·0	48·3	52·4	53·5	54·1	52·8	41·1	42·5	31·7	42·4

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.	1917.												Yearly Means.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Midnight	88	89	90	83	89	87	86	90	92	87	88	86	88
1h	87	90	90	84	90	90	89	90	92	87	89	87	89
2	87	90	90	85	91	90	88	90	92	87	89	86	89
3	88	90	90	86	92	90	92	90	92	87	88	86	89
4	88	91	90	86	93	92	90	92	94	86	86	86	90
5	88	91	88	89	92	90	90	92	93	88	87	87	90
6	88	90	89	90	89	86	88	90	92	89	87	87	89
7	87	90	90	87	82	79	83	86	89	89	87	87	86
8	85	89	90	82	77	71	76	82	85	88	87	87	83
9	84	89	87	76	71	65	72	76	77	84	88	87	80
10	83	89	83	71	67	62	68	72	73	76	85	85	76
11	85	87	81	70	62	57	64	70	69	72	82	83	73
Noon	83	83	79	66	58	55	60	69	66	69	81	80	71
13h	82	82	77	65	57	54	58	67	66	67	79	78	69
14	81	82	74	64	57	52	58	65	66	67	79	80	69
15	82	81	76	65	58	53	58	64	66	68	80	81	69
16	85	83	76	67	59	55	58	66	68	72	82	83	71
17	86	85	78	68	61	56	59	68	72	76	85	84	73
18	87	85	82	70	66	60	63	73	80	81	85	85	76
19	84	87	84	73	71	64	68	79	86	83	86	86	79
20	85	88	87	77	76	70	74	85	89	84	89	86	83
21	85	88	88	79	80	76	79	88	90	84	89	85	84
22	85	89	90	81	83	81	82	88	91	85	88	84	86
23	86	88	90	81	86	84	85	88	91	86	89	86	87
24	87	88	90	83	88	87	87	90	92	87	88	86	88
Means. 0h.–23h.	85	87	85	77	75	72	75	80	82	81	86	85	81
Means. 1h.–24h.	85	87	85	77	75	72	75	80	82	81	86	85	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 1917.

Month, 1917.	Registered Duration of Sunshine in the Hour ending.																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.
	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h				
	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h		°
January	..	..	..	..	0·2	0·1	1·3	4·4	3·7	3·2	1·3	0·6	..	..	..	..	14·8	259·1	0·057	18
February ..	..	..	..	0·1	2·6	5·5	4·8	5·3	5·1	5·1	6·1	5·3	0·4	..	..	..	40·3	277·4	0·145	26
March	..	..	1·4	6·6	7·7	8·5	9·7	9·2	9·3	9·6	8·7	6·2	2·2	..	..	..	79·1	366·2	0·216	37
April	..	1·0	7·2	10·1	11·7	13·3	12·7	15·0	14·3	14·9	12·8	10·3	9·1	4·6	0·8	..	137·8	413·8	0·333	48
May	0·0	5·7	12·2	14·8	16·5	16·6	18·4	20·5	19·1	17·1	17·7	16·9	16·7	15·2	6·8	0·2	214·4	481·6	0·446	57
June	4·6	12·5	14·8	16·0	18·0	16·9	15·7	15·0	17·4	17·0	16·1	16·1	14·9	13·8	13·5	3·5	225·8	494·4	0·457	62
July.....	0·7	8·6	9·8	13·5	14·4	16·3	15·6	19·4	19·3	19·0	19·2	16·6	17·3	15·9	12·2	3·7	221·5	497·3	0·445	60
August	0·2	5·2	9·6	13·2	16·7	16·7	14·3	15·6	17·3	17·7	17·6	16·6	14·6	9·3	4·5	..	189·1	450·2	0·420	52
September ..	..	0·3	2·1	12·3	19·1	18·2	16·4	18·9	19·1	18·1	16·9	16·4	13·1	5·5	..	..	176·4	378·5	0·466	41
October.....	..	..	..	4·8	9·7	14·4	16·2	16·9	17·9	17·8	17·4	11·5	3·4	0·2	..	..	130·2	329·9	0·395	30
November ..	..	..	..	..	2·0	6·2	7·2	8·0	5·6	6·1	4·4	1·9	0·1	..	..	..	41·5	265·5	0·156	20
December ..	..	..	..	..	0·3	3·1	6·6	9·0	9·1	9·4	7·2	0·5	..	..	..	..	45·2	243·7	0·185	16
For the Year	5·5	33·3	57·1	91·4	118·9	135·8	138·9	157·2	157·2	155·0	145·4	118·9	91·8	64·5	37·8	7·4	1516·1	4457·6	0·340	..

The hours are reckoned from apparent midnight.

READINGS of THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE in the YEAR 1917.

(The readings of maximum and minimum thermometers apply to the twenty-four hours ending 21h)

JANUARY.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
	°	°	°	°	°	°	°	°	°	°
1	54·5	48·7	49·6	52·6	53·5	49·6	48·0	51·0	51·3	45·8
2	52·0	47·9	48·4	50·5	50·3	51·5	46·6	47·3	47·7	48·3
3	52·7	48·8	51·4	51·7	50·6	49·2	49·4	49·3	48·6	44·9
4	49·1	36·7	45·1	46·0	44·8	38·5	40·8	41·0	39·0	35·9
5	41·9	35·4	36·7	40·5	41·6	38·2	34·7	37·2	37·8	37·6
6	42·0	36·3	38·6	38·0	39·9	37·4	36·2	35·6	37·9	35·8
7	41·9	32·1	36·8	40·1	40·5	41·9	35·2	38·0	38·6	40·9
8	46·3	34·0	38·5	37·1	34·6	36·0	35·8	35·1	33·9	35·0
9	39·1	34·6	36·7	37·8	39·1	34·7	34·9	35·8	35·5	33·7
10	36·1	29·1	32·0	34·6	35·5	30·0	30·8	32·0	32·9	29·0
11	41·0	28·2	34·6	37·4	38·7	41·0	32·9	37·1	38·5	40·0
12	41·2	34·0	40·0	40·3	38·1	36·4	37·3	37·7	36·1	35·0
13	37·0	34·1	34·1	37·0	35·5	35·7	32·8	34·3	34·2	34·7
14	35·9	32·1	34·2	35·8	35·1	34·5	33·2	34·5	33·6	33·0
15	34·7	30·1	32·6	33·6	33·6	32·6	32·0	32·3	32·7	31·8
16	36·1	30·1	32·5	33·8	35·1	34·4	31·9	32·6	33·0	33·0
17	35·8	32·9	35·0	35·6	34·8	33·6	33·7	33·3	32·8	32·2
18	36·9	33·1	34·1	36·1	36·3	35·3	32·9	34·8	35·3	34·3
19	36·7	34·3	35·9	36·6	36·6	34·6	33·9	34·8	34·8	32·8
20	34·5	31·3	31·6	31·6	31·9	31·6	31·4	31·0	31·5	30·1
21	32·7	30·9	32·5	32·6	32·6	32·0	31·0	30·9	30·8	31·1
22	33·8	30·0	31·0	32·3	33·2	33·8	30·7	31·8	31·8	32·7
23	33·9	29·9	31·6	33·8	31·0	31·0	30·3	32·0	30·0	30·4
24	32·4	27·6	29·8	28·9	30·4	32·4	29·6	27·9	28·9	30·0
25	32·2	28·1	29·1	28·7	29·2	29·6	28·0	28·2	28·3	28·1
26	30·3	27·2	28·5	29·6	30·1	29·4	27·5	27·0	27·7	27·6
27	34·0	26·9	29·9	31·4	32·1	30·0	26·9	28·5	29·6	28·6
28	31·0	27·7	29·6	30·0	31·0	28·2	28·0	28·0	28·0	26·2
29	32·0	26·6	28·7	30·2	29·7	27·5	25·6	26·8	27·0	25·0
30	32·0	24·1	29·5	31·5	31·0	29·6	26·7	29·1	27·9	27·9
31	34·8	28·3	30·6	32·4	33·7	34·7	30·0	31·3	32·2	32·7
Means	38·2	32·6	35·1	36·4	36·5	35·3	33·5	34·4	34·4	33·7

FEBRUARY.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
	°	°	°	°	°	°	°	°	°	°
1	34·8	26·6	32·6	31·1	30·6	26·6	31·2	30·9	29·2	25·1
2	29·1	23·3	25·1	28·6	28·6	27·6	24·6	26·8	26·9	26·3
3	36·0	22·9	26·5	32·8	35·6	24·6	25·9	30·8	31·8	23·6
4	36·3	20·9	26·0	36·0	34·7	31·9	25·0	32·1	32·8	31·8
5	32·1	22·4	23·1	28·8	31·8	29·3	22·2	27·6	30·2	28·8
6	34·8	24·4	26·5	33·6	34·6	25·6	25·7	31·8	32·8	23·9
7	36·5	17·9	20·1	34·6	35·3	24·6	19·0	31·6	32·2	22·9
8	35·2	18·4	27·0	34·8	33·6	26·0	26·0	31·2	30·2	24·0
9	37·0	21·3	25·6	35·8	36·8	28·8	24·8	32·0	33·2	28·2
10	35·5	25·3	33·8	35·5	35·4	34·7	33·1	32·9	33·6	33·4
11	35·9	33·8	34·3	35·1	35·6	34·5	33·5	34·0	34·7	32·9
12	36·2	32·9	33·6	34·8	36·1	35·5	31·8	33·1	33·8	34·1
13	41·3	33·0	35·6	39·4	38·8	34·4	34·7	37·5	35·7	31·4
14	36·8	32·1	34·8	35·8	36·6	32·7	32·2	32·7	32·8	31·3
15	38·5	31·3	34·7	35·4	37·6	31·5	33·0	33·7	34·2	30·9
16	40·7	24·4	28·9	37·4	40·3	36·4	28·9	33·3	37·4	36·0
17	51·2	35·6	40·9	47·8	48·4	41·1	40·8	46·0	46·3	40·8
18	43·3	35·1	39·7	39·6	42·5	37·8	39·7	39·3	40·8	37·5
19	45·0	37·0	39·6	43·7	43·9	38·7	39·3	42·6	42·6	38·3
20	45·8	37·7	40·3	42·7	44·8	45·3	39·8	42·3	44·4	45·0
21	45·6	41·3	42·0	43·1	43·8	42·9	42·0	42·8	43·5	42·5
22	43·1	36·9	37·2	37·4	38·1	38·1	36·8	35·9	36·5	37·2
23	44·6	36·1	38·9	44·0	43·1	39·7	37·3	40·5	40·1	38·9
24	45·7	39·5	42·6	44·9	44·5	41·6	41·7	43·8	43·1	41·0
25	48·0	39·8	40·6	42·6	46·8	43·6	39·8	41·8	43·8	42·6
26	48·1	34·3	38·4	46·7	47·1	42·0	36·8	42·4	41·9	39·8
27	46·7	30·3	35·2	39·7	46·5	43·8	35·2	38·8	42·9	40·3
28	46·9	39·8	40·5	42·6	46·6	44·9	37·3	39·2	42·2	42·5
Means	40·4	30·4	33·7	38·0	39·2	35·2	32·8	36·0	36·8	34·0

MARCH.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
	°	°	°	°	°	°	°	°	°	°
1	48·0	39·7	40·4	43·7	45·8	41·5	38·6	40·4	40·9	39·0
2	42·0	29·9	38·5	39·4	38·6	29·9	37·3	38·2	37·1	29·5
3	39·9	29·9	34·2	37·4	38·6	31·4	33·5	33·9	34·8	30·6
4	44·0	29·2	34·1	39·1	41·2	35·3	33·2	35·2	35·0	32·3
5	38·1	31·3	32·7	34·4	36·2	37·2	32·0	33·6	35·8	36·9
6	41·0	33·5	36·0	38·0	40·4	36·6	36·0	37·8	38·8	36·3
7	36·6	26·1	29·2	29·6	32·5	28·7	28·8	28·9	31·3	28·2
8	33·6	23·1	27·5	30·0	31·8	28·0	27·0	29·7	30·0	26·9
9	33·7	19·3	29·6	30·8	31·7	33·7	29·0	30·5	31·2	33·4
10	49·4	31·7	36·7	46·6	44·9	44·5	36·9	44·6	44·2	44·0
11	52·0	44·0	46·6	49·7	50·6	46·7	45·8	47·9	49·8	46·7
12	47·0	40·4	42·1	41·2	42·0	40·6	41·8	40·6	40·8	39·4
13	49·8	33·9	38·7	46·7	45·6	40·8	37·9	43·7	44·3	40·0
14	46·0	40·0	42·5	44·1	45·3	40·4	42·0	43·0	43·0	38·5
15	43·8	30·2	36·6	41·4	40·7	38·0	34·8	38·7	37·9	36·8
16	50·5	34·0	39·0	46·2	48·0	43·7	37·3	41·9	43·2	41·0
17	58·1	38·1	44·2	49·6	57·3	42·8	41·1	42·9	45·0	40·1
18	54·1	39·5	48·5	52·1	53·7	44·6	44·9	45·5	45·3	39·9
19	50·4	39·1	44·7	49·5	46·7	44·0	41·8	45·1	45·9	42·2
20	46·0	35·9	39·9	43·1	43·4	36·0	36·3	38·1	39·2	34·1
21	42·0	32·6	35·2	37·8	36·5	32·8	32·8	35·1	35·0	31·5
22	41·7	29·6	34·6	37·6	34·2	30·9	32·0	34·0	33·2	29·8
23	40·0	28·1	33·2	34·6	38·4	32·1	32·3	34·1	35·3	30·9
24	44·8	25·2	32·8	40·3	43·7	35·0	31·0	35·1	36·5	32·9
25	48·4	28·4	36·7	45·1	46·8	44·7	36·7	43·1	45·4	41·9
26	44·2	33·1	37·5	38·7	37·2	34·4	36·4	36·8	35·2	33·1
27	42·6	29·9	33·6	40·6	39·7	34·3	32·9	35·3	34·8	33·7
28	45·8	27·0	36·6	42·8	44·8	42·2	33·7	38·8	41·0	41·3
29	51·8	38·1	44·1	46·8	48·0	38·6	40·3	41·7	41·0	37·5
30	51·8	34·2	39·6	48·8	50·5	38·1	37·0	41·6	41·3	36·0
31	40·0	32·1	35·8	38·1	36·2	35·8	35·5	37·4	35·4	34·6
Means	45·1	32·5	37·5	41·4	42·3	37·5	36·0	38·5	39·0	36·1

APRIL.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
	°	°	°	°	°	°	°	°	°	°
1	41·0	28·3	35·8	37·1	37·2	28·7	34·3	35·8	34·1	27·6
2	41·7	26·5	33·9	33·7	39·6	34·8	33·0	33·7	38·1	34·0
3	44·7	32·0	35·7	43·5	37·6	33·6	32·6	39·0	36·8	32·1
4	43·8	31·1	35·1	40·4	41·7	34·3	33·6	36·8	36·8	32·9
5	51·3	28·6	39·8	47·8	50·6	42·7	36·1	40·1	42·7	40·8
6	44·4	32·6	33·1	38·1	42·4	32·6	33·0	35·9	37·7	32·3
7	47·1	26·1	37·6	44·1	45·7	35·6	36·1	37·8	38·9	32·8
8	52·0	27·0	43·1	51·6	49·3	42·9	39·5	45·3	43·2	40·5
9	44·9	33·6	37·7	42·4	40·8	34·5	34·3	37·1	38·0	32·8
10	41·9	29·2	33·7	38·6	40·6	32·6	32·9	33·6	34·8	31·0
11	47·3	32·1	34·6	40·7	45·6	34·1	34·3	38·2	41·7	34·1
12	47·5	32·1	36·5	40·9	45·5	33·4	34·1	37·7	38·9	33·0
13	50·9	30·4	40·3	44·7	46·6	39·2	36·9	39·0	40·9	37·6
14	49·0	35·4	44·2	45·4	46·7	42·0	42·3	44·0	45·3	40·5
15	51·2	34·9	41·7	46·6	46·8	42·6	38·0	40·3	39·9	38·0
16	48·1	32·1	44·3	44·7	44·7	41·1	39·8	40·9	43·7	39·3
17	47·5	36·2	38·7	44·2	46·5	39·8	35·8	38·3	38·5	34·7
18	49·2	35·4	44·9	49·2	46·8	44·3	44·1	47·7	46·1	43·5
19	61·7	43·2	49·5	57·6	56·7	49·4	48·5	53·8	52·6	43·6
20	56·3	40·1	47·9	51·4	55·9	47·7	43·4	45·3	47·3	43·3
21	54·3	41·7	49·5	51·5	47·6	43·1	46·6	48·0	46·0	38·4
22	51·0	34·1	45·2	47·5	49·1	43·7	41·0	42·4	45·0	41·6
23	53·0	35·0	45·1	49·5	50·6	37·4	40·3	43·8	45·0	36·3
24	59·1	32·3	43·6	52·8	58·7	47·9	39·7	44·2	49·4	44·3
25	54·8	39·2	49·2	49·2	53·2	41·2	44·0	43·9	46·1	37·8
26	56·5	30·1	44·3	49·1	55·8	44·6	38·8	42·3	46·0	41·0
27	58·9	42·6	51·0	54·6	56·4	50·4	46·2	49·4	49·0	45·0
28	63·6	41·8	52·1	56·6	59·4	55·6	47·1	49·0	51·0	49·3
29	62·0	48·6	53·9	58·9	59·2	52·5	46·0	48·9	49·2	46·0
30	62·2	39·1	59·4	59·1	59·0	49·6	49·1	49·2	49·8	46·3
Means	51·2	34·4	42·7	47·1	48·5	41·1	39·4	42·0	43·1	38·3

READINGS of THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE—*continued.*

(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending 21h)

MAY.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	66·9	38·3	54·3	64·5	61·6	48·4	50·0	53·7	52·8	45·8
2	71·1	38·1	58·8	68·5	70·3	49·3	52·6	55·3	57·0	45·3
3	64·6	40·1	58·7	62·5	62·7	50·6	51·7	53·7	53·7	48·4
4	70·9	44·1	59·3	68·6	67·5	54·0	54·7	58·8	56·8	49·7
5	68·0	44·9	56·6	67·0	67·7	44·8	52·5	59·6	61·5	42·2
6	51·6	38·2	46·5	49·7	49·6	39·4	41·5	44.0	43·3	37·5
7	60·5	36·1	51·0	60·5	58·6	46·3	46·3	50·1	48·1	41·0
8	62·4	38·1	51·4	61·6	60·3	45·7	45·9	50·2	49·8	41·8
9	59·0	37·3	49·4	56·4	55·4	44·7	45·6	49·6	48·0	42·9
10	67·0	42·6	56·3	64·2	65·0	55·0	52·3	57·1	57·3	50·8
11	78·9	44·9	64·7	74·6	75·5	59·6	58·0	61·9	63·0	55·0
12	71·1	51·2	67·3	68·1	67·3	55·6	59·1	57·9	59·7	53·1
13	79·9	52·3	66·8	73·8	79·8	60·4	60·0	60·0	63·1	52·8
14	79·8	55·1	63·4	74·6	77·4	60·7	58·0	64·2	64·6	55·8
15	68·8	48·1	59·5	65·7	61·5	48·6	55·9	58·1	56·9	46·9
16	56·9	44·1	46·6	50·2	52·7	44·6	44·9	46·1	47·6	41·7
17	51·0	42·1	45·4	48·0	49·8	49·2	44·8	47·8	49·5	48·1
18	64·7	43·1	53·6	55·1	59·8	57·9	51·6	53·8	57·9	57·3
19	66·4	54·1	63·5	60·0	61·5	57·6	59·8	58·0	60·3	57·6
20	67·1	50·9	57·6	64·1	65·0	61·6	56·8	60·8	60·8	58·8
21	70·7	54·1	59·1	61·6	66·3	54·6	58·1	60·6	61·7	53·8
22	71·1	52·1	59·0	68·3	67·1	57·7	56·0	60·0	60·0	55·8
23	73·5	50·1	68·3	70·9	70·2	59·3	61·5	59·4	56·1	52·6
24	69·0	52·9	59·3	63·7	63·1	55·6	54·5	56·8	55·8	51·8
25	73·3	49·0	63·1	67·4	69·9	57·8	57·8	60·2	62·8	57·0
26	77·0	50·4	70·9	74·8	69·7	56·6	64·2	65·9	61·4	54·8
27	77·4	51·9	72·4	75·6	74·8	60·7	61·8	64·9	64·0	57·4
28	75·0	51·3	71·6	74·9	72·4	63·4	62·0	62·2	60·3	57·9
29	76·9	51·3	61·0	70·7	69·6	56·5	56·6	62·0	61·7	55·7
30	69·0	52·3	58·5	65·3	65·4	54·7	51·9	55·4	56·8	51·8
31	70·2	50·1	62·7	66·6	66·8	56·4	54·9	57·0	58·6	52·7
Means.	68·7	46·7	59·2	65·1	65·3	53·8	54·2	56·9	57·1	50·8

JUNE.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	68·0	52·8	61·3	65·3	64·1	55·8	56·0	57·9	57·0	53·8
2	68·3	50·3	61·7	62·5	63·1	51·2	54·9	54·3	54·9	48·2
3	68·9	46·1	60·1	63·6	65·3	54·5	52·8	54·5	56·0	51·0
4	76·0	45·2	67·6	72·1	74·3	60·7	58·5	60·2	61·0	55·2
5	77·9	46·7	70·6	75·4	77·0	55·3	61·5	63·8	64·8	53·2
6	67·8	50·7	57·7	62·6	66·5	58·8	54·9	57·7	59·0	55·4
7	83·3	54·1	70·6	78·4	77·6	65·5	64·8	68·6	68·0	61·1
8	74·1	53·6	66·8	69·6	69·7	63·8	60·1	61·3	61·7	58·8
9	76·7	53·2	67·6	73·6	73·6	58·6	60·7	63·6	62·4	53·7
10	75·4	48·2	67·6	71·6	71·4	64·5	57·4	59·6	60·9	58·2
11	80·0	52·3	62·8	74·9	78·2	63·4	58·3	65·1	64·2	58·8
12	80·1	54·6	66·4	74·5	77·8	62·1	61·0	62·4	63·8	58·7
13	85·1	54·0	75·4	80·3	78·6	65·4	66·6	68·1	65·8	59·7
14	82·2	58·2	67·1	76·8	79·5	62·3	62·8	64·8	65·6	57·5
15	83·0	49·6	71·5	77·4	81·6	66·7	60·7	61·9	65·7	61·7
16	83·2	54·2	74·6	78·2	82·2	64·5	65·2	67·3	70·3	62·0
17	93·2	59·3	73·9	88·1	92·9	71·3	67·8	70·9	71·2	63·3
18	86·8	59·2	77·6	80·1	74·6	67·7	69·3	66·0	66·9	61·5
19	76·4	57·9	64·3	69·3	71·4	62·8	54·1	59·4	62·6	61·0
20	79·0	53·1	69·4	72·4	72·6	60·5	63·4	62·8	61·7	56·6
21	68·1	50·3	64·9	63·5	64·2	55·6	55·1	55·4	57·2	51·9
22	68·3	46·9	58·3	61·6	65·6	54·7	52·4	52·8	54·4	49·6
23	65·4	45·2	59·6	56·4	63·5	57·7	52·8	52·9	57·0	53·3
24	69·9	52·3	64·4	64·2	67·6	59·0	55·8	55·8	57·8	55·7
25	74·2	55·6	59·6	68·6	67·8	60·6	57·2	58·3	56·7	53·3
26	72·1	51·9	60·4	62·5	68·0	56·1	53·8	53·0	57·2	51·9
27	71·0	48·5	58·5	62·7	67·1	59·8	54·2	56·8	58·7	57·3
28	74·0	56·2	68·1	68·7	65·1	61·1	62·3	62·3	62·3	60·3
29	61·3	50·6	57·8	57·0	54·6	51·4	57·3	56·8	53·9	49·2
30	60·5	50·2	55·1	57·8	58·6	53·6	50·0	51·1	51·7	49·6
Means.	75·0	52·0	65·4	69·7	71·1	60·2	58·7	60·2	61·0	56·1

JULY.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	69·2	49·3	59·5	65·6	66·2	54·9	53·6	56·0	56·4	50·7
2	73·2	46·8	58·7	69·4	71·7	61·1	55·5	59·8	58·6	54·2
3	74·9	51·4	68·3	73·7	72·6	61·0	61·3	60·0	58·6	53·8
4	61·6	55·1	59·2	58·6	60·6	55·6	56·0	56·7	58·2	54·8
5	69·2	52·2	55·4	61·7	65·9	55·8	49·9	53·9	55·9	52·7
6	69·1	46·5	58·4	66·1	66·6	54·1	53·2	57·1	55·0	52·0
7	70·9	49·5	64·4	68·1	69·4	57·6	58·5	57·9	58·3	53·7
8	58·1	55·1	56·5	56·7	56·7	55·1	55·7	55·7	55·9	54·2
9	63·7	50·2	52·7	56·9	60·5	54·6	52·1	56·0	57·7	52·8
10	67·4	48·0	56·5	60·8	65·1	54·2	51·1	53·5	56·1	50·8
11	71·6	45·3	59·8	67·1	70·6	57·6	51·8	57·8	60·7	55·7
12	78·7	47·0	64·7	71·6	75·6	57·4	58·8	60·2	61·9	54·0
13	78·6	55·0	74·0	76·7	78·6	64·1	63·4	63·6	64·5	60·0
14	84·7	61·2	72·7	78·8	80·6	69·4	65·4	69·0	69·9	59·5
15	72·9	57·1	68·0	68·1	66·6	59·6	59·6	62·8	58·8	57·0
16	71·1	54·1	64·6	68·0	62·7	57·2	58·8	61·1	60·9	56·8
17	77·3	51·3	67·8	69·8	76·8	62·6	61·2	61·8	65·8	59·8
18	71·1	57·1	62·7	68·7	63·6	63·0	62·3	65·0	63·0	61·1
19	75·8	60·5	64·4	68·7	74·6	65·5	60·6	61·7	64·8	58·8
20	78·6	54·0	65·6	72·7	73·1	62·5	60·4	62·3	63·8	61·2
21	74·2	57·0	65·6	67·8	71·7	59·5	62·1	62·9	62·1	55·1
22	78·0	49·3	69·7	77·2	74·6	63·2	60·6	64·4	62·7	56·2
23	81·9	52·3	70·8	77·6	80·4	63·7	56·8	61·6	66·0	57·9
24	82·3	58·1	70·6	77·3	77·1	66·4	60·8	64·9	64·4	61·8
25	80·8	59·2	64·3	71·8	77·9	64·7	61·3	64·4	67·9	62·7
26	75·3	58·0	62·8	69·8	74·1	65·1	61·4	63·9	65·8	62·5
27	80·9	59·2	67·8	76·7	77·6	64·7	62·6	67·3	67·0	61·8
28	81·3	57·1	68·7	75·0	80·7	65·4	63·4	64·8	67·6	60·8
29	74·2	54·5	64·3	71·9	69·1	57·1	61·8	63·8	64·3	55·0
30	66·3	55·9	59·3	61·0	63·4	56·4	56·6	57·0	58·6	55·6
31	56·7	53·1	54·9	54·7	54·6	53·9	53·6	53·7	52·7	52·0
Means.	73·2	53·6	63·6	68·7	70·3	60·1	58·4	60·7	61·4	56·6

AUGUST.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	55·9	52·8	55·3	55·9	54·7	55·6	54·6	55·0	53·9	55·0
2	62·9	55·6	59·4	57·1	61·7	58·8	56·9	57·1	59·8	57·0
3	62·0	57·2	58·6	59·2	60·7	57·6	56·5	57·6	57·7	57·3
4	66·1	57·2	60·6	60·7	65·5	60·6	59·7	60·3	61·5	59·7
5	73·5	56·6	63·0	67·7	64·7	62·2	61·4	64·3	62·9	61·8
6	73·3	59·7	62·4	68·6	70·6	60·5	60·7	63·9	64·6	60·3
7	77·3	55·2	67·7	72·4	73·4	59·0	64·8	67·1	66·9	57·9
8	70·0	57·2	63·3	66·6	64·6	58·3	61·0	63·5	62·8	57·4
9	70·4	53·1	59·6	65·8	69·3	57·9	57·8	59·9	60·8	56·3
10	73·0	55·1	63·5	68·8	70·8	58·8	58·5	59·7	61·9	56·0
11	70·8	58·1	63·6	66·4	69·6	58·6	57·7	57·9	60·8	55·8
12	72·9	55·0	64·6	67·1	70·6	59·0	58·5	60·7	61·6	57·0
13	72·8	53·9	62·7	69·4	70·6	59·6	59·6	60·9	60·1	57·8
14	71·9	53·6	66·9	68·6	68·7	59·6	60·8	61·1	61·7	57·0
15	71·0	54·1	62·6	65·8	66·7	58·3	58·9	62·2	60·8	55·8
16	71·2	54·8	65·6	65·9	68·1	59·9	58·9	55·9	58·5	57·7
17	71·2	55·1	66·3	65·1	66·6	60·6	61·0	60·7	60·0	57·8
18	72·1	58·3	59·9	67·6	69·8	58·3	58·7	61·5	58·8	56·4
19	73·4	54·1	63·4	67·8	72·4	57·3	57·6	58·4	61·0	54·6
20	73·5	50·8	62·8	65·1	72·4	60·0	57·7	57·3	62·0	56·9
21	71·9	53·1	63·6	69·0	68·3	57·9	58·0	60·7	58·8	55·0
22	77·5	54·6	69·8	75·9	73·8	64·6	61·6	65·3	62·3	62·6
23	71·7	57·4	66·6	70·6	68·8	57·5	60·8	61·8	60·8	53·8
24	69·0	54·7	63·6	65·1	64·8	58·3	57·6	57·8	58·0	55·1
25	67·9	53·0	59·9	60·8	66·7	54·4	52·1	53·4	56·9	51·0
26	67·2	51·0	62·9	64·5	62·7	52·9	56·2	56·8	57·0	52·3
27	64·2	50·2	60·3	60·8	55·9	60·2	54·0	55·7	53·3	59·6
28	61·9	54·2	60·1	55·7	59·1	55·6	55·9	52·6	54·6	52·8
29	66·0	54·1	56·9	57·6	63·3	57·6	54·0	55·8	57·0	54·6
30	66·1	53·1	59·1	60·8	61·6	55·6	54·6	55·0	56·3	54·6
31	68·0	54·9	58·6	64·4	66·0	55·5	55·5	56·3	55·2	52·5
Means.	69·6	54·8	62·4	65·1	66·5	58·4	58·1	59·2	59·6	56·5

READINGS of THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE—*concluded.*

(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending 21h)

SEPTEMBER.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	65·9	51·8	59·5	59·5	61·7	56·1	57·0	56·6	57·3	51·9
2	67·5	51·2	58·7	65·1	64·2	55·7	53·6	54·9	55·0	52·8
3	72·8	47·4	60·0	67·7	70·4	54·7	55·5	58·9	60·7	53·8
4	70·9	45·1	62·7	69·6	70·1	56·5	59·0	60·9	59·4	55·1
5	70·9	48·9	64·3	69·7	66·4	60·2	59·6	61·7	59·8	59·9
6	72·8	57·0	59·4	68·8	71·6	60·8	58·3	63·6	63·5	60·4
7	69·5	59·0	60·3	64·4	66·9	62·8	57·0	60·5	61·6	58·8
8	75·0	50·2	62·8	71·4	70·9	59·6	58·3	64·0	65·1	58·8
9	67·0	56·0	59·6	62·5	62·8	60·1	58·3	60·8	60·9	59·5
10	67·9	55·3	60·5	64·7	65·7	55·8	58·3	60·5	60·8	55·3
11	74·5	52·3	65·4	72·8	69·6	60·8	61·0	63·3	62·9	60·0
12	64·0	51·7	57·5	59·7	62·7	54·6	51·8	52·6	54·7	50·1
13	62·7	47·7	58·9	60·0	58·3	56·8	54·6	56·1	55·0	54·3
14	70·2	52·9	61·6	64·5	69·1	52·9	53·1	57·5	60·2	52·1
15	71·1	51·0	59·3	65·6	66·6	58·1	52·0	55·3	57·4	56·7
16	70·3	53·2	62·3	68·1	68·4	56·3	59·3	61·3	61·1	55·3
17	67·2	55·6	63·0	63·7	62·7	60·6	56·2	56·8	59·7	58·0
18	67·3	58·2	62·6	65·6	62·8	62·0	60·8	62·0	59·8	61·5
19	64·9	59·2	63·6	64·5	63·2	59·5	61·6	61·6	61·9	59·2
20	65·0	52·1	58·1	59·9	64·4	54·7	54·0	55·0	57·9	51·8
21	65·5	47·9	56·9	62·2	63·5	51·1	51·8	53·3	53·7	49·3
22	65·0	48·1	60·1	62·6	61·7	56·2	54·9	55·5	56·3	54·6
23	69·7	53·2	59·6	64·8	67·9	58·5	56·8	60·2	62·1	57·2
24	71·2	46·7	62·0	66·1	69·6	55·7	57·8	58·9	61·2	53·8
25	73·1	49·1	58·3	70·5	71·6	57·7	55·8	63·1	64·4	56·8
26	66·5	56·3	61·3	64·5	65·1	59·7	58·4	59·9	60·0	58·7
27	65·9	48·1	56·6	63·4	62·9	49·1	53·7	54·8	55·1	48·5
28	64·2	43·2	57·8	60·5	60·1	54·6	53·1	54·4	53·7	52·7
29	66·4	48·3	56·5	62·5	64·6	48·7	54·2	56·0	56·4	48·7
30	69·0	41·0	56·9	65·8	68·8	49·9	53·9	58·4	60·6	49·8
Means	68·5	51·6	60·2	65·0	65·8	56·7	56·3	58·6	59·3	55·2

NOVEMBER.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	54·1	45·5	49·7	51·7	53·5	53·1	49·5	51·0	52·9	52·9
2	58·2	52·1	54·6	58·1	57·6	54·3	54·2	56·2	55·8	53·6
3	54·2	47·9	48·6	50·6	51·6	50·1	48·5	50·2	50·9	49·7
4	52·1	37·1	47·0	51·6	49·8	38·6	45·5	45·8	44·7	37·8
5	52·7	30·9	40·6	50·7	51·6	51·3	40·0	47·9	49·3	49·8
6	53·5	41·1	52·8	51·5	50·5	43·0	51·8	45·6	45·0	40·8
7	47·9	37·7	44·7	45·4	44·6	37·7	42·7	40·8	39·3	35·7
8	49·4	34·8	38·5	44·3	44·3	49·4	36·6	40·8	41·8	49·0
9	51·2	42·5	46·3	49·4	48·5	44·2	43·8	44·4	43·3	42·5
10	45·2	41·0	42·6	42·6	45·1	44·1	39·9	40·7	42·8	42·2
11	45·8	39·0	40·1	45·1	44·6	39·3	38·0	41·8	41·6	38·1
12	50·9	35·9	44·6	49·7	49·1	47·8	41·8	46·4	47·9	46·8
13	47·8	34·6	40·1	44·2	45·9	40·8	40·1	44·2	45·7	40·6
14	52·6	36·9	44·7	50·1	52·5	42·6	44·5	48·7	50·3	41·3
15	43·9	31·1	38·8	43·9	43·2	36·6	38·8	41·8	41·9	36·5
16	47·0	34·9	39·7	45·1	45·7	37·5	38·9	42·8	43·8	36·9
17	46·0	30·2	36·8	43·6	45·9	45·6	36·8	42·2	44·0	43·2
18	47·9	45·0	45·7	47·3	47·7	47·2	43·8	45·0	45·0	43·9
19	48·8	44·7	45·5	48·5	47·6	45·6	42·1	44·7	43·9	43·6
20	56·8	45·1	50·6	55·6	54·6	53·6	49·8	52·9	52·9	52·8
21	57·6	53·2	55·7	57·2	57·0	53·6	54·0	54·6	54·3	52·2
22	53·9	51·1	51·6	51·6	53·6	52·5	50·9	50·8	50·7	50·3
23	57·1	50·0	51·6	55·6	54·1	50·6	49·8	51·1	50·7	48·8
24	57·8	46·2	50·6	55·1	55·5	52·4	48·5	51·8	50·7	48·1
25	53·2	33·8	41·7	35·6	41·7	38·1	37·6	35·5	37·0	33·9
26	39·5	32·1	33·7	36·6	36·5	39·5	29·4	31·6	32·5	38·7
27	57·1	39·2	51·7	55·1	55·6	53·5	49·1	51·8	52·4	51·7
28	54·8	49·1	49·8	53·9	54·4	53·8	47·7	50·9	50·9	51·3
29	55·5	48·0	50·3	54·1	53·0	50·7	47·5	50·3	49·8	48·8
30	52·7	48·9	50·7	52·5	51·5	49·0	48·5	48·8	46·9	44·9
Means	51·5	41·3	46·0	49·2	49·5	46·5	44·3	46·4	46·6	44·9

OCTOBER.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	69·9	42·1	49·6	68·5	68·1	47·4	49·6	58·3	59·0	47·1
2	73·0	43·9	54·8	70·2	70·9	56·9	54·8	63·0	63·6	55·9
3	67·7	53·1	59·0	65·6	61·7	57·6	57·2	58·8	52·8	52·9
4	60·8	51·1	60·5	59·9	55·5	51·5	59·1	58·8	53·7	48·0
5	54·1	42·5	48·6	52·5	49·6	42·6	44·7	46·7	44·1	39·8
6	50·3	40·1	42·7	48·9	48·2	40·6	41·3	44·4	39·9	36·8
7	59·5	32·4	43·6	53·7	59·4	47·6	41·9	53·0	52·8	44·8
8	57·4	44·6	49·6	53·3	48·3	57·4	45·7	47·5	47·6	55·1
9	57·3	42·0	50·6	50·8	52·6	42·6	46·0	45·9	46·8	40·1
10	51·7	36·6	41·1	49·1	48·2	44·9	39·8	43·7	44·3	42·7
11	51·1	38·1	42·7	48·4	48·6	44·0	39·6	42·8	41·8	40·8
12	53·1	41·9	48·6	52·4	47·5	51·4	44·8	45·8	46·9	50·9
13	52·3	41·2	48·6	50·4	45·6	43·6	44·9	47·5	43·9	41·5
14	52·9	35·7	43·3	48·5	49·7	40·6	41·2	42·9	44·3	40·1
15	50·5	33·0	42·8	49·1	49·6	38·1	40·2	43·8	44·6	36·8
16	55·8	37·9	50·5	53·7	54·3	53·6	48·8	51·9	52·3	53·0
17	58·2	48·8	53·6	54·6	56·8	48·8	52·7	53·3	54·7	47·9
18	53·3	38·1	43·5	50·5	49·5	43·6	41·8	45·4	44·8	42·6
19	52·7	38·0	44·9	51·5	50·5	41·3	42·7	45·9	43·9	40·1
20	55·8	33·1	47·0	54·2	52·7	41·8	43·8	48·1	48·7	40·8
21	58·3	39·1	50·4	56·4	56·7	52·3	47·3	49·7	50·5	48·8
22	59·8	46·2	47·6	54·6	56·8	49·6	46·8	49·8	49·8	45·6
23	52·9	38·6	49·1	52·3	49·5	38·6	46·0	44·9	42·9	37·0
24	52·8	34·6	41·1	47·3	45·7	52·7	38·4	41·8	43·0	49·9
25	54·0	41·9	46·7	50·1	49·9	43·2	40·6	41·3	42·3	40·0
26	51·1	39·3	46·6	49·5	48·2	39·6	43·0	44·4	42·4	37·5
27	48·9	34·8	38·5	45·7	46·8	35·2	36·3	40·4	40·0	34·6
28	43·9	28·7	32·6	42·5	42·9	35·5	32·2	38·6	36·9	32·8
29	48·6	31·4	37·8	45·5	46·0	45·1	37·0	41·9	41·8	40·9
30	53·9	45·0	47·6	50·6	52·0	45·4	46·6	48·0	46·8	43·8
31	56·2	36·8	43·5	54·5	52·6	48·6	42·9	48·5	47·9	47·1
Means	55·4	39·7	46·7	52·7	52·1	45·9	44·4	47·6	46·9	43·7

DECEMBER.

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
d	°	°	°	°	°	°	°	°	°	°
1	52·8	43·3	47·6	51·5	49·8	43·5	45·6	47·9	43·9	39·0
2	43·5	32·5	35·4	38·6	37·8	32·5	32·6	33·9	33·8	28·9
3	39·3	29·7	31·7	38·5	39·3	33·6	29·6	34·9	34·9	31·1
4	38·5	23·3	25·6	36·7	36·6	35·6	24·8	31·9	32·5	32·8
5	42·1	28·1	37·8	40·6	38·9	28·4	35·3	36·3	33·9	27·6
6	46·8	25·9	30·6	42·1	43·6	46·1	29·5	38·9	40·5	43·7
7	52·8	45·5	50·6	51·4	50·7	46·7	48·6	49·7	49·7	45·7
8	46·9	39·1	43·8	44·5	42·4	39·5	42·0	41·6	39·8	38·6
9	39·7	35·2	35·7	36·8	39·0	38·8	35·1	36·1	37·3	37·1
10	43·0	36·1	39·6	41·5	42·6	37·6	38·9	40·7	41·0	36·9
11	41·0	32·7	36·1	38·7	39·6	32·7	35·5	37·7	36·6	31·5
12	36·4	28·1	32·0	33·6	34·5	36·4	30·6	32·8	33·5	35·0
13	48·2	35·0	42·5	46·6	47·6	43·9	41·3	44·8	45·8	43·5
14	50·5	41·0	47·5	49·5	49·9	41·3	45·9	46·9	46·8	37·3
15	41·7	34·9	36·2	40·8	41·1	35·7	33·6	36·8	37·0	34·2
16	41·5	33·2	37·5	41·4	37·5	34·9	36·7	37·7	36·4	34·6
17	35·9	29·8	30·7	31·6	33·5	30·6	29·1	30·0	31·8	29·6
18	36·2	28·8	31·5	35·7	35·6	29·4	30·4	32·9	32·8	28·7
19	29·7	17·6	18·6	21·6	23·7	17·6	18·0	21·6	23·6	17·6
20	29·9	17·2	23·6	27·3	29·4	29·1	23·5	27·3	29·4	28·7
21	37·5	28·1	28·7	34·5	37·5	35·6	28·7	32·0	36·9	33·2
22	37·6	33·2	35·7	37·6	35·8	33·5	31·9	33·6	32·7	30·8
23	33·6	26·1	27·4	30·6	29·3	30·6	26·8	29·3	28·2	29·8
24	44·1	29·8	37·8	41·6	43·5	43·6	37·2	40·3	41·9	42·6
25	44·7	33·1	36·6	38·4	36·7	33·5	32·8	33·3	31·9	31·7
26	35·0	30·3	31·6	34·7	34·7	32·7	31·6	32·3	32·7	31·7
27	37·0	30·0	31·7	34·8	35·7	30·2	31·5	32·7	32·7	29·6
28	37·5	30·1	33·6	35·4	36·4	34·6	33·0	34·5	34·7	31·9
29	36·1	33·5	33·6	35·6	35·7	35·8	31·1	33·0	33·8	35·7
30	37·0	32·8	37·0	36·3	34·9	33·3	36·9	36·0	34·8	32·3
31	37·4	30·7	34·6	35·7	35·6	30·7	33·9	33·9	33·4	28·7
Means	40·4	31·4	34·9	38·2	38·4	35·1	33·6	35·8	36·0	33·6

AMOUNT of RAIN COLLECTED in each MONTH of the YEAR 1917.

Gauges partly sunk in the Ground in the Magnetic Pavilion Enclosure.	Number of Gauge.	Monthly Amount of Rain collected in each Gauge. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Sums.	Height of Receiving Surface. Above the Ground.	Above Mean Sea Level.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	ft. in.	ft. in.
	6	1·056	0·842	1·747	1·806	2·609	2·213	3·955	4·559	1·701	2·732	1·704	1·078	26·002	0 5	149 6
	8	1·045	0·807	1·716	1·805	2·558	2·224	3·973	4·565	1·676	2·716	1·688	1·081	25·854	1 0	150 1
Number of Rainy Days (0in.005 or over).	..	14	11	17	16	9	8	11	21	11	15	12	12	157	..	..

MEAN HOURLY MEASURES of the HORIZONTAL MOVEMENT of the AIR in each MONTH, and GREATEST HOURLY MEASURES as derived from the RECORDS of ROBINSON'S ANEMOMETER.

Hour ending.	1917. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Mean for the Year.
h	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.
1	13·7	7·9	11·5	9·6	7·2	8·6	9·2	11·5	9·2	14·9	13·3	12·5	10·8
2	14·7	8·1	11·6	10·7	7·4	8·7	8·9	11·7	8·8	14·6	13·9	12·6	11·0
3	15·5	7·6	12·1	11·5	7·3	8·6	8·8	12·2	9·1	14·6	14·3	12·9	11·2
4	15·8	8·3	12·3	11·5	7·3	7·5	9·0	12·5	8·9	14·0	14·7	12·7	11·2
5	16·2	8·1	13·0	11·7	7·5	7·4	8·7	12·6	8·6	13·3	14·7	12·7	11·2
6	15·9	7·5	12·1	11·3	7·2	6·8	8·4	12·4	8·7	12·3	13·7	12·7	10·8
7	16·0	7·6	12·5	12·0	8·4	7·6	9·0	13·4	9·2	12·6	14·5	12·7	11·3
8	16·6	8·5	13·1	12·4	8·9	9·1	9·3	14·3	9·4	12·4	14·3	12·9	11·8
9	15·9	9·1	13·8	13·2	9·6	10·2	10·2	14·8	10·1	12·3	15·4	13·0	12·3
10	16·4	9·4	14·3	12·9	9·7	10·1	10·8	15·5	10·6	13·4	15·3	12·7	12·6
11	15·8	9·5	15·5	13·3	10·5	10·2	11·4	15·8	11·2	14·3	14·4	12·3	12·8
Noon	13·8	9·6	15·2	13·1	11·2	9·3	10·6	15·6	11·4	13·5	13·2	11·3	12·3
13	16·1	9·9	14·8	14·8	12·1	11·1	12·4	17·9	12·9	15·5	15·1	14·3	13·9
14	16·4	11·0	15·3	15·5	13·0	11·7	11·9	17·1	13·3	15·0	15·8	15·4	14·3
15	16·1	11·3	16·1	14·7	13·7	12·2	11·7	17·1	13·3	14·9	16·1	15·4	14·4
16	16·0	10·8	15·0	15·7	13·2	13·1	11·8	17·1	13·1	14·3	15·6	15·0	14·2
17	15·7	10·4	15·1	14·6	12·6	13·7	12·0	16·4	12·8	13·1	14·0	14·1	13·7
18	15·8	10·5	14·3	13·8	12·2	13·6	12·4	15·9	11·9	13·5	15·1	14·9	13·7
19	15·3	9·6	12·4	11·0	11·3	12·2	12·3	13·1	9·9	12·4	13·9	13·8	12·3
20	16·3	9·4	12·6	11·2	11·1	11·5	11·5	12·7	10·0	14·0	13·9	14·0	12·4
21	16·5	8·6	12·4	11·0	9·9	10·5	10·6	12·4	10·5	14·5	14·0	14·8	12·1
22	15·8	8·1	12·1	10·8	9·3	9·5	10·3	12·4	10·2	15·0	14·6	12·9	11·7
23	14·4	7·5	10·8	9·5	7·8	8·8	9·6	11·2	9·5	14·5	13·1	13·1	10·8
Midnight	13·3	7·6	11·5	9·8	7·4	8·6	9·5	11·9	8·9	14·7	13·2	12·0	10·7
Means	15·6	9·0	13·3	12·3	9·8	10·0	10·4	14·1	10·5	13·9	14·4	13·4	12·2
Greatest Measure (1)	35	23	40	38	32	27	27	40	30	46	45	38	..
Greatest Measure (2)	27	19	31	29	25	22	22	31	24	35	34	29	..

(1) Deduced from the motion of the cups by the formula $V = 3v$;
(2) " " " " " " " " $V = 2v + 4$;
where v is the hourly motion of the cups in miles. See Introduction.

APPENDIX.

ROYAL OBSERVATORY, GREENWICH.

SUMMARY AND ANALYSIS

OF THE

PHOTOGRAPHIC RECORDS OF THE BAROMETER, 1854 to 1913.

SUMMARY AND ANALYSIS OF THE PHOTOGRAPHIC RECORDS OF THE BAROMETER, 1854 TO 1913.

Tables I, II and III contain Monthly and Yearly Mean Readings of the Photographic Barometer at every hour of the day through the ranges of years 1854 to 1873, 1874 to 1893, and 1894 to 1913 respectively.

Table IV gives the first four pairs of Fourier Coefficients derived from analysis of the separate monthly mean diurnal inequalities, the mean being given for each period of 20 years. The formula employed is

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

in which t is the time from Greenwich mean midnight converted into arc at the rate of 15° to each hour, B_t the mean value of the atmospheric pressure at the time, t for each month and B the mean value for the month or year.

Table V gives the result of a similar analysis for the whole period, taking all the years together instead of separately, and Table VI expresses Table V in terms of amplitude and phase-angle.

TABLE I.—MONTHLY MEAN READING of the BAROMETER at every HOUR of the DAY through the RANGE of YEARS 1854 to 1873.

Hour, Greenwich Mean Solar Time (Civil Reckoning).	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	29·732	29·835	29·732	29·809	29·788	29·836	29·817	29·806	29·794	29·729	29·771	29·792	29·787
1h a.m.	29·727	29·833	29·730	29·806	29·784	29·833	29·814	29·803	29·790	29·726	29·767	29·790	29·784
2 ,,	29·727	29·830	29·725	29·802	29·781	29·830	29·810	29·799	29·786	29·722	29·765	29·791	29·781
3 ,,	29·725	29·826	29·719	29·799	29·778	29·827	29·806	29·795	29·781	29·716	29·760	29·790	29·777
4 ,,	29·721	29·823	29·716	29·797	29·776	29·826	29·806	29·792	29·778	29·713	29·757	29·787	29·774
5 ,,	29·717	29·823	29·715	29·798	29·777	29·828	29·807	29·793	29·777	29·712	29·756	29·784	29·774
6 ,,	29·716	29·823	29·718	29·802	29·780	29·830	29·809	29·798	29·781	29·713	29·756	29·785	29·776
7 ,,	29·720	29·828	29·723	29·807	29·782	29·834	29·813	29·802	29·787	29·718	29·760	29·787	29·780
8 ,,	29·726	29·835	29·727	29·811	29·784	29·838	29·816	29·806	29·793	29·725	29·767	29·794	29·785
9 ,,	29·734	29·840	29·731	29·815	29·785	29·839	29·817	29·810	29·799	29·729	29·771	29·801	29·789
10 ,,	29·740	29·843	29·733	29·816	29·784	29·838	29·817	29·810	29·799	29·730	29·774	29·808	29·791
11 ,,	29·741	29·845	29·732	29·814	29·782	29·836	29·816	29·807	29·796	29·728	29·773	29·805	29·790
Noon	29·732	29·840	29·729	29·810	29·778	29·833	29·813	29·803	29·793	29·721	29·765	29·794	29·784
1h p.m.	29·723	29·831	29·722	29·805	29·774	29·828	29·809	29·799	29·788	29·712	29·757	29·784	29·778
2 ,,	29·721	29·824	29·714	29·800	29·770	29·825	29·806	29·795	29·784	29·708	29·752	29·780	29·773
3 ,,	29·724	29·821	29·709	29·793	29·765	29·820	29·802	29·790	29·779	29·706	29·751	29·782	29·770
4 ,,	29·728	29·821	29·707	29·791	29·763	29·817	29·798	29·788	29·776	29·706	29·753	29·784	29·769
5 ,,	29·731	29·824	29·707	29·790	29·762	29·815	29·795	29·785	29·776	29·710	29·757	29·787	29·770
6 ,,	29·734	29·830	29·712	29·792	29·763	29·815	29·795	29·786	29·779	29·717	29·761	29·789	29·773
7 ,,	29·737	29·835	29·717	29·798	29·767	29·819	29·798	29·791	29·785	29·722	29·764	29·792	29·777
8 ,,	29·738	29·837	29·722	29·805	29·774	29·825	29·804	29·799	29·791	29·726	29·765	29·794	29·782
9 ,,	29·738	29·840	29·727	29·811	29·783	29·835	29·812	29·805	29·794	29·730	29·767	29·795	29·787
10 ,,	29·737	29·841	29·728	29·813	29·786	29·838	29·816	29·808	29·795	29·730	29·767	29·796	29·788
11 ,,	29·736	29·840	29·728	29·813	29·787	29·839	29·817	29·809	29·794	29·730	29·766	29·797	29·788
Means	29·729	29·832	29·722	29·804	29·777	29·829	29·809	29·799	29·787	29·720	29·763	29·791	29·780

TABLE II.—MONTHLY MEAN READINGS of the BAROMETER at every HOUR of the DAY through the RANGE of YEARS 1874 to 1893.

Hour, Greenwich Mean Solar Time (Civil Reckoning).	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	29·870	29·816	29·788	29·725	29·798	29·822	29·785	29·777	29·807	29·736	29·742	29·779	29·787
1h a.m.	29·865	29·812	29·786	29·720	29·794	29·818	29·781	29·772	29·804	29·733	29·735	29·775	29·783
2 ,,	29·865	29·809	29·781	29·715	29·789	29·813	29·776	29·768	29·799	29·728	29·732	29·774	29·779
3 ,,	29·863	29·803	29·775	29·711	29·786	29·810	29·773	29·764	29·794	29·722	29·727	29·772	29·775
4 ,,	29·858	29·799	29·772	29·708	29·784	29·810	29·772	29·761	29·790	29·720	29·724	29·767	29·772
5 ,,	29·855	29·799	29·772	29·709	29·787	29·813	29·775	29·763	29·791	29·720	29·723	29·765	29·773
6 ,,	29·855	29·800	29·775	29·715	29·792	29·817	29·779	29·767	29·797	29·722	29·724	29·766	29·776
7 ,,	29·860	29·803	29·781	29·720	29·796	29·822	29·784	29·772	29·803	29·730	29·729	29·770	29·781
8 ,,	29·868	29·811	29·787	29·723	29·799	29·825	29·787	29·776	29·808	29·737	29·736	29·777	29·786
9 ,,	29·874	29·815	29·791	29·724	29·798	29·825	29·786	29·778	29·813	29·741	29·740	29·784	29·789
10 ,,	29·879	29·818	29·793	29·725	29·798	29·824	29·785	29·778	29·813	29·742	29·744	29·790	29·791
11 ,,	29·879	29·821	29·792	29·722	29·795	29·823	29·784	29·776	29·809	29·741	29·743	29·786	29·789
Noon	29·869	29·816	29·789	29·718	29·792	29·819	29·787	29·773	29·806	29·735	29·736	29·778	29·784
1h p.m	29·858	29·808	29·781	29·712	29·787	29·814	29·777	29·769	29·801	29·729	29·730	29·769	29·778
2 ,,	29·853	29·801	29·772	29·706	29·783	29·810	29·774	29·765	29·795	29·725	29·724	29·765	29·773
3 ,,	29·853	29·797	29·766	29·699	29·778	29·805	29·769	29·760	29·791	29·722	29·725	29·766	29·769
4 ,,	29·855	29·796	29·763	29·697	29·775	29·801	29·766	29·757	29·788	29·722	29·727	29·768	29·768
5 ,,	29·857	29·800	29·765	29·698	29·774	29·799	29·763	29·754	29·789	29·728	29·731	29·771	29·769
6 ,,	29·860	29·806	29·772	29·701	29·777	29·800	29·764	29·755	29·793	29·736	29·737	29·775	29·773
7 ,,	29·864	29·810	29·779	29·709	29·782	29·804	29·768	29·761	29·800	29·739	29·739	29·779	29·778
8 ,,	29·866	29·812	29·783	29·719	29·792	29·810	29·774	29·770	29·806	29·742	29·740	29·782	29·783
9 ,,	29·866	29·814	29·785	29·723	29·800	29·820	29·782	29·775	29·808	29·745	29·742	29·784	29·787
10 ,,	29·866	29·815	29·787	29·725	29·803	29·823	29·785	29·777	29·808	29·745	29·741	29·785	29·788
11 ,,	29·866	29·816	29·787	29·726	29·804	29·824	29·786	29·778	29·807	29·744	29·740	29·787	29·789
Means.	29·864	29·808	29·780	29·715	29·790	29·815	29·777	29·769	29·801	29·733	29·734	29·776	29·780

TABLE III.—MONTHLY MEAN READINGS of the BAROMETER at every HOUR of the DAY through the RANGE of YEARS 1894 to 1913.

Hour, Greenwich Mean Solar Time (Civil Reckoning).	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	29·869	29·813	29·712	29·765	29·819	29·828	29·837	29·798	29·877	29·752	29·781	29·726	29·798
1h a.m.	29·865	29·809	29·710	29·761	29·814	29·824	29·833	29·795	29·874	29·749	29·777	29·721	29·794
2 ,,	29·865	29·805	29·705	29·756	29·810	29·820	29·829	29·791	29·870	29·744	29·775	29·720	29·791
3 ,,	29·864	29·799	29·698	29·752	29·806	29·816	29·825	29·787	29·866	29·739	29·771	29·718	29·787
4 ,,	29·859	29·795	29·694	29·750	29·804	29·816	29·825	29·784	29·863	29·737	29·768	29·713	29·784
5 ,,	29·856	29·794	29·695	29·751	29·807	29·819	29·827	29·786	29·864	29·737	29·769	29·708	29·784
6 ,,	29·856	29·796	29·699	29·757	29·812	29·823	29·831	29·790	29·869	29·739	29·770	29·709	29·787
7 ,,	29·860	29·798	29·704	29·763	29·816	29·826	29·835	29·795	29·874	29·745	29·775	29·713	29·792
8 ,,	29·867	29·805	29·710	29·766	29·818	29·829	29·838	29·798	29·880	29·753	29·783	29·719	29·797
9 ,,	29·875	29·810	29·714	29·768	29·817	29·828	29·838	29·800	29·883	29·756	29·788	29·726	29·800
10 ,,	29·880	29·812	29·715	29·768	29·816	29·828	29·837	29·800	29·884	29·757	29·791	29·732	29·802
11 ,,	29·879	29·814	29·714	29·765	29·813	29·827	29·836	29·797	29·880	29·756	29·788	29·729	29·800
Noon	29·870	29·808	29·711	29·760	29·809	29·824	29·833	29·792	29·876	29·749	29·779	29·720	29·794
1h p.m.	29·859	29·799	29·704	29·756	29·805	29·819	29·829	29·788	29·870	29·742	29·772	29·713	29·788
2 ,,	29·854	29·791	29·698	29·750	29·800	29·816	29·825	29·784	29·864	29·738	29·766	29·709	29·783
3 ,,	29·855	29·789	29·693	29·743	29·795	29·811	29·821	29·780	29·858	29·734	29·765	29·711	29·780
4 ,,	29·857	29·788	29·691	29·739	29·791	29·807	29·817	29·776	29·855	29·734	29·766	29·714	29·778
5 ,,	29·860	29·792	29·694	29·740	29·789	29·805	29·814	29·774	29·855	29·738	29·770	29·717	29·779
6 ,,	29·864	29·799	29·700	29·744	29·792	29·807	29·814	29·775	29·858	29·745	29·775	29·720	29·783
7 ,,	29·867	29·804	29·707	29·751	29·797	29·810	29·818	29·780	29·865	29·749	29·778	29·724	29·788
8 ,,	29·869	29·806	29·711	19·761	29·805	29·817	29·825	29·789	29·872	29·752	29·780	29·727	29·793
9 ,,	29·871	29·810	29·714	29·766	29·815	29·828	29·836	29·796	29·876	29·755	29·782	29·729	29·798
10 ,,	29·871	29·811	29·715	29·767	29·818	29·831	29·839	29·798	29·877	29·755	29·782	29·729	29·799
11 ,,	29·871	29·810	29·714	29·768	29·818	29·831	29·841	29·799	29·877	29·754	29·782	29·729	29·799
Means.	29·865	29·802	29·705	29·757	29·808	29·820	29·829	29·790	29·870	29·746	29·776	29·720	29·791

TABLE IV.—FOURIER COEFFICIENTS from ANALYSIS in THREE 20-YEAR PERIODS.

(1) 1854 to 1873. (2) 1874 to 1893. (3) 1894 to 1913.

		a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
Jan.	(1)	+ 8	−50	+32	−69	− 9	+43	− 7	−23
	(2)	− 2	+21	+50	−69	− 6	+51	− 4	−12
	(3)	+ 3	+ 2	+46	−74	− 8	+47	− 7	−18
Feb.	(1)	+ 5	+11	+57	−78	−15	+30	+ 6	− 2
	(2)	+10	+ 1	+64	−75	−11	+28	+11	+ 1
	(3)	+29	+12	+66	−80	−10	+33	+ 9	+ 1
March	(1)	+14	+25	+70	−78	− 6	+10	+ 2	+ 6
	(2)	+ 6	+35	+72	−89	− 9	+20	+ 9	+14
	(3)	+17	+ 6	+63	−92	− 5	+14	+ 4	+12
April	(1)	0	+50	+66	−77	+ 1	− 4	− 6	+ 4
	(2)	+30	+52	+65	−95	+ 1	− 7	0	+11
	(3)	+20	+51	+64	−97	+ 2	−11	− 3	+ 6
May	(1)	+36	+64	+57	−60	+ 8	−15	− 4	− 1
	(2)	+32	+49	+59	−86	+ 8	−26	− 4	+ 2
	(3)	+31	+78	+60	−74	+12	−21	− 3	+ 6
June	(1)	+11	+63	+60	−60	+12	−18	− 5	− 3
	(2)	+ 7	+65	+59	−73	+12	−22	− 2	− 2
	(3)	+16	+56	+60	−68	+10	−26	− 2	− 2
July	(1)	+ 7	+54	+62	−52	+12	−17	− 7	− 2
	(2)	+ 6	+52	+57	−64	+15	−22	− 2	+ 2
	(3)	+13	+53	+64	−66	+14	−28	− 4	− 2
Aug.	(1)	+ 6	+47	+66	−71	+11	− 9	−10	+ 1
	(2)	+ 9	+38	+66	−73	+10	−14	− 7	+ 7
	(3)	+16	+58	+62	−71	+10	−13	− 9	+ 6
Sept.	(1)	− 3	+ 2	+64	−87	+ 1	+ 5	−10	+ 7
	(2)	− 1	+19	+56	−89	+ 3	+ 9	− 3	+15
	(3)	+ 4	+52	+64	−87	+ 2	+ 4	− 5	+11
Oct.	(1)	+41	+10	+50	−92	− 1	+27	− 2	0
	(2)	+15	−32	+40	−100	0	+20	0	+ 1
	(3)	+12	+ 2	+45	−93	+ 1	+25	0	+ 4
Nov.	(1)	+14	− 7	+39	−79	− 2	+34	− 1	−11
	(2)	+13	−24	+39	−77	0	+34	+ 4	− 5
	(3)	+ 1	+14	+42	−88	+ 1	+35	− 2	− 8
Dec.	(1)	0	+24	+38	−68	− 6	+45	− 9	−24
	(2)	+16	−15	+43	−86	− 5	+35	− 9	−22
	(3)	+27	−23	+41	−71	− 2	+41	− 9	−19
Year	(1)	+12	+24	+55	−73	+ 1	+11	− 4	− 4
	(2)	+12	+22	+56	−81	+ 2	+ 9	− 1	+ 1
	(3)	+16	+30	+56	−80	+ 2	+ 8	− 3	0

TABLE V.

	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
Jan.	+ 3	− 9	+43	−70	− 8	+47	− 6	−18
Feb.	+14	+ 2	+62	−80	−12	+29	+ 9	− 1
March	+13	+28	+69	−84	− 6	+17	+ 5	+12
April	+17	+48	+65	−91	+ 1	− 8	− 3	+ 8
May	+34	+65	+59	−73	+10	−20	− 4	+ 2
June	+11	+60	+60	−68	+11	−22	− 3	− 2
July	+ 9	+57	+61	−60	+14	−22	− 4	− 1
Aug.	+10	+46	+64	−73	+10	−12	− 9	+ 4
Sept.	+ 0	+28	+62	−86	+ 3	+ 7	− 5	+12
Oct.	+23	− 6	+45	−97	− 0	+24	− 0	+ 2
Nov.	+10	+ 2	+41	−77	+ 1	+38	+ 2	− 6
Dec.	+14	− 8	+40	−77	− 5	+39	−10	−22
Year	+13	+26	+56	−78	+ 2	+10	− 2	− 1

TABLE VI.

	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
		°		°		°		°
Jan.	9	161·6	82	148·4	48	350·3	19	198·4
Feb.	14	81·8	101	142·2	31	337·5	9	263·7
March	31	24·9	109	140·6	18	340·6	13	22·6
April	51	19·5	112	144·5	8	172·8	9	339·4
May	73	27·6	94	141·1	22	153·4	4	296·6
June	61	10·4	91	138·6	25	153·4	4	236·3
July	58	9·0	86	134·5	26	147·5	4	256·0
August	47	12·3	97	138·8	16	140·2	10	294·0
Sept.	28	0·8	106	144·2	8	23·2	13	337·4
Oct.	24	104·6	107	155·1	24	359·8	2	354·0
Nov.	10	78·7	87	152·0	38	1·5	6	161·6
Dec.	16	119·7	87	152·5	39	352·7	24	204·4
Year	29	26·6	96	144·3	10	11·3	2	243·6