RESULTS

OF THE

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS

MADE AT

THE ROYAL OBSERVATORY, GREENWICH,

IN THE YEAR

1920.

UNDER THE DIRECTION OF

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

ASTRONOMER ROYAL.

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INDEX.

INDEX.

RESULTS OF MAGNETICAL AND METEOROLOGICAL OBSERVATIONS IN TABULAR ARRANGEMENT :—

INDEX.

RESULTS OF MAGNETICAL AND METEOROLOGICAL OBSERVATIONS—*continued.* PAGE

GREENWICH MAGNETICAL AND METEOROLOGICAL OBSERVATIONS, 1920.

INTRODUCTION.

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

§ 1. *Personal Establishment and Arrangements.*

During the year 1920 the personal establishment in the Magnetical and Meteorological Department of the Royal Observatory consisted of Walter William Bryant, Superintendent, aided by three Computers. The Computers employed during the year were :—G. F. Wells, E. H. Tibbitts, 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, the photographic wet-bulb and dry-bulb thermometers, thermometers for solar and terrestrial radiation, two earth thermometers, 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, 5½ 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 5½ 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.

§ 3. *Subjects of Observation in the year* 1920.

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 atmospheric potential gradient; 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.

A camera recording the trace of stars in the neighbourhood of the celestial Pole was brought into regular use at the beginning of the year, with a view to obtaining an indication of the amount of cloud in the night sky.

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 xvii).

§ 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 Elliott 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 $10^{r}\cdot140$.

The vertical axis of the telescope is adjusted by means of a fixed level, one division of which corresponds to $1''\cdot15$. The level correction for inequality of the pivots of the axis of the telescope was found in 1898 to be $-6^{div}\cdot0$ or $-6''\cdot9$.

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 (by turning the magnet through 180° in its carrier, about the longitudinal axis), so that half the observations are made with the scale direct and half with the scale reversed.

The reading of the azimuth circle corresponding to the astronomical meridian is determined by observations of Polaris which, weather permitting, is observed once a week.

Declination observations have been made at least thrice weekly throughout 1920.

ABSOLUTE HORIZONTAL FORCE INSTRUMENT.—This instrument is of the Kew unifilar 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′·58 per millimetre; at the present time this angle represents 3·11 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 0·4. 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 237·7 γ and 144·0 γ in the mean of 1920, and the present rates of diminution of their values are 4·0 γ and 2·4 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 1920 January was 3·37 γ per mm., and for 1921 January was 3·42 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 daily rate of change of base-line value during 1920 was 0·40 γ. There is a small mean annual decrease in this rate of change. 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. The temperature correction of the instrument was determined from observations secured when the whole room was heated up to a high temperature. 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 magnetic force at (x, ρ), due to a current of strength A ampères, is—

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

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 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 162 mm. The scale value is found to be nearly uniform across the sheets.

The scale value determinations are made weekly. The scale value was found to be constant. The adopted value is 2·00 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.

The separation hitherto adopted has been based upon the judgment of the Superintendent of the department guided by the principle that, in general, a day on which a variation of more than 300 γ in horizontal force occurs, or, correspondingly, a variation of more than one degree in declination, is to be classed as a day of great disturbance. Days on which the variations exceed half these quantities are classed as days of lesser disturbance.

Following the principle thus defined, there are three days (February 24–25, March 4–5, March 22–23) in the year 1920 which are classed as days of great disturbance. On March 22–23 the variation in vertical force was greater than could be recorded on the photographic sheet, the trace being lost for more than four hours, in consequence. Days of lesser disturbance are September 28–29 and December 4–5. When two days are mentioned together, 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 hour are measured by the aid of an etched glass scale, the hour being the period of sixty minutes *commencing* at the time named in the table, 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.

The results of the absolute observations of declination horizontal force and dip are given in Tables XVII, XVIII and XIX respectively. These tables contain also the values of the base-lines of the declination, north force and vertical force magnetograms respectively, deduced from the absolute observations.

Table XX contains an annual summary of the magnetic elements, giving the mean monthly values of declination, horizontal force and dip ; also of the west, north and vertical components of the total force. The monthly mean diurnal ranges and the sums of hourly deviations from means of declination, north force and vertical force are also given.

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 p. E ix) 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	..	..	1881	18 27·1	0·1807	67 34·7
1842	23 14·6	..	..	1882	18 22·3	0·1806	67 34·2
1843	23 11·7	..	69 0·6	1883	18 15·0	0·1812	67 31·7
1844	23 15·3	..	69 0·3	1884	18 7·6	0·1814	67 29·7
1845	22 56·7	..	68 57·5	1885	18 1·7	0·1817	67 28·0
1846	22 49·6	0·1731	68 58·1	1886	17 54·5	0·1818	67 27·1
1847	22 51·3	0·1736	68 59·0	1887	17 49·1	0·1819	67 26·6
1848	22 51·8	0·1731	68 54·7	1888	17 40·4	0·1822	67 25·6
1849	22 37·8	0·1733	68 51·3	1889	17 34·9	0·1823	67 24·3
1850	22 23·5	0·1738	68 46·9	1890	17 28·6	0·1825	67 23·0
1851	22 18·3	0·1744	68 40·4	1891	17 23·4	0·1827	67 21·5
1852	22 17·9	0·1745	68 42·7	1892	17 17·4	0·1829	67 20·0
1853	22 10·1	0·1748	68 44·6	1893	17 11·4	0·1831	67 17·9
1854	22 0·8	0·1749	68 47·7	1894	17 4·6	0·1831	67 17·4
1855	21 48·4	0·1756	68 44·6	1895	16 57·4	0·1834	67 16·1*
1856	21 43·5	0·1759	68 43·5	1896	16 51·7*	0·1835*	67 15·1*
1857	21 35·4	0·1769	68 31·1	1897	16 45·8*	0·1838	67 13·5*
1858	21 30·3	0·1762	68 28·3	1898	16 39·2*	0·1840	67 12·1
1859	21 23·5	0·1761	68 26·9	1899	16 34·2	0·1843	67 10·5
1860	21 14·3	..	68 30·1	1900	16 29·0	0·1846	67 8·8
1861	21 5·5	0·1773	68 24·6	1901	16 26·0	0·1850	67 6·4
		0·1759	68 15·8	1902	16 22·8	0·1852	67 3·8
1862	20 52·6	0·1763	68 9·6	1903	16 19·1	0·1852	67 1·2
1863	20 45·9	0·1764	68 7·0	1904	16 15·0	0·1854	66 57·6
1864	..	0·1767	68 4·1	1905	16 9·9	0·1854	66 56·3
1865	20 33·9	0·1767	68 2·7	1906	16 3·6	0·1854	66 55·6
1866	20 28·0	0·1773	68 1·3	1907	15 59·8	0·1855	66 56·2
1867	20 20·5	0·1777	67 57·2	1908	15 53·5	0·1854	66 56·3
1868	20 13·1	0·1779	67 56·5	1909	15 47·6	0·1854	66 54·1
1869	20 4·1	0·1782	67 54·8	1910	15 41·2	0·1855	66 52·8
1870	19 53·0	0·1784	67 52·5	1911	15 33·0	0·1855	66 52·1
1871	19 41·9	0·1786	67 50·3	1912	15 24·3	0·1855	66 51·8
1872	19 36·8	0·1789	67 47·8	1913	15 15·2	0·1853	66 50·5
1873	19 33·4	0·1793	67 45·8	1914	15 6·3	0·1853	66 51·3
1874	19 28·9	0·1797	67 43·6	1915	14 56·5	0·1851	66 52·0
1875	19 21·2	0·1797	67 42·4	1916	14 46·9	0·1848	66 52·8
1876	19 8·3	0·1799	67 41·0	1917	14 37·1	0·1848	66 53·0
1877	18 57·2	0·1800	67 39·7	1918	14 27·8	0·1846	66 52·8
1878	18 49·3	0·1802	67 38·2	1919	14 18·2	0·1845	66 53·3
1879	18 40·5	0·1805	67 37·0	1920	14 8·6	0·1845	66 53·6
1880	18 32·6	0·1805	67 35·7				

* 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 2·5 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 $-0°\cdot4$ 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 $-0°\cdot2$ 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. 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. 165654. The thermometers are laid on short grass and freely exposed to the sky ; they require no correction for index-error.

EARTH THERMOMETERS.—There are two thermometers now in use, the bulbs of which are sunk to depths of 4 and 1 feet below the surface. Both thermometers are read daily at noon, the readings of the longer being given in the daily results. The description of the deep sunk thermometers previously in use will be found in earlier volumes. 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 82) are given according to both formulæ, and the least hourly measures omitted.

RAIN GAUGES.—During the year 1919 three rain gauges were employed, placed at different elevations above the ground.

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.

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^h 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.

The monthly amounts of rain collected in gauges Nos. 6 and 8 are given on page E 82 of the Meteorological Results.

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.

NIGHT-SKY RECORDER.—The object of this instrument is to supplement the daily sunshine record, in so far as it gives an indication of the amount of cloud.

It consists of a small camera constructed of wood, mounted on a brick pier in the courtyard, to the north of the Transit Pavilion, and permanently directed towards the celestial Pole.

The lens is a single component of a doublet. It is of 7 inches focal length and 0·4 inch aperture, thus working at f/18. With this aperture-ratio good records even at full moon are obtained with plates of " ordinary " speed. The actual camera is enclosed in a larger box about twice its length, which extends nine inches beyond the lens. The lens itself is further surrounded by a hood. Adequate protection from dew is thus obtained and also from rain, except when driven hard from the north. The photographic plates used are ordinary quarter-plate ($3\frac{1}{4}$ inches by $4\frac{1}{4}$). Exposure is intended to be made during the period that the sun remains more than 10° below the horizon. The period thus centres approximately to apparent midnight, but in practice the mean times of commencing and ending the exposure are not varied at intervals of less than seven days.

The traces of Polaris and of δ Ursae Minoris are ordinarily selected for measurement. The measurement is effected by means of a glass scale, on which there are photographically imprinted pairs of concentric circles whose radii are slightly greater and slightly less than the radius of the trace to be measured, the circles being divided into a time scale of hour-angle, with ten-minute units. The plate is placed over the scale in a measuring frame, and adjusted so that the trace is concentric with the containing circles marked on the scale. The hour-angle of the star, according to the scale, at the commencement and ending of the various portions of the trace is then read off to the nearest minute of time.

The meridian setting of the instrument is occasionally checked on very fine nights by making a break in the exposure at a specified time. The correction for error of orientation of the plate is made during the computation of Mean Time corresponding to hour angle of star, in the following manner:—Whenever the sky is seen to be clear at the commencement of exposure, the difference between the hour angle given by the scale for the beginning of the trace and the corresponding mean time noted by the observer, is taken as the quantity to be applied to the scale readings throughout the night. When the sky is not clear, the last difference so obtained is used, due allowance being made for the daily acceleration of sidereal time over mean time. Variations in the error of orientation are found seldom to exceed two or three minutes of time, and are unimportant to the records.

§ 7. *Meteorological Reductions.*

The results given in the Meteorological Section refer to the civil day, commencing at midnight, except in the case of the Night Sky Recorder, for which they relate to the period from dusk on the day named, to dawn of the following day.

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 77 and E 78) have been calculated from the corresponding mean hourly values of air and evaporation temperatures (pages E 76 and E 77).

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 75 and E 82, 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 51 to E 73, and in the abstract table, page E 75, 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
1923 *June* 28.

ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL OBSERVATIONS,

1920.

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION.

January. 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	13·3	14·7	14·1	12·9	13·6	13·9	13·2	13·6	13·3	13·6	14·9	16·2	17·1	16·9	16·1	15·8	16·1	17·3	17·1	14·5	9·1	9·9	10·6	11·6	14·1	
2	12·6	13·3	11·3	12·1	12·9	13·4	13·5	13·6	13·7	15·1	17·1	16·5	16·7	17·1	16·6	15·9	15·6	15·6	15·0	14·9	12·7	9·1	10·9	11·1	14·1	
3	12·6	13·1	12·5	11·9	12·3	12·5	12·7	12·9	12·6	13·3	14·1	16·1	15·9	15·9	15·6	14·6	13·9	13·6	13·9	13·2	12·5	12·3	12·1	10·6	13·4	
4*	12·6	13·3	12·6	13·3	13·3	12·7	12·9	12·3	12·9	12·7	14·1	16·2	17·1	16·9	16·1	15·0	14·3	13·9	13·6	13·9	13·1	10·9	11·9	12·3	13·7	
5*	12·9	11·9	12·1	12·3	12·3	12·5	12·6	12·6	12·2	11·9	13·6	15·6	16·5	16·9	15·5	14·6	14·6	14·1	13·9	13·2	12·6	12·1	11·3	11·9	13·3	
6	12·3	12·4	12·6	12·9	13·1	13·2	12·8	12·6	11·9	12·6	14·3	15·7	(16·1)	16·6	16·1	16·2	16·1	16·4	16·2	16·6	12·9	10·3	10·6	10·7	13·8	
7	11·6	11·1	12·3	14·8	13·9	12·8	12·7	12·6	11·7	11·5	12·6	15·4	17·3	19·6	19·7	(19·9)	20·1	20·1	16·5	13·3	10·9	10·6	11·1	11·3	14·3	
8	11·3	11·9	12·9	13·3	13·3	13·4	12·9	12·9	11·5	11·6	13·3	15·1	16·6	16·1	14·4	14·3	14·4	14·7	13·9	12·8	12·0	12·3	12·1	12·2	13·3	
9**	12·6	13·2	13·3	13·6	13·9	13·9	14·2	14·1	12·1	11·3	11·3	14·1	17·8	18·6	18·2	17·1	17·3	16·6	14·7	13·6	13·2	4·1	3·6	6·1	13·3	
10**	9·9	10·9	13·0	10·9	12·6	15·1	10·9	12·9	12·9	11·9	11·9	15·9	17·9	18·1	16·7	17·1	14·9	15·2	14·3	12·5	5·1	6·3	10·1	11·9	12·9	
11**	12·6	11·9	12·2	13·6	13·3	12·9	12·6	12·2	11·6	11·9	13·1	13·9	15·6	17·6	16·4	15·1	14·3	14·9	14·1	8·6	9·9	2·9	8·3	6·3	12·3	
12	6·3	12·3	12·9	13·5	11·6	13·5	11·6	11·9	11·9	12·9	15·1	16·1	17·7	17·9	16·8	15·7	13·6	14·3	13·9	12·9	11·3	10·9	11·1	11·3	13·2	
13*	11·6	11·9	12·0	11·9	11·8	12·3	12·3	13·0	12·3	13·2	14·1	14·6	15·3	16·6	17·9	16·3	15·4	13·8	13·6	13·9	14·1	13·2	12·3	11·9	13·6	
14	12·6	12·2	12·2	12·1	11·9	12·2	12·3	12·9	11·3	11·1	12·1	13·8	15·1	16·6	15·5	15·1	14·3	15·1	15·0	13·3	10·1	8·6	10·3	11·0	13·2	
15	12·6	13·9	14·3	14·3	14·1	13·6	13·5	13·6	11·9	12·3	13·3	15·1	16·3	18·3	18·3	14·9	14·9	14·9	14·3	14·1	13·1	12·5	10·1	13·6	14·1	
16	11·6	12·1	12·9	16·3	12·9	12·1	12·2	12·6	12·9	12·8	12·9	14·1	15·3	15·6	15·2	14·1	13·9	13·9	13·7	13·8	13·1	12·9	12·8	12·6	12·9	
17	12·6	12·7	13·6	13·2	13·3	13·3	13·1	12·9	11·3	11·3	12·1	14·5	18·2	19·6	19·3	18·0	17·6	14·3	14·1	10·5	10·3	9·1	11·3	10·9	13·6	
18	11·9	13·1	13·8	13·2	13·3	13·1	12·9	12·3	11·3	12·3	13·1	14·9	16·6	17·3	16·3	14·6	13·9	14·1	13·9	13·2	12·5	11·8	11·9	13·1	13·5	
19*	12·6	13·1	13·3	13·4	13·9	12·9	12·8	12·1	11·3	11·9	13·6	14·7	16·3	17·1	16·6	15·8	15·3	14·9	14·8	13·6	13·2	12·9	12·9	12·2	13·8	
20	13·1	13·6	13·5	13·7	13·6	13·1	13·1	12·9	11·9	11·5	13·1	14·1	15·4	17·6	17·1	15·9	15·6	15·1	14·4	13·6	12·9	11·9	11·9	8·9	13·7	
21**	7·6	9·1	10·9	13·1	15·9	13·1	13·3	13·3	12·9	13·9	15·6	16·9	19·6	18·2	18·6	19·6	17·3	9·1	13·6	12·9	12·1	9·6	5·9	7·1	13·3	
22	8·3	11·9	13·9	14·1	14·0	13·6	13·2	12·1	10·9	11·1	13·2	15·1	17·1	17·6	16·9	16·1	12·9	14·3	14·5	13·6	12·9	12·3	11·9	12·3	13·5	
23	10·9	11·1	12·8	12·6	13·1	14·9	13·5	12·9	11·3	11·1	12·3	15·2	17·6	18·3	17·6	16·1	15·1	11·9	14·7	13·1	11·3	8·3	8·1	12·4	13·2	
24	11·1	12·6	12·9	15·8	14·3	14·1	14·4	14·9	14·1	13·8	15·9	16·3	17·1	18·1	15·8	13·9	14·3	13·5	13·6	13·5	13·0	12·9	11·5	13·2	14·2	
25	12·2	12·5	14·7	12·6	13·3	11·9	12·3	11·9	10·3	11·1	12·5	14·1	15·6	16·3	16·1	14·5	14·1	13·9	14·0	11·9	11·9	12·6	12·3	12·9	13·2	
26	13·2	13·7	14·4	13·1	12·5	13·1	12·9	12·3	10·9	11·6	13·7	16·2	16·6	17·9	16·5	16·1	15·1	15·0	13·9	13·2	9·6	11·3	12·1	12·9	13·7	
27*	13·1	13·3	13·6	13·3	13·3	13·2	13·1	12·9	12·1	12·4	14·1	15·1	15·4	16·6	15·9	14·9	14·3	14·1	14·1	13·3	13·1	12·6	11·6	12·2	13·7	
28**	12·3	13·1	13·3	13·1	13·2	13·1	12·8	11·6	10·6	10·8	12·6	15·3	17·6	17·3	19·2	19·6	17·6	16·2	16·1	16·4	13·3	10·1	10·5	10·1	14·0	
29	8·1	10·9	11·4	13·1	11·3	12·3	12·6	12·1	10·9	10·9	13·2	14·1	16·3	18·3	17·1	16·1	14·6	14·3	14·2	13·1	12·3	12·3	11·6	12·3	13·0	
30	12·6	12·3	11·9	11·9	13·1	10·3	10·9	12·5	11·6	12·1	13·9	15·6	17·9	17·3	16·1	16·2	17·6	15·2	16·1	15·8	9·5	7·3	10·6	12·3	13·4	
31	12·6	12·3	12·2	11·9	11·7	12·7	12·3	12·2	11·3	10·9	12·1	14·6	18·1	17·8	17·1	14·5	13·6	13·3	12·9	12·9	12·3	12·6	11·8	11·9	13·1	
Mean	11·7	12·4	12·9	13·2	13·1	13·0	12·8	12·7	11·9	12·1	13·5	15·2	16·8	17·4	16·8	15·9	15·2	14·6	14·5	13·4	11·8	10·5	10·8	11·3	13·5	
Mean*	12·6	12·7	12·7	12·9	12·9	12·7	12·7	12·6	12·1	12·4	13·9	15·2	16·2	16·8	16·4	15·3	14·8	14·2	14·0	13·5	13·2	12·3	12·0	12·1	13·6	
Mean**	11·0	11·7	12·5	11·9	13·8	13·6	12·7	12·8	12·0	11·9	12·9	15·3	17·7	17·9	17·4	17·7	16·3	14·4	14·5	12·9	10·7	6·6	7·7	8·3	13·1	

February. 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	12·5	12·6	11·8	12·1	12·2	11·1	11·0	11·1	10·1	10·4	13·1	13·5	16·1	16·3	17·3	16·1	15·4	14·3	14·9	14·6	13·6	13·3	12·9	12·6	13·3	
2*	10·9	11·3	10·9	10·6	11·3	10·9	11·3	11·3	10·6	11·2	13·1	15·3	16·3	15·5	15·6	15·3	15·1	15·1	14·9	14·3	13·1	12·3	12·1	10·9	12·9	
3*	11·6	11·5	11·9	11·3	11·1	11·6	10·9	11·8	10·3	10·7	12·8	13·2	15·2	16·1	16·6	15·9	15·6	15·4	15·1	15·1	14·2	12·9	12·3	12·1	13·1	
4	12·3	10·9	12·0	11·9	12·0	12·1	11·8	11·7	10·9	10·9	12·9	14·9	16·3	17·9	17·8	15·0	13·6	13·2	12·9	12·6	12·3	12·1	12·3	12·6	13·0	
5	12·7	12·6	12·9	13·3	12·9	12·8	12·1	12·1	10·9	10·3	12·1	13·9	16·0	17·1	17·1	15·3	14·1	13·5	13·1	12·9	12·2	11·9	11·6	12·2	13·1	
6	12·1	12·6	12·9	13·1	12·9	13·1	12·7	11·6	10·3	9·9	11·6	13·3	15·3	16·3	16·6	15·5	14·9	15·1	14·7	13·6	12·4	11·8	9·1	3·6	12·7	
7**	9·1	11·5	12·4	12·9	12·3	11·9	13·9	12·3	10·9	10·1	11·9	14·6	16·9	17·9	18·6	18·6	16·2	15·1	15·0	13·6	5·6	8·5	7·1	10·5	12·8	
8	10·6	10·8	11·1	9·9	11·9	11·7	10·9	10·3	9·6	9·6	11·9	15·6	17·4	18·0	18·1	16·1	14·7	14·3	13·1	12·7	10·1	9·7	9·9	10·1	12·4	
9*	10·3	11·3	11·5	11·9	12·1	11·9	11·6	11·5	10·1	9·6	11·3	14·6	16·8	17·3	16·9	15·1	13·4	13·1	13·3	12·5	12·1	11·3	9·6	9·9	12·5	
10	10·6	10·9	9·9	10·9	10·9	11·5	11·6	11·4	10·6	11·3	13·2	15·1	17·3	19·3	19·3	18·6	16·3	15·3	13·7	13·1	11·9	11·6	10·8	9·9	13·1	
11	10·6	11·4	11·6	11·1	10·7	11·9	10·1	10·7	10·3	10·6	12·3	14·1	14·9	15·6	15·6	15·3	14·1	13·9	13·6	13·5	11·9	11·1	11·9	10·9	12·4	
12	4·1	6·7	10·9	11·3	11·5	11·6	11·9	12·3	10·9	10·6	12·9	13·6	16·3	16·9	15·3	14·6	13·9	13·3	13·6	13·3	12·3	8·3	10·9	11·6	12·1	
13	11·9	11·9	11·6	13·7	11·6	11·3	10·3	10·3	10·1	10·3	11·9	14·9	16·1	16·1	16·3	14·6	13·8	13·3	13·1	12·8	10·6	6·3	6·9	9·1	12·1	
14**	9·3	11·7	12·1	11·5	12·0	11·2	10·6	11·3	11·7	12·1	12·9	15·1	17·3	18·6	19·3	16·6	17·1	16·3	14·8	9·1	13·1	12·1	11·3	9·1	13·2	
15	9·1	11·6	11·3	11·9	12·2	12·1	11·3	10·3	9·3	9·4	10·1	13·3	16·1	16·6	16·3	15·1	13·9	13·4	12·9	13·5	12·1	11·6	11·9	11·6	12·4	
16**	11·9	12·1	12·2	11·9	11·6	11·3	10·9	10·6	9·3	9·1	10·8	16·1	19·2	23·1	22·8	20·1	16·3	15·2	12·1	1·6	10·1	10·4	10·8	11·1	12·9	
17**	9·9	13·1	13·9	11·8	11·6	13·4	10·9	9·9	11·1	9·6	12·4	15·6	16·1	16·3	17·1	15·9	13·3	10·3	6·6	0·1	8·0	10·6	7·4	7·3	11·3	
18	10·7	14·1	14·5	13·1	11·3	10·6	9·9	9·5	8·6	9·1	12·2	14·6	16·7	17·9	17·5	16·2	13·3	13·1	12·2	10·3	9·1	10·2	10·6	10·9	12·3	
19	11·9	12·6	12·3	12·1	11·3	11·1	10·9	10·6	8·9	7·9	9·1	12·3	15·6	16·6	15·9	14·5	13·1	12·2	12·9	12·1	11·3	10·7	10·9	10·8	12·0	
20	11·0	11·1	11·9	12·1	11·6	12·3	11·3	9·9	8 0	7·6	10·5	13·3	15·6	17·6	16·3	14·9	13·9	13·1	12·5	12·3	12·2	11·6	11·3	11·3	12·2	
21	11·3	11·3	11·4	11·6	11·4	11·3	10·9	10·6	8·6	9·0	11·6	15·1	17·9	17·6	17·4	16·1	13·9	12·3	10·6	9·4	11·3	11·1	10·3	10·3	12·2	
22	11·1	10·9	11·1	11·5	11·6	11·4	11·3	10·3	9·9	8·1	10·1	12·2	15·1	17·3	17·6	16·1	13·9	12·6	12·3	12·3	11·9	11·5	11·3	11·4	12·2	
23*	11·6	11·9	12·2	12·1	11·9	11·7	10·9	11·1	10·8	9·6	11·1	12·2	13·9	15·1	16·6	16·3	14·3	13·7	13·3	12·9	12·1	11·7	11·3	11·1	12·5	
24**	10·6	10·1	10·4	10·1	10·9	11·6	11·2	10·6	9·4	8·9	10·1	13·4	17·9	21·1	20·3	19·6	21·5	22·1	26·1	10·3	5·1	8·1	1·6	3·8	12·7	
25	3·1	2·1	5·2	8·1	7·9	9·7	9·6	10·1	9·3	9·1	10·1	11·9	14·1	16·3	16·9	16·2	15·1	14·6	14·0	13·2	13·4	7·9	9·8	9·9	10·7	
26	10·9	11·1	11·3	11·1	10·9	11·3	11·3	11·1	9·3	8·7	9·9	11·7	15·2	16·3	16·1	15·5	14·7	14·9	15·9	14·9	11·3	10·6	9·3	7·1	12·1	
27	7·1	7·3	9·1	9·2	11·1	12·2	11·0	11·1	9·5	9·9	10·6	12·5	16·9	19·1	18·8	17·6	17·0	15·9	13·9	12·3	10·3	10·4	8·6	6·6	12·0	
28	5·9	5·9	6·9	8·7	9·8	9·9	10·3	10·6	9·7	10·6	12·8	13·9	15·2	16·9	17·1	16·5	14·3	14·1	12·9	12·0	11·8	10·6	6·7	6·6	11·2	
29*	7·6	9·1	8·8	8·5	8·9	9·5	9·4	9·1	8·9	9·6	12·4	15·1	15·9	17·1	16·3	15·9	14·7	13·9	13·2	12·3	11·9	11·8	10·5	9·3	11·7	
Mean	10·1	10·8	11·2	11·4	11·4	11·5	11·1	10·9	9·9	9·8	11·6	14·0	16·2	17·4	17·4	16·2	14·9	14·2	13·7	11·8	11·3	10·8	10·0	9·8	12·4	
Mean*	10·4	11·0	11·1	10·9	11·1	11·1	10·8	11·0	10·1	10·1	12·1	14·1	15·6	16·2	16·4	15·7	14·6	14·3	13·9	13·4	12·7	12·0	11·2	10·7	12·5	
Mean**	10·2	11·7	12·2	11·6	11·7	11·9	11·5	10·9	10·5	10·0	11·6	15·0	17·5	19·4	19·6	18·2	16·9	15·8	14·9	6·9	8·4	10·0	7·6	8·3	12·6	

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION.

January. 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	13·3	14·7	14·1	12·9	13·6	13·9	13·2	13·6	13·3	13·6	14·9	16·2	17·1	16·9	16·1	15·8	16·1	17·3	17·1	14·5	9·1	9·9	10·6	11·6	14·1	
2	12·6	13·3	11·3	12·1	12·9	13·4	13·5	13·6	13·7	15·1	17·1	16·5	16·7	17·1	16·6	15·9	15·6	15·6	15·0	14·9	12·7	9·1	10·9	11·1	14·1	
3	12·6	13·1	12·5	11·9	12·3	12·5	12·7	12·9	12·6	13·3	14·1	16·1	15·9	15·9	15·6	14·6	13·9	13·6	13·9	13·2	12·5	12·3	12·1	10·6	13·4	
4*	12·6	13·3	12·6	13·3	13·3	12·7	12·9	12·3	12·9	12·7	14·1	16·2	17·1	16·9	16·1	15·0	14·3	13·9	13·6	13·9	13·1	10·9	11·9	12·3	13·7	
5*	12·9	11·9	12·1	12·3	12·3	12·5	12·6	12·6	12·2	11·9	13·6	15·6	16·5	16·9	15·5	14·6	14·6	14·1	13·9	13·2	12·6	12·1	11·3	11·9	13·3	
6	12·3	12·4	12·6	12·9	13·1	13·2	12·8	12·6	11·9	12·6	14·3	15·7	(16·1)	16·6	16·1	16·2	16·1	16·4	16·2	16·6	12·9	10·3	10·6	10·7	13·8	
7	11·6	11·1	12·3	14·8	13·9	12·8	12·7	12·6	11·7	11·5	12·6	15·4	17·3	19·6	19·7	(19·9)	20·1	20·1	16·5	13·3	10·9	10·6	11·1	11·3	14·3	
8	11·3	11·9	12·9	13·3	13·3	13·4	12·9	12·9	11·5	11·6	13·3	15·1	16·6	16·1	14·4	14·3	14·4	14·7	13·9	12·8	12·0	12·3	12·1	12·2	13·3	
9**	12·6	13·2	13·3	13·6	13·9	13·9	14·2	14·1	12·1	11·3	11·3	14·1	17·8	18·6	18·2	17·1	17·3	16·6	14·7	13·6	13·2	4·1	3·6	6·1	13·3	
10**	9·9	10·9	13·0	10·9	12·6	15·1	10·9	12·9	12·9	11·9	11·9	15·9	17·9	18·1	16·7	17·1	14·9	15·2	14·3	12·5	5·1	6·3	10·1	11·9	12·9	
11**	12·6	11·9	12·2	13·6	13·3	12·9	12·6	12·2	11·6	11·9	13·1	13·9	15·6	17·6	16·4	15·1	14·3	14·9	14·1	8·6	9·9	2·9	8·3	6·3	12·3	
12	6·3	12·3	12·9	13·5	11·6	13·5	11·6	11·9	11·9	12·9	15·1	16·1	17·7	17·9	16·8	15·7	13·6	14·3	13·9	12·9	11·3	10·9	11·1	11·3	13·2	
13*	11·6	11·9	12·0	11·9	11·8	12·3	12·3	13·0	12·3	13·2	14·1	14·6	15·3	16·6	17·9	16·3	15·4	13·8	13·6	13·9	14·1	13·2	12·3	11·9	13·6	
14	12·6	12·2	12·2	12·1	11·9	12·2	12·3	12·9	11·3	11·1	12·1	13·8	15·1	16·6	15·5	15·1	14·3	15·1	15·0	13·3	10·1	8·6	10·3	11·0	13·2	
15	12·6	13·9	14·3	14·3	14·1	13·6	13·5	13·6	11·9	12·3	13·3	15·1	16·3	18·3	18·3	14·9	14·9	14·9	14·3	14·1	13·1	12·5	10·1	13·6	14·1	
16	11·6	12·1	12·9	16·3	12·9	12·1	12·2	12·6	12·9	12·8	12·9	14·1	15·3	15·6	15·2	14·1	13·9	13·9	13·7	13·8	13·1	12·9	12·8	12·6	12·9	
17	12·6	12·7	13·6	13·2	13·3	13·3	13·1	12·9	11·3	11·3	12·1	14·5	18·2	19·6	19·3	18·0	17·6	14·3	14·1	10·5	10·3	9·1	11·3	10·9	13·6	
18	11·9	13·1	13·8	13·2	13·3	13·1	12·9	12·3	11·3	12·3	13·1	14·9	16·6	17·3	16·3	14·6	13·9	14·1	13·9	13·2	12·5	11·8	11·9	13·1	13·5	
19*	12·6	13·1	13·3	13·4	13·9	12·9	12·8	12·1	11·3	11·9	13·6	14·7	16·3	17·1	16·6	15·8	15·3	14·9	14·8	13·6	13·2	12·9	12·9	12·2	13·8	
20	13·1	13·6	13·5	13·7	13·6	13·1	13·1	12·9	11·9	11·5	13·1	14·1	15·4	17·6	17·1	15·9	15·6	15·1	14·4	13·6	12·9	11·9	11·9	8·9	13·7	
21**	7·6	9·1	10·9	13·1	15·9	13·1	13·3	13·3	12·9	13·9	15·6	16·9	19·6	18·2	18·6	19·6	17·3	9·1	13·6	12·9	12·1	9·6	5·9	7·1	13·3	
22	8·3	11·9	13·9	14·1	14·0	13·6	13·2	12·1	10·9	11·1	13·2	15·1	17·1	17·6	16·9	16·1	12·9	14·3	14·5	13·6	12·9	12·3	11·9	12·3	13·5	
23	10·9	11·1	12·8	12·6	13·1	14·9	13·5	12·9	11·3	11·1	12·3	15·2	17·6	18·3	17·6	16·1	15·1	11·9	14·7	13·1	11·3	8·3	8·1	12·4	13·2	
24	11·1	12·6	12·9	15·8	14·3	14·1	14·4	14·9	14·1	13·8	15·9	16·3	17·1	18·1	15·8	13·9	14·3	13·5	13·6	13·5	13·0	12·9	11·5	13·2	14·2	
25	12·2	12·5	14·7	12·6	13·3	11·9	12·3	11·9	10·3	11·1	12·5	14·1	15·6	16·3	16·1	14·5	14·1	13·9	14·0	11·9	11·9	12·6	12·3	12·9	13·2	
26	13·2	13·7	14·4	13·1	12·5	13·1	12·9	12·3	10·9	11·6	13·7	16·2	16·6	17·9	16·5	16·1	15·1	15·0	13·9	13·2	9·6	11·3	12·1	12·9	13·7	
27*	13·1	13·3	13·6	13·3	13·3	13·2	13·1	12·9	12·1	12·4	14·1	15·1	15·4	16·6	15·9	14·9	14·3	14·1	14·1	13·3	13·1	12·6	11·6	12·2	13·7	
28**	12·3	13·1	13·3	13·1	13·2	13·1	12·8	11·6	10·6	10·8	12·6	15·3	17·6	17·3	19·2	19·6	17·6	16·2	16·1	16·4	13·3	10·1	10·5	10·1	14·0	
29	8·1	10·9	11·4	13·1	11·3	12·3	12·6	12·1	10·9	10·9	13·2	14·1	16·3	18·3	17·1	16·1	14·6	14·3	14·2	13·1	12·3	12·3	11·6	12·3	13·0	
30	12·6	12·3	11·9	11·9	13·1	10·3	10·9	12·5	11·6	12·1	13·9	15·6	17·9	17·3	16·1	16·2	17·6	15·2	16·1	15·8	9·5	7·3	10·6	12·3	13·4	
31	12·6	12·3	12·2	11·9	11·7	12·7	12·3	12·2	11·3	10·9	12·1	14·6	18·1	17·8	17·1	14·5	13·6	13·3	12·9	12·9	12·3	12·6	11·8	11·9	13·1	
Mean	11·7	12·4	12·9	13·2	13·1	13·0	12·8	12·7	11·9	12·1	13·5	15·2	16·8	17·4	16·8	15·9	15·2	14·6	14·5	13·4	11·8	10·5	10·8	11·3	13·5	
Mean*	12·6	12·7	12·7	12·9	12·9	12·7	12·7	12·6	12·1	12·4	13·9	15·2	16·2	16·8	16·4	15·3	14·8	14·2	14·0	13·5	13·2	12·3	12·0	12·1	13·6	
Mean**	11·0	11·7	12·5	11·9	13·8	13·6	12·7	12·8	12·0	11·9	12·9	15·3	17·7	17·9	17·4	17·7	16·3	14·4	14·5	12·9	10·7	6·6	7·7	8·3	13·1	

February. 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	12·5	12·6	11·8	12·1	12·2	11·1	11·0	11·1	10·1	10·4	13·1	13·5	16·1	16·3	17·3	16·1	15·4	14·3	14·9	14·6	13·6	13·3	12·9	12·6	13·3	
2*	10·9	11·3	10·9	10·6	11·3	10·9	11·3	11·3	10·6	11·2	13·1	15·3	16·3	15·5	15·6	15·3	15·1	15·1	14·9	14·3	13·1	12·3	12·1	10·9	12·9	
3*	11·6	11·5	11·9	11·3	11·1	11·6	10·9	11·8	10·3	10·7	12·8	13·2	15·2	16·1	16·6	15·9	15·6	15·4	15·1	15·1	14·2	12·9	12·3	12·1	13·1	
4	12·3	10·9	12·0	11·9	12·0	12·1	11·8	11·7	10·9	10·9	12·9	14·9	16·3	17·9	17·8	15·0	13·6	13·2	12·9	12·6	12·3	12·1	12·3	12·6	13·0	
5	12·7	12·6	12·9	13·3	12·9	12·8	12·1	12·1	10·9	10·3	12·1	13·9	16·0	17·1	17·1	15·3	14·1	13·5	13·1	12·9	12·2	11·9	11·6	12·2	13·1	
6	12·1	12·6	12·9	13·1	12·9	13·1	12·7	11·6	10·3	9·9	11·6	13·3	15·3	16·3	16·6	15·5	14·9	15·1	14·7	13·6	12·4	11·8	9·1	3·6	12·7	
7**	9·1	11·5	12·4	12·9	12·3	11·9	13·9	12·3	10·9	10·1	11·9	14·6	16·9	17·9	18·6	18·6	16·2	15·1	15·0	13·6	5·6	8·5	7·1	10·5	12·8	
8	10·6	10·8	11·1	9·9	11·9	11·7	10·9	10·3	9·6	9·6	11·9	15·6	17·4	18·0	18·1	16·1	14·7	14·3	13·1	12·7	10·1	9·7	9·9	10·1	12·4	
9*	10·3	11·3	11·5	11·9	12·1	11·9	11·6	11·5	10·1	9·6	11·3	14·6	16·8	17·3	16·9	15·1	13·4	13·1	13·3	12·5	12·1	11·3	9·6	9·9	12·5	
10	10·6	10·9	9·9	10·9	10·9	11·5	11·6	11·4	10·6	11·3	13·2	15·1	17·3	19·3	19·3	18·6	16·3	15·3	13·7	13·1	11·9	11·6	10·8	9·9	13·1	
11	10·6	11·4	11·6	11·1	10·7	11·9	10·1	10·7	10·3	10·6	12·3	14·1	14·9	15·6	15·6	15·3	14·1	13·9	13·6	13·5	11·9	11·1	11·9	10·9	12·4	
12	4·1	6·7	10·9	11·3	11·5	11·6	11·9	12·3	10·9	10·6	12·9	13·6	16·3	16·9	15·3	14·6	13·9	13·3	13·6	13·3	12·3	8·3	10·9	11·6	12·1	
13	11·9	11·9	11·6	13·7	11·6	11·3	10·3	10·3	10·1	10·3	11·9	14·9	16·1	16·1	16·3	14·6	13·8	13·3	13·1	12·8	10·6	6·3	6·9	9·1	12·1	
14**	9·3	11·7	12·1	11·5	12·0	11·2	10·6	11·3	11·7	12·1	12·9	15·1	17·3	18·6	19·3	16·6	17·1	16·3	14·8	9·1	13·1	12·1	11·3	9·1	13·2	
15	9·1	11·6	11·3	11·9	12·2	12·1	11·3	10·3	9·3	9·4	10·1	13·3	16·1	16·6	16·3	15·1	13·9	13·4	12·9	13·5	12·1	11·6	11·9	11·6	12·4	
16**	11·9	12·1	12·2	11·9	11·6	11·3	10·9	10·6	9·3	9·1	10·8	16·1	19·2	23·1	22·8	20·1	16·3	15·2	12·1	1·6	10·1	10·4	10·8	11·1	12·9	
17**	9·9	13·1	13·9	11·8	11·6	13·4	10·9	9·9	11·1	9·6	12·4	15·6	16·1	16·3	17·1	15·9	13·3	10·3	6·6	0·1	8·0	10·6	7·4	7·3	11·3	
18	10·7	14·1	14·5	13·1	11·3	10·6	9·9	9·5	8·6	9·1	12·2	14·6	16·7	17·9	17·5	16·2	13·3	13·1	12·2	10·3	9·1	10·2	10·6	10·9	12·3	
19	11·9	12·6	12·3	12·1	11·3	11·1	10·9	10·6	8·9	7·9	9·1	12·3	15·6	16·6	15·9	14·5	13·1	12·2	12·9	12·1	11·3	10·7	10·9	10·8	12·0	
20	11·0	11·1	11·9	12·1	11·6	12·3	11·3	9·9	8 0	7·6	10·5	13·3	15·6	17·6	16·3	14·9	13·9	13·1	12·5	12·3	12·2	11·6	11·3	11·3	12·2	
21	11·3	11·3	11·4	11·6	11·4	11·3	10·9	10·6	8·6	9·0	11·6	15·1	17·9	17·6	17·4	16·1	13·9	12·3	10·6	9·4	11·3	11·1	10·3	10·3	12·2	
22	11·1	10·9	11·1	11·5	11·6	11·4	11·3	10·3	9·9	8·1	10·1	12·2	15·1	17·3	17·6	16·1	13·9	12·6	12·3	12·3	11·9	11·5	11·3	11·4	12·2	
23*	11·6	11·9	12·2	12·1	11·9	11·7	10·9	11·1	10·8	9·6	11·1	12·2	13·9	15·1	16·6	16·3	14·3	13·7	13·3	12·9	12·1	11·7	11·3	11·1	12·5	
24**	10·6	10·1	10·4	10·1	10·9	11·6	11·2	10·6	9·4	8·9	10·1	13·4	17·9	21·1	20·3	19·6	21·5	22·1	26·1	10·3	5·1	8·1	1·6	3·8	12·7	
25	3·1	2·1	5·2	8·1	7·9	9·7	9·6	10·1	9·3	9·1	10·1	11·9	14·1	16·3	16·9	16·2	15·1	14·6	14·0	13·2	13·4	7·9	9·8	9·9	10·7	
26	10·9	11·1	11·3	11·1	10·9	11·3	11·3	11·1	9·3	8·7	9·9	11·7	15·2	16·3	16·1	15·5	14·7	14·9	15·9	14·9	11·3	10·6	9·3	7·1	12·1	
27	7·1	7·3	9·1	9·2	11·1	12·2	11·0	11·1	9·5	9·9	10·6	12·5	16·9	19·1	18·8	17·6	17·0	15·9	13·9	12·3	10·3	10·4	8·6	6·6	12·0	
28	5·9	5·9	6·9	8·7	9·8	9·9	10·3	10·6	9·7	10·6	12·8	13·9	15·2	16·9	17·1	16·5	14·3	14·1	12·9	12·0	11·8	10·6	6·7	6·6	11·2	
29*	7·6	9·1	8·8	8·5	8·9	9·5	9·4	9·1	8·9	9·6	12·4	15·1	15·9	17·1	16·3	15·9	14·7	13·9	13·2	12·3	11·9	11·8	10·5	9·3	11·7	
Mean	10·1	10·8	11·2	11·4	11·4	11·5	11·1	10·9	9·9	9·8	11·6	14·0	16·2	17·4	17·4	16·2	14·9	14·2	13·7	11·8	11·3	10·8	10·0	9·8	12·4	
Mean*	10·4	11·0	11·1	10·9	11·1	11·1	10·8	11·0	10·1	10·1	12·1	14·1	15·6	16·2	16·4	15·7	14·6	14·3	13·9	13·4	12·7	12·0	11·2	10·7	12·5	
Mean**	10·2	11·7	12·2	11·6	11·7	11·9	11·5	10·9	10·5	10·0	11·6	15·0	17·5	19·4	19·6	18·2	16·9	15·8	14·9	6·9	8·4	10·0	7·6	8·3	12·6	

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**	9·1	8·7	2·6	13·9	9·3	3·5	5·9	8·9	11·9	10·9	14·3	20·6	20·9	20·1	17·6	13·9	12·3	11·6	11·4	5·1	8·3	10·1	10·1	8·5	11·2	
2	9·1	9·9	7·4	5·6	5·5	5·3	4·1	6·4	6·9	8·9	11·6	13·6	16·3	17·1	14·3	13·3	13·9	12·3	9·1	9·9	9·9	10·1	10·5	10·6	10·1	
3	11·1	11·0	7·7	7·3	7·1	6·3	8·1	8·8	8·9	10·1	14·6	15·6	15·6	16·1	15·3	13·4	12·1	10·3	9·5	8·6	6·9	9·3	9·9	10·2	10·6	
4	10·1	11·3	9·3	8·9	8·6	8·3	6·9	4·9	4·1	7·3	9·6	12·9	16·9	18·6	16·3	13·1	10·9	10·3	9·9	9·6	9·9	10·3	10·2	9·9	10·3	
5	10·1	10·9	9·3	8·9	8·7	7·6	6·1	5·3	5·1	6·6	8·2	12·6	15·1	16·1	15·3	13·6	12·2	11·1	10·8	10·6	10·2	9·6	9·4	9·1	10·1	
6*	9·1	8·9	8·9	8·6	8·3	7·9	7·1	6·9	6·6	7·1	9·0	12·3	15·3	16·1	15·1	13·9	12·9	11·3	10·3	10·1	10·2	8·9	8·7	9·1	10·1	
7*	9·3	9·1	8·9	8·3	7·3	6·1	5·6	5·9	6·5	7·6	9·1	10·8	12·1	12·3	11·9	11·6	11·2	10·6	10·2	10·1	10·0	10·2	9·9	9·3	9·3	
8	9·1	9·1	8·9	8·6	7·6	6·7	6·1	5·9	6·7	8·1	10·3	12·6	15·0	15·9	15·3	13·6	12·9	12·1	11·2	11·9	12·1	9·5	7·6	9·3	10·2	
9	8·6	8·8	10·2	10·1	5·9	4·9	3·3	4·9	7·0	10·9	12·6	13·3	16·2	17·1	15·9	15·1	13·9	10·9	5·5	6·6	9·7	9·3	9·3	8·9	9·9	
10	9·3	9·6	11·3	9·6	7·9	6·1	5·1	4·1	5·2	7·6	8·9	9·3	10·9	13·1	14·4	14·1	13·1	11·9	10·9	10·3	10·1	9·9	10·2	10·1	9·7	
11*	9·5	9·1	8·8	8·5	7·9	6·9	6·3	5·5	5·3	6·5	9·1	12·9	14·6	14·3	13·2	12·1	11·8	10·9	10·1	9·9	10·2	10·1	9·9	9·3	9·7	
12	9·6	9·1	8·9	8·3	7·1	6·4	5·9	5·9	6·8	8·9	12·0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
13**	—	—	—	—	—	—	—	—	—	—	—	12·9	13·9	14·5	15·6	15·3	16·1	16·5	14·1	12·5	7·3	4·3	4·0	6·6	—	
14**	10·6	8·7	3·6	6·3	3·9	9·6	10·1	7·9	9·1	11·7	12·2	12·6	14·3	15·1	12·9	13·1	12·9	12·3	11·1	9·1	9·2	6·3	5·9	10·1	9·9	
15**	11·1	8·3	8·1	3·9	7·9	7·3	4·3	6·1	7·9	9·0	11·6	15·1	17·9	18·3	19·1	16·6	14·1	7·1	9·6	7·9	6·3	9·3	9·9	3·1	10·1	
16	5·7	10·6	6·4	4·3	4·9	5·9	6·3	6·3	7·2	9·1	10·8	15·1	16·1	15·3	14·0	12·3	10·6	9·7	9·1	6·7	7·5	7·9	9·3	9·3	9·2	
17	11·1	11·6	9·9	8·9	7·6	6·1	5·3	7·3	7·3	8·2	11·3	14·6	17·3	16·9	15·1	12·6	10·9	9·9	9·3	9·1	8·9	8·6	8·8	7·7	10·2	
18	4·3	6·3	8·9	8·3	9·1	6·8	5·6	5·2	5·1	7·1	9·1	13·1	15·1	15·2	15·0	14·9	13·2	11·6	9·3	8·5	8·3	8·9	8·1	8·6	9·4	
19	8·9	8·3	8·9	8·3	8·6	6·5	6·3	6·1	6·5	7·3	10·4	13·1	15·3	15·9	16·1	14·1	13·3	12·1	11·3	10·9	10·3	9·9	9·7	9·6	10·4	
20	9·6	9·5	8·6	8·2	7·1	5·7	4·6	5·1	6·3	8·9	11·6	14·6	15·9	15·3	14·7	12·6	11·5	11·3	11·3	10·9	10·3	9·1	10·6	10·5	10·2	
21	10·1	9·9	8·6	6·9	6·1	5·2	4·6	4·9	6·6	10·1	12·9	13·6	16·1	16·6	15·6	13·2	11·6	10·6	10·3	9·6	9·3	10·9	9·3	9·3	10·1	
22*	8·9	9·5	9·1	8·3	7·4	6·6	6·6	6·8	7·1	9·1	10·2	13·9	14·9	15·3	14·3	12·3	10·3	10·1	10·6	10·6	10·4	10·5	10·1	10·2	10·1	
23*	9·1	8·9	8·1	8·7	8·2	8·1	6·1	5·1	6·6	8·1	10·8	12·6	13·9	14·3	14·3	14·1	13·3	13·3	12·5	12·1	11·8	11·2	9·1	8·9	10·4	
24	8·9	7·9	7·1	7·1	6·3	5·1	4·9	5·9	7·6	9·5	10·9	11·9	12·4	13·9	14·1	13·9	13·6	13·1	12·7	11·1	10·8	10·3	9·6	9·1	9·9	
25	8·1	7·2	8·3	8·3	6·3	7·9	5·5	4·6	6·6	8·3	10·1	12·6	13·9	14·1	13·6	13·4	13·1	12·4	12·1	10·9	9·9	9·2	9·1	8·3	9·8	
26	8·1	7·7	9·1	8·2	6·3	4·6	5·6	6·3	8·1	11·9	13·2	14·1	15·3	15·1	13·2	11·9	11·6	11·3	11·3	11·1	10·6	9·9	10·1	7·9	10·1	
27	8·9	8·1	7·1	10·3	11·9	7·0	6·6	9·3	9·9	12·2	14·1	16·3	16·3	15·6	14·2	11·7	10·6	10·2	10·6	11·5	11·1	10·9	10·9	9·7	11·0	
28**	9·1	7·9	8·1	8·0	5·9	2·9	3·2	4·1	6·1	9·3	14·2	18·6	18·6	18·1	18·4	18·1	15·3	12·2	9·8	7·6	6·9	11·9	13·3	11·6	10·8	
29	9·3	8·2	9·1	12·0	8·8	7·1	7·3	8·6	7·1	8·0	13·1	15·3	15·3	15·1	13·5	12·3	10·9	9·9	8·1	9·1	9·2	8·1	8·6	7·5	10·1	
30	8·6	8·4	8·1	7·3	6·3	6·0	5·1	5·4	5·6	9·7	11·9	14·9	14·9	14·3	13·7	12·6	11·0	10·6	10·4	10·2	10·1	9·5	9·6	9·5	9·7	
31	9·3	8·3	8·1	8·3	9·1	7·2	7·1	7·3	7·6	9·3	11·6	13·9	14·1	13·9	13·3	12·9	12·2	11·9	10·6	10·1	10·0	9·9	9·6	9·8	10·2	
Mean	9·1	9·0	8·2	8·3	7·5	6·4	5·9	6·2	7·0	8·9	11·3	13·8	15·3	15·7	14·8	13·5	12·4	11·3	10·4	9·7	9·5	9·5	9·4	9·1	10·1	
Mean*	9·2	9·2	8·7	8·5	7·8	7·1	6·3	6·1	6·4	7·7	9·6	12·5	14·2	14·5	13·7	12·8	11·8	11·2	10·7	10·6	10·5	10·2	9·5	9·4	9·9	
Mean**	10·0	8·4	5·6	8·1	6·8	5·9	5·9	6·8	8·8	10·2	13·0	16·7	17·9	17·9	17·1	15·4	13·7	10·8	10·5	7·4	7·7	9·4	9·9	8·4	10·5	
June.													14° + Tabular Quantities.													Mean.
	′	′	′	′	′	′	′	′	′	′	′	′		′	′	′	′	′	′	′	′	′	′	′	′	′
1	9·3	8·6	8·5	8·3	7·3	5·9	5·1	4·6	4·5	6·9	9·1	13·1	15·3	17·1	16·9	15·5	12·9	11·7	10·9	8·6	9·9	10·6	10·1	9·7	10·0	
2*	9·3	9·1	8·6	8·1	6·3	5·9	3·6	3·1	4·9	8·9	11·9	14·6	17·4	19·1	18·4	15·6	12·2	10·3	9·3	9·1	9·9	9·1	9·1	9·8	10·1	
3	9·3	9·9	9·2	8·2	6·1	3·4	3·1	2·6	3·6	5·9	8·3	12·1	15·5	15·6	15·3	14·9	12·9	10·9	9·6	8·7	9·1	9·5	9·3	9·3	9·3	
4**	5·3	6·3	6·3	7·3	5·9	4·9	3·1	0·6	1·9	7·1	8·3	12·9	16·3	16·6	16·3	15·3	14·3	12·2	9·0	8·3	8·9	9·6	9·6	9·4	9·0	
5	9·9	9·6	9·1	9·3	7·1	4·1	5·1	6·2	5·3	6·9	8·1	8·6	12·3	14·3	15·6	14·9	12·7	11·3	10·1	10·2	10·1	10·3	10·6	10·9	9·7	
6	9·3	9·1	8·9	7·3	6·6	4·6	6·6	7·3	7·2	7·1	9·9	12·6	15·1	15·9	15·3	13·9	12·1	10·9	8·5	9·6	9·9	8·9	9·6	9·3	9·8	
7	9·1	8·6	8·7	8·5	6·6	5·1	3·6	3·1	3·8	6·1	8·1	10·9	13·9	14·3	13·3	13·1	12·1	11·9	10·9	10·6	11·1	10·7	10·1	9·6	9·3	
8*	9·1	8·6	8·7	9·1	6·9	5·6	5·6	5·6	6·2	7·1	8·9	12·1	14·3	15·6	15·9	14·6	13·3	11·9	10·1	9·3	9·1	8·9	9·1	9·2	9·8	
9	8·9	8·3	7·6	6·9	6·1	5·7	6·1	3·5	2·6	4·9	8·1	10·9	11·3	12·3	12·5	12·9	14·1	13·9	13·6	11 3	10·9	10·8	9·6	9·1	9·2	
10**	7·6	5·3	− 0·1	0·3	2·1	3·2	2·9	2·9	9·2	11·9	10·1	12·9	16·2	16·3	17·1	12·7	12·9	9·4	4·6	4·9	2·6	3·3	3·1	8·9	7·5	
11**	10·9	7·5	6·1	6·6	6·8	7·1	5·1	7·2	7·6	8·0	8·6	14·5	15·3	15·3	14·6	13·9	13·6	8·9	9·1	9·9	8·1	8·3	8·9	8·9	9·6	
12	10·1	10·9	9·0	6·6	5·1	4·6	4·9	4·1	4·3	6·1	8·3	11·7	14·1	14·3	14·1	12·6	11·5	11·3	10·2	8·9	7·9	9·1	9·1	8·1	8·9	
13	7·9	7·6	8·3	8·9	5·9	4·1	3·3	3·1	3·6	5·3	7·1	7·4	11·9	14·6	14·3	14·1	12·3	11·3	10·9	10·2	9·9	9·3	9·1	7·9	8·7	
14*	8·6	8·2	7·6	7·9	5·5	4·1	4·3	4·9	6·1	7·2	10·1	13·6	15·9	16·3	15·3	13·6	11·9	10·3	8·9	8·6	9·0	9·1	8·9	8·3	9·4	
15	7·9	7·6	7·2	7·1	6·2	5·1	3·3	2·1	2·1	4·3	7·6	11·8	13·8	14·6	14·6	14·1	12·7	11·3	10·7	9·6	9·2	9·1	9·2	8·9	8·7	
16	8·6	8·4	7·9	7·3	5·9	5·1	4·9	4·6	6·1	8·2	10·6	12·1	13·2	14·6	14·9	13·1	11·9	10·6	10·5	10·3	10·1	9·9	9·6	8·9	9·5	
17	9·1	8·8	7·9	7·9	6·6	5·8	4·6	4·1	4·1	5·5	7·3	11·1	13·3	13·9	14·6	13·9	13·6	10·9	10·3	9·9	10·1	9·9	9·6	7·1	9·2	
18*	7·9	6·9	7·6	6·9	6·1	4·9	3·3	2·3	5·1	4·9	6·2	8·6	11·9	15·1	15·9	15·3	14·1	10·9	9·9	9·3	9·6	8·3	8·9	9·1	8·7	
19	9·1	9·1	8·9	7·9	6·9	5·9	4·1	3·5	3·1	4·1	7·1	11·3	13·9	16·1	17·9	17·3	15·6	15·1	13·5	10·9	10·3	10·1	8·2	7·3	9·9	
20	7·6	8·9	7·6	5·9	6·3	7·3	8·1	5·1	5·1	6·8	8·5	9·1	12·5	15·1	16·6	16·6	15·1	13·8	11·9	10·2	9·1	9·3	9·3	9·1	9·8	
21	8·6	6·9	7·3	7·6	6·3	5·2	4·3	4·6	5·1	5·4	6·6	12·6	14·9	16·1	15·9	15·6	15·1	12·9	10·6	9·1	9·0	9·5	9·3	8·7	9·5	
22*	7·9	6·3	5·9	6·1	4·9	4·1	4·1	4·3	5·1	7·3	10·1	13·6	15·8	17·3	17·6	15·9	13·9	12·1	10·9	10·1	9·3	9·1	8·9	8·1	9·5	
23	8·6	7·3	6·1	2·1	3·3	3·9	3·9	3·6	5·2	6·1	8·6	10·5	12·9	13·9	13·9	12·6	12·3	11·3	10·1	9·9	8·9	9·6	9·1	8·3	8·3	
24	7·6	6·9	5·1	5·6	4·9	2·2	2·1	3·4	4·6	5·8	7·6	12·2	13·9	16·1	17·3	16·3	12·1	9·9	8·9	8·9	8·8	8·1	8·6	8·9	8·6	
25	10·1	9·6	8·9	8·3	6·9	5·1	4·6	4·7	5·1	6·6	9·1	11·9	14·3	14·6	13·2	11·3	10·9	10·2	10·1	10·1	9·2	6·7	8·1	9·0	9·1	
26	8·1	6·8	5·1	5·9	5·6	4·3	4·1	5·5	7·3	9·1	11·3	13·3	14·9	15·1	14·3	13·1	11·9	10·0	10·1	10·3	10·1	10·2	9·9	9·1	9·4	
27	8·6	7·9	7·3	7·6	7·3	4·3	3·1	3·3	5·6	7·9	10·3	12·6	14·1	12·9	12·1	10·9	10·6	10·1	9·9	10·2	10·1	9·3	8·3	8·6	8·9	
28**	8·9	8·2	7·8	6·9	5·6	3·9	4·1	4·6	5·5	7·0	9·9	14·1	16·9	17·6	16·7	15·6	14·3	12·9	11·1	9·9	10·8	10·9	10·3	9·9	10·1	
29**	8·6	8·0	6·1	4·3	4·1	3·3	3·3	3·4	4·1	5·6	7·9	10·3	12·3	13·5	14·6	13·2	11·9	9·6	8·2	8·1	7·9	9·0	9·3	7·6	8·1	
30	9·3	6·4	5·9	6·1	5·8	5·4	4·3	7·8	7·9	8·7	10·6	14·3	16·3	16·2	16·3	16·0	13·6	12·6	11·7	9·5	9·3	9·9	8·1	6·9	9·9	
Mean	8·7	8·1	7·2	6·9	5·9	4·8	4·3	4·2	5·0	6·8	8·8	11·9	14·3	15·3	15·4	14·3	12·9	11·3	10·1	9·5	9·3	9·2	9·0	8·8	9·3	
Mean*	8·6	7·8	7·7	7·6	6·0	5·0	4·1	4·0	5·5	7·1	9·5	12·5	15·1	16·7	16·7	15·0	13·1	11·1	9·8	9·3	9·4	8·9	9·1	8·8	9·5	
Mean**	8·3	7·1	5·2	5·1	4·9	4·5	3·7	3·8	5·7	8·0	9·0	13·0	15·4	15·9	15·8	14·1	13·4	10·6	8·4	8·3	7·7	8·2	8·2	9·0	8·9	

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	8·6	7·9	7·3	7·1	8·9	7·9	6·3	4·1	3·1	4·9	7·1	9·6	12·0	14·6	14·3	12·9	11·3	10·3	9·6	9·1	8·9	9·1	8·9	7·3	8·8	
2*	7·9	7·1	7·1	6·9	5·9	4·9	4·9	5·1	5·0	7·1	9·4	14·1	16·6	16·1	15·9	15·3	12·4	10·6	9·9	9·3	8·9	8·6	8·7	8·3	9·4	
3*	8·9	8·6	8·3	7·9	6·3	5·3	5·1	4·1	4·4	6·6	9·1	12·9	15·6	15·9	15·9	13·9	11·8	10·1	9·4	9·1	8·9	7·9	7·1	7·9	9·2	
4	8·1	7·9	7·6	6·9	5·3	2·9	2·2	2·1	3·7	7·3	10·9	15·1	17·3	17·6	15·5	13·6	11·6	10·9	9·9	8·9	9·3	9·6	9·0	7·9	9·2	
5	7·3	7·2	7·1	6·6	5·3	4·6	5·3	5·6	5·9	5·9	7·2	9·6	12·2	13·6	13·9	13·3	12·9	11·3	10·8	10·6	10·2	9·6	9·3	8·6	8·9	
6	8·6	8·3	8·3	9·1	5·8	5·1	6·0	6·9	6·2	8·1	11·1	12·9	14·3	15·7	16·6	16·1	13·3	12·6	12·0	9·9	10·3	7·1	7·1	2·6	9·7	
7**	0·6	5·9	4·6	3·6	3·6	2·6	2·9	2·3	2·3	6·6	8·3	8·6	12·3	14·6	15·3	15·3	15·4	15·1	13·1	13·6	12·3	9·6	5·1	4·6	8·3	
8	6·3	6·9	5·6	4·3	4·9	2·6	3·6	7·9	7·3	6·6	8·9	11·1	11·3	12·6	14·9	13·9	12·6	12·2	11·3	10·3	9·3	8·3	7·6	7·1	8·6	
9	6·9	8·6	10·2	7·1	5·1	3·0	2·6	2·1	2·9	6·1	8·7	12·3	13·6	14·5	15·3	14·9	13·1	11·5	10·1	8·7	8·1	8·3	7·9	8·6	8·8	
10	7·6	7·2	7·1	6·8	5·9	4·6	4·3	4·1	4·2	4·1	6·1	9·3	11·1	12·9	13·7	14·6	12·9	11·6	10·9	10·0	9·7	9·3	8·3	8·4	8·5	
11	8·1	7·6	7·9	7·6	6·3	4·9	4·1	3·1	3·2	4·6	5·9	10·6	14·1	15·9	16·1	14·9	12·6	10·9	10·1	10·3	10·5	10·6	9·9	7·3	9·0	
12**	5·3	5·9	7·1	6·7	7·7	5·1	2·6	3·7	7·6	10·2	10·6	13·1	14·2	16·6	16·3	14·1	11·3	9·6	9·3	8·1	6·2	7·1	8·9	9·2	8·9	
13	9·1	9·6	9·3	7·2	5·1	3·8	3·6	4·1	4·5	5·6	8·9	11·1	13·5	14·6	14·6	12·9	11·3	10·3	9·3	9·1	9·3	9·1	8·6	8·5	8·9	
14	8·3	7·1	6·7	6·4	4·6	3·5	3·1	3·4	4·1	5·3	7·8	10·6	11·8	13·1	14·3	12·6	10·3	9·3	9·3	8·9	6·9	8·2	7·1	7·9	7·9	
15**	7·9	8·9	7·9	7·9	5·3	5·3	5·1	4·2	4·3	7·5	11·1	14·1	15·1	18·1	17·3	17·4	17·8	17·6	11·9	9·8	− 1·9	1·3	1·6	8·4	9·3	
16**	5·1	3·1	1·6	2·5	1·3	− 0·1	1·1	1·7	3·2	8·1	11·2	13·1	13·9	13·6	12·9	12·3	11·3	10·3	10·3	10·1	9·6	8·9	7·9	7·8	7·5	
17	7·6	7·1	8·4	8·2	6·8	4·1	4·3	4·1	5·5	6·7	8·6	12·1	15·1	14·9	13·3	13·3	12·6	11·7	10·6	10·1	8·9	7·9	6·9	6·9	9·0	
18	6·9	6·9	6·6	5·9	4·6	2·7	2·1	2·5	4·9	7·6	10·9	14·9	18·6	19·6	19·6	16·9	14·9	12·1	9·3	7·6	7·3	7·8	8·9	8·1	9·4	
19	5·9	6·6	7·5	7·1	5·9	4·6	3·9	4·3	5·1	6·8	8·1	11·1	13·9	15·3	16·3	15·2	13·3	11·3	10·6	7·9	8·6	8·9	9·1	7·3	8·9	
20	6·9	5·3	4·1	4·9	8·2	6·1	2·9	3·3	4·6	5·4	6·5	8·6	10·4	12·6	13·1	11·9	11·4	10·6	8·9	8·6	8·6	8·0	7·9	7·3	7·7	
21*	7·1	6·6	6·3	6·3	6·6	5·1	5·1	5·1	5·6	7·9	9·5	12·6	13·4	15·3	15·6	14·1	12·3	10·9	9·9	9·6	8·5	8·3	7·9	7·9	9·1	
22	7·3	6·6	5·9	5·6	5·6	3·9	3·1	4·1	5·1	6·9	8·6	11·6	13·9	15·1	15·9	15·8	14·2	13·6	10·3	8·6	9·1	8·9	8·3	7·1	8·9	
23**	9·6	6·3	5·6	6·3	4·3	4·3	3·6	2·6	3·3	4·1	7·2	12·1	15·0	16·1	18·1	17·4	15·6	13·1	11·3	9·1	9·3	8·9	8·9	8·1	9·2	
24	7·9	8·1	9·9	7·6	5·9	5·6	5·3	5·1	4·3	6·3	7·6	10·3	12·8	12·1	12·6	12·5	11·6	10·2	9·1	8·6	8·7	7·9	5·6	6·5	8·4	
25	5·9	7·1	6·8	8·1	7·8	7·1	3·5	2·3	3·1	5·9	7·9	10·1	11·9	13·6	13·1	11·7	9·6	6·9	8·6	8·3	8·9	8·9	8·6	7·3	8·0	
26	9·3	10·1	5·3	5·1	5·6	5·3	8·2	9·1	8·3	9·1	10·9	12·6	12·7	13·1	13·6	12·9	11·9	9·6	7·9	7·9	8·2	8·6	7·6	5·8	9·1	
27	7·3	7·3	7·2	6·1	4·9	4·1	4·4	4·1	4·7	6·6	8·8	11·9	13·9	13·6	11·9	10·1	9·1	8·5	8·3	8·3	8·5	9·1	7·6	7·9	8·1	
28*	7·3	6·9	7·1	7·3	6·1	4·1	3·1	3·6	4·9	6·6	7·9	11·1	12·6	12·3	12·1	11·5	10·3	9·1	7·9	7·6	8·2	8·1	8·2	8·6	8·0	
29*	8·9	7·3	6·3	6·1	5·2	3·9	3·6	3·6	4·5	7·1	10·6	14·2	15·1	14·6	13·6	12·1	10·2	8·9	8·8	8·1	8·6	8·4	8·5	7·7	8·6	
30	7·1	5·9	5·8	5·1	3·7	2·1	2·3	1·9	4·1	7·9	11·3	14·6	16·1	15·6	13·6	11·7	9·4	8·3	7·6	8·3	8·5	8·3	7·3	6·9	8·1	
31	6·9	5·6	4·5	4·1	3·9	4·1	3·6	4·3	5·6	7·9	10·6	13·5	15·3	13·3	12·3	10·6	8·9	8·1	6·9	7·3	7·6	7·8	7·6	7·3	7·8	
Mean	7·3	7·1	6·8	6·4	5·5	4·3	3·9	4·0	4·7	6·7	8·9	11·9	13·9	14·7	14·8	13·7	12·1	10·8	9·8	9·1	8·5	8·3	7·8	7·5	8·7	
Mean*	8·0	7·3	7·0	6·9	6·0	4·6	4·4	4·3	5·0	7·1	9·4	13·0	14·7	14·8	14·6	13·4	11·4	9·9	9·2	8·7	8·7	8·3	8·1	8·1	8·9	
Mean**	5·7	6·0	5·4	5·4	4·4	3·4	3·1	2·8	4·1	7·3	9·6	12·2	14·1	15·8	16·0	15·3	14·2	13·1	11·1	10·1	7·1	7·2	6·5	7·6	8·6	
August.													14° + Tabular Quantities.													Mean.
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	5·6	5·9	6·0	7·6	6·7	4·3	2·9	3·1	3·6	5·3	9·1	10·6	13·0	13·3	13·1	11·9	10·9	9·1	8·3	8·0	8·3	5·9	5·1	5·5	7·6	
2*	6·5	6·8	6·2	6·1	5·5	5·3	4·1	4·6	4·3	5·5	8·3	11·1	12·9	14·6	14·2	11·9	10·6	9·5	9·1	8·9	8·3	8·1	7·3	6·9	8·2	
3	6·6	6·4	6·3	6·1	5·9	5·1	4·3	4·6	5·8	7·1	8·9	11·1	13·2	15·1	15·6	14·5	11·6	9·9	8·9	9·3	7·4	6·9	5·1	6·3	8·4	
4	6·1	6·9	7·3	3·1	− 0·1	1·1	0·9	4·6	7·1	6·7	9·1	11·1	13·9	15·6	16·3	13·9	15·1	11·9	9·1	2·2	6·9	6·7	3·3	6·1	7·7	
5	6·8	6·1	7·9	9·3	6·6	4·1	3·6	4·6	5·1	6·9	8·4	11·6	14·1	15·1	14·5	13·2	10·7	9·1	6·3	7·1	8·1	7·9	7·9	7·7	8·5	
6*	7·1	6·7	6·6	6·1	4·8	4·1	3·6	3·6	5·1	7·8	8·6	10·9	12·6	13·3	12·3	10·9	9·6	8·3	7·3	7·8	7·9	8·2	7·6	7·3	7·8	
7	7·2	8·5	8·3	5·3	4·1	3·3	3·9	3·6	3·4	4·9	9·1	12·3	15·6	15·6	13·9	12·1	11·2	10·6	10·1	9·9	9·8	8·9	7·9	6·6	8·6	
8**	5·8	4·1	2·3	3·6	4·4	5·3	7·6	6·1	6·2	8·1	10·5	11·1	11·1	10·9	10·9	10·3	9·1	8·7	8·1	7·1	8·2	5·1	4·1	6·9	7·3	
9**	6·7	7·8	9·1	7·9	6·1	3·1	3·5	4·1	3·2	6·3	9·1	13·3	15·1	16·3	13·3	11·1	9·9	7·0	7·1	8·6	7·9	7·9	7·1	5·9	8·2	
10	5·1	8·9	7·6	7·3	4·6	6·3	6·2	5·6	5·9	6·9	8·2	10·1	11·8	12·3	12·9	11·9	9·3	8·2	8·3	4·9	8·0	7·9	7·1	5·3	8·0	
11	5·9	6·3	7·9	7·3	6·9	5·1	3·6	3·1	3·9	6·6	8·9	10·6	12·3	13·3	11·9	10·7	9·3	9·9	9·8	10·1	8·9	8·8	8·3	7·6	8·2	
12**	7·6	12·5	1·9	0·9	2·3	1·1	1·2	2·1	3·6	6·1	10·8	12·3	13·6	12·9	12·2	11·3	10·1	9·3	9·6	0·1	− 2·4	− 0·1	− 1·7	4·1	5·9	
13	4·6	6·1	5·3	4·1	3·9	2·9	2·6	2·3	3·9	6·9	10·9	14·7	15·9	14·6	13·3	10·1	7·9	7·6	7·4	8·1	7·7	6·1	1·6	5·3	7·2	
14	6·1	7·9	7·1	3·1	2·8	2·1	3·6	2·9	5·2	6·1	9·9	15·1	16·1	19·3	13·6	13·3	11·9	9·7	6·1	4·2	0·9	3·3	5·3	7·0	7·6	
15	10·1	8·6	5·9	5·1	3·9	3·6	4·5	5·1	5·3	8·1	10·6	11·9	13·1	13·1	11·5	10·2	8·9	9·1	8·7	8·2	5·3	6·3	7·1	8·9	8·1	
16	7·6	4·7	5·9	7·1	6·3	4·1	2·1	1·3	2·3	4·6	7·4	10·5	14·1	14·3	12·1	9·9	9·3	7·4	7·5	7·6	7·1	7·3	6·9	6·9	7·2	
17*	6·6	6·1	5·9	5·9	5·6	4·1	3·7	3·6	4·8	6·9	8·9	11·1	13·1	14·1	12·9	11·4	9·9	8·8	7·9	7·3	7·7	7·3	7·1	6·8	7·8	
18	6·3	6·1	4·9	5·1	4·5	3·9	3·7	3·6	3·3	5·1	8·3	11·1	14·9	16·6	16·8	13·1	10·9	10·6	11·1	8·9	8·2	8·1	3·6	− 0·1	7·9	
19	− 1·9	0·6	9·9	6·6	4·9	3·9	4·0	3·9	4·5	6·6	8·9	12·2	13·1	15·1	14·1	11·7	10·3	8·9	7·3	7·3	7·6	6·9	6·1	6·3	7·4	
20	6·3	6·6	6·9	7·1	6·2	4·6	2·9	1·6	1·1	2·9	6·1	11·5	15·1	15·6	15·1	13·0	10·9	9·0	7·6	7·9	7·8	7·6	6·6	5·7	7·7	
21**	2·3	0·9	0·6	0·1	2·9	2·1	1·2	2·3	5·1	5·5	9·3	12·9	16·6	17·9	17·6	14·4	13·1	9·1	7·3	5·1	4·3	2·6	0·9	3·6	6·6	
22**	4·3	− 2·9	− 2·4	7·3	7·9	2·6	0·3	− 0·4	3·3	7·6	11·1	11·3	13·3	14·1	12·3	10·6	8·7	7·1	7·5	5·1	7·3	7·3	5·6	7·4	6·5	
23	5·9	2·1	2·1	3·4	3·6	4·2	4·6	6·6	6·9	6·3	8·1	10·9	12·6	12·6	11·1	9·8	8·2	7·6	7·3	6·1	5·9	3·1	4·8	5·6	6·6	
24	5·9	4·3	4·1	6·3	7·1	4·3	3·1	3·6	4·1	5·7	9·3	12·6	14·1	13·3	11·6	9·5	8·9	7·6	7·7	7·8	7·3	7·9	7·6	6·7	7·5	
25	7·1	6·3	6·1	6·2	8·2	5·6	4·1	4·1	5·9	7·9	10·1	12·3	13·1	12·3	10·6	9·1	7·9	7·6	9·1	8·9	9·1	8·6	7·5	6·3	8·1	
26	6·1	5·5	5·1	4·9	4·1	4·0	3·6	3·6	4·9	6·1	7·6	11·9	13·6	13·3	12·1	10·9	9·7	8·6	8·9	8·6	7·8	7·1	6·2	4·9	7·5	
27*	5·1	4·3	4·1	4·6	4·3	3·9	3·1	3·1	4·2	6·1	9·7	12·1	14·1	13·9	11·6	9·7	8·3	7·6	6·9	6·8	6·3	6·9	6·1	5·9	7·0	
28*	5·8	5·6	5·3	5·2	4·6	4·3	3·1	4·1	4·5	6·9	9·5	12·2	13·6	13·6	12·1	9·4	8·0	7·1	7·2	7·6	7·3	7·3	6·9	6·8	7·4	
29	6·4	6·6	6·5	6·4	6·2	5·1	3·6	3·6	3·8	6·1	9·8	12·7	13·6	11·9	11·6	8·8	8·3	6·6	7·0	7·6	7·9	7·7	6·6	6·5	7·5	
30	6·3	5·7	5·5	0·6	1·1	1·9	2·5	4·1	6·4	8·3	9·9	15·1	13·6	14·3	12·1	10·1	7·9	5·3	6·1	6·3	6·8	4·5	3·3	6·6	6·9	
31	5·3	4·9	4·8	4·1	3·4	2·3	3·1	2·3	2·6	3·9	8·1	12·3	13·9	14·1	12·3	10·6	9·8	8·6	8·6	7·9	6·9	5·1	3·9	7·6	6·9	
Mean	5·9	5·7	5·5	5·3	4·8	3·8	3·4	3·6	4·5	6·3	9·1	12·0	13·8	14·3	13·0	11·3	9·8	8·6	8·0	7·1	7·0	6·6	5·6	6·2	7·5	
Mean*	6·2	5·8	5·6	5·6	4·9	4·3	3·5	3·8	4·5	6·6	9·0	11·5	13·3	13·9	12·6	10·7	9·3	8·3	7·7	7·6	7·5	7·5	7·0	6·7	7·6	
Mean**	5·3	4·7	2·3	4·0	4·8	2·8	2·7	2·8	4·2	6·7	10·1	12·2	13·9	14·4	12·2	11·6	10.2	8·2	7·9	5·2	5·3	4·6	3·2	5·7	6·9	

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

September. 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	5·1	4·6	4·1	3·3	2·9	6·1	6·4	4·3	4·5	6·1	9·6	13·9	16·1	15·6	15·4	13·3	11·9	9·6	9·0	8·6	7·4	5·8	3·1	2·1	7·9	
2	4·1	4·9	5·1	4·9	4·9	4·6	3·9	3·6	4·7	6·3	8·6	11·1	12·9	13·1	11·8	10·1	8·9	8·6	8·2	8·1	8·1	6·4	2·1	3·9	7·0	
3**	5·1	4·6	4·9	5·1	4·6	5·3	8·6	4·6	4·9	8·2	10·6	15·1	13·2	15·1	16·3	10·6	8·3	7·3	0·6	1·6	− 1·9	1·1	2·1	3·2	6·6	
4**	6·6	1·1	3·1	3·3	3·9	10·1	9·1	7·7	5·9	7·6	9·9	13·1	16·3	15·1	14·9	11·3	10·9	3·1	4·6	- 1·4	1·3	5·5	8·1	3·9	7·3	
5	4·1	7·6	7·3	7·2	3·1	4·6	6·8	6·2	3·1	5·6	7·9	9·1	11·5	11·6	10·7	9·9	9·1	8·2	6·9	5·1	5·5	6·6	7·6	6·3	7·2	
6*	4·3	5·2	6·1	5·4	4·9	4·1	3·6	2·3	2·3	3·6	6·1	9·2	11·9	12·1	11·3	9·6	8·5	7·2	6·6	7·1	7·2	7·6	7·1	6·9	6·7	
7	6·3	6·1	5·1	5·3	5·1	4·9	3·5	3·1	3·2	4·6	8·8	10·6	12·3	12·3	10·9	9·3	8·1	7·9	7·7	8·6	8·0	8·3	4·3	3·2	7·0	
8	4·1	− 4·7	3·1	0·6	2·3	2·9	3·2	2·9	3·0	5·7	10·1	12·0	16·3	18·1	16·7	13·6	12·0	9·6	8·9	7·6	8·1	6·2	0·1	− 4·1	6·6	
9	0·1	5·1	6·6	3·2	1·6	2·1	2·3	3·6	5·1	6·3	10·1	10·3	10·9	12·1	10·9	11·6	8·1	8·1	4·6	5·1	5·2	6·6	6·4	6·1	6·3	
10	10·9	5·7	4·1	5·4	5·1	5·1	5·6	5·9	5·1	6·4	9·1	9·9	11·1	10·6	9·3	8·6	8·3	5·9	5·2	4·1	3·3	3·6	2·3	2·3	6·4	
11	3·3	3·6	4·9	5·0	4·9	4·6	3·6	3·3	4·3	6·4	9·1	12·5	14·1	13·6	10·4	7·1	6·3	7·6	7·5	6·9	4·3	3·6	4·3	6·1	6·6	
12*	5·3	5·6	5·9	6·4	5·1	4·3	3·9	3·3	3·5	5·6	8·2	11·1	11·9	11·3	10·3	8·9	8·2	7·6	7·7	7·5	7·3	5·3	5·3	4·3	6·8	
13	4·9	5·3	5·3	5·2	5·1	4·9	4·6	4·3	4·6	5·9	7·6	10·7	13·1	13·1	11·2	9·6	2·5	6·3	8·1	6·4	5·1	3·3	5·6	5·9	6·6	
14	6·1	6·2	6·3	6·1	6·2	5·9	5·3	4·1	3·2	4·6	7·3	9·6	11·5	12·6	13·1	11·8	10·1	8·3	7·3	2·1	3·3	5·1	1·3	3·5	6·7	
15	3·7	6·0	7·4	2·6	5·1	4·8	4·6	4·1	4·9	7·6	8·9	11·1	14·1	10·9	13·1	12·6	10·9	9·1	5·6	7·3	6·4	6·1	6·1	6·9	7·5	
16	8·1	7·8	5·6	5·0	5·9	6·9	7·1	6·9	6·3	6·6	7·9	9·6	11·6	11·6	11·8	10·1	8·9	8·3	7·9	7·7	6·6	2·5	− 3·4	− 1·3	6·9	
17	3·6	6·9	5·8	4·2	3·1	3·4	4·6	7·3	8·4	9·6	11·1	15·1	15·9	14·3	11·1	11·3	7·4	6·9	7·6	2·1	4·4	5·6	4·1	5·3	7·5	
18	4·5	4·6	4·9	4·8	5·0	5·1	4·9	4·6	4·6	6·1	8·8	11·6	12·6	11·3	9·9	4·1	6·1	7·5	7·9	6·9	5·6	6·9	6·3	5·3	6·7	
19	3·6	4·3	4·9	5·3	6·1	5·9	5·1	4·1	4·3	5·1	8·3	11·1	11·6	11·6	10·5	9·1	7·3	7·2	7·1	7·3	6·9	6·1	5·6	1·9	6·7	
20*	7·1	5·9	5·1	5·9	5·1	7·3	6·3	5·4	5·4	6·9	9·1	10·9	11·7	12·8	12·1	10·4	- 8·1	7·8	7·3	7·1	6·8	6·7	6·6	5·5	7·7	
21*	3·9	4·6	5·4	5·6	3·4	4·3	6·3	5·1	4·5	6·1	7·9	10·9	13·1	12·3	10·5	8·6	7·4	6·7	6·8	6·6	6·3	4·9	5·1	4·3	6·7	
22**	5·1	5·1	4·3	2·6	2·9	5·3	6·9	4·7	4·1	5·3	9·6	15·1	12·9	12·1	10·9	10·1	7·6	7·9	3·9	− 3·4	− 9·4	− 9·9	− 8·2	− 1·1	4·3	
23	0·9	1·6	0·9	3·1	2·6	2·1	2·9	2·9	3·6	5·3	7·3	9·3	10·9	10·9	9·1	8·3	7·9	7·3	7·9	7·3	7·1	6·9	5·9	4·1	5·7	
24	5·1	4·6	3·9	4·3	4·1	3·3	3·6	3·9	4·1	5·1	8·8	11·8	13·1	12·9	11·3	9·6	7·9	5·6	6·5	6·3	6·7	6·4	6·3	6·1	6·7	
25	5·3	5·3	5·3	4·9	4·9	4·8	4·1	3·5	2·9	3·9	5·6	7·9	9·9	10·1	9·7	8·9	8·3	7·5	7·6	7·1	7·2	6·6	6·3	6·1	6·4	
26*	5·9	5·3	5·1	5·3	5·2	5·1	4·8	3·6	2·6	3·1	5·3	8·1	10·9	11·3	10·9	9·6	9·0	8·8	8·1	7·6	7·5	4·2	4·9	5·1	6·5	
27	5·2	4·8	4·7	3·9	4·9	2·3	3·6	2·5	4·2	5·9	5·9	9·1	11·1	11·3	10·1	8·8	9·1	8·3	8·7	9·1	7·5	6·6	3·2	− 1·9	6·2	
28**	− 8·9	− 1·6	1·6	3·9	3·7	3·9	3·3	2·3	2·9	3·5	6·4	10·1	12·6	15·6	15·9	14·1	10·2	2·3	−12·1	−18·1	− 5·9	− 0·3	−11·4	− 8·7	1·9	
29**	− 9·8	−11·4	− 9·8	− 6·3	− 0·4	1·9	6·3	12·2	13·1	9·6	11·3	12·5	15·6	14·1	13·9	11·3	10·6	11·9	10·6	9·8	2·6	0·6	2·5	1·3	5·6	
30	− 4·4	− 2·7	3·1	− 2·5	2·1	4·9	3·1	3·3	3·9	6·2	8·1	12·2	13·6	12·6	10·6	9·4	8·6	8·3	8·1	6·4	7·3	5·9	1·9	2·8	5·5	
Mean	3·6	3·7	4·3	4·0	4·1	4·7	4·9	4·5	4·6	6·0	8·4	11·2	12·8	12·7	11·8	10·1	8·6	7·6	6·4	5·1	4·9	4·7	3·4	3·2	6·5	
Mean*	5·3	5·3	5·6	5·7	4·7	5·0	4·9	3·9	3·7	5·1	7·3	10·0	11·9	12·0	11·0	9·5	8·3	7·5	7·3	7·2	7·0	5·7	5·8	5·2	6·9	
Mean**	− 0·4	− 0·4	0·8	1·7	3·0	5·3	6·9	6·2	6·2	6·8	9·6	13·2	14·1	14·4	14·4	11·5	9·5	6·5	1·5	− 2·3	− 2·7	− 0·6	− 1·4	− 0·3	5·2	

October. 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**	2·3	0·9	− 1·1	− 0·9	0·6	2·1	4·3	3·9	4·3	6·1	8·6	10·9	11·6	10·9	11·6	10·1	13·3	1·6	3·1	3·3	4·7	2·6	2·1	− 7·4	4·6	
2	− 1·4	2·3	6·1	7·9	5·1	9·1	3·9	2·1	4·9	7·1	8·9	9·6	9·9	10·3	9·3	7·7	5·9	4·9	6·1	7·6	7·2	6·1	5·7	6·1	6·3	
3*	4·9	5·2	5·6	4·3	5·1	5·2	4·9	3·6	4·0	6·6	7·8	10·1	11·3	11·9	10·9	8·3	6·9	6·2	5·6	5·1	4·9	5·1	4·9	3·6	6·3	
4	2·9	3·1	3·4	2·9	3·9	6·1	6·9	5·9	6·6	7·3	11·1	12·1	12·6	12·3	13·9	10·9	8·1	6·1	6·9	6·1	5·1	5·2	4·6	2·6	6·9	
5	2·6	4·7	4·9	4·9	6·3	5·5	7·1	7·1	5·3	6·6	8·5	11·6	13·5	15·1	13·2	9·1	8·3	6·9	6·1	5·3	5·6	5·6	5·5	5·6	7·3	
6	5·1	4·9	4·7	4·9	4·5	5·1	5·9	5·6	4·9	5·1	6·7	10·1	12·2	11·3	12·6	11·1	7·9	7·1	7·3	5·9	4·6	0·1	− 1·9	0·6	6·1	
7	0·1	0·3	0·4	2·1	3·3	7·6	11·9	9·1	7·1	7·3	9·1	11·8	14·9	14·1	12·9	12·2	8·1	9·3	7·6	3·3	5·1	4·8	1·9	1·6	6·9	
8	1·6	3·9	4·8	7·6	4·8	4·1	2·9	2·9	2·6	4·3	7·6	9·9	11·1	11·3	11·0	9·6	7·9	6·5	4·1	4·5	5·6	5·9	5·9	6·3	6·1	
9	5·6	4·9	5·1	4·6	4·7	5·1	4·4	4·3	3·6	4·9	6·1	8·9	10·1	11·3	10·9	9·4	8·6	8·8	7·6	7·2	6·9	6·3	4·3	1·1	6·5	
10**	7·3	4·1	3·0	7·1	9·4	9·1	9·8	10·3	7·2	7·6	9·1	15·1	13·3	12·9	11·6	9·3	2·1	3·4	3·6	2·9	2·9	2·9	3·9	4·6	7·2	
11	5·6	5·4	5·3	5·6	5·6	5·2	4·9	4·1	3·9	4·3	7·6	9·6	11·9	11·6	10·6	9·1	7·6	5·2	4·9	3·9	5·1	4·9	4·1	4·6	6·3	
12	5·1	5·2	5·4	5·5	6·3	7·3	5·3	5·1	3·9	4·7	7·1	10·9	12·6	11·7	9·6	7·8	7·1	7·0	5·9	5·2	4·6	4·9	4·1	3·3	6·5	
13	5·1	5·6	4·9	4·3	4·6	5·1	4·9	4·1	3·3	4·1	6·1	9·8	10·6	10·9	9·3	7·9	6·9	6·3	5·9	5·6	5·1	4·9	5·1	4·9	6·1	
14*	5·1	5·3	5·2	5·1	4·9	4·9	4·3	3·1	2·1	3·2	6·1	9·0	10·9	11·3	9·9	8·4	7·1	7·3	7·3	7·4	6·3	5·1	4·5	3·6	6·1	
15	4·6	4·2	4·6	5·2	6·9	5·1	3·9	3·8	3·3	5·1	8·3	10·9	12·6	12·6	10·1	8·9	7·6	7·1	6·3	6·1	5·6	3·3	1·3	4·1	6·3	
16	5·1	5·5	6·1	5·9	5·1	5·1	4·8	4·1	3·8	4·6	6·6	9·9	12·1	12·6	11·1	9·3	8·1	7·3	7·1	3·7	1·1	− 0·9	1·1	3·9	6·0	
17	5·3	5·6	5·7	5·7	5·6	5·2	4·9	3·6	2·9	4·1	7·1	10·2	11·9	12·1	10·6	8·9	8·1	7·9	7·9	4·6	0·1	1·5	− 0·9	2·9	5·9	
18	3·6	4·9	4·6	4·9	5·3	4·9	5·1	3·9	2·1	4·1	6·3	10·3	12·1	11·5	10·3	8·2	6·9	6·3	6·6	5·3	3·9	4·1	4·3	3·8	6·0	
19	2·6	4·3	5·1	5·6	6·1	4·6	4·2	3·1	2·1	3·4	7·1	9·3	12·3	12·6	11·9	10·9	9·6	7·8	7·6	5·2	2·9	2·1	3·3	4·1	6·1	
20*	4·6	5·2	5·9	6·1	5·9	4·9	4·0	3·1	2·9	3·6	6·9	9·3	11·1	11·3	10·1	8·5	7·6	6·9	6·6	6·5	6·1	5·7	5·2	5·1	6·4	
21*	4·9	4·9	4·9	5·3	5·1	5·2	4·9	3·6	2·9	3·6	6·7	9·6	10·6	10·6	9·3	8·1	7·9	7·9	7·3	6·3	6·1	5·2	4·9	5·1	6·3	
22	5·3	5·3	5·1	6·1	5·0	4·3	3·9	3·4	2·3	2·9	5·1	9·6	11·3	12·3	11·3	9·6	8·3	6·9	5·6	5·3	5·6	0·9	− 1·9	3·1	5·7	
23	4·1	5·1	5·3	5·3	4·9	4·6	4·9	4·3	3·0	4·1	6·2	7·1	9·7	9·6	9·4	9·3	9·1	9·6	8·9	7·3	5·9	6·3	5·6	1·6	6·3	
24**	− 6·4	2·3	4·1	0·1	0·3	3·3	3·2	3·1	2·6	2·6	3·4	8·1	9·4	10·1	8·9	7·3	6·3	6·3	6·1	5·2	4·9	4·9	4·1	4·3	4·4	
25**	4·1	4·1	5·5	5·3	5·1	4·9	4·9	4·6	4·2	3·6	5·3	7·3	9·9	13·6	15·6	13·5	14·1	13·9	8·6	7·3	6·1	5·1	2·6	3·9	7·2	
26	2·9	3·6	4·7	4·9	4·6	4·5	4·3	4·1	3·9	5·2	5·9	8·1	9·1	8·7	8·3	7·6	7·1	10·3	9·9	7·9	5·6	4·3	4·4	2·6	5·6	
27**	2·6	1·9	6·1	4·3	2·0	3·1	4·5	4·3	4·6	5·0	6·9	9·7	9·6	10·6	8·8	8·2	− 5·9	0·3	6·6	3·2	4·6	4·3	4·1	4·5	4·7	
28	4·9	5·9	3·3	3·1	4·9	5·3	5·1	4·6	3·8	4·3	6·1	8·1	9·7	10·2	11·3	10·1	6·6	5·8	3·6	4·4	3·6	3·3	1·9	3·6	5·6	
29	4·3	3·6	4·1	3·6	3·6	4·1	4·4	4·6	3·6	4·8	7·1	10·2	12·6	11·9	10·8	4·7	7·6	6·3	6·1	4·9	4·1	4·1	3·9	4·1	5·8	
30*	4·8	4·6	4·8	5·1	5·3	5·1	4·8	4·6	3·5	3·3	5·6	7·4	8·1	8·3	7·3	6·5	6·1	5·9	5·6	4·9	4·6	4·0	4·1	4·2	5·4	
31	4·6	5·3	5·2	6·1	5·3	5·1	4·9	5·1	4·7	4·9	7·3	9·3	9·9	10·1	8·9	8·1	7·3	6·6	6·3	5·6	− 1·1	− 2·1	− 1·1	− 0·9	5·2	
Mean	3·7	4·3	4·6	4·8	4·8	5·2	5·1	4·5	3·9	4·8	7·0	9·8	11·2	11·5	10·7	9·0	7·4	6·7	6·4	5·4	4·6	3·9	3·3	3·3	6·1	
Mean*	4·8	5·0	5·3	5·1	5·3	5·1	4·6	3·6	3·1	4·0	6·6	9·1	10·4	10·7	9·5	8·0	7·1	6·9	6·5	6·1	5·6	5·0	4·7	4·3	6·1	
Mean**	1·9	2·7	3·6	3·2	3·5	4·5	5·3	5·2	4·5	5·0	6·7	10·2	10·8	11·7	11·3	9·7	6·4	5·2	5·6	4·3	4·6	4·0	3·4	2·0	5·6	

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	3·1	5·1	4·3	4·3	6·1	4·6	5·3	3·9	3·3	3·9	5·6	7·6	8·6	8·3	8·1	7·6	7·3	7·1	5·3	4·1	3·5	4·3	4·4	4·6	5·4	
2	5·6	1·9	2·2	3·5	4·1	5·5	5·3	5·1	5·6	7·3	8·6	8·9	9·6	8·9	9·6	9·6	9·8	10·1	6·9	5·3	2·1	0·3	1·1	2·3	5·8	
3	3·5	4·4	5·6	4·0	8·1	6·1	4·3	4·1	4·3	5·1	7·3	9·3	10·3	10·1	8·9	8·1	7·9	7·1	7·4	4·6	2·2	− 0·1	2·9	4·6	5·9	
4**	5·1	3·6	6·3	2·9	2·3	4·3	9·7	7·6	7·4	7·3	10·3	11·5	15·6	14·1	11·1	10·1	7·1	6·9	5·9	5·1	4·6	4·3	4·8	4·6	7·3	
5	4·6	4·9	4·6	4·9	4·3	4·3	4·9	5·6	5·1	5·7	6·9	9·9	10·1	11·1	9·6	8·9	5·3	− 0·7	3·6	2·9	2·1	1·9	− 0·9	− 0·9	4·9	
6**	− 1·9	− 0·4	1·9	4·1	7·9	9·3	7·9	7·1	5·6	7·9	10·9	9·6	10·9	11·6	9·1	4·7	0·4	− 0·4	− 1·3	− 0·1	− 1·1	0·5	1·3	2·4	4·5	
7	4·7	5·6	5·5	3·6	3·9	5·3	5·3	4·3	3·9	4·9	6·1	7·6	8·6	7·6	7·3	5·1	2·3	2·9	2·6	3·9	3·6	2·6	− 0·4	1·9	4·6	
8*	2·1	2·2	3·9	3·6	4·1	3·7	4·1	4·3	4·9	6·3	7·1	7·9	8·3	7·3	6·1	5·9	5·6	5·1	4·9	4·3	4·2	4·1	3·9	4·1	4·9	
9	5·1	3·2	3·1	2·8	2·1	2·3	2·5	4·1	5·3	6·9	7·6	7·8	8·6	7·9	6·6	6·9	6·1	5·8	4·6	4·3	2·1	2·9	2·3	3·1	4·7	
10*	4·6	5·6	4·3	4·6	3·6	3·9	4·3	4·3	4·1	5·0	5·6	6·5	8·3	7·3	7·1	6·5	6·3	5·3	4·5	4·1	3·5	2·9	2·3	3·6	4·9	
11	4·1	5·4	3·6	3·6	3·5	3·3	3·9	4·1	4·3	5·4	6·6	7·9	8·9	8·3	7·3	7·1	6·3	5·6	6·1	4·9	4·1	4·1	4·0	3·9	5·3	
12	4·3	4·9	4·9	5·1	4·7	4·6	4·3	4·3	4·9	5·9	6·1	7·7	9·1	9·1	7·8	8·3	7·1	7·1	4·3	3·8	3·6	2·7	3·1	1·1	5·4	
13	4·1	4·9	6·6	4·9	4·1	2·6	5·3	5·9	5·3	6·4	7·6	7·7	7·9	7·6	7·3	6·1	5·5	5·3	5·1	4·9	4·3	3·4	4·9	3·1	5·4	
14*	3·1	3·2	3·3	2·9	3·0	3·6	3·3	3·5	4·1	4·9	5·6	6·4	7·6	7·4	6·7	6·1	5·9	5·3	4·6	4·3	4·1	3·6	4·0	3·9	4·6	
15	3·6	4·3	4·6	4·9	5·6	4·9	4·7	4·1	4·6	5·2	6·3	7·3	9·0	9·1	11·6	11·1	11·7	8·6	6·1	2·6	2·7	3·1	3·2	2·9	5·9	
16	2·6	3·9	5·1	5·2	5·1	4·9	4·1	4·7	4·9	5·3	6·1	6·6	6·3	5·9	5·3	5·1	4·6	3·9	4·9	4·3	3·9	3·1	3·2	3·3	4·7	
17**	3·6	4·1	4·6	3·9	4·1	3·3	3·6	4·9	7·6	6·9	7·9	8·6	9·1	8·9	10·9	11·9	9·9	10·3	4·6	−0·9	2·3	3·6	2·3	− 0·9	5·6	
18	− 0·1	0·7	1·6	0·7	1·2	2·1	2·9	6·1	4·6	5·9	7·6	7·8	9·1	8·8	6·2	8·1	7·8	8·1	5·3	2·1	0·0	3·3	3·3	3·1	4·4	
19	3·3	3·3	3·4	3·8	3·7	2·3	2·6	3·2	3·1	3·5	4·9	6·1	6·7	6·6	5·5	7·1	6·9	6·3	4·9	4·6	3·8	3·6	3·3	3·1	4·4	
20	3·1	2·3	2·1	2·4	1·9	2·3	2·3	2·7	3·1	4·1	5·6	6·1	7·6	7·3	6·6	5·6	5·3	4·3	4·1	3·6	3·4	3·3	2·9	− 0·4	3·8	
21	− 3·1	− 1·1	0·9	1·3	1·9	2·2	2·1	2·2	2·3	3·3	5·9	8·1	7·3	6·6	6·6	8·3	7·9	7·6	5·0	0·9	− 0·1	− 0·4	0·6	3·6	3·3	
22	1·9	3·1	3·9	0·6	1·3	1·3	2·2	2·3	2·3	3·3	5·0	6·5	7·1	6·4	5·6	5·9	4·3	4·3	4·3	4·1	3·9	− 1·9	1·1	3·2	3·4	
23*	3·9	4·5	3·6	3·0	2·6	2·7	2·7	2·6	2·8	3·8	5·6	6·9	7·3	7·1	5·1	4·3	4·6	4·8	4·3	3·6	3·2	3·1	3·0	2·9	4·1	
24*	2·7	3·1	3·1	3·2	3·1	3·1	2·9	2·8	2·6	3·3	4·6	5·9	6·6	6·2	4·6	4·7	4·3	3·9	3·6	3·1	2·9	3·1	2·9	1·6	3·7	
25	1·3	2·2	3·1	3·3	3·3	3·1	3·1	2·7	2·5	3·3	4·7	5·2	5·6	5·9	5·6	4·7	4·1	3·9	3·7	3·3	3·1	2·8	2·6	3·1	3·6	
26**	3·2	3·1	3·3	3·4	3·6	3·3	3·1	2·9	2·1	2·3	4·3	5·4	6·8	8·1	6·9	6·3	7·1	6·3	2·2	− 0·7	− 4·1	− 3·4	− 7·1	− 8·7	2·5	
27**	3·1	− 2·4	1·3	4·1	6·6	1·5	1·3	1·9	2·1	2·9	5·1	5·9	6·6	6·1	5·3	4·9	4·3	4·1	3·4	3·1	2·5	2·3	2·6	2·9	3·4	
28	3·3	3·5	3·9	3·9	3·9	3·6	3·4	3·1	2·3	3·3	5·1	5·9	6·3	6·2	5·6	5·1	4·3	4·2	4·1	3·3	3·1	1·9	1·6	2·9	3·9	
29	2·9	3·7	3·6	3·8	4·1	3·0	2·6	2·9	3·5	4·1	5·3	5·6	5·9	5·9	6·1	5·9	5·1	4·5	4·1	1·1	2·1	2·4	2·6	2·5	3·9	
30	2·6	3·3	3·9	4·3	3·1	2·9	3·1	3·3	3·6	4·3	4·9	5·6	5·9	6·3	6·1	5·9	4·9	4·3	4·2	3·6	3·3	2·9	2·7	2·6	4·1	
Mean	3·0	3·3	3·7	3·6	3·9	3·7	3·9	4·0	4·1	4·9	6·4	7·3	8·2	7·9	7·2	6·9	6·1	5·4	4·4	3·3	2·6	2·3	2·3	2·3	4·6	
Mean*	3·3	3·7	3·6	3·5	3·3	3·4	3·4	3·5	3·7	4·6	5·7	6·8	7·6	7·0	5·9	5·5	5·3	4·8	4·4	3·9	3·6	3·4	3·2	3·2	4·4	
Mean**	2·6	1·6	3·5	3·7	4·9	4·4	5·1	5·0	5·0	5·5	7·7	8·2	9·8	9·8	8·7	7·6	5·8	5·4	3·0	1·3	0·9	1·5	0·7	− 0·1	4·7	

December. 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*	1·3	2·1	2·8	3·1	3·5	3·1	3·0	2·9	3·3	4·1	5·6	6·3	6·6	6·9	5·9	4·9	4·6	3·6	4·3	2·9	2·9	2·7	2·3	2·1	3·8	
2	2·6	3·3	3·1	3·6	3·9	3·9	4·1	4·3	4·9	5·3	6·9	6·6	7·1	8·9	8·3	6·8	5·6	4·7	2·9	2·1	1·9	− 2·1	− 3·9	− 1·4	3·9	
3	2·6	0·3	3·1	2·6	4·2	5·9	6·1	5·6	4·6	4·5	3·9	5·6	6·3	7·1	5·9	5·0	4·6	2·6	3·4	2·6	1·3	1·9	− 0·4	1·5	3·8	
4**	2·3	3·1	3·4	3·6	3·3	6·1	6·7	4·6	4·4	4·1	7·6	8·6	6·3	5·9	5·9	5·1	1·9	− 2·3	− 6·4	2·1	− 3·3	0·3	− 6·3	− 5·4	2·6	
5**	− 2·4	− 0·4	1·9	2·3	2·9	3·9	3·5	3·1	2·3	3·2	4·1	5·6	5·7	5·1	4·3	3·5	2·6	2·9	3·1	3·9	3·3	2·6	− 0·9	1·7	2·8	
6**	2·8	2·6	3·5	2·9	4·6	4·3	3·1	2·9	2·9	5·1	6·1	6·1	6·3	5·6	5·1	− 0·7	0·9	2·6	0·3	1·9	0·3	0·1	0·2	0·9	2·9	
7	2·3	3·1	3·2	3·3	3·1	4·6	5·3	5·7	4·8	4·6	4·9	6·3	6·9	7·9	6·1	5·4	4·6	3·3	− 0·9	2·1	2·8	2·6	2·4	1·3	4·0	
8	0·9	1·0	1·1	2·6	2·9	2·6	2·3	2·2	1·7	3·1	5·3	5·6	7·3	8·1	5·9	5·9	0·3	4·1	3·3	1·3	0·8	2·1	1·9	0·9	3·0	
9	2·1	2·2	3·3	5·9	5·2	3·1	3·2	4·1	5·0	6·1	6·3	6·1	7·0	7·6	7·3	4·3	4·9	4·2	3·1	1·1	0·3	2·1	2·4	2·6	4·1	
10	3·1	3·3	2·9	2·6	2·5	2·6	2·3	2·4	2·6	3·9	5·6	6·1	5·9	5·6	4·6	4·3	3·9	3·5	3·3	1·1	1·8	1·9	2·1	2·3	3·4	
11*	3·2	3·6	2·9	3·1	3·2	2·1	2·4	2·8	2·6	2·8	3·7	4·6	5·9	5·9	5·3	4·3	4·1	3·8	2·9	2·6	1·9	2·3	2·1	1·9	3·3	
12*	2·3	2·9	3·1	3·3	3·7	3·6	2·9	2·8	2·6	3·3	4·6	4·9	5·3	5·1	4·9	4·3	4·6	4·4	3·9	3·8	3·1	2·5	2·1	1·3	3·6	
13	2·1	2·9	2·6	2·3	1·9	2·9	3·1	3·2	3·7	4·6	5·5	5·6	6·9	6·3	6·1	5·9	4·6	3·1	3·8	1·4	0·3	0·3	− 0·1	1·4	3·3	
14	2·5	2·8	6·1	2·6	3·1	3·2	3·3	2·9	4·1	3·9	3·8	4·3	5·6	5·9	5·6	5·5	4·3	3·9	3·6	3·1	2·6	1·3	0·6	0·6	3·5	
15	1·1	2·9	3·1	3·3	2·9	1·9	2·9	3·1	3·9	4·6	5·3	6·9	5·8	5·6	4·5	4·3	4·2	3·8	3·8	0·7	0·1	− 0·4	0·5	1·9	3·2	
16	1·3	2·1	4·9	3·1	1·9	2·7	3·2	3·6	3·9	4·3	4·1	5·6	4·9	5·6	5·1	4·8	4·1	4·9	4·1	4·1	2·9	1·1	3·1	2·8	3·7	
17	2·9	2·8	2·9	3·1	3·0	2·9	2·7	2·6	2·9	3·7	4·1	5·6	6·1	5·9	5·3	5·6	5·1	4·1	3·9	3·3	3·1	2·9	2·9	1·9	3·7	
18	2·9	1·9	1·9	2·1	2·6	2·9	3·3	5·0	6·1	5·1	3·9	5·4	5·1	3·3	4·3	4·2	3·9	3·9	3·7	2·1	2·9	2·7	2·2	2·1	3·5	
19	0·3	0·6	2·1	2·1	2·6	2·9	2·6	3·1	3·6	3·6	4·6	4·3	5·1	4·9	4·1	4·1	3·9	3·9	3·6	2·9	2·3	1·3	0·3	1·9	3·0	
20	1·6	0·9	1·7	1·6	0·3	1·9	2·4	3·6	4·1	4·5	5·3	4·6	5·3	5·1	6·3	6·6	5·5	5·3	5·1	3·5	0·3	3·1	2·9	2·6	3·5	
21	2·6	1·9	2·6	2·9	3·1	2·9	2·7	3·0	3·5	3·6	3·8	4·1	3·9	3·1	3·3	3·9	3·5	3·3	3·1	2·9	2·9	2·8	2·7	2·6	3·1	
22*	2·7	3·1	2·9	2·7	2·6	2·9	3·1	3·3	3·6	4·7	4·9	5·1	3·9	3·1	3·3	4·1	4·1	3·7	3·3	2·9	3·1	2·6	2·3	2·1	3·3	
23	2·1	2·3	2·3	2·6	2·4	2·6	2·5	2·6	2·9	3·5	4·1	4·6	4·1	3·6	3·5	4·9	4·3	4·1	2·9	3·1	2·9	2·3	− 2·4	− 1·1	2·8	
24	− 1·7	0·3	2·6	3·1	3·3	3·8	3·1	2·9	3·1	3·1	3·9	4·1	3·7	3·6	3·9	4·6	4·3	3·3	2·9	2·9	2·1	− 0·5	− 0·7	0·3	2·6	
25	0·9	− 0·1	0·6	2·0	1·6	3·9	3·3	2·4	2·8	4·8	5·1	7·1	5·3	5·4	4·6	5·2	4·1	2·3	1·3	2·1	2·3	− 0·4	0·2	− 0·4	2·8	
26**	0·6	2·3	3·9	4·3	3·9	3·3	3·6	4·1	9·1	10·1	6·5	5·6	6·5	8·2	7·3	7·1	− 1·9	0·9	− 1·7	− 5·1	− 9·1	− 4·9	− 1·9	− 4·5	2·4	
27**	− 0·9	− 0·1	2·9	1·9	3·7	4·9	5·1	4·8	3·7	4·1	5·3	6·4	6·8	5·6	4·9	3·7	3·6	3·6	0·9	1·9	0·1	− 0·9	− 4·7	0·9	2·8	
28	2·2	2·5	2·6	3·2	3·9	2·6	2·3	2·6	3·3	4·6	5·1	5·6	5·6	3·9	2·2	2·3	2·3	1·9	2·2	1·5	2·1	1·3	0·9	3·6	2·9	
29	2·9	3·2	3·1	2·5	2·3	2·1	1·9	1·7	1·6	2·6	3·4	4·9	5·6	4·9	3·8	3·1	2·3	1·5	3·0	2·1	1·9	1·9	1·9	2·3	2·8	
30*	2·3	2·4	2·4	2·3	2·2	1·9	1·8	2·1	2·9	3·9	5·3	6·1	5·6	4·4	3·6	2·9	3·4	3·6	3·3	4·1	2·6	2·6	2·4	2·3	3·2	
31	2·3	2·4	2·8	3·9	1·1	1·6	1·9	2·3	3·4	5·6	5·7	5·6	5·3	5·2	3·1	2·0	3·6	5·8	2·6	2·2	1·6	1·5	1·6	1·7	3·1	
Mean	1·7	2·1	2·9	2·9	3·0	3·2	3·2	3·3	3·7	4·4	4·9	5·6	5·7	5·6	5·0	4·4	3·6	3·4	2·5	2·2	1·4	1·3	0·6	1·1	3·2	
Mean*	2·1	2·8	2·8	2·9	3·0	2·7	2·7	2·7	3·0	3·7	4·8	5·4	5·5	5·1	4·6	4·1	4·2	3·8	3·5	3·2	2·7	2·6	2·3	1·9	3·4	
Mean**	0·8	1·5	3·2	3·0	3·7	4·5	4·4	3·9	4·5	5·3	5·9	6·5	6·3	6·1	5·5	3·7	1·4	1·6	− 0·8	0·9	− 1·3	− 0·6	− 2·8	− 1·3	2·7	

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 (in γ).													Mean.
1	896	901	901	906	901	906	911	913	911	909	891	886	896	896	891	899	901	883	873	891	891	886	886	889	896	
2	886	886	889	891	896	903	906	903	896	879	883	883	863	889	894	900	900	897	900	892	897	900	884	892	892	
3	892	892	887	892	894	897	900	900	897	892	882	887	892	892	894	900	902	902	902	894	900	900	898	902	895	
4*	900	899	902	897	900	903	903	905	903	901	898	895	895	898	903	903	903	903	901	901	898	903	898	898	901	
5*	898	898	901	898	898	903	903	903	903	901	895	893	891	893	901	903	903	905	904	904	904	906	907	904	901	
6	904	904	904	904	904	904	909	912	912	904	899	896	(900)	904	904	904	904	902	886	886	894	899	904	902	902	
7	902	904	904	906	916	914	916	922	923	907	895	880	873	870	880	(880)	880	877	890	905	910	910	910	910	899	
8	905	907	907	913	913	925	930	930	920	913	905	905	907	907	907	910	905	910	913	913	905	913	914	911	912	
9**	908	908	914	916	916	918	924	924	924	914	901	888	886	888	901	888	886	888	908	918	916	911	896	888	905	
10**	898	898	901	901	898	916	924	916	891	894	886	881	877	872	889	875	887	887	885	887	907	905	895	879	894	
11**	879	879	877	875	877	882	882	882	882	877	872	862	865	879	895	897	897	897	877	862	869	865	872	887	879	
12	869	867	863	868	876	878	886	885	886	873	858	860	868	873	883	883	893	893	893	890	903	908	888	888	881	
13*	888	888	890	893	898	900	903	908	903	893	886	883	880	876	883	886	884	889	884	879	879	881	879	879	888	
14	879	879	879	884	881	881	884	889	889	879	877	874	874	879	889	891	894	897	889	889	879	871	871	879	882	
15	877	879	881	884	884	889	890	890	890	885	878	872	880	885	890	885	900	900	898	895	898	900	900	915	885	
16	905	900	905	898	912	915	915	910	892	890	885	888	882	878	878	882	882	885	888	890	889	889	889	885	893	
17	881	881	877	881	881	886	889	891	889	879	866	861	856	846	856	856	841	823	836	866	851	861	863	881	867	
18	869	861	861	863	863	869	871	871	866	851	832	832	832	832	844	857	862	860	862	862	862	862	864	864	857	
19*	864	862	864	867	872	880	877	882	877	862	852	852	852	852	854	857	867	872	872	874	877	874	872	874	867	
20	873	873	871	871	873	878	881	888	885	883	878	868	868	873	883	888	885	891	893	898	888	883	881	881	881	
21**	888	881	865	873	873	888	888	885	881	855	848	841	843	818	849	854	849	876	874	889	886	886	909	892	871	
22	886	884	884	886	889	896	902	904	899	889	884	874	874	866	874	879	874	886	889	889	886	884	879	882	875	
23	892	884	879	882	880	875	887	885	887	875	870	865	853	865	870	875	880	880	883	885	885	897	897	895	880	
24	905	895	900	897	915	915	913	912	895	865	870	880	877	870	870	880	883	885	884	884	886	884	878	881	888	
25	881	878	881	884	881	881	881	881	874	864	856	851	848	854	858	864	861	868	871	878	876	874	873	871	870	
26	868	871	876	876	874	878	874	878	872	862	845	832	837	849	867	869	875	882	885	887	897	895	895	897	873	
27*	892	895	897	899	905	909	912	915	907	897	889	882	882	887	895	899	905	905	907	907	905	899	899	897	899	
28**	897	897	899	902	907	909	917	922	915	905	899	895	877	879	887	875	882	897	899	889	879	887	895	922	897	
29	899	892	887	895	897	897	902	907	902	895	889	885	883	883	888	895	906	913	908	908	908	906	906	900	898	
30	898	900	898	900	906	906	918	918	916	903	893	873	860	870	886	890	886	883	896	896	886	885	883	890	893	
31	886	886	889	887	885	891	894	899	894	879	877	869	869	869	879	884	887	889	889	894	894	891	891	889	887	
Mean	889	888	888	890	892	897	900	901	896	886	879	874	871	874	882	884	886	888	888	890	890	891	889	891	887	
Mean*	888	888	891	891	895	899	900	903	899	891	884	881	880	881	887	890	892	895	894	893	893	893	891	890	891	
Mean**	894	893	891	893	894	903	907	906	899	889	881	873	870	867	884	878	880	889	889	889	891	891	893	894	889	
February.													17000 γ + Tabular Quantities (in γ).													Mean.
1	887	894	891	894	894	896	896	896	894	889	887	881	879	884	889	891	892	893	895	895	890	890	890	898	891	
2*	898	895	895	895	895	898	898	900	897	888	885	882	882	885	888	888	890	890	890	892	895	900	895	892	892	
3*	895	892	890	895	895	895	895	902	900	900	895	891	889	886	888	889	891	893	891	893	893	891	889	891	893	
4	893	903	896	896	899	901	906	911	906	896	891	889	886	891	886	889	891	893	896	896	899	899	897	896	896	
5	899	899	899	899	901	909	912	912	907	900	882	872	872	880	884	892	902	902	902	902	902	904	902	902	900	
6	902	902	904	907	910	912	914	920	912	902	897	892	890	884	884	887	892	897	904	907	910	910	904	914	902	
7**	902	903	903	903	908	905	915	928	921	913	895	868	871	875	883	875	871	883	881	883	903	888	893	893	894	
8	893	895	913	898	898	898	903	903	893	883	883	873	871	881	883	890	891	891	895	895	904	902	899	896	893	
9*	894	894	894	896	899	904	904	906	902	894	884	876	874	879	886	896	899	899	899	902	902	904	904	894	895	
10	892	896	896	892	894	899	904	904	894	884	879	874	874	874	872	883	887	893	897	895	895	890	895	893	890	
11	893	890	890	890	890	897	917	917	907	905	897	890	885	885	890	893	897	900	897	895	900	900	897	900	897	
12	920	900	890	892	895	900	903	905	903	895	896	884	884	876	886	888	894	896	898	901	896	896	901	898	900	
13	896	901	904	904	906	908	914	916	911	901	888	874	864	871	878	886	891	894	896	896	888	891	884	894	894	
14**	891	891	891	896	898	907	905	902	892	887	877	862	865	862	865	857	869	879	885	867	887	892	892	895	884	
15	894	895	895	890	892	897	902	901	897	892	887	877	877	882	884	885	887	877	862	872	887	897	899	897	889	
16**	898	896	898	898	903	908	913	920	923	910	898	868	838	833	828	843	840	858	838	863	860	873	878	873	877	
17**	880	883	878	890	880	880	888	893	878	868	858	833	823	853	853	850	858	873	888	929	879	889	889	884	874	
18	874	881	884	881	884	887	891	887	879	869	864	844	834	849	859	859	881	884	889	892	899	891	891	887	877	
19	891	889	889	889	889	891	897	899	897	889	879	859	851	860	865	875	880	872	875	878	880	880	882	888	881	
20	888	887	885	890	890	888	892	895	888	878	870	862	862	865	870	882	888	890	892	890	890	892	898	895	884	
21	895	898	892	897	900	905	905	905	899	881	871	856	843	863	873	881	886	893	891	901	901	901	901	899	889	
22	901	899	901	901	906	908	911	906	896	886	881	866	863	871	871	879	889	889	901	901	903	903	903	901	893	
23*	901	903	903	907	912	917	920	914	914	912	902	887	882	882	884	892	897	904	904	902	904	907	910	910	903	
24**	907	904	912	904	907	907	912	922	922	912	892	877	862	857	872	870	857	860	814	797	842	860	890	900	882	
25	883	893	891	881	883	885	893	891	883	881	873	863	858	863	871	878	888	893	888	895	893	883	885	883	882	
26	888	888	888	888	891	893	898	908	908	895	893	883	878	875	881	888	883	886	874	864	882	892	892	894	888	
27	899	894	894	899	896	902	899	904	901	889	879	874	869	854	854	874	884	886	892	896	887	886	894	894	888	
28	904	896	896	899	899	904	899	899	899	892	889	889	887	885	885	887	890	890	895	900	903	905	912	903	897	
29*	900	903	900	905	905	903	905	905	903	887	885	877	880	885	890	890	893	893	897	900	897	895	895	895	895	
Mean	895	895	895	896	897	900	904	906	901	892	885	873	869	872	876	880	884	888	887	889	892	893	895	895	890	
Mean*	898	897	896	900	901	903	904	905	903	896	891	883	881	883	887	891	894	896	896	898	898	899	899	896	896	
Mean**	896	895	896	898	899	901	907	913	907	898	884	862	852	856	860	859	859	871	861	868	874	880	888	889	882	

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. (in γ)																									Mean.
1	900	898	900	897	900	903	905	896	904	898	891	881	871	871	874	881	896	898	898	896	894	891	896	896	893	
2*	891	896	896	896	901	906	906	906	904	894	886	881	874	866	881	886	894	896	894	898	901	901	901	901	894	
3*	901	901	904	904	906	906	911	912	905	897	887	885	887	892	897	899	902	902	905	905	907	907	907	907	902	
4	907	912	912	917	922	929	927	929	919	909	912	905	897	902	907	917	915	894	852	832	807	819	862	832	893	
5**	832	777	777	879	895	857	809	828	823	828	818	823	843	838	826	830	840	861	888	878	853	868	863	870	842	
6	868	880	868	873	878	883	886	889	880	870	858	846	848	858	863	876	873	853	876	880	888	873	876	913	873	
7	876	878	876	880	873	880	888	897	884	859	864	854	859	850	864	859	874	877	881	881	889	889	891	892	872	
8	891	911	894	879	884	891	899	901	897	879	854	857	859	857	867	879	884	889	894	894	897	891	899	904	885	
9	894	891	894	897	897	899	901	902	900	885	875	862	860	865	875	882	890	895	900	900	900	900	905	902	891	
10	902	900	902	905	905	910	912	915	910	898	892	880	880	880	888	890	895	900	902	898	905	920	905	902	900	
11	902	900	900	900	905	910	912	909	903	891	886	881	881	881	879	881	889	896	901	911	909	901	911	913	898	
12	903	901	903	906	909	909	911	916	906	896	886	881	881	886	886	876	879	891	901	873	883	889	906	899	895	
13	903	901	899	899	901	901	903	904	907	904	902	882	882	880	887	892	902	900	902	907	907	910	910	908	900	
14**	912	912	907	904	900	907	914	920	907	904	902	894	897	914	847	872	887	884	852	874	880	882	890	887	894	
15	887	892	887	887	887	890	889	883	873	848	848	873	881	878	873	878	883	885	893	893	893	893	895	893	874	
16	898	893	895	898	901	898	898	885	865	861	873	858	855	861	868	881	885	895	905	905	918	913	915	915	889	
17	903	903	901	903	903	905	905	904	896	892	874	864	862	866	869	879	889	894	902	904	904	904	906	902	893	
18	904	899	899	896	899	902	904	902	892	889	879	869	869	869	874	882	884	896	899	899	896	892	909	912	892	
19	899	896	894	896	899	904	904	903	893	880	870	863	865	865	875	887	890	897	903	903	905	905	905	905	892	
20	905	905	905	907	907	913	910	905	895	885	880	875	863	863	870	885	897	887	895	905	900	905	907	907	895	
21	907	907	907	910	913	913	915	914	904	884	871	861	866	866	874	886	881	886	891	896	896	891	901	914	894	
22**	903	906	903	904	904	901	898	904	896	856	846	871	894	911	838	811	964	1011	926	796	774	784	816	811	876	
23**	691	758	776	691	631	788	746	757	737	719	742	755	757	762	787	809	847	822	822	872	847	832	822	842	776	
24**	829	832	885	867	839	827	845	847	839	825	797	812	822	825	857	867	902	852	832	867	852	847	847	857	845	
25	855	849	802	837	847	857	852	853	843	833	828	830	836	840	846	850	848	870	898	883	860	858	856	878	850	
26	870	866	863	868	873	878	883	878	873	860	858	850	853	860	863	876	876	876	878	878	873	878	880	880	870	
27	880	878	878	886	893	888	886	877	864	854	839	834	839	844	851	859	867	894	871	879	879	879	877	881	870	
28	886	872	872	871	867	867	864	862	861	861	851	849	849	847	856	867	869	859	879	881	879	879	879	882	871	
29*	879	879	879	879	881	881	879	878	870	855	840	838	844	850	860	868	875	878	880	878	880	878	880	882	871	
30*	880	880	882	880	883	890	890	885	878	865	852	845	848	852	862	870	870	872	880	888	888	882	882	882	874	
31*	882	882	885	890	888	890	885	881	871	861	856	841	841	846	851	866	879	886	891	896	896	896	896	896	877	
Mean	882	883	882	885	884	890	889	888	880	869	862	858	860	863	865	872	885	887	887	885	882	882	887	889	879	
Mean*	887	888	889	890	892	895	894	892	886	874	864	858	859	861	870	878	884	887	890	893	894	893	893	894	883	
Mean**	833	837	850	849	834	856	842	851	840	826	821	831	843	850	831	838	888	886	864	857	841	843	848	853	847	
April.	17000 γ + Tabular Quantities (in γ).																									Mean.
1*	894	892	892	892	892	892	892	892	882	870	857	849	852	857	864	874	877	892	897	900	900	902	897	897	884	
2	897	897	897	897	897	897	902	900	890	872	852	847	842	852	867	882	894	901	905	898	908	915	906	901	888	
3	898	898	893	893	898	901	903	903	895	878	868	851	851	863	868	885	898	905	903	903	901	913	911	901	891	
4	898	893	898	901	900	911	913	913	910	895	876	859	864	842	869	869	894	899	894	904	886	896	902	896	891	
5**	899	899	894	899	899	899	904	882	886	879	864	844	852	854	852	859	894	879	899	874	876	879	899	892	882	
6	904	889	864	880	885	885	875	883	887	850	860	855	850	842	855	870	883	895	895	903	900	917	907	903	881	
7	900	893	895	895	897	897	907	903	880	853	840	840	850	860	873	880	887	893	907	897	901	896	904	898	885	
8	896	891	888	876	886	891	894	898	884	866	854	851	848	856	871	878	886	888	894	896	896	896	896	901	883	
9	896	896	891	891	896	901	901	901	891	876	861	851	851	862	877	867	887	892	889	895	899	897	897	902	886	
10	905	919	905	892	897	902	905	902	892	872	862	847	845	857	867	877	887	897	897	899	897	897	897	895	888	
11*	897	907	897	902	902	902	903	900	893	880	868	858	860	876	888	893	900	906	906	908	908	910	908	908	895	
12	910	906	906	903	906	908	908	903	898	890	878	876	873	876	880	893	903	903	906	908	908	908	910	911	899	
13*	909	909	909	909	909	911	914	911	904	894	889	874	871	874	884	894	899	909	907	901	904	909	914	911	901	
14*	911	921	921	914	911	909	909	904	894	887	884	877	874	876	877	884	892	902	910	910	908	910	912	918	900	
15**	918	912	920	930	925	932	910	918	920	870	825	822	822	815	815	858	885	892	860	840	862	875	875	875	878	
16	878	850	865	865	877	880	888	890	880	863	861	851	849	859	866	876	876	881	886	883	889	891	891	886	874	
17**	891	899	886	881	891	879	893	901	891	866	831	816	823	831	846	861	861	903	906	889	923	891	883	891	876	
18**	889	891	882	910	910	872	887	872	862	852	832	830	844	837	852	852	862	862	887	900	897	904	880	902	874	
19	927	904	892	872	872	872	872	862	854	844	847	852	857	862	862	872	872	887	882	885	878	878	878	881	873	
20	878	903	893	893	903	893	885	865	853	835	828	823	838	853	843	858	858	871	861	881	893	873	861	878	868	
21	878	888	883	893	878	881	893	881	863	848	843	853	856	854	864	874	896	889	889	892	894	894	909	929	880	
22	909	899	899	894	896	899	899	899	889	879	866	859	864	869	884	886	889	894	896	902	899	904	894	892	890	
23	902	901	896	896	896	900	903	900	890	875	865	865	865	875	893	907	903	900	900	905	890	900	903	905	893	
24**	930	917	905	905	890	923	905	890	865	855	835	843	853	845	845	857	870	885	900	903	897	893	894	894	883	
25	888	886	888	891	894	894	891	886	876	866	871	886	989	901	898	894	891	886	884	883	878	888	876	874	886	
26	876	878	878	876	874	866	861	856	858	861	876	876	876	876	884	897	907	902	905	907	905	907	907	907	884	
27	909	907	907	905	905	902	897	895	889	882	875	862	865	872	882	887	895	895	902	905	902	905	919	899	894	
28*	902	902	899	899	902	907	905	903	896	886	876	868	878	888	898	900	908	908	908	916	918	918	920	918	901	
29	928	933	913	910	910	910	906	903	893	878	873	870	878	888	900	908	913	918	918	926	928	923	913	908	906	
30	934	919	909	899	901	901	901	894	884	879	877	879	884	889	897	901	909	914	909	907	917	919	919	894	902	
Mean	902	900	895	895	897	897	897	894	885	870	860	854	858	862	870	879	889	895	896	897	898	900	899	898	887	
Mean*	903	906	903	903	903	904	905	902	894	883	875	865	867	874	882	889	895	903	906	907	908	910	910	910	896	
Mean**	905	904	897	905	903	901	900	893	885	864	837	831	839	836	842	857	874	884	890	883	891	888	886	891	879	

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	
May.													17000 γ + Tabular Quantities (in γ).													Mean.
1**	902	920	925	902	902	890	875	860	855	845	840	820	838	840	870	870	882	888	890	895	905	902	908	905	880	
2	915	918	905	908	900	900	885	875	875	870	865	862	869	869	876	896	893	901	916	909	906	906	903	909	893	
3	911	921	911	906	909	916	901	889	881	851	836	851	863	863	871	879	891	901	901	901	933	901	901	901	891	
4	906	901	902	902	904	907	907	902	894	880	872	874	867	877	887	900	904	907	907	910	910	910	912	910	898	
5	914	910	907	909	910	912	912	907	902	887	884	874	874	880	887	897	903	911	915	915	918	915	913	913	903	
6*	913	913	913	915	918	921	913	905	895	888	885	883	885	888	893	898	905	915	923	923	923	915	918	913	907	
7*	913	913	913	913	914	916	914	909	902	896	896	894	894	899	902	904	909	914	916	919	919	914	914	914	909	
8	914	914	919	919	919	922	922	919	912	902	889	884	886	884	896	894	912	921	923	935	945	943	943	935	915	
9	933	930	910	917	923	925	910	905	900	880	870	877	883	885	892	895	905	927	923	900	895	890	887	895	902	
10	893	893	887	893	895	897	897	895	884	876	878	876	878	878	881	888	896	904	908	911	911	908	906	906	893	
11*	906	904	904	906	906	903	901	(896)	(888)	(886)	891	888	886	888	894	901	908	914	916	916	914	911	909	909	902	
12	907	907	905	905	907	909	907	905	897	892	887	889	887	885	885	892	897	907	915	917	909	909	912	912	901	
13**	932	939	937	929	935	942	939	937	909	912	912	905	908	913	958	940	898	908	928	926	948	913	886	906	923	
14**	908	893	878	886	886	878	883	870	856	840	848	856	866	866	866	888	886	898	918	923	930	920	896	898	885	
15**	893	903	897	901	879	897	881	887	881	874	871	861	851	857	869	869	904	934	924	927	897	899	909	931	892	
16	884	884	894	889	884	879	887	887	874	869	874	879	874	869	874	881	895	902	908	920	910	905	895	892	888	
17	895	898	898	895	902	900	892	880	885	890	880	878	870	858	855	865	882	895	895	902	908	905	905	902	889	
18	908	895	895	892	888	895	886	881	873	871	871	876	869	871	879	883	899	896	899	901	903	901	906	906	890	
19	901	899	899	899	899	899	899	891	883	881	881	881	881	881	896	891	909	921	929	929	927	920	914	914	901	
20	914	917	914	914	914	912	904	894	892	884	874	882	884	897	897	899	912	915	924	930	917	920	917	922	906	
21	922	917	917	914	914	917	912	902	892	880	878	881	883	893	901	905	911	913	918	923	918	918	923	908	907	
22*	911	908	908	911	913	908	908	903	895	885	878	873	878	883	893	898	908	918	918	918	918	915	915	921	904	
23*	922	916	914	919	919	916	914	906	899	894	892	889	884	889	889	889	892	904	924	912	914	919	916	916	906	
24	916	916	914	914	914	914	906	899	892	884	886	889	892	894	893	897	900	913	910	920	915	917	915	910	905	
25	905	905	897	905	905	900	907	897	890	885	880	885	880	880	885	895	900	910	907	913	910	910	900	905	898	
26	903	903	905	903	906	904	888	886	881	876	886	886	886	886	888	898	901	906	911	908	914	906	906	916	898	
27	906	916	918	888	901	904	894	878	881	876	868	871	868	878	886	894	904	906	905	909	907	905	907	912	895	
28**	917	912	907	907	915	919	915	905	897	877	837	832	862	877	895	887	915	907	902	925	919	909	907	902	898	
29	897	887	887	877	887	872	875	867	873	870	846	848	868	876	866	878	888	898	906	908	903	923	893	890	883	
30	888	888	888	890	890	878	886	880	868	863	863	866	866	868	878	888	896	900	903	903	900	900	901	901	885	
31	899	897	897	897	897	897	889	884	879	871	859	867	874	877	887	894	897	904	909	907	907	904	901	901	892	
Mean	908	908	905	904	905	905	900	893	886	878	873	873	876	879	886	892	900	908	912	914	914	910	907	908	898	
Mean*	913	911	910	913	914	913	910	906	898	891	888	885	885	889	894	898	904	913	919	917	918	915	914	915	906	
Mean**	910	913	909	905	903	905	899	892	880	870	862	855	865	871	892	891	897	907	912	919	920	909	901	908	896	
June.													17000 γ + Tabular Quantities (in γ).													Mean.
1	907	904	904	907	909	907	897	891	889	879	874	874	875	885	895	902	920	928	928	922	918	918	910	910	902	
2*	910	910	910	912	915	912	905	892	878	862	860	872	875	880	890	898	908	910	910	910	910	910	908	905	898	
3	902	900	900	902	908	911	906	899	891	883	879	876	879	881	891	901	911	921	923	906	903	903	906	911	892	
4**	916	906	906	909	913	916	911	899	873	856	861	866	871	871	866	876	891	991	906	916	916	906	913	902	895	
5	907	907	907	904	912	920	912	892	894	890	887	887	887	894	907	917	920	927	920	914	914	922	920	922	908	
6	922	922	922	924	927	907	890	892	892	887	877	867	870	880	894	913	925	928	925	923	913	915	911	913	906	
7	913	913	915	913	915	915	913	908	901	883	885	888	893	903	915	921	923	923	923	921	918	911	913	911	910	
8*	913	911	913	918	923	921	913	903	894	889	884	882	884	889	896	912	919	924	924	922	922	922	924	924	909	
9	922	922	924	924	926	924	914	914	914	909	894	889	889	894	896	922	924	942	956	926	924	926	929	929	918	
10**	944	943	935	933	943	935	917	903	875	870	875	843	843	835	873	900	917	930	937	925	905	895	887	880	902	
11**	897	905	910	905	880	887	873	870	863	865	865	865	855	860	880	905	915	915	924	921	921	911	911	906	892	
12	911	906	906	911	908	904	896	886	888	881	878	874	876	886	898	906	906	914	911	924	926	911	911	908	901	
13	906	904	904	901	906	904	894	901	901	894	886	885	882	895	897	907	909	915	912	912	912	912	915	909	903	
14*	905	905	907	907	909	907	902	889	882	882	882	875	877	879	889	895	909	915	915	915	912	909	907	905	899	
15	907	907	909	909	910	910	910	906	898	896	893	883	890	896	900	910	913	908	906	918	918	913	910	908	905	
16	908	906	908	913	916	913	910	906	903	893	886	888	888	898	896	903	913	916	913	915	916	911	911	911	906	
17	909	909	909	911	917	919	914	907	901	899	899	887	884	881	889	899	911	917	919	914	914	914	911	911	906	
18*	907	909	909	911	919	921	914	891	871	867	859	867	867	871	885	898	900	905	915	915	915	915	910	910	898	
19	908	910	910	910	915	912	910	900	892	882	878	875	875	880	895	902	900	912	910	930	925	918	908	900	902	
20	905	910	912	905	905	892	892	889	871	851	849	861	866	863	879	896	909	913	911	911	911	909	906	906	893	
21	906	903	901	903	911	909	901	891	883	876	873	866	869	876	886	896	903	909	923	921	909	909	906	909	902	
22*	912	910	907	910	914	912	904	897	887	882	874	877	874	877	882	887	900	907	922	917	914	912	912	917	900	
23	920	917	920	912	917	912	910	910	902	897	892	882	872	874	884	894	904	913	911	913	913	915	915	913	905	
24	918	923	913	915	915	915	913	905	903	901	891	873	861	875	878	895	918	911	915	918	913	918	903	898	904	
25	901	900	898	898	901	901	897	885	881	875	882	882	886	886	899	894	902	904	906	914	922	922	906	904	898	
26	904	906	916	914	914	914	906	904	896	884	879	882	879	879	889	892	894	902	912	914	909	909	906	906	900	
27	906	906	909	907	913	910	907	897	890	887	877	877	885	885	897	905	913	907	905	915	917	915	915	910	902	
28**	907	907	910	913	913	905	900	893	890	890	880	885	903	907	903	903	923	925	910	915	918	918	918	928	907	
29**	928	916	901	904	908	911	911	906	901	886	878	878	886	888	886	886	894	901	904	914	911	918	906	904	901	
30	896	906	901	906	908	906	901	881	876	871	878	876	878	887	902	907	915	917	932	917	922	919	915	907	901	
Mean	911	910	910	911	913	911	905	897	889	882	879	876	877	882	891	901	910	916	917	917	915	913	910	909	902	
Mean*	909	909	909	912	916	915	908	894	882	876	872	875	875	879	888	898	907	912	917	916	915	914	912	912	901	
Mean**	918	915	912	913	911	910	902	894	880	873	872	867	872	872	882	894	908	916	916	918	914	910	907	904	899	

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	
July.	17000 γ + Tabular Quantities (in γ.)																									Mean.
1	909	912	912	915	905	907	908	898	888	880	878	880	878	878	890	896	903	906	918	916	910	910	910	910	900	
2*	908	908	908	913	913	910	906	893	890	880	883	878	886	890	898	900	910	913	916	920	920	913	908	910	903	
3*	910	908	908	908	911	911	909	901	891	879	874	877	884	891	904	911	917	927	924	924	924	921	914	911	906	
4	909	909	909	909	911	914	914	909	897	894	889	884	884	887	894	907	909	917	919	919	914	914	909	919	906	
5	911	909	905	910	918	918	910	905	900	890	890	890	888	890	900	908	912	922	925	925	928	927	922	920	909	
6	922	920	920	925	927	922	915	912	910	905	902	900	892	892	900	908	915	940	932	925	938	907	912	910	915	
7**	901	891	906	906	911	911	911	906	896	889	893	889	881	886	891	901	921	911	926	936	941	931	916	911	907	
8	911	906	909	911	911	909	881	861	881	883	879	851	876	883	891	896	909	911	913	913	911	913	914	920	898	
9	910	907	904	907	910	912	907	900	892	884	887	877	880	880	882	884	892	902	907	912	912	912	910	910	899	
10	912	907	907	910	912	914	914	912	902	892	887	884	887	890	900	910	912	917	914	912	923	915	915	915	907	
11	915	913	913	913	915	915	921	918	913	908	905	908	898	893	898	905	911	921	923	928	933	938	933	931	915	
12**	923	921	918	923	915	923	923	905	883	868	863	878	885	878	868	891	898	903	902	909	922	911	904	904	901	
13	902	902	899	902	908	906	904	899	892	889	882	876	862	866	882	886	889	904	914	922	922	918	916	914	898	
14	914	914	912	914	914	914	912	906	899	896	889	889	884	886	902	904	915	917	920	920	920	915	920	920	908	
15**	927	925	925	923	923	920	915	915	905	895	903	900	900	875	875	877	895	925	915	925	925	920	907	890	909	
16**	905	913	903	900	897	897	885	875	855	840	860	885	887	893	898	896	894	898	906	908	911	911	911	904	893	
17	904	906	903	896	898	906	896	886	874	876	881	886	891	896	898	911	911	901	898	904	904	904	904	906	898	
18	906	904	906	908	911	916	908	898	894	894	888	881	882	887	885	887	904	912	915	912	899	897	912	905	901	
19	897	899	902	902	902	902	892	882	877	867	857	855	859	867	882	897	897	902	909	917	909	907	912	909	888	
20	909	909	902	899	899	905	907	902	889	887	880	876	878	880	888	890	903	908	913	913	910	908	906	903	899	
21*	903	900	900	898	906	906	898	890	880	868	858	860	870	880	883	886	898	903	913	916	913	915	908	908	894	
22	910	913	916	910	913	918	910	910	894	879	874	877	879	871	877	891	894	904	904	909	909	909	907	914	900	
23**	914	907	899	904	909	907	909	907	897	889	869	859	854	864	899	874	897	889	891	904	904	907	904	901	894	
24	904	904	904	909	909	904	905	905	890	865	865	862	868	880	885	885	890	890	910	918	910	908	918	915	896	
25	908	905	905	905	902	900	915	912	900	888	885	882	888	888	885	900	895	912	920	918	918	918	912	912	902	
26	915	910	912	912	911	906	899	896	891	891	886	883	879	883	883	903	903	916	921	921	919	916	921	916	900	
27	909	911	911	911	916	911	901	893	891	889	886	889	891	891	901	906	913	919	919	916	921	916	913	911	906	
28*	916	911	914	917	917	920	914	904	894	892	892	884	890	894	917	920	917	920	922	920	922	922	922	920	911	
29*	920	920	914	912	917	920	912	900	892	882	880	882	890	904	912	912	917	914	920	922	930	930	934	932	911	
30	933	933	925	928	923	923	923	918	908	901	898	898	903	913	923	923	918	915	923	928	928	928	928	925	919	
31	923	918	915	918	921	921	918	911	903	893	888	885	883	895	908	918	918	918	921	923	925	923	919	924	912	
Mean	911	910	909	910	911	912	907	901	892	885	882	880	882	885	893	899	905	911	915	917	918	915	914	912	903	
Mean*	911	909	909	910	913	913	908	898	889	880	877	876	884	892	903	906	912	915	919	920	922	920	917	916	905	
Mean**	914	911	910	911	911	912	909	902	887	876	878	882	881	879	886	888	901	905	908	916	921	916	908	902	901	
August.	17000 γ + Tabular Quantities (in γ.)																									Mean.
1	920	915	915	917	917	917	910	907	903	903	895	890	890	887	893	903	910	915	917	920	920	920	923	913	909	
2*	913	910	910	912	912	908	905	900	890	875	865	867	877	885	893	907	915	920	925	923	917	915	915	913	903	
3	913	913	913	915	915	915	907	897	887	885	885	897	897	893	895	905	907	925	933	947	925	920	920	915	909	
4	917	925	925	920	920	930	925	905	903	880	865	873	875	866	876	886	906	916	931	946	916	916	928	911	907	
5	908	914	906	898	914	916	908	894	893	878	866	864	861	871	888	898	906	911	921	918	916	914	911	911	899	
6*	911	908	911	908	912	914	911	904	896	888	881	886	891	898	899	904	911	918	924	921	916	918	918	916	907	
7	916	918	924	916	916	918	918	914	911	901	878	874	886	886	898	906	911	926	926	926	936	936	934	946	913	
8**	941	938	932	929	929	922	917	915	912	897	862	887	892	887	885	889	912	905	907	915	909	907	907	905	908	
9**	915	919	907	912	915	902	905	877	887	877	832	842	865	869	887	892	895	904	915	912	912	912	909	917	895	
10	909	902	905	912	902	899	899	877	872	867	867	872	862	875	872	895	895	915	915	913	912	909	915	917	895	
11	905	907	905	902	905	909	905	899	889	892	892	889	887	887	892	898	903	913	910	908	910	910	913	913	902	
12**	920	913	918	908	908	908	903	893	880	870	868	878	880	890	896	908	906	915	933	953	928	888	896	923	904	
13	895	886	885	888	890	886	876	868	863	858	866	850	853	873	886	898	908	908	903	908	928	913	910	898	887	
14	888	890	898	900	902	896	880	883	868	866	873	863	858	878	866	880	883	906	910	918	918	903	898	903	889	
15	888	898	898	896	897	897	884	861	862	859	861	861	864	879	881	899	904	909	911	911	914	907	906	919	890	
16	904	899	894	891	899	903	894	887	874	857	854	854	857	867	884	897	899	904	907	907	904	904	901	901	889	
17*	901	899	899	899	899	901	894	879	864	854	851	854	859	867	877	891	904	904	911	914	909	907	907	904	890	
18	914	917	917	917	919	917	909	901	897	881	869	874	877	884	889	884	887	908	925	925	925	920	928	918	904	
19	910	910	905	890	905	900	900	880	865	858	855	860	865	870	868	888	898	905	912	912	910	910	910	905	891	
20	905	902	900	900	905	915	910	890	888	880	872	862	860	870	880	900	910	918	920	920	922	925	920	915	900	
21**	930	928	922	915	905	915	920	908	885	880	875	868	865	875	882	905	902	908	895	890	892	917	878	915	899	
22**	910	900	900	885	925	915	901	896	869	839	849	861	876	876	893	893	883	903	911	921	916	911	909	911	894	
23	926	923	911	901	903	906	899	889	889	891	886	886	891	889	891	891	896	906	913	921	916	916	911	926	903	
24	916	916	916	909	906	911	906	899	896	893	893	886	886	889	891	899	906	901	909	913	916	913	913	911	904	
25	911	916	911	909	901	911	911	901	896	883	883	889	896	899	901	903	909	913	916	922	920	917	917	914	906	
26	914	917	917	917	915	912	907	902	892	894	892	894	902	910	912	917	917	922	927	932	932	922	922	917	913	
27*	917	920	917	917	914	912	907	900	890	884	877	882	894	900	910	914	917	922	922	927	924	917	920	930	910	
28*	927	917	917	914	917	912	912	902	897	892	890	890	892	902	907	912	912	917	920	922	922	917	914	914	910	
29	917	917	917	917	920	922	917	912	908	900	883	888	903	911	913	911	913	913	918	923	925	923	923	923	914	
30	921	923	931	935	923	921	913	888	865	875	863	855	885	878	891	893	901	911	913	913	913	911	911	911	902	
31	908	908	908	905	913	915	905	893	881	873	871	870	881	888	895	901	908	915	918	921	923	923	921	911	902	
Mean	913	912	911	908	911	911	905	894	886	879	871	873	878	884	891	899	904	912	917	920	918	914	914	914	902	
Mean*	912	911	911	910	911	908	906	897	887	879	873	876	883	890	897	906	912	916	920	921	918	915	915	915	904	
Mean**	923	920	916	910	916	912	909	898	887	873	857	867	876	879	889	897	900	907	912	918	911	907	900	914	900	

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.	17000 γ + Tabular Quantities (in γ).																									Mean.
1	915	918	921	925	923	915	918	903	893	878	875	843	863	878	888	898	908	908	911	911	913	928	919	919	903	
2	912	904	904	906	909	909	906	896	886	879	874	876	879	892	902	906	914	914	914	916	919	929	936	904	904	
3**	909	909	912	914	916	912	906	912	899	894	879	839	859	874	859	854	889	876	896	939	914	894	889	912	894	
4**	914	909	889	909	894	886	884	894	872	862	854	858	822	859	864	872	882	884	884	932	889	884	902	904	884	
5	896	884	884	889	899	902	874	869	876	872	869	869	869	872	874	884	894	899	904	909	911	904	907	912	888	
6*	909	902	896	894	904	904	896	886	876	876	869	866	862	864	869	876	894	904	909	909	909	906	904	906	891	
7	909	909	906	909	909	912	912	904	894	889	879	869	874	882	892	894	899	909	916	924	926	929	936	934	905	
8	926	912	894	907	906	909	906	896	884	872	872	879	884	864	860	877	895	890	905	900	905	917	957	915	897	
9	880	870	860	893	897	900	860	860	847	853	847	865	887	895	887	883	885	887	895	905	900	895	900	905	882	
10	915	905	890	890	885	885	867	855	863	870	870	870	883	887	890	887	890	893	903	897	893	900	902	910	888	
11	907	895	895	895	893	890	890	885	877	873	877	887	885	873	885	883	900	900	905	905	910	927	903	903	894	
12*	903	903	905	905	905	903	900	895	880	885	880	885	895	905	910	907	905	905	908	910	910	920	910	910	902	
13	910	913	915	910	915	913	910	900	895	890	890	897	907	913	907	900	915	893	907	910	903	897	905	907	905	
14	903	903	905	905	907	907	907	900	900	895	885	890	900	897	887	890	897	905	920	937	917	913	930	920	905	
15	913	907	915	930	920	898	907	890	880	860	864	871	874	881	896	896	906	896	894	898	906	906	906	908	897	
16	906	906	904	916	896	908	904	896	888	884	876	876	874	884	888	886	896	896	898	906	914	914	921	891	897	
17	891	911	914	901	901	911	916	896	894	884	876	871	874	874	876	874	871	894	894	896	908	906	906	910	894	
18	908	901	904	898	899	904	906	898	891	878	871	856	871	881	888	891	891	888	901	906	906	901	904	916	894	
19	914	901	901	903	903	911	898	903	891	878	871	874	876	886	886	886	891	898	906	908	911	911	914	911	897	
20*	901	904	903	906	906	896	908	911	898	884	876	874	876	878	881	884	888	896	906	911	911	911	911	916	897	
21*	911	908	906	911	916	911	911	914	908	898	891	878	876	886	894	891	901	906	906	906	908	911	911	911	903	
22**	911	911	926	926	936	916	917	912	912	897	869	852	867	897	897	899	895	915	882	889	905	855	857	857	896	
23	907	887	892	885	895	897	892	892	879	872	869	872	877	882	885	889	892	897	902	902	905	907	902	897	891	
24	897	897	899	902	905	907	899	897	887	879	877	874	872	875	892	895	897	905	907	907	907	905	904	902	895	
25	905	905	901	901	902	902	903	904	900	892	887	882	882	887	892	897	899	905	909	912	912	917	917	917	905	
26*	912	910	912	909	912	912	912	909	902	892	885	887	895	897	902	905	902	907	909	912	912	922	909	909	906	
27	909	907	907	907	902	907	905	907	895	895	882	885	879	877	892	899	899	887	889	905	912	915	917	969	902	
28**	917	909	892	897	890	897	902	887	887	889	892	892	899	892	847	849	867	887	912	857	832	817	847	827	879	
29**	826	828	840	870	888	886	848	828	840	828	830	843	843	858	848	843	863	856	858	853	880	855	858	863	861	
30	886	866	870	883	868	870	876	872	850	850	848	843	853	860	861	868	868	873	876	883	873	866	870	873	867	
Mean	905	900	899	904	904	903	898	893	886	879	873	871	876	882	884	886	894	896	901	906	904	902	906	905	894	
Mean*	907	905	904	905	909	905	905	903	893	887	880	878	881	886	891	893	898	904	908	910	910	914	909	910	900	
Mean**	895	893	892	903	905	899	891	887	882	874	865	857	858	876	863	863	879	884	886	894	884	861	871	873	883	
October.	17000 γ + Tabular Quantities (in γ).																									Mean.
1**	880	888	886	888	883	878	883	883	870	860	853	855	863	870	871	870	878	878	866	865	876	883	893	920	877	
2	893	888	876	878	900	896	893	893	891	865	863	860	860	863	868	873	883	898	900	878	878	890	888	893	882	
3*	888	890	893	890	893	894	894	892	876	868	868	866	866	868	878	888	890	888	893	893	895	896	898	903	886	
4	908	900	898	903	906	908	900	880	863	850	848	848	863	860	856	858	863	873	880	888	898	898	898	908	882	
5	900	890	890	896	898	903	888	900	891	873	858	856	848	843	848	860	866	878	886	888	893	896	893	896	881	
6	893	893	893	893	893	893	898	898	890	873	863	853	850	863	863	858	858	860	863	873	883	888	898	890	878	
7	893	896	900	898	900	878	888	893	888	873	866	848	830	833	843	833	858	856	856	883	890	888	888	886	874	
8	886	880	883	873	888	890	890	883	873	868	858	856	863	863	856	860	868	878	880	878	876	888	888	888	876	
9	890	888	888	890	893	891	896	893	888	878	873	868	868	873	883	890	890	898	900	903	913	908	916	898	891	
10**	910	898	900	908	910	843	838	850	848	848	810	788	813	820	830	826	840	858	858	868	873	890	890	878	858	
11	874	874	877	877	877	881	879	877	874	859	854	857	854	857	861	864	871	879	877	876	879	877	881	881	872	
12	889	887	889	891	891	894	901	897	887	871	859	854	857	867	874	881	881	889	884	879	889	894	914	901	884	
13	897	897	897	897	891	894	897	897	889	874	867	864	867	876	879	884	881	887	889	899	901	903	901	904	889	
14*	907	904	904	901	901	901	901	897	889	874	864	862	871	877	881	884	887	896	892	889	899	897	899	897	891	
15	901	899	897	897	897	904	901	899	881	866	851	851	861	864	871	876	879	887	892	896	897	897	897	894	890	
16	897	897	899	899	901	903	899	891	879	869	864	864	871	879	889	894	897	899	901	899	899	899	897	901	891	
17	901	904	907	907	909	909	909	909	901	894	881	879	881	882	884	882	881	887	879	859	867	879	887	887	890	
18	897	894	891	889	894	894	899	899	894	879	864	861	859	864	869	879	884	889	899	899	894	894	899	904	887	
19	907	901	901	901	907	914	914	911	901	885	867	861	861	857	864	871	874	884	874	877	889	897	899	901	888	
20*	901	901	904	907	909	909	914	911	904	889	879	874	874	877	884	894	901	907	914	917	919	919	917	914	902	
21*	912	912	912	912	914	915	913	908	900	890	885	880	885	895	900	898	898	908	915	915	915	912	912	915	905	
22	912	915	915	918	922	922	920	915	910	900	885	880	888	890	890	902	908	908	912	912	908	908	900	902	906	
23	905	912	912	912	912	912	910	910	902	900	895	890	882	890	898	900	905	895	902	908	915	915	918	935	906	
24**	905	900	900	912	935	912	910	910	908	900	890	875	878	880	882	888	892	890	895	898	902	905	902	905	899	
25**	902	902	903	902	905	915	918	920	922	915	905	902	902	898	865	852	860	858	872	878	882	898	900	900	895	
26	902	895	900	902	900	900	902	900	900	898	890	888	885	888	890	890	897	888	870	870	890	920	902	900	895	
27**	905	898	900	910	915	908	902	902	898	888	880	882	882	882	895	890	920	902	892	898	890	900	905	905	898	
28	905	905	922	912	910	908	912	905	892	882	875	872	875	880	880	870	872	880	900	905	908	910	908	905	896	
29	912	920	918	920	922	920	918	905	882	870	862	868	867	860	870	870	878	900	908	910	910	912	912	910	897	
30*	908	907	905	910	910	912	913	908	905	900	895	890	895	900	900	908	910	912	912	915	915	915	915	913	907	
31	912	915	915	915	918	920	925	912	910	900	895	880	882	882	888	900	910	915	915	915	910	910	908	912	907	
Mean	900	898	899	900	903	901	901	898	891	879	870	866	868	871	875	877	883	887	890	891	895	900	901	902	890	
Mean*	903	903	904	904	905	906	907	905	895	884	878	874	878	883	889	894	897	902	905	906	909	908	908	908	898	
Mean**	900	897	898	904	910	891	890	893	889	882	868	860	868	870	869	865	878	877	877	881	885	895	898	902	885	

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	
November.	17000 γ + Tabular Quantities (in γ).																									Mean.
1	915	910	910	910	915	918	912	915	908	898	885	885	890	895	895	895	900	902	880	875	880	900	905	905	900	
2	918	912	905	905	910	908	912	905	890	885	890	890	880	878	878	878	877	867	885	900	895	895	900	900	894	
3	905	905	905	905	900	915	912	908	902	892	890	888	880	888	900	900	898	900	890	890	895	915	912	910	900	
4**	910	910	922	922	928	925	918	910	908	885	875	867	865	867	875	867	862	878	900	907	910	910	912	910	898	
5	910	915	915	915	918	920	920	920	912	902	895	870	870	875	878	892	890	890	878	882	902	912	930	922	901	
6**	920	918	912	915	917	903	900	895	895	860	865	875	875	870	875	872	870	880	912	890	888	892	918	905	893	
7	900	905	905	915	912	890	902	910	902	895	885	875	890	900	898	890	900	908	912	910	910	912	905	900	901	
8*	905	905	902	908	908	910	908	915	907	900	895	890	885	900	902	900	905	908	910	910	912	910	910	905	905	
9	915	915	910	915	918	920	922	920	915	908	902	902	895	892	892	892	898	905	908	907	905	903	915	907	908	
10*	908	910	910	910	910	912	905	915	908	905	895	895	892	890	892	890	898	902	898	898	898	914	910	908	903	
11	907	915	910	908	910	912	910	912	908	898	898	895	895	890	892	890	888	902	903	910	915	917	918	915	905	
12	915	917	918	920	922	925	925	925	820	920	910	910	905	905	900	898	880	865	890	910	910	910	912	910	909	
13	905	905	902	915	928	920	905	908	900	892	882	882	885	890	895	900	905	908	912	912	908	905	908	918	904	
14*	918	912	912	912	912	910	910	902	895	888	885	885	890	895	898	900	905	907	908	908	908	908	906	905	903	
15	905	900	900	902	902	910	912	910	904	900	895	895	892	882	872	863	860	852	858	875	885	892	890	890	889	
16	890	887	890	895	905	905	908	910	908	900	895	892	895	898	902	892	890	890	900	902	900	898	902	902	898	
17**	902	902	902	906	906	914	920	912	910	905	905	902	895	875	860	852	855	842	865	882	895	898	895	908	892	
18	888	897	900	908	910	908	905	900	900	892	882	870	880	870	872	870	870	872	890	898	902	902	902	902	891	
19	900	902	905	902	908	912	912	908	902	892	890	882	880	875	890	888	882	890	905	902	902	908	908	905	898	
20	905	912	910	912	912	915	915	915	915	905	892	892	898	895	900	902	902	910	912	912	910	915	910	915	908	
21	922	908	912	912	912	915	918	916	905	905	902	900	905	912	915	910	905	900	908	892	912	915	908	905	909	
22	902	915	915	912	910	915	912	910	905	898	892	892	898	902	908	905	900	920	918	918	915	920	908	910	908	
23*	910	908	910	915	920	925	925	922	918	910	905	905	898	910	915	915	920	922	918	918	918	918	918	916	915	
24*	920	920	920	920	922	925	925	922	918	915	912	915	915	922	922	922	922	925	925	925	928	925	922	925	921	
25	922	920	918	920	920	920	920	920	920	915	910	912	915	918	915	918	918	920	940	920	918	920	918	918	914	
26**	915	915	915	915	920	922	925	928	925	915	915	910	908	918	892	908	912	880	865	852	878	880	875	870	902	
27**	908	890	885	888	905	890	888	895	900	895	892	892	895	895	895	895	898	902	902	902	905	902	900	898		
28	900	900	900	900	902	905	902	905	902	895	895	892	898	900	902	902	902	890	900	900	898	895	895	898	899	
29	900	900	900	900	900	910	910	905	900	890	888	888	895	898	898	892	900	900	902	908	905	905	905	905	900	
30	902	902	905	905	910	912	910	910	902	892	888	898	898	892	890	892	895	898	892	892	892	900	900	900	899	
Mean	908	908	908	910	912	913	912	912	907	898	894	892	892	893	894	893	894	895	899	900	903	907	907	907	902	
Mean*	912	911	911	913	914	917	915	915	909	904	898	898	896	903	906	905	910	913	912	912	913	915	913	912	909	
Mean**	911	907	907	909	915	911	910	908	908	892	890	889	888	885	879	879	879	876	889	887	895	897	900	899	897	
December.	17000 γ + Tabular Quantities (in γ.)																									Mean.
1*	908	895	898	900	900	905	905	902	900	892	892	895	890	892	895	900	900	900	895	900	900	905	905	902	899	
2	902	907	910	910	915	918	915	918	910	902	900	898	890	882	865	888	890	890	885	888	892	918	910	892	900	
3	900	898	895	902	898	905	910	905	900	880	875	878	870	872	885	888	888	895	870	895	900	900	898	902	892	
4**	895	895	898	900	900	918	925	925	902	872	855	872	892	898	895	872	872	875	900	872	872	888	910	915	892	
5**	878	800	888	895	890	890	888	890	890	885	882	878	880	888	890	892	893	900	900	910	902	920	910	895	892	
6**	898	902	900	890	880	888	898	890	890	890	880	872	892	892	885	875	900	882	915	895	900	905	930	908	894	
7	900	902	902	902	902	900	904	900	892	880	880	870	865	872	865	875	885	888	908	905	902	902	902	920	893	
8	915	910	905	902	905	908	908	912	910	902	895	890	868	872	880	870	870	870	868	878	890	900	900	915	894	
9	910	902	900	898	918	922	920	915	908	902	892	890	885	885	882	880	878	878	895	905	912	905	905	905	900	
10	905	910	910	908	910	912	915	910	905	890	892	895	900	902	902	905	908	910	912	910	902	908	908	908	906	
11*	908	910	912	913	918	925	927	922	920	915	910	905	905	905	908	912	915	915	918	918	915	915	915	915	914	
12*	915	918	920	920	922	925	928	925	925	922	920	920	925	928	928	925	925	925	925	922	925	922	922	925	923	
13	920	925	928	930	935	935	940	938	937	930	930	925	920	910	900	885	898	915	908	910	918	918	920	915	920	
14	915	918	912	925	920	925	928	925	918	915	902	910	912	890	900	910	910	915	922	920	918	912	940	920	916	
15	920	918	920	920	930	932	935	930	920	920	920	918	918	920	920	918	920	915	910	900	915	908	907	910	919	
16	910	915	915	920	925	927	925	922	920	915	905	907	913	915	913	903	908	910	918	917	915	928	922	920	916	
17	922	922	922	924	925	926	926	926	925	922	920	912	905	908	902	902	910	920	925	928	925	922	920	922	919	
18	923	928	927	930	932	935	930	925	930	920	915	912	910	915	918	917	918	917	910	918	920	920	918	927	922	
19	915	914	916	918	918	920	922	918	920	920	912	912	915	915	912	912	918	918	917	917	918	922	928	928	918	
20	915	912	915	925	925	925	928	930	935	938	940	930	920	912	908	908	905	918	925	915	910	915	915	918	920	
21	918	915	917	920	918	920	917	914	913	912	912	910	910	905	902	900	902	910	910	912	910	910	910	910	912	
22*	908	910	912	913	915	915	918	915	912	912	912	915	920	918	912	908	910	912	915	915	915	915	912	913	913	
23	912	912	912	912	914	916	917	918	915	912	912	915	918	920	915	912	912	915	920	922	918	920	938	920	916	
24	925	918	915	922	925	925	925	925	925	915	915	912	915	918	905	880	890	905	908	905	900	895	892	882	910	
25	895	895	898	900	905	902	908	905	890	898	915	900	870	872	880	878	880	877	878	888	875	875	878	890	890	
26**	888	888	892	898	900	912	915	895	852	832	825	822	818	822	805	805	812	820	842	842	860	862	878	888	857	
27**	870	875	882	882	880	880	892	882	870	855	860	875	878	872	850	860	865	855	865	845	852	865	910	870	870	
28	872	875	880	885	890	885	890	890	880	872	875	882	890	892	885	872	872	878	882	882	878	877	878	878	881	
29	875	878	880	882	888	890	890	890	880	872	870	872	878	888	885	877	878	878	875	880	882	880	882	882	881	
30*	880	882	885	888	890	895	895	895	890	888	882	885	895	900	908	890	888	890	885	880	885	890	890	888	889	
31	886	888	885	890	904	900	900	895	890	882	878	878	885	887	877	878	862	860	880	882	878	878	880	880	884	
Mean	903	904	905	907	910	912	914	911	906	899	896	895	895	896	893	890	893	895	900	899	900	903	908	905	902	
Mean*	904	903	905	907	909	913	915	912	909	906	903	904	907	909	910	907	908	908	908	907	908	909	909	909	908	
Mean**	886	888	892	893	890	898	904	896	881	867	860	864	872	874	865	861	868	866	884	873	877	888	908	895	881	

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.	43000 γ + Tabular Quantities (in γ)																									Mean.
1	254	261	249	249	251	254	255	254	254	249	247	244	244	249	254	257	259	259	261	269	269	277	277	271	257	
2	269	261	259	259	259	259	257	257	259	257	255	257	256	257	259	261	259	259	261	269	269	274	279	274	262	
3	264	264	261	259	259	259	259	269	261	261	259	261	269	269	267	264	261	259	261	261	261	264	267	259	262	
4	259	257	257	257	255	254	256	256	257	256	254	257	259	261	267	264	261	261	259	259	261	264	267	259	259	
5	259	259	259	259	257	257	257	257	259	257	254	254	254	259	264	..	..	..	..	..	..	..	..	..	..	
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
27	252	254	248	250	252	254	257	260	260	257	252	252	252	257	262	262	262	262	262	260	260	260	257	254	257	
28	259	251	251	251	251	251	251	253	256	256	251	249	251	253	256	259	261	259	261	263	272	275	272	267	257	
29	260	250	252	250	250	250	255	258	260	252	250	250	252	252	255	255	257	255	255	258	255	257	255	255	254	
30	259	249	247	247	247	245	244	247	249	244	249	251	251	254	254	259	259	261	259	259	261	270	268	262	254	
31	265	253	250	250	250	250	250	256	256	256	250	248	250	258	256	255	253	253	253	253	253	253	258	250	253	
Mean	260	256	253	252	253	253	254	256	257	254	252	252	254	257	259	260	259	259	259	261	262	266	267	261	257	
Mean*																										
Mean**																										
February.	43000 γ + Tabular Quantities (in γ)																									Mean.
1	251	249	247	247	247	247	245	245	251	247	247	245	245	251	255	255	252	252	252	252	251	254	254	251	249	
2*	246	246	246	246	246	246	248	248	246	246	246	246	246	244	248	249	250	250	248	247	247	247	247	247	246	
3*	245	245	245	245	245	245	245	247	255	255	250	245	249	252	246	246	246	246	246	246	252	249	248	244	247	
4	244	239	239	239	239	239	239	244	238	233	228	231	233	233	243	243	243	243	241	241	243	238	238	235	238	
5	238	235	235	235	234	237	234	234	234	232	233	230	233	232	242	244	242	242	240	240	240	240	238	234	236	
6	233	233	233	235	235	239	238	239	235	231	226	226	229	231	236	241	239	239	239	239	240	240	240	230	235	
7**	230	230	232	232	234	238	238	238	240	238	230	232	240	242	250	248	251	253	253	251	251	251	249	247	241	
8	241	244	237	237	239	241	241	241	241	239	234	237	238	236	240	248	248	248	248	248	248	248	246	246	242	
9*	243	243	243	243	243	246	248	248	247	247	245	242	239	245	249	255	255	249	249	247	247	247	247	245	246	
10	245	242	239	242	241	244	246	246	246	244	241	241	241	241	244	246	248	248	246	248	248	246	246	244	244	
11	243	240	237	237	240	243	237	237	237	237	233	233	235	237	238	240	243	243	245	245	244	242	241	239	239	
12	226	227	229	232	234	239	242	241	239	234	232	234	234	236	239	244	245	243	243	243	243	245	243	241	237	
13	238	238	238	235	235	238	238	241	238	233	231	233	237	240	244	245	244	242	242	242	244	248	248	245	240	
14**	237	237	237	237	234	234	235	237	236	233	231	229	239	241	250	254	254	252	252	260	254	252	250	247	243	
15	241	238	236	236	237	238	237	238	240	238	235	232	232	235	238	240	246	251	256	256	256	251	246	242	241	
16**	239	239	237	237	237	237	237	237	235	231	229	229	237	244	265	281	279	268	286	281	269	261	251	249	250	
17**	244	233	236	228	236	238	238	244	240	240	238	243	249	249	249	254	258	258	258	250	248	246	239	237	243	
18	237	229	227	229	232	239	239	239	239	237	235	232	231	238	249	252	257	252	249	249	247	247	245	238	240	
19	238	236	236	236	238	238	238	243	241	235	225	225	227	233	235	237	246	254	254	252	251	251	246	244	239	
20	238	237	237	237	236	236	236	238	241	234	226	224	232	236	243	245	247	247	240	243	245	243	240	236	238	
21	235	235	235	235	235	239	239	242	239	233	228	228	231	235	244	249	246	249	246	246	243	243	241	238	239	
22	234	238	238	238	241	241	238	240	243	240	235	232	232	234	243	248	250	250	249	247	244	242	242	242	241	
23*	240	242	242	242	244	244	244	250	244	242	233	231	230	236	241	249	251	251	249	249	249	249	247	245	244	
24**	243	243	241	241	241	246	246	246	245	240	231	229	240	245	250	262	276	302	353	395	364	317	281	279	269	
25	255	235	238	242	251	254	259	261	259	265	261	249	249	251	257	259	261	261	261	261	268	272	270	268	256	
26	260	258	258	258	258	258	258	260	260	256	250	248	248	253	258	262	260	260	269	279	278	273	270	268	260	
27	263	257	257	257	255	254	255	257	259	257	257	252	247	249	259	268	269	266	266	266	268	271	271	266	260	
28	255	255	255	255	257	257	257	260	257	255	253	255	254	259	265	267	267	267	265	267	267	267	267	265	260	
29*	260	260	260	256	256	256	256	256	255	255	255	253	259	264	266	269	269	266	266	266	266	266	264	264	261	
Mean	243	241	240	240	241	243	243	245	244	242	238	237	239	242	248	252	253	254	256	257	256	253	250	247	246	
Mean*	247	247	247	246	247	247	248	250	250	249	246	243	245	248	248	250	254	252	252	251	252	252	251	249	249	
Mean**	239	236	237	235	236	239	239	240	239	236	232	231	241	244	253	260	264	267	280	287	277	265	254	252	249	

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	
March.	43000 γ + Tabular Quantities (in γ).																									Mean.
1	264	264	262	260	259	261	263	263	261	261	254	252	252	261	263	265	263	263	263	263	265	268	265	263	262	
2*	263	258	258	258	258	261	260	261	261	255	252	247	252	254	261	263	262	262	262	262	262	262	262	260	259	
3*	260	257	257	257	257	257	257	262	262	262	251	251	251	257	262	262	262	260	262	262	262	260	260	258	259	
4	253	253	253	253	250	252	254	256	252	250	245	240	240	242	250	252	261	266	292	354	369	356	333	256	270	
5**	261	219	184	235	245	240	235	230	232	244	250	262	277	288	292	303	304	301	299	291	291	291	282	280	264	
6	275	255	265	270	270	270	270	270	270	262	260	260	265	270	270	275	272	280	285	282	280	278	270	255	270	
7	255	262	265	265	264	264	261	259	259	259	259	259	261	269	274	274	277	279	277	276	274	274	269	269	267	
8	267	261	250	259	261	264	269	269	267	264	261	259	249	254	259	269	268	268	268	268	268	268	266	253	263	
9	248	253	256	258	258	263	263	268	266	258	248	246	245	248	256	258	264	267	264	258	258	258	258	256	259	
10	256	258	256	258	257	257	255	257	257	249	242	239	239	247	257	257	257	257	259	268	270	259	259	257	255	
11	257	257	259	259	259	259	261	263	257	255	245	241	240	242	249	257	265	262	262	265	267	262	262	256	257	
12	256	258	258	256	258	256	256	254	252	248	246	241	241	248	256	267	277	275	279	285	287	279	269	265	261	
13	265	259	261	264	264	261	258	258	255	257	247	245	247	257	262	266	270	266	266	264	263	264	263	261	260	
14**	261	257	257	257	259	257	255	255	257	255	247	250	255	266	294	308	304	316	353	316	298	291	283	280	276	
15	280	275	275	275	275	275	277	275	273	275	275	277	277	280	283	285	285	277	275	275	277	277	275	275	277	
16	275	275	274	272	272	272	274	269	269	272	269	259	259	264	274	282	282	282	276	279	277	276	262	256	272	
17	264	272	274	272	272	274	274	274	274	264	262	261	262	264	271	275	283	275	273	273	273	273	275	273	271	
18	273	273	273	273	273	273	275	273	271	267	263	258	263	271	277	283	283	275	275	281	281	281	275	271	273	
19	271	273	272	272	272	270	270	272	270	266	251	249	257	264	267	274	282	274	272	272	272	270	270	270	271	
20	270	272	272	272	272	272	272	274	272	264	253	249	249	251	261	268	279	281	281	279	279	273	271	271	272	
21	271	269	269	269	267	267	269	271	266	259	248	242	245	250	261	273	279	279	276	278	278	276	271	269	267	
22**	269	263	265	265	268	267	265	270	268	257	240	242	231	260	373	456	..	..	..	..	430	373	332	322	..	
23**	198	58	43	27	38	94	198	270	282	309	322	313	311	334	354	347	341	302	308	310	298	290	274	257	245	
24**	238	217	192	192	228	259	274	281	288	288	287	279	279	308	295	295	352	331	310	300	288	285	269	254	275	
25	248	242	239	235	239	256	268	276	278	278	276	268	266	266	268	280	291	297	291	280	280	280	278	273	269	
26	266	266	270	273	276	278	280	284	284	278	273	258	260	266	272	277	277	275	275	275	275	273	272	272	273	
27	270	269	269	269	269	269	275	275	275	269	267	257	255	257	267	277	277	288	296	288	283	277	269	265	272	
28	259	267	268	268	268	266	266	271	274	268	264	256	258	264	268	274	284	278	277	274	271	271	268	266	269	
29*	266	266	266	266	266	266	268	271	269	256	251	243	245	256	263	265	263	265	265	265	265	265	265	265	263	
30*	263	263	261	261	261	261	261	265	263	255	244	241	242	244	253	263	263	263	263	263	257	257	257	255	257	
31*	257	257	256	256	256	258	259	262	261	256	249	243	241	243	249	252	252	252	252	254	254	254	252	250	253	
Mean	260	253	250	252	254	258	263	266	266	263	259	255	256	263	270	275	279	277	279	279	277	275	270	264	265	
Mean*	262	260	260	260	260	261	261	264	263	257	249	245	246	251	258	261	260	260	261	261	260	260	259	258	258	
Mean**	240	188	169	178	193	213	241	259	265	274	277	276	281	299	309	313	325	312	318	304	294	289	277	268	265	
April.	43000 γ + Tabular Quantities (in γ).																									Mean.
1*	252	252	252	252	252	254	254	256	256	252	243	241	233	238	244	251	253	253	251	250	251	250	250	249	250	
2	251	251	251	251	251	251	253	253	251	242	242	232	232	234	240	242	250	253	251	251	249	248	248	248	247	
3	251	251	253	251	251	251	251	249	244	240	234	224	224	234	240	242	244	251	251	253	253	253	251	251	246	
4	251	253	253	253	251	244	244	246	242	234	230	224	224	232	242	242	253	258	258	261	263	263	261	258	248	
5**	254	252	252	252	252	252	252	252	250	248	241	241	239	245	264	268	274	293	298	293	283	281	264	257	261	
6	257	241	241	243	236	243	247	254	254	254	250	250	250	257	262	272	272	270	264	262	262	257	257	252	254	
7	254	255	257	257	260	262	262	262	260	252	243	241	239	241	254	262	262	272	274	272	270	262	260	257	258	
8	256	256	253	253	251	251	251	256	256	249	238	232	236	240	253	261	263	263	261	259	259	259	259	259	253	
9	257	255	259	261	261	261	261	263	257	244	240	238	238	242	256	266	269	269	267	261	261	261	261	259	257	
10	256	240	240	249	251	253	259	261	251	240	240	240	238	244	251	245	259	256	259	256	255	254	254	253	251	
11*	255	250	245	241	245	248	248	250	248	241	239	237	229	231	239	248	250	254	254	252	252	250	250	248	246	
12	250	250	250	241	241	239	241	243	241	239	237	231	227	226	234	239	245	248	248	248	248	248	248	248	242	
13*	248	248	248	248	246	248	250	250	248	241	239	231	224	224	229	237	239	241	248	250	250	248	248	248	242	
14*	247	240	236	236	238	240	240	240	238	234	228	226	222	223	228	236	238	238	240	242	244	244	244	244	237	
15**	244	240	228	218	220	228	228	228	228	226	226	226	244	282	282	300	331	342	319	288	278	251	249	249	256	
16	247	240	242	247	242	244	247	249	249	247	240	233	233	236	244	251	252	254	259	259	259	257	259	257	248	
17**	256	250	248	239	237	237	237	239	239	237	235	239	241	256	258	258	260	277	279	281	268	253	248	237	246	
18**	227	217	222	206	215	219	225	237	243	243	240	239	237	239	248	258	268	268	274	274	263	248	248	248	242	
19	229	225	227	237	248	250	256	258	250	248	239	237	237	237	237	248	258	268	258	258	258	258	250	248	247	
20	238	228	226	226	224	220	224	226	226	221	221	221	234	247	269	283	286	288	286	278	273	257	255	252	246	
21	247	242	244	245	249	245	242	242	238	236	234	226	228	242	249	265	267	265	259	257	255	252	252	242	247	
22	238	245	249	250	252	254	255	257	252	247	234	226	224	234	245	257	257	257	257	257	255	255	255	257	249	
23	256	254	254	254	256	258	264	261	256	251	246	236	230	235	246	258	261	266	266	268	266	268	266	264	256	
24**	248	233	223	227	233	217	220	225	223	217	223	232	235	241	251	258	264	266	266	264	263	258	256	258	242	
25	256	256	258	258	261	264	261	263	258	246	237	235	233	237	246	251	256	259	258	256	258	258	258	256	253	
26	250	250	255	255	257	257	257	255	250	240	234	236	240	245	247	253	255	255	255	255	255	253	255	255	251	
27	255	255	253	253	255	255	255	253	245	243	234	232	234	245	255	260	257	255	258	257	255	257	251	251	251	
28*	255	255	255	255	255	255	255	253	247	243	234	229	232	236	243	253	253	255	255	255	255	255	255	255	250	
29	254	251	252	252	254	256	259	254	252	242	235	233	235	244	254	254	254	254	254	254	254	256	262	246	251	
30	246	244	247	252	261	262	262	258	254	246	239	235	236	244	248	257	262	266	273	285	275	270	252	249	255	
Mean	250	246	246	245	247	247	249	250	247	241	236	233	234	240	249	256	260	264	263	262	260	256	254	252	249	
Mean*	251	249	247	246	247	249	249	250	247	238	237	233	228	230	237	245	247	248	250	250	250	249	249	249	245	
Mean**	246	238	235	228	231	231	232	236	237	234	233	235	239	253	261	268	279	285	287	280	267	258	253	250	249	

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.
May.	43000 γ + Tabular Quantities (in γ).																									
1**	249	218	221	228	213	223	228	236	242	242	244	249	241	249	254	270	273	273	277	285	293	297	277	275	252	
2	265	253	258	263	269	272	265	263	263	255	253	251	253	261	271	274	274	279	282	274	272	271	269	269	266	
3	269	261	261	267	269	267	265	263	261	256	251	253	258	263	269	274	279	286	284	282	274	272	272	272	268	
4	269	269	265	269	272	274	276	277	272	263	253	245	255	272	274	282	280	276	276	276	274	272	272	272	270	
5	268	270	268	271	273	273	273	273	268	262	252	250	249	254	265	273	273	275	275	273	273	273	271	271	268	
6*	271	271	273	273	273	273	273	271	268	260	252	252	250	250	252	260	262	270	273	275	276	273	273	273	267	
7*	273	273	273	275	278	278	276	275	268	260	252	250	252	254	264	271	273	275	275	275	273	273	271	271	269	
8	273	273	273	273	275	276	273	273	268	257	252	244	244	252	258	260	264	273	273	273	271	273	273	271	266	
9	271	273	273	260	257	262	262	262	262	260	254	247	247	250	260	268	281	304	316	312	298	291	291	285	273	
10	283	281	278	275	276	283	281	281	275	262	242	237	242	254	262	273	273	273	280	281	276	275	275	275	271	
11*	274	274	274	276	279	277	277	274	272	269	262	259	253	259	264	270	272	278	282	282	280	278	276	276	272	
12	277	277	277	277	280	280	276	274	263	251	249	239	243	259	264	272	272	276	280	282	280	280	276	274	270	
13**	274	270	272	272	272	270	272	270	267	263	259	249	248	251	270	277	292	294	311	305	292	270	272	264	273	
14**	249	232	249	261	270	270	253	259	261	256	249	251	261	267	270	274	280	282	290	286	272	263	263	270	264	
15**	270	263	270	265	263	259	261	261	259	259	253	259	270	280	290	292	303	308	305	303	297	290	267	251	275	
16	249	243	249	259	270	272	272	272	270	259	251	259	264	274	279	280	282	284	282	277	276	274	272	272	268	
17	271	266	266	271	273	275	271	269	257	245	240	240	248	258	260	269	271	273	271	271	271	271	269	269	264	
18	264	262	263	263	269	266	271	271	271	266	250	250	252	255	260	269	269	271	276	276	273	271	271	269	266	
19	266	262	263	266	269	271	271	269	266	250	248	248	242	252	258	264	267	269	269	266	263	262	260	260	262	
20	262	262	262	262	269	269	267	262	252	248	244	244	250	258	264	264	262	262	269	269	267	264	260	260	261	
21	260	260	260	260	266	269	266	262	260	248	240	238	240	247	250	258	260	268	271	274	279	262	258	255	259	
22*	258	260	260	260	264	269	269	267	262	248	242	240	231	231	248	256	262	264	267	267	262	260	260	260	257	
23*	259	257	257	259	261	265	261	261	261	253	245	239	239	241	249	255	257	267	268	265	261	259	259	259	257	
24	257	255	254	259	259	259	259	257	257	251	247	241	239	244	249	251	257	259	261	268	261	261	259	257	255	
25	256	252	252	251	254	253	249	253	249	247	243	239	239	239	241	249	249	254	259	259	261	257	257	251	251	
26	249	249	247	241	241	247	244	241	239	234	228	226	228	228	234	237	239	244	246	249	247	247	247	239	240	
27	239	237	235	230	228	232	237	239	236	230	226	218	223	237	247	247	249	249	247	246	244	244	244	241	238	
28**	239	239	241	241	245	247	244	239	237	230	220	216	228	247	254	261	272	299	292	275	265	254	234	230	248	
29	238	240	243	243	240	246	248	248	246	238	238	233	233	238	243	250	250	254	256	250	248	243	236	238	243	
30	240	240	240	242	243	243	244	242	233	225	227	224	227	225	229	236	240	246	246	244	243	243	240	238	238	
31	236	238	238	238	238	242	242	240	233	222	222	219	219	227	235	245	248	246	248	246	245	243	240	240	237	
Mean	261	257	259	260	262	263	262	261	258	251	245	242	244	251	258	264	267	272	274	273	270	267	263	262	260	
Mean*	267	267	267	269	271	272	271	270	266	258	251	248	245	247	255	262	265	271	273	273	270	269	268	268	264	
Mean**	256	244	251	253	253	254	252	253	253	250	245	245	250	259	268	275	284	291	295	291	284	273	263	258	263	
June.	43000 γ + Tabular Quantities (in γ).																									Mean.
1	240	240	240	240	242	246	243	240	236	229	229	227	225	224	222	229	236	243	248	250	246	240	238	238	237	
2*	238	238	238	240	246	246	244	240	238	223	215	215	219	227	229	234	240	246	248	240	238	238	238	238	236	
3	236	238	238	238	243	243	242	242	240	238	227	217	215	222	236	238	240	242	248	243	238	236	235	233	236	
4**	226	226	228	232	237	239	237	233	220	216	211	206	211	216	221	237	247	247	252	252	247	242	237	237	232	
5	235	237	237	237	242	245	247	242	237	232	226	218	222	228	235	239	243	247	247	245	243	239	237	237	237	
6	237	239	239	240	245	244	244	243	241	235	233	226	226	237	247	255	257	263	257	257	254	250	247	247	244	
7	247	247	247	249	249	247	247	245	239	235	232	226	234	237	247	249	255	255	257	257	255	251	249	249	246	
8*	249	249	249	249	251	255	255	257	257	249	247	237	232	232	239	249	253	257	259	257	255	253	251	249	250	
9	249	249	249	251	253	257	255	254	252	239	232	232	232	239	239	239	242	252	268	268	266	259	257	257	250	
10**	252	245	237	237	237	232	237	242	242	232	226	249	257	263	286	314	321	329	327	304	286	268	257	235	263	
11**	237	226	235	244	245	247	255	257	249	237	235	228	242	252	260	276	275	280	278	278	276	273	268	266	255	
12	263	249	249	249	257	257	260	266	265	255	247	254	249	250	255	257	266	276	276	274	270	268	266	263	260	
13	263	263	261	260	259	260	259	257	252	252	257	252	252	255	257	259	268	268	270	273	268	266	263	259	261	
14*	259	259	257	259	261	266	265	266	259	255	245	239	244	247	250	257	263	268	268	268	266	259	259	257	258	
15	256	256	256	256	256	262	258	254	246	241	234	234	236	243	244	246	254	256	256	256	256	254	253	251	251	
16	253	253	252	253	256	256	256	251	246	241	236	225	231	236	246	258	256	256	251	251	248	248	246	246	248	
17	246	246	248	249	251	254	251	251	244	234	234	229	229	238	241	248	249	251	256	251	248	246	244	243	245	
18*	251	251	251	251	251	253	254	256	253	246	236	225	225	231	238	249	256	256	254	253	248	244	244	241	247	
19	241	241	243	244	248	254	253	246	238	234	225	217	215	220	231	234	244	251	254	253	248	246	246	244	240	
20	238	238	236	234	236	236	236	236	236	234	225	217	215	215	225	233	241	251	251	248	246	241	241	238	235	
21	236	234	236	238	241	244	243	244	241	231	227	219	217	218	225	236	236	246	256	251	248	244	240	238	237	
22*	238	236	238	241	241	241	236	236	236	231	225	215	215	223	225	233	238	246	248	246	246	244	240	238	236	
23	236	234	227	231	236	236	236	243	239	227	225	219	217	225	225	229	236	241	246	246	246	241	238	236	234	
24	236	236	236	238	236	238	236	236	236	227	219	208	213	223	229	241	250	256	254	252	249	244	239	238	236	
25	238	236	236	238	238	242	243	242	239	231	225	217	218	223	233	243	246	244	248	246	248	241	238	238	237	
26	236	236	236	238	243	244	239	236	234	233	236	234	233	238	238	248	254	253	249	246	246	244	244	241	241	
27	241	241	240	242	241	241	236	236	231	218	217	220	223	231	236	238	246	244	241	241	244	244	244	242	237	
28**	241	241	241	241	244	244	240	238	239	231	224	215	222	223	231	233	236	244	248	251	251	246	241	241	238	
29**	236	236	238	241	241	241	244	243	236	231	224	215	217	223	231	236	238	246	246	246	244	240	238	238	236	
30	241	234	236	238	244	246	238	244	243	236	231	220	227	231	234	246	248	248	248	248	248	246	244	246	240	
Mean	243	242	242	243	246	247	246	246	242	235	230	225	227	232	239	246	251	255	257	255	252	248	246	244	243	
Mean*	247	247	247	248	250	252	251	251	249	241	234	226	227	232	236	244	250	255	255	253	251	248	246	245	245	
Mean**	238	235	236	239	241	241	243	243	237	229	224	223	230	235	246	259	263	269	270	266	261	254	248	243	245	

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	
July.	43000 γ + Tabular Quantities (in γ).																									Mean.
1	246	244	243	244	244	246	241	241	238	236	234	232	227	225	234	236	244	248	251	249	246	246	246	244	241	
2*	241	241	241	241	244	246	246	241	243	238	234	225	227	231	241	246	246	246	246	246	244	241	241	241	241	
3*	241	241	241	244	246	246	244	243	238	238	236	227	231	231	234	234	238	244	246	246	244	240	238	238	240	
4	238	239	241	244	246	246	241	238	234	225	220	210	213	217	225	236	241	248	244	244	242	240	238	236	235	
5	238	246	244	243	246	246	244	246	244	236	223	217	221	227	234	236	241	240	238	239	236	236	238	238	237	
6	241	243	241	243	244	244	246	246	244	244	238	234	225	229	236	238	246	248	254	256	256	254	253	251	244	
7**	248	241	220	236	241	246	246	246	238	236	231	220	225	231	236	241	248	249	256	262	267	246	236	236	241	
8	233	235	240	243	247	247	245	245	245	242	235	233	233	237	245	255	257	257	255	255	253	251	245	245	245	
9	243	235	243	247	250	253	253	250	247	247	245	243	233	226	233	245	247	253	255	255	253	253	251	250	246	
10	245	245	247	250	253	253	253	253	250	250	245	235	235	237	243	243	247	250	253	253	255	255	253	249	248	
11	247	247	247	247	247	249	245	247	245	235	233	230	226	233	239	245	250	250	249	247	245	243	243	243	243	
12**	243	240	243	245	245	243	242	240	240	233	233	233	235	245	255	255	261	264	264	259	261	253	247	245	247	
13	245	245	243	243	245	247	247	245	243	235	226	222	222	226	237	245	247	247	250	245	243	243	245	245	241	
14	245	245	245	247	245	245	245	245	240	233	226	219	224	230	240	243	240	245	243	243	250	250	245	245	241	
15**	245	237	238	237	238	240	240	243	243	235	226	224	226	235	245	255	255	257	261	266	274	257	245	226	244	
16**	213	223	229	236	244	244	246	246	244	234	223	218	215	223	226	242	246	254	254	252	246	244	244	242	237	
17	244	244	244	239	239	241	242	244	244	239	237	232	227	234	244	249	249	252	244	244	244	244	242	242	242	
18	242	242	244	244	244	246	244	239	234	223	215	218	218	229	244	254	263	273	279	275	270	263	252	232	245	
19	239	244	244	244	246	252	249	249	246	239	234	225	221	231	234	244	252	256	258	258	254	249	244	244	244	
20	236	234	239	244	246	246	244	244	244	246	244	244	236	232	239	249	252	254	254	252	249	246	244	244	244	
21*	246	246	246	249	252	254	252	251	249	244	244	246	244	244	244	256	256	254	254	254	252	249	246	246	249	
22	244	244	244	246	248	250	246	244	242	241	236	232	229	231	242	254	263	273	275	271	260	254	251	249	249	
23**	237	233	241	245	251	251	253	253	251	235	235	231	238	238	245	259	269	272	274	272	262	255	253	253	250	
24	253	251	245	243	245	253	255	253	248	243	238	243	241	243	247	247	253	257	262	262	264	262	259	251	251	
25	248	251	251	251	249	248	245	248	245	243	238	231	233	235	245	253	259	262	259	255	253	253	253	253	248	
26	251	243	243	251	253	259	255	253	253	248	243	243	245	251	248	259	264	271	267	264	264	262	259	253	254	
27	255	255	255	259	264	264	266	268	264	260	251	251	255	259	262	264	269	274	274	272	266	264	264	264	262	
28*	264	262	264	264	264	266	266	268	264	259	253	248	251	253	255	262	264	269	272	266	266	264	266	264	262	
29*	264	264	264	266	270	272	272	272	264	253	251	243	248	253	263	269	272	266	264	264	262	262	264	264	263	
30	263	261	263	263	268	268	261	261	252	242	240	240	242	244	254	263	268	268	267	263	263	261	261	261	258	
31	261	260	263	263	265	266	263	261	258	252	250	242	242	244	254	261	265	268	263	263	261	261	261	261	259	
Mean	245	245	245	247	249	251	250	249	246	241	236	232	232	236	243	250	254	257	258	257	255	252	249	247	247	
Mean*	251	251	251	253	255	257	256	255	252	246	244	238	240	242	247	253	255	256	256	255	254	251	251	251	251	
Mean**	237	235	234	240	244	245	245	246	243	235	230	225	228	234	241	250	256	259	262	262	262	251	245	240	244	
August.	43000 γ + Tabular Quantities (in γ).																									Mean.
1	258	258	260	261	258	254	252	252	250	242	242	234	234	242	250	255	261	263	263	263	261	258	258	258	254	
2*	256	254	255	258	263	261	260	254	254	252	252	242	234	242	250	261	263	263	263	263	261	261	259	258	256	
3	257	257	257	257	262	262	260	257	251	241	231	231	231	231	233	243	253	260	262	260	260	260	258	257	251	
4	253	253	243	243	249	251	251	249	249	239	241	239	241	246	253	262	270	272	277	272	267	262	260	254	254	
5	253	253	255	253	253	257	257	262	262	257	251	239	241	246	246	262	264	272	272	267	262	260	260	257	257	
6*	257	257	257	260	264	264	267	267	262	253	249	241	243	246	251	257	262	262	262	262	260	260	258	258	257	
7	258	253	248	250	254	259	259	259	254	248	242	240	230	240	248	259	261	263	261	261	261	261	259	259	254	
8**	245	248	250	252	259	259	252	250	240	238	237	232	235	242	250	256	266	271	271	274	271	269	261	259	254	
9**	256	245	245	242	245	256	261	263	269	259	250	250	252	259	266	269	271	273	271	269	263	263	263	261	259	
10	259	259	250	252	256	259	259	261	259	256	256	250	252	261	261	269	271	271	269	271	265	263	261	259	260	
11	258	258	258	258	260	260	265	267	255	249	241	239	239	247	258	267	268	270	268	265	264	262	262	260	258	
12**	260	249	231	241	255	258	258	255	249	239	239	241	241	247	251	260	262	260	263	278	265	249	224	224	250	
13	241	255	262	265	270	270	272	275	265	255	249	249	255	260	265	270	270	270	268	270	270	268	244	249	261	
14	251	255	258	260	262	268	265	260	258	255	249	249	247	260	280	280	280	278	275	275	268	268	260	258	263	
15	248	248	257	259	261	261	261	257	248	240	236	230	238	246	256	264	267	267	261	261	259	259	257	250	254	
16	243	248	254	257	259	261	264	262	259	250	246	242	238	244	259	266	264	267	261	259	257	257	257	255	255	
17*	257	259	260	260	260	265	265	260	260	249	239	237	239	247	251	260	260	262	262	262	260	258	258	258	256	
18	254	254	254	254	254	259	259	257	254	246	240	238	238	243	254	264	267	264	264	261	261	259	259	257	255	
19	247	242	235	224	237	249	258	258	258	249	245	235	229	239	256	266	268	270	268	266	264	260	260	258	252	
20	258	260	261	263	266	268	273	276	275	263	258	253	256	258	263	266	270	270	268	268	268	268	266	266	265	
21**	249	247	239	242	258	268	273	273	272	268	263	263	258	268	280	301	305	320	320	318	309	278	268	258	275	
22**	237	232	239	232	232	245	260	273	276	276	272	266	260	266	278	289	289	289	289	289	284	284	280	276	267	
23	267	262	262	269	277	285	290	290	288	286	272	265	259	271	277	288	290	288	288	288	288	286	283	277	279	
24	265	267	269	275	277	279	280	280	275	272	269	267	265	269	277	288	288	288	288	286	285	283	283	283	277	
25	283	279	279	279	277	279	279	277	277	272	272	267	267	272	277	288	286	279	283	280	286	286	286	284	279	
26	283	283	279	279	283	283	286	288	286	275	267	267	265	269	277	277	277	279	279	279	277	277	279	279	278	
27*	282	280	278	278	282	285	284	282	278	271	266	264	266	268	278	285	285	285	287	285	283	282	282	278	279	
28*	271	274	276	276	276	278	282	282	276	266	256	254	256	263	269	276	278	278	278	278	278	276	276	276	273	
29	276	276	276	276	278	276	276	276	271	261	254	256	262	272	282	287	287	282	282	276	274	274	276	276	274	
30	276	276	274	266	271	276	278	276	271	271	266	271	273	276	285	287	292	292	289	287	287	287	285	278	279	
31	277	281	281	281	281	284	286	286	275	270	265	255	255	260	267	275	281	281	281	281	281	284	284	279	276	
Mean	259	259	258	259	263	266	267	267	264	257	252	249	248	255	263	271	273	274	274	273	271	268	267	263	263	
Mean*	265	265	265	266	269	271	272	269	266	258	252	248	248	253	260	268	270	270	270	270	268	267	266	266	264	
Mean**	249	244	241	242	250	257	261	263	261	256	252	250	249	256	265	275	279	283	283	286	270	269	259	256	261	

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 (in γ).																									Mean.
1	275	277	281	277	277	275	273	275	273	267	260	262	267	273	279	286	291	293	294	289	288	284	281	277	278	
2	260	267	275	281	284	288	288	291	286	275	270	270	275	281	286	288	288	288	286	286	286	284	275	275	281	
3**	277	284	284	284	286	286	275	267	265	257	257	265	277	288	306	316	316	312	319	301	286	284	273	257	284	
4**	234	244	253	252	260	265	275	277	281	273	267	265	273	277	296	298	306	329	319	306	296	288	265	269	277	
5	272	266	264	274	274	283	283	283	274	266	259	262	268	274	280	283	287	287	287	285	285	285	280	269	276	
6*	264	269	272	274	276	283	285	285	280	274	262	264	266	266	268	274	280	283	283	283	283	281	276	276	275	
7	274	274	274	274	274	276	278	278	276	272	264	262	256	261	267	274	274	272	272	274	274	272	256	256	270	
8	256	249	243	243	262	264	271	274	274	264	254	249	254	262	272	274	285	285	285	287	285	280	264	238	266	
9	237	248	242	237	261	263	265	271	263	263	263	263	265	263	268	273	284	299	294	294	286	284	282	279	269	
10	258	261	268	271	271	268	273	273	268	263	263	263	265	271	273	275	282	284	286	286	284	275	255	255	270	
11	261	267	269	273	273	277	275	277	271	265	263	261	261	268	281	288	290	294	294	284	282	279	279	271	275	
12*	273	275	275	275	275	275	273	273	271	263	258	255	261	268	273	275	273	271	271	271	273	271	273	273	271	
13	272	272	272	272	272	272	274	275	274	267	257	254	255	262	267	285	301	293	283	283	283	285	283	274	274	
14	278	278	278	281	280	283	283	283	278	270	270	264	262	267	272	283	286	288	283	283	274	278	274	272	277	
15	267	272	272	262	262	267	272	274	274	267	264	272	272	288	288	291	290	293	301	293	292	288	283	275	278	
16	278	270	272	274	272	274	278	283	281	281	272	270	269	272	272	283	287	285	285	283	283	283	278	260	277	
17	246	246	251	253	263	271	275	280	273	271	266	271	280	292	..	..	..	..	..	..	..	..	..	..	..	
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	251	263	261	260	255	253	251	250	248	242	..	
19	234	240	242	242	242	244	248	251	250	242	234	232	232	232	234	242	251	251	249	248	248	248	242	240	242	
20*	242	240	242	242	242	244	247	247	247	242	240	234	234	238	248	253	258	253	253	253	251	251	248	248	246	
21*	243	241	243	243	243	246	250	248	250	246	247	241	239	241	241	247	252	252	252	252	252	252	252	248	247	
22**	244	243	247	243	241	243	243	246	246	243	241	239	241	250	250	250	245	252	270	274	272	252	219	223	247	
23	205	231	243	252	252	257	260	259	254	252	247	250	249	247	243	252	254	254	254	254	252	252	254	254	249	
24	254	254	252	252	252	252	254	260	256	250	243	241	243	248	252	260	260	262	260	257	252	252	252	250	253	
25	251	251	251	249	249	251	251	255	249	246	249	249	249	245	245	246	246	249	249	249	249	251	249	249	249	
26*	249	249	249	247	246	246	246	246	246	240	238	238	236	238	242	245	245	245	245	246	246	245	245	245	244	
27	246	246	246	246	246	242	246	246	240	236	234	232	235	238	240	245	249	251	255	251	249	246	246	235	244	
28**	225	238	238	240	240	240	240	238	235	228	225	207	207	218	228	257	280	280	254	205	171	228	233	233	233	
29**	230	209	187	187	171	178	187	201	205	207	216	218	220	230	244	267	264	259	259	264	257	249	247	239	229	
30	236	230	218	213	218	218	220	226	223	220	216	218	220	228	230	238	238	240	240	247	247	238	238	238	229	
Mean	253	255	255	256	257	260	262	263	261	256	252	251	253	258	262	269	273	275	274	270	267	266	260	256	261	
Mean*	254	255	256	256	256	259	260	260	259	253	249	246	247	250	254	259	262	261	261	261	261	260	259	258	257	
Mean**	242	244	242	241	240	242	244	246	246	242	247	239	244	253	265	278	282	286	284	270	256	260	247	244	254	
October.	43000 γ + Tabular Quantities (in γ).																									Mean.
1**	232	277	222	225	224	225	224	222	222	219	217	217	219	225	229	235	243	268	266	252	243	229	222	206	230	
2	200	207	207	207	208	211	207	216	214	214	211	214	218	228	236	236	236	234	226	228	226	226	224	221	219	
3*	220	220	215	217	220	220	220	220	218	215	213	213	215	217	217	220	225	225	227	225	225	225	220	215	219	
4	209	209	209	210	209	209	210	214	214	212	209	214	219	224	234	243	245	243	234	232	224	222	222	214	220	
5	211	211	213	212	213	213	217	213	215	211	208	208	211	223	231	233	244	231	231	223	223	218	215	213	218	
6	212	212	212	212	212	214	217	217	215	212	210	209	207	212	217	222	238	234	248	235	232	222	217	207	219	
7	202	198	198	195	195	194	195	195	195	192	190	206	211	223	234	237	237	237	231	219	213	213	211	206	209	
8	205	205	201	201	199	202	210	208	199	199	194	194	199	201	208	210	212	214	214	213	210	210	208	208	205	
9	200	200	198	198	200	201	204	204	200	198	190	188	183	186	188	190	196	198	196	196	196	196	198	198	196	
10**	187	179	185	185	166	166	175	177	179	187	189	192	206	216	220	228	241	226	220	216	213	206	197	187	198	
11	192	194	196	196	198	198	200	198	194	186	186	186	191	196	205	207	205	207	207	207	205	202	202	202	198	
12	197	197	197	195	195	195	195	195	195	195	193	190	197	201	206	214	208	206	206	206	203	204	190	187	199	
13	194	194	194	196	196	200	200	200	200	196	194	196	198	203	205	210	203	203	203	203	201	199	196	196	199	
14*	195	195	197	195	199	199	202	206	206	202	199	195	196	193	202	206	204	204	204	206	204	204	204	199	201	
15	198	198	198	196	196	194	199	201	203	200	198	195	194	198	203	205	205	203	203	201	203	203	201	201	200	
16	200	200	198	197	197	200	202	202	202	197	191	186	186	191	197	202	200	200	200	200	202	202	200	197	199	
17	196	194	194	192	192	192	192	192	192	190	185	185	190	192	199	201	203	206	209	213	219	213	211	209	198	
18	200	200	200	200	200	202	204	205	200	195	189	189	195	202	205	208	205	200	200	202	202	202	200	198	200	
19	194	194	194	194	194	197	199	199	201	199	194	194	194	201	209	214	214	211	212	219	217	214	209	207	203	
20*	203	200	200	200	200	200	202	208	206	198	198	196	198	198	203	206	206	203	203	202	202	200	200	200	201	
21*	199	199	201	202	202	205	207	209	209	202	199	197	197	197	207	207	205	207	209	207	207	209	209	209	204	
22	206	208	206	206	206	206	208	211	211	206	201	204	204	206	208	214	214	216	216	218	218	224	227	225	211	
23	221	217	215	213	213	215	215	217	217	213	207	205	207	207	207	210	215	215	221	221	221	221	221	216	215	
24**	220	223	223	216	198	204	206	206	214	212	209	209	212	214	223	229	227	229	229	229	229	229	231	229	219	
25**	229	229	226	224	224	224	224	224	224	219	213	211	213	226	253	265	265	263	263	261	253	246	244	244	236	
26	241	241	235	233	233	233	233	231	231	227	223	223	225	228	233	238	243	243	250	258	259	243	241	241	237	
27**	237	234	234	217	227	230	232	234	237	232	227	232	230	232	234	245	261	253	244	244	244	244	242	242	237	
28	239	236	219	226	229	231	231	241	241	239	231	221	229	233	244	254	262	260	252	250	243	243	243	241	239	
29	240	232	228	230	230	232	235	238	240	240	238	235	240	256	261	271	271	261	253	249	249	246	246	246	244	
30*	245	245	248	248	250	248	248	246	245	245	241	245	248	245	250	250	250	252	250	251	250	250	250	248	248	
31	247	247	247	249	249	249	249	251	249	238	238	238	238	244	251	257	257	255	257	256	259	259	257	247	250	
Mean	212	211	210	209	209	210	212	213	213	209	206	206	209	213	220	225	227	226	225	224	222	220	218	215	215	
Mean*	212	212	212	212	214	214	216	218	217	212	210	209	211	210	216	218	218	218	219	218	218	218	217	214	215	
Mean**	221	218	218	213	208	210	212	213	215	214	211	212	216	223	232	240	247	248	244	240	236	231	227	222	224	

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	
November.	43000 γ + Tabular Quantities (in γ).																									Mean.
1	248	250	253	256	250	250	252	256	253	253	252	249	255	259	262	262	262	262	267	276	277	272	264	261	258	
2	256	251	254	256	258	258	257	259	259	257	255	258	258	265	267	267	273	275	275	275	277	277	275	270	264	
3	264	259	258	257	261	258	263	265	265	263	261	258	260	260	260	262	266	269	271	275	281	273	272	264	264	
4**	261	261	256	256	256	256	259	258	260	260	260	262	262	266	276	286	297	291	285	280	275	275	275	272	269	
5	275	270	270	270	269	269	269	267	267	267	265	267	269	271	278	284	294	303	301	301	294	288	278	266	277	
6**	262	256	262	264	254	249	256	265	277	277	278	280	284	286	297	309	323	317	312	297	296	296	280	277	281	
7	280	275	275	277	277	280	282	282	284	284	286	282	284	286	292	293	294	292	292	285	285	289	289	285	285	
8*	283	283	282	280	282	284	284	284	288	284	284	282	286	291	293	291	291	289	287	289	290	289	288	288	286	
9	285	282	282	282	282	284	284	280	279	281	279	281	284	289	289	295	298	295	290	290	288	288	286	286	286	
10*	283	280	278	278	279	279	283	279	281	279	279	279	281	285	284	286	286	286	288	288	285	284	284	284	282	
11	279	277	273	275	277	280	280	277	277	275	274	274	279	279	282	284	290	290	286	284	281	281	277	275	279	
12	273	273	273	272	273	274	274	274	274	270	272	272	274	277	280	280	283	292	290	287	281	279	276	273	277	
13	271	271	268	262	260	265	270	268	268	268	270	272	274	279	281	279	277	271	271	271	271	273	268	260	270	
14*	260	260	261	263	266	268	268	268	267	269	267	267	267	269	272	272	272	272	271	270	269	268	268	266	268	
15	266	264	266	266	265	265	267	267	265	260	255	255	260	267	269	276	285	290	295	293	290	283	274	272	271	
16	265	265	265	263	263	263	263	261	261	257	254	256	257	257	262	262	267	267	267	264	264	263	261	259	262	
17**	256	256	256	253	253	256	258	258	254	252	252	255	260	265	276	276	280	290	292	290	285	275	269	259	266	
18	257	251	252	253	253	256	258	256	256	254	258	256	257	259	267	267	272	273	273	269	269	262	259	258	260	
19	256	256	256	255	254	253	256	256	255	253	253	255	255	260	262	260	265	265	262	259	259	256	254	254	257	
20	254	254	252	249	248	248	251	253	253	253	253	255	258	258	257	252	252	254	254	254	256	254	254	252	253	
21	246	243	243	249	249	249	249	249	251	249	246	248	252	252	250	252	250	258	260	271	265	249	257	254	252	
22	251	251	234	239	244	249	250	256	256	253	248	253	253	258	258	258	257	257	255	257	257	257	257	255	253	
23*	252	252	248	248	252	254	254	254	254	254	254	252	249	249	255	257	257	255	256	257	255	255	255	254	253	
24*	254	252	248	250	249	252	252	254	253	248	248	248	251	253	253	255	253	253	251	250	252	252	251	252	251	
25	252	252	252	252	251	251	253	254	254	253	251	251	253	255	256	257	259	257	256	256	256	254	254	254	254	
26**	251	251	251	249	251	253	255	255	255	251	246	246	248	248	250	259	261	267	285	300	289	268	266	266	259	
27**	237	232	253	249	235	239	248	255	255	255	255	257	259	259	259	261	259	260	260	258	256	256	256	256	253	
28	256	256	255	255	255	257	257	255	251	250	250	250	252	254	254	256	256	260	259	259	259	259	256	253	255	
29	253	253	253	255	253	253	257	257	252	254	254	254	254	254	258	260	270	274	271	271	271	266	265	261	259	
30	261	261	261	261	260	262	262	262	260	258	258	260	262	265	264	269	269	267	264	269	266	266	260	260	263	
Mean	262	260	260	260	259	260	262	263	263	261	261	261	263	266	269	271	274	275	275	275	273	270	268	265	266	
Mean*	266	265	263	264	266	267	268	268	269	267	266	266	267	269	271	272	272	271	271	270	270	270	269	269	268	
Mean**	253	251	256	254	250	251	255	258	260	259	258	260	263	265	272	278	284	285	287	285	280	274	269	266	266	
December.	43000 γ + Tabular Quantities (in γ).																									Mean.
1*	256	256	255	257	257	259	261	261	258	256	254	256	257	259	261	260	260	262	262	264	262	259	255	253	258	
2	253	251	250	247	247	250	252	252	251	246	249	251	253	254	262	260	264	264	266	265	259	257	247	243	254	
3	238	238	240	242	242	242	241	241	245	246	246	248	254	254	251	250	250	253	253	254	252	248	244	239	246	
4**	238	238	238	241	241	240	236	236	242	242	243	249	249	251	251	252	259	261	269	261	260	255	234	213	246	
5**	224	233	233	233	230	233	237	239	237	239	239	236	238	246	246	246	243	241	241	235	239	234	234	240	237	
6**	236	234	233	233	233	233	237	236	240	236	236	240	241	241	243	257	250	249	241	241	239	236	226	226	238	
7	229	229	229	229	229	231	231	231	231	235	235	241	243	245	249	249	247	247	240	240	238	237	235	230	237	
8	225	225	223	225	228	230	230	232	230	228	228	230	235	235	242	246	250	250	250	250	250	245	239	237	236	
9	231	231	231	229	224	224	229	229	229	234	234	234	239	239	245	248	250	250	247	247	240	238	236	236	236	
10	233	236	230	230	236	236	238	238	236	236	234	236	238	238	238	238	244	244	238	240	237	237	237	237	237	
11*	236	235	235	235	233	235	235	236	235	233	232	232	233	237	237	239	239	237	239	239	239	241	238	236	236	
12*	235	236	236	236	238	236	236	235	233	233	233	235	235	237	237	237	239	241	238	238	236	234	236	236	236	
13	236	236	234	234	235	235	235	237	235	233	235	233	235	237	243	253	253	253	251	251	249	243	243	243	241	
14	240	237	237	237	242	242	242	240	242	244	241	241	241	246	251	251	251	251	249	249	248	250	242	240	244	
15	240	240	242	242	240	240	243	243	241	239	239	239	239	244	244	249	248	248	250	260	250	250	250	248	245	
16	248	246	245	239	245	247	247	247	247	252	252	252	246	251	251	251	254	256	256	256	256	254	250	249	250	
17	247	247	245	245	245	249	253	251	249	246	246	244	246	249	249	254	254	254	253	253	253	253	251	251	249	
18	248	245	245	245	244	245	247	250	247	247	247	247	252	250	249	249	251	251	253	253	253	253	253	251	249	
19	250	250	250	250	249	250	250	252	250	250	255	255	249	255	251	251	252	252	255	255	254	254	251	250	252	
20	246	248	248	243	249	248	248	246	243	243	243	243	246	248	250	253	258	258	253	253	259	255	255	252	249	
21	247	247	247	247	247	249	249	256	253	253	249	250	250	254	253	253	253	253	256	256	255	254	255	255	252	
22*	248	248	248	248	246	248	248	248	252	255	256	255	255	254	250	250	255	252	252	254	251	255	254	254	252	
23	251	248	247	245	247	247	247	248	248	247	247	251	251	251	245	251	251	251	251	251	250	250	250	253	249	
24	246	247	250	247	248	246	246	246	244	244	249	250	250	253	256	255	255	254	253	255	252	252	254	254	250	
25	249	249	249	249	249	243	241	240	241	241	241	239	245	251	251	254	256	257	260	256	253	253	253	248	249	
26**	248	248	248	242	242	237	232	232	237	243	253	255	268	289	294	304	313	306	294	284	267	252	250	226	261	
27**	241	243	241	241	243	241	239	241	241	247	247	241	247	252	257	252	257	260	262	267	266	261	249	240	249	
28	242	242	242	242	240	240	242	242	242	242	240	238	237	249	251	249	249	251	251	249	248	246	241	237	244	
29	239	239	239	241	239	241	243	241	241	239	234	234	234	234	234	237	241	245	245	245	240	238	236	230	239	
30*	233	233	230	230	233	233	233	233	230	228	230	228	232	233	230	228	228	233	236	233	234	232	230	229	231	
31	227	225	227	225	225	225	227	227	227	232	237	232	237	235	232	232	237	239	237	235	234	228	226	224	231	
Mean	241	241	240	240	241	240	241	241	241	242	242	242	244	247	248	250	252	252	252	251	249	247	244	241	245	
Mean*	242	242	241	241	241	242	243	243	242	241	241	241	242	244	243	243	244	245	245	246	244	244	243	242	243	
Mean**	237	239	239	238	238	237	236	237	239	241	244	244	249	256	258	262	264	263	261	258	254	248	239	229	246	

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

1920.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
	′	′	′	′	′	′	′	′	′	′	′	′	′
Midnight	1·2	0·3	0·5	1·5	3·2	4·5	3·4	2·5	0·4	0·4	0·7	1·1	0·58
1h.	1·9	1·0	0·6	0·9	3·1	3·9	3·2	2·3	0·5	1·0	1·0	1·5	0·68
2	2·4	1·4	1·0	0·9	2·3	3·0	2·9	2·1	1·1	1·3	1·4	2·3	0·78
3	2·7	1·6	1·0	1·7	2·4	2·7	2·5	1·9	0·8	1·5	1·3	2·3	0·81
4	2·6	1·6	1·8	1·6	1·6	1·7	1·6	1·4	0·9	1·5	1·6	2·4	0·63
5	2·5	1·7	2·3	2·2	0·5	0·6	0·4	0·4	1·5	1·9	1·4	2·6	0·44
6	2·3	1·3	1·8	1·5	0·0	0·1	0·0	0·0	1·7	1·8	1·6	2·6	0·17
7	2·2	1·1	1·5	0·4	0·3	0·0	0·1	0·2	1·3	1·2	1·7	2·7	0·00
8	1·4	0·1	0·6	0·0	1·1	0·8	0·8	1·1	1·4	0·6	1·8	3·1	0·01
9	1·6	0·0	1·1	1·2	3·0	2·6	2·8	2·9	2·8	1·5	2·6	3·8	1·10
10	3·0	1·8	3·2	3·6	5·4	4·6	5·0	5·7	5·2	3·7	4·1	4·3	3·07
11	4·7	4·2	6·1	6·9	7·9	7·7	8·0	8·6	8·0	6·5	5·0	5·0	5·49
Noon	6·3	6·4	9·1	9·6	9·4	10·1	10·0	10·4	9·6	7·9	5·9	5·1	7·26
13h.	6·9	7·6	9·7	10·9	9·8	11·1	10·8	10·9	9·5	8·2	5·6	5·0	7·77
14	6·3	7·6	9·8	10·0	8·9	11·2	10·9	9·6	8·6	7·4	4·9	4·4	7·24
15	5·4	6·4	7·9	8·1	7·6	10·1	9·8	7·9	6·9	5·7	4·6	3·8	5·96
16	4·7	5·1	6·6	6·4	6·5	8·7	8·2	6·4	5·4	4·1	3·8	3·0	4·68
17	4·1	4·4	4·7	4·4	5·4	7·1	6·9	5·2	4·4	3·4	3·1	2·8	3·60
18	4·0	3·9	3·5	3·6	4·5	5·9	5·9	4·6	3·2	3·1	2·1	1·9	2·79
19	2·9	2·0	2·3	3·4	3·8	5·3	5·2	3·7	1·9	2·1	1·0	1·6	1·87
20	1·3	1·5	1·9	2·4	3·6	5·1	4·6	3·6	1·7	1·3	0·3	0·8	1·28
21	0·0	1·0	1·5	2·3	3·6	5·0	4·4	3·2	1·5	0·6	0·0	0·7	0·92
22	0·3	0·2	1·1	1·8	3·5	4·8	3·9	2·2	0·2	0·0	0·0	0·0	0·44
23	0·8	0·0	0·0	1·7	3·2	4·6	3·6	2·8	0·0	0·0	0·0	0·5	0·37
Means	2·98	2·59	3·32	3·63	4·19	5·05	4·79	4·15	3·27	2·78	2·31	2·64	2·41

TABLE V.—DIURNAL RANGE of DECLINATION, on each CIVIL DAY, as deduced from Table I.

1920.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d.	′	′	′	′	′	′	′	′	′	′	′	′
1	8·2	7·2	10·8	11·7	18·3	12·5	11·5	10·4	14·0	19·0	5·5	5·6
2	8·0	5·7	8·2	13·4	13·0	16·0	11·7	10·5	11·0	11·7	9·8	12·8
3	5·5	6·3	7·5	16·3	9·8	13·0	11·8	11·3	18·2	8·3	10·4	7·5
4	6·2	7·0	42·5	17·0	14·5	16·0	15·5	16·4	17·7	11·3	13·3	15·0
5	5.6	6·8	43·3	19·3	11·0	11·5	9·3	11·5	8·5	12·5	12·0	8·0
6	6·3	13·0	12·5	11·5	9·5	11·3	14·0	9·7	9·8	14·5	13·5	7·0
7	9·5	13·0	8·2	13·7	6·7	11·2	14·8	12·3	9·2	14·8	9·0	8·8
8	5·3	8·5	12·3	15·0	10·0	10·3	12·3	8·8	22·8	9·7	6·2	7·8
9	15·0	7·7	9·2	12·8	13·8	11·5	13·2	13·2	12·0	10·2	6·5	7·3
10	13·0	9·4	13·7	12·0	10·5	17·2	10·5	8·3	8·8	13·0	6·0	5·0
11	14·7	5·5	9·5	12·8	9·3	10·2	13·0	10·2	10·8	8·0	5·6	4·0
12	11·6	12·8	13·0	9·8	—	10·2	14·0	16·0	8·6	9·3	8·0	4·0
13	6·3	10·0	6·5	9·0	—	11·5	11·0	14·3	9·8	7·6	5·3	7·0
14	8·0	10·2	22·0	7·3	11·5	12·2	11·2	18·4	11·8	9·2	4·7	5·5
15	8·2	7·5	10·5	23·5	16·0	12·5	20·0	9·5	11·5	11·3	9·0	7·3
16	4·7	21·5	13·2	12·7	11·8	10·3	14·0	13·0	15·0	13·5	4·0	4·5
17	10·5	17·0	12·0	18·5	12·0	10·5	11·0	10·5	13·8	13·0	12·8	4·2
18	6·0	9·3	8·0	18·2	10·8	13·6	17·5	16·7	8·0	10·0	9·2	4·2
19	5·8	8·7	11·8	16·8	10·0	14·8	12·4	17·0	9·7	10·5	4·8	4·8
20	8·7	10·0	12·2	21·3	11·3	11·5	10·2	14·5	7·7	8·4	8·0	6·3
21	13·7	9·3	15·8	18·5	12·0	11·8	10·5	17·8	9·7	7·7	11·4	2·2
22	9·3	9·5	48·5	11·5	8·7	13·5	12·8	17·0	25·0	14·2	9·0	3·0
23	10·2	7·0	33·7	16·2	9·2	11·8	15·5	10·5	10·0	8·0	4·7	7·3
24	7·0	24·5	16·2	17·8	9·2	15·2	8·3	11·0	9·8	16·5	5·0	6·3
25	6·0	14·8	11·0	4·0	9·5	10·0	11·3	9·0	7·2	13·0	4·6	7·5
26	8·3	9·2	10·2	8·5	10·7	11·0	8·5	10·0	8·7	7·7	16·8	19·2
27	5·0	12·5	10·8	12·5	9·7	11·0	9·8	11·0	13·2	16·5	9·0	11·5
28	9·5	11·2	8·0	11·7	15·7	13·7	9·5	10·5	34·0	9·4	4·7	4·7
29	10·2	9·5	10·6	12·4	8·2	11·3	11·5	10·0	27·0	9·0	5·0	4·0
30	10·6		10·2	15·5	9·8	12·0	14·2	14·5	18·0	5·0	3·7	4·3
31	7·2		11·8		7·0		11·7	11·8		12·2		4·5
Means	8·5	10·5	15·3	14·0	11·0	12·3	12·3	12·4	13·4	11·1	7·9	6·8

The mean of the twelve monthly values is 11′·29.

TABLE VI.—MONTHLY and ANNUAL MEAN 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	4, 5, 13, 19, 27.	April	1, 11, 13, 14, 28.	July	2, 3, 21, 28, 29.	October	3, 14, 20, 21, 30.
February	2, 3, 9, 23, 29.	May	6, 7, 11, 22, 23.	August	2, 6, 17, 27, 28.	November	8, 10, 14, 23, 24.
March	2, 3, 29, 30, 31.	June	2, 8, 14, 18, 22.	September	6, 12, 20, 21, 26.	December	1, 11, 12, 22, 30.

1920.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
	′	′	′	′	′	′	′	′	′	′	′	′	′
Midnight	0·6	0·3	2·3	3·8	3·1	4·6	3·7	2·7	1·6	1·7	0·1	0·2	1·66
1h.	0·7	0·9	2·7	4·1	3·1	3·8	3·0	2·3	1·6	1·9	0·5	0·9	1·73
2	0·7	1·0	2·7	2·9	2·6	3·7	2·7	2·1	1·9	2·2	0·4	0·9	1·58
3	0·9	0·8	2·9	2·8	2·4	3·6	2·6	2·1	2·0	2·0	0·3	1·0	1·55
4	0·9	1·0	2·6	2·5	1·7	2·0	1·7	1·4	1·0	2·2	0·1	1·1	1·12
5	0·7	1·0	2·4	2·1	1·0	1·0	0·3	0·8	1·3	2·0	0·2	0·8	0·73
6	0·7	0·7	2·1	1·3	0·2	0·1	0·1	0·0	1·2	1·5	0·2	0·8	0·34
7	0·6	0·9	1·0	0·2	0·0	0·0	0·0	0·3	0·2	0·5	0·3	0·8	0·00
8	0·1	0·0	0·0	0·0	0·3	1·5	0·7	1·0	0·0	0·0	0·5	1·1	0·03
9	0·4	0·0	0·8	1·2	1·6	3·1	2·8	3·1	1·4	0·9	1·4	1·8	1·14
10	1·9	2·0	3·2	3·2	3·5	5·5	5·1	5·5	3·6	3·5	2·5	2·9	3·13
11	3·2	3·9	6·7	6·2	6·4	8·5	8·7	8·0	6·3	6·0	3·6	3·5	5·52
Noon.	4·2	5·5	9·2	8·8	8·1	11·1	10·4	9·8	8·2	7·3	4·4	3·6	7·15
13h.	4·8	6·1	9·2	10·0	8·4	12·7	10·5	10·4	8·3	7·6	3·8	3·2	7·52
14	4·4	6·3	7·5	9·5	7·6	12·7	10·3	9·1	7·3	6·4	2·7	2·7	6·81
15	3·3	5·6	5·7	7·8	6·7	11·0	9·1	7·2	5·8	4·9	2·3	2·2	5·57
16	2·8	4·5	4·1	6·6	5·7	9·1	7·1	5·8	4·6	4·0	2·1	2·3	4·49
17	2·2	4·2	3·4	5·6	5·1	7·1	5·6	4·8	3·8	3·8	1·6	1·9	3·69
18	2·0	3·8	3·3	5·2	4·6	5·8	4·9	4·2	3·6	3·4	1·2	1·6	3·23
19	1·5	3·3	3·4	4·6	4·5	5·3	4·4	4·1	3·5	3·0	0·7	1·3	2·90
20	1·2	2·6	3·1	4·6	4·4	5·4	4·4	4·0	3·3	2·5	0·4	0·8	2·66
21	0·3	1·9	3·0	4·6	4·1	4·9	4·0	4·0	2·0	1·9	0·2	0·7	2·23
22	0·0	1·1	2·9	4·4	3·4	5·1	3·8	3·5	2·1	1·6	0·1	0·4	1·97
23	0·1	0·6	2·9	4·2	3·3	4·8	3·8	3·2	1·5	1·2	0·0	0·0	1·73
Means	1·59	2·42	3·63	4·43	3·83	5·52	4·57	4·14	3·17	3·00	1·23	1·52	2·85

TABLE VII.—MONTHLY and ANNUAL MEAN 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	9, 10, 11, 21, 28.	April	5, 15, 17, 18, 24.	July	7, 12, 15, 16, 23.	October	1, 10, 24, 25, 27.
February	7, 14, 16, 17, 24.	May	1, 14, 15, 28.	August	8, 9, 12, 21, 22.	November	4, 6, 17, 26, 27.
March	5, 14, 22, 23, 24.	June	4, 10, 11, 28, 29.	September	3, 4, 22, 28, 29.	December	4, 5, 6, 26, 27.

1920.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
	′	′	′	′	′	′	′	′	′	′	′	′	′
Midnight	4·4	3·3	0·0	1·5	4·4	4·6	2·9	3·0	2·3	0·0	2·7	3·6	0·17
1h.	5·1	4·8	0·3	0·0	2·8	3·4	3·2	2·4	2·3	0·8	1·7	4·3	0·03
2	5·9	5·3	4·0	0·7	0·0	1·5	2·6	0·0	3·5	1·7	3·6	6·0	0·34
3	5·3	4·7	2·7	1·1	2·5	1·4	2·6	1·7	4·4	1·3	3·8	5·8	0·55
4	7·2	4·8	7·9	0·0	1·2	1·2	1·6	2·5	5·7	1·6	5·0	6·5	1·21
5	7·0	5·0	11·7	4·4	0·3	0·8	0·6	0·5	8·0	2·6	4·5	7·3	1·83
6	6·1	4·6	9·8	4·7	0·3	0·0	0·3	0·4	9·6	3·4	5·2	7·2	1·74
7	6·2	4·0	11·0	3·6	1·2	0·1	0·0	0·5	8·9	3·3	5·1	6·7	1·66
8	5·4	3·6	8·3	2·8	3·2	2·0	1·3	1·9	8·9	2·6	5·1	7·3	1·81
9	5·3	3·1	9·6	4·0	4·6	4·3	4·5	4·4	9·5	3·1	5·6	8·1	2·95
10	6·3	4·7	12·0	6·9	7·4	5·3	6·8	7·8	12·3	4·8	7·8	8·7	5·01
11	8.7	8·1	13·5	9·7	11·1	9·3	9·4	9·9	15·9	8·3	8·3	9·3	7·56
Noon.	11·1	10·6	18·9	11·8	12·3	11·7	11·3	11·6	16·8	8·9	9·9	9·1	9·44
13h.	11·3	12·5	19·5	14·5	12·3	12·2	13·0	12·1	17·1	9·8	9·9	8·9	10·20
14	10·8	12·7	23·0	12·7	11·5	12·1	13·2	9·9	17·1	9·4	8·8	8·3	9·90
15	11·1	11·3	19·7	11·5	9·8	10·4	12·5	9·3	14·2	7·8	7·7	6·5	8·42
16	9·7	10·0	21·0	9·4	8·1	9·7	11·4	7·9	12·2	4·5	5·9	4·2	6·94
17	7·8	8·9	14·8	3·4	5·2	6·9	10·3	5·9	9·2	3·3	5·5	4·4	4·57
18	7·9	8·0	10·3	2·4	4·9	4·7	8·3	5·6	4·2	3·7	3·1	2·0	2·87
19	6·3	0·0	10·3	3·5	1·8	4·6	7·3	2·9	0·4	2·4	1·4	3·7	1·16
20	4·1	1·5	12·2	1·8	2·1	4·0	4·3	3·0	0·0	2·7	1·0	1·0	0·58
21	0·0	3·1	9·0	3·3	3·8	4·5	4·4	2·3	2·1	2·1	1·6	2·2	0·64
22	1·1	0·7	9·2	2·7	4·3	4·5	3·7	0·9	1·3	1·5	0·8	0·0	0·00
23	1·7	1·4	6·6	2·2	2·8	5·3	4·8	3·4	2·4	0·1	0·0	1·5	0·12
Means	6·5	5·7	11·1	4·9	4·9	5·2	5·8	4·6	7·8	3·7	4·8	5·5	3·32

TABLE VIII.—MONTHLY and ANNUAL MEAN DIURNAL INEQUALITIES of MAGNETIC NORTH FORCE.

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

1920.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	18γ	26γ	24γ	48γ	35γ	35γ	31γ	42γ	34γ	34γ	16γ	13γ	28·5γ
1h.	17	26	25	46	35	34	30	41	29	32	16	14	27·6
2	17	26	24	41	32	34	29	40	28	33	16	15	26·7
3	19	27	27	41	31	35	30	37	33	34	18	17	27·9
4	21	28	26	43	32	37	31	40	33	37	20	20	29·5
5	26	31	32	43	32	35	32	40	32	35	21	22	30·6
6	29	35	31	43	27	29	27	34	27	35	20	24	28·9
7	30	37	30	40	20	21	21	23	22	32	20	21	25·2
8	25	32	22	31	13	13	12	15	15	25	15	16	18·3
9	15	23	11	16	5	6	5	8	8	13	6	9	9·2
10	8	16	4	6	0	3	2	0	2	4	2	6	3·2
11	3	4	0	0	0	0	0	2	0	0	0	5	0·0
Noon	0	0	2	4	3	1	2	7	5	2	0	5	1·4
13h.	3	3	5	8	6	6	5	13	11	5	1	6	4·8
14	11	7	7	16	13	15	13	20	13	9	2	3	9·6
15	13	11	14	25	19	25	19	28	15	11	1	0	13·9
16	15	15	27	35	27	34	25	33	23	17	2	3	20·1
17	17	19	29	41	35	40	31	41	25	21	3	5	24·4
18	17	18	29	42	39	41	35	46	30	24	7	10	27·0
19	19	20	27	43	41	41	37	49	35	25	8	9	28·3
20	19	23	24	44	41	39	38	47	33	29	11	10	28·6
21	20	24	24	46	37	37	35	43	31	34	15	13	28·7
22	18	26	29	45	34	34	34	43	35	35	15	18	29·3
23	20	26	31	44	35	33	32	43	34	36	15	15	29·1
Means	16·7	21·0	21·0	33·0	24·7	26·2	23·2	30·6	23·0	23·4	10·4	11·6	20·9

TABLE IX.—DIURNAL RANGE of MAGNETIC NORTH FORCE, on each CIVIL DAY, as deduced from Table II.

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

1920.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d.												
1	40γ	19γ	34γ	53γ	105γ	54γ	40γ	36γ	85γ	67γ	33γ	18γ
2	43	18	40	73	56	55	42	60	62	40	51	53
3	20	16	27	62	97	47	53	62	100	37	35	40
4	10	25	122	71	45	60	35	81	110	60	63	70
5	16	40	111	60	44	40	40	60	43	57	60	42
6	26	36	67	75	40	61	48	43	47	48	60	58
7	53	60	47	64	25	40	60	72	67	70	40	55
8	25	42	57	53	61	42	69	79	97	34	30	47
9	38	32	45	51	63	67	35	87	58	48	30	44
10	52	32	40	74	35	109	39	55	60	122	25	25
11	35	32	34	52	30	69	45	26	54	27	30	22
12	50	44	43	38	32	52	60	85	40	60	60	13
13	32	52	30	43	72	33	60	78	25	40	46	55
14	26	50	73	47	90	40	36	60	52	45	33	50
15	43	40	47	117	83	35	52	60	70	53	60	35
16	37	95	63	42	51	30	73	53	47	39	23	25
17	68	106	44	107	53	38	37	63	45	30	72	26
18	39	65	43	80	39	62	35	59	60	45	40	25
19	30	48	42	83	48	55	62	57	43	57	37	16
20	30	36	50	80	56	64	37	65	42	45	23	35
21	91	62	54	86	45	57	58	65	40	35	30	20
22	38	48	237	50	48	48	47	86	84	42	28	10
23	44	38	241	40	40	48	60	40	38	53	27	26
24	50	125	105	95	36	62	56	30	35	60	16	45
25	36	37	96	35	33	47	38	39	35	70	12	45
26	65	44	33	51	40	37	42	40	37	50	76	110
27	33	48	60	57	50	40	35	53	92	35	23	65
28	47	27	39	52	93	48	38	37	100	52	13	20
29	30	28	44	63	77	50	54	42	62	62	22	20
30	58		45	57	40	61	35	80	43	25	24	26
31	30		55		50		42	53		45		44
Means	39·8	46·4	66·7	63·7	54·1	51·7	47·2	58·3	59·0	50·1	37·4	38·2

The mean of the twelve monthly values is 51·1γ

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	4, 5, 13, 19, 27.	April	1, 11, 13, 14, 28.	July	2, 3, 21, 28, 29.	October	3, 14, 20, 21, 30.
February	2, 3, 9, 23, 29.	May	6, 7, 11, 22, 23.	August	2, 6, 17, 27, 28.	November	8, 10, 14, 23, 24.
March	2, 3, 29, 30, 31.	June	2, 8, 14, 18, 22.	September	6, 12, 20, 21, 26.	December	1, 11, 12, 22, 30.

1920.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	8γ	17γ	29γ	38γ	28γ	37γ	35γ	39γ	29γ	29γ	16γ	1γ	24·5γ
1h.	8	16	30	41	26	37	33	38	27	29	15	0	24·0
2	11	15	31	38	25	37	33	38	26	30	15	2	24·1
3	11	19	32	38	28	40	34	37	27	30	17	4	25·4
4	15	20	34	38	29	44	37	38	31	31	18	6	27·4
5	19	22	37	39	28	43	37	35	27	32	21	10	28·2
6	20	23	36	40	25	36	32	33	27	33	19	12	27·0
7	23	24	34	37	21	22	22	24	25	31	19	9	23·3
8	19	22	28	29	13	10	13	14	15	21	13	6	15·9
9	11	15	16	18	6	4	4	6	9	10	8	3	8·2
10	4	10	6	10	3	0	1	0	2	4	2	0	2·5
11	1	2	0	0	0	3	0	3	0	0	2	1	0·0
Noon	0	0	1	2	0	3	8	10	3	4	0	4	1·9
13h.	1	2	3	9	4	7	16	17	8	9	7	6	6·4
14	7	6	12	17	9	16	27	24	13	15	10	7	12·6
15	10	10	20	24	13	26	30	33	15	20	9	4	16·8
16	12	13	26	30	19	35	36	39	20	23	14	5	21·7
17	15	15	29	38	28	40	39	43	26	28	17	5	25·9
18	14	15	32	41	34	45	43	47	30	31	16	5	28·4
19	13	17	35	42	32	44	44	48	32	32	16	4	28·9
20	13	17	36	43	33	43	46	45	32	35	17	5	29·4
21	13	18	35	45	30	42	44	42	36	34	19	6	29·3
22	11	18	35	45	29	40	41	42	31	34	17	6	28·1
23	10	15	36	45	30	40	40	42	32	34	16	6	27·8
Means	11·2	14·6	25·5	31·1	20·5	28·9	29·0	30·7	21·8	24·1	13·5	4·9	20·3

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	9, 10, 11, 21, 28.	April	5, 15, 17, 18, 24.	July	7, 12, 15, 16, 23.	October	1, 10, 24, 25, 27.
February	7, 14, 16, 17, 24.	May	1, 13, 14, 15, 28.	August	8, 9, 12, 21, 22.	November	4, 6, 17, 26, 27.
March	5, 14, 22, 23, 24.	June	4, 10, 11, 28, 29.	September	3, 4, 22, 28, 29.	December	4, 5, 6, 26, 27.

1920.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	27γ	44γ	12γ	74γ	55γ	51γ	38γ	66γ	38γ	40γ	35γ	26γ	37·3γ
1h.	26	43	16	73	58	48	35	63	36	37	31	28	36·3
2	24	44	29	66	54	45	34	59	35	38	31	32	36·0
3	26	46	28	74	50	46	35	53	46	44	33	33	37·9
4	27	47	13	72	48	44	35	59	48	50	39	30	37·8
5	36	49	35	70	50	43	36	55	42	31	35	38	38·4
6	40	55	21	69	44	35	33	52	34	30	34	44	36·0
7	39	61	30	62	37	27	26	41	30	33	32	36	32·9
8	32	55	19	54	25	13	11	30	25	29	32	21	23·9
9	22	46	5	33	15	6	0	16	17	22	16	7	12·2
10	14	32	0	6	7	5	2	0	8	8	14	0	3·1
11	6	10	10	0	0	0	6	10	0	0	13	4	0·0
Noon	3	0	22	8	10	5	5	19	1	8	12	12	3·9
13h.	0	4	29	5	16	5	3	22	19	10	9	14	6·4
14	17	8	10	11	37	15	10	32	6	9	3	5	8·7
15	11	7	17	26	36	27	12	40	6	5	3	1	11·0
16	13	7	67	43	42	41	25	43	22	18	3	8	22·8
17	22	19	65	53	52	49	29	50	27	17	0	6	27·5
18	22	9	43	59	57	49	32	55	29	17	13	24	29·2
19	22	16	36	52	64	51	40	61	37	21	11	13	30·4
20	24	22	20	60	65	47	45	54	27	25	19	17	30·5
21	24	28	22	57	54	43	40	50	4	35	21	28	28·9
22	26	36	27	55	46	40	32	43	14	38	24	48	30·9
23	27	37	32	60	53	37	26	57	16	42	23	35	32·2
Means	22·1	30·2	25·3	47·6	40·6	32·2	24·6	42·9	23·6	25·3	20·3	21·2	24·8

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 are diminished by the smallest hourly value.)

1920.

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

TABLE XIII.—DIURNAL RANGE of VERTICAL MAGNETIC FORCE, on each CIVIL DAY, as deduced from Table III.

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

1920.

Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d.												
1	33γ	10γ	16γ	23γ	84γ	28γ	26γ	29γ	34γ	62γ	28γ	11γ
2	24	6	16	21	31	33	21	29	31	36	26	23
3	10	11	11	29	35	33	19	31	62	14	24	16
4	13	16	29	39	37	46	38	38	95	36	41	56
5	—	14	120	59	26	29	29	33	28	36	38	22
6	—	15	30	36	26	37	31	26	21	41	74	31
7	—	23	24	35	28	31	47	33	22	47	19	20
8	—	14	19	31	32	29	24	42	44	20	13	27
9	—	16	23	31	69	36	29	31	62	21	19	26
10	—	9	31	23	46	103	20	21	31	75	10	14
11	—	12	27	25	29	54	24	31	33	21	17	9
12	—	19	46	24	43	31	31	54	20	27	22	8
13	—	17	25	26	63	21	28	34	47	16	21	20
14	—	31	106	25	58	29	31	33	26	13	12	14
15	—	24	12	116	57	28	50	37	39	11	40	21
16	—	57	23	26	41	33	41	29	27	16	13	17
17	—	30	22	46	35	27	25	28	—	34	40	10
18	—	30	25	68	26	31	64	29	—	19	22	9
19	—	29	33	43	29	39	37	41	17	25	12	6
20	—	23	32	68	25	36	22	23	24	10	10	16
21	—	21	37	41	41	39	12	81	13	12	28	9
22	—	18	—	33	38	33	46	57	55	26	24	10
23	—	21	327	38	29	29	43	31	55	16	9	8
24	—	66	160	49	29	48	23	23	21	33	7	12
25	—	37	62	31	22	31	31	21	10	54	8	21
26	—	31	26	23	23	21	28	23	13	36	54	87
27	14	24	41	28	31	29	23	23	23	44	29	28
28	26	14	28	26	83	36	24	28	109	43	10	14
29	10	16	28	29	23	31	29	33	96	43	22	15
30	26		24	50	22	28	28	26	34	11	11	8
31	17		21		29		26	31		21		15
Means	19·2	22·6	47·4	38·1	38·4	35·3	30·6	33·2	39·0	29·6	23·4	19·4

The mean of the twelve monthly values is 31·4γ.

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 :—

February	2, 3, 9, 23, 29.	April	1, 11, 13, 14, 28.	July	2, 3, 21, 28, 29.	October	3, 14, 20, 21, 30.
March	2, 3, 29, 30, 31.	May	6, 7, 11, 22, 23.	August	2, 6, 17, 27, 28.	November	8, 10, 14, 23, 24.
		June	2, 8, 14, 18, 22.	September	6, 12, 20, 21, 26.	December	1, 11, 12, 22, 30.

1920.

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

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 comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

February	7, 14, 16, 17, 24.	April	5, 15, 17, 18, 24.	July	7, 12, 15, 16, 23.	October	1, 10, 24, 25, 27.
March	5, 14, 22, 23, 24.	May	1, 13, 14, 15, 28.	August	8, 9, 12, 21, 22.	November	4, 6, 17, 26, 27.
		June	4, 10, 11, 28, 29.	September	3, 4, 22, 28, 29.	December	4, 5, 6 26, 27.

1920.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Eleven Months.
Midnight		8γ	71γ	18γ	12γ	15γ	12γ	8γ	3γ	13γ	3γ	8γ	9·0γ
1h.		5	19	10	0	12	10	3	5	10	1	10	1·2
2		6	0	7	7	13	9	0	3	10	6	10	0·0
3		4	9	0	9	16	15	1	2	5	4	9	0·2
4		5	24	3	9	18	19	9	1	0	0	9	2·3
5		8	44	3	10	18	20	16	3	2	1	8	5·6
6		8	72	4	8	20	20	20	5	4	5	7	9·2
7		9	90	8	9	20	21	22	7	5	8	8	12·3
8		8	96	9	9	14	18	20	7	7	10	10	12·4
9		5	105	6	6	6	10	15	3	6	9	12	10·1
10		1	108	5	1	1	5	11	8	3	8	15	8·6
11		0	107	7	1	0	0	9	0	4	10	15	7·4
Noon		10	112	11	6	7	3	8	5	8	13	20	12·0
13h.		13	130	25	15	12	9	15	14	15	15	27	19·9
14		22	140	33	24	23	16	24	26	24	22	29	28·3
15		29	144	40	31	36	25	34	39	32	28	33	36·3
16		33	156	51	40	40	31	38	43	39	34	35	42·6
17		36	143	57	47	46	34	42	47	40	35	34	44·5
18		49	149	59	51	47	37	42	45	36	37	32	46·6
19		56	135	52	47	43	37	45	31	32	35	29	42·8
20		46	125	39	40	38	37	29	17	28	30	25	34·8
21		34	120	30	29	31	26	28	21	23	24	19	28·5
22		23	108	25	19	25	20	18	8	19	19	10	20·2
23		21	99	22	14	20	15	15	5	14	16	0	15·4
Means		18·3	96·1	21·8	18·5	21·7	18·7	19·7	14·5	15·8	15·5	17·3	18·8

(To be substituted for the erroneous Table printed on page E 26 of the 1918 Volume.)

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

$$V_t = m + a_1 \cos t + b_1 \sin t + a_2 \cos 2t + b_2 \sin 2t + a_3 \cos 3t + b_3 \sin 3t + a_4 \cos 4t + b_4 \sin 4t$$
$$= m + c_1 \sin (t + \alpha_1) + c_2 \sin (2t + \alpha_2) + c_3 \sin (3t + \alpha_3) + c_4 \sin (4t + \alpha_4),$$

in which t represents the time from 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 1γ (0·00001 G.G.S. units) for N.F. and V.F. and in minutes of arc (1′ = 5·37 γ) for Declination.

If the inequalities are expressed relative to time reckoned from apparent midnight, the new phase angles α'_1, α'_2, α'_3, α'_4 may be obtained from α_1, α_2, α_3, α_4 by adding respectively, α, 2α, 3α, 4α, the value of α for each month being as follows:—

Jan. + 2°.19′.	April + 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, 1918.	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
	DECLINATION WEST.															
	′	′	′	′	′	′	′	′	′	°	′	°	′	°	′	°
January ..	− 2·21	− 1·20	− 0·44	+ 1·44	− 0·41	− 0·38	0·00	+ 0·42	2·51	241·5	1·50	343·0	0·58	227·2	0·42	0·0
February..	− 2·46	− 1·74	− 0·10	+ 0·89	− 0·27	− 0·32	+ 0·17	+ 0·37	3·01	234·7	0·89	353·6	0·41	220·2	0·41	24·7
March ..	− 2·85	− 2·15	+ 1·29	+ 1·87	− 0·72	− 0·90	+ 0·43	+ 0·36	3·57	233·0	2·27	34·6	1·15	218·7	0·56	50·1
April ..	− 3·29	− 2·91	+ 0·95	+ 2·11	− 0·91	− 1·11	+ 0·40	+ 0·19	4·39	228·5	2·31	24·2	1·44	219·3	0·45	64·6
May ..	− 2·27	− 3·06	+ 1·74	+ 1·89	− 0·81	− 0·58	+ 0·09	− 0·04	3·81	216·6	2·57	42·6	1·00	234·4	0·10	114·0
June ..	− 2·25	− 3·42	+ 1·85	+ 1·73	− 0·68	− 0·54	− 0·08	+ 0·10	4·09	213·3	2·53	46·9	0·87	231·6	0·14	321·3
July ..	− 2·40	− 3·42	+ 1·66	+ 1·93	− 0·46	− 0·49	+ 0·01	+ 0·05	4·18	215·1	2·55	40·7	0·67	223·2	0·05	11·3
August ..	− 2·91	− 2·96	+ 1·98	+ 2·03	− 0·95	− 0·45	− 0·02	+ 0·13	4·15	224·5	2·84	44·3	1·05	244·6	0·14	351·2
September	− 3·35	− 1·96	+ 1·65	+ 1·60	− 0·73	− 0·54	+ 0·51	+ 0·15	3·88	239·7	2·30	45·9	0·90	233·5	0·53	73·6
October ..	− 2·98	− 1·44	+ 0·76	+ 2·04	− 0·70	− 0·72	+ 0·58	+ 0·12	3·31	244·2	2·18	20·4	1·00	224·2	0·59	78·3
November	− 2·57	− 0·47	+ 0·46	+ 1·45	− 0·48	− 0·29	+ 0·19	+ 0·18	2·61	259·7	1·52	17·6	0·56	238·8	0·26	46·5
December	− 2·67	+ 0·38	+ 0·38	+ 1·11	+ 0·19	+ 0·13	+ 0·31	+ 0·14	2·70	278·1	1·17	18·9	0·08	55·6	0·34	65·7
For the Year	− 2·67	− 2·03	+ 1·03	+ 1·68	− 0·57	− 0·52	+ 0·20	+ 0·18	3·35	232·8	1·97	31·5	0·77	227·6	0·26	48·0
	NORTH FORCE.															
January ..	+ 7·8	+ 8·1	− 3·3	− 5·1	+ 2·0	+ 0·5	− 0·4	+ 0·2	11·2	43·9	6·1	212·9	2·9	76·0	0·4	296·6
February	+ 7·5	+ 6·6	− 4·4	− 3·0	+ 1·7	− 0·7	+ 0·2	+ 0·3	10·0	48·7	5·3	235·7	1·9	112·4	0·4	33·7
March ..	+ 14·8	+ 3·1	− 7·0	− 2·4	+ 2·4	− 2·1	− 0·4	+ 1·3	15·1	78·2	7·4	251·1	3·2	131·2	1·4	342·9
April ..	+ 18·6	− 0·2	− 9·9	− 1·6	+ 2·9	− 0·4	− 0·3	+ 1·5	18·6	90·8	10·0	260·8	2·9	97·8	1·6	348·7
May ..	+ 15·5	− 5·8	− 8·1	+ 0·2	+ 0·7	0·0	+ 1·2	+ 0·6	16·5	110·5	8·1	271·4	0·7	90·0	1·3	63·4
June ..	+ 16·7	− 4·3	− 8·4	+ 1·6	+ 0·5	− 2·1	+ 1·2	+ 0·9	17·2	104·4	8·6	280·8	2·2	166·6	1·5	53·1
July ..	+ 17·2	− 5·0	− 10·3	+ 1·9	+ 0·3	− 0·5	+ 0·1	− 0·8	17·9	106·2	10·5	280·5	0·6	149·0	0·8	172·9
August ..	+ 20·1	− 6·6	− 9·0	+ 1·2	+ 0·2	− 1·4	+ 2·0	+ 0·8	21·1	108·2	9·1	277·6	1·4	171·9	2·2	68·2
September	+ 21·7	− 2·2	− 6·9	+ 2·1	− 0·4	− 3·0	+ 0·1	+ 1·2	21·8	95·8	7·2	286·9	3·0	187·6	1·2	4·8
October ..	+ 20·6	+ 2·6	− 8·2	− 1·7	+ 1·3	− 3·2	+ 1·0	+ 1·8	20·8	82·8	8·4	258·3	3·4	157·9	2·1	29·1
November	+ 11·1	+ 2·4	− 7·1	− 1·7	+ 1·9	− 2·0	+ 0·5	+ 0·2	11·4	77·6	7·3	256·5	2·8	136·5	0·5	68·2
December	+ 5·1	+ 4·8	− 3·1	− 2·4	− 0·6	− 2·1	+ 0·4	− 0·2	7·0	46·7	3·9	232·3	2·2	196·0	0·4	116·6
For the Year	+ 14·7	+ 0·2	− 7·2	− 0·8	+ 1·2	− 1·4	+ 0·5	+ 0·7	14·7	89·2	7·2	263·7	1·9	139·4	0·9	35·5
	VERTICAL FORCE.															
January	+ 2·0	− 6·1	− 3·4	0·0	+ 1·2	− 0·7	− 0·4	− 0·4	6·4	161·8	3·4	270·0	1·4	120·3	0·6	225·0
February	+ 2·2	− 8·0	− 2·6	− 1·2	+ 1·1	− 0·2	− 0·9	− 0·4	8·3	164·6	2·9	245·2	1·1	100·3	1·0	246·0
March ..	+ 2·8	− 6·6	− 6·3	− 0·4	+ 3·8	− 1·2	− 0·3	− 0·9	7·2	157·0	6·3	266·3	4·0	107·5	1·0	198·4
April ..	+ 5·3	− 7·9	− 9·2	− 1·3	+ 2·3	+ 0·6	− 2·0	+ 0·4	9·5	146·1	9·3	262·0	2·4	75·4	2·1	281·3
May ..	+ 4·6	− 6·8	− 8·7	− 0·7	+ 2·4	− 1·1	− 1·2	− 0·3	8·2	145·9	8·7	265·4	2·7	114·7	1·2	256·0
June ..	+ 5·0	− 5·6	− 7·5	+ 0·3	+ 1·5	0·0	− 0·6	+ 0·8	7·5	138·2	7·5	272·3	1·5	90·0	1·0	323·1
July ..	+ 6·5	− 6·4	− 7·9	− 0·4	+ 0·9	+ 0·3	− 0·6	− 0·4	9·1	134·6	7·9	267·1	0·9	71·6	0·8	236·3
August ..	+ 4·0	− 5·2	− 7·1	− 1·9	+ 2·7	− 0·5	− 0·6	+ 0·3	6·6	142·4	7·4	255·0	2·8	100·5	0·7	296·6
September	+ 1·5	− 9·2	− 6·5	− 0·5	+ 3·3	+ 0·3	− 0·8	− 0·3	9·3	170·8	6·5	265·6	3·3	84·8	0·8	249·4
October ..	− 0·1	− 8·8	− 4·6	− 0·1	+ 2·3	0·0	− 1·4	− 0·7	8·8	180·7	4·6	268·7	2·3	90·0	1·6	243·4
November	− 0·8	− 7·5	− 2·4	+ 1·2	+ 0·5	− 0·5	− 0·4	− 0·1	7·5	186·1	2·7	296·6	0·8	135·0	0·4	256·0
December	− 1·2	− 8·7	− 2·9	+ 0·3	− 0·2	+ 0·3	+ 0·1	− 0·1	8·8	187·8	2·9	275·9	0·3	326·3	0·1	135·0
For the Year	+ 2·7	− 7·3	− 5·7	− 0·4	+ 1·8	− 0·2	− 0·8	− 0·1	7·8	159·7	5·7	266·0	1·8	96·3	0·8	262·9

(To be substituted for the erroneous Table printed on page E 26 of the 1919 Volume.)

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

$$V_t = m + a_1 \cos t + b_1 \sin t + a_2 \cos 2t + b_2 \sin 2t + a_3 \cos 3t + b_3 \sin 3t + a_4 \cos 4t + b_4 \sin 4t$$
$$= m + c_1 \sin (t + \alpha_1) + c_2 \sin (2t + \alpha_2) + c_3 \sin (3t + \alpha_3) + c_4 \sin (4t + \alpha_4),$$

in which t represents the time from 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 1γ (0·00001 G.G.S. units) for N.F. and V.F. and in minutes of arc (1′ = 5·37 γ) for Declination.

If the inequalities are expressed relative to time reckoned from apparent midnight, the new phase angles α'_1, α'_2, α'_3, α'_4 may be obtained from α_1, α_2, α_3, α_4 by adding respectively, α, 2α, 3α, 4α, the value of α for each month being as follows :—

Jan.	+ 2°.19′.	April	+ 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 1919.	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
	DECLINATION WEST.															
	′	′	′	′	′	′	′	′	′	°	′	°	′	°	′	°
January ..	− 2·57	− 0·14	+ 0·42	+ 1·25	− 0·02	− 0·08	+ 0·34	+ 0·16	2·57	266·9	1·32	18·6	0·10	194·0	0·39	64·8
February..	− 2·70	− 0·51	+ 0·88	+ 0·44	− 0·34	− 0·31	− 0·01	+ 0·16	2·75	259·3	0·98	63·4	0·47	227·6	0·17	356·4
March ..	− 3·10	− 1·47	+ 1·07	+ 1·81	− 0·46	− 0·95	+ 0·51	+ 0·39	3·43	244·6	2·10	30·6	1·05	205·8	0·64	52·6
April ..	− 2·83	− 2·36	+ 0·92	+ 2·10	− 0·52	− 0·78	+ 0·31	+ 0·24	3·68	230·2	2·29	23·7	0·94	213·7	0·40	52·3
May ..	− 2·60	− 2·97	+ 1·10	+ 1·72	− 0·31	− 0·53	+ 0·37	− 0·06	3·95	221·2	2·04	32·6	0·62	210·3	0·37	99·2
June ..	− 2·47	− 4·20	+ 1·71	+ 2·05	− 0·69	− 0·46	− 0·09	− 0·04	4·87	210·5	2·67	39·8	0·83	236·3	0·09	246·0
July ..	− 2·14	− 4·01	+ 1·39	+ 2·22	− 0·59	− 0·71	− 0·07	+ 0·12	4·54	208·1	2·62	32·0	0·92	219·7	0·09	329·8
August ..	− 2·88	− 3·40	+ 1·77	+ 1·71	− 0·74	− 0·37	+ 0·04	+ 0·18	4·46	220·3	2·46	46·0	0·83	243·4	0·16	12·5
September	− 3·68	− 2·25	+ 0·86	+ 1·70	− 0·70	− 0·76	+ 0·31	+ 0·18	4·31	238·5	1·90	26·8	1·03	222·6	0·36	59·9
October ..	− 2·57	− 1·64	+ 0·45	+ 1·91	− 0·66	− 0·49	+ 0·46	+ 0·40	3·05	237·5	1·96	13·3	0·82	233·4	0·61	49·0
November	− 1·89	− 0·85	+ 0·45	+ 1·13	− 0·33	− 0·15	+ 0·35	+ 0·04	2·07	245·8	1·22	21·7	0·36	245·6	0·34	83·5
December	− 2·05	− 0·34	− 0·12	+ 0·90	− 0·22	− 0·08	0·00	+ 0·21	2·08	260·6	0·97	352·4	0·24	250·0	0·20	0·0
For the Year	− 2·60	− 2·07	+ 0·90	+ 1·59	− 0·46	− 0·47	+ 0·23	+ 0·17	3·32	231·5	1·83	29·5	0·66	224·4	0·28	53·5
	NORTH FORCE.															
January ..	+ 6·4	+ 3·5	− 3·7	− 1·6	+ 1·7	− 1·5	+ 0·4	+ 1·4	7·3	61·3	4·0	246·6	2·3	131·4	1·5	15·9
February..	+ 9·0	+ 1·2	− 4·1	− 2·1	+ 1·1	− 1·2	+ 0·4	+ 0·7	9·1	82·4	4·6	242·9	1·6	137·5	0·8	29·8
March ..	+ 14·9	+ 0·3	− 7·1	− 1·6	+ 2·7	− 1·3	− 0·3	+ 0·5	14·9	88·8	7·3	257·3	3·0	115·7	0·6	329·0
April ..	+ 16·1	− 0·3	− 7·7	− 1·4	+ 2·3	− 0·5	− 0·5	+ 1·2	16·1	91·1	7·8	259·7	2·4	102·3	1·3	337·4
May ..	+ 15·9	− 6·3	− 7·8	+ 1·4	− 0·3	+ 0·9	+ 0·2	+ 1·2	17·1	111·6	7·9	280·2	0·9	341·6	1·2	9·5
June ..	+ 17·4	− 5·2	− 9·0	+ 0·5	− 0·6	− 0·8	+ 0·6	− 0·2	18·1	106·6	9·0	273·2	1·0	216·9	0·6	108·4
July ..	+ 18·3	− 2·9	− 10·4	+ 0·8	+ 2·0	− 1·5	− 0·3	+ 0·1	18·5	99·0	10·4	274·4	2·5	126·9	0·3	288·4
August ..	+ 17·2	− 3·3	− 8·4	+ 1·0	+ 0·9	− 3·7	+ 1·1	+ 1·1	17·5	100·9	8·5	276·8	3·8	166·3	1·5	45·0
September	+ 17·2	+ 0·5	− 7·2	+ 1·9	+ 1·1	− 2·1	0·0	+ 0·9	17·2	88·3	7·4	284·8	2·4	152·4	0·9	0·0
October ..	+ 14·2	+ 2·0	− 8·0	− 1·2	+ 2·6	− 1·6	− 2·0	− 0·2	14·3	82·0	8·1	261·5	3·1	121·6	2·0	264·3
November	+ 6·9	+ 4·4	− 4·3	− 1·5	+ 1·0	− 2·1	− 0·4	+ 0·6	8·2	57·5	4·6	250·8	2·3	154·5	0·8	326·3
December	+ 5·0	+ 3·8	− 4·5	− 2·0	+ 1·4	− 1·6	+ 1·1	+ 0·8	6·3	52·8	4·9	246·0	2·1	138·8	1·3	54·0
For the Year	+ 13·2	− 0·4	− 7·0	− 0·4	+ 1·4	− 1·4	+ 0·1	+ 0·6	13·2	91·7	7·0	266·7	2·0	135·0	0·6	9·5
	VERTICAL FORCE.															
January ..	+ 0·6	− 7·5	− 2·6	− 0·6	− 0·1	− 0·6	− 0·9	− 0·1	7·5	175·4	2·7	257·0	0·6	189·5	0·9	263·7
February	+ 0·7	− 6·2	− 2·6	0·0	+ 0·3	− 0·6	− 0·5	+ 0·1	6·2	173·6	2·6	270·0	0·7	153·5	0·5	281·3
March ..	− 0·3	− 10·9	− 6·9	− 2·2	+ 2·5	0·0	− 1·3	− 0·2	10·9	181·6	7·2	252·3	2·5	90·0	1·3	261·2
April ..	+ 4·7	− 8·0	− 7·9	− 1·4	+ 2·9	+ 0·6	− 1·5	+ 0·2	9·3	149·6	8·0	259·9	3·0	78·3	1·5	277·6
May ..	+ 6·7	− 11·9	− 8·8	+ 0·5	+ 2·9	+ 1·1	− 0·6	+ 0·3	13·7	150·6	8·8	273·2	3·1	69·2	0·7	296·6
June ..	+ 7·2	− 4·7	− 7·9	− 0·4	+ 2·2	− 0·3	− 0·4	− 0·1	8·6	123·1	7·9	267·1	2·2	97·8	0·4	256·0
July ..	+ 6·4	− 4·7	− 7·6	− 1·5	+ 2·2	+ 0·7	+ 0·2	− 0·3	7·9	126·3	7·8	258·8	2·3	72·3	0·3	146·3
August ..	+ 2·1	− 9·5	− 8·3	+ 1·6	+ 5·2	− 1·0	− 1·1	− 2·0	9·7	167·5	8·5	280·9	5·3	100·9	2·3	208·8
September	+ 2·4	− 8·9	− 7·2	− 1·2	+ 1·8	+ 0·4	− 0·6	0·0	9·2	164·9	7·3	260·5	1·8	77·5	0·6	270·0
October ..	+ 1·2	− 10·4	− 4·0	− 2·1	+ 1·0	+ 0·2	− 0·5	+ 0·7	10·5	173·4	4·5	242·3	1·0	78·7	0·9	324·5
November	+ 0·1	− 5·2	− 2·4	− 0·9	+ 1·1	− 0·2	− 0·9	− 0·1	5·2	178·9	2·6	249·4	1·1	100·3	0·9	263·7
December	− 0·6	− 7·5	− 1·9	− 1·0	+ 0·4	− 1·0	− 1·0	− 0·4	7·5	184·6	2·1	242·2	1·1	158·2	1·1	248·2
For the Year	+ 2·6	− 8·0	− 5·7	− 0·8	+ 1·9	0·0	− 0·8	− 0·2	8·4	162·0	5·8	262·0	1·9	90·0	0·8	256·0

(1920.)

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

$$V_t = m + a_1 \cos t + b_1 \sin t + a_2 \cos 2t + b_2 \sin 2t + a_3 \cos 3t + b_3 \sin 3t + a_4 \cos 4t + b_4 \sin 4t$$
$$= m + c_1 \sin (t + \alpha_1) + c_2 \sin (2t + \alpha_2) + c_3 \sin (3t + \alpha_3) + c_4 \sin (4t + \alpha_4),$$

in which t represents the time from 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 XIV.

The coefficients, a, b, c, are given in units of 1γ (0·00001 C.G.S. units) for N.F. and V.F. and minutes of arc ($1' = 5{\cdot}37\ \gamma$) for Declination.

If the inequalities are expressed relative to time reckoned from apparent midnight, the new phase angles $\alpha'_1, \alpha'_2, \alpha'_3, \alpha'_4$ may be obtained from $\alpha_1, \alpha_2, \alpha_3, \alpha_4$ by adding respectively, $\alpha, 2\alpha, 3\alpha, 4\alpha$, the value of α for each month being as follows :—

Jan. + 2°.19′.	April + 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, 1920.	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
	DECLINATION WEST.															
	′	′	′	′	′	′	′	′	′	°	′	°	′	°	′	°
January ..	− 1·88	− 0·86	− 0·02	+ 1·51	− 0·45	− 0·13	+ 0·34	+ 0·42	2·07	245·4	1·51	359·2	0·47	253·9	0·54	39·0
February..	− 2·08	− 1·74	+ 0·02	+ 1·84	− 0·42	− 0·66	+ 0·18	+ 0·39	2·71	230·1	1·84	0·6	0·79	212 5	0·42	24·8
March ..	− 3·05	− 2·03	+ 0·46	+ 1·91	− 0·46	− 1·10	+ 0·23	+ 0·27	3·66	236·4	1·97	13·5	1·19	202·7	0·34	40·4
April ..	− 2·79	− 2·34	+ 1·01	+ 1·91	− 1·70	− 1·22	+ 0·35	+ 0·23	3·64	230·0	2·16	27·9	1·41	209·8	0·41	56·7
May ..	− 2·15	− 2·47	+ 1·70	+ 0·34	− 0·60	− 0·23	+ 0·12	− 0·02	3·27	221·0	2·17	51·8	0·64	249·0	0·10	99·5
June ..	− 1·86	− 3·54	+ 1·64	+ 1·81	− 0·31	− 0·49	+ 0·01	+ 0·05	4·00	207·7	2·44	42·2	0·58	212·3	0·00	11·3
July ..	− 2·24	− 3·38	+ 1·49	+ 1·73	− 0·52	− 0·33	− 0·04	+ 0·06	4·06	213·6	2·28	40·7	0·61	237·6	0·10	326·3
August ..	− 2·76	− 2·57	+ 1·76	+ 0·46	− 0·82	− 0·34	+ 0·16	+ 0·16	3·77	227·0	2·29	50·3	0·89	247·5	0·24	5·7
September	− 3·51	− 1·63	+ 1·01	+ 0·33	− 0·71	− 0·53	+ 0·28	+ 0·21	3·87	245·1	1·67	37·2	0·88	233·3	0·34	7·6
October ..	− 2·69	− 1·21	+ 0·65	+ 1·47	− 0·80	− 0·54	+ 0·37	+ 0·38	2·95	245·8	1·61	23·9	0·96	236·0	0·53	5·5
November	− 2·27	− 0·48	+ 0·45	+ 0·96	− 0·23	+ 0·04	+ 0·21	+ 0·02	2·32	258·1	1·06	25·1	0·22	279·9	0·20	84·6
December	− 1·90	+ 0·22	+ 0·24	+ 0·58	− 0·29	+ 0·13	+ 0·03	+ 0·09	1·91	278·6	0·63	22·5	0·31	294·1	0·10	18·4
For the Year	− 2·43	− 1·84	+ 0·87	+ 1·49	− 0·52	− 0·44	+ 0·19	+ 0·19	3·05	232·9	1·78	30·3	0·68	229·8	0·28	45·0
	NORTH FORCE.															
January ..	+ 5·3	+ 4·1	− 6·5	− 2·9	+ 3·6	− 1·3	− 0·7	+ 0·7	6·7	52·3	7·1	246·0	3·8	109·9	1·0	315·0
February..	+ 7·9	+ 7·7	− 5·8	− 4·2	+ 4·0	+ 0·2	− 1·1	+ 0·2	11·0	45·7	7·2	234·1	4·0	87·2	1·1	280·3
March ..	+ 10·5	+ 1·3	− 8·4	− 1·2	+ 3·7	− 0·5	+ 1·5	− 0·2	10·7	82·9	8·5	261·9	3·7	97·7	1·5	97·6
April ..	+ 18·6	+ 0·5	− 9·7	− 1·1	+ 4·3	− 0·8	+ 0·2	+ 1·2	18·6	88·5	9·8	263·5	4·4	100·5	1·2	9·5
May ..	+ 16·8	− 4·3	− 7·8	+ 0·3	+ 0·2	− 0·4	+ 1·1	+ 1·1	17·3	104·4	7·8	272·2	0·4	153·4	1·6	45·0
June ..	+ 16·1	− 4·4	− 9·8	+ 2·2	+ 0·6	+ 0·2	+ 0·8	− 0·6	16·7	105·3	10·0	282·6	0·6	71·6	1·0	126·9
July ..	+ 15·2	− 3·4	− 7·8	0·0	+ 0·2	− 1·3	+ 0·7	+ 0·3	15·6	102·6	7·8	270·0	1·3	171·2	0·8	66·8
August ..	+ 18·5	− 5·4	− 8·5	+ 1·9	+ 0·3	− 1·6	+ 1·3	+ 1·2	19·7	106·3	8·7	282·6	1·6	169·4	1·8	47·3
September	+ 14·4	− 0·9	− 5·8	+ 0·4	+ 0·3	− 2·1	+ 0·8	+ 0·6	14·4	93·6	5·8	273·9	2·1	171·9	1·0	53·1
October ..	+ 15·0	+ 5·4	− 5·7	− 1·4	+ 2·5	− 2·5	− 0·1	+ 0·4	15·9	70·2	5·9	256·2	3·5	135·0	0·4	346·0
November	+ 7·2	+ 6·5	− 2·7	− 1·2	+ 1·0	− 2·1	− 0·1	+ 0·9	9·7	48·7	2·9	246·0	2·3	154·5	0·9	353·7
December	+ 4·8	+ 6·5	− 2·5	− 1·9	+ 0·2	− 2·3	− 1·1	+ 0·7	8·1	36·5	3·2	232·8	2·3	175·0	1·3	57·5
For the Year	+ 12·6	+ 1·2	− 6·8	− 0·7	+ 1·8	− 1·2	+ 0·5	+ 0·6	12·7	84·6	6·8	264·1	2·1	123·7	0·8	39·8
	VERTICAL FORCE.															
January ..	+ 2·6	− 4·1	+ 0·4	− 1·8	+ 1·8	− 2·0	− 0·8	− 0·1	4·9	147·6	1·8	167·5	2·7	138·0	0·8	262·9
February..	+ 2·2	− 6·8	− 4·2	− 2·1	+ 1·3	− 0·8	− 1·0	+ 0·2	7·1	162·1	4·7	243·4	1·5	121·6	1·0	281·3
March ..	− 0·6	− 10·5	− 5·6	− 4·4	+ 3·2	− 1·5	− 1·2	0·0	10·5	183·3	7·1	231·8	3·6	115·1	1·2	270·0
April ..	+ 5·7	− 7·4	− 7·3	− 1·2	+ 3·2	0·0	− 0·6	+ 0·2	9·3	142·4	7·4	260·7	3·2	90·0	0·7	288·4
May ..	+ 6·8	− 5·2	− 8·1	− 0·7	+ 2·0	− 0·5	− 0·5	+ 0·6	8·6	127·4	8·1	265·1	2·1	103·9	0·8	320·0
June ..	+ 6·5	− 4·2	− 8·5	− 0·9	+ 2·0	+ 0·2	− 0·2	+ 0·3	7·7	122·9	8·6	264·0	2·0	84·3	0·4	326·3
July ..	+ 5·4	− 3·6	− 7·7	− 1·1	+ 1·7	0·0	− 0·5	− 0·2	6·5	123·7	7·8	261·9	1·7	90·0	0·6	248·2
August ..	+ 3·6	− 4·9	− 7·9	− 1·4	+ 3·0	− 1·1	− 0·8	− 0·2	6·1	143·7	8·0	259·9	3·2	110·2	0·8	256·0
September	+ 0·4	− 6·5	− 7·3	− 0·8	+ 1·8	− 0·1	− 0·6	+ 0·2	6·5	176·5	7·3	263·8	1·8	93·2	0·7	288·4
October ..	+ 1·2	− 7·9	− 4·3	− 0·1	+ 2·3	− 0·5	− 1·0	+ 0·2	8·0	171·4	4·3	268·7	2·4	102·3	1·0	281·3
November	+ 0·1	− 7·1	− 2·8	− 1·1	+ 0·7	− 0·2	− 0·3	+ 0·2	7·1	179·2	3·0	248·6	0·7	105·9	0·4	303·7
December	− 1·0	− 5·7	− 2·1	+ 0·2	− 0·1	+ 0·2	− 0·4	+ 0·2	5·8	190·0	2·1	275·4	0·2	333·4	0·5	291·8
For the Year	+ 2·8	− 6·3	− 5·6	− 1·6	+ 1·8	− 0·4	− 0·6	+ 0·2	6·9	156·0	5·8	254·1	1·8	102·5	0·7	288·4

TABLE XVII.—RESULTS of OBSERVATIONS of MAGNETIC DECLINATION, with DEDUCED VALUES of the BASE-LINE of the DECLINATION MAGNETOGRAMS.

Greenwich Civil Time, 1920.	Declination.	Deduced value of Base-line.	Greenwich Civil Time, 1920.	Declination.	Deduced value of Base-line.	Greenwich Civil Time, 1920	Declination.	Deduced value of Base-line.
d h m	° ′	° ′	d h m	° ′	° ′	d h m	° ′	° ′
Jan. 1. 11. 45	14. 15·8	14. 28·8	Mar. 16. 15. 15	14. 17·3	14. 29·6	June 1. 11. 0	14. 11·2	14. 29·1
2. 14. 27	16·4	29·0	16. 0	15·6	29·6	13. 0	16·4	29·3
15. 0	16·5	29·3	18. 12. 17	17·2	29·2	13. 30	17·5	29·1
5. 14. 57	14·6	28·6	19. 12. 0	17·9	29·4	2. 11. 21	14·6	29·2
6. 14. 37	15·9	28·9	12. 30	19·6	29·6	4. 11. 0	10·6	28·6
15. 0	16·0	29·3	22. 14. 30	25·0	30·0	13. 0	15·3	28·9
9. 13. 0	19·8	29·3	15. 0	27·8	28·5	14. 0	16·0	28·8
14. 0	19·3	29·2	23. 12. 10	19·2	29·5	5. 10. 25	8·2	28·5
13. 14. 23	16·9	29·7	24. 15. 36	18·8	29·3	8. 11. 36	12·2	29·1
14. 57	16·5	29·7	25. 16. 28	12·1	29·1	12. 0	12·9	28·9
16. 12. 0	15·1	28·8	26. 11. 40	13·1	29·3	10. 11. 12	11·1	28·5
13. 0	15·6	28·9	12. 0	14·2	29·2	11. 11. 0	10·6	28·9
17. 11. 50	16·2	29·2	29. 13. 35	16·0	29·3	12. 0	14·6	29·0
20. 12. 28	15·4	29·0	30. 11. 33	16·1	29·1	15. 14. 0	14·4	28·9
13. 0	17·5	29·0	12. 24	17·6	29·6	14. 48	14·2	29·0
22. 11. 30	15·4	29·3	31. 9. 46	7·8	29·1	15. 0	13·5	28·5
12. 48	18·0	29·0				17. 11. 30	11·4	29·2
23. 12. 24	17·0	29·0	April 1. 14. 47	15·8	28·8	18. 11. 0	7·5	29·0
13. 0	18·8	28·8	15. 25	14·0	28·8	11. 45	9·3	29·1
24. 12. 5	16·3	28·4	6. 15. 0	16·4	28·8	21. 14. 30	15·9	29·1
26. 11. 45	15·9	28·9	15. 30	15·3	28·8	15. 0	15·9	29·0
27. 14. 30	15·6	29·1	8. 11. 25	15·8	28·9	22. 11. 40	14·1	29·2
15. 30	14·8	29·1	9. 11. 30	12·5	28·7	23. 10. 0	7·0	28·9
29. 11. 44	15·3	29·7	12. 0	15·1	29·0	24. 11. 58	14·2	29·2
30. 12. 6	17·6	29·6	11. 11. 15	11·8	28·8	25. 11. 0	10·6	28·9
12. 42	19·6	29·6	13. 13. 0	13·5	28·5	12. 0	13·0	28·6
31. 12. 45	18·3	29·1	14. 0	14·3	28·4	29. 11. 20	9·5	28·5
			14. 11. 35	9·3	28·3	13. 26	13·5	29·2
Feb. 2. 12. 5	16·8	29·7	16. 11. 0	9·1	28·8	14. 0	14·5	29·0
3. 12. 0	16·8	29·8	14. 20	16·5	29·0	30. 11. 20	13·6	28·6
12. 30	16·5	29·7	15. 0	14·5	28·3			
16. 10	15·8	29·2	19. 16. 12	13·3	28·8	July 1. 11. 3	9·0	29·5
4. 16. 30	14·3	29·7	20. 12. 50	20·5	29·1	2. 13. 24	16·4	29·4
5. 11. 15	13·9	29·4	13. 20	21·2	29·2	13. 55	16·0	29·4
12. 14	16·9	30·5	22. 11. 17	11·2	28·7	5. 17. 23	11·3	29·1
6. 12. 21	16·2	30·1	23. 11. 24	12·5	28·7	6. 11. 0	12·3	29·1
12. 51	16·5	30·0	12. 0	15·3	29·1	13. 0	14·8	29·2
7. 12. 0	17·0	29·9	24. 11. 10	15·0	29·0	7. 11. 37	12·8	29·3
10. 12. 35	18·3	30·0	27. 11. 15	14·9	28·8	9. 11. 0	10·8	29·0
13. 0	19·4	29·9	11. 45	16·7	29·1	11. 55	13·3	29·3
11. 11. 47	15·3	29·8	28. 11. 0	12·7	28·7	12. 13. 0	16·1	29·3
12. 11. 55	15·6	30·0	30. 11. 0	12·1	28·7	14. 0	16·9	29·5
13. 12. 50	17·1	30·1	12. 0	14·3	29·0	14. 11. 29	10·8	29·4
13. 25	16·5	30·0				16. 12. 0	14·2	29·5
17. 11. 57	15·6	30·1	May 1. 11. 18	20·3	28·8	20. 11. 0	7·6	28·8
12. 45	17·2	29·9	4. 11. 20	12·4	28·4	13. 24	12·8	29·0
18. 11. 54	16·7	29·7	12. 0	14·7	28·7	14. 0	13·3	29·2
20. 11. 45	14·7	29·7	5. 11. 50	13·4	29·0	21. 11. 41	13·2	29·5
12. 15	16·0	30·1	7. 11. 22	9·8	28·8	23. 11. 52	13·7	29·3
24. 12. 30	18·9	29·9	11. 52	11·2	29·2	13. 48	16·6	28·6
13. 0	21·8	29·8	8. 11. 30	12·5	30·0	14. 20	18·4	30·0
26. 11. 28	11·9	29·5	11. 13. 10	14·1	28·7	27. 11. 0	10·4	29·3
27. 12. 12	15·8	29·8	13. 40	13·7	28·6	14. 0	12·8	29·2
12. 45	19·3	30·0	13. 13. 15	14·2	28·6	14. 32	12·1	29·5
			14. 11. 40	11·7	28·7	29. 11. 0	12·6	29·2
Mar. 1. 12. 40	16·5	29·2	18. 13. 0	14·8	28·8	30. 11. 0	13·9	29·4
2. 12. 45	18·6	29·6	14. 0	14·9	28·8	11. 48	16·6	29·8
14. 40	15·5	29·5	19. 11. 44	13·5	29·1	31. 11. 40	14·6	29·4
15. 0	14·9	29·6	20. 11. 13	13·7	28·7			
3. 12. 47	16·7	29·4	21. 11. 25	16·1	28·9	Aug. 3. 13. 45	14·9	28·9
5. 11. 50	15·5	29·5	12. 0	16·1	28·9	14. 20	14·9	28·6
12. 20	16·1	29·4	25. 14. 0	14·2	29·2	4. 14. 36	15·6	28·7
9. 12. 0	15·6	29·6	14. 30	13·3	29·0	5. 10. 4	6·6	28·4
14. 0	17·1	28·8	26. 11. 47	14·0	28·7	6. 13. 48	13·0	28·9
15. 0	16·1	29·1	27. 11. 8	15·4	28·7	14. 20	12·0	28·6
10. 12. 17	16·6	29·2	28. 11. 0	15·3	28·8	10. 11. 0	8·3	28·4
12. 12. 0	15·3	29·0	15. 0	19·3	29·2	12. 0	10·9	28·8
13. 0	17·8	28·8	29. 11. 42	15·7	28·7	11. 10. 47	19·0	28·7

TABLE XVII.—RESULTS of OBSERVATIONS of MAGNETIC DECLINATION, with DEDUCED VALUES of the BASE-LINE of the DECLINATION MAGNETOGRAMS—*continued.*

Greenwich Civil Time, 1920.	Declination.	Deduced value of Base-line.	Greenwich Civil Time, 1920.	Declination.	Deduced value of Base-line.	Greenwich Civil Time, 1920.	Declination.	Deduced value of Base-line.
d h m	° ′	° ′	d h m	° ′	° ′	d h m	° ′	° ′
Aug. 12. 11. 3	14. 10·4	14. 28·7	Oct. 1. 11. 50	14. 11·4	14. 29·0	Nov. 10. 11. 59	14. 8·6	14. 29·6
13. 11. 0	12·5	28·8	2. 11. 14	10·0	29·0	12. 12. 0	9·3	29·7
16. 11. 14	19·2	28·5	5. 12. 0	12·8	28·8	12. 45	10·0	29·7
17. 13. 27	14·0	29·0	13. 0	13·3	28·6	16. 12. 0	7·3	30·3
14. 0	13·4	28·9	14. 0	14·6	28·7	13. 0	7·0	29·7
18. 11. 47	12·0	28·7	6. 14. 34	12·5	29·0	17. 12. 11	10·0	30·0
19. 11. 16	11·4	28·4	8. 11. 0	9·4	28·9	18. 11. 51	8·0	29·6
20. 9. 45	3·1	28·1	11. 57	10·3	28·9	19. 12. 0	6·8	29·8
10. 45	7·3	28·8	9. 12. 0	9·9	28·9	12. 45	8·0	30·0
24. 9. 48	6·3	29·0	11. 13. 35	11·2	28·7	23. 12. 0	7·5	29·5
30. 14. 0	12·4	28·8	12. 11. 34	10·8	28·6	13. 0	8·1	29·7
15. 0	10·5	28·6	12. 0	12·3	28·9	25. 11. 21	6·1	29·5
31. 11. 0	9·3	28·3	14. 13. 50	10·2	28·7	26. 11. 33	5·9	29·7
			15. 11. 0	9·0	29·0	12. 0	6·9	29·9
Sept. 2. 15. 0	10·2	28·5	11. 43	11·1	29·0	12. 36	7·6	29·6
15. 32	9·6	28·6	16. 10. 30	6·1	28·7	30. 12. 0	5·7	29·4
6. 13. 0	12·0	28·6	10. 37	6·4	28·6	13. 0	6·5	29·5
14. 0	11·2	28·6	19. 12. 35	13·0	29·4			
14. 30	10·9	28·7	13. 0	12·6	29·2	Dec. 1. 11. 40	7·7	29·8
17. 0	6·3	28·1	20. 11. 12	9·1	28·6	3. 12. 0	5·0	29·1
9. 11. 0	9·8	28·5	21. 15. 1	7·7	28·2	12. 55	7·6	29·3
11. 45	10·4	29·4	22. 11. 46	9·3	28·8	7. 12. 0	6·5	29·5
15. 25	11·8	28·7	13. 0	12·1	29·1	13. 0	8·4	29·7
17. 20	5·8	27·4	14. 0	11·6	28·6	9. 11. 31	6·7	29·7
13. 11. 19	11·0	29·0	23. 11. 0	8·0	28·7	10. 12. 0	6·4	29·7
14. 12	10·6	28·6	26. 12. 0	9·0	29·0	12. 40	6·7	29·7
14. 40	10·8	28·8	13. 0	8·8	28·8	14. 12. 28	6·4	29·9
16. 14. 24	11·1	28·3	28. 14. 40	11·2	28·5	13. 0	7·5	29·5
17. 12. 33	15·3	28·5	29. 12. 0	12·2	29·1	15. 11. 26	7·5	29·5
13. 0	15·4	28·8	13. 0	13·4	29·4	16. 11. 27	6·1	29·1
18. 11. 23	11·6	28·6	30. 10. 42	5·7	28·7	17. 11. 45	7·1	29·9
19. 14. 0	10·9	28·4				12. 30	6·9	29·9
21. 11. 8	9·1	28·3	Nov. 2. 12. 46	10·2	29·8	21. 12. 57	3·4	29·3
14. 0	11·0	28·8	3. 13. 0	12·3	30·3	13. 54	3·9	29·6
22. 11. 38	14·1	28·3	14. 0	9·4	29·4	14. 25	4·2	29·9
24. 11. 0	9·3	28·3	15. 0	8·8	29·8	23. 14. 39	4·4	29·9
12. 0	12·3	28·8	4. 11. 50	13·8	30·3	15. 0	4·7	29·5
28. 12. 0	10·0	28·5	5. 12. 0	10·3	29·3	28. 14. 0	2·9	29·4
13. 45	16·9	29·1	13. 0	11·8	29·8	15. 0	2·5	29·5
30. 11. 48	12·9	28·9	6. 12. 0	9·4	29·3	30. 12. 0	6·6	29·4
			8. 12. 0	7·8	28·8	31. 12. 0	5·5	29·3
Oct. 1. 11. 0	10·2	29·2	15. 0	6·3	29·6	12. 51	6·4	29·6

TABLE XVIII.—RESULTS of DETERMINATIONS of the ABSOLUTE VALUE OF HORIZONTAL MAGNETIC FORCE from OBSERVATIONS made with the GIBSON INSTRUMENT in the MAGNETIC PAVILION, with DEDUCED VALUES of the BASE-LINE of the NORTH FORCE MAGNETOGRAMS.

Greenwich Civil Time, 1920.	In C.G.S. Units. Value of observed Horizontal Force.	Deduced value of North Force Base-line.	Greenwich Civil Time, 1920.	In C.G.S. Units. Value of observed Horizontal Force.	Deduced value of North Force Base-line.	Greenwich Civil Time, 1920.	In C.G.S. Units. Value of observed Horizontal Force.	Deduced value of North Force Base-line.
d h m h m	·18000+	·17000+	d h m h m	·18000+	·17000+	d h m h m	·18000+	·17000+
Jan. 2. 14.19–15. 6	460	695	May 4. 11.14–11.58	427	765	Sept. 2. 14.54–15.40	459	830
6. 14.29–15.16	474	706	7. 11.16–11.56	445	765	6. 13.49–14.32	429	832
9. 14. 2–14.46	461	695	11. 13. 5–13.48	457	781	9. 11.13–11.53	428	834
13. 14.16–15. 0	462	718	14. 11. 4–11.46	415	775	13. 14. 7–14.48	471	841
16. 12. 4–13. 5	440	709	18. 13.19–14.18	458	793	17. 12.27–13. 8	444	837
20. 12.21–13. 4	453	729	21. 11.18–12. 2	443	780	21. 13.49–14.47	446	835
23. 12.17–13. 2	437	726	25. 13.52–14.35	454	793	24. 11.10–11.54	428	827
27. 14.23–15.34	460	715	28. 14.43–15.27	478	798	28. 13.11–13.53	454	833
30. 11.59–12.43	435	724	June 1. 12.55–13.38	448	794	Oct. 1. 11.13–11.53	414	835
			4. 13. 5–13.50	436	798	5. 13. 8–13.50	414	842
Feb. 3. 12. 1–12.46	460	724	8. 11.32–12.15	435	787	8. 11.20–12. 2	421	844
6. 12.15–12.58	455	725	11. 11. 6–11.50	409	781	12. 11.25–12. 7	420	844
10. 12.27–13. 9	449	729	15. 13.53–14.50	468	803	15. 10.58–11.40	414	841
13. 12.43–13.26	440	731	18. 11. 3–11.47	425	805	19. 12.40–13.35	434	849
17. 11.49–12.48	403	746	21. 14.24–15. 6	468	811	22. 13. 9–13.57	448	838
20. 11.37–12.20	428	733	25. 11.15–11.57	445	809	26. 12.17–12.58	443	839
24. 12.25–13. 8	440	735	29. 13.21–14. 5	460	815	29. 12.21–13. 0	432	843
27. 12.9—12.52	437	735	July 2. 13.17–14. 0	468	818	Nov. 3. 14.24–15. 5	453	837
March 2. 14.31–15.16	453	743	6. 13. 8–13.51	467	818	5. 12. 9–12.58	412	822
5. 11.44–12.27	405	735	9. 11. 8–11.51	431	805	8. 14.26–15. 8	447	833
9. 14. 7–14.53	436	735	12. 13.42–14.30	441	819	12. 12. 9–12.52	456	836
12. 12.16–12.57	448	741	16. 11.11–12. 6	439	815	16. 11.59–12.55	451	844
16. 15. 7–16. 6	445	741	20. 13.18–14. 1	444	819	19. 12. 8–12.53	436	841
19. 11.48–12.34	440	752	23. 13.42–14.27	448	816	23. 12.20–13. 0	452	831
26. 11.31–12.14	416	756	27. 13.58–14.41	455	818	26. 11.56–12.40	456	838
30. 11.27–12.30	420	756	30. 11. 8–11.51	462	822	30. 12.12–12.55	450	841
April 1. 14.39–15.28	442	761				Dec. 3. 12.10–12.54	433	845
6. 14.57–15.38	445	763	Aug. 3. 13.45–14.27	465	830	7. 12.18–13. 1	417	837
9. 11.23–12. 5	416	756	6. 13.42–14.24	462	825	10. 12. 3–12.47	447	835
13. 13. 7–14. 5	441	761	10. 11.22–12. 3	427	823	14. 12.22–13. 8	451	831
16. 14.14–15. 0	446	769	13. 11.10–11.52	423	836	17. 11.37–12.37	446	826
20. 12.42–13.28	430	769	17. 13.19–14.17	440	836	21. 13.46–14.30	452	842
23. 11.19–12. 0	421	761	20. 9.48–10.43	439	841	23. 14.31–15.15	457	835
27. 11. 6–11.49	423	761	24. 9.55–10.45	454	834	28. 14.19–15. 3	449	859
30. 11.20–12. 2	436	763	30. 14.20–15. 3	453	836	31. 12.13–12.57	459	861

TABLE XIX.—RESULTS of OBSERVATIONS of MAGNETIC DIP made with the DIP INDUCTOR, with DEDUCED VALUES of the BASE-LINE of the VERTICAL FORCE MAGNETOGRAMS.

Greenwich Civil Time, 1920.	Magnetic Dip.	Deduced Value of Vertical Force Base-line.	Greenwich Civil Time, 1920.	Magnetic Dip.	Deduced Value of Vertical Force Base-line.	Greenwich Civil Time, 1920.	Magnetic Dip.	Deduced Value of Vertical Force Base-line.	Greenwich Civil Time, 1920.	Magnetic Dip	Deduced Value of Vertical Force Base-line.
d h	° ′	·42800+	d h	° ′	·42800+	d h	° ′	·42800+	d h	° ′	·42800+
Jan. 2. 12·6	66 54·8	—	April 1. 14·4	66 55·1	230	July 1. 11·1	66 53·5	185	Oct. 1. 11·0	66 54·5	154
6. 14·3	66 52·7	—	6. 14·8	66 55·2	183	2. 11·4	66 53·4	199	5. 12·0	66 56·0	205
9. 12·8	66 54·4	—	8. 11·3	66 55·2	216	6. 11·5	66 53·0	220	6. 14·3	66 54·2	160
13. 12·5	66 53·5	—	9. 11·2	66 55·6	207	7. 11·5	66 52·6	176	8. 11·0	66 54·6	173
15. 11·5	66 53·6	—	13. 12·9	66 53·8	211	9. 10·9	66 54·4	200	12. 11·2	66 55·5	209
16. 11·8	66 54·1	—	14. 11·5	66 54·1	224	12. 13·5	66 54·1	188	14. 14·1	66 54·0	199
20. 12·1	66 53·4	—	16. 11·2	66 56·1	228	14. 11·4	66 53·3	203	15. 10·7	66 56·4	215
22. 12·7	66 54·5	—	20. 11·9	66 56·9	210	16. 10·9	66 53·9	226	19. 11·4	66 55·4	203
23. 12·1	66 53·4	—	22. 11·2	66 55·8	232	20. 11·5	66 54·7	210	21. 14·9	66 53·3	206
27. 14·9	66 53·2	288	23. 11·1	66 55·6	228	21. 11·6	66 54·9	192	22. 11·6	66 54·5	220
29. 11·6	66 53·2	269	27. 10·9	66 55·0	225	23. 11·8	66 54·4	162	26. 12·1	66 54·2	178
30. 11·8	66 54·2	271	28. 11·1	66 54·4	214	27. 11·1	66 53·9	204	28. 14·6	66 54·2	135
			30. 11·2	66 54·3	219	29. 11·1	66 54·0	205	29. 12·1	66 55·4	155
Feb. 3. 11·8	66 52·6	264				30. 10·9	66 52·4	183			
5. 12·1	66 53·9	267	May 4. 11·0	66 54·5	188				Nov. 2. 12·9	66 54·7	134
6. 12·0	66 53·0	276	5. 11·7	66 55·4	233	Aug. 3. 13·5	66 52·4	187	3. 14·2	66 54·2	165
10. 12·2	66 54·0	262	7. 11·1	66 53·1	192	5. 10·0	66 55·2	181	5. 11·9	66 56·0	147
11. 11·7	66 52·4	249	11. 11·3	66 53·9	204	6. 11·6	66 53·7	201	8. 13·0	66 53·9	110
13. 12·4	66 54·3	246	12. 11·7	66 52·7	189	10. 11·1	66 55·0	191	10. 11·9	66 53·4	81
17. 11·6	66 57·1	245	14. 10·9	66 55·9	181	11. 10·7	66 53·4	193	12. 11·9	66 53·0	109
18. 11·8	66 55·8	247	18. 13·1	66 53·5	165	13. 10·9	66 56·0	193	16. 11·7	66 52·5	63
20. 11·3	66 55·1	263	19. 11·6	66 54·2	198	17. 11·4	66 55·0	174	17. 12·1	66 53·0	33
24. 12·1	66 54·4	229	21. 10·9	66 52·8	171	18. 11·7	66 53·4	166	19. 11·9	66 53·7	58
26. 11·3	66 53·3	216	25. 13·7	66 53·9	207	20. 10·9	66 55·1	159	23. 12·1	66 53·8	107
27. 11·9	66 54·7	238	26. 11·7	66 52·2	172	24. 10·9	66 53·0	146	25. 11·2	66 52·5	82
			28. 10·9	66 56·4	209	26. 11·0	66 54·0	196	26. 11·7	66 52·4	78
Mar. 2. 12·6	66 52·8	181				30. 14·1	66 53·9	170	30. 12·0	66 52·6	35
3. 12·7	66 52·8	206	June 1. 11·7	66 54·1	215	31. 11·1	66 55·0	188			
5. 11·6	66 58·0	227	2. 11·3	66 53·4	195				Dec. 1. 11·6	66 53·0	35
9. 12·0	66 55·7	248	4. 11·1	66 54·4	217	Sept. 2. 14·7	66 53·1	165	3. 11·9	66 54·5	32
10. 12·2	66 53·8	231	8. 11·3	66 54·5	227	6. 13·6	66 55·7	186	7. 12·0	66 55·5	46
12. 12·0	66 53·6	225	10. 11·2	66 58·6	257	9. 10·9	66 56·5	203	9. 12·6	66 53·6	31
16. 12·3	66 56·3	242	11. 12·0	66 55·3	200	13. 13·9	66 53·0	191	10. 11·8	66 53·8	65
18. 12·2	66 54·2	186	15. 11·7	66 53·7	206	16. 14·6	66 53·8	156	14. 12·1	66 52·7	44
19. 11·6	66 55·2	229	17. 11·4	66 53·1	188	17. 10·5	66 54·3	159	15. 11·3	66 52·5	61
22. 14·1	66 53·0	—	18. 10·8	66 55·4	204	21. 11·3	66 54·6	195	17. 11·3	66 53·6	67
23. 12·1	66 58·1	—	21. 14·2	66 52·1	178	22. 11·6	66 55·9	199	21. 12·9	66 53·0	10
26. 11·3	66 55·6	183	24. 11·9	66 53·3	165	24. 10·9	66 54·6	186	23. 14·3	66 52·2	11
30. 11·3	66 55·3	201	25. 11·0	66 53·2	199	28. 11·9	66 53·3	194	28. 14·1	66 53·3	−36
31. 9·7	66 56·1	217	29. 11·2	66 53·3	199	30. 11·7	66 56·5	213	30. 12·0	66 51·5	−48
									31. 12·0	66 53·0	−34

TABLE XX.—ANNUAL SUMMARY OF THE MAGNETIC ELEMENTS.

Month, 1920.	Mean Value of						Monthly Mean Diurnal Range of			Sum of Hourly Deviations from Means of		
	Declination.	Horizontal Force.	Dip.	West Force.	North Force.	Vertical Force.	Declination.	North Force.	Vertical Force.	Declination.	North Force.	Vertical Force.
	° ′		° ′				′			′		
January	14. 13·5	·18452	66. 53·1	·04534	·17887	·43228*	6·9	30γ	(15)γ**	37·3	136γ	(84)γ**
February ..	14. 12·4	·18454	66. 53·5	·04529	·17890	·43246	7·6	37	20	49·8	193	132
March	14. 11·4	·18442	66. 54·8	·04521	·17879	·43265	9·8	32	29	61·6	208	193
April	14. 10·2	·18448	66. 53·9	·04516	·17887	·43249	10·9	48	31	61·6	315	165
May.....	14. 10·1	·18459	66. 53·5	·04519	·17898	·43260	9·8	41	32	55·4	285	156
June	14. 9·3	·18462	66. 52·8	·04515	·17902	·43243	11·2	41	32	63·8	290	153
July	14. 8·7	·18462	66. 52·9	·04512	·17903	·43247	10·9	38	26	65·7	260	136
August	14. 7·5	·18460	66. 53·6	·04505	·17902	·43263	10·9	49	26	63·6	317	150
September ..	14. 6·5	·18450	66. 54·2	·04498	·17894	·43261	9·6	35	24	63·1	233	142
October	14. 6·1	·18446	66. 53·1	·04494	·17890	·43215	8·2	37	21	50·1	254	140
November ..	14. 4·6	·18456	66. 53·9	·04488	·17902	·43266	5·9	21	16	37·5	166	120
December ..	14. 3·2	·18454	66. 53·4	·04481	·17902	·43245	5·1	24	12	27·9	137	97
For the Year.	14. 8·6	·18454	66 53·6	·04509	·17894	·43249	8·9	36·2	23·7	53·1	232·8	144·0

* The Vertical Force for January has been computed from absolute observations of Dip, and the mean Horizontal Force corrected for diurnal inequality.
** This value depends upon observations made on the nine days Jan. 1–4, 27–31.

ROYAL OBSERVATORY, GREENWICH.

MAGNETIC DISTURBANCES.

1920.

MAGNETIC DISTURBANCES in DECLINATION, NORTH FORCE, and VERTICAL FORCE, recorded at the ROYAL OBSERVATORY, GREENWICH, in the Year 1920.

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).

1920.

January

1^d 17^h to 19^h Irregular serrated wave in N.F. (− 30). 18$\frac{1}{2}^h$ to 19^h Decrease in Dec. (− 3′). 19$\frac{3}{4}^h$ to 21$\frac{1}{4}^h$ Irregular double wave in N.F. (− 20, + 21), the intermediate movement steep. 20^h to 20$\frac{1}{4}^h$ Very sharp decrease in Dec. (− 11′), followed till 21^h by slower partial return (+ 7′). 22^h to 23^h Wave in Dec. (+ 6′).

2^d 12^h to 12$\frac{3}{4}^h$ Wave in N.F. (− 33). 21^h to 22$\frac{1}{4}^h$ Truncated wave in Dec. (− 3′).

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

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

5^d 15^h to 8^d 17^h Loss of V.F. register. New instrument introduced, but no measurable register obtained till 24^d 12^h, when the old instrument was reintroduced.

6^d 19$\frac{1}{2}^h$ Increase in Dec. (+ 3′), followed till 20$\frac{1}{2}^h$ by a decrease (− 7′).

7^d 3^h to 4$\frac{3}{4}^h$ Wave in Dec. (+ 5′). 12$\frac{1}{2}^h$ to 13$\frac{3}{4}^h$ Wave in N.F. (− 24).

8^d 14^h to 15$\frac{1}{2}^h$ Wave in Dec. (− 5′).

9^d 16$\frac{3}{4}^h$ to 17$\frac{1}{2}^h$ Wave in Dec. (+ 3′). 21^h to 21$\frac{3}{4}^h$ Decrease in Dec. (− 12′). 23^h to 24^h Increase in Dec. (+ 5′).

10^d 5^h to 6^h Domed wave in Dec. (+ 6′). 5$\frac{1}{4}^h$ to 6$\frac{1}{2}^h$ Slightly truncated wave in N.F. (+ 30). 7$\frac{1}{4}^h$ Sharp increase in Dec. (+ 4′). 7$\frac{3}{4}^h$ to 8$\frac{1}{4}^h$ Serrated decrease in N.F. (− 27). 12$\frac{1}{2}^h$ Sudden increase in Dec. (+ 3′). 14$\frac{1}{2}^h$ to 15$\frac{1}{2}^h$ Wave in Dec. (+ 3′). 14$\frac{3}{4}^h$ to 16^h Wave in N.F. (− 23). 20^h Sharp decrease in Dec. (− 9′) and increase in N.F. (+ 24).

11^d 17$\frac{3}{4}^h$ to 19$\frac{1}{2}^h$ Irregular decrease in N.F. (− 54), followed till 20$\frac{1}{2}^h$ by a wave (+ 40), steep at commencement, with serrated pause from 20^h to 20$\frac{1}{4}^h$ on return. 18$\frac{3}{4}^h$ to 20^h Two successive waves in Dec. (− 5′, − 7′). 20$\frac{1}{2}^h$ to 21^h Sharp decrease in Dec. (− 10′). 21$\frac{1}{2}^h$ to 22^h Increase in Dec. (+ 8′). 22$\frac{1}{2}^h$ to 22$\frac{3}{4}^h$ Sharp increase in N.F. (+ 36). 23^h to 23$\frac{1}{2}^h$ Sharp movements in Dec. (+ 3′, − 6′).

12^d 0^h to 0$\frac{1}{4}^h$ Decrease in N.F. (− 27). 0$\frac{1}{4}^h$ to 1$\frac{1}{4}^h$ Increase in Dec. (+ 10′). 3$\frac{3}{4}^h$ to 4$\frac{1}{4}^h$ Domed wave in Dec. (− 3′). 6^h to 6$\frac{1}{4}^h$ Decrease in Dec. (− 3′). 21^h to 21$\frac{1}{2}^h$ Sharp wave in N.F. (+ 22).

14^d 20$\frac{1}{2}^h$ to 21$\frac{3}{4}^h$ Domed wave in Dec. (− 6′).

15^d 22$\frac{3}{4}^h$ to 24^h Wave in Dec. (+ 6′). 23^h to 24^h Wave in N.F. (+ 34), steep at commencement.

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

17^d 16^h to 16$\frac{1}{2}^h$ Decrease in N.F. (− 23). 16$\frac{1}{2}^h$ to 17$\frac{1}{4}^h$ Serrated decrease in Dec. (− 7′), followed till 18$\frac{3}{4}^h$ by a wave (+ 6′), with a wave (− 5′) superposed from 17$\frac{1}{2}^h$ to 18$\frac{1}{4}^h$. 16$\frac{1}{4}^h$ to 17^h Sharp movements in N.F. (− 35, + 22). 18$\frac{3}{4}^h$ to 19$\frac{3}{4}^h$ Sharp wave in N.F. (+ 54). 19^h to 19$\frac{1}{4}^h$ Sharp increase in Dec. (+ 5′). 23$\frac{1}{2}^h$ to 18^d 0$\frac{1}{2}^h$ Wave in N.F. (+ 37), steep at commencement.

1920.

January

21d 0h to 1h Wave in Dec. (− 4′); in N.F. small. 1½h to 2¼h Wave in Dec. (+ 3′), followed till 2¾h by an increase (+ 6′). 4h to 5h Wave in Dec. (+ 6′). 12h to 13h Steep truncated and deeply serrated wave in Dec. (+ 6′). 12¼h to 14¾h Irregular wave in N.F. (− 57). 17h to 18½h Wave in Dec. (− 12′), steep at commencement. 17¼h to 17½h Sharp increase in N.F. (+ 50), followed till 18½h by slower partial return (− 30). 21½h to 23h Irregular wave in Dec. (− 5′), followed till 24h by a wave (− 4′). 22½h to 23½h Truncated wave in N.F. (+ 32).

22d 16h to 17¾h Wave in Dec. (− 5′).

23d 16½h to 18h Irregular wave in Dec. (− 5′). 21h to 23h Wave in N.F. (+ 27). 21¾h to 22¼h Wave in Dec. (− 4′). 23h to 23¾h Wave in Dec. (+ 4′).

24d 3¼h to 4½h Wave in Dec. (+ 5′).

25d 2h to 3h Wave in Dec. (+ 4′). 4h to 5h Wave in Dec. (+ 3′).

26d 20h to 21h Wave in Dec. (− 4′).

28d 12h to 12¼h Very sharp serrated double wave in Dec. (− 3′, + 3′); very sharp wave in N.F. (− 24). 12½h to 13h Sharp double-crested wave in Dec. (+ 4′). 13½h to 13¾h Sharp increase in Dec. (+ 4′) and N.F. (+ 27). 15¼h to 16½h Wave in N.F. (− 23). 23h to 24h Sharp wave in N.F. (+ 44); decrease in V.F. (− 18).

29d 0¼h to 1h Increase in Dec. (+ 4′). 3h to 3¾h Wave in Dec. (+ 4′).

30d 4h to 5h Domed wave in Dec. (+ 3′). 17h to 17½h Wave in Dec. (− 4′). 20¼h to 20¾h Steep irregular decrease in Dec. (− 9′), followed till 22½h by oscillatory return (+ 6′). 20¾h to 22¼h Irregular double wave in N.F. (+ 32, − 20).

February

4d 0¾h to 1¼h Decrease in Dec. (− 4′).

6d 22½h to 7d 0½h Very irregular waves in Dec. (− 8′) and N.F. (+ 56); both steep at commencement.

7d 19½h to 19¾h Sharp wave in Dec. (− 3′), followed till 21h by a domed wave (− 7′), steep at commencement. 19½h to 20h Sharp wave in N.F. (+ 24), followed till 21h by a domed wave (+ 35).

8d 1¾h to 3h Truncated wave in N.F. (+ 21). 20½h to 20¾h Decrease in Dec. (− 5′); increase in N.F. (+ 20).

11d 5¼h to 6h Wave in Dec. (+ 3′); increase in N.F. (+ 25). 11d 23¾h to 12d 2h Double-crested wave in Dec. (− 10′); truncated wave in N.F. (+ 45), with wave (− 22) superposed from 0¼h to 1h. 23¾h to 12d 0¼h Decrease in V.F. (− 14).

12d 21h to 22¼h Wave in Dec. (− 5′).

13d 3h to 4¼h Wave in Dec. (+ 4′). 20½h to 21h Decrease in Dec. (− 6′). 13d 23¼h to 14d 0¼h Wave in N.F. (+ 32).

14d 15h to 15½h Decrease in Dec. (− 5′). 19h to 20½h Sharp wave in Dec. (− 10′). 19h to 19¾h Truncated wave in N.F. (− 24). 19h to 21h Wave in V.F. (+ 12). 23½h to 15d 0½h Wave in Dec. (− 6′).

15d 18¼h to 19½h Wave in Dec. (+ 4′).

16d 13½h to 15¼h Irregular double wave in Dec. (+ 11′, − 8′), followed till 15½h by a sharp wave (− 4′). 13½h to 15h Accelerated increase in V.F. (+ 40). 14¼h Sharp serrated decrease in N.F. (− 21). 14¾h to 15½h Double wave in N.F. (− 22, + 30), followed till 15¾h by a sharp wave (+ 22). 16h Sharp decrease in Dec. (− 4′). 16¼h to 18½h Wave in V.F. (− 16). 18h to 18¾h Sharp movements in N.F. (− 44, + 27, − 30, + 30). 18½h to 18¾h Very sharp movements in Dec. (+ 5′, − 11′), followed till 20h, after a brief pause, by two successive sharp waves (− 15′, − 6′). 19¼h to 19¾h Irregular wave in N.F. (+ 50). 19¼h to 17d 1h Decrease in V.F. (− 45).

17d 0½h to 3½h Two successive waves in Dec. (+ 8′, + 7′). 2h to 2¾h Truncated wave in N.F. (− 22). 10¾h to 11¾h Serrated domed wave in Dec. (+ 3′). 11h to 13h Serrated wave in N.F. (− 54). 17¼h to 18¼h Irregular double wave in Dec. (+ 3′, − 4′). 17¾h to 18¼h Wave in N.F. (− 22) 18¾h to 20h Sharp wave in Dec. (− 15′). 19h to 20h Wave in N.F. (+ 70); steep at both ends. 20¼h to 21½h Wave in N.F. (− 24). 22¼h to 23½h Irregular waves in Dec. (− 4′) and N.F. (+ 26).

18d 0¾h to 1¼h Domed wave in N.F. (+ 24). 1h to 2h Wave in Dec. (+ 5′). 19½h to 20½h Waves in Dec. (− 5′) and N.F. (+ 24).

21d 18¼h to 19½h Wave in Dec. (− 6′).

24d 8h to 25d 8h. *See* Plate I.

25d 21h to 22h Sharp wave in Dec. (− 8′).

27d 23½h to 24h Steep wave in Dec. (− 6′).

28d 21½h to 21¾h Sharp decrease in Dec. (− 5′).

1920.
March

1d 19¾h to 20h Decrease in Dec. (− 5′).

4d 11h to 5d 11h. *See* Plate I.

5d 18h to 18½h Sharp movements in N.F. (− 27, + 78). 18¼h to 18½h Steep decrease in Dec. (− 15′), followed till 19¼h by an irregular partial return (+ 10′). 19h to 19¾h Irregular decrease in N.F. (− 60). 21¼h to 22h Wave in N.F. (+ 27).

6d 0¼h to 2¼h Truncated wave in Dec. (+ 9′), with sharp wave (+ 4′) superposed from 0¾h to 1h. 0¾h to 3h Wave in V.F. (− 24). 1h to 2h Wave in N.F. (+ 25). 17h to 18¼h Triple-crested wave in N.F. (− 33). 18¼h to 21¼h Two successive waves in Dec. (− 9′, − 7′). 20h to 21h Wave in N.F. (+ 23). 22¾h to 23½h Decrease in V.F. (− 24). 23h to 23¾h Wave in Dec. (− 7′), steep at commencement. 23h to 24h Truncated wave in N.F. (+ 60), steep at commencement.

8d 1h to 2½h Wave in N.F. (+ 37). 1½h to 2¼h Wave in Dec. (+ 4′). 1½h to 2h Decrease in V.F. (− 17). 19¾h to 20¾h Wave in Dec. (− 5′).

10d 19h to 21h Wave in Dec. (− 10′), followed till 22¼h by a wave (− 5′) with very sudden commencement. 19h to 20½h Double wave in N.F. (− 20, + 20), the second portion domed. 21h to 21½h Sharp wave in N.F. (+ 34).

11d 19h to 20h Domed wave in Dec. (− 6′). 22h to 24h Wave in N.F. (+ 27).

12d 16h to 18h Wave in V.F. (− 12). 16¼h to 17¼h Wave in N.F. (− 27). 17¾h to 18h Sharp decrease in Dec. (− 5′), continued till 18½h by a sharp wave (− 7′). 18h to 18¾h Sharp wave in N.F. (+ 34). 19¾h to 21h Truncated wave in Dec. (− 4′). 21h to 23h Decrease in V.F. (− 20). 22½h to 23¼h Wave in N.F. (+ 20).

14d 13h Sudden increase in Dec. (+ 6′) and N.F. (+ 44). 13h to 15h Increase in V.F. (+ 40). 13¼h to 14¾h Sharply serrated double wave in Dec. (− 7′, + 10′). 13½h to 14¼h Irregular decrease in N.F. (− 90), followed till 14½h by a very sharp serrated wave (− 21), followed till 14¾h by a serrated increase (+ 33)s 15h to 15¼h Very sharp double-crested wave in Dec. (− 3′), followed till 15½h by very sharp movement. (− 8′, + 4′, − 3′, + 6′, − 3′). 15h to 15¼h Very sharp movements in N.F. (− 30, + 27, − 17, + 17, − 20, + 33, − 40, + 40). 15½h Sudden increase in N.F. (+ 52) and V.F. (+ 15), followed respectively till 16h by serrated returns (− 52) and (− 16). 16h to 16¼h Two successive sharp irregular waves in Dec. (− 7′, − 4′); sharp movements in N.F. (− 30, + 44, − 34, + 20) with superposed sharp fluctuations. 16¼h to 21h Wave in V.F. (+ 60). 18h to 18¾h Irregular sharp decrease in Dec. (− 12′); serrated wave in N.F. (− 33). 18¾h to 20h Irregular domed wave in Dec. (+ 5′).

15d 21h to 22½h Two successive waves in Dec. (− 5′, − 4′). 22h to 22½h Wave in N.F. (+ 20).

16d 5½h to 8h Truncated wave in Dec. (+ 5′). 19½h Sharp decrease in Dec., exceeding 3′, interrupted by loss of register till 21¼h. 19½h to 29¾h Very sharp double wave in N.F. (− 30, + 40). 22h to 23¼h Very steep wave in Dec. (+ 18′). 22¼h to 22½h Steep decrease in V.F. (− 36). 23h to 24h Increase in V.F. (+ 20). 23½h to 23¾h Decrease in N.F. (− 27).

20d 17h to 18½h Domed wave in N.F. (− 24). 18¾h to 19½h Wave in Dec. (− 3′).

21d 19½h to 20½h Domed wave in Dec. (− 5′). 22¾h to 24h Irregular wave in Dec. (− 5′). 23h Sharp increase in N.F. (+ 24).

22d 8h to 23d 8h. *See* Plate II.

23d 8h to 8¼h Very sharp movements in Dec. (− 5′, + 8′, − 4′, + 6′, − 8′, + 4′, − 4′), followed by similar sharp oscillations till 10¾h, the chief being + 4′, − 6′, + 6′, − 5′ at 8¾h, and a wave (+ 5′) at 10¾h. 8h to 8¾h Very sharp movements in N.F. (− 24, + 34, − 44, + 37) with superposed oscillations, followed till 9¾h by a serrated wave (− 50). 8h to 10h Increase in V.F. (+ 45). 11¾h to 12h Increase in Dec. (+ 7′). 12¼h to 12½h Serrated decrease in N.F. (− 40), followed till 13h by a serrated wave (+ 24). 12½h to 17¼h Truncated wave in V.F. (+ 50). 13½h to 13¾h Sharp serrated increase in N.F. (+ 54), followed till 14¼h by a serrated wave (+ 34) 14h Sharp increase in Dec. (+ 4′). 14¼h to 14½h Two successive sharp waves in Dec. (− 3′, − 3′) 15h to 15½h Wave in Dec. (− 3′), followed till 16h by sharp decrease (− 10′) and partial recovery (+ 3′). 15¼h to 15½h Sharp increase in N.F. (+ 30), becoming gradual till 15¾h; then very rapid till 16h (+ 40), with double wave (± 20) between 16h and 16½h. 16½h to 17½h Steady decrease in N.F. (− 30). 19h to 24h Steady decrease in V.F. (− 90). 19h to 19⅓h Sharp decrease in Dec. (− 20′), followed by rapid partial recovery till 19¾h (+ 13′). 19¼h Sudden increase in N.F. (+ 80), followed by irregular recovery till 20½h. 20h to 21½h Double wave in Dec. (± 5′). 20¾h to 21¾h Domed wave in N.F. (+ 35). 21¾h to 23h Three successive truncated waves in N.F. (+ 20, + 25, + 15). 12⅔h to 22½h Double wave in Dec. (∓ 3′). 22½h to 23¼h Double wave in Dec. (± 3′), followed by rapid decrease till 24h (− 3′). 23h to 23¾h Rapid increase in N.F. (+ 60), with partial return till 24h (− 30).

1920.
March

24d 0¼h Very rapid decrease in N.F. (− 40), followed by partial recovery with irregular fluctuations till 2h. 0¼h to 1h Serrated wave in Dec. (− 10′). 1h to 2h Serrated wave in Dec. (− 7′). 1h to 2⅔h Decrease in V.F. (− 56), interrupted at 1½h. 2h to 5h Serrated wave in N.F. (+ 90), having the peak at 2¾h and interruptions in the return at 3½h and 4½h. 2h to 3h Irregular wave in Dec. (− 6′). 3h to 5½h Flattened wave in Dec. (− 8′), having the peak at 4h and a superposed wave (+ 3′) at 4½h. 3½h to 5h Rapid increase in V.F. (+ 60), becoming more gradual till 8h (+ 30). 5½h Very sharp wave in Dec. (− 3′). 7¼h Very sharp wave in Dec. (− 4′). 11⅛h to 12h Serrated wave in N.F. (+ 25). 11⅛h to 11½h Rapid increase in Dec. (+ 5′). 12h to 13¼h Truncated wave in Dec., with marked serrations (+ 10′). 12½h to 13½h Sharp wave in N.F. (− 80); increase in V.F. (+ 30). 15½h to 18h Sharp wave in V.F. (+ 90), having its peak at 16⅜h. 15¼h to 15½h Sharp wave in N.F. (− 25). 15⅜h to 16½h Sharp wave in N.F. (+ 60). 16½h to 17h Very sharp wave in N.F. (+ 100). 17h to 17½h Sharp wave in N.F. (+ 60). 15¼h to 15½h Serrated wave in Dec. (− 4′). 16⅜h Sudden decrease in Dec. (− 17′), followed by partial recovery (+ 7′) to 16¾h and very sharp wave (− 14′) to 17⅛h. 17⅜h to 18h Domed wave in Dec. (+ 3′). 17¾h to 18h Rapid decrease in N.F. (− 30). 18½h to 18¾h Rapid increase in N.F. (+ 30), with partial return. 19h to 19¼h Rapid increase in N.F. (+ 35). 18½h to 18¾h Wave in Dec. (− 3′). 19h Sudden decrease in Dec. (− 7′), with gradual fluctuating return to 20h. 20h to 20⅜h Double wave in N.F. (∓ 40). 20h to 21h Irregular wave in Dec. (− 5′). 21h to 21⅜h Wave in Dec. (− 5′). 22h to 23h Steady decrease in V.F. (− 30). 22h to 23¼h Wave in Dec. (+ 7′), accompanied by wave in N.F. (+ 20). 23h to 23½h Wave in N.F. (+ 35). 23¼h to 24h Wave in Dec. (+ 8′).

25d 0h to 1h Domed wave in Dec. (− 3′). 1½h to 4h Truncated wave in N.F. (− 70). 2h to 2½h Sharp wave in Dec. (− 3′). 2½h to 3¼h Increase in Dec. (+ 7′), with partial return (− 3′). 4¾h to 5¼h Rapid decrease in Dec. (− 6′), with two sharp oscillations. 5h to 6h Domed wave in N.F. (+ 30). 17⅛h to 18h Rapid increase in N.F. (+ 60), with partial return (− 30). 18¼h to 19½h Irregular wave in N.F. (+ 40). 17½h to 18h Wave in Dec. (− 5′). 18h to 18⅛h Rapid decrease in Dec. (− 7′). 18½h to 19h Irregular wave in Dec. (+ 3′). 19½h to 20h Wave in Dec. (− 3′). 23½h to 26d 0½h Wave in N.F. (+ 45). 23½h Decrease in Dec. (− 3′).

26d 0¼h to 1⅛h Wave in Dec. (+ 5′).

27d 17h to 18h Serrated wave in N.F. (+ 45). 19¼h to 19½h Sharp wave in Dec. (− 5′). 19⅛h to 19⅜h Wave in N.F. (+ 40). 19½h to 21h Wave in Dec. (− 6′). 20h to 20½h Increase in N.F. (+ 25). 21½h to 22½h Wave in Dec. (− 4′). 23½h to 28d 1h Domed wave in N.F. (+ 20). 23⅛h to 28d 0½h Irregular domed wave in Dec. (− 3′).

28d 16½h to 18h Wave in N.F. (− 30). 17½h to 18½h Wave in Dec. (− 3′).

April

2d 20½h to 21¾h Wave in N.F. (+ 30), accompanied by wave in Dec. (− 3′).

3d 19¾h to 20½h Wave in Dec. (− 3′). 21h to 23h Serrated wave in N.F. (+ 30). 21¼h to 22h Decrease in Dec. (− 9′), followed to 24h by steady recovery.

4d 12h to 12⅛h Increase in Dec. (+ 5′). 12½h to 14¼h Wave in N.F. (− 35). 14h to 15h Double wave in Dec. (± 3′). 14h to 15½h Two successive waves in V.F. (+ 12). 15¼h to 15½h Decrease in Dec. (− 3′). 14¼h to 16h Two successive waves in N.F. (− 20). 16h to 17h Increase in N.F. (+ 35). 17½h to 18h Sharp wave in N.F. (+ 20). 20½h to 21½h Wave in Dec. (− 6′).

5d 5½h to 6¼h Truncated wave in Dec. (+ 6′), accompanied by wave in N.F. (− 20), and followed till 9½h by continuous rapid oscillations in both traces, those in Dec. being of 3′ amplitude on several occasions. 10h to 10½h Decrease in N.F. (− 30). 14h to 14½h Wave in N.F. (− 30). 14h to 15h Increase in V.F. (+ 25). 16h to 18½h Increase in V.F. (+ 40). 15⅛h to 16¼h Increase in N.F. (+ 50). 16½h to 17½h Wave in N.F. (− 25). 17h to 18h Decrease in Dec. (− 18′), interrupted by sharp partial recovery at 17½h (+ 3′) and followed till 18½h by further partial recovery (+ 4′). 17½h to 18h Decrease in N.F. (− 30). 18h to 19⅛h Wave in N.F. (+ 50). 19h to 19⅜h Increase in Dec. (+ 6′). 20h to 21h Serrated domed wave in Dec. (− 3′). 20⅜h to 21h Increase in N.F. (+ 20). 22¼h to 23¼h Truncated wave in N.F. (+ 22). 22¾h to 24h Increase in Dec. (+ 10′). 23⅜h to 24h Increase in N.F. (+ 20). 18h to 24h Steady decrease in V.F. (− 60).

6d 0h to 1½h Serrated decrease in Dec. (− 10′). 2h to 3½h Truncated wave in Dec. (+ 7′). 2h to 3¼h Irregular wave in N.F. (− 35). 9h to 10½h Domed wave in N.F. (− 30). 10¾h to 13h Increase in Dec. (+ 10′). 12⅜h to 13⅜h Wave in N.F. (− 40). 14¼h to 14⅜h Decrease in N.F. (− 20). 14½h to 16h Wave in N.F. (+ 30). 16h to 16½h Increase in N.F. (+ 45), accompanied by decrease in Dec. (− 5′). 20h to 20½h Decrease in Dec. (− 4′). 21¼h Rapid increase in N.F. (+ 45) followed till 22¼h by fluctuating return 21¼h to 21½h Sharp wave in Dec. (− 3′) followed by double wave (− 3′, + 4′) ending at 23½h. 22½h to 23¼h Truncated wave in N.F. (+ 20).

7d 8¾h Rapid decrease in N.F. (− 25). 9½h to 10h Increase in Dec. (+ 4′). 17½h to 18¾h Wave in Dec. (− 8′) accompanied by irregular wave in N.F. (+ 30). 19⅜h to 20⅛h Wave in Dec. (− 5′).

8d 1½h to 2½h Wave in Dec. (+ 4′). 3½h to 4⅛h Wave in Dec. (+ 4′), with accompanying wave in N.F. (− 20). 5½h to 6½h Wave in N.F. (− 30). 5¾h to 7h Slightly serrated wave in Dec. (+ 5′).

1920.
April

9^d 15^h to 16^h Domed wave in N.F. (− 30).

10^d $0\frac{3}{4}^h$ Sudden increase in Dec. (+ 5′), accompanied by corresponding increase in N.F. (+ 35). $0\frac{3}{4}^h$ to $1\frac{1}{2}^h$ Decrease in V.F. (− 20). 1^h to $1\frac{1}{2}^h$ Decrease in Dec. (− 5′) and in N.F. (− 20). $12\frac{3}{4}^h$ to $13\frac{1}{2}^h$ Wave in Dec. (+ 3′).

11^d 1^h to $2\frac{1}{4}^h$ Wave in N.F. (+ 20).

12^d $2\frac{1}{2}^h$ to $3\frac{1}{2}^h$ Wave in Dec. (+ 5′), with accompanying wave in N.F. (− 20).

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

15^d $1\frac{1}{3}^h$ to $2\frac{1}{2}^h$ Truncated wave in Dec. (+ 5′). $1\frac{1}{2}^h$ to $2\frac{1}{2}^h$ Decrease in V.F. (− 15). $2\frac{1}{2}^h$ to $3\frac{2}{3}^h$ Wave in Dec. (+ 8′). 3^h to $3\frac{1}{2}^h$ Decrease in V.F. (− 15). 4^h to $5\frac{1}{4}^h$ Serrated wave in N.F. (− 22). 6^h to 8^h Domed wave, with serrations, in N.F. (− 30). $8\frac{1}{2}^h$ to $8\frac{3}{4}^h$ Two very sharp waves in Dec. (+ 5′). $8\frac{1}{2}^h$ to $10\frac{1}{4}^h$ Rapid oscillating decrease in N.F. (− 100). 10^h to $10\frac{3}{5}^h$ Increase in Dec. (+ 8′). 11^h to $11\frac{3}{4}^h$ Wave in Dec. (− 4′). $11\frac{1}{2}^h$ to $11\frac{3}{4}^h$ Increase in N.F. (+ 20). 12^h to $12\frac{1}{3}^h$ Wave in Dec. (− 3′). $12\frac{1}{3}^h$ to 13^h Wave in N.F. (− 25). 12^h to $13\frac{1}{4}^h$ Rapid increase in V.F. (+ 60). $13\frac{1}{4}^h$ to 14^h Declination and N.F. traces much disturbed. Sudden increase in Dec. at $13\frac{1}{4}^h$ (+ 6′), accompanied by increase in N.F. (+ 20). $13\frac{1}{4}^h$ to $13\frac{3}{4}^h$ Rapid oscillating decrease in N.F. (− 85). $13\frac{1}{2}^h$ to 14^h Very serrated wave in Dec. (+ 5′). 14^h to $18\frac{1}{2}^h$ Continuous disturbances in Dec. and N.F. $14\frac{1}{2}^h$ to 17^h Increase in V.F. (+ 70). $15\frac{3}{4}^h$ to $16\frac{1}{2}^h$ Rapid oscillating decrease in Dec. (− 9′), with partial recovery (+ 4′) to $16\frac{3}{4}^h$ and further sudden decrease (− 14′) till 17^h. $14\frac{2}{3}^h$ Sharp wave in N.F. (− 25). 16^h to $16\frac{1}{2}^h$ Serrated wave in N.F. (− 25). $16\frac{3}{4}^h$ to 17^h Sharp wave in N.F. (− 50), followed by another at $17\frac{1}{4}^h$ (− 20). $17\frac{1}{4}^h$ to $17\frac{3}{4}^h$ Two consecutive waves in Dec. (− 4′). $17\frac{1}{2}^h$ to $21\frac{1}{2}^h$ Decrease in V.F. (− 100). $17\frac{2}{3}^h$ to $18\frac{1}{4}^h$ Irregular wave in N.F. (− 30), followed till $18\frac{2}{3}^h$ by rapid decrease, interrupted at $18\frac{1}{2}^h$ (− 60). 18^h to $18\frac{1}{2}^h$ Two consecutive waves in Dec. (− 3′, − 5′). $20\frac{1}{2}^h$ to 21^h Wave in N.F. (+ 30). $20\frac{1}{3}^h$ to $20\frac{2}{3}^h$ Wave in Dec. (− 5′). 21^h to $21\frac{1}{3}^h$ Wave in N.F. (+ 20). 21^h to $21\frac{1}{2}^h$ Wave in Dec. (+ 5′). $21\frac{1}{3}^h$ to 22^h Truncated wave in N.F. (+ 20), accompanied by rapid decrease in Dec. (− 7′). 22^h to $22\frac{1}{2}^h$ Wave in N.F. (+ 20), with increase in Dec. (+ 4′).

16^d 1^h to $1\frac{1}{2}^h$ Decrease in N.F. (− 25), with increase in Dec. (+ 5′). $3\frac{1}{2}^h$ to $4\frac{1}{2}^h$ Double wave in Dec. (± 3′). $19\frac{1}{4}^h$ to 20^h Wave in Dec. (− 6′).

17^d $1\frac{1}{4}^h$ to 3^h Truncated wave in Dec. (− 4′). $2\frac{1}{4}^h$ to 4^h Truncated wave in N.F. (− 30). $12\frac{2}{3}^h$ to 13^h Sharp increase in Dec. (+ 4′). 13^h to 14^h Increase in V.F. (+ 25). $16\frac{2}{4}^h$ to $17\frac{1}{2}^h$ Rapid increase in N.F. (+ 60), followed till 20^h by three consecutive double waves (∓ 20). 17^h to $17\frac{1}{2}^h$ Decrease in Dec. (− 8′). $18\frac{1}{3}^h$ to $19\frac{1}{2}^h$ Irregular wave in Dec. (+ 6′). 17^h to 18^h Increase in V.F. (+ 30). $20\frac{1}{2}^h$ to $21\frac{1}{4}^h$ Sharp wave in Dec. (− 14′), with wave in N.F. (+ 70). $21\frac{1}{3}^h$ to $21\frac{3}{4}^h$ Wave in N.F. (+ 30), with interrupted decrease in Dec. (− 6′). 22^h to $23\frac{1}{4}^h$ Wave in Dec. (+ 4′). $23\frac{1}{2}^h$ to 24^h Sharp wave in Dec. (+ 8′). $23\frac{1}{2}^h$ to 24^h Decrease in N.F. (− 20), followed immediately by a sharp increase (+ 40). $23\frac{1}{2}^h$ Very rapid decrease in V.F. (− 25).

18^d 0^h to $0\frac{3}{4}^h$ Serrated wave in N.F. (− 30). 0^h to $1\frac{1}{2}^h$ Truncated wave in V.F. (+ 18), together with irregula wave in Dec. (+ 10′). $1\frac{1}{2}^h$ to $4\frac{1}{4}^h$ Wave in Dec. with distinct oscillations at $2\frac{1}{2}^h$ and 3^h (+ 13′), followed by irregular increase till $5\frac{2}{3}^h$ (+ 17′). $2\frac{3}{4}^h$ to $3\frac{1}{4}^h$ Sharp increase in N.F. (+ 40). $1\frac{1}{2}^h$ to 5^h Double wave in V.F. (± 15). 5^h to $6\frac{1}{4}^h$ Domed wave in N.F. (− 30). $5\frac{3}{4}^h$ to $6\frac{1}{4}^h$ Decrease in Dec. (− 5′). 8^h to $8\frac{1}{3}^h$ Wave in Dec. (− 3′). $10\frac{3}{4}^h$ to $11\frac{3}{4}^h$ Domed wave in N.F. (− 30). $17\frac{1}{2}^h$ to 18^h Increase in N.F. (+ 40), accompanied by a wave in Dec. (− 3′). $19\frac{2}{3}^h$ to $20\frac{1}{2}^h$ Decrease in N.F. (− 30). $20\frac{1}{2}^h$ to 21^h Sharp double wave in Dec. (± 5′). $20\frac{2}{3}^h$ to $21\frac{3}{4}^h$ Sharp wave in N.F. (+ 75). $22\frac{1}{3}^h$ to $23\frac{1}{4}^h$ Wave in Dec. (+ 3′). 23^h to 19^d 1^h Truncated wave in N.F. (+ 60). $23\frac{1}{2}^h$ to 24^h Rapid decrease in Dec. (− 6′), with partial recovery (+ 3′). $23\frac{3}{4}^h$ to 19^d $0\frac{1}{3}^h$ Decrease in V.F. (− 20).

19^d 0^h to $0\frac{3}{5}^h$ Wave in Dec. (− 3′). 1^h to $1\frac{1}{2}^h$ Decrease in Dec. (− 5′). 1^h to $1\frac{1}{2}^h$ Increase in N.F. (+ 20). $2\frac{1}{2}^h$ to $3\frac{1}{4}^h$ Increase in Dec. (+ 8′). $2\frac{1}{2}^h$ to 4^h Increase in V.F. (+ 20). $16\frac{1}{2}^h$ to $17\frac{1}{4}^h$ Wave in N.F. (− 20), with decrease in Dec. (− 6′). $20\frac{1}{2}^h$ to 21^h Rapid decrease in Dec. (− 5′). $22\frac{1}{3}^h$ to $23\frac{1}{3}^h$ Wave in Dec. (− 5′). $23\frac{1}{2}^h$ to 20^d $0\frac{1}{2}^h$ Wave in N.F. (+ 32).

20^d $0\frac{3}{4}^h$ to 2^h Wave in N.F. (+ 30). $0\frac{1}{2}^h$ to $2\frac{1}{3}^h$ Double wave in Dec. (± 5′). 12^h to 15^h Increase in V.F. (+ 60). $14\frac{1}{4}^h$ to 15^h Wave in N.F. (− 30). 15^h to 16^h Truncated wave in Dec. (− 3′). $19\frac{1}{2}^h$ to $20\frac{1}{4}^h$ Rapid decrease in Dec. (− 20′), with partial recovery till 21^h (+ 12′). 20^h to $20\frac{3}{4}^h$ Wave in N.F. (+ 35).

21^d $2\frac{1}{2}^h$ to 3^h Wave in Dec. (+ 3′). $3\frac{3}{4}^h$ to 6^h Irregular wave in N.F. (− 30). $4\frac{1}{2}^h$ to 6^h Domed wave in Dec. (+ 5′). $15\frac{1}{4}^h$ to $15\frac{1}{2}^h$ Sharp decrease in Dec. (− 3′). 16^h to $17\frac{1}{4}^h$ Domed wave in N.F. (+ 20). 22^h Sharp increase in N.F. (+ 25). $23\frac{1}{2}^h$ Rapid decrease in Dec. (− 4′). 23^h to 24^h Serrated wave in N.F. (+ 30). $23\frac{1}{3}^h$ to $23\frac{2}{3}^h$ Decrease in V.F. (− 16).

23^d 21^h to 22^h Double wave in Dec. (± 3′). $21\frac{1}{2}^h$ to 22^n Wave in N.F. (+ 30). 22^h to $22\frac{1}{2}^h$ Decrease in Dec. (− 6′). $23\frac{1}{2}^h$ to 24^d 1^h Wave in N.F. (+ 35). 24^d 0^h to 2^h Decrease in V.F. (− 18).

24^d $1\frac{1}{3}^h$ to 2^h Wave in N.F. (+ 25). $2\frac{1}{4}^h$ to $2\frac{3}{4}^h$ Truncated wave in Dec. (+ 5′). $4\frac{1}{4}^h$ to $4\frac{3}{4}^h$ Rapid increase in Dec. (+ 14′) with wave in N.F. (− 30). $4\frac{3}{4}^h$ to $5\frac{1}{4}^h$ Decrease in V.F. (− 16).

25^d 21^h to $22\frac{1}{2}^h$ Irregular wave in N.F. (+ 25).

1920.

April

27d 20⅜h to 21⅓h Wave in Dec. (− 3′). 22h Sharp increase in N.F. (+ 30), with more gradual return till 22¾h.

29d 1h to 1⅜h Decrease in Dec. (− 4′). 22h to 23¾h Very serrated wave in Dec. (+ 8′), with corresponding wave in N.F. (− 35). 23h to 23½h Decrease in V.F. (− 12).

30d 1½h to 2¼h Double wave in N.F. (∓ 25). 1½h to 2½h Serrated wave in Dec. (+ 4′). 2½h to 3½h Rapid increase in Dec. (+ 11′). 2h to 2⅜h Wave in V.F. (+ 12). 19½h to 19¾h Increase in N.F. (+ 25). 19½h to 20h Wave in Dec. (− 3′). 21½h to 22½h Sharp wave in N.F. (+ 50), with sharp decrease in Dec. (− 10′), partially recovering (+ 5′).

May

1d 0¼h to 0⅜h Sharp increase in Dec. (+ 11′). 0½h to 1½h Rapid decrease in V.F. (− 40). 0⅜h to 1¼h Wave in Dec. (− 3′). 0¾h to 1⅜h Irregular increase in N.F. (+ 40). 1¼h to 2½h Rapid decrease in Dec. (− 13′). 2h to 4h Truncated wave in V.F. (+ 12). 2½h to 3½h Rapid increase in Dec. (+ 21′). 2¾h to 3¾h Wave in N.F. (− 50). 3½h to 4h Decrease in Dec. (− 7′). 3¾h to 4⅜h Wave in N.F. (− 30). 4h to 5h Slight increase in Dec., followed by rapid decrease (− 11′). 4¾h to 5¼h Decrease in N.F. (− 30). 10¼h to 11½h Increase in Dec. (+ 7′), accompanied by serrated flattened wave in N.F. (− 20). 12h to 12⅓h Increase in Dec. (+ 7′), accompanied by serrated flattened wave in N.F. (− 20). 12h to 12⅓h Increase in N.F. (+ 35). 13¼h Sharp decrease in Dec. (− 3′). 13½h to 14h Sharp increase in N.F. (+ 45). 15¼h to 15⅜h Wave in N.F. (− 20). 15h to 15⅓h Decrease in Dec. (− 3′). 18h to 18½h Truncated wave in N.F. (− 30), accompanied by rapid decrease in Dec. (− 9′). 19½h to 20½h Irregular increase in Dec. (+ 7′).

2d 0½h to 1½h Wave in Dec. (+ 10′). 0½h to 0¾h Increase in N.F. (+ 20). 0¾h to 1½h Decrease in V.F. (− 20). 10½h to 11½h Wave in N.F. (− 20). 14¼h to 15h Decrease in Dec. (− 7′). 18h to 18¾h Domed wave in Dec. (− 3′). 18¼h to 19h Wave in N.F. (+ 30).

3d 0⅜h to 1¾h Truncated wave in Dec. (+ 3′). 8⅓h to 8⅔h Rapid decrease in N.F. (− 30). 9h to 10½h Irregular increase in Dec. (+ 7′). 19¾h to 21h Sharp wave in N.F. (+ 60), accompanied by double wave in Dec. (∓ 7′).

4d 1h to 2h Wave in Dec. (+ 4′).

5d 1¼h to 2h Wave in Dec. (+ 3′).

8d 14h to 15h Wave in N.F. (+ 20). 20h to 20⅜h Irregular wave in N.F. (+ 20). 21h to 23h Double-crested wave in Dec. (− 4′).

9d 2⅛h to 4h Double-crested wave in Dec. (+ 5′). 2⅛h to 3⅛h Irregular wave in N.F. (− 20). 5h to 8h A number of small oscillations in Dec. 10h Sharp wave in Dec. (+ 3′), with sharp decrease in N.F. (− 25). 12½h Sudden increase in Dec. (+ 3′). 12½h to 13h Truncated wave in N.F. (+ 20). 16h to 21h Wave in V.F. (+ 30). 16h to 16½h Sharp serrated wave in N.F. (− 30). 17h to 17½h Wave in N.F. (− 20). 18h to 18½h Wave in Dec. (− 3′).

12d 11½h to 13d 10½h Registration failed in Dec.
12d 11¼h to 11¾h Wave in V.F. (− 16).

13d 0½h Sudden increase in N.F. (+ 25). 8h to 8½h Decrease in N.F. (− 20). 14h to 16h Fluctuating increase in V.F. (+ 40). 14⅜h to 15h Sharp wave in N.F. (+ 60). 15h to 16h Double wave in N.F. (± 40), followed immediately till 16¾h by a very sharp double wave (± 80). 15¾h to 17h Two consecutive double waves in Dec. (∓ 3′). 17⅛h Sudden increase in N.F. (+ 20). 17¾h to 18⅜h Wave in N.F. (+ 35). 18h to 19h Decrease in Dec. (− 6′). 20¼h to 20½h Rapid increase in N.F. (+ 60), with partial recovery to 20¾h (− 35). 20h to 20½h Rapid decrease in Dec. (− 10′), followed immediately till 22½h by two successive double waves (± 5′, ± 6′). 20½h to 21½h Rapid decrease in V.F. (− 35). 21h to 21½h Very rapid decrease in N.F. (− 80). 21½h to 22¼h Wave in N.F. (+ 30). 22⅜h to 23⅛h Sharp wave in Dec. (+ 5′). 23¾h to 14d 0¾h Double wave in Dec. (∓ 5′). 23h to 14d 0½h Decrease in V.F. (− 16).

14d 0h to 1h Double wave in N.F. (∓ 20). 1h to 2h Rapid decrease in Dec. (− 9′). 2¼h Sharp decrease in N.F. (− 20). 2½h to 3h Sharp irregular increase in Dec. (+ 5′). 0½h to 6h Irregular double wave in V.F. (∓ 15). 5h to 5½h Increase in Dec. (+ 10′), with partial return till 6h (− 3′). 5h to 6h Wave in N.F. (− 30). 7h to 7½h Serrated wave in Dec. (− 3′), followed till 9h by many small oscillations. 15h to 15⅓h Sharp increase in N.F. 6h to 7½h Several sharp fluctuations in V.F. (± 20). 12⅜h to 13⅓h Truncated wave in Dec. (− 3′). 12h to 13½h Serrated wave in N.F. (− 30). 15h to 16⅜h Serrated double wave in N.F. (∓ 25). 16⅜h to 17½h Truncated wave in N.F. (+ 50); rapid decrease in Dec. (− 12′), with partial recovery (+ 6′). 17½h to 18⅛h Truncated wave in Dec. (− 5′). 17⅜h to 18½h Sharp serrated wave in N.F. (+ 50). 18½h to 19h Wave in Dec. (+ 3′). 19¾h to 20½h Decrease in N.F. (− 30). 21½h to 22½h Wave in N.F. (+ 50). 21¾h to 22¾h Wave in Dec. (+ 8′). 22½h to 24h Double-crested wave in N.F. (+ 60, + 70). 23h to 23¾h Wave in Dec. (− 7′). 23¾h to 16d 0½h Wave in Dec. (− 3′).

16d 0¾h to 2h Truncated wave in Dec. (+ 7′). 1½h to 2h Increase in N.F. (+ 25). 18½h to 19½h Double wave in N.F. (∓ 20). 18¾h to 19½h Wave in Dec. (− 5′).

17d 23½h to 18d 2h Wave in Dec. (− 5′).

1920.

May

$18^d\ 3\frac{1}{2}^h$ to 5^h Wave in N.F. (— 20).

$20^d\ 13\frac{1}{2}^h$ to 15^h Wave in N.F. (+ 25).

$21^d\ 15\frac{2}{3}^h$ to $16\frac{1}{2}^h$ Wave in N.F. (+ 20). $18\frac{1}{2}^h$ to $19\frac{1}{2}^h$ Double-crested wave in Dec. (— 3′). $21\frac{1}{4}^h$ to $22\frac{1}{2}^h$ Flattened wave in Dec. (— 3′). $21\frac{1}{2}^h$ to 23^h Wave in N.F. (+ 20).

$22^d\ 12\frac{1}{2}^h$ to 15^h Increase in V.F. (+ 30).

$23^d\ 16^h$ to $17\frac{1}{2}^h$ Increase in N.F. (+ 35). $13\frac{3}{4}^h$, $14\frac{1}{4}^h$ and 15^h to 16^h Fluctuations in V.F. (± 15).

$24^d\ 17^h$ to $17\frac{2}{3}^h$ Increase in N.F. (+ 25). $19\frac{1}{3}^h$ to $19\frac{2}{3}^h$ Wave in V.F. (+ 12).

$25^d\ 2^h$ to 3^h Wave in N.F. (— 20). $16\frac{3}{4}^h$ Sharp fluctuation in V.F. (± 15).

$26^d\ 14\frac{1}{2}^h$ to $15\frac{1}{3}^h$ Wave in N.F. (+ 30). $22\frac{3}{4}^h$ to 24^h Truncated wave in N.F. (+ 20). $22\frac{2}{3}^h$ to 23^h Decrease in Dec. (— 3′).

$27^d\ 3\frac{1}{4}^h$ to $3\frac{1}{2}^h$ Very rapid decrease in N.F. (— 40), gradually recovering till $4\frac{2}{3}^h$. 3^h to $5\frac{1}{2}^h$ Serrated wave in Dec. (+ 7′).

$28^d\ 0\frac{3}{4}^h$ to 2^h Several sharp oscillations in N.F. (— 20, — 15, — 25). 14^h to 18^h Steady increase in V.F. (+ 60), followed till 22^h by fluctuating decrease (— 70). 11^h to 20^h Continuous small disturbances in Dec. and N.F. 12^h to $12\frac{1}{2}^h$ Increase in N.F. (+ 40). $12\frac{3}{4}^h$ to $13\frac{1}{4}^h$ Increase in N.F. (+ 30). $13\frac{3}{4}^h$ Sudden decrease in N.F. (— 40). $14\frac{1}{4}^h$ to $15\frac{1}{4}^h$ Sharp serrated wave in N.F. (+ 70). $15\frac{3}{4}^h$ to $16\frac{1}{2}^h$ Domed wave in N.F. (+ 35). $16\frac{2}{3}^h$ to $17\frac{1}{2}^h$ Truncated wave in N.F. (+ 35). $17\frac{1}{2}^h$ to $18\frac{1}{3}^h$ Irregular serrated wave in N.F. (+ 30). $17\frac{2}{3}^h$ Sharp decrease in Dec. (— 5′). 19^h to $19\frac{1}{2}^h$ Increase in N.F. (+ 30). $19\frac{1}{2}^h$ to 20^h Domed wave in Dec. (— 4′). 20^h to $20\frac{1}{2}^h$ Wave in Dec. (— 5′). 20^h to $20\frac{2}{3}^h$ Wave in N.F. (+ 20). $21\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Two consecutive double waves in Dec. (∓ 3′, ∓ 4′). $21\frac{1}{2}^h$ to 23^h Two consecutive truncated waves in N.F. (+ 20).

$29^d\ 1\frac{1}{2}^h$ to 2^h Wave in Dec. (— 3′). 3^h to $4\frac{1}{2}^h$ Wave in Dec. (+ 5′). 6^h to $6\frac{3}{4}^h$ Increase in Dec. (+ 6′). $9\frac{1}{2}^h$ to $10\frac{1}{4}^h$ Increase in Dec. (+ 6′). $13\frac{3}{4}^h$ to $14\frac{1}{2}^h$ Wave in N.F. (+ 25). 18^h to 19^h Truncated wave in N.F. (— 20). $20\frac{3}{4}^h$ to $22\frac{1}{3}^h$ Serrated wave in N.F. (+ 40). $21\frac{1}{2}^h$ to $22\frac{3}{4}^h$ Flattened wave in Dec. (+ 3′).

$30^d\ 4\frac{3}{4}^h$ to $5\frac{1}{4}^h$ Rapid irregular decrease in N.F. (— 20). $6\frac{1}{2}^h$ to $7\frac{1}{2}^h$ Domed wave in Dec. (+ 3′). $16\frac{1}{4}^h$ to $16\frac{1}{2}^h$ Decrease in Dec. (— 3′).

June

$3^d\ 18\frac{1}{2}^h$ to 19^h Decrease in N.F. (— 25). $23\frac{1}{2}^h$ to $4^d\ 1^h$ Wave in N.F. (+ 25). $23\frac{1}{2}^h$ to $4^d\ 0\frac{1}{4}^h$ Rapid decrease in Dec. (— 6′).

$4^d\ 8^h$ to 9^h Rapid decrease in N.F. (— 40), with fluctuating increase in Dec. (+ 7′). $12\frac{1}{2}^h$ to 13^h Sharp wave in N.F. (+ 25), with a similar wave in Dec. (+ 3′). $13\frac{2}{3}^h$ to 14^h Sharp wave in N.F. (+ 20). 16^h to $16\frac{3}{4}^h$ Wave in N.F. (+ 30). $18\frac{3}{4}^h$ to $19\frac{1}{2}^h$ Truncated wave in N.F. (+ 20).

$5^d\ 5^h$ to $5\frac{1}{2}^h$ Decrease in N.F. (— 30). $5\frac{1}{4}^h$ to 6^h Serrated wave in Dec. (— 3′). 6^h to $6\frac{3}{4}^h$ Wave in N.F. (— 20). $9\frac{3}{4}^h$ to $10\frac{1}{4}^h$ Several rapid fluctuations in V.F. (± 20).

$9^d\ 17\frac{1}{2}^h$ to $18\frac{3}{4}^h$ Truncated wave in N.F. (+ 30).

$10^d\ 0^h$ to $0\frac{1}{2}^h$ Wave in N.F. (+ 20). 1^h to $2\frac{1}{4}^h$ Decrease in Dec. (— 8′). $6\frac{1}{2}^h$ to $7\frac{1}{2}^h$ Sharp wave in Dec. (— 5′). $8\frac{1}{2}^h$ to 10^h Two consecutive waves in Dec. (+ 3′). $10\frac{1}{2}^h$ to 12^h Sharp serrated wave in N.F. (— 60). 11^h to $11\frac{1}{4}^h$ Wave in Dec. (+ 3′). $12\frac{1}{2}^h$ to $13\frac{1}{4}^h$ Serrated wave in N.F. (— 40). 14^h to 16^h Increase in V.F. (+ 50). 14^h to 21^h Continuous oscillations in N.F. and Dec. $14\frac{3}{4}^h$ to 15^h Increase in N.F. (+ 25). $15\frac{3}{4}^h$ to $16\frac{3}{4}^h$ Double-crested wave in Dec. (+ 6′). $16\frac{2}{3}^h$ to 18^h Two consecutive waves in Dec. (+ 5′, + 3′). $17\frac{1}{3}^h$ to $18\frac{1}{4}^h$ Double wave in N.F. (± 20). $18\frac{1}{3}^h$ to $18\frac{2}{3}^h$ Wave in V.F. (— 12). 19^h to 23^h Steady decrease in V.F. (— 70), with marked oscillations between $19\frac{1}{2}^h$ and $19\frac{3}{4}^h$ (± 25). 18^h to $19\frac{1}{3}^h$ Double wave in N.F. (∓ 45). $18\frac{1}{2}^h$ to 19^h Double wave in Dec. (∓ 6′). $19\frac{1}{3}^h$ to $19\frac{3}{4}^h$ Double wave in N.F. (∓ 20). $19\frac{1}{2}^h$ to $20\frac{1}{4}^h$ Double wave in Dec. (∓ 3′). 23^h to $23\frac{1}{2}^h$ Sharp wave in Dec. (+ 4′), with wave in V.F. (— 14). $23\frac{1}{2}^h$ to $11^d\ 0\frac{1}{2}^h$ Truncated wave in Dec. (+ 5′).

$11^d\ 0^h$ to $0\frac{3}{4}^h$ Wave in N.F. (+ 20). $0\frac{1}{3}^h$ to 1^h Wave in Dec. (+ 8′). $0\frac{3}{4}^h$ to 1^h Rapid decrease in V.F. (— 16). $4\frac{1}{4}^h$ to $5\frac{1}{4}^h$ Wave in N.F. (— 40). $12\frac{1}{2}^h$ to $13\frac{1}{4}^h$ Wave in Dec. (+ 3′). $13\frac{1}{3}^h$ to 14^h Rapid increase in N.F. (+ 40). 17^h to $18\frac{1}{2}^h$ Double wave in N.F. (∓ 30). 17^h to $17\frac{3}{4}^h$ Increase in V.F. (+ 16). $17\frac{1}{3}^h$ to $18\frac{1}{3}^h$ Wave in Dec. (— 5′). $20\frac{1}{4}^h$ to $21\frac{1}{4}^h$ Truncated wave in Dec. (— 3′).

$12^d\ 0\frac{1}{2}^h$ to $1\frac{1}{2}^h$ Wave in N.F. (+ 20). $0\frac{1}{2}^h$ to $0\frac{3}{4}^h$ Increase in Dec. (+ 3′).

$14^d\ 16^h$ to $16\frac{1}{2}^h$ Increase in N.F. (+ 20).

$15^d\ 15\frac{1}{2}^h$ to $16\frac{1}{2}^h$ Wave in N.F. (+ 20).

$20^d\ 1^h$ to $2\frac{1}{4}^h$ Flattened wave in Dec. (+ 3′). $13\frac{1}{2}^h$ to $14\frac{1}{2}^h$ Several fluctuations in V.F. (∓ 30). $23\frac{1}{2}^h$ to $21^d\ 0\frac{1}{2}^h$ Wave in Dec. (+ 3′).

1920.

June

23d 7h to 9h Wave in V.F. (+ 12).

24d 2h to 2½h Decrease in Dec. (− 3′). 21½h to 22h Wave in N.F. (+ 30).

25d 0¼h to 1h Wave in Dec. (+ 3′). 21h to 22h Wave in Dec. (− 3′).

27d 22h to 22½h Wave in Dec. (− 4′).

28d 16⅛h to 17¾h Two consecutive waves in N.F. (+ 30). 18¼h to 19h Wave in N.F. (+ 25). 23h to 24h Several small oscillations in N.F.

29d 5½h and 6h. Two sharp waves in Dec. (− 3′). 19h to 19½h Serrated wave in N.F. (+ 20).

30d 0⅛h to 1h Wave in Dec. (+ 4′). 6½h to 7h Decrease in N.F. (− 20). 7h to 7½h Increase in Dec. (+ 5′). 14½h to 14¾h Increase in N.F. (+ 20). 17¾h to 18½h Wave in N.F. (+ 20). 19h to 19⅜h Wave in N.F. (− 20), with decrease in Dec. (− 4′). 22½h to 22¾h Decrease in N.F. (− 20). 22¼h to 22⅜h Decrease in Dec. (− 3′).

July

1d 3½h to 5½h Double wave in Dec. (∓ 3′). 18⅜h Very sharp wave in V.F. (− 25). 22½h to 23½h Wave in Dec. (− 3′).

3d 10½h to 12h Two consecutive waves in V.F. (− 12).

4d 0⅜h Sharp fluctuations in V.F. (± 25).

6d 14h to 15⅛h Wave in N.F. (− 30). 17½h to 18¼h Double wave in N.F. (± 25). 18¾h Sharp decrease in N.F. (− 30). 19h to 19¼h and 20¼h Fluctuations in V.F. (± 20). 20½h to 21h Wave in Dec. (+ 4′). 21h to 22h Wave in N.F. (− 30). 21⅛h to 22½h Wave in Dec. (− 4′). 23½h to 24h Wave in Dec. (− 3′).

7d 1h to 2¾h Wave in Dec. (+ 12′). 2h to 2½h Increase in N.F. (+ 25). 3h to 3½h Increase in Dec. (+ 3′). 1⅜h to 3½h Wave in V.F. (− 25). 11½h to 12h Decrease in N.F. (− 30). 16h to 17⅛h Irregular wave in N.F. (+ 30). 18¾h to 19⅜h Irregular wave in N.F. (+ 30). 20⅜h to 21h Sharp decrease in V.F. (− 25), with partial recovery till 21½h (+ 12). 20½h to 21h Very sharp wave in N.F. (+ 70), with double wave in Dec. (∓ 5′). 21h to 22h Wave in N.F. (+ 40), with double wave in Dec. (∓ 4′). 22¾h to 23½h Wave in Dec. (+ 3′). 23½h to 8d 0¼h Wave in N.F. (− 25).

8d 1h to 1⅜h Wave in Dec. (+ 3′). 5½h to 6½h Truncated wave in Dec. (+ 5′). 6h to 7h Decrease in N.F. (− 50). 6½h to 8h Irregular increase in Dec. (+ 9′). 13⅜h to 14¼h Domed wave in N.F. (+ 20). 14¼h to 15h Loss of register. 15¼h to 16h Truncated wave in N.F. (− 20).

9d 1⅛h to 3h Wave in Dec. (+ 5′). 1½h to 2¼h Wave in N.F. (− 20). 18½h to 19h Sharp wave in V.F. (+ 40).

12d 0h to 0½h Wave in Dec. (− 3′). 2½h to 3¾h Double wave in Dec. (± 3′). 4h to 4½h Wave in Dec. (+ 4′). 5¾h to 6¼h Serrated wave in Dec. (− 3′). 7½h to 7¾h Sharp decrease in N.F. (− 30). 8½h to 9h Truncated wave in Dec. (− 3′). 9h to 9⅜h Wave in Dec. (− 3′). 16¼h to 16¾h Sharp wave in N.F. (+ 25). 20h to 21h Double wave in N.F. (∓ 25), with wave in Dec. (− 6′).

14d 16½h to 17½h Wave in V.F. (− 12). 19h to 21h Wave in Dec. (− 5′). 22¼h to 22½h Wave in N.F. (+ 25).

15d 3½h to 4¼h Wave in Dec. (+ 3′). 12½h to 13h Wave in N.F. (− 30). 13¼h to 13½h Very rapid decrease in N.F. (− 45). 13⅛h to 14⅛h Wave in Dec. (+ 3′). 15¼h to 15½h Rapid decrease in N.F. (− 35). 16¼h to 17h Sharp wave in N.F. (+ 30). 17¼h to 18¼h Serrated wave in N.F. (+ 60). 18h to 18½h Rapid decrease in Dec. (− 8′). 18½h Very rapid increase in N.F. (+ 50), with immediate partial return till 18¾h (− 20). 19h to 19⅜h Double wave in N.F. (± 35). 19½h to 20¼h Very rapid decrease in Dec. (− 19′), with partial return till 20⅜h (+ 5′). 19⅜h to 21h Double-crested wave in V.F. (+ 24). 19⅝h to 20¼h Truncated wave in N.F. (+ 20). 20¼h to 21⅜h Truncated wave in N.F. (+ 35). 21h to 22½h Wave in Dec. (+ 5′). 22⅜h to 23⅜h Sharp irregular wave in N.F. (− 30). 23h to 16d 0¾h Serrated wave in Dec. (+ 16′). 23⅜h to 16d 1h Wave in V.F. (− 30).

16d 0⅛h to 1¾h Wave in N.F. (+ 35), with wave in Dec. (+ 5′). 5h to 5¾h Double-crested wave in Dec. (− 3′). 17h to 17⅜h Increase in N.F. (+ 25).

17d 3h to 4½h Wave in Dec. (+ 3′). 15h to 16h Wave in N.F. (+ 20). 16½h to 17½h Domed wave in N.F. (+ 20).

18d 14½h to 15¼h Serrated wave in N.F. (− 30). 14¾h to 15¼h Wave in Dec. (+ 3′). 17⅓h to 17½h Sharp decrease in Dec. (− 5′). 17h to 18h Serrated wave in N.F. (+ 20). 22¼h to 23½h Domed wave in N.F. (+ 25). 22¼h to 23½h Wave in Dec. (+ 4′). 22h to 23¼h Decrease in V.F. (− 25).

19d 23¾h to 20d 0½h Wave in Dec. (+ 3′).

20d 3½h to 6½h Wave in Dec. (+ 5′).

22d 6½h to 7¼h Sharp wave in Dec. (+ 3′). 15h to 16½h Serrated wave in N.F. (+ 30). 17h to 17½h Wave in N.F. (+ 25). 23½h to 23d 1h Wave in Dec. (+ 5′).

1920.

July

$23^d\ 0^h$ to $0\frac{1}{2}^h$ Decrease in V.F. (— 12). $13\frac{3}{4}^h$ to $14\frac{1}{2}^h$ Wave in N.F. (+ 35). $14\frac{1}{2}^h$ to $15\frac{1}{4}^h$ Sharp wave in N.F. (+ 55). $15\frac{1}{2}^h$ to 16^h Wave in N.F. (— 20). $15\frac{1}{2}^h$ to $16\frac{1}{3}^h$ Truncated wave in Dec. (— 3′). 16^h to 17^h Serrated wave in N.F. (+ 50). 17^h to $18\frac{1}{4}^h$ Wave in N.F. (+ 25). 18^h to 19^h Decrease in Dec. (— 5′). $18\frac{1}{2}^h$ to $19\frac{1}{4}^h$ Wave in N.F. (+ 25).

$24^d\ 7\frac{1}{2}^h$ to $8\frac{3}{4}^h$ Domed wave in Dec. (— 3′). $16\frac{1}{2}^h$ to 18^h Irregular wave in N.F. (— 30). $22\frac{1}{2}^h$ to 23^h Wave in N.F. (+ 25), with similar wave in Dec. (— 4′). $23\frac{1}{2}^h$ to 24^h Wave in Dec. (+ 3′).

$25^d\ 3^h$ to $3\frac{3}{8}^h$ Wave in Dec. (+ 3′). $4\frac{1}{2}^h$ to 6^h Wave in N.F. (— 20). $15\frac{1}{3}^h$ to $16\frac{1}{3}^h$ Wave in N.F. (+ 20).

$26^d\ 1\frac{1}{3}^h$ to $2\frac{1}{2}^h$ Decrease in Dec. (— 7′). 0^h to 3^h Wave in V.F. (— 12). $22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in N.F. (+ 30). $22\frac{1}{2}^h$ to $22\frac{3}{4}^h$ Sharp decrease in Dec. (— 5′).

$28^d\ 13^h$ to 14^h Increase in N.F. (+ 30).

$30^d\ 15\frac{1}{4}^h$ to $15\frac{3}{8}^h$ Decrease in N.F. (— 20). $22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Truncated wave in Dec. (— 3′).

August

$1^d\ 21\frac{1}{4}^h$ to $21\frac{1}{2}^h$ Decrease in Dec. (— 3′).

$2^d\ 13\frac{1}{2}^h$ to $13\frac{3}{4}^h$ Wave in V.F. (— 12).

$3^d\ 15\frac{1}{4}^h$ to 16^h Wave in N.F. (+ 20). $18\frac{1}{2}^h$ to 20^h Wave in N.F. (+ 20). $20\frac{3}{3}^h$ to $21\frac{1}{4}^h$ Wave in N.F. (+ 20). $21\frac{1}{2}^h$ to $22\frac{1}{4}^h$ Serrated wave in N.F. (+ 20).

$4^d\ 1\frac{1}{4}^h$ to $2\frac{3}{4}^h$ Wave in Dec. (+ 6′). 4^h to $4\frac{1}{2}^h$ Decrease in Dec. (— 4′). 7^h to $7\frac{1}{4}^h$ Increase in Dec. (+ 4′). $7\frac{1}{2}^h$ to 8^h Increase in Dec. (+ 4′). $13\frac{1}{2}^h$ to 14^h Wave in N.F. (+ 20). 15^h to $16\frac{1}{4}^h$ Increase in N.F. (+ 40). $16\frac{1}{2}^h$, $18\frac{1}{2}^h$, 19^h Sharp fluctuations in V.F. (+ 25). $18\frac{3}{3}^h$ to $20\frac{1}{3}^h$ Irregular wave in Dec. (— 10′). $18\frac{3}{4}^h$ to 20^h Truncated wave in N.F. (+ 40). 22^h to $23\frac{1}{3}^h$ Irregular wave in Dec. (— 6′). 22^h to $23\frac{1}{2}^h$ Wave in N.F. (+ 35).

$5^d\ 3^h$ to 4^h Wave in N.F. (— 20). $9\frac{1}{4}^h$ to $9\frac{1}{2}^h$ Decrease in N.F. (— 20). 18^h to $18\frac{1}{3}^h$ Decrease in Dec. (— 3′). 18^h to $18\frac{1}{2}^h$ Increase in N.F. (+ 20).

$7^d\ 1^h$ to 3^h Flattened wave in Dec. (+ 3′). 12^h to $12\frac{1}{2}^h$ Sharp wave in N.F. (+ 20). $15\frac{1}{2}^h$ to 16^h Wave in N.F. (— 20). $23\frac{3}{3}^h$ to $8^d\ 0\frac{1}{2}^h$ Wave in Dec. (+ 4′).

$8^d\ 4^h$ to $4\frac{3}{3}^h$ Sharp double wave in Dec. (∓ 3′). $5\frac{1}{2}^h$ to 7^h Two consecutive waves in Dec. (+ 5′). $9\frac{3}{3}^h$ to 10^h Rapid decrease in N.F. (— 30). 10^h to $11\frac{1}{2}^h$ Wave in N.F. (— 35). 10^h to 11^h Wave in Dec. (+ 3′). $18\frac{1}{2}^h$ to 20^h Wave in Dec. (— 3′). $20\frac{1}{2}^h$ to $22\frac{1}{2}^h$ Truncated wave in Dec. (— 3′). $22\frac{1}{3}^h$ to $23\frac{1}{4}^h$ Wave in Dec. (— 10′). $22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in V.F. (+ 12). $23\frac{1}{4}^h$ to $9^d\ 1^h$ Truncated wave in Dec. (— 4′).

$9^d\ 0\frac{3}{3}^h$ to 2^h Truncated wave in N.F. (+ 20). 1^h to 2^h Wave in Dec. (— 4′). 1^h to $1\frac{1}{4}^h$ Decrease in V.F. (— 12). 3^h to $3\frac{1}{2}^h$ Decrease in Dec. (— 3′). $6\frac{1}{2}^h$ to 7^h Irregular decrease in N.F. (— 30). $9\frac{1}{2}^h$ to $10\frac{1}{2}^h$ Rapid decrease in N.F. (— 60), gradually recovering till 13^h.

$10^d\ 1^h$ to $2\frac{1}{2}^h$ Wave in Dec. (+ 6′). $2\frac{3}{4}^h$ to 4^h Wave in Dec. (+ 3′). 15^h to 16^h Wave in N.F. (+ 20). $18\frac{1}{2}^h$ to $19\frac{1}{2}^h$ Wave in N.F. (— 30). 19^h to 20^h Wave in Dec. (— 4′). $22\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in Dec. (— 4′). $22\frac{1}{2}^h$ to 24^h Wave in N.F. (+ 20).

$12^d\ 1\frac{1}{4}^h$ to $2\frac{1}{4}^h$ Sharp wave in Dec. (+ 16′), followed immediately from $2\frac{1}{3}^h$ to 4^h by a further wave (— 6′). $1\frac{1}{4}^h$ to $1\frac{1}{2}^h$ Sharp decrease in N.F. (— 20). $1\frac{1}{2}^h$ to 2^h Very rapid decrease in V.F. (— 30), gradually recovering till 4^h. $15\frac{3}{3}^h$ to $16\frac{1}{2}^h$ Wave in N.F. (+ 30). 18^h to $18\frac{3}{4}^h$ Increase in N.F. (+ 30). 19^h to $19\frac{1}{2}^h$ Rapid decrease in Dec. (— 7′), followed by a sharp double wave (∓ 6′). $19\frac{1}{2}^h$ to $20\frac{1}{4}^h$ Sharp wave in N.F. (+ 70). $20\frac{1}{4}^h$ to 21^h Wave in Dec. (— 4′). 19^h to $20\frac{1}{4}^h$ Truncated wave in V.F. (+ 14). $20\frac{3}{3}^h$ to $21\frac{3}{3}^h$ Rapid decrease in N.F. (— 60). 21^h to 22^h Wave in Dec. (+ 9′). $21\frac{1}{2}^h$ to $21\frac{3}{4}^h$ Sharp decrease in V.F. (— 16). $21\frac{3}{3}^h$ to $22\frac{1}{4}^h$ Wave in N.F. (+ 20). 22^h to $22\frac{1}{4}^h$ Wave in Dec. (+ 3′). $22\frac{1}{4}^h$ to $22\frac{3}{3}^h$ Sharp wave in N.F. (+ 55). $22\frac{1}{3}^h$ to 23^h Sharp double wave in Dec. (± 8′); very rapid decrease in V.F. (— 45), partially recovering (+ 24). $22\frac{1}{2}^h$ to 24^h Sharp wave in N.F. (+ 70), with increase in Dec. (+ 6′). 23^h to $13^d\ 1^h$ Steady increase in V.F. (+ 30).

$13^d\ 0\frac{1}{3}^h$ to 1^h Wave in Dec. (— 3′). $17\frac{1}{2}^h$ to $18\frac{1}{2}^h$ Domed wave in N.F. (— 20). $20\frac{1}{4}^h$ to 21^h Serrated wave in Dec. (+ 6′). $20\frac{1}{4}^h$ to $20\frac{1}{2}^h$ Sharp increase in N.F. (+ 30). $20\frac{1}{2}^h$ to 21^h Rapid decrease in V.F. (— 30). 21^h to $21\frac{1}{3}^h$ Wave in Dec. (+ 3′). $21\frac{1}{3}^h$ to 22^h Wave in Dec. (+ 5′). $21\frac{1}{2}^h$ to 22^h Rapid decrease in N.F. (— 50), followed till 23^h by a wave (+ 42).

$14^d\ 2\frac{1}{4}^h$ to 3^h Decrease in Dec. (— 5′). $7\frac{1}{4}^h$ to $7\frac{3}{4}^h$ Truncated serrated wave in Dec. (— 3′). 13^h to 14^h Serrated wave in Dec. (+ 5′). 13^h Sharp increase in N.F. (+ 20). 13^h to 14^h Rapid increase in V.F. (+ 30). $14\frac{1}{4}^h$ Sharp decrease in Dec. (— 3′). $14\frac{1}{2}^h$ to 15^h Serrated wave in N.F. (— 20). $19\frac{1}{4}^h$ to 20^h Sharp wave in N.F. (+ 20). $19\frac{1}{2}^h$ to $20\frac{1}{2}^h$ Wave in Dec. (— 4′). $20\frac{1}{2}^h$ to 21^h Sharp wave in N.F. (+ 20). 22^h to $22\frac{1}{2}^h$ Sharp increase in Dec. (+ 4′). $23\frac{1}{2}^h$ to $15^d\ 0\frac{1}{4}^h$ Decrease in N.F. (— 30).

1920.

August

15d 0h to 0½h Rapid increase in Dec. (+ 6′), followed till 2h by gradual decrease. 20⅛h to 21⅛h Truncated wave in N.F. (+ 20). 20h to 21h Wave in Dec. (− 3′). 22½h to 16d 0½h Slow wave in N.F. (+ 20). 23h to 23¾h Wave in Dec. (+ 3′), with decrease in V.F. (− 12).

17d 17⅜h and 18¾h Fluctuations in V.F. (+ 30).

18d 18h to 18⅝h Increase in N.F. (+ 25). 22h to 22½h Sharp increase in N.F. (+ 40), followed till 22¾h by partial return (− 20). 22h to 23h Rapid decrease in Dec. (− 9′).

19d 1h to 2¼h Rapid increase in Dec. (+ 14′). 1¾h to 3h Double wave in N.F. (∓ 20), followed till 4¼h by irregular wave (− 30). 2¼h to 4h Wave in V.F. (− 16).

20d 22½h to 21d 0¾h Triple wave in Dec. (∓ 5′, − 3′). 2¼h to 3h Domed wave in Dec. (+ 3′). 23¾h to 24h Sharp decrease in V.F. (− 18).

21d 3h to 5h Steady increase in V.F. (+ 35). 15½h to 16½h Irregular wave in N.F. (+ 25). 15⅝h to 16h Wave in Dec. (− 4′). 13h to 18h Steady increase in V.F. (+ 70), followed by a similar decrease till 24h with a superposed wave at 22½h to 23½h (+ 20). 15½h to 16½h Wave in N.F. (+ 20). 20⅜h to 23h Double wave in N.F. (± 30). 20h to 21¼h Two consecutive waves in Dec. (+ 3′). 21½h to 23¼h Two consecutive waves in Dec. (− 4′,− 5′). 23½h to 22d 1h Two consecutive waves in Dec. (+ 4′, + 9′). 23h to 22d 0½h Double-crested wave in N.F. (+ 45).

22d 0⅜h to 1¼h Truncated wave in N.F. (+ 25). 0½h to 1¾h Irregular wave in V.F. (− 20). 1h to 2⅜h Double-crested wave in Dec. (− 5′). 1½h to 2½h Wave in N.F. (+ 30). 2½h to 3⅜h Double wave in N.F. (± 25), followed from 3⅜h to 4¼h by a further increase (+ 40). 3h to 3¼h Sharp increase in Dec. (+ 6′). 3½h to 4h Wave in Dec. (+ 4′). 5h to 7h Increase in V.F. (+ 40). 8h to 9½h Sharp decrease in N.F. (− 60), with corresponding increase in Dec. (+ 10′). 18⅜h to 20h Serrated wave in Dec. (− 5′). 21½h to 23h Wave in Dec. (− 4′).

23d 21h to 22⅓h Flattened wave in Dec. (− 3′). 23h to 24d 0⅜h Wave in N.F. (+ 30).

24d 5h to 5½h Decrease in Dec. (− 4′). 16¼h to 17¼h Flattened wave in N.F. (+ 20).

25d 3½h to 4¼h Increase in Dec. (+ 3′), with corresponding decrease in N.F. (− 20). 17½h to 18h Fluctuations in V.F. (± 15).

27d 23⅓h Very rapid increase in N.F. (+ 20).

29d 22¼h to 22½h Wave in N.F. (− 20).

30d 2⅓h to 3h Sharp wave in Dec. (+ 5′), accompanied by rapid increase in N.F. (+ 30), gradually returning till 4h. 2½h to 3h Rapid decrease in V.F. (− 12). 7h to 8½h Decrease in N.F. (− 40). 10½h to 11½h Wave in N.F. (− 20). 10h to 11¼h Increase in Dec. (+ 7′). 11⅓h to 13h Wave in Dec. (− 3′). 12h to 13½h Truncated wave in N.F. (+ 20). 22¾h to 23h Sharp increase in Dec. (+ 4′).

31d 23h to 24h Sharp wave in Dec. (+ 7′). 23½h to 24h Decrease in V.F. (− 12).

September

1d 3h to 3⅜h Truncated wave in Dec. (− 3′). 10¼h to 11h Decrease in N.F. (− 25). 11¼h to 12h Wave in N.F. (− 20). 12½h to 13h Wave in N.F. (+ 30), accompanied by wave in Dec. (+ 4′). 16h to 16¾h Serrated wave in N.F. (+ 20). 21h to 22h Wave in N.F. (+ 20). 23½h to 23¾h Increase in Dec. (+ 3′). 23h to 2d 1½h Wave in V.F. (− 12).

2d 1h to 1⅜h Increase in Dec. (+ 3′). 21½h to 23½h Wave in N.F. (+ 40), with irregular wave in Dec. (− 5′).

3d 5h to 7h Wave in N.F. (− 25), with wave in Dec. (+ 5′). 9⅜h Sharp decrease in N.F. (− 20). 11h to 13h Serrated, truncated wave in N.F. (− 50). 11h to 12½h Wave in Dec. (+ 5′). 13½h to 14½h Sharp wave in N.F. (− 30). 14h to 15h Increase in V.F. (+ 30). 14½h to 16h Irregular decrease in Dec. (− 10′). 14½h to 16h Serrated domed wave in N.F. (− 30). 15⅜h to 16h Sharp increase in N.F. (+ 25). 16⅛h to 17⅛h Wave in N.F. (+ 25). 17½h to 18⅛h Truncated wave in N.F. (+ 20). 18⅛h Sharp decrease in Dec. (− 4′). 19h to 19¾h Rapid decrease in V.F. (− 30). 19¼h to 20h Very sharp double wave in N.F. (+ 90, − 60), with triple wave in Dec. (− 10′, + 7′, − 10′). 20⅛h to 20⅜h Sharp decrease in N.F. (− 50), with wave in Dec. (+ 6′). 20⅜h to 22h Wave in Dec. (+ 10′). 22h to 23h Truncated wave in Dec. (+ 8′), with serrated wave in N.F. (− 40). 21½h to 23h Sharp decrease in V.F. (− 30), with superposed wave from 22¼h to 22½h (+ 12). 23¼h to 23¾h Wave in Dec. (+ 6′), followed immediately by another, 23¾h to 4d 1h (+ 11′). 23½h to 4d 0½h Sharp wave in N.F. (+ 50).

4d 0h to 1½h Wave in V.F. (− 20). 1h to 2½h Double wave in N.F. (± 20). 1½h to 2½h Wave in Dec. (− 7′). 2h to 2⅛h Increase in V.F. (+ 12). 3h to 4h Wave in N.F. (+ 40). 3h to 3½h Sharp decrease in Dec. (− 5′). 4⅜h to 6½h Wave in Dec. (+ 7′). 6½h to 7h Truncated wave in Dec. (+ 3′). 11¾h to 13½h Wave in N.F. (− 50). 12h to 13h Wave in Dec. (+ 4′). 15⅜h to 15¾h Sharp increase in N.F. (+ 30). 16¾h to 17¼h Sharp wave in N.F. (− 20), accompanied by sharp decrease in Dec. (− 8′). 17h to 18⅛h Wave in V.F. (+ 20). 17½h to 18h Sharp wave in Dec. (− 3′), with corresponding wave in N.F. (+ 20). 18¼h to 18⅜h Increase in Dec. (+ 3′), followed immediately till 19h by a rapid decrease (− 10′); corresponding decrease in N.F. (− 30) and increase (+ 40). 19¼h to 19⅜h Sharp wave in Dec. (− 7′), with corresponding wave in N.F. (+ 40), followed by very rapid decrease till 20¼h in N.F. (− 40). 19¾h to 20⅛h Wave in Dec. (+ 3′). 21¼h to 22½h Decrease in V.F. (− 30). 21½h to 23h Double-crested wave in Dec. (+ 7′). 21¾h to 22¾h Truncated wave in N.F. (+ 20). 22¾h to 23¼h Increase in N.F. (+ 20). 23h to 24h Wave in Dec. (+ 3′).

1920.
September

5d 0¼h to 0½h Increase in Dec. (+ 3′). 1½h to 2½h Domed wave in Dec. (+ 5′), with wave in N.F. (— 20). 3⅓h to 4¼h Decrease in Dec. (— 6′), with increase in N.F. (+ 25). 5½h to 6⅓h Decrease in N.F. (— 35). 7¾h to 9½h Wave in Dec. (— 4′). 19¼h to 20½h Two consecutive waves in Dec. (— 3′, — 4′). 22⅓h to 23h Wave in Dec. (+ 4′). 22½h to 23⅝h Wave in N.F. (+ 20).

7d 21½h to 22¼h Double wave in Dec. (± 4′). 21¾h to 22½h Double-crested wave in N.F. (+ 30). 21⅝h to 22h Sharp decrease in V.F. (— 20).

8d 0¼h to 0½h Sharp increase in Dec. (+ 7′), followed till 2½h by a domed wave (— 14′). 0½h to 1h Decrease in V.F. (— 20). 0h to 1¼h Serrated double wave in N.F. (∓ 25). 2h to 3½h Double wave in N.F. (∓ 25), the second part domed. 2¾h to 3¼h Sharp decrease in Dec. (— 8′). 2½h to 4h Wave in V.F. (— 25). 12¾h to 13¾h Serrated wave in N.F. (— 25), followed till 14½h by a second wave (— 25). 17⅝h Sudden increase in N.F. (+ 20). 19h. Rapid decrease in N.F. (— 20). 19h to 19¾h Wave in Dec. (— 5′). 21½h to 22h Rapid decrease in Dec. (— 9′), followed immediately till 23h by a wave (+ 6′). 21½h to 22½h Rapid irregular increase in N.F. (+ 60), followed till 23h by a wave (— 20) and a very sharp decrease till 23⅜h (— 100). 23⅜h to 24h Increase in Dec. (+ 7′). 22h to 23⅜h Rapid decrease in V.F. (— 40), followed till 9d 2h by an irregular partial recovery (+ 24).

9d 0¼h to 1h Serrated wave in N.F. (+ 25). 1¼h to 1¾h Truncated wave in N.F. (— 20). 1h to 1½h Rapid increase in Dec. (+ 10′). 2h to 2¼h Decrease in Dec. (— 5′), followed till 3h by sharp wave (+ 10′). 2h to 3h Wave in N.F. (— 50). 2h to 4h Irregular wave in V.F. (— 40), very steep at 2½h. 5½h to 6½h Decrease in N.F. (— 60). 7½h Very sharp increase in Dec. (+ 4′). 13½h to 14h Wave in Dec. (+ 3′). 13⅜h to 14⅓h Wave in N.F. (— 20). 15½h to 16½h Wave in N.F. (— 30). 15¾h to 16⅝h Domed wave in Dec. (— 4′). 16h to 16⅓h Rapid increase in V.F. (+ 20). 18½h to 19⅓h Domed wave in Dec. (— 5′). 19¾h to 20⅓h Wave in N.F. (+ 25). 23⅜h to 24h Very rapid increase in Dec. (+ 9′). 23¾h to 10d 0¾h Wave in N.F. (+ 30).

10d 0h to 0½h Rapid decrease in V.F. (— 20). 0⅓h to 0½h Rapid decrease in Dec. (— 5′). 1¼h to 1⅜h Further rapid decrease in Dec. (— 5′). 20⅝h to 21⅓h Wave in Dec. (— 5′). 21⅓h to 22½h Irregular wave in Dec. (— 7′). 22h to 23h Double wave in N.F. (± 25). 22⅓h to 23h Wave in V.F. (— 20). 22½h to 23⅓h Wave in Dec. (— 5′). 23⅓h to 24h Wave in Dec. (— 4′). 23⅝h to 24h Rapid increase in N.F. (+ 20).

11d 0h to 1h Decrease in N.F. (— 30). 15⅓h to 15⅝h Rapid decrease in Dec. (— 5′). 15⅓h to 15½h Decrease in N.F. (— 20), followed immediately by rapid increase (+ 50). 20¾h to 21h Very rapid increase in N.F. (+ 45), followed by irregular return till 22h. 20¾h to 21½h Double-crested wave in Dec. (— 4′).

13d 14½h to 18h Wave in V.F. (+ 40). 15½h to 16h Wave in N.F. (+ 20). 15¾h to 18h Irregular double-crested wave in Dec. (— 10′, — 8′). 16h to 17⅓h Irregular wave in N.F. (+ 40). 19¾h to 20½h Wave in N.F. (+ 20). 20h to 21¼h Double wave in Dec. (± 3′).

14d 18½h to 19½h Irregular increase in N.F. (+ 40), with partial return (— 20), accompanied by corresponding movement in Dec. (— 5′). 19½h to 20½h Truncated wave in Dec. (— 4′). 20⅓h to 20½h Sharp decrease in N.F. (— 25). 22⅔h to 15d 0½h Double wave in Dec. (— 6′, + 4′). 22½h to 24h Irregular double wave in N.F. (+ 30, — 20).

15d 2h to 3h Increase in N.F. (+ 30). 2¾h to 4½h Double-crested wave in Dec. (— 5′). 4½h to 5⅝h Serrated wave in N.F. (— 40). 12h to 13¼h Sharp serrated wave in Dec. (+ 6′). 12¾h to 13½h Truncated wave in N.F. (— 30). 15½h to 16h Truncated wave in N.F. (— 20). 17¼h to 18h Sharp irregular decrease in N.F. (— 50). 17⅝h to 19h Truncated wave in Dec. (— 4′).

16d 0½h to 1½h Wave in Dec. (+ 5′). 4⅛h to 4⅝h Increase in Dec. (+ 3′). 4h to 5⅛h Wave in N.F. (— 20). 19¾h to 20½h Many rapid fluctuations in N.F. (— 20 to — 30), with similar movements in V.F. at 20⅛h (— 30). 21¼h to 22h Rapid decrease in Dec. (— 11′). 21¾h to 23h Sharp wave in N.F. (+ 30). 23h to 23½h Increase in Dec. (+ 5′), with partial return till 24h.

17d 0¼h Sudden increase in Dec. (+ 9′). 0½h to 1⅛h Wave in Dec. (— 5′). 0⅔h to 1h Increase in N.F. (+ 30). 0¼h to 1½h Wave in V.F. (— 12). 2¼h to 2½h Decrease in Dec. (— 5′). 3h to 3¼h Decrease in N.F. (— 20). 3h to 4h Wave in Dec. (+ 4′). 11½h to 12¼h Wave in N.F. (— 20). 14⅓h to 14½h Increase in N.F. (+ 25). 16½h to 17h Irregular truncated wave in N.F. (— 20). 16½h to 17⅔h Wave in Dec. (— 5′). 19h to 20½h Wave in Dec. (— 7′). 19⅛h to 20h Increase in N.F. (+ 25). 22⅝h to 23¾h Double wave in Dec. (— 3′, + 4′). 23h to 24h Double wave in N.F. (∓ 20).

17d 14½h to 18d 10¼h Loss of V.F. register.

18d 14⅜h to 16½h Serrated wave in Dec. (— 6′). 16¼h to 17¾h Wave in N.F. (— 20). 23⅓h to 23½h Sharp increase in N.F. (+ 25).

19d 0h to 1¼h Wave in Dec. (— 3′). 0½h to 1h Decrease in N.F. (— 20). 22⅛h to 24h Wave in Dec. (— 7′).

22d 2¼h Sudden increase in Dec. (+ 4′), followed immediately by very rapid decrease till 3h (— 9′). 2¼h Sudden increase in N.F. (+ 25). 5½h to 7½h Slow wave in Dec. (+ 3′). 11⅜h to 12h Sharp double wave in Dec. (± 2′) and N.F. (± 10). 16⅛h Sudden decrease in N.F. (— 40), with immediate partial recovery (+ 20), followed till 18¼h by serrated wave (+ 50). 16⅛h Sudden decrease in Dec. (— 3′). 16½h to 21⅜h Wave in V.F. (+ 40). 18h to 18¾h Irregular decrease in Dec. (— 7′). 19h to 20h Serrated wave in N.F. (+ 25). 19h to 19¾h Rapid decrease in Dec. (— 6′), followed till 21h by a sharp wave (— 12′) and from 21h to 21¾h by a second, but irregular wave (— 17′). 20h to 21h Truncated wave in N.F., with steep sides (+ 40). 21¼h to 21⅜h Very sharp wave in N.F. (— 40), followed immediately, till 22¾h, by a serrated wave (— 40). 21⅜h Sharp wave in Dec. (+ 4′). 21¾h to 22½h Wave in V.F. (— 30). 22h to 23h Sharp irregular decrease in Dec. (— 8′), interrupted at 22½h by a wave (+ 3′). 23¼h to 23¾h Extremely rapid increase in Dec. (+ 23′). 23h to 23¾h Sharp wave in V.F. (+ 20), with rapid decrease in N.F. (— 40).

1920.

September

23d 0h to 0⅓h Sharp decrease in Dec. (− 12′), with corresponding increase in N.F. (+ 110), partially recovering by 0¾h (+ 4′) and (− 60) respectively. 0¾h to 1⅓h Wave in Dec. (-- 6′), with wave in N.F. (+ 20) and in V.F. (− 16). 1h to 2h Rapid increase in V.F. (+ 30). 2h to 3¼h Wave in Dec. (− 5′).

26d 21h to 22¼h Wave in Dec. (− 4′), with serrated wave in N.F. (+ 25).

27d 22h to 22⅔h Very rapid decrease in Dec. (− 8′). 22¾h to 23h Sudden increase in N.F. (+ 60). 23h to 24h Wave in N.F. (− 30). 23h to 28d 0½h Rapid decrease in V.F. (− 35), followed till 0¾h by partial recovery (+ 20). 23½h to 28d 1½h Truncated wave in Dec. (− 12′).

28d 0h to 0⅝h Very rapid decrease in N.F. (− 90), with partial recovery till 1¼h (+ 30). 1½h to 3h Irregular increase in Dec. (+ 6′). 3½h to 4½h Serrated wave in Dec. (− 3′).

28d 8h to 29d 8h. *See* Plate III.

29d 8h to 10½h Slow wave in Dec. (− 6′). 12⅝h to 12¾h Sharp decrease in Dec. (− 3′). 12¾h to 13¼h Increase in N.F. (+ 20). 13h to 15½h Increase in V.F. (+ 40). 14½h to 15½h Double-crested wave in N.F. (− 20). 17¼h to 17¾h Wave in N.F. (− 20). 19h to 20h Wave in N.F. (− 20). 20h to 21h Wave in Dec. (− 9′), with wave in N.F. (+ 40) and decrease in V.F. (− 15). 21h to 23½h Truncated wave in Dec. (− 6′), with superposed wave at 22½h to 22¾h (− 3′). 23¼h to 23¾h Irregular decrease in Dec. (− 9′). 22½h to 23½h Truncated wave in N.F. (+ 25). 23½h to 24h Rapid increase in N.F. (+ 40) gradually recovering till 30d 2h.

30d 0h to 1h Irregular wave in Dec. (− 4′). 1¾h to 3h Sharp wave in Dec. (+ 10′). 2¼h to 4h Wave in V.F. (− 20). 2½h to 4h Wave in N.F. (+ 30). 10½h to 11h Increase in Dec. (+ 4′). 20h to 21½h Triple wave in Dec. (± 5′), followed till 22½h by an irregular wave (− 3′). 20h to 21½h Triple wave in N.F. (∓ 25).

October

1d 16h to 16½h Irregular increase in Dec. (+ 5′). 17h to 17⅝h Very sharp decrease in Dec. (− 23′), followed till 18½h by partial recovery (+ 15′). 17h to 18h Sharp double wave in N.F. (− 40, + 30), the second wave having a double crest. 17⅓h to 18½h Sharp wave in V.F. (+ 30), steep at commencement. 18½h to 19¾h Wave in Dec. (− 5′). 19h to 19¾h Wave in N.F. (− 20). 20¾h to 21¾h Wave in Dec. (− 3′). 22⅔h to 23½h Very rapid decrease in Dec. (− 16′), followed immediately till 23⅝h by rapid partial recovery (+ 5′) and till 2d 1¼h by a more gradual recovery (+ 10′). 23¼h to 2d 0¾h Truncated wave in N.F. (+ 40).

2d 2h to 4h Wave in Dec. (+ 6′). 5h to 6½h Wave in Dec. (+ 8′). 11⅓h to 11⅔h Wave in Dec. (+ 3′). 11½h to 12h Wave in N.F. (− 20). 19h to 19⅝h Wave in N.F. (+ 20). 23h Very sharp increase in N.F. (+ 20).

3d 23⅝h to 4d 1h Wave in N.F. (+ 20).

4d 16½h to 18h Truncated wave in Dec. (− 6′). 17h to 17⅝h Increase in N.F. (+ 40).

5d 5¼h to 7h Wave in Dec. (− 4′).

6d 13h to 13¾h Increase in N.F. (+ 25). 15½h to 16½h Truncated wave in N.F. (− 20). 16h to 17h Wave in Dec. (− 4′). 17h to 18½h Wave in Dec. (− 4′). 20¾h to 21⅝h Rapid decrease in Dec. (− 8′), gradually recovering till 23h.

7d 5h to 7h Domed wave in N.F. (− 30). 5h to 6¼h Rapid increase in Dec. (+ 10′), followed till 7h by decrease (− 5′). 11h to 12h Decrease in N.F. (− 30). 15½h to 16¼h Decrease in Dec. (− 6′). 16¼h Fluctuations in V.F.-(± 15). 18½h to 19½h Wave in Dec. (− 6′). 19h to 19⅓h Increase in N.F. (+ 40). 19½h to 20½h Wave in Dec. (− 3′). 21h to 22h Decrease in Dec. (− 5′).

8d 3¼h to 4h Wave in Dec. (+ 4′). 2¾h to 4h Irregular wave in N.F. (− 20). 18⅓h to 19⅓h Wave in Dec. (− 5′).

9d 22¼h to 23¼h Wave in N.F. (+ 30). 22½h to 24h Wave in Dec. (− 8′).

10d 0h to 1¼h Domed wave in Dec. (+ 5′), with truncated wave in N.F. (+ 20) and decrease in V.F. (− 20). 3h to 5h Wave in Dec. (+ 8′). 3½h to 4⅝h Decrease in V.F. (− 30). 4½h to 5¼h Rapid decrease in N.F. (− 80). 5¾h to 6¼h Wave in Dec. (+ 3′). 6⅝h to 7⅓h Wave in Dec. (− 5′). 8h to 9¼h Sharp serrated wave in N.F. (− 30). 8h to 8¼h Sharp decrease in Dec. (− 4′). 10¼h to 10¾h Very rapid decrease in N.F. (− 50). 10⅝h to 11¼h Rapid increase in Dec. (+ 6′). 11½h to 12h Increase in N.F. (+ 30). 14½h to 15¼h Wave in N.F. (+ 20). 16h to 17h Wave in Dec. (− 8′). 16¼h to 16½h Very rapid increase in N.F. (+ 50). 16h to 17h Wave in V.F. (+ 12). 22½h to 23h Wave in Dec. (− 7′), with wave in N.F. (+ 35).

11d 17¼h to 18¼h Wave in Dec. (− 4′), followed till 19h by a decrease (− 4′). 17½h to 19h Double wave in N.F. (± 20). 17⅝h Sharp fluctuation in V.F. (+ 20).

12d 4¾h to 5½h Wave in N.F. (− 20). 21¾h to 23¼h Double wave in Dec. (± 4′). 21¾h to 23½h Slow wave in N.F. (+ 25). 22h to 22½h Decrease in V.F. (− 12).

15d 21h to 23h Slow wave in Dec. (− 4′).

16d 19h to 19½h Decrease in Dec. (− 4′). 20¼h to 21h Rapid decrease in Dec. (− 6′), with interrupted partial recovery till 22h (+ 3′).

1920.

October

17d 18½h to 20h Serrated wave in N.F. (− 40). 19h to 20h Rapid decrease in Dec. (− 10′). 22h to 23½h Wave in Dec. (− 5′).

18d 23¼h to 19d 0½h Wave in Dec. (− 3′), with wave in N.F. (+ 20).

19d 5¾h Fluctuations in V.F. (± 20).

22d 21h to 23h Wave in Dec. (− 9′).

23d 15¼h to 16¼h Truncated wave in N.F. (+ 20). 21¾h to 23h Wave in N.F. (+ 30). 22h to 23⅜h Truncated irregular wave in Dec. (− 5′). 23h to 24h Double wave in N.F. (± 15). 23h to 24d 0½h Wave in V.F. (− 15). 23⅜h to 24d 1⅜h Sharp wave in Dec. (− 17′).

24d 2⅔h to 4h Irregular truncated wave in Dec. (− 10′). 2¾h to 3¾h Wave in N.F. (+ 30). 3¾h to 4¼h Sharp decrease in V.F. (− 18). 3¾h to 5½h Wave in N.F. (+ 55). 4h to 5½h Truncated wave in Dec. (− 7′). 19½h to 20½h Wave in Dec. (− 3′).

25d 12½h Very rapid increase in Dec. (+ 6′), with sharp wave in N.F. (− 20′). 13h to 15½h Increase in V.F. (+ 40). 13½h to 14½h Wave in N.F. (− 35), followed immediately by sharp decrease till 14¾h (− 40). 13½h to 15½h Three consecutive serrated irregular waves in Dec. (+ 4′, + 4′, + 3′). 15½h to 17h Wave in Dec. (+ 3′). 16½h to 17½h Wave in N.F. (+ 25). 17h to 18h Wave in Dec. (+ 4′), followed till 18⅜h by a decrease (− 5′). 17½h to 19h Irregular increase in N.F. (+ 45). 20⅜h to 22½h Double wave in Dec. (± 3′). 21h to 22¼h Double wave in N.F. (± 15). 23¾h to 26d 1h Wave in Dec. (− 3′).

26d 17h to 18½h Truncated wave in Dec. (+ 3′). 19½h to 20h Wave in N.F. (− 20). 19¾h to 20h Sharp decrease in Dec. (− 5′), with immediate partial recovery till 20¼h (+ 3′). 20½h to 21¾h Decrease in V.F. (− 20). 20½h to 21⅜h Rapid irregular increase in N.F. (+ 50), followed till 22¼h by steady decrease (− 35).

27d 2½h to 3⅓h Wave in Dec. (+ 6′), commencing with sudden increase (+ 4′). 2¾h Rapid increase in N.F. (+ 25). 2½h to 3¼h Decrease in V.F. (− 16). 15½h to 18h Steep wave in Dec. (− 20′), with sharp serrations at 16h, 16½h, 17¼h. 15h to 16h Increase in V.F. (+ 20). 16h to 18h Serrated wave in N.F. (+ 70).

28d 1½h to 2½h Steep wave in Dec. (+ 11′), followed till 4h by irregular wave (− 4′). 1½h to 3h Double wave in N.F. (∓ 20). 2h to 2⅛h Rapid decrease in V.F. (− 20), gradually recovering till 4h. 12h to 16½h Steady increase in V.F. (+ 40). 16½h to 17h Double-crested wave in N.F. (+ 20), with irregular wave in Dec. (− 4′). 18h to 19h Wave in Dec. (− 4′).

29d 0¾h to 2h Double wave in N.F. (± 20). 1½h to 2½h Wave in Dec. (+ 6′). 12¾h to 13½h Wave in N.F. (− 20). 14¾h to 16h Double wave in N.F. (∓ 25). 15h to 16h Sharp wave in Dec. (− 9′). 13h to 18h Slow wave in V.F. (+ 30).

31d 20h to 20⅛h Sharp decrease in Dec. (− 7′), followed till 21¼h by a wave (− 6′). 22h to 23h Wave in Dec. (+ 4′). 22½h to 23½h Wave in N.F. (+ 35). 22½h to 23h Decrease in V.F. (− 15). 23h to Nov. 1d 1½h Increase in Dec. (+ 9′).

November

1d 3½h to 4½h Wave in Dec. (+ 3′). 5h to 6¼h Wave in Dec. (− 3′). 19¼h to 20h Truncated wave in Dec. (+ 3′).

2d 0⅛h to 1¾h Double wave in Dec. (± 4′). 0½h to 1½h Wave in N.F. (+ 25). 0½h to 1h Decrease in V.F. (− 15). 18h to 18½h Decrease in Dec. (− 4′), with increase in N.F. (+ 35).

3d 3h to 5h Double wave in Dec. (∓ 3′). 3¾h to 5h Wave in N.F. (− 20). 21h to 21⅝h Increase in N.F. (+ 40), followed till 22h by partial return (− 20). 22h to 22½h Increase in Dec. (+ 5′).

4d 1⅝h to 2⅔h Wave in Dec. (+ 7′). 5⅛h to 6½h Flattened wave in N.F. (− 20), followed till 8h by serrated wave (− 20). 5⅛h to 6⅛h Increase in Dec. (+ 8′), followed till 6⅝h by partial return (− 3′). 12h to 14h Wave in Dec. (+ 8′). 13h to 13¾h Increase in N.F. (+ 25). 14h to 16h Increase in V.F. (+ 30). 15½h to 15¾h Decrease in N.F. (− 20), followed till 18½h by steady increase (+ 50). 15¾h to 16¾h Domed wave in Dec. (− 4′).

5d 16⅔h to 18h Triple wave in N.F. (− 25, + 30, − 25). 16¾h to 17½h Steep wave in Dec. (− 14′). 18h Wave in Dec. (− 3′). 22h to 23½h Double-crested wave in Dec. (− 4′). 22h to 6d 0½h Double wave in N.F. (+ 40, − 20). 23½h to 6d 1h Irregular wave in Dec. (− 4′).

6d 1h to 2h Truncated wave in Dec. (− 3′). 3⅛h to 3¾h Rapid increase in Dec. (+ 7′). 9½h to 10h Irregular rapid increase in Dec. (+ 7′). 9½h to 10½h Serrated wave in N.F. (− 40). 13h to 23h Nearly continuous oscillations in Dec. and N.F. 13½h to 16½h Irregular decrease in Dec. (− 15′). 15h to 16½h Increase in V.F. (+ 20). 16h to 16½h Truncated wave in N.F. (− 20). 16⅛h to 17⅛h Irregular wave in Dec. (+ 4′). 17⅛h to 18h Truncated wave in N.F. (+ 20). 17¾h to 18h Wave in Dec. (+ 3′), followed immediately till 18¾h by double-crested wave (− 6′). 18¼h to 19h Steep wave in N.F. (+ 75). 18½h to 19h Sharp decrease in V.F. (− 20). 19h to 19⅝h Wave in Dec. (− 4′). 21¾h to 22¾h Wave in N.F. (+ 30). 22h to 23h Decrease in V.F. (− 16).

1920.

November

7d 5h to 5½h Decrease in N.F. (− 20). 21½h to 23h Wave in Dec. (− 5′), the return interrupted at 22½h.

9d 0½h to 1⅓h Wave in Dec. (+ 3′), with wave in N.F. (+ 20). 20¼h to 21h Irregular wave in Dec. (− 3′).

11d 1h to 2h Wave in Dec. (+ 4′).

12d 17¼h to 17¾h Wave in N.F. (− 30). 16¾h to 18h Wave in Dec. (+ 3′). 18h to 19h Irregular increase in N.F. (+ 25). 22½h to 23½h Wave in N.F. (+ 20). 22¾h to 23¾h Wave in Dec. (− 7′).

13d 2h to 3h Serrated wave in Dec. (+ 3′). 4⅓h to 6h Wave in Dec. (− 4′), with slow wave in N.F. (+ 20). 22½h to 23h Wave in Dec. (+ 4′). 22⅝h to 24h Wave in N.F. (+ 20).

15d 17h to 19h Decrease in Dec. (− 11′), interrupted from 17⅝h to 18h. 18½h to 19¾h Wave in N.F. (+ 20).

17d 7¼h to 8h Increase in Dec. (+ 4′). 13¼h to 13½h Rapid decrease in N.F. (− 30). 13½h to 14½h Wave in Dec. (+ 5′), followed till 16⅛h by a second wave (+ 5′). 16h to 16⅛h Increase in N.F. (+ 20). 17½h to 18¼h Wave in N.F. (− 30). 17⅝h to 18h Sharp decrease in Dec. (− 7′). 18⅝h to 20⅛h Wave in Dec. (− 8′). 19½h to 20h Increase in N.F. (+ 20).

18d 0h to 1h Serrated wave in N.F. (− 20). 0h to 0½h Sharp increase in Dec. (+ 6′). 13h to 14¼h Wave in N.F. (− 20). 13½h to 14¾h Wave in Dec. (− 4′). 19½h to 19¾h Sharp decrease in Dec. (− 6′), recovering irregularly till 21h.

20d 23¾h to 21d 0⅛h Wave in Dec. (− 5′), with wave in N.F. (+ 30).

21d 0½h to 1¼h Wave in Dec. (− 3′). 19h to 21½h Truncated wave in V.F. (+ 15), followed till 23h by wave (− 12). 19h to 19½h Decrease in Dec. (− 7′), with decrease in N.F. (− 25), followed till 20½h by a double-crested wave in Dec. (+ 4′), and till 21h by a further wave in Dec. (− 3′). 20⅝h to 22h Sharp double wave in N.F. (+ 75, − 40). 21h to 22h Double wave in Dec. (± 6′).

22d 1h to 3h Irregular wave in Dec. (+ 8′). 2¼h to 3h Wave in N.F. (− 20). 1½h to 2½h Decrease in N.F. (− 15). 16½h to 17¼h Increase in N.F. (+ 25). 21¼h to 22½h Domed wave in Dec. (− 7′), with wave in N.F. (+ 30).

26d 14¼h to 15½h Wave in N.F. (− 30). 16½h to 17¼h Irregular decrease in N.F. (− 40), followed till 18⅛h by double-crested wave (− 20). 17h to 18h Decrease in Dec. (− 7′), interrupted by sharp wave at 17⅝h (+ 3′). 17h to 21⅛h Slow wave in V.F. (+ 40). 19½h to 19¾h Very rapid decrease in Dec. (− 6′), with sharp wave in N.F. (− 20), followed till 20½h by a wave in Dec. (−6′). 20h to 20⅜h Rapid increase in N. F. (+ 35) followed by double-crested wave (+ 25). 21h to 21¼h Rapid decrease in Dec. (− 5′). 22h to 23h Irregular decrease in Dec. (− 6′), rapidly recovering till 23¾h.

27d 0h to 1h Sharp serrated wave in Dec. (+ 15′). 0h to 0⅛h Very rapid increase in N.F. (+ 60). 0h to 0¾h Very rapid decrease in V.F. (− 40), followed by a slower recovery till 2h (+ 30). 1h to 1½h Rapid decrease in N.F. (− 35). 1⅛h to 2h Increase in Dec. (+ 5′). 3¼h to 5¼h Serrated wave in Dec. (+ 8′). 3½h to 5½h Double wave in N.F. (∓ 25). 4h to 6h Slow wave in V.F. (− 15).

30d 20½h Sudden decrease in N.F. (− 20), immediately recovering, with a corresponding small movement in Dec.

December

2 13¾h to 15½h Irregular wave in N.F. (− 25). 21h to 23h Truncated wave in N.F. (+ 50). 21¼h to 23h Wave in Dec. (− 8′). 21⅓h to 22h Decrease in V.F. (− 12). 23h to 3d 0½h Irregular increase in Dec. (+ 7′).

3d 0½h to 2h Serrated wave in Dec. (− 5′). 0h to 0⅜h Decrease in V.F. (− 12). 4h to 4¾h Increase in Dec. (+ 5′). 4¼h to 5½h Wave in N.F. (− 20). 17½h to 18h Wave in Dec. (− 3′). 21¾h to 22½h Wave in Dec. (− 5′). 22½h to 24h Wave in N.F. (+ 30).

4d 5h to 7h Two consecutive waves in Dec. (+ 4′). Dec. 4d 8h to 5d 8h. *See* Plate III.

5d 19h to 6d 4h Traces in Dec. and N.F. continuously disturbed by irregular oscillations, especially from 19½h to 22½h. 20¼h to 20½h Very sharp wave in N.F. (− 30). 21¼h Very sharp wave in N.F. (+ 25). 21½h to 22½h Irregular double-crested wave in Dec. (− 5′).

6d 1⅓h Sharp wave in Dec. (+ 3′). 1¼h to 1½h Sharp wave in N.F. (+ 20). 2h to 2½h Irregular serrated wave in N.F. (+ 20). 2h to 2⅜h Two consecutive serrated waves in Dec., the second truncated (+ 3′). 3⅜h to 4h Domed wave in Dec. (− 3′). 9¼h to 9½h Increase in Dec. (+ 4′). 11h to 11⅜h Wave in N.F. (− 20). 14½h to 15½h Truncated wave in N.F. (− 25). 14⅜h to 15½h Wave in Dec. (− 7′). 15h to 15½h Increase in V.F. (+ 16). 16h to 17h Double-crested wave in N.F. (+ 20). 17¼h to 18⅜h Very sharp wave in Dec. (− 8′). 18h Sudden increase in N.F. (+ 60), followed from 18¼h to 19h by irregular return. 21⅜h to 22¼h Rapid increase in N.F. (+ 50), gradually returning till 23¾h.

7d 17½h to 19½h Wave in Dec. (− 6′). 18h to 18⅜h Wave in N.F. (+ 25). 23h to 8d 0½h Irregular wave in N.F. (+ 25).

1920.
December

8d 15h to 16½h Irregular wave in N.F. (− 40). 16h to 17h Wave in Dec. (− 8′).. 23½h Very rapid increase in N.F. (+ 30), gradually returning till 9d 0½h.

9d 4½h to 5h Decrease in Dec. (− 4′). 4h to 5h Increase in N.F. (+ 25). 14¾h to 15½h Decrease in Dec. (− 6′).

10d 19h to 20½h Wave in Dec. (− 3′).

13d 11½h to 12h Increase in Dec. (+ 4′). 16h to 16½h Increase in N.F. (+ 25).

14d 1½h to 3½h Wave in Dec. (+ 6′). 12⅔h to 14½h Flattened wave in N.F. (− 25). 13¼h to 14h Increase in V.F. (+ 12). 21h to 22h Wave in Dec. (− 3′). 22h to 23⅓h Truncated wave in N.F. (+ 25).

15d 18¾h to 20h Wave in Dec. (− 6′), followed till 20½h by decrease (− 5′), almost sudden at first. 19h to 20h Wave in V.F. (+ 12). 20¼h to 20½h Increase in N.F.(+ 20).

16d 2¼h to 3½h Wave in Dec. (+ 7′).

18d 18⅔h to 19½h Wave in Dec. (− 3′). 23h to 24h Wave in N.F. (+ 20).

19d 21¼h to 23h Irregular wave in Dec. (− 4′). 21¾h to 22½h Truncated wave in N.F. (+ 20), followed till 24h by an irregular wave (+ 20).

20d 3h to 4h Wave in Dec. (+ 3′). 19h Very rapid decrease in N.F. (− 30), partially recovering by 19¼h (+ 20). 19⅔h to 20h Very rapid decrease in Dec. (− 6′), recovering by 21½h with an interruption at 20½h. 20h to 20⅔h Wave in N.F. (− 20).

23d 22h to 23½h Irregular serrated wave in Dec. (− 6′). 23½h to 24h Increase in N.F. (+ 30). 23¾h to 24d 0¾h Domed wave in Dec. (− 3′).

24d 14¾h to 17h Slow wave in N.F. (− 25). 21¼h to 22½h Flattened wave in Dec. (− 3′).

25d 5h to 6⅓h Wave in Dec. (+ 3′). 10h to 10¼h Very sharp wave in Dec. (− 4′), accompanied by sharp increase in N.F. (+ 25). 11h to 13h Steady decrease in N.F. (− 50). 12⅓h to 13h Truncated, serrated wave in Dec. (− 3′). 22½h to 23½h Truncated wave in Dec. (− 3′). 22¾h to 23½h Domed wave in N.F. (+ 20).

26d 7¼h to 8½h Very rapid decrease in N.F. (− 75). 8h to 10¼h Serrated wave in Dec. (+ 10′). 11h to 17h Steady increase in V.F. (+ 70), followed till 23h by a similar decrease. 23h A further sharp decrease in V.F. (− 25), recovering by 27d 0½h. 12h to 21h Traces in Dec. and N.F. in more or less continuous oscillation. 12¼h to 13¼h Truncated wave in N.F. (− 20). 12½h to 13¼h Serrated wave in Dec. (+ 3′). 13¼h to 14⅓h Two consecutive serrated waves in Dec. (+ 3′, + 4′). 14h to 14½h Sharp wave in N.F. (− 40). 15¾h to 16h Sharp decrease in Dec. (− 7′). 16⅓h to 17h Truncated, serrated wave in Dec. (− 5′). 17h to 17⅔h Sharp wave in Dec. (+ 4′). 16½h to 17h Irregular increase in N.F. (+ 30). 17h to 17⅔h Irregular wave in N.F. (− 25). 18½h to 19h Wave in N.F. (+ 20). 18½h to 19½h Wave in Dec. (− 7′). 19½h to 21⅔h Double-crested wave in Dec. (− 7′, − 11′). 20h to 20¾h Wave in N.F. (+ 25). 22⅓h to 24h Double wave in Dec. (± 5′). 22½h to 24h Two consecutive waves in N.F. (+ 45, + 35).

27d 1⅔h to 3h Wave in Dec. (+ 5′). 2h to 3⅓h Wave in N.F. (+ 20). 5¼h to 6¾h Flattened wave in Dec. (+ 3′). 9h to 11h Wave in N.F. (− 30). 13½h to 16h Slow wave in N.F. (− 25). 16½h to 17½h Domed wave in N.F. (− 20). 18h to 19⅓h Wave in N.F. (+ 25). 20h to 21h Decrease in Dec. (− 6′), followed till 21⅓h by increase (+ 3′). 21¾h Very rapid decrease in Dec. (− 8′), followed till 22⅓h by partial recovery (+ 5′). 22⅔h to 23h A further wave in Dec. (− 4′), passing to complete recovery (+ 7′). 21¾h to 23¼h Triple-crested wave in N.F. (+ 40, + 70, + 50). 22h to 23h Decrease in V.F. (− 15).

28d 4h to 5¼h Wave in N.F. (+ 20). 22h to 23h Increase in Dec. (+ 5′).

29d 16½h to 16¾h Decrease in Dec. (− 3′), gradually recovering till 18h.

31d 16h to 18h Irregular wave in N.F. (− 35). 16½h to 18h Double wave in Dec. (∓ 3′).

EXPLANATION OF THE PLATES.

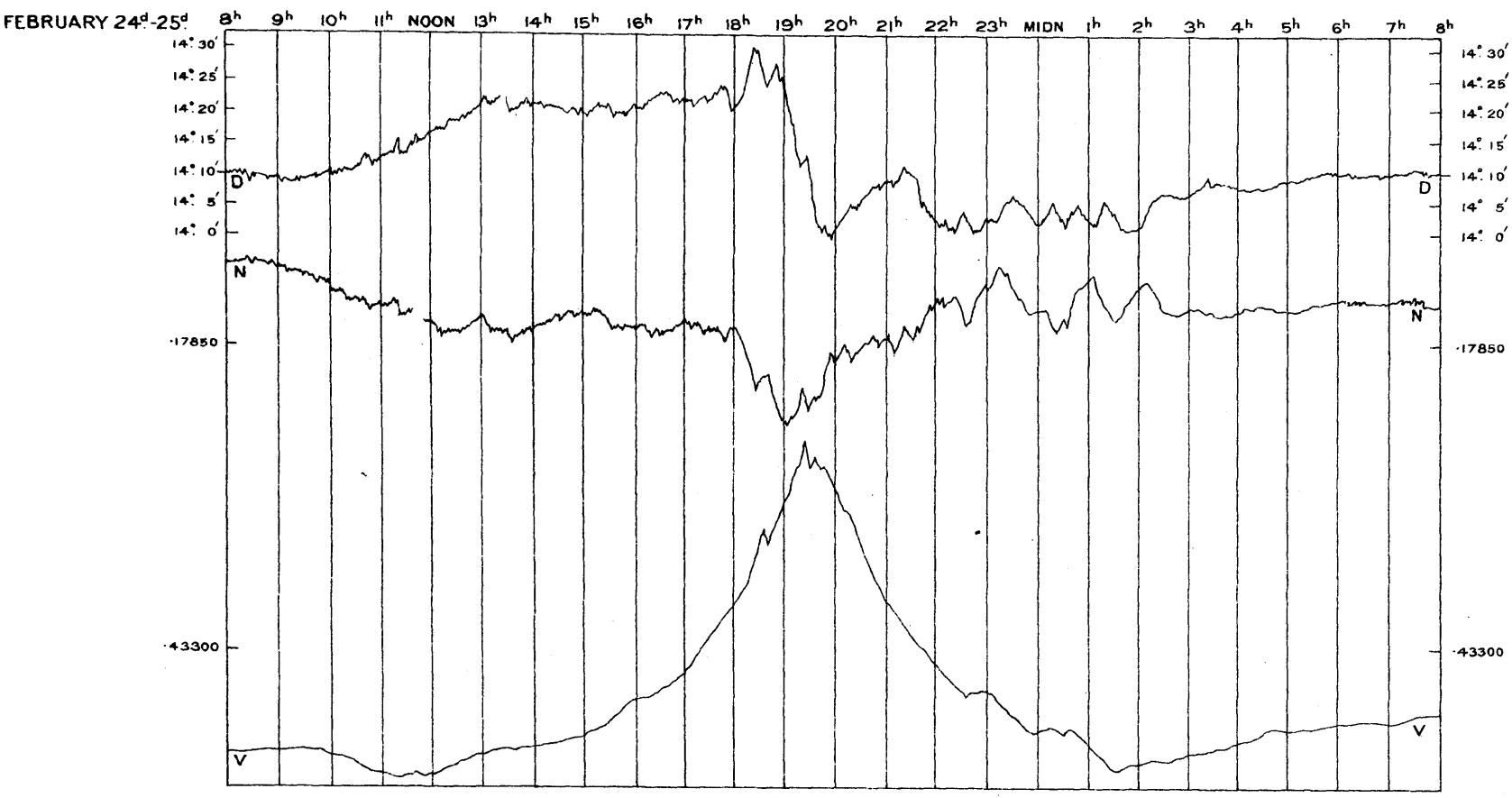
The magnetic motions figured on the Plates are those for days of disturbance selected by the International Committee—February 24d 8h to 25d 8h; March 4d 11h to 5d 11h; March 22d 8h to 23d 8h; September 28d 8h to 29d 8h; December 4d 8h to 5d 8h.

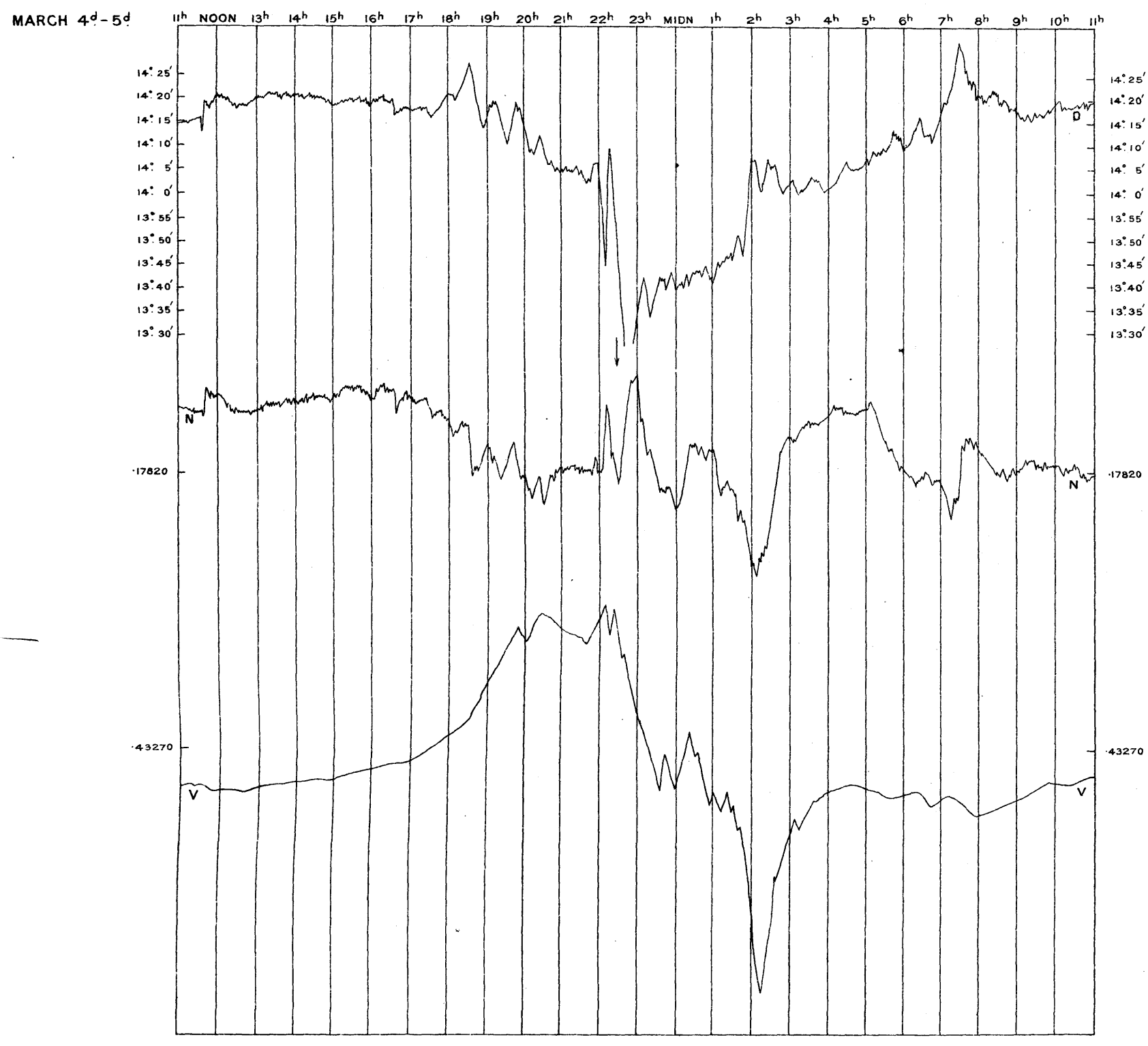
The time is Greenwich Civil Time (commencing at midnight, and counting the hours from 0 to 24).

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 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 $0^{in}.66 = 16.4^{mm.}$ in the declination curve, by $0^{in}.69 = 16.7^{mm.}$ in the north force curve, and by $0^{in}.57 = 14.5^{mm.}$ in the vertical force curve.

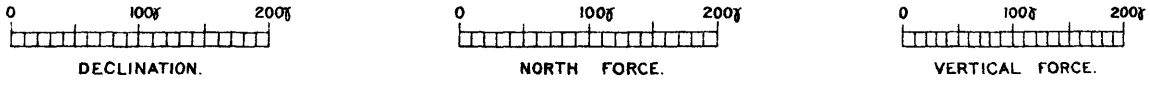
Upward motion indicates increase of declination, north force, and vertical force.

MAGNETIC DISTURBANCES RECORDED AT THE ROYAL OBSERVATORY, GREENWICH, 1920.





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



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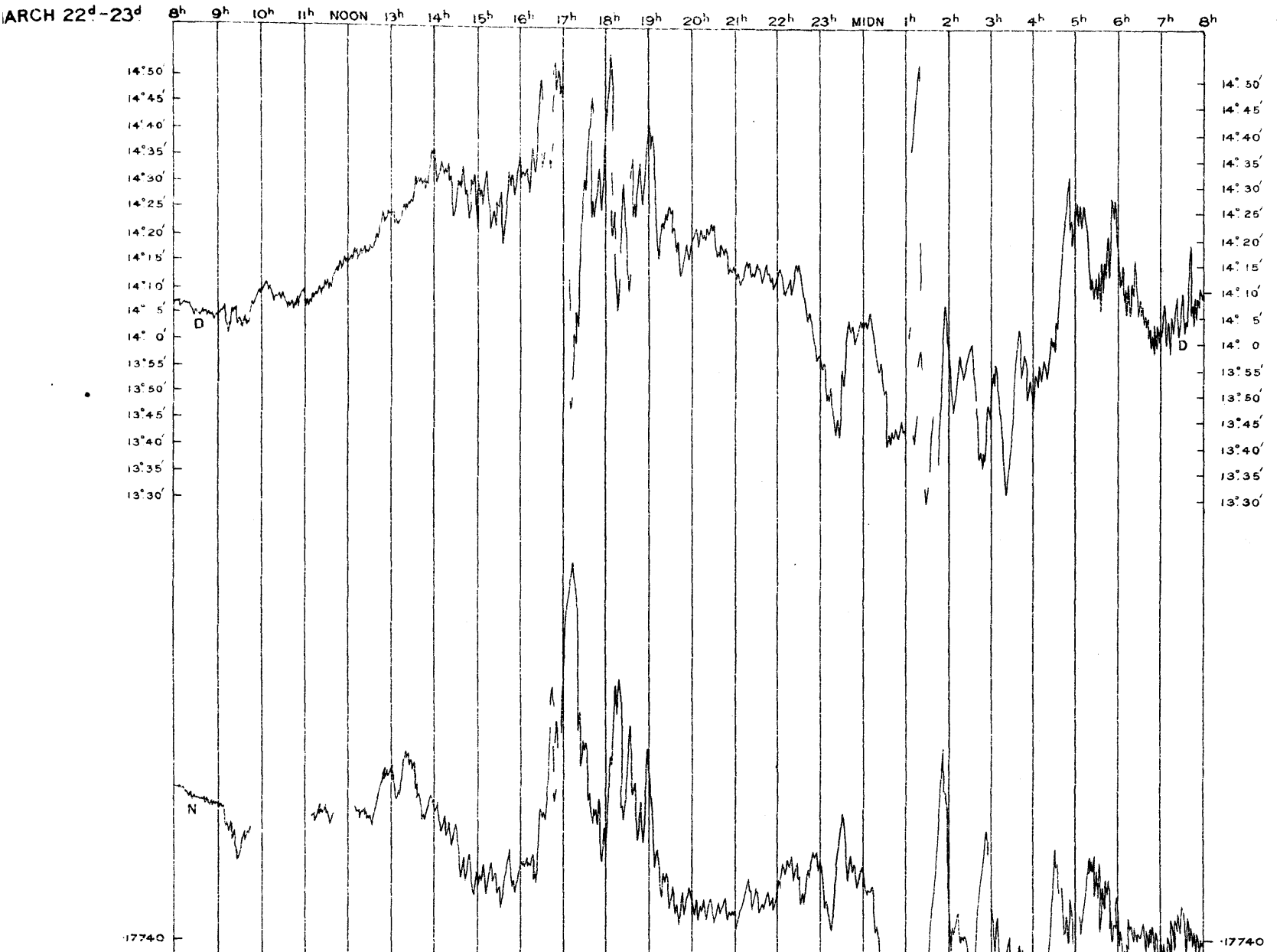
MAGNETIC DISTURBANCES RECORDED AT THE ROYAL OBSERVATORY GREENWICH, 1920.

MARCH 22d–23d



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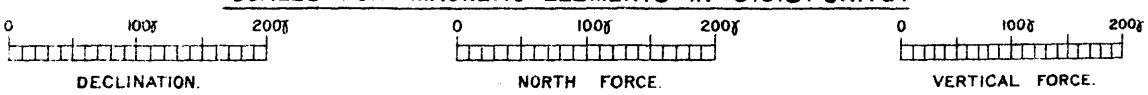

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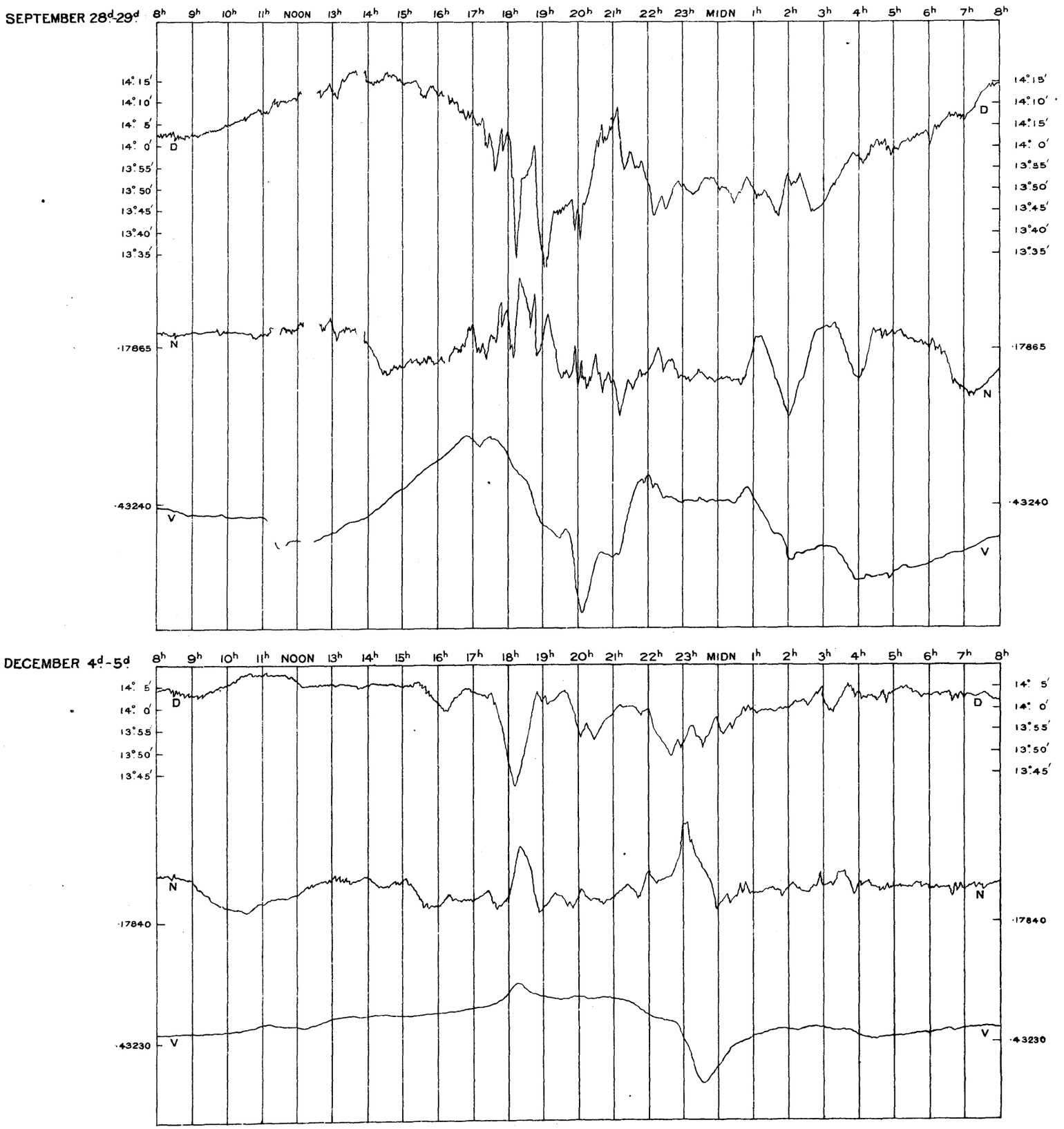
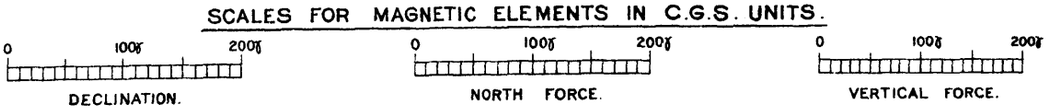


SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1920.

MONTH and DAY, 1920.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. 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.	De-duced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
	in.	°	°	°	°	°	°	°	°	°	°		°	°	°	in.		hours.	hours.
Jan. 1	29·242	38·6	31·5	7·1	35·3	— 3·3	33·6	31·0	4·3	7·6	1·0	84	46·1	22·7	44·7	0·018	wP : . . : . .	0·0	7·9
2	29·679	39·0	26·7	12·3	32·1	— 6·3	30·6	27·2	4·9	11·4	0·0	81	45·0	16·1	44·9	0·003*	. . : wP : wwP	4·9	7·9
3	29·435	38·5	32·6	5·9	36·7	— 1·6	34·2	30·6	6·1	8·4	3·3	79	45·4	23·4	44·6	0·002	mP : wwP : wP, wwP	0·0	7·9
4	29·764	37·9	32·2	5·7	34·8	— 3·5	32·3	28·3	6·5	8·6	5·3	76	52·8	24·0	44·1	0·000	wwP : wP : wwP	0·9	7·9
5	30·254	38·1	33·4	4·7	36·1	— 2·1	33·5	29·6	6·5	9·6	3·1	77	48·0	26·6	44·0	0·001	wP : wwP : wwP	0·4	7·9
6	30·108	33·5	26·6	6·9	31·5	— 6·6	30·3	27·4	4·1	8·2	0·0	83	42·6	25·3	43·8	0·000	wwP	0·3	8·0
7	29·767	44·8	22·1	22·7	29·7	— 8·3	28·3	23·8	5·9	5·4	0·7	78	45·9	22·5	43·8	0·001	. . : wwP : . .	2·0	8·0
8	29·258	51·1	40·2	10·9	47·0	+ 9·1	43·4	39·3	7·7	12·7	1·7	75	64·7	31·0	43·8	0·010	. . : wwP : . .	2·1	8·0
9	29·491	42·4	35·9	6·5	39·1	+ 1·2	36·0	31·9	7·2	9·8	4·6	76	55·0	27·0	43·2	0·145	. . : . ., sP : sP	4·2	8·0
10	29·107	53·1	37·9	15·2	48·1	+ 10·2	46·4	44·5	3·6	6·3	0·6	88	64·2	34·3	43·2	0·441	v, wwP : wwP : wwP	0·2	8·1
11	28·959	53·6	44·7	8·9	48·5	+ 10·6	45·4	42·0	6·5	10·6	2·9	79	52·8	38·3	43·7	0·459	wwP	0·0	8·1
12	29·350	55·4	44·2	11·2	48·7	+ 10·8	45·2	41·4	7·3	12·2	1·3	76	59·0	38·0	43·5	0·094	wwP : wP : wwP	0·0	8·1
13	29·650	55·3	44·2	11·1	49·2	+ 11·2	45·6	41·8	7·4	11·5	2·6	76	69·7	39·3	43·7	0·217	wwP : sP : sP, vP	0·9	8·2
14	30·036	44·4	32·1	12·3	39·1	+ 1·1	35·8	31·4	7·7	14·0	2·6	75	53·0	19·9	43·9	0·001	sP : ssP : ssP	4·7	8·2
15	30·277	49·1	38·0	11·1	45·5	+ 7·4	43·9	42·0	3·5	7·3	1·2	88	53·0	41·6	44·0	0·013	mP : mP : sP	0·0	8·2
16	30·322	55·5	47·6	7·9	50·5	+ 12·2	48·9	47·2	3·3	6·8	0·8	89	62·0	39·4	44·0	0·002	wP : mP : sP, mP	0·4	8·3
17	30·139	51·4	42·2	9·2	48·0	+ 9·5	46·6	45·1	2·9	6·2	0·4	90	63·0	35·9	44·1	0·000	mP, sP : mP : mP, wwP	1·5	8·3
18	29·970	54·7	49·6	5·1	51·4	+ 12·8	50·4	49·4	2·0	3·4	0·8	93	61·7	47·0	44·1	0·030	wP : mP : sP	0·1	8·4
19	29·742	50·7	35·1	15·6	43·1	+ 4·4	41·2	38·9	4·2	7·1	2·7	85	57·0	29·6	44·1	0·133	wP : mP : wP	0·0	8·4
20	29·918	45·6	35·4	10·2	41·2	+ 2·4	39·0	36·3	4·9	7·7	2·4	83	55·6	29·8	44·7	0·000	wwP : wP : mP	0·0	8·5
21	29·933	49·2	37·0	12·2	44·2	+ 5·4	40·7	36·6	7·6	15·3	0·9	74	60·6	25·6	44·5	0·054	wwP : sP : ssP	2·2	8·5
22	30·113	46·9	29·9	17·0	39·4	+ 0·6	37·7	35·5	3·9	9·2	0·0	86	67·1	20·0	44·3	0·000	sP	4·1	8·5
23	29·966	47·0	42·0	5·0	44·8	+ 5·9	43·5	42·0	2·8	5·8	1·3	90	56·2	33·9	44·5	0·005	mP : sP : sP	0·0	8·6
24	29·796	49·9	40·4	9·5	45·4	+ 6·5	43·1	40·5	4·9	6·8	2·2	83	63·0	30·6	44·2	0·004	mP : mP : mP, sP	0·3	8·6
25	30·001	48·9	32·8	16·1	41·1	+ 2·0	38·5	35·2	5·9	11·3	1·2	80	80·6	24·5	44·1	0·000	mP, sP	7·1	8·7
26	29·626	49·2	39·5	9·7	45·8	+ 6·5	43·6	41·1	4·7	5·5	2·7	84	67·9	35·0	44·3	0·017	wP : mP : mP, sP	0·1	8·7
27	29·550	47·8	33·9	13·9	40·9	+ 1·4	39·2	37·1	3·8	7·4	1·7	86	55·2	27·1	44·1	0·101	sP : sP, sN : wwN, wwP	0·0	8·8
28	29·359	47·8	40·6	7·2	44·2	+ 4·6	42·5	40·5	3·7	5·9	1·1	87	56·0	34·9	44·0	0·341	. . : ssP, sN : sN, wP	0·0	8·8
29	29·515	45·2	37·1	8·1	40·8	+ 1·1	37·6	33·6	7·2	11·1	3·2	76	80·1	31·1	44·1	0·010	wP, mP : sP : ssP, mP	5·9	8·9
30	29·640	48·6	40·1	8·5	44·0	+ 4·3	40·6	36·6	7·4	12·8	2·3	75	79·4	32·5	44·0	0·182	wN, mP : ssP : ssP	6·9	8·9
31	29·779	54·9	40·1	14·8	47·5	+ 7·8	44·8	41·9	5·6	9·2	1·1	82	61·0	34·0	44·0	0·014	. . : wP : mP	0·0	9·0
Means	29·734	47·4	37·0	10·4	42·4	+ 3·8	40·1	37·1	5·3	8·9	1·8	81·7	58·8	30·4	44·1	Sum 2·298	..	1·6	8·3
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following 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 January 2 is derived from frost.

The mean reading of the *Barometer* for the month was 29in·734, being 0in·060 *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 55°·5 on January 16; the lowest in the month was 22°·1 on January 7; and the range was 33°·4.
The mean of all the highest daily readings in the month was 47°·4, being 4°·3 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 37°·0, being 3°·3 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 15°·4, being 1°·0 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 42°·4, being 3°·8 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1920.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	Wind as Deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	General Direction. 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.	Clouds and Weather. P.M.
	hours.		hours.				lbs.	lbs.	miles.		
Jan. 1	9·4	..	9·2	..	SW : ESE : E	NE : NNE	5·5	0·45	368	10 : 10,oc.-slt.-r,m	10, fq.-th.-r, m : 10,fq.-slt.-r,oc.-slt.-sn: p.-cl : p.-cl, lu.-ha, ho.-fr
2	4·3	..	3·0	..	NNE : W	W : Calm	1·5	0·05	234	1, ho.-fr : 1, ho.-fr	: 1, cu : 2, th.-cl : 8, ho.-fr, m : 10 th.-cl,ho.-fr,m,lu.-ha
3	3·1	..	1·8	..	SSE : S	SSE : SE : ESE	3·2	0·27	282	10 : 10, s, cu.-s	10,s,cu.-s,oc.-m.-r : 10, ci.-s, n : 9, th.-cl
4	3·0	..	2·2	..	ESE : ENE	NE	3·5	0·28	336	p.-cl : p.-cl	p.-cl : p,-cl
5	2·0	..	0·9	..	NE	NE : ENE	4·0	0·57	461	p.-cl : p.-cl : 10, n	9, slt.-r, w : 9, cu, w : 10, cu, w
6	0·0	..	0·0	..	NE : ENE	NE : NNE	2·9	0·26	317	10 : 10, s, s.-cu	10 : 10
7	0·0	..	0·0	..	Calm : NNW : W	SW	5·0	0·20	269	10 : 10, m : 6, slt.-m	p.-cl, m : 10, th.-cl : 10, th.-cl, w
8	7·8	..	6·6	..	SW : WSW : W	W : WNW	14·8	1·65	770	10, m.-r, w : p.-cl, st.-w	p.-cl, st.-w : 1, w
9	1·6	..	1·2	..	W : WNW	W : WSW : SW	3·5	0·36	420	p.-cl, w : p.-cl : 1, cu, slt.-h	2, cu.-n : 10, th.-cl, r
10	0·0	..	0·0	..	SW : S : WSW	SW : WSW : W	12·0	1·23	644	10, r : 10, slt. r, w : 10, r, w	9, r, w : 10, r, w : 9, w
11	7·0	..	5·3	..	W : WSW : SW	WSW : W	18·0	2·14	799	10, w : 10, r, w : 10, r, slt.-w	9,fq.-r,st.-w: p.-cl,oc.-shs,st.-w : 10, st.-w
12	..	..	..	..	W	WSW : SW	15·8	1·66	796	p.-cl, st.-w : 10, s, n, th.-cl, slt.-w	10, r, w : 10, th.-r, w : 10, th.-r, r, w
13	..	..	..	..	W	WSW : SW	21·3	1·03	611	p.-cl, st.-w : 2, w : 8,th.-cl,so.-ha,w	9, w : 10, r : 10, r
14	0·0	..	0·0	..	W : NW : N	N : SW : SSW	12·4	0·75	421	p.-cl, w : 8, w : 1, cu, w	1, cu, h : 7, slt.-f, ho.-fr
15	0·0	..	0·0	..	SSW : SW	SW : WSW	3·0	0·35	332	10 : 10, oc.-m.-r	10, s, n, oc.-m.-r : 10, oc.-m.-r
16	..	..	..	..	WSW : SW	W : WSW	2·9	0·23	343	10 : 10, oc.-slt.-r	8 : 2, d : 1, d, th.-cl
17	0·0	..	0·0	..	WSW : W	WSW	3·7	0·54	447	1 : 9, th.-cl : 8, ci.-s, cu, n, w	10, w : 10, oc.-slt.-r, w
18	1·4	..	1·0	..	WSW : SW	WSW : SW	2·5	0·22	317	10, slt.-sh : 10, s, n, oc.-m.-r	9, s, n, oc.-slt.-r : 10 : 10, oc.-m.-r,r
19	..	..	..	..	SW : N	NW : WNW : W	7·5	0·64	446	10, : 10 : 10, r, glm	10, r, sl : p.-cl : 0, ho.-fr
20	3·2	0·25	2·3	0·18	WNW : W	WSW:NW:WNW	2·5	0·27	351	0, ho.-fr : 1 : 10, m.-r	10, fq.-m.-r : p.-cl, th.-cl
21	12·7	1·00	12·7	1·00	WSW : NW	NW : WNW	10·1	0·82	505	10, sh : 8, w : 2, w	p.-cl, s, cu, n, w : 0, w, ho.-fr
22	0·0	0·00	0·0	0·00	WSW : SW : SSW	SSW : SW	3·3	0·21	301	0, ho.-fr : 0, ho.-fr : 3, th.-cl, h	p.-cl : 8 : 10
23	..	..	..	..	SW : SSW	SSW : SW	3·2	0·20	290	10, sh : 9 : 10,fq.-th,-r	10, n : 10 : 10, fq.-m.-r
24	11·3	0·89	11·3	0·89	SSW : SW	SSW : SW : WSW	4·3	0·36	330	10 : 10 : 10, S, oc.-m.-r'	10,s,s.-cu,oc.-m.-r : 6, fq.-m.-r : 0, ho.-fr
25	1·4	0·11	1·2	0·09	WSW : SW	SSW : S	3·0	0·14	269	0, ho.-fr : 0, ho.-fr : 0	2 : 4, slt.-sh : 10
26	8·5	0·67	7·1	0·56	S : SSW	SSW : W : WSW	5·0	0·59	432	10 : 10 : 9, s	10, m.-r, w : 10, m.-r, w : 7, slt.-r
27	3·5	0·28	1·9	0·15	SW : S : SSW	SSW : SW	9·0	0·70	438	0, ho.-fr : 1, ho.-fr, : 10, s, n	10, r, w, n : 10, th.-r,w,n : 9, th.-r, w
28	1·7	..	1·2	..	SW : S	SE : S : SW	9·6	0·46	309	10, m : 10	10, r : 10, r, w : 8, r, w
29	1·7	0·13	1·1	0·08	WSW : W	SW : SSW	8·0	0·98	583	p.-cl, w : 1, w : 1	p.-cl : 10, th.-cl : 10, r, st.-w
30	0·0	0·00	0·0	0·00	SSW : WSW	W : WSW : SW	11·2	0·85	511	10, r, st.-w : 4, w : 1, cu, w	3, cu, cu.-s, w: p.-cl,th.-cl,lu.-ha : 10, s
31	11·0	0·87	10·3	0·82	SSW : SW	SW : WSW	8·5	0·80	506	10 : 10, sh : 10, th.-r, w	10, w : 3 : p.-cl, w
Means	..	..	..	..	..	..	..	0·62	433		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 40°·1, being 2°·9 *higher* than
The mean *Temperature of the Dew Point* for the month was 37°·1, being 1°·6 *higher* than
The mean *Degree of Humidity* for the month was 81·7, being 6·3 *less* than
The mean *Elastic force of Vapour* for the month was 0in.221, being 0in.015 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs.6, being 0grs.2 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 547 grains, being 5 grains *less* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·4.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·190. The maximum daily amount of *Sunshine* was 7·1 hours on January 25.
The highest reading of the *Solar Radiation Thermometer* was 80°·6 on January 25; and the lowest reading of the *Terrestrial Radiation Thermometer* was 16°·1 on January 2.
The *Proportions of Wind* referred to the cardinal points were N. 3, E. 3, S. 9, W. 16.
The *Greatest Pressure of the Wind* in the month was 21·3 lbs. on the square foot on January 13. The mean daily *Horizontal Movement of the Air* for the month was 433 miles; the greatest daily value was 799 miles on January 11; and the least daily value was 234 miles on January 2.
Rain (0in.005 or over) fell on 18 days in the month, amounting to 2in.298 as measured by gauge No. 6 partly sunk below the ground; being 0in.417 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1920.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. 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.		hours.	hours.
Feb. 1	30·216	50·5	38·2	12·3	44·1	+ 4·5	40·0	35·2	8·9	11·3	6·6	70	76·8	31·1	44·1	0·000	mP : sP : sP	5·2	9·1
2	30·344	51·5	45·0	6·5	47·5	+ 8·0	43·7	39·5	8·0	11·0	5·3	75	79·0	36·9	44·0	0·000	wP : wwP : mP	0·9	9·1
3	30·276	51·3	42·2	9·1	45·9	+ 6·4	43·3	40·3	5·6	7·8	3·3	82	87·6	33·3	44·1	0·000	mP : wwP : wP	3·3	9·2
4	30·341	47·8	35·2	12·6	43·1	+ 3·6	41·8	40·3	2·8	5·7	1·2	90	52·5	29·1	44·0	0·131	wP : wP, mP : mP	0·0	9·2
5	30·459	44·9	28·9	16·0	37·4	− 2·2	35·4	32·6	4·8	8·5	0·7	83	67·2	22·6	44·0	0·003	mP : sP : sP	3·3	9·3
6	30·316	49·2	33·2	16·0	40·3	+ 0·7	38·5	36·2	4·1	9·8	0·5	86	82·7	25·4	44·1	0·000	mP : sP : mP	4·4	9·3
7	30·254	48·1	28·9	19·2	38·1	− 1·4	36·1	33·4	4·7	11·1	0·3	83	83·1	21·9	44·0	0·001*	mP : sP : mP	7·9	9·4
8	30·289	50·0	36·0	14·0	42·8	+ 3·5	40·6	38·0	4·8	8·9	1·8	84	83·0	24·8	43·9	0·012*	mP, sP : mP : wwP	3·4	9·4
9	30·247	48·7	33·1	15·6	41·9	+ 2·8	40·0	37·6	4·3	8·0	0·5	86	65·2	25·8	43·6	0·005*	.. : wwP : ..	0·0	9·5
10	29·780	51·2	47·7	3·5	49·3	+ 10·4	47·1	44·7	4·6	7·2	3·1	85	58·0	43·9	43·7	0·066	wwP : wwP : wP, mP	0·0	9·6
11	29·662	51·5	40·0	11·5	45·6	+ 6·8	41·7	37·2	8·4	15·7	3·7	73	82·0	32·4	43·8	0·031	mP : ssP : ssP	4·8	9·6
12	30·029	49·4	35·6	13·8	42·4	+ 3·6	38·8	34·4	8·0	14·5	4·2	74	79·7	28·8	43·6	0·000	sP : ssP : sP	4·2	9·7
13	29·716	53·8	44·2	9·6	48·5	+ 9·5	45·8	42·9	5·6	9·6	2·2	82	79·0	38·0	43·7	0·004	mP : mP : sP	0·8	9·8
14	29·823	53·9	40·1	13·8	46·0	+ 6·7	43·6	40·9	5·1	9·6	0·9	83	72·9	32·2	43·8	0·000	mP : mP, ssP : sP, mP	0·3	9·8
15	29·739	48·8	38·1	10·7	44·9	+ 5·5	42·6	39·9	5·0	11·3	0·0	83	59·3	31·1	43·8	0·003	sP, mP : mP : mP	0·0	9·9
16	29·721	53·9	36·2	17·7	46·4	+ 6·9	44·5	42·4	4·0	9·5	0·5	87	94·8	28·1	44·0	0·014	mP, sP : ssP, sP : sP	4·8	9·9
17	29·742	59·8	39·2	20·6	48·2	+ 8·6	45·3	42·1	6·1	16·6	0·4	80	102·5	27·5	44·0	0·000	wP : mP : sP	8·8	10·0
18	29·842	61·8	36·3	25·5	46·6	+ 7·1	43·7	40·4	6·2	14·7	0·0	80	107·8	26·8	44·0	0·000	sP	8·0	10·1
19	29·791	61·0	36·0	25·0	46·6	+ 7·1	43·8	40·6	6·0	13·0	0·2	81	98·5	26·3	44·1	0·000	sP	3·3	10·1
20	29·737	43·0	35·1	7·9	39·5	− 0·0	38·8	37·9	1·6	2·8	0·5	94	45·0	29·0	44·0	0·170	mP, wP : wP : wP	0·0	10·2
21	30·009	41·7	34·4	7·3	38·3	− 1·3	35·4	31·5	6·8	11·8	2·2	76	55·9	30·3	43·9	0·050	wwP : sP : sP, wP	0·4	10·3
22	30·307	49·8	32·2	17·6	39·3	− 0·4	36·7	33·3	6·0	12·7	1·0	80	91·9	26·4	44·0	0·000	wwP : wP, sP : ..	8·1	10·3
23	30·280	49·0	29·3	19·7	37·4	− 2·4	35·5	32·9	4·5	11·3	0·0	84	80·8	26·0	43·7	0·001*	.. : mP, sP : wwP	5·1	10·4
24	29·993	47·9	34·2	13·7	39·3	− 0·7	37·8	35·9	3·4	8·9	0·0	88	85·0	28·7	43·6	0·003*	.. : wwP, mP : wwP	2·2	10·5
25	29·880	54·4	32·4	22·0	42·2	+ 2·1	40·7	38·9	3·3	6·1	0·3	88	74·9	28·5	43·5	0·015	wwP : wwP, mP : wwP	0·4	10·5
26	29·912	52·6	39·2	13·4	45·9	+ 5·7	42·7	39·1	6·8	14·9	0·7	78	85·2	32·2	43·5	0·000	wwP : wwP, ssP : sP, mP	3·7	10·6
27	29·995	50·9	33·3	17·6	43·0	+ 2·7	40·4	37·3	5·7	7·9	3·0	80	59·0	26·7	43·5	0·071	wwP : wwP : wwP, wP	0·0	10·6
28	30·208	53·0	27·2	25·8	40·5	+ 0·2	37·3	33·2	7·3	17·3	2·1	75	93·8	24·8	43·4	0·000	wP : sP, ssP : mP, wwP	4·5	10·7
29	30·141	49·0	43·2	5·8	46·9	+ 6·6	45·3	4·35	3·4	5·7	2·1	89	62·5	41·2	43·4	0·000	wwP	0·0	10·8
Means	30·036	51·0	36·4	14·6	43·4	+ 3·8	40·9	38·0	5·4	10·5	1·6	82·0	77·4	29·6	43·8	Sum 0·580	..	3·0	9·9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn on the following 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 February 7, 9, 23 and 24 are derived from frost or fog. The amount entered on February 8 is partly derived from frost.

The mean reading of the *Barometer* for the month was 30in.036, being 0in.234 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 61°·8 on February 18; the lowest in the month was 27°·2 on February 28; and the range was 34°·6.
The mean of all the highest daily readings in the month was 51°·0, being 5°·8 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 36°·4, being 2°·1 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 14°·6, being 3°·6 *greater* than the average for the the 65 years, 1841–1905.
The mean for the month was 43°·4, being 3°·9 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1920.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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	2·7	0·23	2·3	0·19	WSW : W	WSW : SW	6·5	0·83	528	2, w : 0, w : 0, w	7 : 9 : 10, th.-cl
2	6·3	0·52	4·7	0·39	WSW	SW	6·4	0·81	528	10 : 10 : 10, w	10, s, ci.-s, n, w : 5, cu : 10, cu.-s, th.-cl
3	5·0	0·41	4·2	0·35	SW	SW	3·3	0·32	320	10, th.-cl : 9, th.-cl : 8, s	8 : 5, th.-cl : 6
4	11·2	0·93	10·3	0·86	SW : NNE : NE	NNE : NE : Calm	2·4	0·09	171	10, sh : 10, m.-r	10, oc.-slt.-r : 8, m, ho.-fr : 6 slt.-f, ho.-fr
5	4·5	0·37	3·9	0·33	Calm : E	ESE	1·9	0·08	177	0, ho.-fr, m : 0, ho.-fr, m	4, ci.-s, so.-ha : 10, th.-cl : 9, th.-cl, lu.-ha
6	..	..	..	..	Calm : SE	SE : Calm	1·5	0·08	152	10 : 10, s	1, ci : 0, ho.-fr
7	8·7	0·72	8·1	0·67	Calm : SE	S : SSE	0·9	0·04	170	0, ho.-fr : 0, ho.-fr	0, ho.-fr : 1, ho.-fr
8	11·6	0·97	10·8	0·90	SSW : SW	SSW : SW : W	2·2	0·15	230	7, ho.-fr : 5, ho.-fr : 5, cu.-s	10, cu.-s, ci.-s : 8, oc.-slt.-r, m : 0, ho.-fr m
9	0·0	0·00	0·0	0·00	SW	SW : WSW	6·9	0·50	393	0 : 5, th.-cl : 10, ci.-s, n	10, s, n : 10, w : 10, oc.-slt.-r, w
10	6·7	0·55	5·2	0·43	WSW : SW	SW	14·5	1·64	728	10, w : 10, fq.-r, w: 10, oc.-slt.-r, w	10, w : 10, oc.-slt.-r, w : 9, w
11	12·0	1·00	12·0	1·00	SW : WSW : W	W : WNW	8·4	0·99	614	p.-cl, w : p.-cl, slt. sh, w: p.-cl, w	9, w : 7, fq.-r, w : 0
12	0·6	0·05	0·4	0·03	W : W : SW	W : SW : SSW	2·7	0·30	364	0, ho.-fr : p.-cl, th.-cl: 2, m	6, s, n, so.-ha: 9 : 8
13	6·5	0·54	4·5	0·38	SSW : SW	SW : WSW	11·4	0·88	526	10, oc.-slt.-r : 10, n, cu.-n, w	10, s.-cu, n, oc.-slt.-r, w : 9, oc.-slt.-r, w
14	4·5	0·38	3·7	0·31	WSW	W : ESE : Calm	3·4	0·26	314	4 : 10 : 10, s.-cu	9, cu., h : 6, h : 10, f
15	3·3	0·28	2·7	0·23	Calm : S : SSW	SSW : S : SW	4·0	0·28	271	10, f. slt.-sh : 10 : 10	10 : 10
16	3·3	0·29	1·3	0·12	SSW : W : SW	S : SSE : Calm	2·0	0·10	186	7, slt.-sh, ho.-fr : 0, slt.-m, ho. fr : 3, slt.-m	10, oc.-m.-r : 10
17	11·5	1·00	11·5	1·00	SE	SE : Calm	1·9	0·06	164	4, th.-cl : 8, th.-cl : 1, ci.-cu	0, ci.-cu : 0, ho.-fr, slt.-f
18	10·3	0·89	10·2	0·88	Calm	Calm : SSW	0·6	0·01	88	0, ho.-fr, slt.-f : 3, ci.-cu, slt.-f	1, ci.-cu : 1, m, ho.-fr
19	6·3	0·55	4·8	0·42	Calm : SW	SSW : Calm	1·5	0·05	119	2, slt.-f, ho.-fr : 10, slt.-f : 7, cu.-h, slt.-f	7, cu, s : 0 : 0, slt.-f
20	0·0	0·00	0·0	0·00	Calm : N : NE	N : NNE	2·5	0·21	242	7, f : 10, slt.-f, oc.-m -r: 10, oc.-m.-r, slt.-f, glm	10, oc.-m.-r, glm : 10, slt.-r, r, sl: 10, r
21	..	..	..	..	N : NNE	NNE	9·3	1·00	512	10, r : 10, slt.-sn.-sh, w	10, s.-cu, w : 10, w : 7
22	7·3	0·64	0·0	0·00	NNE : NE	NE : Calm : SE	1·2	0·08	184	p.-cl, ho.-fr: p.-cl, ho.-fr : 2, h, th.-cl	p.-cl, cu : 0, slt.-f, ho.-fr : 0, slt.-f, ho.-fr
23	3·8	0·35	1·5	0·13	Calm	Calm : E	1·4	0·06	129	tk.-f, ho.-fr : tk.-f	0, slt.-f, ho.-fr : 2, f, ho.-fr
24	6·7	0·61	6·3	0·57	E : Calm	SSW : Calm	0·4	0·01	93	10, f : 10, f	7, h, cu : 0, f : 0, f
25	0·8	0·08	0·6	0·05	Calm	Calm : S	0·4	0·00	96	tk.-f : 10, tk.-f, m.-r : 10, f, oc.-slt.-r	10, slt.-sh, so.-ha : 10, th.-cl : 10
26	..	..	..	..	WSW : W : WNW	W : WNW : WSW	3·0	0·22	325	10 : 10 : 9, glm	7, s, cu : 0 : 2
27	11·0	1·00	11·0	1·00	WSW	W : NNW : NE	5·0	0·48	411	7 : 9 : 10, w, oc.-m.-r	10, w, m.-r, r, glm : 1, ci, ho.-fr
28	0·0	0·00	0·0	0·00	Calm : SSW	SSW	1·8	0·14	234	2, ho.-fr : 7, th.-cl : 5, th.-cl	8, s, s.-cu : 10 : 10, m.-r
29	0·0	0·00	0·0	0·00	SSW : SW : WSW	WSW : SW	3·8	0·30	349	10, li.-sh : 10, w : 10, s	10, s : 7 : 10
Means	..	..	..	..	..	..	..	0·34	297		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 40°·9, being 3°·2 *higher* than
The mean *Temperature of the Dew Point* for the month was 38°·0, being 2°·6 *higher* than
The mean *Degree of Humidity* for the month was 82·0, being 3·5 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.229, being 0in.022 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs.6, being 0grs.2 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 553 grains, being the same as
} the average for the 65 years, 1841–1905.

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

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·306. The maximum daily amount of *Sunshine* was 8·8 hours on February 17.

The highest reading of the *Solar Radiation Thermometer* was 107°·8 on February 18; and the lowest reading of the *Terrestrial Radiation Thermometer* was 21°·9 on February 7.

The *Proportions of Wind* referred to the cardinal points were N. 2, E. 3, S. 9, W. 9. Six days were calm.

The *Greatest Pressure of the Wind* in the month was 14·5 lbs. on the square foot on February 10. The mean daily *Horizontal Movement of the Air* for the month was 297 miles; the greatest daily value was 728 miles on February 10; and the least daily value was 88 miles on February 18.

Rain (0in.005 or over) fell on 10 days in the month, amounting to 0in.580 as measured by gauge No. 6 partly sunk below the ground; being 0in.900 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1920.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. 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.		hours.	hours.
Mar. 1	29·910	59·3	41·9	17·4	48·0	+ 7·6	44·3	40·2	7·8	18·6	0·2	75	107·3	34·8	43·6	0·000	wwP : wwP, sP : ssP, sP	6·5	10·8
2	30·024	51·1	38·6	12·5	47·8	+ 7·4	45·6	43·2	4·6	9·0	1·0	85	54·2	34·5	43·8	0·100	wP : wwP, mP : wP	0·0	10·9
3	30·431	51·0	30·0	21·0	40·3	− 0·2	37·9	34·8	5·5	11·7	0·0	81	95·0	29·3	43·9	0·000	wP, wwP : wwP, sP, ssP	7·3	11·0
4	30·096	54·1	31·1	23·0	41·6	+ 0·9	37·7	32·9	8·7	13·9	1·8	72	90·0	28·5	43·8	0·000	mP : mP, sP : ssP	8·7	11·0
5	29·709	54·5	37·6	16·9	46·7	+ 5·8	44·9	42·9	3·8	7·8	0·9	87	82·4	31·1	43·9	0·141	mP : wwP, sP : wwP, vP	1·0	11·1
6	29·282	56·7	44·9	11·8	50·8	+ 9·8	48·9	46·9	3·9	7·1	1·5	88	89·4	40·0	43·9	0·232	mP : vP : vP	0·5	11·2
7	29·446	47·1	31·7	15·4	40·3	− 0·7	36·0	30·5	9·8	15·6	2·5	67	91·0	31·0	43·8	0·021	mP : sP : vP	5·6	11·2
8	30·038	41·3	27·2	14·1	34·1	− 7·0	31·0	25·5	8·6	15·1	0·0	71	88·8	26·2	43·9	0·000	sP : ssP : ssP	7·8	11·3
9	30·302	42·6	27·3	15·3	35·6	− 5·4	32·2	27·0	8·6	15·1	3·8	70	84·8	22·2	43·8	0·003	sP : ssP : sP	2·3	11·4
10	30·162	49·0	36·9	12·1	41·6	+ 0·7	39·4	36·7	4·9	7·2	2·6	84	77·0	33·8	43·6	0·000	mP	0·3	11·4
11	29·993	50·9	38·2	12·7	43·8	+ 2·8	41·3	38·4	5·4	14·6	0·0	81	89·3	30·1	43·8	0·058	mP, v : ssP : ssP, mP	2·2	11·5
12	29·671	54·2	37·2	17·0	44·2	+ 3·1	40·6	36·4	7·8	16·7	0·0	74	101·8	30·8	43·5	0·050	mP, vv : ssP : sP	5·4	11·6
13	29·586	49·8	32·5	17·3	40·8	− 0·5	38·7	36·1	4·7	11·1	0·0	84	76·2	28·4	43·4	0·049	sP : sP, mP : vv, sP	1·0	11·6
14	29·001	47·7	34·2	13·5	40·5	− 1·0	39·0	37·1	3·4	12·7	0·0	88	89·7	28·8	43·6	0·159	mP : mP : vv	0·7	11·7
15	28·695	47·2	35·1	12·1	40·4	− 1·3	38·0	34·9	5·5	12·6	0·7	81	65·5	34·5	43·3	0·122	v, wP : v, ssP : ssP	1·7	11·8
16	29·490	47·9	36·0	11·9	41·7	− 0·2	37·1	31·4	10·3	15·3	3·5	67	89·0	30·0	43·4	0·000	sP : ssP : ssP, mP	3·0	11·8
17	29·753	61·2	44·2	17·0	52·4	+ 10·4	49·7	47·0	7·4	11·1	1·5	82	97·4	40·4	43·9	0·006	wP : mP, ssP : sP	3·0	11·9
18	29·959	59·6	41·9	17·7	50·7	+ 8·7	45·8	40·8	9·9	17·3	3·5	69	101·2	30·7	43·9	0·000	mP : sP : ssP	3·5	12·0
19	30·266	57·1	35·9	21·2	44·7	+ 2·8	40·5	35·6	9·1	15·7	2·0	70	94·4	28·2	43·9	0·000	sP : ssP : ssP, sP	6·2	12·0
20	30·330	61·9	36·6	25·3	48·3	+ 6·4	44·7	40·8	7·5	14·9	0·7	75	94·0	29·4	43·9	0·000	sP, ssP	7·4	12·1
21	30·269	65·9	34·7	31·2	50·1	+ 8·2	46·2	42·1	8·0	16·5	0·0	75	111·7	28·0	44·0	0·000	mP : sP : sP	7·7	12·2
22	30·086	65·5	36·3	29·2	50·2	+ 8·2	46·4	42·4	7·8	15·6	0·9	75	108·4	28·0	44·0	0·000	wP : sP, mP : mP, wP	7·9	12·2
23	29·886	65·0	37·0	28·0	49·7	+ 7·5	45·8	41·7	8·0	17·9	0·5	74	120·8	26·0	44·2	0·000	wwP : mP : mP, sP	8·0	12·3
24	29·858	58·2	39·6	18·6	48·3	+ 5·9	45·5	42·5	5·8	14·2	0·0	81	107·3	29·9	44·2	0·035	wwP : mP, sP : wP, wwP	0·8	12·4
25	29·682	58·5	45·1	13·4	50·4	+ 7·7	46·4	42·2	8·2	14·3	3·1	74	117·1	36·3	44·4	0·002	wwP : mP : mP, wP	5·1	12·4
26	29·555	55·8	37·3	18·5	47·8	+ 4·8	43·5	38·7	9·1	15·1	2·1	72	112·9	29·6	44·8	0·211	wP : mP : mP, wwP	6·6	12·5
27	29·418	58·3	45·2	13·1	50·5	+ 7·2	47·4	44·1	6·4	10·9	2·9	79	108·9	41·9	44·7	0·004	wwP : wwP, mP : wP	1·5	12·6
28	29·349	64·6	49·1	15·5	55·8	+ 12·1	50·6	45·8	10·0	16·3	4·5	69	120·7	42·5	44·9	0·000	wP : mP : mP	6·9	12·6
29	29·317	61·5	50·0	11·5	54·6	+ 10·5	51·5	48·5	6·1	10·3	1·6	79	82·4	43·0	45·1	0·173	mP, wwP : wP, mP : sP, mP	0·0	12·7
30	29·40	64·5	47·0	17·5	54·5	+ 10·0	51·3	48·2	6·3	12·6	1·0	79	104·5	43·7	45·5	0·017	wP : sP : sP, mP	0·8	12·8
31	29·415	64·0	39·9	24·1	50·8	+ 5·9	46·0	41·0	9·8	19·4	0·9	70	129·7	31·0	45·7	0·000	wP : mP : sP, ssP	11·0	12·8
Means	29·754	55·7	38·1	17·6	46·4	+ 4·5	43·0	39·2	7·2	13·7	1·4	76·7	96·2	32·3	44·1	Sum 1·383	..	4·2	11·8
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn on the following 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.754, being 0in.008 *higher* than the average for the 65 years, 1841–1905.

Temperature of the Air.

The highest in the month was 65°·9 on March 21; the lowest in the month was 27°·2 on March 8; and the range was 38°·7.
The mean of all the highest daily readings in the month was 55°·7, being 5°·9 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 38°·1, being 3°·0 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 17°·6, being 2°·9 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 46°·4, being 4°·5 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1920.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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.		
Mar. 1	0·0	0·00	0·0	0·00	WSW : Calm	SW : Calm	2·3	0·10	196	10 : 10 : 6	0 : 7, th.-cl, h : 9, th.-cl,h,lu.-ha
2	10·5	1·00	10·5	1·00	SW : WSW	W : NNW : NNE	2·4	0·21	246	10 : 10, fq.-m.-r, m, glm	10, oc.-r : 5
3	10·5	1·00	10·5	1·00	Calm : WSW	SW	1·0	0·08	191	0, f : tk.-f	0 : 1, ho.-fr
4	7·5	0·71	6·4	0·61	WSW : W	Calm	1·0	0·06	179	0, ho.-fr : 0, slt.-h	0, slt.-f : 0, slt.-f : 6, slt.-r
5	6·0	0·57	4·1	0·40	Calm : SW	WSW : SW : S	4·0	0·16	266	4 : 6 : 10, slt.-r	8, s : 9, fq.-shs : 10, r
6	6·5	0·62	4·8	0·46	S : SW	SSW : SW	6·4	0·63	425	8 : 7 : 10,s,n,cc.-th.-r	10, fq.-r, n : 10, fq.-r, w
7	8·1	0·77	7·5	0·71	W : WSW : WNW	NW : N : NNE	3·4	0·34	371	5 : 6, slt.-m : 3, slt. m	5 : 5, slt.-sh, sl, ho.-fr
8	10·0	1·00	10·0	1·00	N	N	3·3	0·30	298	0, ho.-fr : 6, ho.-fr : 1, slt.-h	2 : 1 : 0, ho.-fr
9	0·0	0·00	0·0	0·00	N : Calm : W	N : NW : Calm	1·2	0·06	184	0, ho.-fr : 2, f, ho.-fr	9, s.-cu : 10 : 10
10	0·0	0·00	0·0	0·00	Calm : SW	SSW	1·4	0·11	231	10 : 10, oc.-m.-r	10, s, s.-cu : 10
11	5·6	0·56	4·0	0·40	SW : N	N : NE : ESE	1·4	0·11	212	10, slt.-r : 10, slt.-r : 10, s, n	8, cu.-n : 5 : 5
12	9·7	0·97	9·3	0·93	SE : SSW : WSW	W : WSW	8·0	0·42	441	8 : 10, r : 10, s, n, w	7,s.-cu,cu,w: 5, th.-cl, w : 5, th.-cl, w
13	6·9	0·69	6·5	0·65	SSW	SSW	3·5	0·18	318	0, ho.-fr : 3, th.-cl : 9,th.-cl,so.-ha	10, n : 10, slt.-sh, r : 7, th.-r
14	0·8	0·08	0·5	0·05	Calm : S : WSW	SW : SE : SSW	2·7	0·18	254	3 : 9, slt.-r : 10, r	9, slt.-r : 10, slt.-r : 10, oc.-shs
15	1·9	0·20	0·8	0·08	SSW : WSW : W	W : WSW : WNW	9·0	0·96	568	10, sh : 10, w : 10, r, sn, w	9,s.-cu,n,oc.-r,w: 5, oc.-shs,w : 9, s
16	0·0	0·00	0·0	0·00	W : WNW : NW	WNW : W : SW	4·3	0·50	447	6 : 2, cu : 6, s, cu, w	8, w, th.-cl : 10 : 10
17	5·0	0·52	3·8	0·40	SW : WSW : W	W : WSW	5·0	0·52	491	10 : 10, slt.-r : 10, s, cu, w	5, cu, ci, w : 6, w : 10, w
18	9·8	1·00	9·8	1·00	WSW : SW	WSW : W : NW	8·1	0·69	495	5, w : 10 : 9, s, w	6, cu, s, w : 2, w : 0, m
19	9·8	1·00	9·8	1·00	WSW : NW	W : NW : S	1·1	0·04	203	0 : 1, h	3, h : 0, f
20	9·8	1·00	9·8	1·00	Calm : SW	WSW : NW : Calm	0·6	0·00	153	0 : 0, h	0, h : 0, slt.-f, d
21	..	..	..	..	Calm : SW	SSW : Calm	0·5	0·02	117	0, f, d : 0, slt.-f	4, s, cu : 8 : 1
22	9·8	1·00	9·8	1·00	Calm : E	E : SE	0·5	0·04	132	0, f, d : 0, slt.-h	0, cu : 0 : 0, a
23	9·8	1·00	9·8	1·00	ESE : Calm	SE : Calm	1·0	0·05	148	0, a : 0, f	0, : 1 slt.-d
24	1·5	0·15	1·5	0·15	SW : Calm	SW : SSW	4·1	0·26	286	0, d : 8 : 10, th.-cl,so.-ha	10, cu.-s : 10, th.-cl, slt.-r : 10, m.-r
25	8·0	0·81	6·9	0·71	SW	SSW : S : SW	6·3	0·68	421	10 : 9 : 6, cu.-s	6, cu.-n : 5 : 8, r
26	0·0	0·00	0·0	0·00	SW : S : SSW	SSW	8·7	1·02	533	5 : 6, cu, n, w	7, w : 10, slt.-r, w : 10, r, w
27	..	..	..	..	SW	SSW	6·8	0·68	430	10 : 10 : 10,oc.-slt.-r	9, s.-cu : 8, th.-cl, w, r : 7, th.-cl,w,lu.-ha
28	4·0	0·41	1·5	0·16	S : SSW	SSW : S : SSE	6·8	0·73	441	10, w : 10,w,slt.-r,t,l : p.-cl, w	7, w : 8 : 9, th.-cl, lu.-has
29	1·5	0·15	0·9	0·10	S : SE	E : SE : ENE	1·2	0·07	179	10 : 10,s,n,th.-cl,slt.-r	10, th.-cl, so.-ha : 7 : 10, th.-cl
30	..	..	..	..	E : ENE	NE : S	1·0	0·11	205	10, sh : 10 : 9, cu. s,oc.-slt.-r	10, s, n, so.-ha : 9 : 10, th.-cl
31	0·0	0·00	0·0	0·00	Calm : S	S : Calm	1·5	0·07	215	4 : 1 : 2, cu	p.-cl, cu : 3 : 7
Means	..	..	..	..	..	..	..	0·30	299		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 43°·0, being 3°·6 *higher* than
The mean *Temperature of the Dew Point* for the month was 39°·2, being 2°·9 *higher* than
The mean *Degree of Humidity* for the month was 76·7, being 3·8 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.239 being 0in.025 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs.8, being 0grs.3 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 545 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 6·0.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·356. The maximum daily amount of *Sunshine* was 11·0 hours on March 31.
The highest reading of the *Solar Radiation Thermometer* was 129°·7 on March 31; and the lowest reading of the *Terrestrial Radiation Thermometer* was 22°·2 on March 9.
The *Proportions of Wind* referred to the cardinal points were N. 4, E. 2, S. 11, W. 10. Four days were calm.
The *Greatest Pressure of the Wind* in the month was 9·0 lbs. on the square foot on March 15. The mean daily *Horizontal Movement of the Air* for the month was 299 miles; the greatest daily value was 568 miles on March 15; and the least daily value was 117 miles on March 21.
Rain (0in.005 or over) fell on 14 days in the month, amounting to 1in.383, as measured by gauge No. 6 partly sunk below the ground; being 0in.137 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1920.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. 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.		hours.	hours.
Apr. 1	29·233	50·7	38·8	11·9	43·1	− 2·2	41·9	40·5	2·6	6·9	0·0	91	72·9	31·1	45·8	0·335	mP : mP, wP : wP, mP	0·0	12·9
2	29·382	50·8	34·3	16·5	42·6	− 3·1	40·6	38·2	4·4	9·9	0·0	85	71·0	32·0	45·9	0·000	mP : mP, sP : sP, wP	0·6	13·0
3	29·506	53·9	40·1	13·8	45·0	− 1·0	42·7	40·0	5·0	10·6	0·7	83	110·5	35·3	46·0	0·003	wP : ssP, sP : ssP, sP	0·8	13·0
4	29·537	50·4	41·8	8·6	44·7	− 1·5	43·0	41·0	3·7	9·2	0·0	87	83·0	39·9	45·9	0·061	sP, mP : sP : sP, sN	0·3	13·1
5	29·692	53·5	41·4	12·1	45·1	− 1·2	42·5	39·5	5·6	11·1	1·5	81	87·8	37·0	45·8	0·024	mP, sP : sP, ssP	1·1	13·1
6	29·815	56·9	34·2	22·7	45·4	− 0·9	42·7	39·6	5·8	13·7	0·0	81	103·6	29·7	45·8	0·000	sP, mP : mP, sP : ssP, sP	1·0	13·2
7	29·680	58·1	41·3	16·8	48·3	+ 2·0	45·7	42·9	5·4	17·0	0·0	82	105·0	36·7	45·9	0·096	sP : sP : v, sP	2·9	13·3
8	29·509	57·5	48·6	8·9	51·6	+ 5·5	50·2	48·8	2·8	7·6	0·0	90	77·9	47·3	45·9	0·094	mP, sP : sP : sP	0·1	13·4
9	29·312	61·9	48·3	13·6	53·1	+ 7·1	51·9	50·7	2·4	8·1	0·4	92	87·8	44·9	46·0	0·129	sP : v, mP : mP	0·0	13·4
10	29·397	64·1	49·2	14·9	54·2	+ 8·3	50·6	47·1	7·1	14·8	0·4	77	127·6	44·2	46·2	0·000	wP, mP : sP : sP	4·4	13·5
11	29·269	59·2	46·0	13·2	49·9	+ 4·1	48·6	47·3	2·6	9·1	0·0	91	96·2	41·2	46·3	0·346	mP, v : v : v, mP	0·3	13·5
12	29·064	54·8	43·3	11·5	48·2	+ 2·3	46·4	44·4	3·8	8·9	0·0	87	87·0	35·8	46·6	0·131	mP, v : v : sP	0·7	13·6
13	29·087	60·0	42·6	17·4	49·5	+ 3·4	47·1	44·5	5·0	11·7	2·2	84	121·9	34·6	46·8	0·125	vP : mP, v : v, sP	3·4	13·7
14	29·339	58·0	42·2	15·8	48·7	+ 2·3	45·3	41·6	7·1	14·3	1·7	77	122·0	37·8	46·9	0·080	mP, sP : sP, mP : sP, v	6·6	13·7
15	29·124	59·6	50·1	9·5	53·6	+ 6·8	49·8	46·1	7·5	13·5	2·0	76	96·5	46·2	47·0	0·172	mP : mP : sP, mP	1·8	13·8
16	29·315	58·8	45·6	13·2	51·2	+ 4·0	47·3	43·2	8·0	12·5	2·8	75	118·2	37·8	47·1	0·132	wP, mP : mP : v, mP	5·6	13·8
17	29·664	55·4	42·5	12·9	49·5	+ 1·9	46·6	43·5	6·0	8·8	0·4	80	97·5	34·2	47·2	0·000	mP	0·0	13·9
18	29·724	51·6	40·0	11·6	48·1	+ 0·1	46·5	44·7	3·4	5·2	1·1	89	64·9	35·0	47·2	0·018	v, wP : sP : mP, sP	0·0	14·0
19	29·679	59·4	37·3	22·1	48·0	− 0·3	45·4	42·5	5·5	11·8	0·5	82	118·3	32·3	47·5	0·053	mP : mP, v : mP	1·5	14·1
20	29·404	54·0	39·4	14·6	45·5	− 3·0	42·7	39·5	6·0	13·8	0·0	80	120·8	34·0	47·5	0·211	mP : sP, v : sP, mP	5·3	14·1
21	29·752	54·9	39·8	15·1	46·2	− 2·5	41·8	36·8	9·4	14·4	2·7	71	110·3	35·0	47·5	0·009	mP, sP : ssP : ssP	2·7	14·2
22	29·921	57·0	35·1	21·9	46·0	− 2·7	43·1	39·8	6·2	15·0	0·0	80	116·8	32·4	47·8	0·281	sP : sP, mP : v, mP	3·5	14·2
23	29·964	58·2	44·4	13·8	50·8	+ 2·2	49·1	47·3	3·5	8·3	0·4	88	91·7	35·4	47·4	0·000	mP : ssP : sP, mP	1·5	14·3
24	30·007	66·2	44·1	22·1	53·5	+ 4·9	50·1	46·7	6·8	15·2	0·0	78	112·3	35·1	47·5	0·000	mP : sP : sP, mP	2·5	14·3
25	29·827	61·0	45·2	15·8	52·8	+ 4·2	47·5	42·2	10·6	19·4	2·7	67	111·1	38·7	47·7	0·004	wP : mP : sP, mP	6·0	14·4
26	29·773	56·8	44·3	12·5	49·4	+ 0·8	44·8	39·9	9·5	14·6	3·5	70	112·0	38·0	47·7	0·038	mP, sP : ssP, sP : sP	2·2	14·5
27	29·538	52·9	43·0	9·9	47·6	− 1·1	45·1	42·4	5·2	7·4	2·4	83	66·4	37·8	47·8	0·204	v, mP : wP, v : ssP	0·0	14·5
28	29·450	55·2	36·9	18·3	43·1	− 5·7	39·7	35·6	7·5	15·2	1·0	75	107·8	29·8	47·8	0·102	sP : v : v, wN	7·6	14·6
29	29·657	56·5	36·1	20·4	43·8	− 5·2	40·1	35·7	8·1	18·6	0·0	73	110·0	31·0	47·8	0·021	wN, wwP : wwP, vN : v, mP	6·2	14·7
30	29·784	58·8	32·9	25·9	46·7	− 2·4	42·0	36·7	10·0	19·2	0·6	69	121·2	28·0	47·7	0·000	wP, wwP : wwP, mP : mP	8·1	14·7
Means	29·547	56·9	41·6	15·2	48·2	+ 0·9	45·4	42·3	5·9	12·2	0·9	80·8	101·0	36·3	46·9	Sum 2·669	..	2·6	13·8
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following 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 $29^{in.}547$, being $0^{in.}201$ *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 66°·2 on April 24 ; the lowest in the month was 32°·9 on April 30 ; and the range was 33°·3.
The mean of all the highest daily readings in the month was 56°·9, being 0°·3 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 41°·6, being 2°·6 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 15°·2, being 3°·0 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 48°·2, being 0°·9 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1920.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	Wind as Deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M
	hours.		hours.				lbs.	lbs.	miles.		
Apr. 1	3·0	0·32	2·0	0·21	NE : Calm : SSW	N : Calm : S	0·6	0·00	92	10 : 10, oc.-r	10, slt.-glm, r : 10, r
2	3·9	0·41	0·5	0·05	Calm : W	WNW : WSW	0·5	0·03	161	10, f : 10, slt.-glm, f	10, f : 6, th.-cl, so.-ha, slt.-f : 10, h
3	0·0	0·00	0·0	0·00	SW : WSW	SW : NNW : NNE	0·5	0·02	136	10, slt.-f : 10, slt.-f, th.-cl	10, n, oc.-slt.-r : 10, slt.-r
4	0·0	0·00	0·0	0·00	NNE : N	N : NNW	2·4	0·19	238	10 : 10, oc.-slt.-r	10, fq.-r : 10, r, m.-r
5	..	..	..	..	WNW : NW	NW : NNW : Calm	1·0	0·10	211	10, r : 10, r : 10	8 : 8
6	..	..	..	..	Calm	SSW	0·6	0·03	132	6 : 3, f	9, 11, s : 10 : 9
7	0·0	0·00	0·0	0·00	SSW : SW	SW : SSW	5·4	0·32	309	8 : 9, th.-cl : 9,oc.-slt.-r	10, oc.-r, m.-r : 10, oc.-r, m.-r
8	0·0	0·00	0·0	0·00	SSW	SSW : S	1·7	0·10	192	10, oc.-r : 10, oc.-slt.-r	10, fq.-slt.-r : 10, oc.-r
9	0·0	0·00	0·0	0·00	Calm : E	S : SSW : SW	1·2	0·07	156	10, oc.-r, slt.-f : 10, oc.-shs	10, slt.-r : 10, slt.-r
10	1·5	0·18	0·9	0·11	SSW : SW	SW : Calm	4·4	0·27	281	10 : 10, th.-r.-sh : 6, cu, s.-cu	7 : 7
11	3·7	0·44	2·8	0·34	Calm : ESE	SE : S : SSW	2·1	0·11	182	8 : 9, fq.-slt.-r : 10,s,n,oc.-th.-r	10, hy.-r : 9, fq.-th.-r : 9
12	7·5	0·90	6·9	0·83	S : SSE : SE	SSE : S : SSW	3·5	0·23	253	p.-cl : 10, oc.-slt.-r : 10, r	10, oc.-r : p.-cl : 2
13	8·0	0·96	7·0	0·83	SSE : S : SSW	SSW : WSW : SW	3·9	0·40	338	3 : 10 : 6,cu,n,s,fq.-r	5,cu,n,s,fq.-r,so.-ha: 5, shs : 2
14	0·7	0.08	0·7	0·08	SSW : SW	SSW : S : SSE	5·5	0·64	400	2 : 2 : 5,cu,n,w,fq.-shs	6, s, cu, n,w : 10, r : 10, slt.-r
15	..	..	..	..	SSW	SSW : SW	18·0	1·79	638	10, slt.-r, w : 9, slt.-r. w : 9, fq.-r, w	9, hy.-r, w : 8, sh, w : 11, oc.-r, w
16	6·7	0·84	5·8	0·73	SSW : SW	SSW : SW	11·0	1·34	552	10, oc.-r, w : 8, w,oc.-r : 8,s.cu,n,oc.-r,w	7, cu, n, s,w : 8, hy.-shs,w : 2
17	0·0	0·00	0·0	0·00	Calm : NE : E	E : ENE	1·9	0·12	195	8, th.-cl : 10, th.-cl,so.ha: 10, ci-s, s, n	10 : 10 : 10, slt.-sh
18	8·0	1·00	7·7	0·96	NE : NNE	NNE : Calm : SW	0·6	0·02	128	10 : 10, slt-sh : 10, s, oc.-slt.-r	10, oc,-slt.-r, glm : 10, r : 0
19	6·6	0·87	5·8	0·77	Calm : SW	SW : WSW	4·6	0·35	305	2 : 8 : 9, s, s.-cu, n	10, s, n, slt.-r : 6 : 5
20	0·0	0·00	0·0	0·00	WSW : SW	SW : W : WNW	11·0	1·03	489	0 : 8, sh : 6, oc,-r, w	10, s.-cu,n,fq.-r,w : 10, fq.-shs,w : 10, oc.-slt.-r
21	7·6	1·00	7.6	1·00	WNW : NW	NW : NNW : W	7·7	0·74	477	10, oc.-slt.-r, w : 10, w, oc.-slt.r : 10, w, slt.-sh	8, ci.-cu : 3 : 0
22	0·0	0·00	0·0	0·00	WSW : SW	SSW : S	3·8	0·25	273	0 : 3 : 3, ci, s, n	10, r, : 10, m.-r
23	7·0	0·92	5·0	0·66	S : Calm	N : S : Calm	0·4	0·01	114	10 : 9, cu.-s	8, n, s, glm, h : 1, h : 0, h
24	1·0	0·13	0·4	0·05	WSW : W	WSW : W	3·3	0·31	316	0 : 9, th.-cl, m.-r	10, th.-cl. : 10, th.-cl
25	4·6	0·61	4·0	0·53	W : WNW : NW	WNW : NW : W	5·5	0·70	497	10, m.-r.-sh : 8, w	8, w : 6, oc.-lu.-has
26	1·8	0·23	0·4	0·05	W : NW : N	NNW : NW : W	4·0	0·46	395	8, sh : 8, cu.-s, oc.-r	9, cu.- s, h : 9, th.-cl : 10,ci.-s,th.-cl,lu.-ha
27	5·7	0·75	5·4	0·71	W	W : WNW : NW	6·3	0·68	475	10, m.-r, w : 10, cu.-s, oc.-slt.-r, w	10, r, w : 9, r : 6, n, cu
28	7·6	1·00	7·6	1·00	N : NW : N	NNW : SW : W	4·2	0·29	323	0 : 0 : 9, cu.-s	8, hy.-sh, sn : 3, hy.-sh, t, l : 1
29	7·5	0·99	7·3	0·96	W : WNW	NW : W	5·7	0·30	334	0 : 1 : 8, cu.-s	7, cu.-s : 9, sh : 2, s
30	4·0	0·53	0·5	0·07	W	W : WSW	4·4	0·27	282	0 : 0 : 6, cu, ci	8, : 8, slt.-sh : 9, th.-cl, lu.-ha
Means	..	..	..	..	..	..	..	0·37	296		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 45°·4, being 1°·5 *higher* than
The mean *Temperature of the Dew Point* for the month was 42°·3, being 2°·2 *higher* than
The mean *Degree of Humidity* for the month was 80·8, being 5·0 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in.270, being 0in.022 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs.1, being 0gr.2 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 538 grains, being 5 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 8·4.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·185. The maximum daily amount of *Sunshine* was 8·1 hours on April 30.
The highest reading of the *Solar Radiation Thermometer* was 127°·6 on April 10; and the lowest reading of the *Terrestrial Radiation Thermometer* was 28°·0 on April 30.
The *Proportions of Wind* referred to the cardinal points were N. 4, E. 1, S. 9, W. 11. Five days were calm.
The *Greatest Pressure of the Wind* in the month was 18.0 lbs. on the square foot on April 15. The mean daily *Horizontal Movement of the Air* for the month was 296 miles; the greatest daily value was 638 miles on April 15; and the least daily value was 92 miles on April 1.
Rain (0in.005 or over) fell on 21 days in the month, amounting to 2in.669, as measured by gauge No. 6 partly sunk below the ground; being 1in.103 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1920.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. 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.		hours.	hours.
May 1	29·653	63·1	40·9	22·2	52·3	+ 3·0	48·2	44·0	8·3	18·0	0·0	74	119·2	32·4	47·7	0·005	wP, wwP : wP : wP	1·2	14·8
2	29·357	67·4	48·0	19·4	56·6	+ 7·1	52·9	49·5	7·1	12·4	2·9	77	122·0	40·3	47·8	0·011	wP, wwP	2·4	14·8
3	29·777	63·2	43·9	19·3	51·6	+ 1·8	45·0	38·3	13·3	21·7	6·9	61	130·7	34·1	47·8	0·000	wwP, wP : wP, mP : sP	11·2	14·9
4	30·178	56·2	38·7	17·5	46·7	− 3·3	41·0	34·6	12·1	20·4	2·4	63	113·0	25·8	48·1	0·000	wP	8·0	14·9
5	30·386	59·2	32·0	27·2	47·4	− 2·9	43·0	38·1	9·3	18·4	1·2	71	108·2	20·4	48·0	0·000	wP : wP, wwP : wwP	3·9	15·0
6	30·015	55·6	47·2	8·4	50·3	− 0·2	46·6	42·7	7·6	15·4	1·4	76	78·2	45·0	48·1	0·190	wwP : wwP, mP : mP, wP	0·0	15·1
7	29·870	61·0	42·7	18·3	51·2	+ 0·5	47·0	42·6	8·6	16·8	2·5	73	119·7	35·9	48·2	0·050	mP : ssP : ssP	9·8	15·1
8	29·959	54·4	40·6	13·8	47·1	− 3·9	44·8	42·3	4·8	9·9	1·4	84	83·0	34·2	48·1	0·077	sP : sP, v : sP	0·3	15·2
9	29·977	62·0	41·2	20·8	51·7	+ 0·5	46·6	41·4	10·3	20·0	1·7	68	108·1	28·5	48·2	0·039	wP, v : mP : sP	7·2	15·2
10	30·109	61·8	39·3	22·5	50·3	− 1·2	45·1	39·6	10·7	19·0	2·6	67	120·0	27·2	48·4	0·000	mP, sP : sP, mP : mP	8·5	15·3
11	29·900	64·6	41·1	23·5	54·2	+ 2·4	48·8	43·5	10·7	20·3	0·7	67	130·6	30·7	48·6	0·000	wP : mP : mP	7·4	15·3
12	29·629	72·3	49·6	22·7	60·3	+ 8·2	56·1	52·5	7·8	15·2	1·2	75	129·3	42·5	48·8	0·005	mP, sP : mP : sP, mP	7·2	15·4
13	29·915	65·5	45·3	20·2	54·5	+ 2·1	48·3	42·3	12·2	19·8	1·8	63	122·6	36·2	48·8	0·000	mP, sP : sP, ssP : ssP	10·4	15·4
14	30·101	67·0	39·3	27·7	54·3	+ 1·7	48·9	43·7	10·6	17·6	1·8	67	128·5	30·4	49·0	0·000	mP, sP : sP, ssP : ssP	9·5	15·5
15	30·010	62·0	43·9	18·1	53·4	+ 0·6	47·7	42·0	11·4	19·2	0·9	65	129·8	33·0	49·3	0·000	mP	11·4	15·5
16	29·690	61·5	48·8	12·7	53·4	+ 0·4	49·3	45·2	8·2	14·2	3·5	74	135·3	42·5	49·3	0·008	wwP, mP : wP : wP	5·6	15·6
17	29·518	64·7	50·3	14·4	54·5	+ 1·4	51·6	48·8	5·7	10·3	2·2	81	107·0	43·5	49·6	0·111	wP, mP : mP : mP, wP	1·5	15·6
18	29·484	64·6	46·9	17·7	53·4	+ 0·1	48·8	44·2	9·2	19·8	1·3	71	125·9	39·0	49·7	0·000	mP : mP, v : mP	6·0	15·7
19	29·763	64·6	45·6	19·0	54·0	+ 0·5	47·1	40·3	13·7	23·3	4·3	59	130·8	35·3	49·9	0·000	wP, mP : mP : sP, mP	14·2	15·7
20	30·009	66·0	41·3	24·7	52·7	− 1·1	47·4	42·1	10·6	20·9	1·3	68	123·2	30·2	50·0	0·000	wP, sP : mP, sP : sP, wP	3·7	15·8
21	30·095	70·4	46·6	23·8	56·7	+ 2·5	50·2	44·2	12·5	22·9	2·7	63	133·6	33·3	50·2	0·000	mP : sP, mP : sP	10·5	15·8
22	30·232	72·9	41·8	31·1	57·7	+ 3·1	51·5	45·9	11·8	21·8	1·1	65	131·9	29·0	50·2	0·000	wP, sP : sP, .. : ..	13·0	15·9
23	30·120	71·9	45·1	26·8	59·4	+ 4·5	53·1	47·6	11·8	21·8	0·6	65	135·8	34·7	50·8	0·000	.. : mP : mP, wP	13·8	15·9
24	29·788	74·1	50·1	24·0	63·3	+ 8·0	57·5	52·6	10·7	19·1	1·8	68	136·9	35·9	50·9	0·000	wP : mP : mP	14·0	15·9
25	29·717	86·5	52·2	34·3	68·4	+ 12·9	62·1	57·2	11·2	23·0	0·8	67	147·2	39·8	51·0	0·000	mP, sP	10·6	16·0
26	29·810	78·6	54·3	24·3	64·5	+ 8·7	60·3	56·8	7·7	18·5	0·8	76	146·5	44·3	51·1	0·000	mP	3·9	16·0
27	29·842	75·3	53·5	21·8	61·0	+ 5·0	57·6	54·6	6·4	15·8	0·0	80	138·4	43·5	51·5	0·000	wP : mP : mP, wP	4·6	16·1
28	29·835	76·0	53·1	22·9	63·0	+ 6·8	58·2	54·2	8·8	18·4	0·4	73	141·3	45·5	51·8	0·003	wP : mP : mP	4·3	16·1
29	29·748	74·9	52·1	22·8	63·1	+ 6·7	58·8	55·2	7·9	15·8	0·6	76	138·5	45·2	52·0	0·026	mP, wP	6·2	16·1
30	29·817	69·4	50·1	19·3	58·2	+ 1·5	53·0	48·3	9·9	19·1	2·4	70	129·0	45·1	52·2	0·133	wP	5·1	16·2
31	30·034	67·0	47·9	19·1	56·4	− 0·7	50·8	45·6	10·8	18·2	1·7	67	134·1	41·8	52·5	0·030	wP, mP : ssP : sP	7·7	16·2
Means	29·882	66·9	45·6	21·3	55·5	+ 2·5	50·6	45·8	9·7	18·3	1·8	70·1	125·1	36·2	49·6	Sum 0·688	..	7·2	15·5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following 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.882, being 0in.088 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 86°·5 on May 25; the lowest in the month was 32°·0 on May 5; and the range was 54°·5.
The mean of all the highest daily readings in the month was 66°·9, being 3°·0 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 45°·6, being 1°·9 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 21°·3, being 1°·1 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 55°·5, being 2°·5 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1920.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	Wind as Deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours.		hours.				lbs.	lbs.	miles.		
May 1	0·0	0·00	0·0	0·00	Calm : SW : S	S : SSE : SE	3·4	0·11	194	9, th.-cl, lu.-ha : 9, th.-cl : 9, th.-cl	9, th.-cl : 9, fq.-slt.-r : 10
2	6·9	0·98	6·3	0·90	SW : WSW	WSW : W	5·8	0·75	419	10, oc.-m.-r : 10, s, n, slt.-sh	10, fq. slt.-r, w : 4, slt.-r : 2
3	7·0	1·00	7·0	1·00	W : WNW	W : WSW : WNW	7·5	1·02	530	2 : 2 : 4, cu, ci, w	6, w : 3 : 0
4	7·0	1·00	7·0	1·00	W : NW : N	N : NNW	3·5	0·28	297	0 : 0 : 5, cu.-s, cu	7, cu.-n, slt.-sh : 0
5	0·0	0·00	0·0	0·00	N : W : WSW	WSW	2·7	0·27	255	0, ho.-fr : 0, so.-ha : 9, cu.-s	9, cu, s : 10
6	4·0	0·57	3.5	0·50	WSW	WSW	6·3	0·52	367	10, r : 10, oc.-slt.-r	10, r : 10, r : 7, r
7	6·6	0·94	5·9	0·85	W : WNW	WNW : W	7·7	0·62	446	0 : p.-cl : v.-cl, cu.-s, fq.-shs, w	v.-cl, cu, cu.-s, fq.-slt, shs: 3 : 1
8	1·8	0·27	1·1	0·17	W	W : WNW	2·4	0·10	220	v.-cl : v.-cl, th.-cl : 10, s, n, oc.-slt.-r	10, fq.-r : 9, shs : 10
9	6·5	1·00	6·5	1·00	WNW : NNW : N	N : NNE	1·1	0·09	202	4 : 9, sh : 8, slt.-sh	1 : 0
10	6·5	1·00	6·5	1·00	NE : E : ESE	SE : ESE	1·2	0·09	179	0, ho.-fr : 1, ho.-fr : 4, s, n	4, cu, ci : 3 : 0, cu
11	0·6	0·10	0·4	0·07	ESE : SE	ESE	3·3	0·25	237	0 : 2, cu, ci.-s	8, ci.-s, cu, th, -cl: 10, th.-cl : 10, th.-cl, sh
12	3·0	0·45	2·2	0·34	Calm : SW	SW : WSW	5·1	0·31	272	8 : 3 : 7, s.-cu, sh	7, cu : 6 : 9, slt.-sh
13	6·5	1·00	6·5	1·00	WSW : W : WNW	WNW : NNW	4·7	0·54	400	3, th.-cl : 1 : 7, cu.-s, ci, s, so.-ha, w	6, cu, w : p.-cl : 0
14	6·5	1·00	6·5	1·00	Calm : W : NW	N : NNE : NE	1·5	0·07	185	0 : th.-cl : 3, h	7, cu.-s, cl.-cu : 4 : 0
15	..	..	..	..	ENE : E : SE	ESE : E	4·8	0·48	307	0 : 1, ci, cu	3, th.-cl, ci.-s: 9 : 8
16	1·5	0·25	1·3	0·22	E : ESE	ESE : E	6·7	0·53	364	8, m.-r.-sh : 3 : 3	4 : 3, oc.-shs
17	3·5	0·58	2·5	0·41	E : SW : WSW	SW : WSW	5·1	0·44	304	10 : 8 : 9, s.-cu, cu	10, slt.-sh : 10, r, w : 7, r
18	5·9	0·99	5·4	0·90	SW : SSW	SW	25·7	1·10	476	10 : 10, oc.-slt.-r, w	6, w : v.-cl, slt.-shs, w : 2, w
19	6·0	1·00	6·0	1·00	WSW	WSW : SW	6·7	0·83	487	2, th.-cl : 1 : p.-cl, cu, cu.-s	p.-cl, cu : 0 : 0
20	0·9	0·14	0·1	0·02	SW : WSW	Calm : S : SW	0·7	0·03	157	1, th.-cl : 6 : 10, ci.-s, cu, so.-ha	10, ci.-s, n, so.-ha : 10, th.-cl : 10
21	5·4	0·90	5·3	0·89	Calm : W	W	3·1	0·13	218	10 : v.-cl, h : p.-cl, cu, h	p.-cl, h : 2 : 1
22	6·0	1·00	5·8	0·96	Calm : W	W : Calm	1·8	0·13	187	1 : 2, th.-cl	1, th.-cl : 1, d
23	6·0	1·00	6·0	1·00	Calm : SE	SE : ESE	2·7	0·23	207	0 : 0	0 : 0
24	6·0	1·00	6·0	1·00	E : ESE	ESE	4·4	0·30	260	0 : 0	0 : 0
25	2·9	0·40	2·4	0·32	E : Calm : SE	WSW : E	1·6	0·08	161	0 : 1	4, cu, n, s, oc.-t : 7 : 6
26	3·0	0·50	2·7	0·45	Calm : WSW	SW	1·8	0·08	168	9 : 8, m.-r.-sh: 9, slt.-sh	8, s, n : 8, t : p.-cl, n
27	4·5	0·75	1·3	0·22	WSW : W	WSW	1·4	0·09	196	10 : 10 : 8, cu, cu.-s	8, cu, cu.-s : 8 : 5, th.-cl, lu.-ha
28	0·0	0·00	0·0	0·00	WSW : W	WSW : Calm	1·1	0·07	175	5 : 10, slt.-sh : 10, s.-cu	9, s.-cu : 9, th.-cl : 9, m.-r
29	5·1	0·85	4·9	0·82	Calm : SSE	SW : WSW	3·8	0·22	207	10, r : 10 : 9, slt.-sh	8, slt.-r : 3 : 3
30	0.6	0·10	0·1	0·02	WSW : W : WNW	W : WNW	3·6	0·54	411	6, th.-cl : 7 : 9, w	8, sh, w : 8, w : 9, r
31	0·6	0·10	0·4	0·06	W : NW : N	NW : W	3·3	0·26	308	8 : 1 : 7	8 : 9, m.-r, r
Means	..	..	..	..	..	..	..	0·34	284		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 50°·6, being 1°·6 *higher* than
The mean *Temperature of the Dew Point* for the month was 45°·8, being 0°·8 *higher* than
The mean *Degree of Humidity* for the month was 70·1, being 4·1 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.308, being 0in.009 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs.5, being 0grs.1 *greater* than
The mean *Weight of a Cubic Foot of Air* for the month was 537 grains, being 1 grain *less* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 5·9.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·463. The maximum daily amount of *Sunshine* was 14·2 hours on May 19.
The highest reading of the *Solar Radiation Thermometer* was 147°·2 on May 25; and the lowest reading of the *Terrestrial Radiation Thermometer* was 20°·4 on May 5.
The *Proportions of Wind* referred to the cardinal points were N. 3, E. 5, S. 5, W. 15. Three days were calm.
The *Greatest Pressure of the Wind* in the month was 25·7 lbs. on the square foot on May 18. The mean daily *Horizontal Movement of the Air* for the month was 284 miles; the greatest daily value was 530 miles on May 3; and the least daily value was 157 miles on May 20.
Rain (0in.·005 or over) fell on 12 days in the month, amounting to 0in.688, as measured by gauge No. 6 partly sunk below the ground; being 1in.·227 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1920.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. 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.		hours.	hours.
June 1	30·160	74·2	51·2	23·0	61·1	+ 3·7	56·6	52·7	8·4	18·7	0·2	75	130·2	43·4	52·5	0·000	mP : sP : ssP	4·6	16·2
2	30·117	78·7	51·1	27·6	65·3	+ 7·5	58·8	53·5	11·8	21·3	0·6	66	143·7	40·9	52·8	0·000	mP : sP : sP, mP	12·3	16·3
3	30·020	73·0	54·7	18·3	62·4	+ 4·3	56·2	50·9	11·5	21·1	0·2	66	132·0	54·3	52·8	0·000	mP : sP : sP, mP	6·2	16·3
4	29·984	60·1	47·4	12·7	52·4	− 5·9	46·9	41·3	11·1	16·9	7·1	67	119·9	40·6	52·8	0·012	wwP, mP : ssP : ssP	4·1	16·3
5	29·949	58·0	43·0	15·0	49·4	− 9·0	44·1	38·4	11·0	15·7	6·7	66	107·0	30·0	52·8	0·000	mP, sP : sP, mP : mP	4·2	16·4
6	29·883	63·0	40·2	22·8	49·9	− 8·4	44·5	38·8	11·1	18·5	1·6	66	133·2	29·0	53·0	0·000	mP : mP : mP, wP	6·0	16·4
7	29·863	65·0	36·5	28·5	50·8	− 7·4	45·3	39·6	11·2	21·0	0·0	66	136·0	26·8	53·0	0·000	wP, sP : ssP, sP : mP, wP	10·4	16·4
8	29·890	63·6	39·9	23·7	51·2	− 6·9	45·6	39·8	11·4	19·8	1·1	65	141·5	25·0	52·9	0·000	wP, mP, : sP, mP : mP	13·6	16·4
9	29·855	64·2	38·2	26·0	52·2	− 5·8	47·0	41·7	10·5	18·7	0·9	68	139·2	26·0	53·0	0·000	wP, mP : mP : mP, wwP	13·7	16·4
10	29·764	59·9	46·1	13·8	52·6	− 5·5	50·5	48·4	4·2	8·1	1·2	86	99·2	39·0	52·7	0·065	wwP, wP	2·7	16·4
11	29·644	69·4	50·9	18·5	59·3	+ 1·1	56·2	53·4	5·9	14·9	0·0	82	127·6	44·0	52·7	0·019	wwP : wwP : wP	3·7	16·5
12	29·619	75·7	52·6	23·1	62·1	+ 3·7	58·6	55·6	6·5	19·0	0·0	79	143·2	43·4	52·9	0·643	wP, mP : mP, v : v, wP	3·7	16·5
13	29·717	71·7	48·4	33·3	59·0	+ 0·5	55·6	52·5	6·5	17·3	0·0	80	133·3	37·8	53·0	0·000	wP	3·1	16·5
14	29·818	73·3	46·1	27·2	58·7	− 0·0	55·3	52·2	6·5	17·5	0·0	79	149·0	35·2	53·2	0·029	wP : wP, v : v, wP	7·5	16·5
15	29·831	73·2	51·3	21·9	62·7	+ 3·9	57·2	52·5	10·2	21·9	0·2	69	131·8	40·6	53·1	0·117	wP, wwN, wP, mP : mP, wP	8·5	16·5
16	29·740	76·8	53·4	23·4	65·3	+ 6·4	59·9	55·5	9·8	20·9	1·6	71	145·5	44·1	53·4	0·033	wP	9·9	16·5
17	29·753	76·8	51·9	24·9	62·8	+ 3·8	58·4	54·7	8·1	21·0	0·4	75	138·3	41·4	53·5	0·106	wP, mP : mP, v : wP	10·1	16·5
18	29·773	77·0	49·1	27·9	63·3	+ 4·1	57·4	52·5	10·8	22·5	0·0	68	147·0	38·2	53·8	0·000	wP	15·4	16·6
19	29·744	77·9	50·9	27·0	62·6	+ 3·1	57·9	53·9	8·7	19·0	0·0	73	150·0	41·9	53·9	0·000	wP	9·2	16·6
20	29·698	62·2	54·1	8·1	58·6	− 1·3	57·5	56·5	2·1	6·2	0·0	93	80·0	45·8	53·9	0·478	wwP, wwN	0·0	16·6
21	29·926	73·0	51·9	21·1	61·5	+ 1·2	56·2	51·7	9·8	19·4	0·8	70	131·2	45·6	54·1	0·000	wwP : wP, mP : mP	10·6	16·6
22	30·126	75·9	52·1	23·8	64·7	+ 4·1	57·1	50·8	13·9	22·7	3·6	61	139·0	44·7	54·2	0·000	mP	13·6	16·6
23	30·159	73·8	56·9	16·9	64·2	+ 3·3	57·4	51·8	12·4	20·4	5·1	64	125·0	49·0	54·4	0·000	wP : mP, sP : sP, mP	5·9	16·6
24	30·100	74·6	52·1	22·5	62·2	+ 1·0	54·6	48·1	14·1	21·5	3·1	60	130·8	43·3	54·6	0·000	mP, sP : sP, ssP : sP, wP	10·1	16·6
25	29·934	74·0	53·3	20·7	63·9	+ 2·5	57·0	51·3	12·6	18·2	1·7	63	129·0	42·8	54·7	0·000	mP, sP : mP, sP : sP	6·3	16·6
26	29·892	70·7	56·9	13·8	62·3	+ 0·8	57·7	53·8	8·5	11·1	2·8	74	105·2	47·1	54·9	0·004	mP, wP : mP : mP	0·2	16·5
27	29·834	72·0	56·5	15·5	62·3	+ 0·7	59·3	56·7	5·6	13·0	1·1	82	111·6	55·8	55·0	0·148	wwP : wP : wwP	0·0	16·5
28	29·703	75·6	56·8	18·8	63·9	+ 2·3	59·5	55·8	8·1	17·5	0·0	76	139·8	56·0	55·0	0·058	wwP : mP : mP, wwP	4·5	16·5
29	29·714	71·0	55·0	16·0	62·9	+ 1·3	58·8	55·3	7·6	16·1	1·1	76	118·2	47·5	55·0	0·000	wwP : mP : mP, wP	3·8	16·5
30	29·750	74·4	53·8	20·6	62·0	+ 0·5	55·3	49·5	12·5	22·9	2·2	64	145·8	46·4	55·2	0·000	wwP, wP : mP : mP, wP	11·5	16·5
Means	29·865	71·0	50·1	20·9	59·7	+ 0·3	54·7	50·3	9·4	18·1	1·4	71·7	130·1	41·5	53·6	Sum 1·712	..	7·2	16·5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk of the civil day named, to dawn of the following 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.865, being 0in.050 ***higher*** than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 78°·7 on June 2 ; the lowest in the month was 36°·5 on June 7 ; and the range was 42°·2.
The mean of all the highest daily readings in the month was 71°·0, being 0°·3 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 50°·1, being 0°·2 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 20°·9, being 0°·1 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 59°·7, being 0·3 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1920.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	Minoris. δ Ursae Duration.	Minoris. δ Ursae Fraction of Total Exposure.	Wind as Deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	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.	P.M.
	hours.		hours.				lbs.	lbs.	miles.		
June 1	6·0	1·00	6·0	1·00	W : NW	W : N	1·3	0·06	202	9 : 9	8 : 5 : 1, s
2	0·0	0·00	0·0	0·00	W : N	N : NNE	3·0	0·16	226	2, th.-cl : 2 : p.-cl, cu, ci	p.-cl, cu : 4 : 9
3	0·0	0·00	0·0	0·00	N : NNE	NNE : ENE	1·5	0·10	199	10 : 10, s, n, th.-cl	4 : 10
4	0·0	0·00	0·0	0·00	ENE : NE	NNE	3·8	0·55	413	10, r, m.-r : 9	7 : 8 cu.-n
5	..	..	..	..	NNE	NE : ENE	3·6	0·37	323	9 : 10	8 : 5 : 0
6	..	..	..	..	NNE	NNE : NE	2·0	0·11	172	4, th.-cl : 6 : 3, cu	8 : 9, th.-cl : 0
7	..	..	..	..	Calm : NNE	NE : SE	1·6	0·10	162	0 : 7 : 8, cu, s	5 : 3 : 4, ci, n
8	5·5	1·00	5·5	1·00	Calm : E	ESE : SE	2·0	0·15	182	8 : 2 : 2, cu	2, cu, ci : 0
9	4·5	0·82	0·0	0·00	E : ESE	ESE : E	3·3	0·29	282	0 : 1 : 3	1 : 1 : 2
10	2·8	0·57	1·9	0·37	E : ESE	ESE	2·2	0·20	235	8 : 5 : 10, r	9, s.-cu : 3 : 7
11	2·8	0·56	2·1	0·41	ESE : SE : S	S	1·5	0·10	167	3 : 10, slt.-r : 10, fq.-slt.-r	10 s.-cu, fq.-slt.-r : p.-cl : 8, n, s, slt.-r
12	1·9	0·37	1·4	0·28	Calm : SE	SE : SW	4·8	0·16	157	8 : 5 : 9, s.-cu, n	10, sh, t : 10, t.-sm, r, hl : 9, r
13	5·0	1·00	4·9	0·98	W : Calm : S	SSW : Calm	0·5	0·01	108	9 : th.-cl : 9, s	10, th.-cl, s : 9 : 0
14	3·2	0·64	3·0	0·61	Calm	ESE	1·4	0·06	126	0 : p.-cl, so.-ha : 6, cu, cl, so.-ha	9,n,ci.-s,oc.-t,oc.-shs,so-ha : 3,hy.-sh,oc. t: 1
15	2·2	0·43	1·5	0·30	ENE : E	E : ESE	3·5	0·17	195	10 : 8, th.-cl, cu, s.-cu, n	4,cl.-s,cu,th.-cl,so.-ha: 2 : 10, n
16	3·1	0·62	3·0	0·60	E : ESE	SSE : SE	2·9	0·14	190	3, slt.-sh : 1 : 6, cu	7 : 9 : 7, slt.-sh, oc.-t.
17	4·2	0·83	4·2	0·83	Calm : E : SE	SE : SW	4·3	0·07	140	0, m : 1, m, h : 4, cu, cu.-r	v.-cl,cu.-n,t.-sm,shs: 3 : 5
18	4·2	0·84	3·4	0·68	Calm : W : SW	SW	1·5	0·07	175	0 : 1 : 3, ci, cu	3, cu : 1
19	2·9	0·58	2·5	0·51	Calm : SW	WSW : W	1·3	0·06	156	3, th.-cl : 9 : 8,s.-cu, cu	p.-cl, cu- cu.-s : 3 : 1, s
20	2·7	0·53	2·4	0·47	WSW : SW	SW : WSW : W	2·1	0·18	251	10 : 10, r	10, r : 9, r
21	1·3	0·25	0·7	0·14	WNW : NW	W	1·6	0·18	258	2, th.-cl : 2 : 6, cu, s	9 : 9 : 10, oc.-slt.-shs
22	1·9	0·38	1·4	0·28	WNW : W	W	1·4	0·12	220	7 : 7 : 2, cu	2 : 2 : 10
23	4·5	0·89	4·0	0·79	W : NW	N : NNE : NE	1·4	0·12	244	8 : 8, s, cu.-s	8, cu, cu.-s : 6, t : 3
24	3·0	0·59	1·9	0·38	NE	Calm : NW : E	1·0	0·05	150	3, th.-cl : 3, th.-cl : 6, cu	6, cu, s.-cu : v.-cl : 8, n, cu
25	1·9	0·38	1·4	0·29	Calm : W	W : WNW	2·5	0·20	269	7, th.-cl : 3, so.-ha : 7, cu, n	9 : 9
26	0·0	0·00	0·0	0·00	WNW : W	W : WNW	2·1	0·11	242	9, th.-cl : 9 : 10	10, oc.-slt.-r : 10, oc.-shs
27	0·0	0·00	0·0	0·00	WNW	W : WSW WNW : W : WSW	1·6	0·07	188	10 : 10, s, n	10, oc.-r : 10, r
28	0·0	0·00	0·0	0·00	W : WNW : NW	WSW : W	3·2	0·28	314	10, r : 9, s.-cu, n	8 : 10 : 10, fq.-slt.-r
29	5·0	1·00	5·0	1·00	WSW : W	W : WSW	4·8	0·49	337	10, fq.-slt.-r : 10, s, n, fq.-slt.-r	9, s.-cu : 3 : 0
30	0·1	0·02	0·1	0·02	WSW : W : WNW		3·0	0·29	324	0 : 1 : p.-cl, cu, s.-cu	6, cu, cu.-s, ci : 10, slt.-sh
Means	..	..	..	..	..	..	..	0·17	220		
Number of Column for Reference	20	21	22	32	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 54°·7, being 0°·2 *lower* than
The mean *Temperature of the Dew Point* for the month was 50°·3, being 0°·6 *lower* than
The mean *Degree of Humidity* for the month was 71·7, being 1·9 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.365, being 0in.008 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs.1, being 0grs.1 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 532 grains, being 1 grain *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6·8.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·436. The maximum daily amount of *Sunshine* was 15·4 hours on June 18.
The highest reading of the *Solar Radiation Thermometer* was 150°·0 on June 19; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°·0 on June 8.
The *Proportions of Wind* referred to the cardinal points were N. 6, E. 6, S. 3, W. 10. Five days were calm.
The *Greatest Pressure of the Wind* in the month was 4·8 lbs. on the square foot on June 12 and 29. The mean daily *Horizontal Movement of the Air* for the month was 220 miles; the greatest daily value was 413 miles on June 4; and the least daily value was 108 miles on June 13.
Rain (0in.005 or over) fell on 11 days in the month, amounting to 1in.712, as measured by gauge No. 6 partly sunk below the ground; being 0in.326 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1920.	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.	Daily Duration of Sunshine	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. 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.		hours.	hours.
July 1	29·686	66·0	55·8	10·2	58·9	− 2·6	56·4	54·2	4·7	9·6	1·6	84	101·0	51·7	55·3	0·168	wwP, wP	0·0	16·5
2	29·539	69·9	55·6	14·3	60·6	− 1·0	56·8	53·5	7·1	15·0	1·1	78	131·4	50·8	55·4	0·103	wwP : mP : mP, wP	5·1	16·5
3	29·661	72·0	49·4	22·6	60·0	− 1·8	55·7	51·9	8·1	18·7	0·0	75	151·0	41·7	55·8	0·000	wP : mP : mP	4·4	16·4
4	29·766	71·2	48·1	23·1	59·0	− 3·1	54·5	50·5	8·5	19·4	0·2	74	157·1	40·3	55·8	0·000	wP, mP : mP : mP, wP	3·9	16·4
5	29·669	55·3	49·1	4·2	50·6	− 11·7	49·1	47·5	3·1	6·7	1·0	89	70·0	49·2	55·4	0·606	mP : wwP : wwP	0·0	16·4
6	29·505	66·3	49·7	16·6	56·8	− 5·6	54·6	52·6	4·2	10·4	0·4	86	125·2	50·0	55·6	0·149	wP, mP : wwP, sP : mP	1·2	16·4
7	29·535	66·4	51·7	14·7	56·8	− 5·6	54·6	52·6	4·2	12·1	0·0	86	127·0	50·0	55·7	0·172	wP : wwP, mP : mP, wP	0·8	16·4
8	29·558	64·0	49·2	14·8	55·9	− 6·5	53·0	50·3	5·6	15·6	0·0	82	119·0	42·1	55·4	0·224	wwP : mP, wwP : mP, wwP	6·9	16·3
9	29·745	68·6	50·4	18·2	58·5	− 3·9	53·9	49·8	8·7	16·6	0·6	73	127·4	44·6	55·3	0·000	wwP : mP : sP, mP	7·5	16·3
10	29·903	66·1	50·9	15·2	57·8	− 4·7	54·7	52·0	5·8	12·2	1·4	81	121·0	44·2	55·4	0·004	wP, mP : mP : mP, wwP	2·8	16·3
11	29·885	75·0	55·1	19·9	61·9	− 0·8	58·1	54·9	7·0	17·1	0·0	78	146·5	51·7	55·5	0·076	wwP : mP : mP	5·6	16·3
12	29·729	74·8	57·7	17·1	63·7	+ 0·8	60·4	57·7	6·0	14·3	0·0	81	134·0	52·9	55·6	0·436	wP, wwP : mP : mP	3·7	16·2
13	29·841	70·6	53·1	17·5	60·8	− 2·3	54·5	49·0	11·8	19·7	3·4	65	130·9	44·7	55·6	0·000	mP : sP : sP, mP	9·7	16·2
14	29·975	73·0	51·7	21·3	60·9	− 2·4	54·3	48·5	12·4	19·1	3·9	64	143·4	42·4	56·0	0·000	wP, mP : mP : mP	12·4	16·2
15	29·856	72·2	53·1	19·1	61·5	− 1·9	56·0	51·3	10·2	20·8	1·8	69	129·7	45·0	56·0	0·004	mP, V : V, mP : sP	6·1	16·1
16	29·850	74·4	49·1	25·3	62·3	− 1·1	56·4	51·3	11·0	20·2	0·8	68	145·4	42·0	56·1	0·000	mP : mP : sP, mP	14·2	16·1
17	29·693	75·8	54·8	21·0	63·0	− 0·4	59·0	55·6	7·4	14·7	1·6	77	142·3	45·7	56·2	0·004	wP, mP : mP : mP, wP	5·3	16·0
18	29·850	75·6	53·2	22·4	61·6	− 1·7	54·9	49·1	12·5	22·6	2·7	64	143·6	42·4	56·3	0·000	wP : mP, wP : wP, mP	8·3	16·0
19	30·099	75·6	48·9	26·7	62·1	− 1·1	55·4	49·6	12·5	22·2	0·8	64	140·3	39·1	56·4	0·000	wP, mP : sP : sP	11·7	16·0
20	30·097	74·6	51·7	22·9	62·7	− 0·5	58·0	54·0	8·7	14·9	3·2	74	145·5	41·1	56·7	0·000	mP	5·8	15·9
21	29·925	72·5	60·2	12·3	64·6	+ 1·4	62·7	61·2	3·4	8·5	0·5	89	102·8	52·6	56·7	0·402	wP : mP, wwP : wwP	0·0	15·9
22	29·678	74·8	58·1	16·7	64·1	+ 1·0	58·8	54·4	9·7	19·4	0·6	71	137·8	54·6	56·9	0·190	wwP : sP : sP, mP	6·7	15·8
23	29·504	66·8	56·9	9·9	60·1	− 2·9	56·7	53·7	6·4	11·7	1·9	80	125·0	54·0	56·9	0·000	wP, mP : mP : mP, wwP	1·1	15·8
24	29·596	66·9	46·5	20·4	56·6	− 6·3	51·0	45·8	10·8	20·5	1·9	67	125·7	38·5	57·0	0·256	.. : .., sP : sP	8·6	15·8
25	29·742	68·5	44·0	24·5	54·2	− 8·5	50·2	46·3	7·9	18·0	0·0	74	134·7	36·8	56·8	0·116	mP : wP : wP, wwP	5·8	15·7
26	29·514	61·7	51·1	10·6	56·1	− 6·4	52·3	48·7	7·4	10·7	1·2	76	99·2	43·1	56·9	0·021	wwP, mP : mP, sP : sP, mP	2·7	15·7
27	29·856	63·3	44·2	19·1	52·5	− 9·9	49·7	46·9	5·6	13·9	0·0	82	100·7	37·4	56·8	0·020	mP, wP : wP, V : sP, mP	0·9	15·6
28	29·871	62·5	45·2	17·3	53·1	− 9·2	50·9	48·7	4·4	14·4	0·4	85	97·2	39·6	56·6	0·068	wP, mP : mP, wwP : wP	0·0	15·6
29	29·892	70·7	53·2	17·5	60·4	− 1·9	55·1	50·5	9·9	17·4	0·4	70	127·1	46·4	56·5	0·000	wP, mP : sP : ..	7·9	15·5
30	29·773	66·8	56·2	10·6	61·0	− 1·3	59·2	57·7	3·3	6·9	1·3	89	94·0	52·0	56·2	0·213	.. : .. : mP, wP	0·4	15·5
31	29·664	74·1	54·2	19·9	62·5	+ 0·3	58·9	55·8	6·7	17·3	0·4	79	142·2	51·0	56·5	0·000	mP, sP : mP : mP, wP	2·6	15·4
Means	29·757	69·5	51·9	17·6	59·4	− 3·3	55·3	51·8	7·6	15·5	1·1	76·6	126·4	45·7	56·1	Sum 3·232	..	4·9	16·0
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk of the civil day named, to dawn of the following 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.757, being 0in.042 *lower* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 75°·8 on July 17; the lowest in the month was 44°·0 on July 25; and the range was 31°·8.
The mean of all the highest daily readings in the month was 69°·5, being 4°·7 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 51°·9, being 1°·4 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 17°·6, being 3°·2 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 59°·4, being 3°·3 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1920.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	Wind as Deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours.		hours.				lbs.	lbs.	miles.		
July 1	1·7	0·34	1·1	0·22	W : WSW	WSW : SW	3·2	0·30	295	10 : 10, oc.-r	10, oc.-n.-r : 10, r : 7
2	0·9	0·18	0·5	0·10	SSW : SW : WSW	WSW	4·0	0·40	338	10, oc.-th.-cl, sh : 10, fq.-r : 7, cu, s.-cu	9, slt.-sh : 9 : 9
3	4·6	0·91	4·0	0·80	WSW : SW	WSW : W : Calm	1·7	0·14	208	7 : 9 : 9, slt.-sh	8, cu.-n, s : 9, slt.-shs : 3, n, cu, l
4	0·0	0·00	0·0	0·00	Calm : E : SE	E : ENE : NE	3·9	0·32	289	8, l : 8 : 9, slt.-sh, t	9, fq.-shs, t : 10 : 10, slt.-sh
5	0·0	0·00	0·0	0·00	NNE : N : NNW	WNW : W	1·8	0·15	271	10 : 10, r	10, r : 10, r : 10, sh
6	0·0	0·00	0·0	0·00	W : WSW	WSW : WNW	3·6	0·19	265	10, m.-r.-sh : 10, r	10, cu, ci, r : 10, sh : 10, n, s, m.-r
7	1·3	0·27	0·7	0·14	Calm : SW : S	SSW : S : WSW	2·2	0·12	197	10, r : 10, sh : 10, r	10 : 10, oc.-r : 9, oc.-shs
8	3·3	0·66	3·0	0·60	Calm : SW : SSW	SW	5·5	0·51	331	8 : 7, fq.-shs : 5,cu,s,n,oc.-shs	9, s.-cu, n, fq.-shs : 9, fq.-shs : 6, oc.-shs
9	4·6	0·92	3·9	0·78	WSW : W : WNW	W : WNW	4·2	0·30	329	2 : 9 : 9, slt.-sh	9, cu, s.-cu, slt.-sh : 3 : 1, ci.-cu, cl.-s
10	0·1	0·01	0·1	0·01	WSW	W : WSW	4·8	0·34	309	5 : 8 : 9, s,n,m.-r	10, slt.-r, n.-r : 10, slt.-r, m.-r
11	0·0	0·00	0·0	0·00	W	WSW	1·3	0·10	192	6 : 10, r : p.-cl	7, sh : 9 : 10, m.-r.-sh
12	3·0	0·60	1·9	0·38	Calm : SW	WSW : W	3·0	0·15	223	10, hy.-r, oc.-slt.-r: 9,s.-cu,n,oc.-slt.-r	9, s, s.-cu : 9, s, n, slt.-sh
13	5·0	1·00	4·9	0·98	W : WNW	WNW	4·2	0·47	442	p.-cl : 4 : 6, s.-cu, n	6, w : 7, w : 1
14	3·5	0·70	2·9	0·58	WNW : W	WSW	2·6	0·18	265	p.-cl : 9 : 7, s.-cu	5, cu : 2 : 2
15	..	..	..	..	Calm : WSW	W : WNW	3·7	0·18	253	6, slt.-shs : 9, slt.-shs : 9, cu, s	8, slt.-sh : 2 : 0
16	4·8	0·97	4·4	0·87	Calm : SW	SW : S	3·2	0·16	214	3, th.-cl : 5, th.-cl, ci.-s, so. na	p.-cl, cu : 1 : 6, th.-cl
17	3·0	0·61	2·4	0·49	S : SW	SW : WSW	3·6	0·24	269	3, th.-cl : 6 : p.-cl, ci.-s	8, slt.-shs : 3, m.-r.-sh
18	4·9	0·98	4·5	0·90	Calm : W	W : WSW	2·0	0·15	245	9 : 7 : 6, cl.-cu, s.-cu	7, s.-cu, cu : 7, cu : 2, cu, n
19	5·0	1·00	5·0	1·00	WSW : W	W : WNW : WSW	1·5	0·10	213	3, th.-cl : 2 : p, s.-cu	6, s.-cu : 1, ci
20	1·8	0·35	1·5	0·30	WSW	WSW	3·3	0·38	342	0 : 10, s	9, s, s.-cu : 7, th.-cl
21	0·0	0·00	0·0	0·00	WSW	Calm : WSW	1·0	0·03	166	8 : 10 : 10, n, oc.-m.-r	10, r : 10, r
22	0·5	0·09	0·1	0·01	WSW : W	W : WNW	4·1	0·40	367	10, r : 10, slt.-sh : 8, cu.-n, s	6, w : 7 : 10
23	0·4	0·07	0·3	0·05	WSW : SW	SW	8·0	0·73	415	9 : 9, slt.-sh : 10, oc.-slt.-r, w	10, oc.-slt.-r, w : 9 : 9, oc.-slt.-shs
24	5·0	1·00	5·0	1·00	WSW : NNE : NNW	NNW : N : WSW	4·5	0·43	357	10, m.-r, r : 10, r : 9	8 : p.-cl : 0
25	0·0	0·00	0·0	0·00	WSW : W	SSW : S	2·5	0·20	230	0 : 0 : 7	10, sh : 10, slt.-r : 10, r
26	3·1	0·62	2·8	0·56	SSW : SW : W	NW : WNW	4·5	0·35	320	8, shs : 8 : 10, sh	10, oc.-m.-r : 7 : 7
27	4·4	0·88	3·8	0·77	Calm : N : W	Calm : Var.	0·5	0·01	134	v.-cl : 9, shs : 10, m, slt.-r, t	9, oc.-r : 7, slt -glm, m: 3, m
28	1·3	0·27	0·9	0·18	SW : WSW	SW	3·5	0·23	257	0, m : 10 : 10, shs	10, r : 10, r : 7
29	1·8	0·36	1·5	0·29	NW : N	WNW : W : WSW	2·0	0·24	306	9 : 8, cu	5, cu.-n : 3 : 9, th.-cl
30	2·1	0·43	0·9	0·18	W : WSW	WSW : W	2·9	0·30	317	10, slt.-shs : 10, r	10, r : 8 : v.-cl
31	1·4	0·23	0·8	0·13	Calm	Calm : SW	0·6	0·03	123	7, th.-cl : 10 : 8	8 : 8, sh : 9, th.-cl
Means	..	..	..	..	..	..	..	0·25	274		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 55°·3, being 2°·6 *lower* than
The mean *Temperature of the Dew Point* for the month was 51°·8, being 2°·0 *lower* than
The mean *Degree of Humidity* for the month was 76·6, being 3·8 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in.385, being 0in.030 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs.3, being 0grs.3 *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 530 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 8·2.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·306. The maximum daily amount of *Sunshine* was 14·2 hours on July 16.
The highest reading of the *Solar Radiation Thermometer* was 157°·1 on July 4; and the lowest reading of the *Terrestrial Radiation Thermometer* was 36°·8 on July 25.
The *Proportions of Wind* referred to the cardinal points were N. 3, E. 1, S. 6, W. 18. Three days were calm.
The *Greatest Pressure of the Wind* in the month was 8·0 lbs. on the square foot on July 23. The mean daily *Horizontal Movement of the Air* for the month was 274 miles; the greatest daily value was 442 miles on July 13; and the least daily value was 123 miles on July 31.
Rain (0in.·005 or over) fell on 16 days in the month, amounting to 3in.232, as measured by gauge No. 6 partly sunk below the ground; being 0in.·833 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1920.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. 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.		hours.	hours.
Aug. 1	29·622	73·0	52·8	20·2	61·8	— 0·4	55·7	50·5	11·3	21·2	2·5	67	133·6	46·4	56·5	0·000	wP, mP : mP : mP	9·0	15·4
2	29·699	67·1	51·7	15·4	56·5	— 5·6	54·5	52·7	3·8	7·9	0·6	87	112·2	45·7	56·3	0·453	wP, mP : wP : wwP	0·7	15·3
3	29·737	72·0	51·6	20·4	60·2	— 1·9	54·1	48·7	11·5	21·4	1·0	66	144·0	44·6	56·8	0·007	wwP : sP, mP : mP	12·4	15·3
4	29·761	66·8	50·7	16·1	57·1	— 5·0	52·2	47·7	9·4	15·0	4·0	71	116·5	43·9	56·7	0·000	wP, mP : mP : mP, wP	2·8	15·2
5	29·404	70·0	54·0	16·0	59·4	— 2·7	55·8	52·6	6·8	17·4	0·6	79	131·5	50·1	56·8	0·174	wwP : mP, v : wP	4·7	15·1
6	29·616	65·3	52·2	13·1	58·3	— 3·9	53·6	49·4	8·9	15·5	2·9	73	106·0	46·7	56·7	0·017	wwP, : mP : vP, mP	1·5	15·1
7	29·958	70·5	48·7	21·8	58·4	— 3·8	53·5	49·1	9·3	16·6	1·4	72	133·8	41·1	56·8	0·000	mP : mP, wP : wP	5·4	15·0
8	29·898	75·2	47·7	27·5	62·6	+ 0·3	56·4	51·1	11·5	22·3	0·6	67	141·1	42·1	56·9	0·000	wP : wP : wP, mP	13·0	15·0
9	29·845	67·7	55·1	12·6	60·8	— 1·5	56·7	53·2	7·6	13·2	2·1	76	103·8	47·6	56·6	0·009	wP : mP : sP, mP	5·2	14·9
10	29·959	66·9	51·3	15·6	59·0	— 3·3	54·8	51·0	8·0	12·6	1·8	75	96·1	45·3	56·6	0·000	. . : sP : sP, mP	2·5	14·9
11	30·085	70·0	55·2	14·8	60·7	— 1·7	56·9	53·7	7·0	14·2	0·6	78	127·5	47·1	56·9	0·002	mP : sP : mP, wP	2·8	14·8
12	30·128	69·4	50·3	19·1	59·7	— 2·8	55·8	52·4	7·3	17·2	0·0	77	121·0	44·1	56·8	0·000	wP : mP, wP : wP	3·3	14·8
13	30·070	70·8	45·7	25·1	58·2	— 4·3	54·7	51·6	6·6	15·7	0·0	79	135·0	40·5	56·7	0·000	wP : mP : mP, wwP	9·5	14·7
14	30·010	77·6	46·4	31·2	61·6	— 0·9	56·2	51·6	10·0	22·5	0·4	70	136·5	41·2	56·8	0·000	wwP : sP, mP : mP	9·7	14·6
15	30·049	75·6	58·1	17·5	65·0	+ 2·6	58·9	53·9	11·1	20·1	4·2	68	135·2	45·2	56·7	0·000	wP, mP : mP : mP	8·2	14·6
16	30·069	73·4	50·6	22·8	62·3	— 0·0	57·1	52·6	9·7	16·1	0·8	71	120·9	42·2	56·8	0·000	wP : sP : sP, mP	5·4	14·5
17	29·915	69·5	58·1	11·4	61·6	— 0·5	56·8	52·7	8·9	14·2	5·5	73	105·3	51·6	56·9	0·000	mP : sP, mP : sP, mP	1·0	14·4
18	29·682	68·0	52·0	16·0	58·2	— 3·7	55·6	53·3	4·9	11·7	0·0	84	98·2	48·0	57·0	0·595	wP, mP : mP : wwP	1·4	14·4
19	29·703	63·0	48·0	15·0	52·8	— 8·9	48·9	45·0	7·8	17·7	1·4	75	107·4	41·9	57·0	0·333	wwP : vP, sP : sP, mP	5·0	14·3
20	29·919	62·9	41·3	21·6	52·1	— 9·4	47·5	42·8	9·3	15·2	1·6	71	114·6	33·1	56·9	0·000	mP : sP : sP	5·5	14·3
21	29·926	61·0	42·0	19·0	52·6	— 8·7	48·6	44·6	8·0	12·6	2·0	75	89·9	29·1	56·9	0·000	mP : sP : sP, mP	4·0	14·2
22	29·845	63·9	49·0	14·9	54·9	— 6·2	50·9	47·1	7·8	15·4	1·9	75	112·1	40·8	56·5	0·025	wP, wwP : mP : mP	4·7	14·2
23	29·902	67·3	45·2	22·1	55·5	— 5·4	52·5	49·7	5·8	12·7	0·0	82	117·8	36·1	56·5	0·000	wP, mP : sP : mP	4·0	14·1
24	29·921	65·7	49·7	15·4	55·9	— 4·9	53·1	50·5	5·4	13·0	0·0	83	112·7	39·3	56·2	0·000	wP : mP, sP : ssP, wP	3·7	14·0
25	29·966	62·7	46·4	16·3	55·4	— 5·3	52·7	50·1	5·3	9·9	0·6	83	83·2	37·5	56·1	0·000	wwP : wP, mP : sP, mP	0·0	14·0
26	30·128	64·5	47·9	16·6	55·7	— 5·0	51·6	47·7	8·0	15·1	2·6	75	131·6	35·5	56·1	0·000	wP : sP : sP, mP	5·7	13·9
27	30·197	65·0	45·4	19·6	55·0	— 5·6	51·0	47·2	7·8	14·7	1·1	75	121·7	34·0	56·1	0·000	wwP : mP : mP, wP	6·5	13·8
28	30·246	71·8	51·4	20·4	59·7	— 0·7	55·7	52·2	7·5	14·6	1·7	77	114·9	41·7	56·0	0·000	wP : mP : wP, wwP	2·3	13·8
29	30·259	63·2	49·2	14·0	55·2	— 5·1	51·6	48·2	7·0	11·8	2.0	78	112·9	41·4	56·0	0·000	wP : mP : mP, wwP	1·7	13·7
30	30·131	60·3	45·9	14·4	52·1	— 8·0	48·4	44·6	7·5	13·6	0·6	76	112·6	37·8	55·9	0·000	wwP : sP : mP	7·0	13·7
31	30·006	59·9	45·8	14·1	53·6	— 6·3	50·7	47·9	5·7	10·2	2·6	81	75·5	38·2	55·9	0·000	mP, wP : mP : mP	0·0	13·6
Means	29·925	67·7	49·7	18·1	57·8	— 3·8	53·6	49·9	8·0	15·2	1·5	75·5	116·3	41·9	56·6	Sum 1·615	..	4·8	14·5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following 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.925, being 0in.142 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 77°·6 on August 14; the lowest in the month was 41°·3 on August 20; and the range was 36°·3.
The mean of all the highest daily readings in the month was 67°·7, being the 5°·0 *lower* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 49°·7, being 3°·3 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 18°·1, being 1°·6 *less* than the average for the 65 years, 1841–1905.
The mean for the month was 57°·8, being 3°·8 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1920.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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.		
Aug. 1	5·8	0·97	4·7	0·78	W	W	3·7	0·35	368	10 : 10,th.-cl : 9	6, slt.-sh : 3 : 2, th.-cl
2	0·6	0·09	0·1	0·02	WSW : SW	SW	2·9	0·23	253	v.-cl,th.-cl : 10, th.-cl : 10, oc.-slt.-shs	10, fq.-slt-r : 10, r
3	4·8	0·79	3·8	0·63	WSW : W	W	4·1	0·22	300	10, fq.-r : p.-cl : 4	6 : 5 : v.-cl, th.-cl
4	0·0	0·00	0·0	0·00	WSW : W	SW : S	2·8	0·30	306	v.-cl,th.-cl,lu.-ha: 10 : 10	10 : 10
5	5·2	0·87	4·0	0·66	SSW : WSW	W : WSW	3·2	0·38	335	10, oc.-shs : 10, m.-r : 10, r	6, slt.-shs : 1, t, r, w : th.-cl
6	5·1	0·85	4·8	0·80	WSW : W : WNW	WNW : NW	3·6	0·55	422	v.-cl, th.-cl,n.-r : 10, oc.-r : 10	10 : 10, sh : p.-cl
7	5·4	0·90	5·1	0·86	W	WSW : SW	1·0	0·05	199	2 : 7 : 9, cu	8 : 8 : p.-cl, th.-cl
8	3·6	0·60	2·5	0·41	SSW : SW	SW	2·5	0·20	243	2 : 4	3 : 3 : p.-cl
9	5·1	0·85	4·6	0·77	WSW : W	W	4·1	0·35	344	6, th.-cl : 3 : 9, s.-cu, cu.-n, sh	10,oc,slt.-shs: 9 : 1, n, s
10	2·7	0·45	2·4	0·40	W : NW	NNW : N	2·2	0·15	258	2 : 9, s, n	10, s, n : 9 : 6
11	2·5	0·42	0·7	0·12	Calm : NNE	Calm	0·6	0·00	108	10 : 10 : p.-cl, h	10, h : 10, slt.-r : 9
12	6·0	1·00	6·0	1·00	Calm	ESE : Calm	0·9	0·02	104	9, th. cl, h : 9, s, th.-cl, h	9, th.-cl, so.-ha : 5, th.-cl : 5, th.-cl
13	6·0	1·00	6·0	1·00	Calm : E	E : ESE : Calm	1·4	0·07	126	0 : 1, f : 3, cu, h	p.-cl, cu, h : 3, h : 0, h
14	0·0	0·00	0·0	0·00	Calm : NNE	N : NNE	1·6	0·12	181	0, f, d : 0, f, h	3, cu, s.-cu : 7 : 9
15	6·3	0·97	6·1	0·94	N : NNW	NW : W	1·0	0·05	178	10 : 8, ci.-cu,s,th.-cl	7, th.-cl : 6, ci : 0, d
16	0·0	0·00	0·0	0·00	Calm : W	W : WSW	0·6	0·03	162	2 : 3,th.-cl,m : 7, cu	9, s.-cu : 10
17	2·2	0·34	0·9	0·14	W	W : WSW	1·3	0·13	226	10 : 9, s, s.-cu	9 : 9, oc.-th.-cl
18	0·0	0·00	0·0	0·00	SW : WSW	WSW : NE	2·9	0·23	293	10 : 10, s.-cu, n, m.-r.-sh	10, n, r : 10, n, r
19	5·5	0·84	4·8	0·73	NE : NNE	N : NNE	3·7	0·34	342	10, r, m.-r : 9, cu.-n	8, cu.-n, oc.-shs : 7
20	6·4	0·99	6·2	0·95	Calm : NW : NNW	WNW : NW : Calm	1·6	0·13	252	0 : 3 : 7, cu.-n	9, cu.-n : 7 : 1, h
21	1·3	0·17	0·9	0·11	Calm : NW	NW : WNW	3·0	0·24	319	1 : 1 : 7	9 : 9
22	7·5	1·00	7·3	0·98	WNW : NNW	NW : NNW	3·6	0·28	323	10, r : 9	7 : 1
23	1·2	0·16	0·5	0·07	Calm : WNW	Calm : WNW	0·7	0·04	225	1 : 9, s.-cu, slt.-sh	9, th.-cl : 10, slt.-r : 10
24	5·6	0·75	4·9	0·65	Calm	NNE : Calm	0·5	0·00	116	10 : 9, s	3, h : 2 : 6, m
25	2·9	0·39	1·5	0·20	Calm	Calm : N : NNE	0·9	0·05	184	2, n : 10, m : 10 s, m	10 : v.-cl
26	7·5	1·00	7·5	1·00	NNE : NE	NE : Calm	1·8	0·14	225	v.-cl : 3 : 8, s.-cu	9, s.-cu : 0
27	2·2	0·29	1·5	0·19	Calm : NE : E	E : NE : Calm	1·6	0·02	186	0 : 0 : 6, s.-cu	10 : 9, oc.-th.-cl
28	4·8	0·61	3·9	0·50	Calm : E : NE	NE : E	1·0	0·04	171	10 : 9, s.-cu, n	9 : 8 : 1, h
29	7·9	0·98	7·7	0·96	NE : NNE	NNE : NE	2·4	0·26	289	9 : 9, cu.-n	10 : 4 : 3, th.-cl
30	1·6	0·20	1·1	0·14	NNE	N : NNE	1·9	0·15	243	2, th.-cl : 1 : 9, s.-cu	9, s.-cu : 10
31	0·3	0·04	0·1	0·01	NNE : N	N	1·4	0·14	238	8 : p.-cl : 10	10 : 10, slt.-m,-r.-sh
Means	..	..	..	..	..	..	..	0·17	243		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 53°·6, being 3°·9 *lower* than
The mean *Temperature of the Dew Point* for the month was 49°·9, being 4°·1 *lower* than
The mean *Degree of Humidity* for the month was 75·5, being 0·8 *less* than
The mean *Elastic Force of Vapour* for the month was $0^{in.}360$, being $0^{in.}058$ *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was $4^{grs.}0$, being $0^{grs.}6$ *less* than
The mean *Weight of a Cubic Foot of Air* for the month was 535 grains, being 7 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 7·7.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·331. The maximum daily amount of *Sunshine* was 13·0 hours on August 8.
The highest reading of the *Solar Radiation Thermometer* was 144°·0 on August 3; and the lowest reading of the *Terrestrial Radiation Thermometer* was 29°·1 on August 21.
The *Proportions of Wind* referred to the cardinal points were N. 9, E. 3, S. 3, W. 12. Four days were calm.
The *Greatest Pressure of the Wind* in the month was 4·1 lbs. on the square foot on August 3 and 9. The mean daily *Horizontal Movement of the Air* for the month was 243 miles; the greatest daily value was 422 miles on August 6; and the least daily value was 104 miles on August 12.
Rain ($0^{in.}005$ or over) fell on 8 days in the month, amounting to $1^{in.}615$, as measured by gauge No. 6 partly sunk below the ground; being $0^{in.}729$ *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1920.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. 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.		hours.	hours.
Sept. 1	29·968	64·2	53·4	10·8	57·5	− 2·3	53·3	49·5	8·0	13·1	3·5	76	103·5	49·4	55·9	0·000	mP : sP, ssP : mP, wP	0·7	13·5
2	29·906	63·0	48·1	14·9	55·4	− 4·3	52·7	50·1	5·3	12·9	0·0	83	92·0	41·0	55·8	0·033	wP, wwP : sP, wwP : wwP	0·3	13·5
3	29·788	72·2	54·4	17·8	62·0	+ 2·4	59·2	56·8	5·2	14·3	0·2	83	97·0	54·3	55·8	0·009	wwP : wwP, sP : sP, mP	1·1	13·4
4	29·759	68·6	52·8	15·8	61·2	+ 1·7	58·2	55·6	5·6	13·3	0·4	82	87·8	45·3	55·8	0·102	wwP : wwP, wP : sP	0·6	13·4
5	29·816	70·8	49·2	21·6	59·0	− 0·4	56·8	54·8	4·2	7·5	1·7	87	119·0	42·2	55·7	0·056	wP : wwP, wP : wwP	0·8	13·3
6	29·820	72·3	55·8	16·5	63·9	+ 4·7	59·2	55·3	8·6	15·6	3·5	74	103·2	47·9	55·9	0·000	wwP : wP, mP : sP, mP	4·5	13·2
7	29·980	63·9	47·3	16·6	56·3	− 2·7	52·2	48·4	7·9	15·4	1·9	75	97·2	38·2	56·0	0·000	mP, wP : mP, ssP : ssP, mP	0·6	13·1
8	29·993	69·9	53·7	16·2	59·8	+ 1·0	57·2	54·9	4·9	10·1	1·4	84	123·0	49·9	56·0	0·000	wP : mP : mP, wwP	1·5	13·1
9	29·904	73·0	51·1	21·9	60·1	+ 1·5	56·0	52·4	7·7	19·9	0·4	75	126·1	45·5	56·0	0·000	wwP : mP : mP	7·7	13·0
10	30·031	66·7	43·4	23·3	56·1	− 2·3	51·1	46·4	9·7	20·1	1·1	70	117·9	35·1	56·1	0·000	wwP : ssP : ssP, wwP	7·9	13·0
11	30·143	70·4	40·3	30·1	53·4	− 4·7	48·4	43·4	10·0	19·8	0·5	69	119·2	33·4	56·0	0·000	wwP : mP : mP, wwP	6·1	12·9
12	29·975	76·0	39·2	36·8	56·9	− 1·1	50·7	45·0	11·9	24·4	0·2	65	131·8	32·0	56·1	0·000	wwP : mP, wP : wP	10·1	12·8
13	29·862	73·0	40·4	32·6	55·6	− 2·2	51·9	48·4	7·2	20·8	0·0	77	124·0	31·6	55·9	0·045	wwP : sP, v : wwP	4·0	12·7
14	29·920	68·8	57·2	17·6	57·9	+ 0·2	53·7	49·9	8·0	16·6	1·6	75	112·5	41·6	55·7	0·009	wwP : wP : wP, wwP	4·9	12·7
15	29·755	64·6	55·1	9·5	59·6	+ 2·0	58·0	56·6	3·0	6·7	1·1	90	91·5	49·5	55·6	0·233	wwP	0·3	12·6
16	29·524	64·9	52·7	12·2	56·8	− 0·7	54·0	51·4	5·4	15·3	0·0	82	107·8	44·7	55·5	0·941	wwP : wwP, mP : sP, wwP	4·7	12·6
17	29·509	65·5	49·8	15·7	56·3	− 0·9	52·7	49·4	6·9	15·6	3·4	78	109·0	42·6	55·6	0·034	wP : wP, mP : wP	5·6	12·5
18	29·316	60·5	51·1	9·4	55·9	− 1·0	54·0	52·2	3·7	7·9	0·0	88	83·9	43·7	55·5	0·395	wwP : wwP : wP	0·2	12·4
19	29·526	65·1	44·5	20·6	53·0	− 3·5	48·0	43·0	10·0	20·7	0·9	69	120·3	37·1	55·4	0·000	wP : mP : mP	10·5	12·4
20	29·767	62·5	42·0	20·5	51·8	− 4·4	47·3	42·7	9·1	17·7	0·4	72	108·1	37·0	55·4	0·000	mP : sP : sP, mP	6·4	12·3
21	29·828	52·8	47·1	5·7	49·8	− 6·1	48·5	47·2	2·6	6·4	0·4	91	65·0	45·4	55·1	0·946	mP, wwP : wwP : wwP	0·0	12·3
22	29·974	62·4	48·9	13·5	54·4	− 1·2	52·4	50·4	4·0	11·2	0·0	86	104·2	43·3	55·1	0·208	wwP : wwP, sP : mP	2·2	12·2
23	30·091	66·3	47·0	19·3	55·7	+ 0·3	53·5	51·4	4·3	14·1	0·0	86	120·3	41·7	55·1	0·000	mP, wP : mP : wP, wwP	5·3	12·1
24	30·026	64·0	53·9	10·1	57·5	+ 2·2	55·9	54·5	3·0	11·2	0·0	89	107·0	50·0	55·0	0·000	wwP : mP : wP	0·9	12·0
25	29·931	59·4	52·5	6·9	55·7	+ 0·5	54·1	52·6	3·1	5·9	0·2	89	70·3	46·8	55·0	0·000	wwP : wP : wP	0·0	12·0
26	30·003	69·0	51·1	17·9	58·6	+ 3·4	56·1	53·8	4·8	11·3	0·0	84	114·2	42·0	55·0	0·000	wwP : wP, mP : wP, wwP	7·5	11·9
27	30·017	66·8	47·9	18·9	56·1	+ 1·0	54·1	52·2	3·9	11·5	0·2	87	95·0	39·7	55·0	0·000	wwP : mP : wwP	2·0	11·9
28	30·055	66·4	47·9	18·5	56·3	+ 1·4	54·4	52·6	3·7	11·6	0·2	88	108·0	39·2	55·0	0·000	wwP : wP : wP, wwP	3·8	11·8
29	29·930	65·9	55·4	10·5	59·5	+ 4·8	57·4	55·6	3·9	7·2	0·2	87	107·5	46·9	55·0	0·000	wwP : wP : wwP	4·8	11·7
30	29·672	69·2	54·3	14·9	59·2	+ 4·8	57·1	55·2	4·0	12·8	0·0	87	110·8	47·0	55·0	0·433	wwP : wP : wP, wwP	2·8	11·6
Means	29·860	66·6	49·4	17·2	57·0	− 0·2	53·9	51·1	6·0	13·7	0·8	80·9	105·9	42·8	55·5	Sum 3·444	..	3·6	12·6
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the night sky), which relate to the period extending from dusk on the civil day named, to dawn of the following 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.860, being 0in.049 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 76°·0 on September 12 ; the lowest in the month was 39°·2 on September 12 ; and the range was 36°·8.

The mean of all the highest daily readings in the month was 66°·6, being 0°·7 *lower* than the average for the 65 years, 1841–1905.

The mean of all the lowest daily readings in the month was 49°·4, being 0°·3 *higher* than the average for the 65 years, 1841–1905.

The mean of the daily ranges was 17°·2, being 1°·0 *less* than the average for the 65 years, 1841–1905.

The mean for the month was 57°·0, being 0·2 *lower* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1920.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	Wind as Deduced from Self-Registering Anemometers. Osler's. General Direction. A.M.	General Direction. P.M.	Pressure on the Square Foot. Greatest.	Pressure on the Square Foot. Mean of 24 Hourly Measures.	Robinson's Horizontal Movement of the Air.	Clouds and Weather. A.M.	Clouds and Weather. P.M.
	hours.		hours.				lbs.	lbs.	miles.		
Sept. 1	0·4	0·05	0·2	0·02	N : NNW	NW : N	2·6	0·10	199	10 : 9, s.-cu	9, n, s.-cu., slt.-m.-r.-sh : 10, slt.-m.-r.-sh
2	0·0	0·00	0·0	0·00	NW : W	WSW	1·1	0·09	217	10 : 9, th.-cl : 10, s, w, th.-cl	10, fq.-m.-r : 10, m.-r
3	0·8	0·09	0·6	0·07	W : Calm : N	N : var. : W	0·7	0·03	162	10, m.-r : 10, m.-r	9, cu, s : 9, p.-so.-ha : 10, m.-r.-sh
4	6·7	0·78	6·2	0·73	W : WSW	W : NW : N	2·3	0·25	320	10 : 10, r : 10, s, w	10 : 9 : 3, ci.-cu
5	0·2	0·02	0·1	0·01	WSW : SW	W : WSW	4·4	0·23	340	v.-cl : v.-cl : 10, fq.-m.-r	9, w : 10, w : 10, m.-r
6	6·7	0·78	5·5	0·65	W : WNW	W : NW : N	3·0	0·32	371	10 : 10, s.-cu, n	8 : 8 : 7
7	0·9	0·11	0·2	0·02	N : NW	W : N : Calm	1·1	0·05	182	0 : 9, s	9 : 9
8	3·7	0·43	0·9	0·10	Calm : W	WSW : Calm	0·2	0·00	109	9 : 9 : 7, s.-cu	10 : 10 : 6, th.-cl
9	5·5	0·65	4·7	0·56	Calm : S	SSE : Calm : W	0·6	0·01	117	9, th.-cl : 6 : 6, s.-cu, cu	6, cu : 5 : 2, th.-cl
10	8·5	1·00	8·5	1·00	W : N	N : Calm : SW	2·2	0·11	221	1 : 1, cu	p.-cl, ci.-s, so.-ha, th.-cl : 9, th.-cl : 0
11	9·0	1·00	9·0	1·00	Calm : SW	SSW : Calm	1·1	0·04	155	0 : 2 : 6, cl.-s, th.-cl, so.-ha	10, so.-ha : 8 : 0
12	8·7	0·97	8·0	0·88	Calm : S	SW	0·4	0·02	127	v.-cl, th.-cl : v.-cl, th.-cl : 3	2 : 0
13	5·4	0·60	3·9	0·43	Calm : WSW	W : NW : N	0·3	0·01	141	0 : 3, h, slt.-f : p.-cl, s.-cu, ci	9, s, n, slt.-sh : 9, hy.-sh : 9
14	1·5	0·17	0·9	0·10	N : Calm : W	W : WSW	1·1	0·05	182	0 : 10 : 7	p.-cl : 10 : 10, r
15	0·0	0·00	0·0	0·00	SW	SW : Calm	3·8	0·29	273	8, r : 10, r : 10, r, sc	10, oc.-slt.-r : 10, m.-r.-sh
16	7·7	0·86	6·9	0·77	Calm : ENE	W : WSW : SW	2·9	0·19	229	10, hy.-r : 9, cu, hy.-r, slt.-glm	v.-cl, cu, oc.-glm : 1 : 1, sh
17	2·3	0·25	1·6	0·18	SW : WSW	WSW : SW	4·4	0·56	381	2 : 1 : 7, cu, n, cl, fq.-shs	v.-cl, cu, n, fq.-shs : 9, fq.-shs : v.-cl, cu, o, r
18	7·2	0·76	6·8	0·71	SW : WSW	SW : WSW	7·8	0·45	340	10, r : 10, sc, ci.-cu, s, fq.-shs	10, r, m.-r : 9 : 2
19	7·2	0·75	5·5	0·58	W	W : WSW	7·4	0·32	335	0 : 1 : p.-cl, ci, cu	1, cu : 1, ci
20	0·0	00·0	0·0	0·00	Calm : NNE : E	N : NNE	1·4	0·05	149	6 : 1, ci	7, cu.-n : 9 : 10
21	1·9	0·20	1·0	0·10	NNE : NE	NNE : NE	2·6	0·15	244	10 : 10, r : 10, n, r	10, r : 10, r, t.-sm : 10, sh
22	1·1	0·11	0·5	0·05	NNE : NE	NE : Calm	2·4	0·16	241	9, sh : 9 : 9, s.-cu, r	9, s.-cu, n, r : 9 : 9, alt.-cu
23	0·0	0·00	0·0	0·00	Calm : E	E	0·6	0·03	132	10 : 9, th.-cl : 8, th.-cl	8, s.-cu, s : 10 : 10
24	0·0	0·00	0·0	0·00	NE	NE : NNE : N	2·2	0·19	281	10, m : 10, sc	10 : 10
25	1·5	0·15	0·0	0·00	N	N : Calm	1·0	0·06	152	10 : 10, n, s, oc.-m.-r	10, m : 10, m
26	7·3	0·73	3·8	0·38	Calm : WSW : W	W : Calm	0·6	0·03	173	10 : 9, m.-r.-sh : 4	2 : 2 : 0
27	8·3	0·83	1·3	0·13	Calm : W	W : Calm	0·5	0·00	129	9, m : 9, s.-cu, h, m	3, fr.-cu, h : 0, h, m : 1, h, m
28	0·6	0·06	0·1	0·01	Calm : E	E	1·1	0·07	131	10, slt.-f : 9, f : 9, s.-cu, slt.-f	1, cu : 10
29	0·3	0·03	0·2	0·02	E : ESE	E	1·5	0·11	197	9 : 9 : 8, cu	0 : 0 : 10
30	3·9	0·39	3·4	0·34	Calm : E	SE : SW	2·4	0·07	145	10, th.-cl : 9, th.-cl, m : 6, s, n	9, p.-so.-ha : 10, r
Means	..	..	..	..	..	..	..	0·13	213		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 53°·9, being 0°·2 *lower* than
The mean *Temperature of the Dew Point* for the month was 51°·1, being 0°·1 *lower* than
The mean *Degree of Humidity* for the month was 80·9, being 0·7 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in.375, being 0in.002 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4grs.2, being the same as
The mean *Weight of a Cubic Foot of Air* for the month was 534 grains, being 1 grain *greater* than
} the average for the 65 years, 1841–1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·3.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·285. The maximum daily amount of *Sunshine* was 10·5 hours on September 19.
The highest reading of the *Solar Radiation Thermometer* was 131°·8 on September 12; and the lowest reading of the *Terrestrial Radiation Thermometer* was 31°·6 on September 13.
The *Proportions of Wind* referred to the cardinal points were N. 6, E. 4, S. 3, W. 10. Seven days were calm.
The *Greatest Pressure of the Wind* in the month was 7·8 lbs. on the square foot on September 18. The mean daily *Horizontal Movement of the Air* for the month was 213 miles; the greatest daily value was 381 miles on September 17, and the least daily value was 109 miles on September 8.
Rain (0in.005 or over) fell on 13 days in the month, amounting to 3in.444, as measured by gauge No. 6 partly sunk below the ground; being 1in.296 *greater* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1920.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. 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.		hours.	hours.
Oct. 1	29·436	60·4	45·4	15·0	54·3	+ 0·2	53·2	52·1	2·2	8·3	0·0	92	86·5	37·4	55·0	0·278	wwP : wP, wwP : wwP	1·2	11·6
2	29·360	63·5	46·4	17·1	54·1	+ 0·4	51·6	49·2	4·9	12·5	0·2	83	117·0	38·5	55·0	0·175	wwP : v, mP : wP	8·8	11·5
3	29·456	65·0	44·1	20·9	54·4	+ 1·1	51·1	47·9	6·5	14·6	0·0	78	119·5	37·0	55·0	0·018	wwP : mP : wwP	7·0	11·5
4	29·540	62·0	56·0	6·0	58·1	+ 5·1	55·5	53·2	4·9	10·3	1·0	83	85·2	51·0	55·0	0·059	wwP : wP, ww P : wwP	0·0	11·4
5	29·571	72·6	56·5	16·1	63·5	+ 10·7	59·5	56·2	7·3	18·1	0·0	78	123·8	50·7	55·0	0·000	wwP : mP : wP	6·8	11·3
6	29·497	69·9	52·6	17·3	60·5	+ 8·0	57·8	55·4	5·1	14·8	0·0	84	121·1	42·1	55·1	0·004	wwP : wP, mP : wP, wwP	4·8	11·3
7	29·658	72·0	49·1	22·9	59·3	+ 7·0	56·5	54·0	5·3	15·9	0·0	83	123·9	40·4	55·2	0·000	.. : mP : wwP	6·0	11·2
8	29·892	71·1	56·9	14·2	61·6	+ 9·6	59·1	57·0	4·6	12·5	0·4	85	116·8	50·0	55·1	0·000	wwP : wwP, mP : wwP	5·5	11·1
9	29·953	71·3	56·4	14·9	61·2	+ 9·6	58·7	56·6	4·6	15·4	0·2	85	116·0	49·9	55·1	0·007	wwP : wwP, mP : wwP	6·0	11·1
10	29·924	60·3	52·2	8·1	56·3	+ 5·0	54·0	51·8	4·5	9·0	1·6	85	97·2	44·4	55·1	0·000	wwP	1·0	11·0
11	29·910	63·5	47·4	16·1	55·3	+ 4·4	53·3	57·4	3·9	13·1	0·0	87	101·0	40·9	55·3	0·000	wwP : wP : wwP	7·2	10·9
12	29·886	65·0	39·8	25·2	52·1	+ 1·5	49·1	46·0	6·1	18·6	0·0	80	112·0	30·2	55·2	0·000	wwP : mP : wwP	7·1	10·9
13	29·905	66·3	42·9	23·4	52·3	+ 2·0	50·3	48·3	4·0	13·5	0·0	86	120·0	30·2	55·1	0·002	wwP : wP, mP : wwP	6·6	10·8
14	29·829	64·7	42·5	22·2	52·0	+ 1·9	50·9	49·8	2·2	7·5	0·0	92	105·0	36·1	55·0	0·003	wwP : wwP, wP : wwP	1·9	10·7
15	29·704	62·2	49·3	12·9	55·3	+ 5·4	53·9	52·5	2·8	8·2	0·0	91	103·8	40·2	54·8	0·066	.. : wwP, wP, ..	2·8	10·7
16	29·669	61·7	52·1	9·6	55·4	+ 5·6	54·1	52·8	2·6	8·5	0·4	91	87·2	47·5	54·7	0·021	.. : wP : ..	0·3	10·6
17	29·783	57·5	47·6	9·9	52·8	+ 3·2	50·3	47·8	5·0	11·0	1·0	83	86·4	46·9	54·6	0·274	.. : wP : ..	0·7	10·6
18	29·934	53·0	40·7	12·3	47·5	− 1·8	43·0	38·0	9·5	16·8	4·1	70	101·3	35·4	54·5	0·000	wP : mP : ..	7·5	10·5
19	29·962	53·4	38·1	15·3	46·2	− 2·9	43·3	40·0	6·2	12·6	0·0	80	96·0	32·0	54·4	0·000	.. : mP : ..	7·3	10·4
20	29·909	58·0	36·7	21·3	47·3	− 1·5	44·2	40·7	6·6	14·2	0·2	79	103·0	26·2	54·1	0·000	.. : mP : ..	8·9	10·4
21	29·812	60·7	34·0	26·7	44·8	− 3·8	42·7	40·3	4·5	13·7	0·0	85	115·3	24·6	54·0	0·000	.. : .., mP : wP ..	4·6	10·3
22	29·953	53·0	38·1	14·9	45·6	− 2·7	44·6	43·5	2·1	4·1	0·0	93	63·1	31·5	53·7	0·001*	..	0·0	10·2
23	30·032	55·1	34·1	21·0	44·8	− 3·3	43·6	42·2	2·6	8·7	0·0	91	81·1	27·9	53·5	0·003*	..	5·2	10·2
24	29·998	58·9	37·9	21·0	45·9	− 2·0	43·5	40·8	5·1	13·4	0·0	83	94·0	28·0	53·2	0·000	.. : mP : ..	6·7	10·1
25	30·113	59·0	42·2	16·8	48·5	+ 0·8	46·2	43·7	4·8	13·0	0·0	84	99·1	28·4	53·1	0·001*	.. : .., mP : ..	7·4	10·0
26	30·165	58·0	36·3	21·7	46·6	− 1·0	44·5	42·1	4·5	13·2	0·0	85	94·7	28·3	53·0	0·003*	.. : .., mP : ..	6·7	10·0
27	30·115	55·7	33·1	22·6	43·8	− 3·7	42·3	40·5	3·3	9·2	0·0	88	81·7	24·7	52·8	0·004*	.. : wP : ..	5·9	9·9
28	29·956	55·6	32·9	22·7	43·7	− 3·7	41·5	38·9	4·8	15·6	0·0	83	94·8	28·4	52·3	0·004*	.. : mP : ..	8·4	9·9
29	29·924	52·0	36·2	15·8	43·3	− 4·0	40·4	37·0	6·3	14·3	0·0	78	88·9	26·8	52·1	0·004*	.. : .. : ..	7·9	9·8
30	29·763	52·3	30·3	22·0	40·3	− 6·9	37·4	33·7	6·6	13·9	0·8	77	95·9	18·9	51·8	0·004*	.. : wwP, mP : ..	8·9	9·7
31	29·265	56·5	27·9	28·6	43·1	− 4·0	41·2	38·9	4·2	8·9	0·0	85	101·5	16·8	51·6	0·079	..	1·7	9·7
Means	29·802	61·0	43·1	17·9	51·3	+ 1·3	48·9	46·5	4·8	12·4	0·3	84·1	101·1	35·2	54·2	Sum 1·010	..	5·2	10·6
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following 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 October 22, 23, 25, 26, 27, 28, 29 and 30 are derived from dew, fog or frost.

The mean reading of the *Barometer* for the month was 29in.802, being 0in.081 *higher* than the average for the 65 years 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 72°·6 on October 5; the lowest in the month was 27°·9 on October 31; and the range was 44°·7.
The mean of all the highest daily readings in the month was 61°·0, being 3°·5 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 43°·1, being 0°·1 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 17°·9, being 3°·6 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 51°·3, being 1°·3 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1920.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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.		
Oct. 1	3·3	0·33	2·1	0·21	SW : S	S : Calm	4·4	0·26	258	3 : 1 :9, s, sc, oc.-slt.-r	10, oc.-slt.-r : 9, oc.-r
2	9·3	0·88	8·7	0·82	S : SSW	SSW : S	3·6	0·28	246	9, th.-cl, r : 6, sh : 7, ci.-cu, sc, n, oc.-shs	8, slt.-sh : 1 : 1, shs
3	0·0	0·00	0·0	0·00	SSE : S	SSE : SE	3·6	0·44	318	1, sh : 2, sh : p.-cl	7 : 10, slt.-sh : 10,
4	1·6	0·15	1·3	0·12	SE : SSE	S : SE : Calm	2·8	0·26	234	10, oc.-shs : 10, oc.-slt.-r : 10,s,n,oc.-slt.. r	10, n, fq.-r : 9
5	3·0	0·28	1·7	0·16	ESE : SE	SE : Calm	2·2	0·11	165	8 : 9 : 6,th.-cl,cu, ci.-s	7 : 9
6	10·5	1·00	10·2	0·97	Calm : E : S	SSW : Calm : SSE	3·4	0·11	185	10, oc.-slt.-r : 9, s, sc	p.-cl : p.-cl : 0
7	4·4	0·42	2·7	0·26	Calm : SE	E : Calm	0·9	0·01	120	0, hy.-d : p.-cl, th.-cl, ci.-cu, m	9, cu : 9, d
8	1·1	0·11	1·0	0·10	ENE : E	E : ESE	1·0	0·10	180	0, d, m : 10, s	1 : 3 : 10, m, f, m.-r
9	1·3	0·12	1·3	0·12	E	E	2·5	0·26	259	10, tk.-f, m.-r : 10, f, m.-r : 10, m.-r	0 : 1 : 10
10	8·8	0·80	5·3	0·48	ENE : E	ENE	3·9	0·36	327	10 : 10, s.-cu	10,s.-cu,cu.-n: 9 : 5
11	11·0	1·00	11·0	1·00	ENE : E	E	1·6	0·10	195	0 : 5, m : 6, cu, cu.-s	1, cu : 0, m, hy.-d
12	8·6	0·78	7·5	0·68	E : ESE	SE : SSE : Calm	1·0	0·02	122	0, m, hy.-d : 0, m : 0	1, cu : 1, slt.-m
13	8·1	0·73	7·3	0·66	Calm : WSW	Calm	0·5	0·01	94	1 : 10, m, slt.-sh : 6, cu	1, h : 0
14	1·3	0·12	0·2	0·02	Calm	SE : Calm	0·4	0·00	92	5, f : 9, f : 9, s.-cu	9, oc.-r, t : 5 : 9
15	7·6	0·69	6·2	0·56	SW : Calm	SW : Calm	1·9	0·05	170	1 : 9, th.-cl, shs : 9, cu, cu.-s, n	9, s, n, shs : 9 : 9, fq.-shs
16	0·0	0·00	0·0	0·00	Calm : NE : E	E : ENE	1·1	0·03	151	10, fq.-shs : 10 : 9, s, ci.-cu	9 : 10, r, slt.-r
17	3·2	0·28	1·8	0·16	ENE : E	E : ENE : NE	6·3	0·59	396	10, oc.-m.-r : 10, r	9, th.-cl, p.-so.-ha : 10,th.-cl,so.-ha,w : 10, m.-r.-sh
18	1·3	0·11	0·7	0·06	NE : ENE	ENE : E	12·0	0·98	508	6 : 2 : 2, cl, cu, w, so.-ha	4, s, cu, w : 10 : 10
19	5·8	0·50	4·9	0·43	ENE : E : ESE	E : Calm	2·1	0·17	205	10 : 9 : 1, cu, ci	1, ci : 1 : p.-cl,th.-cl,ci
20	10·6	0·92	9·7	0·85	Calm : SE	SE : Calm	1·0	0·03	119	9 : 1, ci, cu	0 : 0, m, ho.-fr
21	5·5	0·48	1·1	0·10	Calm	Calm	0·5	0·00	71	0, m, f : 1, cu, ci, f	p.-cl, ci, cu : p.-cl, m : 10, m, f
22	3·7	0·32	1·4	0·12	Calm	Calm	0·3	0·00	24	tk.-f : 10, f	f : f
23	4·8	0·40	4·8	0·40	Calm	NE : Calm	0·4	0·01	64	f : f : 0, f, m	0, m : 0, m : 0, m, f, slt.-ho.-fr
24	8·6	0·72	8·4	0·70	Calm	E : ENE	1·7	0·08	118	0, f : 0, f	0 : 0
25	12·0	1·00	6·6	0·55	NE	ENE : E	3·3	0·24	261	0, f : 0, f	0 : 0, d
26	8·1	0·68	8·0	0·67	E	E	1·9	0·10	201	0, d : 0, d, f : 0, f	0 : 0, d
27	11·7	0·97	10·7	0·89	Calm	E	1·1	0·04	113	0, f, d : 0, f	0, slt.-m : 0, slt.-m
28	12·0	1·00	12·0	1·00	Calm : E	E	2·4	0·14	210	0, m : 0, f : 0	0 : 0, hy.-d
29	12·0	1·00	12·0	1·00	E : ESE	E : ESE	2·3	0·14	226	0, hy.-d, ho.-fr : 0	0 : 0
30	12·5	1·00	12·5	1·00	ESE : SE	ESE : Calm	0·8	0·03	161	0, ho.-fr : 0, ho.-fr	0 : 0, ho.-fr
31	0·7	0·05	0·3	0·02	Calm : SE	SE : ESE	5·5	0·43	290	0, ho.-fr : 9, m, slt.-sh	9, cu.-n, oc.-m.-r : 10, r
Means	..	..	..	..	..	..	..	0·17	196		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 48°·9, being 1°·0 *higher* than
The mean *Temperature of the Dew Point* for the month was 46°·5, being 0°·8 *higher* than
The mean *Degree of Humidity* for the month was 84·1, being 0·9 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.317, being 0in.010 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3grs.·5, being the same as
The mean *Weight of a Cubic Foot of Air* for the month was 540 grains, being the same as
} the average for the 65 years, 1841–1905.

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

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·488. The maximum daily amount of *Sunshine* was 8·9 hours on October 20 and 30.

The highest reading of the *Solar Radiation Thermometer* was 123°·9 on October 7; and the lowest reading of the *Terrestrial Radiation Thermometer* was 16°·8 on October 31.

The *Proportions of Wind* referred to the cardinal points were N. 1, E. 13, S. 6, W. 0. Eleven days were calm.

The *Greatest Pressure of the Wind* in the month was 12·0 lbs. on the square foot on October 18. The mean daily *Horizontal Movement of the Air* for the month was 196 miles; the greatest daily value was 508 miles on October 18; and the least daily value was 24 miles on October 22.

Rain (0in.005 or over) fell on 9 days in the month, amounting to 1in.010, as measured by gauge No. 6 partly sunk below the ground; being 1in.772 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1920.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. 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.		hours.	hours.
Nov. 1	29·250	49·2	39·1	10·1	45·9	− 1·1	44·5	42·9	3·0	5·9	2·1	90	66·8	33·8	51·2	0·108	..	0·1	9·6
2	29·612	46·3	35·1	11·2	39·8	− 7·0	37·3	34·0	5·8	11·4	2·8	80	81·8	28·2	51·0	0·000	..	5·8	9·6
3	29·650	46·0	36·1	9·9	40·7	− 5·9	37·7	33·9	6·8	9·5	3·2	77	64·7	28·0	50·7	0·000	..	1·1	9·5
4	29·692	48·9	28·1	20·8	36·5	− 9·9	34·8	32·4	4·1	8·4	0·0	86	76·0	25·9	50·5	0·002*	..	2·4	9·4
5	29·864	46·7	28·0	18·7	38·2	− 7·9	37·0	35·3	2·9	6·3	0·9	90	50·6	25·2	50·2	0·003*	..	0·0	9·4
6	30·039	41·4	32·9	8·5	36·4	− 9·4	36·0	35·4	1·0	1·8	0·0	96	53·0	28·8	49·9	0·002*	..	0·1	9·3
7	30·105	51·8	32·9	18·9	42·6	− 2·8	41·3	39·7	2·9	6·0	0·2	90	70·3	29·6	49·7	0·001*	..	0·1	9·3
8	30·254	54·9	36·1	18·8	46·1	+ 1·1	45·3	44·4	1·7	4·0	0·0	94	74·5	29·4	49·5	0·000	..	2·1	9·2
9	30·283	54·7	48·5	6·2	50·8	+ 6·2	48·7	46·5	4·3	8·1	1·2	86	61·6	46·2	49·4	0·000	..	0·0	9·2
10	30·098	57·0	49·3	7·7	51·4	+ 7·1	48·5	45·5	5·9	9·0	1·2	81	70·3	46·3	49·6	0·011	..	0·4	9·1
11	30·059	51·0	33·9	17·1	44·0	+ 0·0	42·6	40·9	3·1	9·1	0·0	89	64·5	27·2	49·2	0·000	..	0·2	9·1
12	30·021	54·9	29·2	25·7	41·7	− 2·0	40·6	39·2	2·5	7·4	0·0	92	91·6	24·9	49·4	0·000	..	3·3	9·0
13	29·834	56·3	42·5	13·8	48·8	+ 5·3	47·1	45·2	3·6	5·7	1·7	88	64·6	32·0	49·4	0·014	..	1·3	8·9
14	29·753	56·4	42·1	14·3	50·5	+ 7·2	48·3	46·0	4·5	9·9	0·4	85	72·8	32·9	49·1	0·155	..	0·1	8·9
15	29·528	59·0	50·5	8·5	55·6	+ 12·5	52·5	49·6	6·0	11·3	1·4	81	68·6	43·9	49·3	0·056	..	0·0	8·8
16	29·813	52·8	42·6	10·2	47·2	+ 4·4	43·3	38·9	8·3	13·1	4·5	74	84·5	34·0	49·2	0·000	..	6·5	8·8
17	30·187	49·1	31·5	17·6	40·3	− 2·3	37·9	34·8	5·5	12·7	0·0	81	63·6	23·8	49·2	0·000	..	6·7	8·7
18	30·244	50·2	31·5	18·7	41·4	− 1·0	40·2	38·7	2·7	8·2	0·2	91	64·0	23·8	49·2	0·005*	..	0·3	8·7
19	30·183	55·0	39·2	15·8	45·0	+ 2·7	43·6	42·0	3·0	9·6	0·0	89	88·4	31·0	49·1	0·006*	..	6·3	8·6
20	30·226	44·2	31·4	12·8	38·8	− 3·4	38·3	37·6	1·2	3·0	0·0	96	55·9	23·9	48·9	0·000	..	0·5	8·6
21	30·249	41·8	27·2	14·6	33·6	− 8·5	32·1	29·4	4·2	8·7	0·0	85	67·6	19·1	48·9	0·000	..	6·9	8·5
22	30·248	45·1	23·4	21·7	34·6	− 7·5	33·7	32·3	2·3	7·6	0·0	91	64·2	15·3	48·3	0·006*	..	6·1	8·5
23	30·087	47·5	29·9	17·6	36·1	− 5·9	34·2	31·4	4·7	13·4	0·0	83	74·0	20·8	48·0	0·007*	..	6·1	8·4
24	29·747	45·5	28·7	16·8	36·8	− 5·2	34·8	32·0	4·8	8·8	0·4	84	70·2	19·2	47·7	0·002*	..	3·3	8·4
25	29·858	55·2	41·9	13·3	46·8	+ 4·9	45·7	44·5	2·3	6·9	0·4	92	80·6	30·1	47·5	0·004*	..	4·7	8·4
26	29·818	50·4	37·1	13·3	43·9	+ 2·1	42·5	40·8	3·1	7·7	0·0	89	75·0	31·0	47·1	0·007*	..	3·7	8·3
27	29·604	53·0	42·1	10·9	47·9	+ 6·2	46·7	45·4	2·5	5·1	1·0	92	61·9	32·1	47·0	0·038	..	0·0	8·3
28	29·631	50·0	46·4	3·6	48·3	+ 6·8	47·7	47·0	1·3	2·5	0·8	96	49·9	45·8	47·0	0·267	..	0·0	8·2
29	29·838	48·5	40·1	8·4	45·9	+ 4·7	44·2	42·2	3·7	7·5	1·1	87	57·2	33·4	47·0	0·040	..	1·1	8·2
30	29·725	53·6	46·2	7·4	49·1	+ 8·1	47·8	46·4	2·7	5·7	1·0	91	78·7	40·8	47·0	0·140	..	1·1	8·2
																Sum			
Means	29·917	50·5	36·8	13·8	43·5	− 0·0	41·8	39·8	3·7	7·8	0·8	87·5	68·9	30·2	49·0	0·874	..	2·3	8·8
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following 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). Amounts entered on November 4, 5, 6, 7, 18, 19, 22, 23, 24, 25, and 26 are derived from frost, fog or dew.

The mean reading of the *Barometer* for the month was 29in. 917, being 0in. 159 ***higher*** than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 59°·0 on November 15; the lowest in the month was 23°·4 on November 22; and the range was 35°·6.
The mean of all the highest daily readings in the month was 50°·5, being 1°·5 ***higher*** than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 36°·8, being 1°·1 *lower* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 13°·8, being 2°·6 *greater* than the average for the 65 years, 1841–1905.
The mean for the month was 43°·5, being the same as the average for the 65 years, 1841–1905.

MONTH and DAY, 1920.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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	12·5	1·00	12·4	0·99	ESE : E	E : ENE : NE	4·0	0·39	323	10, r : 10, fq.-slt.-r	10, slt.-sh : 0
2	10·8	0·86	9·1	0·73	NNE	N	2·5	0·31	313	0, ho.-fr : 0	v.-cl, cu : 1 : 1
3	9·1	0·73	7·9	0·63	N	N : Calm	0·7	0·03	155	3, th.-cl : 9, th.-cl, lu.-ha; 7, s.-cu, so.-ha, h	9, s : 9, slt.-ho.-fr, m : p.-cl, m, ho.-fr
4	8·2	0·65	4·4	0·35	Calm	Calm	0·2	0·00	59	0, m, ho.-fr : 0, h, m, ho.-fr	0, slt.-f : 0, f, slt.-ho.-fr
5	6·3	0·51	4·9	0·39	Calm	N : Calm	2·1	0·02	104	0, f : 0, f	10, m : 10, m : 6
6	6·1	0·49	2·0	0·16	Calm	SW : Calm	0·2	0·00	115	0 : f : f	0, f : 0, f, ho.-fr : p.-cl, m, ho.-fr
7	9·5	0·76	7·4	0·59	SW : Calm	SW : Calm	0·4	0·01	143	10 : 10, s, m	9, s : 9 : 3
8	0·0	0·00	0·0	0·00	Calm : W	W : Calm	0·2	0·00	111	1 : 1 : v.-cl, m, h	9, cu, f : 10, m
9	0·0	0·00	0·0	0·00	SSW : SW	SW	0·5	0·02	167	10, m : 10, s, m	10 : 10, m.-r.-sh
10	1·8	0.14	0·3	0·02	SW : WSW	SW	1·3	0·13	248	10, s : 10, s	10, s : 10 : 10, slt.-r
11	11·9	0·95	10·6	0·85	SW : Calm : NW	Calm : S	0·9	0·02	142	10 : th.-cl : th.-cl, h	1, th.-cl, h, slt.-f : 1, slt.-f
12	6·2	0·49	5·3	0·42	Calm	S	2·5	0·05	147	0, ho.-fr : 0, f, ho.-fr : 1, cu, m	9, cu.-s : 1 : v.-cl
13	11·3	0·87	8·6	0·66	S : SSW	SW : SSW	3·7	0·40	354	10 : 10, w : 10, m.-r	v.-cl : v.-cl : 1
14	0·0	0·00	0·0	0·00	SSW : SW	S : SSW	16·3	0·77	480	0 : 7 : 9	9, so.-ha : 10 : 10, r, w
15	9·2	0·70	6·5	0·50	SSW : SW	SW : WSW	10·8	1·54	658	10, fq.-m.-r, sh, w : 10, fq.-slt.-r, w	10, w : 9, w : 9
16	12·2	0·93	11·3	0·87	W : WSW : NW	NW : W	4·0	0·43	452	1 : 1	v.-cl, w : 1 : v.-cl, th.-cl
17	13·0	1·00	13·0	1·00	WNW : NW	NW : W	1·0	0·05	215	0, slt.-ho.-fr : 0, ho.-fr : 0, h, m	1, ci, h, m : 1, slt.-f
18	13·0	1·00	12·3	0·94	SW	SSW : S	1·2	0·06	197	0, ho.-fr : 10, s, n, so.-ha	9, s, n, th.-cl: 1 : 0, hy.-d
19	2·7	0·21	2·3	0·17	SSW : SW	SSW : Calm	1·1	0·05	149	0, hy.-d : 6, hy.-d : 3	0, d : 10, s, th.-cl, d
20	13·0	1·00	13·0	1·00	Calm	Calm : SE	0·3	0·00	89	10, m : 10, s, m, fq.-m.-r	0, m : 0, m, ho.-fr
21	12·8	0·99	12·5	0·96	Calm : SSE	SSE : S	1·3	0·05	179	0, m, ho.-fr : 0, m, ho.-fr	0 : 0, ho.-fr
22	13·0	1·00	13·0	1·00	Calm : SE	SE : ESE	0·6	0·02	154	0, ho.-fr, f : 0, f, ho.-fr	0, ho.-fr, m : 0, m, ho.-fr
23	12·6	0·97	12·2	0·94	E : SE	SE : E	2·6	0·10	200	0, ho.-fr : 0, ho.-fr	0, ho.-fr : 0, m, ho.-fr
24	9·5	0·73	6·7	0·51	E : ESE	E : ESE : SE	2·0	0·09	199	0, m, ho.-fr : p.-cl, ci, ci.-s, ho.-fr : 9, ci.-s, ho.-fr, h	9, ci.-s, s.-cu : 9, ci.-s, s.-cu, lu.-ha
25	9·4	0·73	4·2	0·33	SSE : S	S : SE : ESE	0·6	0·06	195	3, th.-cl, d : 3, th.cl, hy.-d : v.-cl, cu.-s	v.-cl, cu.-s : v.-cl, hy.-d : 10, th.-cl, m, hy.-d
26	6·5	0·50	4·6	0·36	ESE	ESE : SE	1·0	0·03	176	3, th.-cl, m, f, hy -d : 3, th.-cl, ci.-s, d	3, ci, cu, n : 8 : 8
27	0·0	0·00	0·0	0·00	ESE : SE	SE : ESE	1·0	0·07	172	6 : 10, s, m.-r.-sh	10, m.-r.-sh : 10, r : 10, fq.-m.-r
28	1·0	0·07	0·4	0·03	ESE : E : Calm	W : NW	0·7	0·02	133	10, r : 10, r : 10, m, slt.-r, glm	10, oc.-slt.-r, f, glm : 10, fq.-m.-r : 10, m.-r
29	0·0	0·00	0·0	0·00	SW : S	ESE	3·5	0·15	235	10 : 5	10, s.-cu, fq.-shs : 10, fq.-shs
30	8·2	0·61	7·5	0·56	ESE : S : SE	ESE : E	3·4	0·28	284	10 : 10, s.-cu	10, s, n, m.-r : 10, r, sh
Means	..	..	..	..	..	..	..	0·17	218		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 41°·8, being 0°·1 *lower* than
The mean *Temperature of the Dew Point* for the month was 39°·8, being 0°·2 *lower* than
The mean *Degree of Humidity* for the month was 87·5, being 0·2 *greater* than
The mean *Elastic Force of Vapour* for the month was 0in.245, being 0in.002 *less* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs.8, being the same as
The mean *Weight of a Cubic Foot of Air* for the month was 551 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 5·6.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·265. The maximum daily amount of *Sunshine* was 6·9 hours on November 21.

The highest reading of the *Solar Radiation Thermometer* was 91°·6 on November 12; and the lowest reading of the *Terrestrial Radiation Thermometer* was 15°·3 on November 22.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 6, S. 9, W. 5. Seven days were calm.

The *Greatest Pressure of the Wind* in the month was 16·3 lbs. on the square foot on November 14. The mean daily *Horizontal Movement of the Air* for the month was 218 miles; the greatest daily value was 658 miles on November 15; and the least daily value was 59 miles on November 4.

Rain (0in.005 or over) fell on 14 days in the month, amounting to 0in.874, as measured by gauge No. 6 partly sunk below the ground; being 1in.346 *less* than the average fall for the 65 years, 1841–1905.

MONTH and DAY, 1920.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.					Of Radiation.		Of the Earth 4 ft. 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.		hours.	hours.
Dec. 1	29·898	50·9	36·7	14·2	42·8	+ 1·9	40·8	38·5	4·3	9·7	0·7	85	76·2	29·9	47·1	0·000	..	5·2	8·1
2	29·890	47·0	39·7	7·3	42·6	+ 1·7	41·5	40·2	2·4	6·2	0·0	91	47·6	33·1	47·1	0·175	..	0·0	8·1
3	29·737	56·5	40·1	16·4	48·2	+ 7·1	45·5	42·6	5·6	11·1	1·8	81	60·1	36·2	47·2	0·055	..	0·9	8·1
4	29·785	46·6	42·1	4·5	44·4	+ 3·1	40·7	36·4	8·0	12·3	3·3	73	51·3	36·0	47·1	0·018	..	0·1	8·0
5	30·149	46·0	41·4	4·6	44·0	+ 2·5	41·8	39·2	4·8	7·5	2·7	83	65·9	37·0	47·0	0·037	..	0·0	8·0
6	30·135	41·5	38·2	3·3	39·9	− 1·6	38·3	36·2	3·7	7·0	1·2	87	42·8	33·8	47·0	0·031	..	0·0	8·0
7	29·896	41·4	38·4	3·0	39·9	− 1·4	39·0	37·8	2·1	4·7	1·4	93	46·0	38·6	47·1	0·027	..	0·0	8·0
8	29·940	39·8	34·3	5·5	36·8	− 4·2	36·3	35·6	1·2	2·8	0·5	95	41·7	31·1	47·0	0·000	..	0·0	7·9
9	30·086	38·4	32·4	6·0	35·4	− 5·2	34·5	33·1	2·3	4·1	0·8	91	46·8	28·4	46·7	0·003*	..	0·0	7·9
10	30·097	39·8	32·2	7·6	35·4	− 5·0	34·2	32·3	3·1	4·9	1·5	89	43·4	26·2	46·7	0·007	..	0·4	7·9
11	29·974	37·0	26·9	10·1	33·1	− 7·1	32·4	31·0	2·1	6·9	0·4	92	47·0	30·0	46·6	0·243	..	0·0	7·9
12	29·902	27·7	17·2	10·5	22·7	− 17·6	22·1	18·3	4·4	3·3	0·0	83	35·0	15·0	46·3	0·023	..	1·8	7·8
13	29·922	30·6	15·7	14·9	24·3	− 16·2	23·3	17·6	6·7	6·2	0·0	74	32·2	12·9	46·0	0·000	..	0·0	7·8
14	29·987	36·0	30·2	5·8	33·6	− 7·1	32·3	29·9	3·7	6·1	0·8	87	39·0	29·0	45·9	0·018	..	0·0	7·8
15	30·171	34·5	28·1	6·4	31·4	− 9·4	29·9	26·2	5·2	8·0	0·0	80	34·3	25·1	45·6	0·000	..	0·0	7·8
16	30·196	33·7	28·1	5·6	31·3	− 9·4	29·8	26·0	5·3	5·5	0·0	79	39·3	25·1	45·2	0·010	..	0·0	7·8
17	30·107	36·1	33·1	3·0	35·0	− 5·4	34·0	32·4	2·6	2·1	0·0	90	36·3	31·0	45·1	0·009	..	0·0	7·8
18	30·072	40·2	36·1	4·1	38·1	− 1·9	37·4	36·4	1·7	2·8	1·0	94	44·0	35·3	45·0	0·022	..	0·0	7·8
19	29·911	38·0	36·2	1·8	37·0	− 2·5	36·2	35·1	1·9	3·1	0·5	93	41·1	35·0	45·1	0·102	..	0·0	7·8
20	29·728	44·0	36·1	7·9	38·8	− 0·2	37·7	36·2	2·6	5·9	0·7	92	51·2	31·6	44·8	0·001	..	0·9	7·8
21	29·281	47·4	41·4	6·0	44·3	+ 5·8	43·0	41·5	2·8	4·6	2·8	90	49·5	35·0	45·0	0·024	..	0·0	7·8
22	29·196	45·2	37·9	7·3	42·0	+ 3·6	39·7	36·8	5·2	9·3	3·1	83	64·4	31·4	44·7	0·010	..	5·5	7·8
23	29·446	42·0	33·6	8·4	38·1	− 0·1	37·3	36·2	1·9	4·4	0·0	93	52·0	28·4	44·7	0·337	..	0·4	7·8
24	29·607	55·9	37·7	18·2	49·9	+ 11·7	48·8	47·7	2·2	3·9	0·7	92	66·6	33·0	44·9	0·314	..	0·0	7·8
25	29·746	54·1	47·0	7·1	50·5	+ 12·1	48·6	46·6	3·9	6·5	3·1	87	61·0	39·5	44·9	0·000	..	0·0	7·8
26	29·731	54·4	42·1	12·3	48·3	+ 9·7	46·8	45·2	3·1	6·9	1·1	89	71·6	35·1	45·0	0·000	..	3·9	7·8
27	29·493	54·6	44·5	10·1	49·6	+ 10·8	47·9	46·1	3·5	9·2	0·0	89	69·3	40·2	45·0	0·003	..	3·4	7·8
28	29·449	55·0	48·2	6·8	50·9	+ 12·0	48·8	46·6	4·3	9·0	0·2	86	81·0	42·1	45·2	0·077	..	2·0	7·8
29	29·645	54·7	48·3	6·4	51·3	+ 12·3	49·9	48·5	2·8	5·3	0·8	91	56·4	42·0	45·3	0·174	..	0·0	7·8
30	29·603	54·5	45·2	9·3	50·0	+ 11·1	47·4	44·6	5·4	9·8	0·9	82	74·8	36·5	45·5	0·003	..	2·7	7·8
31	29·564	55·6	47·6	8·0	52·1	+ 13·4	50·7	49·3	2·8	5·0	1·2	90	55·2	44·0	45·6	0·204	..	0·0	7·8
Means	29·818	44·5	36·7	7·8	40·7	+ 0·8	39·2	37·1	3·6	6·3	1·0	87·2	52·4	32·5	45·9	Sum 1·927	..	0·9	7·9
Number of Column for Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following 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 December 9th is partly derived from dew.

The mean reading of the *Barometer* for the month was 29$^{in.}$·818, being 0$^{in.}$·033 *higher* than the average for the 65 years, 1841–1905.

TEMPERATURE OF THE AIR.

The highest in the month was 56°·5 on December 3; the lowest in the month was 15°·7 on December 13; and the range was 40°·8.
The mean of all the highest daily readings in the month was 44°·5, being 0°·3 *higher* than the average for the 65 years, 1841–1905.
The mean of all the lowest daily readings in the month was 36°·7, being 1°·7 *higher* than the average for the 65 years, 1841–1905.
The mean of the daily ranges was 7°·8, being 1°·4 *less* than the average for the 65 years 1841–1905.
The mean for the month was 40°·7, being 0°·8 *higher* than the average for the 65 years, 1841–1905.

MONTH and DAY, 1920.	Record of the Night Sky. Polaris. Duration.	Polaris. Fraction of Total Exposure.	δ Ursae Minoris. Duration.	δ Ursae Minoris. Fraction of Total Exposure.	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.		
Dec. 1	4·3	0·32	2·8	0·21	SW : SSE	SW : S	2·9	0·12	264	1 : 1 : 3, cu, ci	1, cu, ci : 0 : 10, th.-cl
2	0·8	0·06	0·0	0·00	S : E	E : Calm : S	3·6	0·21	204	10, r : 10, s, n, fq.-slt.-r	10 : 10
3	10·7	0·79	10·3	0·76	S : SW	W : WNW	12·0	1·25	677	9 : 10, r, w : 10,s.-cu,fq.-slt.-r,w	9, cu.-n, w : 1, w : 1, cu, w
4	1·7	0·13	1·1	0·08	WNW : NW : N	N : NNE	15·0	2·06	773	1, w : 10 : 9,s,n,w,sh	9, w : 9, w : 10, r, w
5	0·0	0·00	0·0	0·00	NNE : NE	NNE	10·0	0·67	484	10, fq.-sqs, w : v.-cl, w : 9, w	10, sh, w : 10, fq.-slt.-r
6	0·0	0·00	0·0	0·00	NE	NE : NNE	3·7	0·27	337	10. r, m.-r : 10, s, m.-r	10, fq.-m.-r : 10, fq.-m.-r
7	0·0	0·00	0·0	0·00	NE : NNE	NNE : Calm	1·2	00·5	167	10 : 10 : 10,oc.-m.-r	10, fq.-m.-r : 10, fq.-m.-r
8	0·0	0·00	0·0	0·00	Calm	Calm	0·5	0·00	72	10, m.-r : 10, m, slt.-glm : 10, s, f, glm	10, f, slt.-glm : f
9	13·3	0·96	9·4	0·68	Calm : N	N	1·1	0·05	154	10, f, m : 10, f : 8, s, h, f	3, slt.-h : 0 : 0, ho.-fr
10	1·3	0·10	0·9	0·07	N : Calm	N : NE : ESE	1·6	0·05	159	0, ho.-fr : 0, h, ho.-fr	1, h : 10, fq.-slt.-r : 9
11	3·7	0·27	2·8	0·20	Calm : N	N : S : Calm	1·6	0·06	155	10, slt.-sn.-shs : 10, slt.-sn.-shs : 10, s.-cu, s	10, slt.-r : 10, sn
12	..	..	..	..	Calm	Calm	0·4	0·00	68	p.-cl : 10, slt.-sn.-sh : 0, slt.-f	0, slt.-f, h : 0, slt.-f, ho.-fr
13	0·0	0·00	0·0	0·00	Calm	Calm	0·2	0·00	93	3, th.-cl, ho.-fr : 1, ho.-fr : 10, slt.-f, ho.-fr	10 : 10, slt.-sn, ho.-fr : 10, ho.-fr
14	0·0	0·00	0·0	0·00	NE : E	E : NE	3·3	0·19	250	10 : 10	10, fq.-m.-r : 10, fq.-m.-r : 10
15	5·6	0·41	4·6	0·33	E : ENE	NE : NNE	3·7	0·57	414	10 : 10 : 10, oc.-slt.-sn	10, oc.-slt. sn: 10 : p.-cl
16	1·2	0·09	0·0	0·00	N : NNE	N : NNE	3·5	0·30	310	7, sn.-shs : 9 : 10, fq.-slt.-sn	10, fq.-slt.-sn: 10, fq.-slt.-sn: 10, slt.-sn
17	0·0	0·00	0·0	0·00	N : NNE	NNE : NE	2·3	0·28	315	10 : 10 : 10,fq.-m.-r	10, fq.-m.-r : 10, fq.-m.-r
18	0·0	0·00	0·0	0·00	NE	NNE : NE	1·5	0·13	274	10 : 10, sh : 10, slt.-r	10, oc.-m.-r : 10, oc.-m.-r
19	0·0	0·00	0·0	0·00	NNE : NE	NE	1·5	0·13	206	10, oc.-m.-r : 10, oc.-slt.-r	10, fq.-m.-r : 10, r : 10, m.-r, sh
20	2·2	0·15	1·5	0·11	Calm : SW	SW : SSW	2·6	0·11	202	10 : 10,oc.-m.-r: 9, s.-cu	9, s.-cu : 10, m.-r
21	13·3	0·95	11·2	0·80	SSW	SW	6·0	0·64	453	10, m.-r.-sh : 10 : 10, m.-r, w	10, r, w : 1
22	2·6	0·19	2·2	0·16	WSW : W	WSW : SW	6·8	0·46	441	2 : 2 : 1, cu, w	v.-cl, cu, s, w : 1 : 9
23	0·7	0·05	0·0	0·00	E : NE : NNE	N : Calm	2·7	0·13	219	10, r : 10, fq.-r : 8, s.-cu, ci.-cu	2, h : 1, f,h, ho.-fr : p.-cl, m
24	0·0	0·00	0·0	0·00	SE : SW	SW : WSW	3·9	0·42	380	10, r : 10, r : 10	10, oc.-shs : 10
25	10·5	0·75	2·6	0·18	WSW : SSW	SSW : S	3·5	0·32	371	10 : 9, s, n	10, s, n, th.-cl : 10, th.-cl
26	6·5	0·46	2·5	0·18	SSW : SW	Calm : SSE	2·3	0·10	205	7, th.-cl : 3, lu.-ha : p.-cl, th.-cl	p.-cl, th.-cl : 10, th.-cl : 9, th.-cl
27	2·1	0·15	1·3	0·09	SSW : SW	WSW : SW	3·6	0·30	315	9, th.-cl : 9, fq.-m.-r	2 : 10, m.-r
28	10·9	0·78	10·2	0·73	SSE : SW : W	WSW : SW	7·0	0·68	491	10, fq.-m.-r, r : 10, fq.-m.-r, w : 9, w	9, r, w : 1 : 3, th.-cl
29	4·1	0·30	3·2	0·23	SW : SSW	SSW : SW	7·2	0·43	355	10, th.-cl : 10, r	10, m.-r : 10, m.-r, w
30	4·0	0·29	2·2	0·15	SW : WSW	WSW : SW : S	12·0	0·72	475	10, m.-r, w : 2, w : 6,cl,cu,th.-cl,w	9, s, n, w : p.-cl : v.-cl
31	9·6	0·68	8·4	0·60	S : SW	SW	6·1	0·64	462	10 : 10, r : 10, r, w	10, m.-r, w : v.-cl, w
Means	..	..	..	..	..	..	..	0·37	314		
Number of Column for Reference	20	21	22	23	24	25	26	27	28	29	30

The mean *Temperature of Evaporation* for the month was 39°·2, being 0°·7 *higher* than
The mean *Temperature of the Dew Point* for the month was 37°·1, being 0°·4 *higher* than
The mean *Degree of Humidity* for the month was 87·2, being 1·4 *less* than
The mean *Elastic Force of Vapour* for the month was 0in.221, being 0in.003 *greater* than
The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2grs.6, being equal to
} the average for the 65 years, 1841–1905.
The mean *Weight of a Cubic Foot of Air* for the month was 552 grains, being equal to
The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 8·2.
The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·112. The maximum daily amount of *Sunshine* was 5·5 hours on December 22.
The highest reading of the *Solar Radiation Thermometer* was 81°·0 on December 28; and the lowest reading of the *Terrestrial Radiation Thermometer* was 12°·9 on December 13.
The *Proportions of Wind* referred to the cardinal points were N. 8, E. 5, S. 7, W. 5. Six days were calm.
The *Greatest Pressure of the Wind* in the month was 15·0 lbs. on the square foot on December 4. The mean daily *Horizontal Movement of the Air* for the month was 314 miles; the greatest daily value was 733 miles on December 4; and the least daily value was 68 miles on December 12.
Rain (0in.005 or over) fell on 21 days in the month, amounting to 1in.927, as measured by gauge No. 6 partly sunk below the ground; being 0in.100 *greater* than the average fall for the 65 years, 1841–1905.

HIGHEST and LOWEST READINGS of the BAROMETER, reduced to 32° FAHRENHEIT, as extracted from the PHOTOGRAPHIC RECORDS.

MAXIMA.		MINIMA.		MAXIMA.		MINIMA.		MAXIMA.		MINIMA.	
Greenwich Civil Time, 1920.	Reading.	Greenwich Civil Time, 1920.	Reading.	Greenwich Civil Time, 1920.	Reading.	Greenwich Civil Time, 1920.	Reading.	Greenwich Civil Time, 1920.	Reading.	Greenwich Civil Time, 1920.	Reading.
January.		January.		April.		April.		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. 7. 0	29·084	14. 11. 15	29·410	15. 7. 35	29·098	3. 21. 0	29·818	3. 4. 15	29·740
2. 9. 0	29·737	3. 14. 0	29·382	18. 23. 10	29·782	20. 15. 55	29·287	5. 3. 0	29·862	4. 14. 10	29·709
5. 19. 45	30·362	8. 9. 0	29·193	21. 23. 25	30·000	22. 19. 0	29·845	7. 20. 15	30·019	5. 16. 0	29·763
9. 16. 20	29·614	10. 16. 55	28·941	23. 22. 45	30·060	26. 4. 0	29·685	11. 1. 0	30·202	9. 18. 0	29·844
11. 1. 45	29·194	11. 11. 5	28·742	26. 20. 25	29·845	27. 15. 20	29·391	14. 10. 0	29·968	13. 7. 35	29·837
12. 10. 50	29·512	12. 17. 0	29·368	30. 20. 35	29·810			17. 10. 45	29·569	17. 0. 35	29·439
13. 13. 55	29·764	13. 23. 50	29·574					23. 21. 25	30·131	18. 21. 50	29·225
14. 23. 0	30·331	15. 14. 0	30·234			May.		28. 8. 50	30·086	25. 5. 0	29·900
16. 9. 20	30·370	19. 10. 0	29·621	May.		2. 6. 50	29·291				
20. 7. 0	29·967	21. 6. 0	29·802	5. 6. 0	30·450	7. 1. 30	29·798	October.		October.	
22. 10. 0	30·168	24. 15. 0	29·707	8. 0. 55	30·001	9. 3. 50	29·903			2. 3. 25	29·269
25. 10. 0	30·119	26. 18. 0	29·500	10. 8. 50	30·145	12. 4. 50	29·579	4. 21. 5	29·638	6. 9. 45	29·455
27. 6. 0	29·702	27. 21. 0	29·350	14. 8. 45	30·120	18. 11. 20	29·399	8. 21. 5	29·984	16. 6. 50	29·410
28. 9. 0	29·516	28. 22. 0	29·104	22. 9. 0	30·265	25. 3. 35	29·675	19. 10. 0	29·986	21. 15. 50	29·772
29. 17. 55	29·704	30. 4. 20	29·387	27. 10. 20	29·864	29. 15. 40	29·696	23. 0. 20	30·074	24. 4. 0	29·973
30. 23. 10	29·894	31. 13. 50	29·652					26. 23. 40	30·182	31. 23. 50	29·063
				June.		June.					
February.		February.		1. 11. 0	30·185	3. 20. 0	29·933	November.		November.	
2. 11. 0	30·367	4. 0. 0	30·232	4. 21. 0	30·009	12. 15. 25	29·548				
5. 10. 0	30·498	7. 14. 20	30·234	14. 22. 0	29·870	16. 15. 0	29·706	8. 23. 40	30·338	13. 8. 50	29·781
9. 2. 45	30·361	11. 3. 40	29·577	17. 20. 0	29·809	20. 16. 40	29·645	13. 19. 45	29·884	15. 11. 0	29·466
12. 11. 25	30·110	13. 15. 20	29·591	23. 21. 20	30·171	28. 3. 55	29·667	17. 23. 35	30·289	19. 13. 15	30·165
14. 21. 0	29·925	15. 22. 10	29·604	28. 22 0.	29·754	29. 18. 0	29·678	21. 10. 0	30·273	24. 14. 30	29·689
18. 22. 0	29·883	20. 5. 50	29·698	30. 22. 5	29·785			25. 20. 0	29·929	28. 4. 0	29·490
23. 0. 0	30·357	26. 4. 0	29·826			July.		29. 8. 20	29·885	30. 19. 55	29·579
26. 23. 40	30·060	27. 13. 0	29·884	July.		2. 7. 5	29·498				
28. 11. 0	30·251			4. 23. 15	29·821	6. 13. 20	29·439				
				7. 1. 0	29·585	7. 19. 15	29·489				
March.		March.		10. 5. 55	29·925	12. 17. 10	29·667	December.		December.	
				14. 7. 55	30·022	15. 12. 5	29·826				
3. 9. 10	30·519	1. 23. 5	29·760	15. 23. 5	29·909	17. 10. 15	29·638	1. 15. 45	29·987	2. 6. 5	29·750
9. 10. 30	30·337	6. 21. 0	29·077	19. 23. 0	30·171	24. 1. 0	29·397	2. 21. 55	30·074	3. 11. 20	29·563
13. 0. 30	29·758	12. 10. 0	29·580	25. 0. 0	29·836	26. 8. 25	29·371	5. 18. 50	30·211	7. 15. 0	29·829
20. 9. 0	30·356	15. 4. 0	28·398	27. 23. 0	29·969	28. 18. 40	29·771	9. 22. 0	30·118	11. 21. 0	29·878
24. 8. 40	29·921	23. 16. 15	29·830	29. 12. 20	29·949			15 20. 15	30·234	22. 1. 20	29·076
26. 8. 0	29·664	25. 21. 0	29·567			August.		22. 18. 15	29·304	23. 4. 0	29·156
27. 11. 0	29·462	27. 2. 15	29·378	August.				23. 22. 25	29·705	24. 7. 5	29·517
30. 22. 30	29·503	29. 4. 0	29·291			1. 3. 0	29·584	25. 8. 0	29·790	25. 21. 0	29·710
				4. 7. 25	29·817	5. 9. 0	29·336	26. 10. 0	29·813	27. 5. 0	29·432
April.		April.		7. 23. 0	29·994	9. 16. 15	29·827	27. 18. 10	29·538	28. 6. 0	29·262
		1. 16. 0	29·207	12. 9. 10	30·152	14. 15. 0	29·986	29. 3. 50	29·719	30. 0. 40	29·454
6. 10. 30	29·835	9. 9. 14	29·275	16. 8. 0	30·101	19. 2. 45	29·621	30. 20. 50	29·712	31. 19. 5	29·453
10. 20. 45	29·435	12. 16. 0	28·969	21. 1. 0	30·001	22. 3. 55	29·812				
				29. 0. 0	30·291						

The readings in the above table are accurate, but the times are occasionally liable to uncertainty, as the barometer will sometimes remain at its extreme reading without sensible change for a considerable interval of time. In such cases the time given is the middle of the stationary period.

The time is expressed in civil reckoning, commencing at midnight and counting from 0^h to 24^h.

The height of the barometer cistern above mean sea level is 152 feet; no correction has been applied to the readings to reduce to sea level.

HIGHEST and LOWEST READINGS of the BAROMETER in each Month for the YEAR 1920.

	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	30·370	30·498	30·519	30·060	30·450	30·185	30·171	30·291	30·202	30·182	30·338	30·234
Lowest	28·742	29·577	28·398	28·969	29·291	29·548	29·371	29·336	29·225	29·063	29·065	29·076
Range	1·628	0·921	2·121	1·091	1·159	0·637	0·800	0·955	0·977	1·119	1·273	1·158

The highest reading in the year was $30^{in.}·519$ on March 3. The lowest reading in the year was $28^{in.}·398$ on March 15. The range of reading in the year was $2^{in.}·121$.

MONTHLY RESULTS of METEOROLOGICAL ELEMENTS for the YEAR 1920.

MONTH, 1920.	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	29·734	55·5	22·1	33·4	47·4	37·0	10·4	42·4	+ 3·8	40·1	37·1	81·7
February	30·036	61·8	27·2	34·6	51·0	36·4	14·6	43·4	+ 3·9	40·9	38·0	82·0
March	29·754	65·9	27·2	38·7	55·7	38·1	17·6	46·4	+ 4·5	43·0	39·2	76·7
April	29·547	66·2	32·9	33·3	56·9	41·6	15·2	48·2	+ 0·9	45·4	42·3	80·8
May	29·882	86·5	32·0	54·5	66·9	45·6	21·3	55·5	+ 2·5	50·6	45·8	70·1
June	29·865	78·7	36·5	42·2	71·0	50·1	20·9	59·7	+ 0·3	54·7	50·3	71·7
July	29·757	75·8	44·0	31·8	69·5	51·9	17·6	59·4	− 3·3	55·3	51·8	76·6
August	29·925	77·6	41·3	36·3	67·7	49·7	18·1	57·8	− 3·8	53·6	49·9	75·5
September	29·860	76·0	39·2	36·8	66·6	49·4	17·2	57·0	− 0·2	53·9	51·1	80·9
October	29·802	72·6	27·9	44·7	61·0	43·1	17·9	51·3	+ 1·3	48·9	46·5	84·1
November	29·917	59·0	23·4	35·6	50·5	36·8	13·8	43·5	− 0·0	41·8	39·8	87·5
December	29·818	56·5	15·7	40·8	44·5	36·7	7·8	40·7	+ 0·8	39·2	37·1	87·2
Means	29·825	Highest 86·5	Lowest 15·7	Annual Range 70·8	59·1	43·0	16·0	50·4	+ 0·9	47·3	44·1	79·6

MONTH, 1920.	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 4 feet below the surface of the soil.	Mean Amount of Cloud (0-10.)	RAIN. Number of Rainy Days (0in·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	0·221	2·6	549	44·1	7·4	18	2·298	22	61	22	24	91	258	221	35	10	0·62	433
February	0·229	2·6	553	43·8	6·6	10	0·580	33	44	26	52	65	228	91	9	148	0·34	297
March	0·239	2·8	545	44·1	6·0	14	1·383	51	17	26	25	133	245	105	37	105	0·30	299
April	0·270	3·1	538	46·9	8·4	21	2·669	51	12	22	16	107	199	136	64	113	0·37	296
May	0·308	3·5	537	49·6	5·9	12	0·688	33	13	65	73	15	180	241	40	84	0·34	284
June	0·365	4·1	532	53·6	6·8	11	1·712	60	87	79	56	31	62	177	53	115	0·17	220
July	0·385	4·3	530	56·1	8·2	16	3·232	26	12	9	8	33	231	291	60	74	0·25	274
August	0·360	4·0	535	56·6	7·7	8	1·615	142	91	35	7	12	97	198	66	96	0·17	243
September	0·375	4·2	534	55·5	7·3	13	3·444	88	55	53	17	16	120	154	38	179	0·13	213
October	0·317	3·5	540	54·2	4·7	9	1·010	1	68	228	98	63	27	4	0	255	0·17	196
November	0·245	2·8	551	49·0	5·6	14	0·874	46	16	80	94	103	132	43	26	180	0·17	218
December	0·221	2·6	552	45·9	8·2	21	1·927	116	132	36	20	77	155	53	9	146	0·37	314
Sums	..	..	..	..	..	167	21·432	669	608	681	490	746	1934	1714	437	1505	..	..
Means	0·295	3·3	541	49·9	6·9	..	..	..	..	..	..	..	..	..	..	..	0·28	274

The greatest recorded pressure of the wind on the square foot in the year was 25·7 lbs. on May 18.
The greatest recorded daily horizontal movement of the air in the year was 799 miles on January 11.
The least recorded daily horizontal movement of the air in the year was 24 miles on October 22.

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

Hour, Greenwich Civil Time.	1920. 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	29·724	30·040	29·764	29·552	29·883	29·876	29·770	29·927	29·872	29·818	29·912	29·827	29·830
1h	29·721	30·038	29·761	29·546	29·880	29·873	29·765	29·924	29·871	29·814	29·909	29·819	29·827
2	29·720	30·036	29·757	29·542	29·878	29·870	29·759	29·921	29·867	29·808	29·905	29·818	29·823
3	29·719	30·034	29·752	29·538	29·877	29·867	29·754	29·919	29·861	29·803	29·900	29·815	29·820
4	29·718	30·030	29·747	29·535	29·876	29·869	29·752	29·915	29·857	29·799	29·898	29·806	29·817
5	29·718	30·031	29·749	29·535	29·879	29·871	29·754	29·915	29·856	29·799	29·900	29·800	29·817
6	29·721	30·031	29·753	29·539	29·885	29·874	29·756	29·920	29·862	29·800	29·903	29·800	29·820
7	29·725	30·033	29·762	29·544	29·889	29·877	29·757	29·925	29·868	29·804	29·910	29·802	29·825
8	29·735	30·040	29·769	29·547	29·891	29·878	29·758	29·929	29·873	29·811	29·920	29·808	29·830
9	29·744	30·045	29·774	29·548	29·890	29·878	29·757	29·929	29·876	29·814	29·926	29·816	29·833
10	29·750	30·047	29·773	29·549	29·889	29·876	29·756	29·929	29·874	29·814	29·930	29·823	29·834
11	29·750	30·049	29·772	29·548	29·884	29·874	29·756	29·929	29·867	29·809	29·926	29·820	29·832
Noon	29·742	30·039	29·766	29·544	29·881	29·869	29·754	29·927	29·860	29·803	29·919	29·811	29·826
13h	29·732	30·029	29·758	29·542	29·879	29·864	29·752	29·924	29·855	29·795	29·915	29·808	29·821
14	29·729	30·022	29·750	29·537	29·874	29·859	29·752	29·920	29·850	29·788	29·911	29·805	29·816
15	29·728	30·018	29·742	29·535	29·871	29·855	29·751	29·916	29·843	29·784	29·914	29·811	29·814
16	29·730	30·019	29·738	29·537	29·870	29·852	29·749	29·915	29·841	29·783	29·917	29·816	29·814
17	29·732	30·024	29·740	29·540	29·869	29·846	29·747	29·914	29·842	29·789	29·919	29·820	29·815
18	29·739	30·033	29·744	29·546	29·872	29·846	29·748	29·916	29·845	29·797	29·923	29·827	29·820
19	29·743	30·039	29·748	29·553	29·880	29·849	29·752	29·922	29·852	29·799	29·927	29·832	29·825
20	29·746	30·046	29·749	29·563	29·886	29·854	29·758	29·930	29·858	29·804	29·928	29·834	29·820
21	29·749	30·049	29·747	29·566	29·892	29·863	29·766	29·938	29·861	29·808	29·930	29·835	29·834
22	29·749	30·049	29·747	29·568	29·893	29·865	29·769	29·941	29·861	29·808	29·929	29·834	29·834
23	29·751	30·047	29·743	29·570	29·895	29·865	29·768	29·942	29·860	29·606	29·931	29·833	29·834
24	29·748	30·045	29·739	29·569	29·894	29·864	29·764	29·940	29·857	29·803	29·932	29·827	29·832
Means 0h.–23h.	29·734	30·036	29·754	29·547	29·882	29·865	29·757	29·925	29·860	29·802	29·917	29·818	29·825
Means 1h.–24h.	29·735	30·036	29·754	29·547	29·882	29·065	29·756	29·925	29·859	29·802	29·917	29·818	29·825
Number of Days employed	31	29	31	30	31	30	31	31	30	31	30	31	..

MONTHLY MEAN TEMPERATURE of the AIR at every HOUR of the DAY, as deduced from the PHOTOGRAPHIC RECORDS.

Hour, Greenwich Civil Time.	1920. January.	February	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	41·4	40·8	43·4	44·8	49·6	53·7	55·0	53·6	53·4	47·5	41·8	39·8	47·1
1h	41·3	40·5	42·7	44·4	49·0	52·9	54·3	53·0	52·8	47·1	41·2	39·7	46·6
2	41·0	40·0	42·3	44·0	48·4	52·3	53·8	52·3	52·1	46·8	40·9	39·8	46·1
3	41·2	39·7	41·7	43·7	47·8	52·0	53·3	51·8	51·7	46·7	40·5	39·8	45·8
4	41·2	39·4	41·0	43·5	47·3	51·6	53·2	51·4	51·4	46·5	40·1	39·8	45·5
5	41·2	39·6	40·5	43·6	47·6	52·5	53·8	51·2	51·4	46·4	39·9	40·0	45·6
6	41·1	39·8	40·5	44·3	50·0	54·5	55·3	52·1	51·9	45·9	39·7	39·9	46·3
7	41·0	40·0	41·2	46·2	53·2	57·4	57·5	54·4	53·3	46·8	40·2	40·2	47·6
8	41·0	40·4	43·2	48·2	56·1	59·9	59·4	57·0	55·6	48·9	40·8	40·3	49·2
9	41·6	42·0	45·5	49·9	58·6	61·7	61·3	59·5	57·7	51·5	42·4	40·8	51·0
10	42·8	44·2	47·8	51·1	60·2	63·3	63·0	61·1	59·7	54·2	44·6	41·5	52·8
11	43·8	46·2	50·1	52·2	61·6	64·8	63·3	61·8	61·2	57·0	46·7	42·3	54·2
Noon	44·5	47·8	51·8	52·5	62·5	66·1	64·3	62·9	62·5	58·7	48·3	42·6	55·4
13h	44·8	48·7	52·7	53·3	63·0	66·9	64·7	64·0	63·5	59·7	48·9	42·8	56·1
14	45·1	49·4	53·4	53·4	63·4	67·2	64·8	64·7	64·0	59·4	49·1	42·7	56·4
15	44·5	49·2	53·2	53·1	63·2	66·9	65·0	64·7	63·7	58·5	48·0	42·2	56·0
16	43·5	48·4	52·6	52·6	62·7	66·6	64·5	64·2	63·1	57·1	46·6	41·4	55·3
17	43·0	46·7	51·3	51·2	61·4	66·2	64·0	63·3	61·8	54·6	45·2	40·8	54·1
18	42·5	44·9	49·2	50·0	59·3	64·6	62·8	61·6	59·9	52·6	44·5	40·5	52·7
19	42·3	43·8	47·5	48·7	56·9	62·6	61·2	59·6	57·8	51·0	43·9	40·3	51·3
20	41·9	43·0	46·2	47·7	54·8	60·1	59·3	57·7	56·6	49·7	43·3	40·1	50·0
21	42·1	42·4	45·3	46·8	53·1	58·0	57·9	56·1	55·5	48·9	42·9	40·0	49·1
22	42·0	42·0	44·7	46·1	52·1	56·2	56·8	55·1	54·6	48·1	42·3	39·8	48·3
23	42·1	41·5	43·8	45·3	50·9	54·9	55·9	54·2	54·0	47·7	42·0	39·9	47·7
24	41·6	40·8	43·4	44·9	49·8	53·8	55·1	53·4	53·4	47·3	41·7	39·9	47·1
Means 0h.–23h.	42·4	43·4	46·3	48·2	55·5	59·7	59·4	57·8	57·0	51·3	43·5	40·7	50·4
Means 1h.–24h.	42·4	43·4	46·3	48·2	55·5	59·7	59·4	57·8	57·0	51·3	43·5	40·7	50·4
Number of Days employed	31	29	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.	1920. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	39·3	39·2	41·2	43·4	47·7	51·6	53·3	51·6	51·8	46·5	40·7	38·5	45·4
1h	39·2	38·9	40·8	43·2	47·3	50·9	52·8	51·1	51·3	46·1	40·1	38·4	45·0
2	39·1	38·6	40·4	42·9	46·8	50·7	52·3	50·7	50·8	45·8	40·0	38·5	44·7
3	39·2	38·2	40·1	42·6	46·3	50·4	52·1	50·4	50·7	45·8	39·6	38·4	44·5
4	39·3	38·0	39·6	42·6	45·9	50·2	52·0	49·9	50·4	45·6	39·1	38·3	44·2
5	39·3	38·1	39·0	42·6	46·1	50·8	52·4	49·5	50·2	45·6	39·0	38·5	44·3
6	39·2	38·4	39·2	43·1	48·0	52·2	53·2	50·2	50·5	45·4	38·9	38·6	44·7
7	39·0	38·4	39·9	44·4	50·0	53·9	54·5	51·9	51·5	46·1	39·3	38·8	45·6
8	39·0	38·6	41·4	45·6	51·4	55·1	55·4	53·5	53·2	47·8	39·6	38·9	46·6
9	39·5	39·9	43·0	46·4	52·5	56·0	56·2	54·7	54·5	49·7	40·9	39·4	47·7
10	40·5	41·6	44·7	47·1	53·1	56·8	56·9	55·2	55·6	51·4	42·7	39·9	48·8
11	41·1	43·1	46·0	47·7	53·8	57·3	57·3	55·7	56·2	52·8	44·4	40·4	49·7
Noon	41·5	44·1	46·7	48·0	54·3	57·9	57·8	56·3	56·8	53·6	45·4	40·6	50·2
13h	41·9	44·6	47·1	48·4	54·5	58·3	58·0	56·8	57·4	53·8	45·7	40·7	50·6
14	42·1	44·9	47·2	48·5	54·6	58·5	58·1	57·1	57·5	53·6	45·8	40·7	50·7
15	41·6	44·8	47·0	48·5	54·2	58·5	58·2	57·1	57·4	53·0	45·1	40·4	50·5
16	41·0	44·2	46·6	47·9	53·8	58·4	57·9	56·8	57·1	52·2	44·3	39·8	50·0
17	40·7	43·1	45·8	47·1	53·2	58·0	57·8	56·5	56·4	51·1	43·3	39·5	49·4
18	40·3	42·2	44·7	46·4	52·2	57·2	57·1	55·5	55·8	50·1	42·7	39·2	48·6
19	40·1	41·5	43·8	45·6	51·1	56·4	56·4	54·6	54·9	49·0	42·2	39·1	47·9
20	39·8	40·9	42·9	45·1	50·2	55·1	55·8	53·8	54·3	48·2	41·8	39·0	47·2
21	39·8	40·4	42·4	44·6	49·4	54·1	55·0	53·0	53·5	47·7	41·6	38·8	46·7
22	39·7	40·1	42·1	44·1	48·9	53·3	54·5	52·4	53·0	47·1	41·2	38·7	46·3
23	39·6	39·7	41·6	43·6	48·4	52·4	54·0	51·9	52·4	46·6	41·0	38·7	45·8
24	39·5	39·3	41·2	43·5	47·9	51·6	53·4	51·3	51·9	46·2	40·7	38·6	45·4
Means. 0h.–23h.	40·1	40·9	43·0	45·4	50·6	54·7	55·4	53·6	53·9	48·9	41·8	39·2	47·3
Means. 1h.–24h.	40·1	40·9	43·0	45·4	50·6	54·7	55·4	53·6	53·9	48·9	41·8	39·2	47·3
Number of Days employed	31	29	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.	1920. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Midnight	36·7	37·2	38·6	41·8	45·7	49·6	51·7	49·7	50·2	45·4	39·3	36·8	43·6
1h	36·6	36·9	38·6	41·8	45·4	48·9	51·3	49·2	49·8	45·0	38·7	36·7	43·2
2	36·7	36·8	38·1	41·6	45·1	49·1	50·8	49·1	49·5	44·7	38·9	36·8	43·1
3	36·7	36·2	38·1	41·3	44·7	48·8	50·9	49·0	49·7	44·8	38·5	36·6	42·9
4	36·9	36·2	37·8	41·5	44·4	48·8	50·8	48·4	49·4	44·6	37·8	36·3	42·7
5	36·9	36·1	37·1	41·4	44·5	49·1	51·0	47·8	49·0	44·7	37·8	36·6	42·7
6	36·8	36·6	37·6	41·7	45·9	50·0	51·2	48·3	49·1	44·9	37·9	36·9	43·1
7	36·5	36·3	38·2	42·4	46·8	50·7	51·8	49·5	49·7	45·4	38·2	37·0	43·5
8	36·5	36·3	39·3	42·8	47·0	50·9	51·8	50·3	50·9	46·6	38·1	37·1	44·0
9	36·9	37·3	40·1	42·7	47·1	51·1	51·8	50·4	51·6	47·9	39·1	37·7	44·5
10	37·8	38·5	41·3	42·9	46·8	51·3	51·7	50·1	52·0	48·7	40·5	37·9	45·0
11	37·9	39·6	41·7	43·1	47·0	51·1	52·3	50·5	51·9	48·9	41·8	38·1	45·3
Noon	38·0	40·0	41·5	43·4	47·3	51·3	52·4	50·6	51·9	49·1	42·2	38·2	45·5
13h	38·5	40·2	41·5	43·5	47·3	51·4	52·4	50·8	52·3	48·6	42·3	38·2	45·6
14	38·6	40·1	41·0	43·6	47·2	51·6	52·5	50·8	52·1	48·5	42·3	38·3	45·6
15	38·2	40·1	40·8	43·9	46·6	51·8	52·7	50·8	52·2	48·1	41·9	38·2	45·4
16	38·0	39·6	40·6	43·2	46·3	51·8	52·4	50·7	52·0	47·7	41·7	37·8	45·1
17	37·9	39·0	40·1	42·8	46·1	51·4	52·6	50·8	51·8	47·7	41·1	37·9	44·9
18	37·6	39·0	39·9	42·6	45·9	51·1	52·2	50·3	52·2	47·6	40·6	37·6	44·7
19	37·4	38·8	39·7	42·3	45·8	51·1	52·3	50·2	52·4	46·9	40·2	37·6	44·6
20	37·2	38·4	39·2	42·2	45·8	50·7	52·7	50·3	52·2	46·6	40·0	37·6	44·4
21	37·0	38·0	39·1	42·1	45·7	50·6	52·4	50·1	51·6	46·4	40·0	37·3	44·2
22	36·8	37·7	39·0	41·8	45·6	50·6	52·4	49·8	51·4	46·0	39·9	37·3	44·0
23	36·5	37·4	39·0	41·6	45·8	50·0	52·2	49·6	50·8	45·4	39·8	37·1	43·8
24	36·9	37·4	38·6	41·9	45·9	49·5	51·8	49·2	50·4	45·0	39·5	36·9	43·6
Means. 0h.–23h.	37·3	38·0	39·5	42·4	46·1	50·5	51·9	49·9	51·1	46·7	39·9	37·4	44·2
Means. 1h.–24h.	37·3	38·0	39·5	42·4	46·1	50·5	51·9	49·9	51·1	46·7	39·9	37·4	44·2

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.	1920. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	84	87	83	90	87	86	89	87	89	93	92	90	88
1h	84	88	86	91	88	87	90	87	90	93	91	90	89
2	85	89	86	91	89	89	90	89	91	93	93	90	90
3	84	88	88	91	90	89	92	90	93	94	93	89	90
4	85	89	89	93	91	90	92	90	93	94	92	88	91
5	85	88	88	92	89	89	90	88	92	94	93	88	90
6	85	89	90	91	86	84	87	87	90	97	94	90	89
7	84	87	90	87	79	78	82	83	88	95	93	89	86
8	84	86	86	82	72	72	76	78	85	92	90	89	83
9	84	84	82	76	66	68	71	72	80	88	89	89	79
10	83	80	79	74	62	65	67	68	76	81	86	88	76
11	79	78	73	72	59	61	67	67	72	74	84	86	73
Noon	78	75	68	71	57	59	65	65	69	71	80	85	70
13h	78	72	66	69	57	58	64	62	67	67	78	84	68
14	78	70	63	70	56	57	64	61	65	67	77	85	68
15	78	71	63	71	55	59	64	61	66	69	80	86	69
16	80	72	65	71	55	60	65	61	67	71	84	88	70
17	82	76	66	74	57	59	66	64	70	77	86	90	72
18	84	80	70	76	61	61	69	67	76	83	87	90	75
19	84	82	75	79	66	67	73	71	82	86	86	90	78
20	85	83	77	82	71	71	79	76	85	89	88	91	81
21	83	85	79	85	76	77	82	80	87	92	90	90	84
22	83	86	81	86	79	82	85	83	89	93	91	91	86
23	82	87	83	87	83	83	88	84	89	92	92	90	87
24	84	88	83	90	88	85	89	86	90	92	93	90	88
Means. 0h–23h	83	82	78	81	72	73	77	76	81	85	88	89	80
Means. 1h–24h	83	82	78	81	72	73	77	76	81	85	88	89	80

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 1920.

Month, 1920.	Registered Duration of Sunshine in the Hour ending 5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	Total Registered Duration of Sunshine in each Month.	Corresponding aggregate Period during which the Sun was above the Horizon.	Proportion of Sunshine.	Mean Altitude of the Sun at Noon.
	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h	h		°
January	..	..	..	..	2·8	6·3	8·5	10·4	8·0	7·5	4·2	1·5	..	..	..	..	49·2	258·3	0·190	18
February	..	..	..	1·7	7·4	11·0	11·5	12·8	12·7	11·9	9·3	7·7	1·8	..	..	..	87·8	286·9	0·306	26
March	..	..	1·0	7·4	9·7	12·3	14·7	15·4	16·0	16·5	15·3	14·4	7·0	0·7	..	..	130·4	366·8	0·356	37
April	..	1·4	4·0	6·9	7·3	9·0	8·2	5·6	7·8	5·8	7·9	6·9	3·2	2·6	0·1	..	76·7	414·5	0·185	48
May	0·6	13·2	15·7	16·2	17·1	17·1	14·2	15·8	17·5	19·3	19·2	20·1	18·3	12·7	5·5	0·6	223·1	482·0	0·463	57
June	3·9	10·9	11·4	16·1	15·9	14·9	15·6	15·6	15·4	15·4	16·1	15·1	16·9	16·5	13·1	2·6	215·4	494·3	0·436	62
July	2·1	6·3	8·3	10·5	12·6	13·5	10·0	11·4	11·4	9·3	12·1	10·4	12·2	11·0	7·8	3·2	152·1	497·2	0·306	60
August	0·2	4·1	10·1	9·9	13·1	13·3	10·9	10·5	11·8	13·6	14·4	12·4	11·2	9·1	3·6	0·4	148·6	449·6	0·331	52
September ...	..	..	3·4	7·8	9·0	8·4	12·2	11·5	11·6	14·3	11·8	9·6	6·0	2·2	..	..	107·8	377·9	0·285	41
October	..	..	0·3	4·5	10·8	14·7	19·6	22·6	22·6	19·9	19·8	18·2	7·4	0·4	..	..	160·8	329·3	0·488	30
November ..	..	..	..	..	3·6	9·8	11·1	11·6	10·5	9·9	9·8	4·0	..	..	..	..	70·3	265·1	0·265	20
December ...	..	..	..	..	0·4	2·6	4·0	5·1	5·7	6·1	3·0	0·3	..	..	..	..	27·2	243·9	0·112	16
For the Year	6·8	35·9	54·2	81·0	109·7	132·9	140·5	148·3	151·0	149·5	142·9	120·6	84·0	55·2	30·1	6·8	1449·4	4465·8	0·325	..

The hours are reckoned from "apparent" midnight.

READINGS of THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE in the YEAR 1920.

(The readings of the 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
d	°	°	°	°	°	°	°	°	°	°
1	38·6	31·9	37·3	37·6	37·5	33·1	35·7	35·8	35·1	30·8
2	39·0	26·7	29·1	37·4	37·6	32·8	27·9	34·0	34·9	31·6
3	38·5	32·6	38·0	38·3	38·2	35·0	34·9	36·4	36·1	32·3
4	37·9	32·2	33·4	37·5	36·6	34·1	31·5	34·1	33·8	31·9
5	38·1	33·9	36·3	37·7	38·1	35·5	34·7	35·7	35·1	32·8
6	35·5	28·6	33·5	32·7	30·8	28·6	31·9	31·4	29·9	28·0
7	40·0	22·1	22·6	27·5	32·6	40·0	22·0	25·3	31·2	37·9
8	51·1	39·9	49·7	50·1	47·7	40·8	45·1	44·0	42·6	37·7
9	42·4	35·9	37·0	41·0	41·2	39·4	34·6	37·1	37·0	36·0
10	53·1	37·9	51·0	50·6	51·7	49·6	48·9	48·6	48·7	47·3
11	53·6	44·7	50·2	50·6	48·2	47·7	48·8	48·1	46·2	42·8
12	55·4	44·2	46·5	48·2	44·5	54·4	42·4	43·6	43·4	51·7
13	55·3	46·3	47·9	50·6	49·4	46·6	44·5	46·0	45·8	44·9
14	46·9	32·1	38·7	40·5	40·4	32·6	35·0	35·3	34·5	31·1
15	49·1	32·5	44·1	46·6	48·6	48·7	42·2	45·3	47·6	48·0
16	55·5	48·1	49·8	52·6	55·3	48·9	49·0	50·8	52·1	46·8
17	51·0	42·2	44·6	49·8	50·0	51·0	43·1	47·8	48·5	50·0
18	54·7	49·6	51·2	52·2	53·4	49·8	50·2	50·9	51·8	48·6
19	50·7	36·1	47·7	39·1	40·7	36·4	46·8	37·8	38·7	33·8
20	45·6	35·1	39·6	44·1	45·6	43·1	37·4	42·1	44·2	39·9
21	49·2	40·0	46·3	47·9	46·9	40·0	41·4	42·1	40·9	36·9
22	46·9	29·9	32·9	44·8	46·1	43·7	31·6	41·5	42·3	41·6
23	47·0	42·0	45·5	46·5	45·9	42·3	44·7	44·9	43·8	40·9
24	49·9	42·3	44·1	45·2	48·9	45·1	42·3	43·1	46·2	40·9
25	48·9	32·8	35·6	47·1	46·4	43·3	33·7	43·1	41·9	41·9
26	49·2	42·7	45·5	47·5	48·7	42·7	43·6	45·0	46·0	40·4
27	47·7	33·9	38·6	44·2	40·6	47·7	36·6	40·6	39·0	46·6
28	47·8	40·6	41·4	45·5	44·6	44·6	40·0	43·0	43·6	41·6
29	45·5	37·1	38·3	43·7	43·7	43·5	35·2	38·8	39·0	40·6
30	48·6	40·3	43·0	47·2	45·3	40·9	39·7	41·8	39·6	37·0
31	54·9	40·1	50·6	54·6	53·8	44·5	49·7	51·8	51·5	40·8
Means	47·3	37·2	41·6	44·5	44·5	42·1	39·5	41·5	41·6	39·8

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
d	°	°	°	°	°	°	°	°	°	°
1	50·5	38·2	41·6	47·6	49·0	46·5	37·6	42·5	44·3	42·0
2	51·5	45·5	48·2	50·2	49·4	46·2	44·0	45·7	44·8	43·0
3	51·3	42·2	44·5	49·2	49·3	45·3	41·9	45·6	45·8	43·6
4	47·8	36·6	42·6	42·6	43·4	36·6	41·9	40·8	41·1	36·3
5	44·9	28·9	33·4	42·6	43·9	39·9	30·9	39·4	40·5	38·0
6	49·2	36·1	38·9	43·9	47·7	37·5	37·9	41·6	43·2	35·9
7	48·1	28·9	35·1	46·5	46·8	39·4	32·8	41·9	42·5	37·6
8	50·0	36·0	42·8	49·4	47·5	40·0	40·8	44·8	44·4	39·0
9	48·7	33·1	38·6	45·3	48·5	46·7	37·5	42·7	44·7	44·0
10	51·2	46·6	48·5	51·1	50·7	50·2	46·8	48·8	48·6	48·8
11	51·5	41·1	43·5	48·2	48·7	41·4	40·1	42·6	42·4	38·1
12	49·4	35·6	39·3	47·6	46·6	43·5	36·1	41·8	42·0	41·6
13	53·8	43·5	49·5	50·8	52·4	48·5	46·9	48·5	49·0	45·3
14	53·9	42·3	45·6	49·0	51·5	43·5	42·8	46·4	47·8	42·7
15	48·8	38·1	44·8	47·7	48·1	48·1	43·8	42·7	43·8	44·9
16	53·9	36·2	43·0	52·5	49·9	45·0	41·8	48·2	48·1	44·0
17	59·8	41·1	48·6	56·9	58·6	41·1	45·6	50·8	50·3	40·6
18	61·8	36·3	43·3	58·6	60·4	43·5	42·5	51·4	52·7	41·7
19	61·0	36·0	45·8	54·5	57·6	43·6	44·6	49·4	50·7	42·2
20	43·8	35·1	42·6	41·3	39·2	35·8	41·9	40·7	38·3	34·9
21	41·7	35·8	37·5	39·1	40·8	38·1	35·1	35·5	36·2	34·7
22	49·8	33·5	37·5	46·2	49·4	35·5	35·2	41·2	43·2	34·7
23	49·0	29·3	34·6	41·6	48·6	37·9	33·0	40·3	41·8	37·2
24	47·9	34·4	36·3	43·8	47·4	36·8	35·8	40·0	43·0	36·3
25	54·4	32·4	37·0	47·4	52·9	46·1	36·2	45·8	49·6	44·8
26	52·6	42·1	46·2	49·9	50·8	42·2	44·1	44·9	44·0	37·9
27	50·9	38·2	44·5	47·6	48·7	39·3	41·3	45·4	47·8	35·6
28	53·0	27·2	36·8	48·8	50·8	45·4	32·8	43·5	43·0	44·2
29	49·0	44·9	46·6	47·7	48·6	44·9	44·6	45·7	46·2	43·2
Means	51·0	37·1	42·0	47·8	49·2	42·4	39·9	44·1	44·8	40·4

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
d	°	°	°	°	°	°	°	°	°	°
1	59·3	41·9	42·7	54·2	58·4	47·6	41·8	48·0	49·2	43·9
2	51·1	41·5	49·6	49·2	47·9	41·6	48·0	48·5	45·7	39·8
3	51·0	30·0	34·4	46·8	50·3	41·6	33·9	43·7	45·8	35·9
4	54·1	31·1	33·3	48·1	52·6	41·9	32·0	41·8	45·8	37·6
5	54·5	37·6	45·6	49·4	53·7	48·2	45·1	46·7	49·7	47·2
6	56·7	46·8	51·2	53·3	54·4	52·3	49·0	50·7	51·4	49·8
7	52·3	33·2	39·7	45·6	45·7	33·6	36·7	38·8	38·7	32·8
8	41·3	27·2	31·9	37·2	39·8	35·1	29·4	35·1	33·8	31·0
9	42·6	27·3	31·6	42·0	41·2	38·7	30·3	35·0	35·6	34·4
10	49·0	36·9	39·5	43·0	47·6	43·4	37·9	41·1	44·4	41·7
11	50·9	38·2	43·8	47·0	47·4	40·0	40·9	42·0	41·7	38·7
12	54·2	37·2	42·1	51·0	51·3	42·8	40·6	45·8	44·2	38·9
13	49·8	32·5	43·9	48·6	46·8	38·6	42·2	43·9	42·8	37·5
14	47·7	34·2	38·1	41·2	45·1	47·7	36·8	38·8	39·8	46·6
15	47·7	35·1	35·1	37·6	39·9	38·6	34·1	35·8	36·7	37·0
16	47·9	36·0	40·4	44·7	45·2	43·3	35·9	39·5	39·0	38·9
17	61·2	43·3	52·1	57·4	60·4	52·6	50·1	53·4	55·2	49·5
18	59·6	45·3	51·1	55·1	55·2	45·8	48·9	50·0	47·0	40·4
19	57·1	35·9	44·6	51·8	54·7	41·0	41·0	44·2	46·7	38·8
20	61·9	36·6	47·4	56·4	60·3	47·3	43·8	49·9	52·8	45·6
21	65·9	34·7	49·8	62·6	63·7	48·3	46·8	54·2	54·8	45·6
22	65·5	36·3	50·6	61·6	65·4	48·0	46·8	54·8	56·8	45·7
23	65·0	37·0	47·0	63·4	63·0	45·8	45·1	54·5	53·4	43·8
24	58·2	39·6	48·9	55·3	53·8	50·0	45·8	48·4	48·8	46·9
25	58·5	45·1	52·6	53·6	54·2	50·2	47·3	48·5	47·6	46·2
26	55·8	37·3	49·9	52·9	53·6	48·9	44·7	46·0	46·9	46·6
27	58·3	45·2	48·7	53·3	53·9	52·4	46·2	48·8	49·7	48·6
28	64·6	49·1	58·0	61·6	60·8	52·8	52·2	53·8	52·9	49·6
29	61·5	50·0	53·9	57·5	60·6	52·7	52·9	53·7	54·9	50·3
30	64·5	49·0	58·6	64·0	60·2	49·1	54·8	58·9	54·6	46·0
31	64·0	39·9	55·1	61·8	61·7	43·8	50·8	52·4	51·5	40·5
Means	55·9	38·4	45·5	51·8	53·2	45·3	43·0	46·7	47·0	42·4

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
d	°	°	°	°	°	°	°	°	°	°
1	50·7	39·7	47·1	44·1	43·8	41·8	45·5	42·7	42·7	41·0
2	50·8	34·3	43·7	46·3	49·6	41·8	42·1	43·4	44·9	40·2
3	53·9	40·1	44·7	50·4	48·5	44·5	42·7	45·7	44·9	42·9
4	50·4	41·8	44·7	47·6	49·7	43·7	42·6	44·8	46·7	42·7
5	53·5	42·1	45·6	46·0	49·3	43·4	42·8	42·8	44·9	41·5
6	56·9	34·2	44·1	52·1	52·2	46·8	42·2	47·7	46·7	44·8
7	58·1	41·3	52·6	54·5	53·9	47·8	48·2	47·9	48·6	47·3
8	57·5	47·7	52·4	53·6	55·2	50·7	50·5	52·4	52·2	49·8
9	61·9	48·3	53·2	59·4	57·0	52·8	52·2	55·5	55·1	51·9
10	64·1	49·4	56·2	59·6	59·7	51·7	52·1	52·8	52·7	48·9
11	59·2	46·1	50·3	54·1	51·6	47·3	49·3	52·2	50·8	45·9
12	54·8	43·3	48·1	49·3	52·8	46·5	46·0	48·1	50·9	45·0
13	60·0	42·6	51·1	56·0	55·8	46·8	49·0	53·2	52·7	44·8
14	58·0	42·2	51·6	55·9	54·4	47·1	45·9	49·8	47·9	45·9
15	59·6	47·0	53·2	57·9	54·9	51·5	49·6	51·8	51·7	47·9
16	58·8	47·1	53·8	53·1	56·3	47·4	48·7	49·6	50·0	44·8
17	55·4	42·5	51·6	53·3	54·3	49·5	48·6	48·7	49·1	47·1
18	51·6	46·2	49·2	48·5	49·6	46·6	46·6	46·6	47·7	45·3
19	59·4	37·3	52·6	54·8	51·8	48·7	47·8	50·0	50·4	46·8
20	54·0	39·4	48·7	50·6	52·0	44·6	43·6	45·4	47·7	41·0
21	54·9	41·8	45·8	48·6	51·7	45·6	41·6	42·8	44·9	40·6
22	57·0	35·1	52·9	54·6	49·6	46·7	46·2	46·9	45·3	45·9
23	58·2	46·2	51·7	55·9	54·6	46·6	50·2	51·7	52·1	45·6
24	66·2	44·1	56·2	55·4	63·6	53·0	49·6	52·3	55·7	51·2
25	61·0	48·1	52·5	54·5	58·4	48·2	46·4	46·9	49·0	44·5
26	56·8	44·3	49·3	55·1	54·6	48·7	45·4	47·4	48·0	43·3
27	52·9	45·1	48·9	49·7	51·7	46·7	45·4	47·2	50·0	43·5
28	55·2	36·9	46·7	49·8	47·8	37·6	40·9	43·0	42·3	36·8
29	56·5	36·1	48·0	50·3	52·4	42·6	43·7	43·4	43·6	39·6
30	58·8	32·9	50·6	54·1	54·7	47·3	44·7	46·0	45·8	43·7
Means	56·9	42·1	49·9	52·5	53·1	46·8	46·4	48·0	48·5	44·6

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	63·1	40·9	54·8	60·4	60·5	53·0	48·7	52·4	51·8	50·3
2	67·4	49·6	58·6	61·3	60·2	49·6	55·2	57·0	56·1	45·2
3	63·2	46·1	53·0	58·0	56·9	47·6	45·8	48·4	49·1	40·9
4	56·2	38·7	47·9	54·5	52·4	45·1	41·6	44·8	43·9	39·8
5	59·2	32·0	52·6	51·6	56·0	50·4	45·0	44·7	50·4	45·6
6	55·6	47·2	51·1	53·3	52·9	48·7	46·3	46·3	47·6	47·8
7	61·0	44·9	54·8	57·0	58·8	47·6	49·2	51·5	50·0	44·1
8	54·4	40·6	51·3	46·8	51·7	48·5	47·5	45·4	48·9	45·8
9	62·0	46·0	51·5	56·7	59·0	48·7	48·7	49·9	48·9	43·2
10	61·8	39·3	53·9	59·1	59·1	48·7	47·7	50·6	49·2	45·3
11	64·6	41·1	59·0	63·0	62·4	54·5	51·0	51·2	53·0	51·0
12	72·3	49·6	63·2	70·3	69·1	56 9	59·7	63·2	59·9	53·6
13	65·5	47·6	55·5	58·5	64·2	52·4	48·7	49·3	52·7	45·3
14	67·0	39·3	57·0	63·0	62·5	54·2	48·9	53·7	53·4	49·7
15	62·0	43·9	58·9	59·7	60·4	49·6	50·2	50·0	49·2	45·9
16	61·5	48·8	55·2	58·6	58·6	50·8	49·7	51·1	52·5	48·0
17	64·7	49·3	58·2	58·4	57·6	52·3	54·1	54·0	52·5	51·0
18	64·6	47·8	56·8	61·3	61·5	47·8	53·3	54·6	50·7	44·2
19	64·6	46·8	57·8	59·4	62·5	48·8	49·2	49·6	49·8	44·8
20	66·0	41·3	57·9	61·2	61·1	51·1	49·9	50·2	50·4	48·5
21	70·4	47·2	58·9	67·6	64·3	53·5	52·9	55·7	52·7	48·9
22	72·9	41·8	60·8	67·6	70·9	55·6	52·8	55·8	58·2	53·3
23	71·9	45·1	65·7	70·8	69·8	56·8	57·6	59·1	58·0	49·9
24	74·1	50·1	67·6	72·4	71·4	61·6	60·2	62·8	60·9	58·1
25	86·5	52·2	73·9	81·5	81·3	65·7	65·4	69·2	68·9	61·3
26	78·6	58·3	68·3	68·8	74·8	58·6	63·0	63·0	65·2	56·8
27	75·3	53·5	58·4	67·5	72·0	58·2	56·1	61·5	63·4	56·8
28	76·0	53·1	64·2	70·1	70·8	61·1	59·2	62·5	61·0	57·8
29	74·9	56·8	69·7	71·6	70·7	56·8	63·8	64·8	63·0	53·5
30	69·4	52·0	60·9	64·9	64·5	53·9	55·6	56·7	53·8	52·7
31	67·0	47·9	58·7	63·5	63·1	56·5	50·4	54·0	53·7	51·0
Means	65·9	46·4	58·6	62·5	63·2	53·1	52·5	54·3	54·2	49·4

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	74·2	51·2	59·5	63·8	71·0	61·5	55·8	59·2	63·2	57·0
2	78·7	51·1	68·2	75·6	75·9	63·1	61·4	65·2	64·6	57·2
3	73·0	54·7	59·1	64·9	71·7	64·2	54·0	56·4	59·5	59·2
4	64·4	48.8	50·7	52·8	58·2	49·5	45·6	46·2	48·9	43·6
5	58·0	46·1	48·2	53·6	54·6	46·6	43·2	46·8	47·3	42.6
6	63·0	42·3	50·5	58·5	57·8	47·6	43·9	48·8	49·6	44·5
7	65·0	36·5	53·6	60·4	60·6	49·2	47·9	50·6	49·9	45·6
8	63·6	39·9	56·6	59·7	59·6	48·5	49·2	50·0	50·2	44·1
9	64·2	38·2	56·5	62·8	61·7	49·7	49·9	53·3	52 9	47·0
10	59·9	46·1	55·7	53·7	55·9	51·9	52·6	51·8	53·2	50·8
11	69·4	50·9	57·2	60·1	65·5	62·0	55·7	58·6	60·7	58·2
12	75·7	52·6	67·8	70·6	72·4	59·4	62·6	62·7	62·7	58·5
13	71·7	53·1	63·5	66·5	65·8	53·6	57·8	58·0	59·0	52·7
14	73·3	46·1	67·3	70·5	63·9	56·5	61·2	60·9	59·2	54·5
15	73·2	51·3	63·6	70·8	71·7	61·2	60·4	61·1	58·6	56·3
16	76·8	53·4	70·8	74·1	74·2	63·6	63·7	64·9	62·6	59·8
17	76·8	51·9	66·4	76·4	63·5	59·3	61·1	63·3	60·8	56·8
18	77·0	49·1	67·6	74·9	75·7	58·9	59·6	63·6	63·0	55·7
19	77·9	50·9	66·5	70·6	70·4	59·8	60·3	61·7	63·0	56·3
20	62·2	54·1	59·7	59.6	61·1	59·4	58·8	58·8	60·3	58·7
21	73·0	51·9	63·0	68·9	68·4	61·1	56·8	60·2	57·8	56·3
22	75·9	52·1	65·8	72·1	73·2	64·5	56·8	59·4	61·0	57·9
23	73·8	58·1	65·0	67·5	70·2	63·7	59·5	59·1	58·4	55·5
24	74·6	52·1	61·5	67·6	71·6	59·3	52·5	56·6	59·6	56·3
25	74·0	53·3	67·6	68·6	72·1	64·7	58·8	60·2	61·9	54·3
26	70·7	56·9	63·8	66·1	66·4	62·3	58·7	60·2	61·0	57·9
27	72·0	58·6	64·7	69·1	63·4	58·8	59·8	61·8	62·0	56·3
28	75·6	56·5	63·2	68·6	71·6	63·8	57·1	60·3	63·0	61·0
29	71·0	58·8	62·9	66·6	67·1	58·8	59·0	60·3	61·7	55·3
30	74·4	53·8	65·8	67·6	72·2	58·7	55·7	55·8	59·2	53·9
Means	71·1	50·7	61·7	66·1	66·9	58·0	56·0	57·9	58·5	54·1

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	66·0	55·8	60·2	62·5	62·8	55·8	57·2	58·7	57·8	55·7
2	69·9	55·6	61·5	65·9	64·1	59·3	57·0	58·1	58·3	55·9
3	72·0	55·4	61·1	62·7	68·7	55·5	55·7	56·6	58·5	53·6
4	71·2	48·1	63·6	66·7	66·8	57·6	58·1	58·7	57·9	54·6
5	57·9	49·1	49·4	49·6	50·6	49·9	48·6	48·6	49·0	49·0
6	66·3	49·7	58·1	58·5	64·7	57·7	54·8	57·2	59·1	55·9
7	66·4	51·7	54·5	62·4	62·5	56·7	53·0	57·0	57·0	55·7
8	64·0	49·2	61·5	57·9	60·0	54·4	53·8	53·9	55·6	52·9
9	68·6	50·4	61·9	63·7	64·7	56·1	56·6	56·8	56·3	50·8
10	66·1	50·9	60·7	62·8	62·0	58·8	54·8	56·8	58·1	56·9
11	75·0	55·1	66·1	70·7	65·5	60·8	60·1	61·1	59·8	58·6
12	74·8	57·7	65·0	68·6	70·9	61·7	62·8	63·4	63·7	58·8
13	70·6	53·1	64·7	63·4	67·7	57·7	56·7	55·4	56·7	51·9
14	73·0	51·7	61·6	67·8	69·8	58·8	54·0	57·8	59·2	54·7
15	72·2	53·1	64·5	65·5	69·1	61·0	57·4	60·0	61·8	54·6
16	74·4	49·1	66·0	72·0	70·6	59·4	58·8	60·9	60·2	56·5
17	75·8	54·8	70·1	72·0	67·5	58·3	63·9	64·9	61·0	56·5
18	75·6	54·3	62·1	67·6	69·0	60·4	53·0	57·8	57·9	52·6
19	75·6	48·9	65·1	69·6	72·7	61·8	57·8	59·6	60·7	55·4
20	74·6	51·7	63·0	70·8	70·9	63·7	56·8	62·1	63·7	60·9
21	72·5	60·2	67·3	69·8	66·5	63·6	62·9	64·8	65·0	62·9
22	74·8	60·0	63·5	69·8	69·6	61·0	59·7	61·6	58·0	55·7
23	66·8	56·9	61·0	60·7	64·4	59·6	56·5	56·7	59·9	57·3
24	66·9	49·2	55·8	61·7	62·6	54·1	52·1	52·8	52·0	48·3
25	68·5	44·0	59·6	62·8	58·4	53·3	51·5	54·7	53·6	51·6
26	61·7	52·6	56·0	59·6	57·7	52·8	52·4	53·7	52·3	50·0
27	63·3	44·2	53·9	54·5	58·9	48·3	51·8	50·9	54·6	47·4
28	62·5	45·2	58·6	56·2	55·0	55·5	53·6	51·1	53·7	54·7
29	70·7	53·2	59·8	62·7	68·4	60·6	53·8	54·7	58·8	55·6
30	66·8	56·2	63·1	64·6	62·6	59·6	60·4	63·1	61·7	59·0
31	74·1	54·2	60·6	70·6	71·1	62·5	56·0	60·8	63·7	60·6
Means	69·6	52·3	61·3	64·3	65·0	57·9	56·2	57·8	58·2	55·0

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	73·0	56·1	59·4	66·5	70·2	58·2	54·0	58·7	60·6	51·8
2	67·1	51·7	58·1	60·6	59·7	56·0	55·3	58·2	57·6	55·2
3	72·0	53·1	62·6	69·4	65·8	56·1	55·8	58·8	55·0	49·7
4	66·8	50·7	62·0	60·8	63·6	55·6	54·7	54·7	56·6	52·7
5	70·0	54·0	62·6	63·1	69·6	54·6	59·7	61·4	59·4	52·2
6	65·3	54·2	57·7	60·7	61·3	57·4	54·8	55·3	54·8	53·5
7	70·5	48·7	61·6	64·1	66·8	58·0	55·2	56·0	57·9	55·1
8	75·2	47·7	67·4	72·6	73·7	60·5	59·9	61·6	62·3	55·9
9	67·7	55·4	62·0	63·8	64·4	58·8	55·8	57·6	58·9	55·8
10	66·9	51·3	60·6	61·5	62·8	60·8	55·4	55·3	56·3	56·2
11	70·0	55·2	59·7	66·5	67·5	58·3	56·3	59·7	59·7	56·7
12	69·4	53·5	63·0	66·5	67·4	55·6	58·3	59·1	58·4	53·9
13	70·8	45·7	61·8	68·2	68·2	54·5	57·3	60·2	60·0	53·7
14	77·6	46·4	62·6	70·1	74·9	63·7	57·5	58·9	62·3	60·1
15	75·6	58·6	65·0	70·3	73·6	61·8	58·7	60·6	61·8	57·2
16	73·4	50·6	68·0	68·2	69·5	62·7	60·2	59·9	60·7	57·7
17	69·5	58·1	63·6	64·6	66·8	59·7	58·0	57·5	60·2	55·0
18	68·0	52·0	63·5	63·2	61·8	52·6	57·7	59·2	58·2	51·8
19	63·0	49·1	51·8	56·8	58·4	50·4	49·2	49·9	50·2	46·3
20	62·9	41·3	53·9	58·2	57·7	52·3	48·7	50·2	50·8	47·4
21	61·0	42·0	57·5	58·1	59·4	52·5	52·7	52·7	53·3	48·9
22	63·9	49·0	53·6	58·9	63·6	52·9	50·7	52·9	54·8	50·5
23	67·3	45·2	57·5	62·3	66·6	56·5	53·1	55·6	59·3	54·4
24	65·1	50·8	54·6	59·5	63·7	51·4	52·0	54·0	56·6	50·8
25	62·7	46·4	55·2	58·1	61·5	57·7	52·7	54·6	55·9	54·6
26	64·5	50·3	56·2	59·8	59·7	51·7	51·6	53·2	53·8	48·8
27	65·0	45·4	57·7	61·8	62·2	56·2	53·2	54·3	55·2	52·5
28	71·8	52·5	61·7	64·8	69·5	54·8	56·2	58·3	61·3	53·3
29	63·2	51·0	55·0	59·8	60·9	52·7	49·7	53·8	54·8	51·1
30	60·3	45·9	54·4	55·1	55·9	52·0	50·6	50·4	50·3	46·8
31	59·9	45·8	53·5	55·6	58·6	54·3	51·1	52·6	54·3	52·8
Means	67·7	50·2	59·5	62·9	64·7	56·1	54·7	56·3	57·1	53·0

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	64·2	53·4	60·5	62·6	58·2	56·6	54·2	56·0	54·7	53·4
2	63·0	48·1	58·1	60·8	55·6	56·2	52·7	54·3	54·8	54·9
3	72·2	54·4	60·0	67·0	69·0	61·4	58·8	61·4	62·5	59·8
4	68·6	56·0	59·5	63·9	66·4	58·5	57·4	61·1	63·0	53·7
5	70·8	49·2	56·5	58·8	67·7	64·2	54·4	57·8	64·3	62·0
6	72·3	59·0	64·3	65·8	70·2	59·0	60·8	62·0	61·8	52·8
7	63·9	47·3	56·8	60·5	62·2	54·6	53·2	53·8	54·1	52·7
8	69·9	53·7	62·9	64·6	65·1	58·8	59·7	59·9	60·6	58·1
9	73·0	51·1	62·6	69·2	70·2	55·5	58·0	59·3	60·1	53·3
10	66·7	47·6	58·5	64·1	62·8	48·0	52·1	54·1	53·0	46·0
11	70·4	40·3	60·7	66·5	66·5	46·9	54·7	55·8	54·7	45·4
12	76·0	39·2	59·6	73·7	75·6	51·5	53·2	59·7	61·8	49·6
13	73·0	40·4	57·2	68·9	64·6	58·6	53·1	56·7	57·1	56·8
14	68·8	51·2	54·6	64·1	67·1	56·6	52·6	57·7	57·3	53·9
15	64·6	55·1	58·4	63·6	62·2	60·2	57·4	60·3	60·4	58·8
16	64·9	53·0	53·8	60·2	62·4	54·5	53·4	58·0	54·7	52·6
17	65·5	49·8	56·2	61·6	63·1	59·0	52·4	55·5	55·1	54·8
18	60·5	52·0	57·7	58·1	56·8	52·5	55·4	55·8	54·8	49·3
19	65·1	45·4	54·8	60·1	63·7	48·1	50·1	51·4	52·4	46·2
20	62·5	42·0	53·4	60·4	59·5	52·6	47·8	51·1	57·6	48·2
21	52·6	47·1	48·2	48·9	51·6	51·7	47·4	47·6	50·4	51·0
22	62·4	50·9	55·7	52·7	60·6	51·0	53·8	51·8	54·9	50·0
23	66·3	47·0	54·9	62·8	63·6	56·2	52·8	57·8	57·2	55·6
24	64·0	53·9	57·4	61·7	61·2	56·5	54·4	55·8	56·7	53·9
25	59·4	53·3	54·4	56·4	58·5	55·6	53·1	54·4	55·7	54·9
26	69·0	52·2	60·4	65·9	67·5	55·5	57·0	60·3	61·1	54·8
27	66·8	47·9	57·8	63·9	65·1	52·6	55·3	58·3	59·3	52·5
28	66·4	47·9	55·8	61·5	63·6	57·7	54·5	58·0	59·0	56·3
29	65·9	55·4	61·8	62·4	64·2	57·2	59·0	58·7	60·2	56·8
30	69·2	54·6	57·9	65·0	65·6	56·9	56·7	60·4	59·2	56·5
Means	66·6	49·9	57·7	62·5	63·7	55·5	54·5	56·8	57·4	53·5

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	60·4	45·4	57·2	56·0	59·6	54·8	54·2	55·0	57·4	54·6
2	63·5	46·4	57·1	55·5	60·2	46·6	54·3	52·9	53·8	45·8
3	65·0	44·1	54·1	62·3	59·9	58·8	51·8	55·3	54·3	54·5
4	62·0	56·0	59·4	61·5	57·9	57·1	55·9	56·5	56·1	56·5
5	72·6	56·5	66·6	72·6	68·6	62·6	60·4	63·5	62·6	59·2
6	69·9	53·7	62·5	68·4	68·7	53·7	59·8	63·5	61·3	53·2
7	72·0	49·1	61·1	69·5	67·5	59·4	59·0	61·7	61·0	57·5
8	71·1	56·9	59·2	70·4	69·7	57·9	58·2	64·3	62·8	57·7
9	71·3	56·4	59·4	69·9	68·3	57·5	59·0	62·4	60·8	56·1
10	60·3	54·5	55·8	58·1	57·1	54·8	53·7	54·1	52·8	53·7
11	63·5	50·5	56·6	62·5	62·4	51·7	55·0	58·2	55·4	51·4
12	65·0	39·8	55·4	64·0	62·8	45·9	52·5	54·4	55·3	45·8
13	66·3	42·4	53·4	62·7	63·9	49·2	51·9	58·1	56·8	49·0
14	64·7	42·5	51·6	61·3	59·6	51·1	51·1	57·4	57·2	50·7
15	62·2	49·3	57·9	60·8	57·6	52·7	56·1	56·8	56·0	52·0
16	61·7	52·1	56·0	57·9	60·1	54·3	54·8	55·6	55·8	53·3
17	57·5	47·6	53·1	55·6	54·0	48·5	52·4	51·8	50·2	45·0
18	53·0	40·7	46·4	51·4	50·4	47·7	42·1	45·0	44·5	44·3
19	53·4	39·6	47·7	51·7	51·2	39·6	44·4	46·6	46·6	39·1
20	58·0	38·1	50·6	56·4	56·4	39·2	47·7	49·9	49·2	38·4
21	60·7	34·0	41·7	56·1	59·2	43·6	41·0	50·2	52·7	43·3
22	53·0	38·1	44·2	51·6	52·6	44·7	43·6	49·8	50·4	44·4
23	55·1	39·5	43·9	51·8	54·9	39·5	43·5	49·0	50·0	39·1
24	58·9	34·1	41·6	55·0	57·6	45·7	40·8	50·8	50·1	43·9
25	59·0	42·2	47·8	57·6	56·4	46·7	46·9	51·4	50·2	45·5
26	58·0	36·3	44·2	55·8	56·1	44·0	43·9	50·4	49·4	43·1
27	55·7	33·1	40·2	52·7	54·7	42·6	39·9	49·1	49·8	41·6
28	55·6	32·9	42·9	54·6	52·8	41·5	42·3	47·4	45·5	40·7
29	52·0	36·2	44·6	50·7	49·7	41·6	42·1	44·2	43·3	39·6
30	52·3	33·3	42·6	51·0	50·5	34·1	39·8	45·2	43·4	32·1
31	56·5	27·9	42·7	54·5	52·9	48·1	41·9	50·5	49·4	47·0
Means	61·0	43·5	51·5	58·7	58·5	48·9	49·7	53·6	53·0	47·7

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	49·2	42·5	45·8	47·6	47·6	42·5	45·1	45·8	45·4	41·0
2	46·3	35·1	38·9	45·2	44·5	37·6	35·9	40·0	40·2	35·7
3	46·0	35·9	41·8	45·4	43·6	39·6	38·7	41·0	39·6	37·0
4	48·9	28·1	33·1	43·9	45·3	39·2	31·1	41·0	42·8	38·2
5	45·7	28·0	34·1	41·1	45·2	45·7	32·6	40·1	42·0	43·9
6	46·7	32·9	35·5	38·1	38·1	33·3	35·2	37·2	37·7	33·0
7	51·8	32·9	41·6	50·7	50·5	44·4	40·4	47·3	47·8	43·8
8	54·9	36·1	44·6	49·8	51·6	48·6	44·0	48·6	50·0	47·9
9	54·7	48·5	50·6	53·6	52·6	51·6	48·2	50·1	49·9	48·8
10	57·0	49·3	51·7	53·5	54·4	49·7	47·9	49·6	50·5	49·1
11	51·0	36·8	43·6	49·9	44·6	37·7	42·8	45·1	43·7	37·1
12	54·9	29·2	36·8	54·9	51·2	43·6	36·2	50·9	48·5	43·2
13	56·3	42·5	51·6	56·1	54·1	44·0	50·5	54·1	51·8	42·8
14	56·4	42·1	49·9	54·6	54·6	53·4	47·5	50·4	51·2	52·3
15	59·0	51·4	58·8	55·4	55·6	51·5	56·5	54·3	50·0	46·7
16	52·8	43·9	46·9	52·1	50·0	44·3	43·1	46·0	44·2	40·6
17	49·1	33·4	38·9	47·6	47·4	33·4	37·7	43·0	42·0	32·7
18	50·2	31·5	44·6	48·9	48·6	41·0	43·1	46·6	45·3	40·1
19	55·0	39·2	45·5	52·9	52·8	42·7	44·7	48·8	48·4	42·1
20	44·2	35·1	37·7	40·6	43·6	35·1	37·6	40·1	42·2	34·2
21	41·8	27·2	32·6	39·5	39·8	33·3	30·8	37·6	36·8	31·8
22	45·1	23·4	28·5	39·4	43·8	34·6	27·8	38·1	40·9	34·1
23	47·5	29·9	33·3	46·2	44·2	33·2	31·7	40·8	39·0	32·2
24	44·2	28·7	34·0	40·0	41·4	41·6	32·0	36·6	38·5	40·2
25	55·2	40·3	46·6	53·3	50·9	44·6	45·8	50·3	48·6	44·0
26	50·4	37·1	42·5	50·4	47·8	44·6	41·1	46·8	45·4	43·3
27	53·0	42·1	47·2	52·6	51·6	49·6	45·9	50·3	50·2	49·1
28	50·0	46·4	47·1	48·2	48·5	48·3	46·8	47·9	47·7	47·9
29	48·5	40·1	40·5	46·6	47·4	47·6	39·0	43·1	44·2	46·7
30	53·6	47·4	48·4	52·0	48·7	49·5	47·8	49·6	47·0	47·7
Means	50·7	37·2	42·4	48·3	48·0	42·9	40·9	45·4	45·1	41·6

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	50·9	36·7	39·2	49·1	47·9	39·8	37·3	44·7	44·5	39·5
2	47·0	39·7	40·5	41·6	43·0	40·5	39·5	40·6	41·7	40·0
3	56·5	40·1	54·4	51·8	49·5	43·8	53·2	48·4	44·8	39·3
4	46·6	42·1	45·2	46·3	45·6	44·6	40·3	41·8	42·0	41·7
5	46·0	41·8	44·4	45·7	44·6	41·9	42·6	42·8	41·8	40·8
6	42·0	38·2	39·9	40·6	39·4	39·2	38·1	38·1	37·8	38·7
7	41·4	38·4	41·0	41·1	40·8	38·7	39·9	39·4	39·0	38·2
8	39·8	34·3	36·6	36·8	35·8	35·1	35·9	36·2	35·7	34·9
9	38·4	32·4	33·4	37·6	38·3	34·7	32·9	36·1	36·4	33·7
10	39·8	32·2	34·1	37·7	39·0	34·7	32·9	36·2	37·3	33·8
11	37·0	30·1	33·8	36·5	35·5	30·3	33·5	34·6	34·3	29·9
12	30·3	17·5	25·6	24·1	23·7	20·0	25·0	23·3	23·2	19·6
13	28·6	15·7	25·0	27·5	27·1	28·6	24·4	26·4	26·2	27·8
14	36·0	28·7	34·6	34·4	35·3	34·6	32·8	33·8	34·5	32·8
15	34·6	29·9	32·3	31·2	30·2	30·9	30·9	28·6	27·9	28·8
16	33·2	28·1	30·8	32·1	32·6	33·2	29·5	29·5	31·4	32·1
17	35·8	33·1	34·6	35·3	35·5	35·8	33·7	34·5	34·8	35·1
18	40·2	35·8	37·9	39·6	39·9	38·7	37·9	38·7	38·8	37·8
19	38·9	36·2	36·6	37·5	37·1	36·5	36·1	36·7	36·1	35·9
20	43·6	36·1	36·6	38·6	40·6	43·6	36·0	37·3	38·0	42·6
21	47·4	41·4	44·0	47·3	47·0	42·8	43·1	45·8	45·8	41·3
22	45·2	38·7	40·0	44·4	44·8	38·8	38·4	41·0	41·4	37·1
23	42·0	33·6	39·9	41·8	37·6	35·0	38·6	40·3	36·9	34·6
24	55·9	33·7	53·5	55·0	53·6	54·4	52·5	53·6	52·6	52·9
25	54·4	47·6	49·7	52·5	50·6	48·0	48·3	49·9	48·2	45·9
26	54·4	42·1	49·4	53·1	50·6	42·2	47·8	50·5	49·0	41·8
27	54·6	42·1	50·6	52·5	51·7	49·8	49·3	49·8	49·5	48·9
28	55·0	48·2	50·8	52·9	54·0	50·5	47·9	48·6	52·1	48·3
29	54·0	48·3	49·6	51·6	52·9	54·0	49·1	51·3	52·3	51·3
30	54·7	45·2	50·2	52·6	50·9	45·6	46·5	47·8	46·9	45·3
31	55·6	45·5	50·8	52·6	54·1	54·5	49·7	51·4	52·8	52·0
Means	44·5	36·6	40·8	42·6	42·2	40·0	39·4	40·6	40·4	38·8

AMOUNT of RAIN COLLECTED in each MONTH of the YEAR 1920.

Gauges partly sunk in the ground in the Magnetic Pavilion Enclosure.	Gauge Number.	Monthly Amount of Rain collected in each Gauge.												Height of Receiving Surface.	
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Sums.	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	2·298	0·580	1·383	2·669	0·688	1·712	3·232	1·615	3·444	1·010	0·874	1·927	21·432	0 5	149 6
	8	2·282	0·599	1·390	2·669	0·683	1·689	3·200	1·613	3·434	0·989	0·866	1·890	21·304	1 0	150 1
Number of Rainy Days (0.005 in. or over).	..	18	10	14	21	12	11	16	8	13	9	14	21	167	..	..

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

Hour ending,	1920.												Mean for the Year.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
h	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.
1	17·0	11·2	12·5	10·7	9·5	8·1	9·0	8·4	8·4	6·7	9·1	11·6	10·2
2	17·1	10·9	10·9	10·3	8·6	7·5	8·5	7·8	7·8	6·3	8·5	12·3	9 7
3	17·3	11·2	11·0	10·6	8·9	7·5	8·5	7·8	7·9	6·4	9·2	12·5	9·9
4	18·1	11·8	9·9	10·8	9·7	6·9	8·7	8·3	7·5	6·8	8·3	12·2	9·9
5	17·8	11·2	10·8	10·3	9·1	7·1	8·4	8·6	7·9	6·6	8·4	13·3	10·0
6	17·0	11·1	10·4	10·2	8·9	7·4	8·5	8·6	7·6	5·9	8·4	12·8	9·7
7	17·6	11·7	11·2	11·3	9·9	8·5	9·7	9·3	8·4	6·5	8·9	12·9	10·5
8	17·7	11·5	11·0	12·0	11·0	8·9	10·4	9·3	8·3	6·8	8·7	13·4	10·8
9	17·5	12·2	10·9	12·9	12·0	9·2	11·7	9·9	8·1	7·3	7·9	14·0	11·1
10	17·6	12·4	12·5	14·2	12·8	9·7	12·4	11·2	9·1	8·5	8·3	14·5	11·9
11	19·3	14·0	14·0	15·2	13·4	9·9	12·7	11·4	9·6	10·0	8·9	14·0	12·7
Noon	20·4	15·3	15·5	14·9	14·0	9·9	13·2	11·8	10·0	10·9	9·1	14·6	13·3
13h	19·4	14·7	14·4	14·4	14·4	10·0	14·5	11·6	10·3	9·9	8·8	14·0	13·0
14	19·5	14·8	15·1	14·9	14·8	10·8	15·0	12·4	10·4	11·1	9.8	14·5	13·6
15	19·0	14·6	14·8	14·8	15·8	11·1	14·6	12·6	10·4	11·4	10·2	13·9	13·6
16	18·5	15·0	15·1	15·1	15·6	11·5	15·3	13·2	9·9	11·1	10·5	13·5	13·7
17	17·6	13·5	13·6	13·6	14·0	10·5	14·5	12·5	10·1	9·5	9·5	12·9	12·6
18	18·3	12·5	13·2	12·4	13·9	10·5	14·4	11·8	9·1	9·2	9·5	13·2	12·4
19	18·1	12·6	12·7	11·1	13·3	10·1	13·1	11·1	8·5	8·1	9·6	13·2	11·8
20	18·2	11·4	12·6	11·4	11·8	10·5	11·5	10·1	8·2	8·5	9·6	12·6	11·4
21	17·6	11·1	11·9	11·4	11·3	9·7	10·0	9·3	8·6	7·6	9·7	12·5	10·9
22	18·9	11·0	12·3	11·4	11·0	8·7	10·1	8·6	8·8	7·2	9·5	12·6	10·8
23	16·9	10·4	11·5	11·3	10·2	8·3	9·2	8·4	8·9	6·9	8·8	11·6	10·2
Midnight	17·1	10·8	11·6	10·7	9·8	7·8	9·5	8·5	8·7	6·9	9·1	11·5	10·2
Means	18·0	12·4	12·5	12·3	11·8	9·2	11·4	10·1	8·9	8·2	9·1	13·1	11·4
Greatest Hourly Measures (1)	51	40	34	33	33	20	27	25	29	36	40	37	..
Greatest Hourly Measures (2)	38	31	27	26	26	17	22	21	23	28	31	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.