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RESULTS
OF THE
MAGNETICAL AND METEOROLOGICAL
OBSERVATIONS

MADE AT
THE ROYAL OBSERVATORY, GREENWICH,
IN THE YEAR
1921.

UNDER THE DIRECTION OF
SIR FRANK DYSON, M.A., LL.D., F.R.S.,
ASTRONOMER ROYAL.

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GREENWICH MAGNETICAL AND METEOROLOGICAL OBSERVATIONS, 1921.

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 1921 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, $5\frac{1}{2}$ feet from the south-east corner of the room. The standard barometer is situated in the passage way, being supported on a board screwed to the north-west corner pillar of the inner room.

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

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

§ 3. *Subjects of Observation in the year 1921.*

The observations comprise determinations of absolute magnetic declination, horizontal force, and dip; continuous photographic record of the variations of declination and vertical force, and of the north component of horizontal 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 1920, 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·140.

The vertical axis of the telescope is adjusted by means of a fixed level, one division of which corresponds to $1'' \cdot 15$. The level correction for inequality of the pivots of the axis of the telescope was found in 1898 to be $-6^{\text{div}} \cdot 0$ or $-6'' \cdot 9$.

Since 1913 September the magnet has been suspended by a tungsten wire of 0.02 mm. diameter, and about 25 cm. length. The effect of 90° of torsion is to turn the magnet through about $4'$. The torsion is found to change little or not at all; it is checked at intervals, and a correction on this account is made when necessary. The collimation error is eliminated by reversing the magnet in the middle of each month (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 1921.

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 3.11γ , in terms of force. Since the beam of light, when directed towards the centre of the slit, makes an angle $11^{\circ}.42'$ 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 $7^{\circ}30'$. 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 233.1γ and 141.5γ in the mean of 1921, and the present rates of diminution of their values are 4.0γ and 2.4γ 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 $.01 \gamma$ per mm.). The adopted scale value for the month of 1921 January was 3.42γ 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 1921 was 0.50γ . 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 at the beginning of 1920 was 2.0γ per mm.

The variometer was not at first compensated for temperature changes and was found to possess a temperature coefficient of 25γ 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.

A new instrument of similar design was brought into use on April 11. The sensitiveness of this instrument was, in the mean, 2.6γ per mm. (*see* below). The quartz fibre broke on June 7 and the old instrument was replaced and remained in use until October 24. During this period the sensitiveness was 2.7γ per mm. The new instrument was replaced on October 24 and on the completion of the temperature compensation was brought into use on October 29. The scale value is not quite uniform across the sheet; the variation in force is computed from the scale value observations as a quadratic function of the ordinate. From October 29 the mean scale value was 2.2γ per mm.

SCALE VALUE OF VERTICAL FORCE VARIOMETER.—The scale value of the instrument is determined by the method 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—

$$3239A \left[1 - 0.0129 \frac{x^2 - \frac{1}{2}\rho^2}{R^2} - 1.782 \frac{x^4 - 3x^2\rho^2 + \frac{3}{8}\rho^4}{R^4} \dots \right]$$

where R is 31.06 cms., being the distance from the centre of the coil to a point on the circumference of either ring. The coil is placed so that its centre plane is horizontal, and with its centre as nearly as possible coincident with the vertical force magnets; there is no horizontal magnetic field produced by the coil in the plane of the magnets, and the vertical force produced is constant to within 0.5 per cent. throughout the space occupied by the magnets. Within this limit of error, also, an inclination of the magnets to the horizontal even by several degrees would not affect the vertical force to which they would be subject; and the horizontal forces on them, besides being inappreciable, would have a force and not a couple resultant.

In making scale value determinations, the current is supplied by a small portable battery, and is measured by an ammeter. Current strengths of 50 and 100 milliampères are used, which from the above formula, allowing for the slight noncentrality of the magnets with respect to the coil, are found to produce deflecting forces of 161.5 and 323γ respectively. The scale value is found to be nearly uniform across the sheets for the old instrument. For the new instrument, the variation is greater and is allowed for.

The scale value determinations are made weekly. The scale value is found to be nearly constant.

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

§ 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, 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 300γ 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 four days (May 13, 14, 15, 16,) in the year 1921 which are classed as days of great disturbance. On May 14–15 the variation in vertical force was greater than could be recorded on the photographic sheet, the trace being lost for nearly eleven hours, in consequence. Days of lesser disturbance are May 19 and October 8. When two days are mentioned together, it is to be understood that the reference is usually to one set of photographic sheets extending from 11 a.m. to 11 a.m., 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. Four days in May 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

MAGNETIC ELEMENTS.

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
1862	20 52.6	0.1759	68 15.8	1902	16 22.8	0.1852	67 3.8
1863	20 45.9	0.1763	68 9.6	1903	16 19.1	0.1852	67 1.2
1864	..	0.1764	68 7.0	1904	16 15.0	0.1854	66 57.6
1865	20 33.9	0.1767	68 4.1	1905	16 9.9	0.1854	66 56.3
1866	20 28.0	0.1767	68 2.7	1906	16 3.6	0.1854	66 55.6
1867	20 20.5	0.1773	68 1.3	1907	15 59.8	0.1855	66 56.2
1868	20 20.5	0.1777	67 57.2	1908	15 53.5	0.1854	66 56.3
1869	20 13.1	0.1779	67 56.5	1909	15 47.6	0.1854	66 54.1
1870	20 4.1	0.1782	67 54.8	1910	15 41.2	0.1855	66 52.8
1871	19 53.0	0.1784	67 52.5	1911	15 33.0	0.1855	66 52.1
1872	19 41.9	0.1786	67 50.3	1912	15 24.3	0.1855	66 51.8
1873	19 36.8	0.1789	67 47.8	1913	15 15.2	0.1853	66 50.5
1874	19 33.4	0.1793	67 45.8	1914	15 6.3	0.1853	66 51.3
1875	19 28.9	0.1797	67 43.6	1915	14 56.5	0.1851	66 52.0
1876	19 21.2	0.1797	67 42.4	1916	14 46.9	0.1848	66 52.8
1877	19 8.3	0.1799	67 41.0	1917	14 37.1	0.1848	66 53.0
1878	18 57.2	0.1800	67 39.7	1918	14 27.8	0.1846	66 52.8
1879	18 49.3	0.1802	67 38.2	1919	14 18.2	0.1845	66 53.3
1880	18 40.5	0.1805	67 37.0	1920	14 8.6	0.1845	66 53.6
	18 32.6	0.1805	67 35.7	1921	13 57.6	0.1845	66 53.0

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

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

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

In 1861 the new Unifilar Apparatus for absolute Horizontal Force and the Airy Dip-Circle were introduced, both sets of apparatus being used in that year. In 1864 the excavation of the Magnetic Basement caused the suspension of complete Declination Observations. From 1914 the Dip was determined with the Inductor.

§ 6. *Meteorological Instruments.*

· STANDARD BAROMETER.—The standard barometer is Newman No. 64. Its tube is 0ⁱⁿ·565 in diameter, and the depression of the mercury due to capillary action is 0ⁱⁿ·002, 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 0ⁱⁿ·05, subdivided by vernier to 0ⁱⁿ·002. 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.

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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 $-0^{\circ}\cdot4$ 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 $-0^{\circ}\cdot2$ 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 Hershams in 1889, on his whirling machine, it would appear that the relation between V and v is more correctly given by

$$V=4\cdot0+2\cdot0 v,$$

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 1921 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 80 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.

From 1921 January 1 a new and larger camera was in regular use. The lens is of 18·8 inches focal length and 0·8 inch aperture. 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 75 and E 76) have been calculated from the corresponding mean hourly values of air and evaporation temperatures (pages E 74 and E 75).

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.

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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 73 and E 80, is formed from the records of this gauge. In this numeration only those days are counted on which the fall amounted to or exceeded 0ⁱⁿ.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 49 to E 71, and in the abstract table, page E 73, 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, <i>aurora</i>	h, <i>haze</i>	s, <i>stratus</i>
ci, <i>cirrus</i>	ha, <i>halo</i>	sc, <i>scud</i>
cl, <i>clouds</i>	hl, <i>hail</i>	sh, shs, <i>shower (s)</i>
co, <i>corona</i>	l, <i>lightning</i>	sl, <i>sleet</i>
cu, <i>cumulus</i>	m, <i>mist</i>	sm, <i>storm</i>
d, <i>dew</i>	n, <i>nimbus</i>	sn, <i>snow</i>
f, <i>fog</i>	prh, <i>parhelion</i>	sq, sqs, <i>squall (s)</i>
fr, <i>frost</i>	prs, <i>paraselene</i>	t, <i>thunder</i>
g, <i>gale</i>	r, <i>rain</i>	w, <i>wind</i>
glm, <i>gloom</i>		

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

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

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.

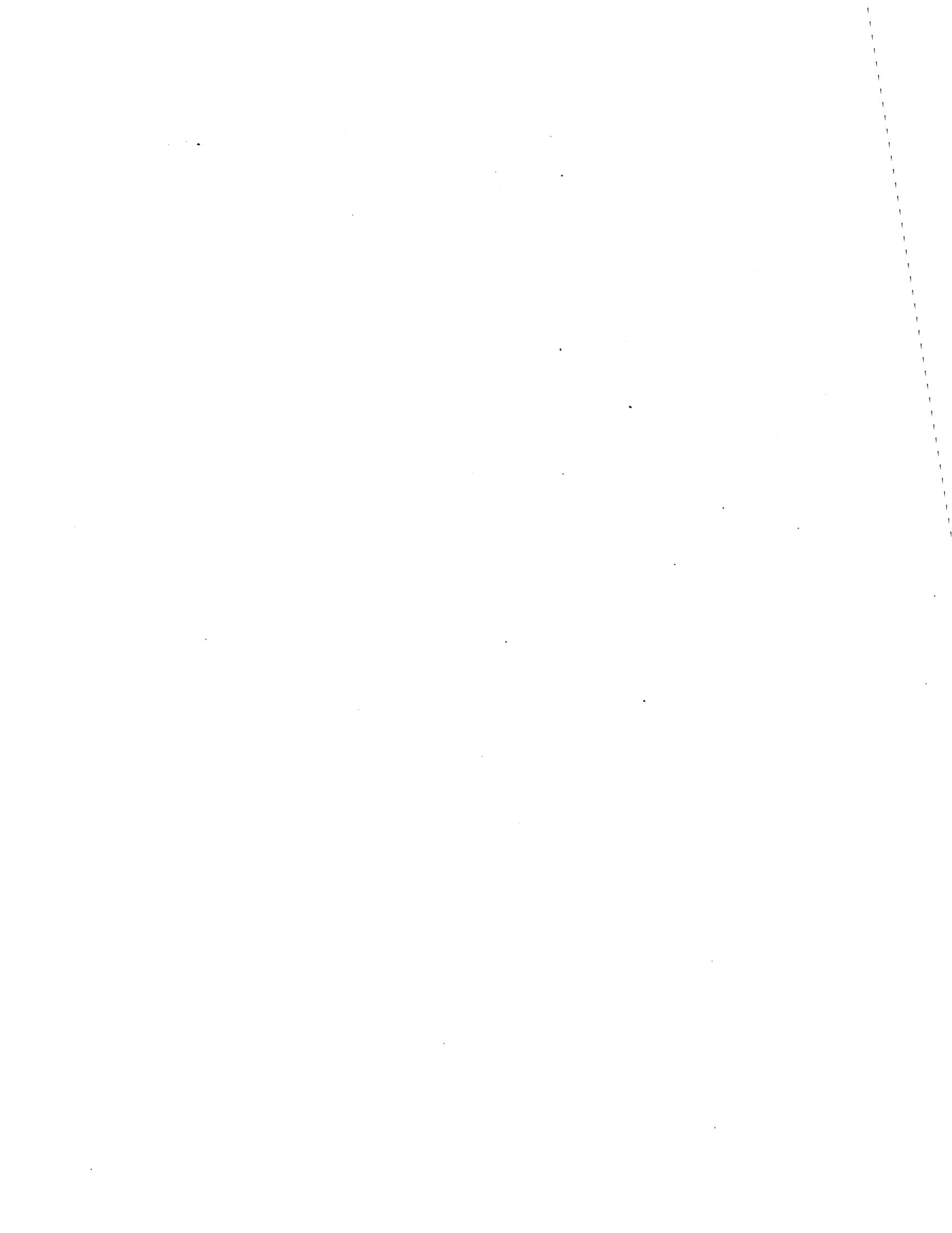
The following is the notation employed for electricity :—

N, <i>negative</i>	m, <i>moderate</i>	s, <i>strong</i>
P, <i>positive</i>	w, <i>weak</i>	v, <i>variable</i>
ss, <i>very strong</i>	ww, <i>very weak</i>	vv, <i>very variable</i>

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

F. W. DYSON.

ROYAL OBSERVATORY, GREENWICH
1923 October 15.



ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

MAGNETICAL OBSERVATIONS,

1921.

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION.

	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.		
January.																												
13° + Tabular Quantities.																												
1**	61.6	60.9	61.3	61.9	61.9	62.0	62.3	63.9	66.1	64.9	65.6	65.6	65.7	65.8	65.6	62.9	64.3	64.1	63.3	60.6	61.9	59.1	62.1	62.1	63.2			
2*	62.1	62.3	63.9	61.9	62.1	62.3	62.3	62.3	63.1	64.1	64.6	64.3	63.9	63.1	63.1	62.9	62.3	62.9	62.9	62.3	62.3	62.3	62.1	62.2	62.1	63.2		
3	61.3	60.9	61.1	61.9	62.9	62.1	61.9	62.1	63.3	64.3	65.6	66.6	66.9	65.9	64.3	64.3	63.9	63.6	62.9	62.3	62.3	62.1	62.2	62.2	62.1	63.2		
4	62.6	63.1	62.1	60.3	61.1	61.3	62.6	62.9	62.9	64.3	65.1	66.1	65.9	66.1	65.9	63.9	63.1	62.1	62.3	61.9	61.9	61.6	61.3	61.9	61.9	63.0		
5	62.3	62.9	63.1	63.5	62.1	62.2	62.6	62.9	64.1	64.9	65.6	66.3	67.1	66.9	65.6	64.9	64.1	63.6	61.6	62.1	61.8	62.1	62.3	62.1	62.3	62.1	63.6	
6	61.6	61.8	62.3	62.1	62.1	61.9	63.3	62.6	62.6	63.3	64.1	64.9	66.3	65.6	64.1	64.1	63.9	63.3	62.9	62.3	61.9	61.1	61.3	62.1	62.1	63.0		
7	62.6	62.9	63.1	62.9	62.9	62.9	62.3	61.9	62.1	63.3	63.6	64.9	66.1	65.9	65.3	64.2	63.6	63.3	62.6	62.4	59.1	59.5	60.2	61.6	61.6	62.9		
8*	62.1	62.3	62.1	61.9	62.6	62.3	62.3	62.1	62.2	62.3	63.6	64.3	65.9	65.9	64.6	64.7	63.9	62.9	62.3	61.9	61.9	61.9	62.1	62.1	62.1	63.0		
9	62.6	62.9	63.1	63.3	63.1	63.1	63.3	64.6	64.9	64.6	65.3	65.3	67.0	65.1	66.1	66.9	66.3	64.6	62.6	59.9	56.3	60.6	61.3	61.9	61.9	63.5		
10**	59.9	61.4	61.6	62.2	62.1	63.3	63.3	62.9	62.5	62.6	62.6	63.9	66.3	69.3	66.9	66.3	65.9	64.6	61.1	59.9	59.9	55.3	57.6	59.6	62.5			
11	61.4	62.3	62.5	63.1	63.1	62.9	62.3	62.2	62.1	62.8	63.9	64.9	65.6	64.9	64.3	64.1	63.9	63.6	63.3	62.1	61.9	61.6	60.9	60.9	62.9			
12	59.3	59.9	62.6	63.1	61.8	62.3	62.1	61.9	61.9	62.1	62.9	63.6	65.3	65.1	64.1	65.3	64.1	64.3	63.3	61.9	60.9	61.3	61.6	61.7	62.6			
13*	61.9	62.1	61.9	61.6	62.9	62.3	61.9	62.1	62.1	62.9	64.6	64.9	65.3	65.3	64.1	64.0	63.8	63.1	62.8	61.9	61.6	61.3	61.3	61.6	62.8			
14*	61.6	62.1	62.2	62.6	62.5	62.6	62.2	62.3	62.3	62.9	64.1	64.1	64.6	65.1	64.3	63.4	62.9	63.1	63.1	60.9	62.1	61.5	61.9	61.8	62.8			
15	61.3	60.9	61.6	62.3	62.1	62.2	62.3	62.1	62.8	63.1	63.9	65.6	66.9	69.1	63.9	63.6	63.5	63.1	62.9	62.6	62.1	61.3	57.6	61.1	62.8			
16	62.1	61.6	61.5	61.6	61.9	61.9	61.1	61.3	61.6	62.9	63.6	64.3	64.9	64.9	64.1	64.1	64.3	63.9	63.9	63.6	62.6	61.4	57.1	57.8	62.4			
17**	59.6	59.6	60.6	60.9	61.3	62.1	61.3	61.4	61.9	63.1	67.3	67.3	69.1	65.6	67.1	64.9	68.1	69.1	59.1	61.9	61.6	61.1	60.6	57.3	63.0			
18	59.3	61.6	61.9	61.3	63.3	62.3	62.4	63.1	63.5	64.1	64.3	65.1	65.6	64.9	64.0	63.8	63.7	63.6	63.6	62.6	60.6	62.2	61.1	60.9	62.9			
19	61.1	61.1	61.3	62.1	61.5	62.2	62.2	62.1	62.1	62.9	64.9	65.6	66.3	65.9	64.5	63.6	63.3	63.1	62.6	62.3	60.6	60.9	61.6	61.5	62.7			
20	62.3	62.1	61.7	62.6	61.8	61.6	61.4	61.5	62.1	63.3	64.1	65.3	65.6	66.1	65.1	63.5	62.9	63.1	63.9	63.1	60.6	59.9	50.6	55.1	62.1			
21	63.4	63.1	62.8	62.1	64.1	63.3	62.4	62.1	62.3	63.9	63.7	65.6	66.1	65.9	65.1	64.3	63.6	63.1	62.6	62.3	60.9	61.6	61.6	61.9	63.2			
22*	62.6	62.6	62.6	62.3	62.9	60.6	61.6	62.0	61.8	62.9	63.6	63.9	64.3	64.1	63.7	63.1	62.9	62.6	62.3	60.3	61.3	61.9	61.9	62.1	62.5			
23	62.5	62.6	61.6	60.3	62.9	61.6	61.3	61.4	61.9	62.2	63.6	63.9	64.6	64.9	64.6	63.9	63.3	62.9	62.6	62.6	62.3	61.5	61.6	61.9	62.6			
24**	62.1	62.1	61.9	62.3	62.6	63.1	60.9	62.2	63.6	64.4	65.6	66.2	67.9	65.9	66.3	65.3	62.8	62.6	62.1	61.9	61.3	60.9	61.1	61.1	63.1			
25	61.6	61.9	61.9	61.9	62.3	62.3	61.9	62.3	62.7	62.9	62.9	63.8	64.1	64.6	64.2	63.3	63.1	62.6	61.6	59.3	60.3	60.9	58.6	60.1	62.1			
26	63.6	61.1	61.9	61.8	61.6	62.1	61.9	61.9	62.3	62.5	62.6	64.5	66.1	67.3	66.1	64.9	64.9	63.3	62.9	62.6	61.3	61.6	61.3	61.3	63.0			
27	62.1	62.3	62.9	62.6	62.9	62.3	62.6	62.3	62.9	62.6	63.0	63.1	63.6	63.9	63.6	62.3	62.1	62.9	62.6	62.1	61.8	61.3	60.9	59.9	62.4			
28	61.6	61.6	62.1	63.1	63.3	60.9	60.9	61.7	62.9	64.3	64.9	66.1	66.3	64.9	64.6	63.6	63.3	64.1	62.4	61.9	60.8	61.1	60.7	60.7	62.8			
29	60.9	61.6	63.3	61.4	60.9	60.5	61.1	61.3	62.7	64.3	65.1	65.9	66.1	65.7	63.9	63.1	63.7	62.4	61.6	61.9	61.1	60.9	61.1	61.3	62.6			
30	61.6	61.9	62.9	62.1	61.1	61.3	61.1	60.9	60.6	61.9	63.6	65.1	65.6	65.2	63.7	62.9	62.6	62.4	62.3	61.9	60.6	59.6	57.9	58.6	62.0			
31**	59.3	60.1	61.1	61.6	61.9	62.1	61.9	61.3	61.1	62.9	64.6	65.9	67.1	66.1	65.5	64.1	64.0	62.6	59.8	62.1	61.9	61.7	61.6	61.6	62.6			
Mean	61.6	61.8	62.1	62.1	62.3	62.1	62.0	62.2	62.6	63.3	64.3	65.1	65.9	65.6	64.8	64.1	63.8	63.4	62.5	61.9	61.2	61.0	60.5	60.9	62.8			
Mean*	62.1	62.3	62.5	62.1	62.6	62.0	62.1	62.2	62.3	63.0	64.1	64.3	64.9	64.7	64.0	63.6	63.2	63.0	62.8	61.5	61.8	61.7	61.8	61.7	62.8			
Mean**	60.5	60.8	61.3	61.8	62.0	62.5	61.9	62.3	63.0	63.6	65.1	65.8	67.0	66.5	66.3	64.7	65.0	64.6	61.1	61.3	61.3	59.5	60.6	60.3	62.9			
February.																												
13° + Tabular Quantities.																												
1	61.6	61.9	62.1	62.3	62.3	61.9	61.8	61.6	61.9	63.1	63.6	64.5	64.3	64.4	64.4	65.1	63.6	62.9	60.6	55.3	59.6	60.9	61.3	61.6	62.6			
2**	61.3	61.6	61.9	62.1	61.1	60.9	63.3	62.3	62.6	63.3	63.1	64.7	64.3	66.9	65.1	65.9	64.5	63.6	56.1	61.2	62.1	61.6	60.9	60.5	62.5			
3	61.1	62.1	61.9	60.3	59.9	60.1	60.4	61.1	61.5	61.6	62.9	63.9	63.7	63.1	62.3	62.3	62.4	62.1	61.8	61.6	61.3	60.6	60.9	61.9	61.9			
4	61.1	61.3	61.4	61.6	61.6	61.6	61.3	61.1	61.3	61.9	62.6	63.5	64.1	64.3	64.1	63.4	63.2	63.1	63.3	62.6	61.9	61.9	60.6	60.8	62.2			
5**	60.3	60.1	60.1	61.1	61.0	60.9	60.6	60.9	61.1	61.2	62.3	66.1	67.6	67.1	67.3	67.6	65.1	66.1	62.9	61.3	59.3	57.1	58.1	60.1	62.2			
6	56.1	56.3	62.6	64.9	61.9	61.1	61.0	60.8	60.6	60.7	61.3	62.4	63.1	63.9	63.5	64.3	63.9	59.3	61.8	60.5	60.6	60.2	60.3	60.6	61.3			
7	61.6	60.9	61.1	61.1	61.0	60.9	60.9	60.9	60.6	60.4	61.1	62.9	63.6	65.1	64.3	63.6	62.3	60.6	60.6	59.1	59.9	60.3	60.9	61.1	61.5			
8*	61.1	61.3	61.6	61.9	61.3	61.1	60.9	61.1	61.7	61.5	62.6	64.5	66.3	65.9	64.6	63.6	62.6	61.9	61.3	61.1	60.6	60.5	60.6	60.7	62.1			
9*	61.1	61.3	61.3	61.3	61.1	60.9	60.6	60.9	60.6	60.3	60.6	61.8	63.1	63.6	63.3	63.1	62.9	62.6	61.4	60.3	60.6	60.9	60.9	61.1	61.5			
10	61.3	61.4	61.6	61.4	61.3	61.1	61.2	61.1	61.3	61.1	61.6	63.3	65.1	65.6	65.3	64.9	63.3	62.9	62.6	61.9	61.3	61.3	59.3	57.1	62.1			
11	60.6	58.1	59.6	61.1	60.9	60.9	61.5	61.3	60.9	60.3	60.6	61.7	63.6	63.6	63.6	63.0	62.3	62.3	61.9	61.3	61.1	60.9	60.3	60.3	61.3			
12*	60.9	61.3	61.3	61.2	61.1	61.3	61.1	61.3	60.7	60.9	62.1	64.1	64.3	64.3	63.3	62.2	62.1	62.1	61.8	61.6	61.3	61.1	60.9	61.1	61.8			
13**	61.3	61.6	61.3	61.3	62.0	61.6	60.7	61.1	60.6	60.3	60.6	62.4	64.3	66.1	65.1	65.9	64.9	64.6	61.9	62.6	61.3	59.0	56.1	57.6	61.8			
14	58.6	57.3	60.9	55.3	57.4	58.9	59.9	61.1	61.5	61.6	62.1	62.9	64.2	65.1	63.3	62.4	62.3	62.6	60.9	61.6	61.9	58.7	60.1	58.6	60.8			
15	55.6	57.9	58.9	59.1</																								

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

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h		
13° + Tabular Quantities.																											
March.																											Mean.
1	60.3	60.1	60.3	60.7	60.9	60.1	60.8	60.2	60.0	59.9	62.1	64.3	68.6	65.6	65.9	64.1	63.6	62.3	61.6	60.9	54.6	59.1	59.6	60.6	61.5	61.5	
2	60.5	60.6	60.7	63.6	61.9	58.9	59.1	59.0	58.6	60.6	62.9	63.3	64.3	65.9	64.6	63.3	62.1	61.9	61.6	61.1	60.9	60.1	58.8	59.6	61.4	61.4	
3	59.9	59.6	60.6	59.7	59.9	60.0	59.9	60.1	59.3	59.1	59.5	61.9	64.1	64.1	64.2	63.1	62.2	61.1	60.2	59.9	60.1	59.6	59.6	57.9	60.6	60.6	
4	59.6	60.1	60.3	61.5	60.6	59.9	59.9	59.1	58.1	58.9	61.6	62.9	65.3	65.9	65.7	63.1	62.5	62.1	61.5	59.9	59.9	60.1	59.6	59.7	61.2	61.2	
5*	59.6	60.3	60.6	60.3	60.3	60.1	59.6	59.9	58.6	58.6	60.7	63.3	65.1	65.6	63.9	62.9	61.1	61.3	61.1	60.3	60.0	59.6	59.2	58.1	60.8	60.8	
6	60.3	60.6	60.6	60.5	60.4	60.1	59.9	59.1	58.8	58.6	60.2	63.1	65.3	65.6	64.3	63.6	61.8	61.1	60.9	60.3	60.9	60.6	60.1	59.6	61.2	61.2	
7	60.3	60.6	60.6	60.3	60.6	60.7	60.3	59.6	58.0	58.1	59.5	62.1	64.9	65.3	64.1	62.9	61.6	60.9	60.6	61.1	59.3	57.1	58.0	58.3	60.6	60.6	
8*	59.1	59.6	60.3	60.1	59.9	59.6	59.0	58.6	57.3	57.6	59.1	61.3	64.1	65.1	64.3	63.1	61.3	61.1	61.1	60.8	60.7	60.6	60.3	60.6	61.3	61.3	
9	60.7	60.6	60.5	60.7	60.6	60.3	60.1	59.6	58.1	57.9	59.3	61.9	65.1	66.3	66.9	66.1	64.4	64.1	63.6	62.6	62.3	60.6	58.9	49.1	61.3	61.3	
10	54.6	58.3	63.3	58.1	58.9	58.9	58.7	58.6	57.9	58.9	60.1	62.1	64.9	65.3	64.3	63.3	61.9	61.6	62.1	61.3	60.9	60.6	59.6	60.5	60.6	60.6	
11	60.1	60.1	60.3	60.3	60.3	60.3	59.7	58.7	57.6	57.4	59.1	62.1	65.3	65.9	66.6	65.3	63.9	63.1	62.5	61.6	61.3	61.1	60.3	59.9	61.4	61.4	
12	58.9	60.0	59.6	59.9	59.6	60.1	59.5	58.6	57.9	57.6	59.1	62.6	65.6	66.6	67.3	64.6	63.1	62.4	62.1	61.3	61.1	60.9	60.6	61.3	61.3	61.3	
13	60.3	60.6	60.9	60.8	60.6	60.7	60.3	59.3	57.6	57.3	59.3	62.1	65.6	66.8	66.3	64.9	62.6	61.9	61.8	61.6	61.3	60.6	60.4	60.1	61.4	61.4	
14	59.6	59.6	59.9	60.4	60.3	61.6	60.3	59.3	57.9	58.1	61.5	64.1	65.6	66.3	66.3	64.3	63.5	63.7	63.3	62.3	60.6	59.8	50.6	56.5	61.1	61.1	
15**	56.6	57.1	56.9	56.9	57.6	57.5	60.4	59.1	58.2	59.6	63.7	67.1	70.7	70.6	70.3	70.6	67.9	65.6	63.8	62.3	64.9	58.6	59.9	60.9	62.2	62.2	
16	60.3	60.1	58.1	59.5	58.3	58.6	63.1	61.9	58.5	58.1	59.6	(61.6)	(63.6)	65.1	64.6	64.1	62.8	61.1	60.6	60.6	60.4	60.1	60.1	60.2	60.9	60.9	
17*	60.3	60.2	60.1	60.2	60.1	58.0	59.9	58.9	58.1	58.3	59.1	62.1	64.3	65.1	64.3	62.9	61.7	61.6	62.2	61.8	61.4	61.1	60.3	59.1	60.9	60.9	
18	58.3	58.6	59.1	59.3	59.9	59.9	59.7	59.6	58.4	58.1	58.8	61.6	64.9	64.6	64.6	63.1	61.5	60.9	61.1	60.9	59.6	60.4	60.3	59.5	60.5	60.5	
19*	59.3	59.1	58.9	57.3	59.1	58.9	59.1	58.6	57.9	57.9	59.1	62.6	65.1	64.9	64.1	62.6	61.1	60.9	60.8	60.6	60.5	60.6	60.7	60.7	60.4	60.4	
20*	60.4	60.3	60.1	60.1	59.9	59.9	59.9	58.9	58.1	58.1	59.4	62.1	64.2	65.1	64.6	62.9	61.3	60.6	60.9	60.6	60.7	60.9	60.6	60.3	60.8	60.8	
21**	60.1	60.1	59.9	59.9	59.3	59.1	58.9	57.5	56.1	56.1	58.6	61.5	65.1	68.3	67.9	69.1	73.9	70.1	63.5	60.4	59.6	59.9	60.6	60.1	61.9	61.9	
22**	57.1	57.6	58.9	59.3	64.6	63.9	62.6	60.3	61.9	61.6	64.1	67.7	66.6	67.9	66.1	65.3	64.1	63.3	62.7	60.1	57.1	56.6	58.9	59.1	61.9	61.9	
23	58.6	59.3	59.9	60.1	60.6	60.3	59.8	58.2	56.6	56.6	58.3	(61.1)	62.9	64.0	64.6	63.6	62.7	61.8	61.3	60.9	60.3	60.1	59.9	59.9	60.5	60.5	
24	59.3	59.9	59.9	59.9	59.7	59.9	59.3	57.3	56.8	56.6	59.1	63.7	66.1	68.1	67.6	65.6	63.3	62.3	60.9	54.9	50.7	52.9	58.9	59.1	60.1	60.1	
25**	59.9	60.1	60.6	58.6	58.3	59.7	59.1	56.7	55.6	55.9	58.1	64.5	66.8	68.6	67.1	64.1	63.3	61.6	61.1	60.4	58.6	49.6	53.3	53.3	59.8	59.8	
26	58.1	58.5	62.6	60.9	59.6	59.1	59.3	59.6	60.3	60.4	62.6	64.6	65.9	67.9	67.6	64.6	63.5	62.1	61.1	61.2	60.6	58.6	55.3	55.6	61.2	61.2	
27**	57.6	59.6	58.9	61.3	61.9	60.1	58.9	57.6	56.9	57.6	61.1	63.9	66.6	66.6	66.1	65.9	63.3	58.1	55.1	57.2	54.1	56.6	58.8	59.6	60.1	60.1	
28	60.1	60.2	60.3	60.1	59.9	59.6	58.4	57.3	57.1	56.1	57.9	61.1	65.1	65.7	66.3	65.7	63.3	62.6	61.6	60.7	60.4	60.1	59.5	58.9	60.8	60.8	
29	61.1	58.9	63.9	59.3	59.6	61.1	59.6	58.9	57.6	57.6	60.9	63.1	66.4	66.6	69.1	65.6	58.8	56.6	57.6	59.0	54.1	58.9	58.1	57.3	60.4	60.4	
30	61.6	59.9	61.1	59.9	59.6	59.6	58.7	57.5	57.9	58.1	60.5	62.1	63.7	64.9	66.1	65.3	62.4	62.1	61.1	59.6	59.8	60.1	60.2	60.6	60.9	60.9	
31	60.6	59.3	58.3	58.8	59.1	60.0	59.1	57.5	56.6	57.3	60.2	62.6	65.4	66.6	65.6	(63.6)	61.4	60.6	60.6	60.8	60.4	59.9	59.3	59.4	60.6	60.6	
Mean	59.5	59.7	60.2	59.9	60.1	59.9	59.8	58.9	58.0	58.1	60.2	62.9	65.4	66.2	65.8	64.5	63.0	62.0	61.4	60.6	59.3	59.2	59.0	58.9	60.9	60.9	
Mean*	59.7	59.9	60.0	59.6	59.9	59.7	59.5	59.0	58.0	58.1	59.5	62.3	64.6	65.2	64.2	62.9	61.3	61.1	61.2	60.8	60.7	60.6	60.2	59.8	60.7	60.7	
Mean**	58.3	58.9	59.0	59.2	60.3	60.1	60.0	58.2	57.7	58.2	61.1	64.9	67.2	68.4	67.5	67.0	66.5	63.7	61.6	60.5	57.2	56.3	58.3	58.6	61.2	61.2	
13° + Tabular Quantities.																											
April.																											Mean.
1	59.6	59.3	59.3	59.1	58.9	59.3	58.9	57.6	56.6	56.9	59.3	62.1	64.6	65.8	64.9	63.4	61.5	60.7	60.2	60.1	60.0	59.9	60.1	60.0	60.3	60.3	
2	59.6	60.5	59.3	59.1	59.2	59.1	57.9	56.7	55.9	57.4	61.6	64.9	66.6	67.3	65.9	64.3	61.6	60.9	60.4	60.3	60.1	59.8	57.9	58.1	60.6	60.6	
3	59.6	59.7	59.4	59.4	59.3	59.3	58.6	56.3	55.6	56.9	59.1	63.9	67.9	69.1	69.1	65.9	63.9	62.3	60.9	61.1	60.6	60.3	54.3	58.1	60.9	60.9	
4*	59.9	59.6	59.4	59.0	59.1	59.3	58.3	56.9	56.3	57.1	59.1	62.9	65.6	66.6	65.7	64.1	62.7	61.6	61.0	60.9	60.9	60.9	60.3	60.8	60.8		
5*	60.1	60.1	60.2	60.3	59.6	59.4	59.1	57.5	56.6	57.3	59.1	62.1	65.9	66.9	66.1	63.9	62.3	61.5	61.1	60.9	60.9	59.6	60.2	60.1	60.9	60.9	
6	58.1	56.9	56.6	56.6	57.3	58.3	57.9	57.3	57.3	57.6	58.5	62.1	64.4	66.6	65.5	63.9	62.3	60.3	60.1	60.5	60.1	59.9	60.0	60.2	59.9	59.9	
7	59.6	59.6	59.4	59.5	59.6	60.7	59.8	56.7	55.3	55.6	57.2	61.2	63.8	65.6	64.9	63.6	62.9	61.6	60.9	60.7	60.2	60.1	59.9	59.9	60.3	60.3	
8*	60.1	60.1	60.1	58.7	58.6	57.9	57.1	55.9	55.6	57.1	59.1	63.9	67.6	68.9	69.1	67.3	65.1	61.9	60.9	59.1	58.9	58.3	57.3	59.1	60.7	60.7	
9	59.6	60.1	59.7	58.8	59.0	58.5	57.1	55.5	55.3	56.1	(59.1)	63.0	66.4	68.4	68.4	68.3	66.3	65.7	59.6	58.6	58.9	59.9	60.1	59.6	60.9	60.9	
10	56.3	54.1	54.9	55.9	54.6	57.9	57.1	55.9	57.3	58.3	60.3	64.1	67.6	68.6	67.9	65.3	63.3	62.6	60.3	54.3	57.3	56.6	55.9	54.1	59.2	59.2	
11	53.6	56.1	53.9	52.3	55.9	56.6	57.1	56.6	56.6	57.1	58.4	63.8	65.5	66.8	66.5	65.5	64.8	63.5	62.3	61.7	61.8	60.8	60.5	59.8	59.9	59.9	
12**	60.3	59.3	59.3	57.4	57.4	58.2	57.6	56.0	56.5	58.2	59.5	64.5	67.0	70.5	68.4	68.2	65.3	62.0	61.4	61.0	60.2	59.5	60.3	61.2	61.2	61.2	
13**	58.5	61.2	58.8	62.5	65.8	67.5	59.8	61.4	59.5	59.8	60.5	63.5	64.4	64.8	65.5	62.5	61.2	60.5	59.2	57.4	54.0	57.8	57.8	5			

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

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	
13° + Tabular Quantities.																										
May.																										Mean.
1	59.0	58.5	58.2	58.2	58.5	58.0	57.2	56.2	56.5	58.2	62.0	64.0	66.2	63.6	62.5	61.8	61.5	60.5	59.9	59.8	60.0	60.2	59.8	59.5	60.0	60.0
2	59.0	58.8	58.5	58.2	57.0	56.2	55.8	55.5	56.5	57.8	59.2	62.8	64.2	64.8	63.5	62.2	61.0	59.8	58.5	58.6	58.5	52.8	53.5	53.0	52.5	57.8
3	59.0	58.7	58.0	57.5	56.4	55.2	53.8	53.5	54.0	55.8	60.0	63.8	66.2	64.0	62.2	61.0	59.8	58.5	58.6	58.5	52.8	53.5	53.0	52.5	57.8	
4	53.8	52.2	49.8	52.0	58.1	59.5	55.6	54.0	54.0	59.1	62.0	65.4	66.5	65.8	65.2	63.2	61.5	60.2	59.8	60.2	60.0	59.8	58.8	59.8	59.0	
5*	60.5	60.2	59.5	58.8	56.8	55.8	55.2	54.2	54.2	56.8	61.8	63.5	65.2	64.3	63.0	61.5	60.3	59.7	60.0	60.1	60.2	60.0	60.2	60.0	59.7	
6*	59.5	59.6	60.0	58.7	57.5	56.0	55.6	55.0	55.2	57.6	60.5	64.4	66.0	65.3	63.0	61.2	60.2	60.5	60.5	60.4	60.2	60.5	59.0	58.8	59.8	
7*	58.2	58.8	58.5	58.0	57.2	56.2	55.8	55.5	55.8	57.0	60.1	63.8	65.8	65.0	63.2	61.5	60.8	60.2	60.0	59.8	59.8	59.7	59.7	59.2	59.6	
8	58.8	58.5	58.0	57.0	56.7	56.0	55.0	55.8	54.8	58.0	61.4	63.2	65.5	66.6	66.8	64.8	63.8	61.5	59.8	59.8	60.0	59.0	59.0	58.6	59.9	
9	60.8	56.4	58.0	59.3	57.2	57.0	54.0	53.8	55.1	57.0	58.8	65.2	69.8	70.5	67.8	66.0	65.1	63.8	62.5	58.5	57.8	58.5	56.8	57.0	60.3	
10	57.5	58.8	59.0	59.8	59.2	58.0	56.5	55.0	55.4	56.5	59.8	63.5	66.8	68.8	67.2	63.2	63.8	62.5	61.2	60.8	60.7	59.5	58.9	58.5	60.4	
11	58.2	57.8	57.5	57.0	56.8	56.2	56.5	55.4	54.5	55.5	57.8	61.1	64.0	64.5	64.0	63.8	63.5	62.8	61.5	59.8	58.5	59.0	59.2	59.2	59.3	
12	59.2	58.8	57.5	56.0	55.1	55.2	52.5	51.1	47.0	51.8	62.0	63.4	65.0	65.8	66.5	66.2	65.2	64.2	63.0	61.2	60.0	59.2	58.4	58.0	59.3	
13**	57.2	57.3	58.2	59.0	56.3	55.7	55.3	56.0	57.2	59.2	62.0	64.8	66.2	69.5	71.3	71.0	71.5	69.0	64.5	64.5	55.5	52.5	54.5	56.0	61.0	
14**	57.0	55.7	58.9	55.2	52.8	59.5	58.8	58.0	55.8	55.3	59.0	59.7	62.0	61.0	63.0	64.0	53.5	59.2	63.0	57.0	54.7	58.0	48.0	59.0	57.8	
15**	31.0								48.5	53.5	56.0	60.0	66.2	65.0	64.5	62.5	59.9	59.7	59.3	60.0	59.8	58.1	58.1	58.7		
16**	58.0	54.0	48.2	56.0	55.4	57.2	62.0	65.3	71.5	68.0	60.0	58.3	59.5	67.0	68.0	63.5	61.0	57.2	59.8	61.5	60.8	60.2	59.5	58.2	60.4	
17	60.5	59.7	57.5	52.2	56.0	55.8	54.8	53.2	53.8	56.8	60.0	62.8	64.0	63.8	63.1	62.2	60.0	58.6	59.0	59.2	59.5	59.0	59.2	60.0	58.7	
18	55.5	57.5	57.5	56.0	53.0	53.2	54.0	54.0	55.0	57.7	60.0	60.8	62.2	65.0	62.8	62.0	60.0	56.9	56.5	54.8	55.5	54.5	58.2	58.5	57.5	
19	59.0	57.8	57.5	58.4	56.6	53.8	52.5	51.8	53.0	55.4	59.0	63.0	64.5	63.8	62.5	61.8	59.5	58.8	57.8	57.7	57.2	51.5	52.2	48.0	57.2	
20**	44.5	52.0	55.5	62.6	52.5	54.8	52.0	50.8	51.2	54.6	56.5	59.8	62.2	63.8	65.6	70.7	73.0	73.0	67.8	59.0	59.2	59.2	58.8	57.0	59.0	
21	55.8	52.8	60.2	56.2	55.2	53.8	54.0	56.0	57.2	56.5	59.2	62.8	63.8	65.8	68.2	65.0	64.5	60.8	54.2	58.5	60.2	59.8	58.8	58.5	59.1	
22	58.0	57.5	57.2	56.8	54.8	53.2	52.8	52.5	54.0	56.2	59.0	62.8	62.7	62.8	62.8	62.0	61.2	60.3	59.0	59.5	57.8	55.5	56.8	56.5	58.0	
23	58.8	59.2	55.2	53.5	52.8	52.0	53.0	53.1	53.8	54.2	57.5	59.8	60.8	62.0	61.8	61.0	59.8	58.8	58.5	58.0	58.0	57.8	57.0	58.0	57.2	
24	57.0	56.5	56.5	55.8	55.5	55.2	56.0	55.8	55.8	56.5	58.0	61.7	63.5	63.8	63.2	62.8	61.8	61.1	60.8	60.5	59.4	59.2	57.2	55.0	58.7	
25*	57.2	57.0	58.5	57.8	56.5	56.1	56.0	54.9	53.8	54.8	56.0	59.7	62.2	64.5	64.8	63.2	62.0	61.1	60.0	59.0	58.6	58.0	57.5	57.4	58.6	
26	57.8	58.0	57.2	56.5	55.8	54.8	54.2	54.2	53.6	55.0	56.0	58.8	61.0	63.5	65.0	64.0	62.5	61.8	60.8	59.2	58.2	57.8	58.2	57.5	58.4	
27	58.0	58.2	58.5	56.3	55.5	55.0	54.5	53.5	52.8	54.0	55.8	59.5	60.8	61.5	61.8	61.8	62.0	61.2	60.5	59.8	58.8	56.0	58.4	56.8	58.0	
28	56.5	56.5	57.0	57.2	57.0	58.9	58.5	55.5	55.8	56.5	57.2	59.8	61.5	63.2	63.8	62.8	61.8	61.0	60.2	58.9	58.0	58.0	57.8	57.8	58.7	
29	57.8	58.7	59.5	60.8	56.2	54.6	54.5	54.4	54.0	55.0	58.0	61.2	63.2	62.5	61.1	60.2	60.2	59.8	58.0	59.2	59.2	59.0	59.1	58.8	58.5	
30*	58.5	57.8	57.2	56.7	56.5	55.9	54.5	54.0	54.8	55.8	58.5	60.8	62.5	62.5	62.3	61.5	61.0	60.2	59.6	59.1	59.0	58.8	58.8	58.6	58.5	
31	58.2	57.8	57.0	56.8	56.2	55.3	55.2	56.5	57.5	58.5	61.2	63.2	65.0	65.2	64.6	62.8	61.5	61.0	60.4	59.8	59.2	58.5	58.2	57.5	59.4	
Mean	57.6	57.4	57.3	57.1	56.0	55.8	55.2	54.8	55.1	56.7	59.3	62.1	64.0	64.7	64.4	63.3	62.1	61.2	60.2	59.4	58.6	58.0	57.7	57.7	59.0	
Mean*	58.8	58.7	58.7	58.0	56.9	56.0	55.4	54.7	54.8	56.4	59.4	62.4	64.3	64.3	63.3	61.8	60.9	60.3	60.0	59.7	59.5	59.4	59.0	58.8	59.2	
Mean**	54.2	54.8	55.2	55.7	54.3	56.8	57.0	57.5	58.9	59.3	60.7	62.5	65.3	67.0	66.8	67.3	64.6	63.8	60.5	57.6	57.5	55.2	57.6	59.6		
13° + Tabular Quantities.																										
June.																										Mean.
1	57.5	57.2	56.8	56.0	54.7	55.0	55.9	53.8	53.5	54.2	56.0	59.3	61.2	63.0	62.4	61.5	60.1	59.0	59.1	60.0	59.8	59.5	59.2	59.0	58.1	
2	58.0	57.8	57.8	57.5	55.8	55.0	54.8	55.5	55.5	57.8	63.0	64.8	65.0	64.2	62.2	61.0	60.6	59.2	58.8	58.5	58.8	58.8	58.5	58.4	59.1	
3	58.0	57.5	57.1	56.5	55.4	54.5	53.8	54.0	54.2	56.0	59.0	60.6	62.0	62.8	62.8	62.0	61.5	60.7	60.4	60.0	60.7	59.8	60.0	56.5	58.6	
4**	58.0	54.5	54.4	53.5	54.4	54.2	53.8	53.8	57.3	60.7	63.5	64.8	66.2	67.2	67.1	65.0	63.3	61.8	58.6	58.2	58.0	56.2	56.8	57.2	59.1	
5*	57.5	56.2	56.0	55.0	55.4	53.8	53.8	54.0	54.8	56.2	58.0	61.5	62.8	63.0	62.6	61.0	59.8	58.7	58.0	58.0	58.2	58.0	58.0	58.0	57.9	
6**	57.8	57.8	57.2	57.0	55.2	54.2	53.5	53.5	54.7	57.2	60.8	63.4	67.0	67.5	66.8	66.0	65.5	61.5	57.8	54.0	56.8	59.0	59.8	59.0	59.3	
7	58.6	57.8	58.0	57.8	57.2	58.0	58.8	57.0	55.5	56.4	58.2	61.2	64.5	67.0	66.2	63.5	60.5	59.4	57.8	57.5	55.6	56.0	56.8	57.0	59.0	
8**	57.5	57.5	57.8	54.2	53.0	51.8	52.0	52.8	53.2	54.8	57.8	60.8	63.0	64.8	64.7	63.0	62.8	60.5	59.2	58.5	58.0	52.0	51.4	49.2	57.1	
9	53.5	56.2	61.2	56.2	54.2	52.8	52.1	52.0	51.8	53.1	55.5	60.0	62.8	64.8	66.5	64.2	62.5	62.8	59.7	56.5	56.4	57.0	56.6	56.4	57.7	
10	56.8	62.2	52.2	52.0	53.0	53.8	54.2	52.0	52.2	54.0	55.0	57.2	58.0	59.2	59.4	59.5	60.0	59.1	58.0	57.2	56.8	56.5	56.5	56.6	56.3	
11	56.5	56.4	56.3	54.5	52.8	52.2	52.2	52.4	53.0	53.8	56.5	58.8	59.8	60.5	60.5	59.8	59.0	58.2	57.5	57.4	57.2	57.0	56.8	56.5	56.5	
12	56.2	56.1	56.0	55.8	54.3	53.5	52.7	54.2	54.8	53.8	56.0	58.0	59.8	60.2	61.0	60.2	58.8	59.0	59.3	58.8	58.2	58.2	57.8	57.5	57.1	
13	57.0	56.8	56.7	56.5	55.2	52.5	51.8	51.8	51.8	53.0	55.0	57.8	59.8	61.2	61.2	60.5	60.8	61.3	59.0	58.8	58.0	57.5	57.2	56.5	57.0	
14**	56.0	56.8	56.2	55.5	52.2	52.2	52.2	52.0	52.5	55.8	58.0	59.0	60.2	61.8	61.8	61.8	60.5	58.8	59.0	58.8	58.4	57.5	57.2	53.5	57.0	
15*	54.0	53.0	54.2	54.8	55.0	53.8	53.2	53.8	54.8	56.7	57.5	59.5	59.8	60.8	61.5	60.6	58.5	57.2	56.5	56.6	57.0	56.2	56.2	56.0	56.5	

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

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean.	
13° + Tabular Quantities.																											
July.																											
1	54.3	53.5	53.8	54.5	53.5	52.2	52.0	51.8	52.0	54.2	57.5	60.8	62.8	64.8	65.8	64.8	61.8	59.5	58.0	57.2	57.5	56.8	56.7	56.2	57.2	57.2	
2*	55.5	55.3	55.8	55.7	54.2	51.5	51.7	51.8	51.8	52.8	55.5	59.5	61.2	61.8	61.2	59.5	58.8	58.2	58.0	58.2	58.2	57.4	57.2	57.0	56.6	56.6	
3	56.5	55.5	55.2	55.0	54.8	52.2	52.5	54.0	54.5	56.0	58.0	60.8	63.2	65.0	64.2	63.5	62.5	60.2	58.5	57.5	57.2	55.8	56.5	56.2	57.7	57.7	
4	55.8	56.5	56.5	53.0	51.5	50.8	49.7	49.7	51.0	52.0	55.0	57.8	61.0	62.2	63.0	63.0	61.8	59.2	57.5	57.0	53.8	52.8	55.5	56.2	55.9	57.4	
5	56.3	57.0	55.0	54.5	53.5	53.2	53.2	53.0	53.0	55.2	58.2	62.2	63.0	63.8	63.8	62.2	60.2	59.2	58.4	58.0	57.8	57.2	55.0	54.6	57.4	57.4	
6	54.6	55.5	55.0	54.0	52.6	51.6	52.0	51.8	51.7	53.0	55.0	59.2	62.2	64.2	65.2	63.2	60.8	59.7	58.7	58.8	58.2	58.0	55.0	54.8	56.9	56.9	
7**	52.6	55.5	55.5	55.0	54.0	55.2	55.0	53.6	52.4	53.8	56.8	60.0	64.2	65.5	67.5	66.2	64.5	60.0	57.8	56.2	56.5	56.5	56.5	56.0	57.8	57.8	
8**	57.5	57.8	57.5	56.8	55.5	54.2	55.2	54.5	53.2	55.0	58.0	59.7	61.8	64.0	62.5	61.0	60.2	57.0	57.0	56.7	56.8	53.0	56.5	57.8	57.5	57.5	
9**	56.2	56.0	56.0	59.5	61.2	58.0	55.0	56.2	54.8	54.5	55.8	59.3	62.0	63.5	63.5	62.8	60.0	59.6	57.0	55.0	56.8	57.0	57.0	56.8	58.1	58.1	
10	56.2	55.7	55.5	55.8	54.0	52.8	52.0	52.0	52.0	52.8	56.0	58.8	60.5	61.0	60.7	60.3	59.5	58.0	56.5	57.0	57.0	56.5	56.2	56.2	56.4	56.4	
11*	55.8	55.8	55.8	55.5	55.0	53.8	53.4	52.5	52.2	53.3	55.5	57.8	58.0	60.4	60.7	60.2	60.0	59.4	58.3	57.3	57.2	57.0	56.5	56.0	56.6	56.6	
12	55.2	55.5	55.5	55.8	55.0	53.0	52.8	52.9	53.0	55.0	56.0	59.3	61.5	63.7	63.5	61.5	59.8	56.8	56.4	57.0	57.8	57.5	56.8	56.2	57.0	57.0	
13	56.7	55.2	54.9	54.5	54.4	52.2	52.0	52.5	54.8	56.2	59.5	61.8	62.8	64.8	64.5	63.0	62.6	59.8	58.6	56.7	54.5	54.8	53.2	57.3	57.3		
14	53.5	55.3	56.0	59.5	54.8	53.5	55.2	51.0	50.7	52.2	54.8	58.2	60.8	62.2	62.8	61.8	61.8	60.5	58.8	58.0	57.8	57.0	55.5	53.2	56.9	56.9	
15**	53.8	54.0	49.2	49.2	51.5	50.8	48.7	51.8	52.2	54.0	56.5	59.5	61.2	61.8	61.3	60.2	59.5	59.5	59.8	58.2	58.2	58.0	55.0	51.2	55.6	55.6	
16**	53.2	53.2	59.8	53.2	51.8	51.2	51.5	54.8	54.3	56.5	57.7	61.0	63.0	63.5	61.2	59.0	57.8	57.2	56.2	54.8	56.5	53.8	53.3	55.0	56.2	56.2	
17	55.2	56.0	57.0	56.5	56.8	54.0	52.5	52.2	52.5	54.5	56.5	59.8	62.2	62.2	62.0	60.8	58.0	57.5	56.8	56.7	57.0	56.8	56.7	56.0	56.9	56.9	
18*	55.8	56.5	56.2	55.8	53.0	52.2	52.8	51.5	51.0	53.8	56.0	61.0	62.8	63.5	63.8	61.2	58.5	56.0	55.0	55.8	56.2	56.0	56.2	56.3	56.5	56.5	
19	56.2	56.2	56.6	56.5	53.8	52.0	52.0	52.8	53.8	54.2	56.2	59.8	62.8	64.0	63.5	61.0	58.2	58.0	57.5	57.0	57.2	54.0	55.5	54.8	56.8	56.8	
20	55.0	54.0	54.6	55.5	53.6	52.3	52.0	52.1	52.2	54.5	57.5	60.2	62.8	64.5	63.2	61.5	59.5	57.2	56.2	56.2	54.8	55.8	55.6	56.2	56.5	56.5	
21*	56.0	56.8	56.0	55.0	53.5	51.4	51.6	52.8	54.0	55.8	57.7	60.8	63.5	63.8	62.2	60.5	58.5	57.0	57.2	58.0	57.3	57.0	56.7	56.8	57.1	57.1	
22	57.0	57.2	58.2	56.2	54.5	51.8	51.2	51.0	51.4	55.0	58.0	60.8	62.0	63.0	62.7	61.2	60.2	58.8	58.0	57.8	57.8	57.0	56.0	56.0	57.2	57.2	
23	55.2	52.2	51.2	53.8	57.0	53.1	52.0	53.0	53.1	54.8	55.2	57.2	61.5	61.0	60.2	59.5	59.0	58.8	58.5	58.2	57.5	56.8	56.2	55.8	56.3	56.3	
24	55.5	55.2	56.0	54.0	53.2	52.5	51.2	51.8	52.0	54.0	57.2	60.0	60.5	60.8	60.0	59.0	59.0	58.7	58.5	57.4	57.0	56.5	55.4	54.0	56.0	56.0	
25*	53.2	54.8	56.5	55.2	54.0	53.3	53.5	53.2	52.3	53.8	55.8	57.0	59.0	60.8	60.5	60.8	61.2	60.8	60.0	59.1	57.5	56.0	56.1	56.2	86.7	86.7	
26	55.8	54.8	54.6	54.8	53.8	53.0	52.2	52.0	52.0	53.2	54.8	57.8	60.8	61.8	61.5	61.0	61.0	59.5	58.5	57.5	51.8	51.0	55.0	55.5	56.0	56.0	
27	56.5	54.8	54.2	54.2	53.2	51.8	52.2	52.5	53.2	54.5	56.2	60.8	63.8	65.2	63.5	62.8	60.8	58.8	58.0	57.7	57.0	56.3	56.2	56.0	57.1	57.1	
28	56.5	58.8	55.7	54.0	53.5	52.4	52.0	51.8	51.2	52.8	54.0	58.0	60.8	61.0	59.6	58.0	57.8	58.0	58.0	57.0	55.8	55.0	55.0	56.0	55.9	55.9	
29	55.5	54.8	54.7	54.0	53.2	53.3	54.5	56.0	55.5	54.8	56.0	60.5	63.5	63.8	61.6	59.8	58.8	58.0	57.8	57.2	57.5	56.2	53.5	51.0	56.7	56.7	
30	53.8	52.8	53.8	53.7	53.2	52.0	52.0	51.5	51.2	53.0	55.0	57.8	61.0	63.0	62.0	60.5	60.2	58.8	56.2	53.8	56.0	56.0	55.0	55.0	55.8	55.8	
31	55.8	55.8	55.2	54.7	54.5	53.2	52.2	51.8	52.2	55.0	57.2	59.5	60.5	61.8	61.8	60.0	58.2	57.2	56.8	56.0	55.8	55.8	56.0	55.8	56.4	56.4	
Mean	55.4	55.4	55.4	55.0	54.2	52.7	52.5	52.6	52.6	54.1	56.3	59.5	61.8	63.0	62.6	61.3	60.0	58.6	57.7	57.1	56.7	56.0	55.8	55.4	56.7	56.7	
Mean*	55.3	55.8	56.1	55.4	54.1	52.4	52.6	52.4	52.3	53.9	56.1	59.2	61.1	62.1	61.7	60.4	59.4	58.3	57.7	57.7	57.3	56.7	56.5	56.5	56.7	56.7	
Mean**	54.7	55.3	55.6	54.7	54.8	53.9	53.1	54.2	53.4	54.8	57.0	59.9	62.4	63.7	63.2	61.8	60.4	58.7	57.6	56.2	57.0	55.7	55.7	55.4	57.0	57.0	
13° + Tabular Quantities.																											
August.																											
1*	55.2	55.4	55.6	55.0	52.8	52.0	51.4	51.0	52.0	54.8	57.0	58.8	59.5	59.2	58.5	58.3	56.8	56.0	56.1	57.0	56.8	56.5	55.8	55.8	55.7	55.7	
2	56.0	56.1	56.0	54.5	53.8	53.2	53.8	53.8	55.0	56.8	58.5	61.0	61.8	61.7	61.0	58.5	57.7	58.0	57.4	56.7	56.2	56.0	52.8	53.5	55.8	55.8	
3**	57.2	55.2	54.8	58.2	56.2	52.8	53.8	57.0	58.5	65.5	65.8	67.8	66.5	65.2	63.0	59.0	56.8	54.5	54.5	55.8	56.3	56.5	56.3	56.0	58.5	58.5	
4	55.8	55.5	55.4	55.0	54.2	51.8	51.0	51.5	52.8	55.0	56.8	60.8	62.5	63.0	62.5	59.5	57.8	57.0	56.0	55.2	54.0	56.4	56.5	56.3	56.3	56.3	
5**	50.2	52.2	52.5	51.8	53.8	54.2	51.5	52.8	55.5	60.2	61.8	61.8	62.8	63.0	62.0	59.2	58.0	57.2	54.0	53.8	55.2	55.5	55.3	58.8	56.4	56.4	
6**	55.8	56.0	59.2	54.8	55.8	55.1	56.5	54.0	53.5	56.0	58.8	62.0	62.8	61.3	59.2	59.2	57.4	57.0	56.8	57.0	56.8	56.0	55.8	55.2	57.2	57.2	
7	55.3	56.4	52.9	54.5	53.7	51.5	52.0	53.5	54.2	56.7	58.5	59.7	61.1	62.0	59.8	58.2	56.5	56.0	56.0	55.2	54.8	55.5	55.8	54.8	56.0	56.0	
8	54.8	54.5	54.6	57.8	55.0	51.9	51.6	50.0	53.0	54.8	57.0	57.8	59.5	60.2	61.5	59.0	56.9	57.0	56.6	56.8	56.2	56.0	56.1	54.0	55.9	55.9	
9*	53.2	54.8	54.8	54.8	55.2	54.0	52.8	52.5	53.0	54.8	56.2	59.0	60.4	61.0	60.5	60.0	58.8	58.0	57.0	56.0	54.8	55.0	55.7	54.0	56.1	56.1	
10	51.8	51.8	52.8	53.8	54.2	52.5	51.8	51.8	52.8	54.5	57.0	59.2	59.2	60.0	59.8	59.0	58.2	56.8	56.4	56.5	56.8	56.2	56.2	55.8	55.5	55.5	
11	55.2	54.8	53.8	53.8	52.8	51.8	51.1	50.0	50.7	53.1	54.5	58.0	52.4	65.2	66.5	63.5	63.3	60.4	58.0	58.5	57.2	50.5	51.8	55.0	56.3	56.3	
12	58.8	51.5	52.2	52.8	52.2	51.8	51.9	52.0	52.8	54.4	57.0	60.2	62.2	62.8	61.5	59.4	58.0	56.8	56.0	56.5	56.4	56.2	55.5	54.2	56.0	56.0	
13	54.5	54.5	53.8	53.7	52.8	52.2	51.5	51.8	52.5																		

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

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean.
September.																										
13° + Tabular Quantities.																										
1	55.4	55.2	55.0	54.8	54.4	53.8	53.0	53.0	53.8	56.0	57.8	59.7	60.5	60.0	58.8	57.2	56.0	55.8	55.8	55.8	55.6	53.8	53.2	51.0	55.6	
2**	50.2	49.0	47.4	46.5	53.6	51.0	57.2	57.8	56.0	60.5	61.2	63.0	65.5	63.6	63.5	53.5	54.7	55.8	54.0	51.0	51.2	54.8	55.2	55.2	55.5	
3	55.0	54.5	54.2	54.2	54.0	53.5	53.0	53.0	54.0	55.8	58.1	60.0	60.5	60.4	58.0	57.2	56.0	55.8	56.8	56.8	56.4	54.6	52.8	55.0	55.8	
4	55.0	55.0	55.1	59.0	54.4	51.8	51.8	53.5	53.7	56.5	59.0	60.2	62.0	62.0	60.2	58.0	56.9	53.0	55.2	53.0	54.0	53.2	54.0	52.0	55.8	
5	52.2	53.0	53.5	53.0	54.5	55.0	52.2	51.8	52.0	54.0	57.5	62.5	64.2	64.4	63.3	60.4	58.0	56.2	56.1	56.0	53.8	53.2	53.8	54.0	56.0	
6	54.2	54.5	57.0	55.2	54.2	53.8	52.9	52.5	51.5	52.0	53.7	59.0	62.0	63.2	62.0	60.0	58.0	57.0	56.2	55.8	53.8	53.0	54.0	53.0	55.8	
7	53.2	54.3	54.5	54.2	54.5	53.5	52.2	51.3	52.5	54.0	56.8	60.0	62.0	62.2	62.0	60.5	60.4	59.2	57.5	53.5	54.8	52.5	53.0	49.2	55.7	
8**	53.8	48.0	40.5	47.7	52.5	52.0	51.9	52.8	53.8	54.8	57.0	58.5	59.8	60.0	60.2	59.0	61.0	55.0	56.1	56.8	56.0	55.1	52.0	52.2	54.4	
9	54.2	57.2	56.0	55.8	55.2	53.0	51.0	50.2	52.0	54.5	57.0	60.0	61.8	61.7	59.2	58.0	57.7	57.0	56.8	56.5	55.8	55.8	55.7	54.2	56.1	
10	53.8	54.0	54.8	53.5	53.3	52.8	52.0	51.5	52.8	55.0	58.2	60.2	62.0	60.5	59.0	57.0	56.8	56.5	54.8	56.0	55.8	55.4	55.0	54.0	55.6	
11*	55.5	54.2	54.2	54.0	54.0	53.8	53.6	52.5	52.5	53.3	56.0	59.5	60.8	60.5	59.0	57.5	56.0	56.0	56.2	56.0	55.8	55.6	54.5	54.5	55.7	
12*	54.5	54.5	54.8	54.5	54.2	54.0	53.5	52.5	52.8	53.8	55.2	57.8	59.2	59.8	58.8	58.0	57.0	56.2	55.8	56.0	55.5	55.1	54.5	55.0	55.5	
13*	54.2	54.8	54.5	54.5	54.2	54.2	53.4	53.0	52.8	53.2	55.2	58.0	60.2	60.0	59.5	58.8	58.0	57.5	56.5	56.0	55.5	55.3	55.0	52.2	55.7	
14	52.8	54.0	54.5	54.2	54.3	54.0	53.5	52.0	51.0	52.0	55.5	58.5	61.5	61.8	60.8	59.0	58.0	57.3	56.8	55.5	55.2	55.5	55.3	55.2	55.8	
15	54.0	54.5	53.5	53.0	48.8	50.0	50.8	51.7	53.0	55.8	59.5	61.5	63.0	62.5	60.0	57.5	55.8	55.5	55.2	55.0	55.4	55.0	55.0	54.0	55.4	
16	53.8	53.8	53.5	53.4	53.8	53.8	53.0	52.8	53.5	55.0	57.1	60.3	61.0	60.5	59.5	58.0	56.8	56.0	56.2	56.5	53.0	51.5	52.0	52.4	55.3	
17	53.5	53.5	54.0	53.0	52.0	53.1	53.0	53.0	53.0	54.2	55.8	58.5	60.2	60.5	59.0	57.5	56.5	55.8	55.8	55.5	55.1	55.0	55.0	55.1	55.3	
18	55.2	55.0	55.0	54.5	54.2	54.0	53.0	52.2	52.9	55.0	56.8	60.5	61.5	61.5	60.8	59.0	58.0	58.5	56.5	56.0	52.0	52.2	53.8	54.2	55.9	
19	56.0	53.0	53.0	52.5	52.0	52.2	53.8	53.0	54.8	54.0	56.0	58.2	60.8	61.0	60.2	59.0	57.2	56.0	54.5	55.0	54.8	54.2	54.5	54.2	55.4	
20	55.2	55.0	54.8	54.5	54.2	54.1	53.5	51.0	51.1	53.0	56.1	59.5	61.8	63.5	61.2	59.0	57.2	56.5	56.5	55.8	55.2	55.0	55.0	54.5	56.0	
21	54.5	55.8	54.0	52.5	51.5	52.2	53.2	51.8	51.5	53.5	55.5	59.5	61.8	62.5	61.5	59.8	58.2	57.0	55.8	54.5	51.8	51.9	53.0	52.0	55.2	
22	51.5	52.8	53.0	53.8	53.8	54.0	53.0	51.8	51.5	53.0	55.0	57.8	59.0	59.2	58.8	57.5	56.8	56.2	56.0	55.8	55.5	55.0	55.0	54.5	55.0	
23**	54.2	53.8	49.5	50.0	50.2	50.5	52.0	51.1	52.8	55.5	56.5	60.8	62.0	61.8	62.0	59.0	57.8	56.5	54.5	54.8	54.8	54.5	54.5	54.5	55.4	
24*	54.2	54.2	54.4	54.2	54.3	54.5	54.0	51.4	51.5	52.0	53.5	55.8	58.5	60.0	59.0	58.5	57.8	55.8	55.8	55.4	55.2	55.1	55.0	54.8	55.2	
25*	54.5	54.3	54.2	54.0	54.0	54.2	54.2	52.8	52.0	52.5	54.5	57.2	59.2	59.8	59.0	58.2	57.2	56.5	55.8	55.0	54.8	54.2	54.0	54.8	55.3	
26	54.8	54.8	54.5	54.0	53.8	53.7	52.8	52.5	52.2	53.5	56.6	59.0	60.0	60.2	59.8	58.8	57.5	55.8	55.0	54.5	54.7	54.8	54.5	55.0	55.5	
27	55.0	54.8	54.5	54.0	54.0	53.5	53.0	52.5	52.2	53.5	55.8	58.8	60.8	60.8	59.8	58.0	57.1	56.2	55.8	55.5	52.2	54.5	53.8	53.5	55.4	
28**	55.0	54.7	54.5	54.0	53.7	53.5	53.0	52.2	51.8	52.0	54.0	58.5	60.7	62.5	62.5	61.8	61.2	58.5	56.2	52.4	47.0	50.2	48.2	44.0	54.6	
29**	51.0	53.8	42.5	45.7	52.2	51.0	51.8	51.8	52.5	54.0	57.5	60.0	61.8	61.0	59.8	56.5	53.0	54.8	53.0	42.5	51.0	52.5	53.0	54.8	54.2	
30	54.5	55.8	57.0	54.0	54.2	54.5	54.5	54.0	53.5	54.0	56.4	58.0	59.5	58.5	57.5	55.8	55.8	55.4	54.5	53.6	54.0	54.0	54.0	54.3	55.3	
Mean	54.0	54.1	53.3	53.3	53.7	53.2	53.0	52.5	52.7	54.2	56.5	59.4	61.1	61.2	60.2	58.3	57.3	56.3	55.7	54.7	54.2	54.1	53.9	53.4	55.4	
Mean*	54.4	54.4	54.4	52.2	54.1	54.1	53.7	52.6	52.3	53.0	54.9	57.7	59.6	60.0	59.2	58.2	57.1	56.4	56.0	55.7	55.4	55.1	54.6	54.3	55.5	
Mean**	52.8	51.9	46.9	48.8	53.6	51.6	53.2	53.1	53.4	55.4	57.2	60.2	62.0	61.8	61.6	58.0	57.5	56.1	54.8	51.4	52.0	53.5	52.6	52.1	54.6	

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean.
October.																										
13° + Tabular Quantities.																										
1	52.0	54.0	53.2	52.8	51.2	51.0	52.0	53.0	53.5	55.5	57.2	61.0	60.8	59.5	58.5	57.6	55.5	54.2	54.0	53.8	53.2	54.0	54.2	56.0	54.9	
2	55.1	55.5	55.0	54.7	54.5	54.2	53.5	52.5	52.8	54.0	55.0	57.2	59.0	59.2	59.0	57.2	56.8	56.0	55.0	54.0	51.5	52.8	54.0	55.3		
3*	55.5	54.2	54.5	54.0	54.2	55.0	54.5	53.4	52.5	53.0	54.8	57.8	60.0	60.8	60.0	58.2	57.0	56.5	55.5	55.2	54.8	54.0	54.0	54.5	55.6	
4	53.5	52.8	53.0	53.5	53.2	53.0	53.0	54.0	53.5	53.8	53.8	58.0	60.0	60.8	60.2	58.8	55.0	55.8	56.0	54.2	52.2	50.8	52.2	54.6	54.8	
5	54.5	55.0	55.8	53.2	55.2	54.2	53.5	52.8	52.0	52.2	54.0	57.8	59.5	59.8	59.5	58.4	57.8	56.5	48.2	53.0	45.5	51.2	53.0	53.5	54.4	
6	53.2	50.8	49.0	50.5	53.5	54.0	53.2	53.1	52.5	53.5	55.4	59.5	61.0	60.0	58.7	58.0	56.3	56.0	55.5	55.2	51.0	52.0	53.5	52.2	54.5	
7**	55.0	55.5	53.8	53.5	53.8	53.6	53.4	52.8	52.8	54.0	56.2	58.2	59.0	59.0	57.8	56.0	55.5	55.8	55.0	49.2	47.5	50.3	50.8	47.2	54.0	
8**	47.0	50.2	51.8	57.5	56.8	65.0	65.0	62.0	62.8	61.7	62.0	62.0	62.8	61.2	59.8	58.5	58.5	55.8	51.5	52.0	50.8	51.8	54.5	56.8	57.4	
9	51.5	50.2	54.0	55.8	52.2	51.2	52.0	51.2	51.0	51.8	54.1	56.8	58.8	58.5	58.8	58.2	56.3	55.3	55.0	54.8	52.8	53.0	54.0	53.8	54.2	
10	53.9	53.0	54.0	53.8	53.5	53.8	53.5	53.2	52.8	53.0	54.0	56.0	58.2	58.8	58.0	56.8	55.5	53.5	53.8	55.5	55.0	54.2	53.8	53.8	54.7	
11**	53.5	54.2	53.8	53.2	53.2	56.0	56.2	55.0	54.7	54.5	55.5	57.0	59.2	60.2	59.2	58.8	54.5	52.8	51.5	48.8	46.5	45.8	48.8	41.0	53.5	
12**	41.2	45.8	46.5	55.5	53.8	53.2	53.0	54.8	53.0	53.0	54.2	57.0	58.2	58.5	58.2	56.5	55.0	53.8	55.5	51.5	50.5	51.2	53.0	55.0	53.2	
13	54.5	54.0	54.0	55.2	54.2	53.0	53.0	52.8	52.5	52.2	53.2	56.8	58.0	58.5	58.4	57.5	56.0	55.0	54.1	54.0	54.0	53.8	53.8	54.2	54.7	
14	54.5	53.5	53.8	53.8	53.8	53.2	53.0	52.0	51.8	52.5	53.4	56.0	58.8													

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

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean.	
November.																											
13° + Tabular Quantities.																											
1	51.8	52.0	54.8	49.8	51.8	52.5	53.0	52.7	52.4	53.0	55.0	57.2	58.0	59.4	58.5	59.8	60.0	57.2	55.5	55.2	55.0	53.2	53.2	53.4	54.8		
2*	53.5	53.2	53.8	54.0	53.8	53.2	53.8	53.0	52.5	52.8	54.8	57.2	58.5	58.0	56.8	55.5	54.8	54.8	54.8	54.2	53.8	53.5	53.5	53.5	54.5		
3*	53.8	53.8	53.8	54.5	54.2	54.0	53.8	53.5	53.0	53.8	55.8	57.8	57.2	57.0	55.8	55.0	56.0	55.2	55.0	55.0	53.5	52.3	53.0	53.0	54.5		
4*	53.2	53.5	53.8	53.9	54.0	54.0	53.4	53.0	51.8	51.5	53.8	55.8	57.8	57.8	56.8	55.5	55.0	54.6	54.2	54.0	53.5	53.8	53.8	53.5	54.3		
5	53.5	53.2	54.0	54.0	54.0	53.8	53.4	53.2	52.2	51.8	53.5	56.0	58.2	58.8	59.0	58.8	59.5	57.5	55.8	54.0	52.5	49.2	40.8	38.5	53.6		
6**	42.0	44.0	51.5	54.2	53.8	58.0	59.2	56.3	56.5	53.8	54.8	56.5	58.0	60.0	59.0	54.5	58.2	56.2	54.5	54.0	50.8	50.5	49.5	50.6	54.0		
7	51.2	52.4	50.0	52.6	53.5	53.5	55.1	55.5	54.1	53.2	53.2	55.5	56.8	57.5	56.8	56.0	54.2	54.5	55.0	53.5	52.8	52.0	52.0	52.4	53.9		
8	53.0	56.1	53.0	53.5	53.8	53.5	53.5	53.0	52.8	53.0	54.5	56.0	57.5	56.8	56.0	55.0	54.6	54.5	54.1	53.8	53.5	53.5	48.5	45.8	53.7		
9	50.0	51.5	53.5	55.3	53.5	52.8	53.2	54.0	52.5	52.8	53.0	56.8	58.2	58.8	58.0	56.2	56.0	52.5	53.0	52.5	53.2	52.0	47.0	50.5	53.8		
10	52.2	53.0	53.8	52.8	51.8	52.0	53.0	54.2	54.2	54.5	55.2	57.5	59.8	59.1	59.7	58.0	56.4	55.0	53.9	53.2	51.5	49.5	50.5	51.8	54.3		
11	53.0	53.5	53.8	54.0	53.8	53.5	53.0	52.5	51.8	52.0	53.5	56.2	57.2	57.0	56.2	55.2	54.5	54.2	53.8	53.5	53.4	53.5	52.2	52.0	53.9		
12	54.5	53.0	53.8	53.2	53.0	53.2	53.0	52.5	52.0	52.0	54.0	56.2	57.2	56.8	55.5	54.8	54.7	54.5	54.0	53.8	53.5	53.2	53.2	53.2	53.9		
13	53.2	53.8	53.8	53.8	53.8	53.8	53.6	52.9	52.0	54.0	55.5	56.5	56.8	56.5	55.8	55.2	55.0	53.8	54.0	53.0	49.0	52.0	52.5	53.8	53.9		
14	47.2	45.0	49.2	51.0	52.2	52.8	52.8	52.6	52.8	53.0	55.1	55.5	56.0	56.0	55.0	54.8	54.5	54.5	52.2	52.5	53.2	53.1	52.0	52.2	52.7		
15	53.2	53.2	53.8	54.0	54.0	53.8	53.5	53.1	52.0	52.3	54.0	56.0	56.5	55.8	54.8	54.5	54.8	54.7	54.7	54.5	53.0	49.8	50.2	52.2	53.7		
16**	53.8	54.8	54.0	55.0	54.5	54.7	54.5	54.0	57.8	55.7	56.4	57.0	59.5	59.0	56.2	55.3	55.2	55.3	51.0	47.0	53.5	35.2	45.0	48.2	53.4		
17**	53.5	50.2	48.0	52.0	54.0	54.0	59.5	60.0	53.8	52.0	—	—	—	—	57.2	58.2	55.8	52.0	53.0	51.8	45.0	39.8	48.5	51.5	—		
18**	52.8	53.7	53.0	53.8	56.0	59.0	58.0	55.0	53.8	54.2	53.5	56.0	59.0	58.8	56.2	54.0	55.2	54.0	48.0	46.0	47.2	52.0	54.5	52.2	54.0		
19	53.0	53.5	54.5	54.5	53.8	53.5	53.5	55.0	54.8	53.2	53.5	54.8	55.5	56.5	53.8	54.0	51.0	54.8	53.8	53.5	53.1	52.9	53.0	53.2	53.9		
20	53.0	52.8	53.2	53.3	54.2	54.0	53.3	53.5	52.2	53.0	53.2	53.8	54.5	55.5	55.5	55.2	53.0	54.2	53.5	53.2	52.8	53.0	52.5	52.8	53.5		
21	53.2	52.0	52.2	52.3	53.2	53.5	53.5	54.2	53.2	53.0	54.5	55.8	57.2	56.2	57.8	54.0	54.2	53.5	50.2	52.2	52.2	51.8	51.5	52.0	53.5		
22	50.8	53.0	53.5	53.8	53.7	53.5	53.2	52.8	52.2	52.5	53.0	55.0	55.2	55.8	55.5	54.4	53.5	53.2	51.4	54.0	53.2	52.8	52.2	52.2	53.4		
23**	52.5	53.0	53.2	53.5	53.8	53.7	53.7	53.3	53.0	53.0	54.4	55.2	56.5	56.7	57.0	56.0	56.3	56.2	53.8	45.0	46.0	46.8	49.5	52.0	53.1		
24	51.5	50.5	53.0	53.5	53.5	53.8	54.2	53.6	52.8	52.8	53.8	56.0	56.8	56.5	55.2	54.2	52.8	53.8	54.0	53.5	53.2	53.0	52.8	52.5	53.6		
25	51.5	52.5	53.0	53.2	53.0	52.5	52.5	52.7	52.5	53.5	54.6	55.8	56.8	56.5	56.2	55.3	54.3	54.2	53.3	51.5	52.5	52.7	52.8	53.5	53.6		
26	53.5	53.8	53.8	53.8	53.6	53.5	53.0	52.8	52.8	53.0	53.2	54.2	54.8	55.0	54.0	53.6	53.5	53.2	53.1	53.0	52.8	52.9	52.8	53.0	53.4		
27*	53.5	52.2	52.3	51.8	51.5	52.0	52.5	52.8	53.0	53.8	54.2	55.0	55.5	56.0	55.5	55.3	54.3	54.0	53.5	52.7	52.0	52.2	51.8	52.5	53.3		
28	52.2	53.2	49.2	49.2	49.8	51.0	51.8	52.0	53.0	53.6	53.6	54.5	55.2	54.5	53.8	54.0	53.8	53.2	53.1	53.0	52.5	52.6	52.7	52.8	52.7		
29*	53.0	53.5	53.5	53.8	53.8	53.5	53.2	53.0	53.0	53.2	53.5	54.8	55.0	55.0	54.0	53.8	54.0	53.8	53.4	53.2	53.0	52.0	52.5	52.5	53.5		
30	52.5	53.3	54.0	53.8	53.3	53.2	53.0	52.3	52.2	52.8	53.8	55.2	56.5	56.2	55.2	54.0	53.8	53.7	53.5	52.8	52.5	52.0	50.5	53.4			
Mean	52.1	52.5	53.1	53.3	53.4	53.6	53.7	53.4	53.1	53.1	54.2	55.8	57.0	57.0	56.3	55.3	54.9	54.6	53.4	52.8	52.5	51.4	51.3	51.5	53.7		
Mean*	53.4	53.2	53.4	53.6	53.5	53.3	53.3	53.1	52.7	52.9	54.0	55.7	56.9	56.8	56.0	55.2	54.8	54.5	54.2	54.0	53.2	52.8	52.9	53.0	54.0		
Mean**	50.9	51.1	51.9	53.7	54.4	55.9	57.0	55.7	55.0	53.7	54.8	56.2	58.3	58.6	57.1	55.6	56.1	54.7	52.1	48.8	48.5	44.9	49.4	50.9	53.6		
December.																											
13° + Tabular Quantities.																											
1	49.2	51.5	52.5	53.0	53.8	53.5	53.2	53.2	53.0	53.5	54.5	57.5	56.0	56.2	58.0	57.0	57.0	55.8	53.8	53.2	52.5	52.2	51.5	51.8	53.9		
2	52.2	52.2	53.0	53.5	53.5	53.8	55.8	53.8	54.5	53.8	55.2	55.4	55.8	56.5	55.5	54.5	54.5	53.4	53.2	52.2	51.2	50.2	49.8	52.0	53.6		
3	51.0	54.7	53.5	52.5	51.8	53.3	54.7	55.0	53.5	53.5	54.0	54.0	54.8	55.2	55.0	54.2	53.2	53.5	53.2	53.0	51.8	51.8	52.2	51.8	53.4		
4	52.5	53.2	53.5	54.0	53.8	53.5	53.0	52.8	52.5	52.5	53.8	54.2	55.5	55.8	53.5	54.0	53.2	54.2	53.6	52.5	51.8	51.8	52.0	52.2	53.3		
5	52.2	52.8	53.0	53.4	53.5	53.5	53.0	53.2	53.0	52.8	53.2	54.0	54.5	54.8	54.2	53.8	53.5	53.8	53.2	53.0	52.5	52.2	52.0	52.0	53.2		
6*	52.0	53.0	53.0	53.2	53.2	53.0	53.0	52.8	53.0	53.0	53.5	54.6	55.0	55.0	54.8	54.2	54.2	54.1	54.0	53.2	52.8	52.5	52.2	52.3	53.4		
7*	52.8	52.7	53.0	53.1	53.2	53.2	53.0	53.0	52.8	52.8	53.0	53.8	54.5	55.0	55.0	54.2	54.0	53.5	53.5	53.0	52.8	52.2	52.5	52.8	53.3		
8	53.0	53.1	53.3	53.0	53.8	53.8	52.5	53.0	53.0	54.2	55.0	55.5	56.7	56.8	56.2	57.0	55.2	53.8	53.5	53.2	52.0	51.8	52.0	52.5	53.9		
9	53.0	53.5	53.2	53.8	53.5	53.0	54.0	53.8	53.5	54.8	54.2	54.8	55.2	54.6	54.2	55.2	54.5	54.0	54.0	53.2	53.2	52.6	51.5	51.8	53.7		
10	50.8	46.5	50.0	51.2	51.8	52.8	52.5	52.7	52.8	53.8	54.8	55.0	55.0	54.8	55.0	53.8	52.5	52.8	52.9	53.0	52.5	52.4	49.5	51.5	52.5		
11	52.8	53.0	53.0	53.0	52.5	53.2	52.8	52.8	52.5	52.7	53.8	55.2	55.5	55.0	54.7	54.5	54.2	54.3	53.5	51.5	54.2	53.0	51.8	51.5	53.4		
12**	50.2	52.8	53.8	52.0	53.5	50.5	56.0	55.0	55.5	53.8	55.2	57.0	56.8	56.0	54.8	53.8	52.8	53.0	47.1	49.0	49.2	49.8	49.8	53.0	52.9		
13**	54.5	51.8	53.5	55.0	54.5	53.5	53.2	53.5	53.8	53.0	54.7	56.0	56.8	52.2	52.8	56.5	44.8	51.2	51.0	49.8	45.0	48.0	45.8	50.0	52.1		
14	50.2	53.6	53.2	53.6	53.8	54.2	53.8	53.5	53.8	53.5	53.2	55.8	55.2	54.8	54.2	53.8	53.6	53.0	52.5	51.8	50.2	51.5	49.5	51.5	53.1		
15	52.0	54.5	54.2	52.5	53.0	54.8	53.0	53.5	52.5	5																	

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

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean.	
January.																											
17000 γ + Tabular Quantities.																											
1**	886	886	885	887	888	891	891	866	881	889	881	876	871	866	856	856	859	866	869	873	871	901	881	876	876	877	
2*	876	879	881	883	881	886	885	886	881	879	873	871	871	873	879	879	873	883	889	891	889	888	879	891	881	881	
3	882	882	884	884	888	892	890	889	884	874	867	870	874	880	882	882	882	882	882	890	887	887	884	887	883		
4	887	884	894	890	890	897	887	886	882	874	864	868	870	862	857	857	862	860	854	877	880	880	882	882	876		
5	881	883	883	881	890	891	888	885	873	869	868	863	853	848	855	871	873	873	865	871	881	881	883	883	875		
6	883	883	888	888	893	891	895	885	881	873	878	878	878	865	878	883	881	881	881	883	885	891	893	893	884		
7	894	892	892	894	894	896	899	902	892	889	884	879	876	879	882	884	892	896	896	894	896	892	892	886	891		
8*	882	886	886	886	892	896	902	901	894	884	876	874	876	876	884	884	889	894	899	902	899	901	902	902	890		
9	900	900	902	905	907	913	913	905	903	887	885	885	883	882	877	863	863	867	877	885	913	895	887	885	890		
10**	900	890	893	893	903	901	905	910	903	895	880	877	875	857	865	873	875	875	865	867	875	885	883	877	884		
11	876	879	881	883	884	891	898	894	891	886	886	881	881	888	888	886	891	896	896	896	891	894	891	888	888		
12	901	886	886	901	901	901	906	898	899	894	888	881	878	874	874	876	882	886	891	890	892	898	898	890	890		
13*	899	902	902	902	897	912	909	907	899	892	887	882	885	892	895	895	892	897	899	899	899	899	899	899	897		
14*	899	897	899	902	907	909	909	909	899	899	899	895	892	897	899	902	902	905	905	912	907	909	907	905	903		
15	908	908	908	910	913	916	918	918	913	903	893	888	876	878	903	910	908	910	916	912	906	898	916	908	906		
16	903	906	906	910	910	913	918	915	910	906	903	906	906	910	911	910	906	908	916	918	906	908	906	908	909		
17**	907	904	904	907	909	917	917	921	911	881	879	884	877	897	894	904	904	877	859	874	884	879	881	899	895		
18	889	889	894	891	889	891	897	897	883	886	889	886	879	879	884	886	887	889	889	887	891	904	901	896	890		
19	894	889	891	897	903	909	914	914	911	899	889	894	897	899	907	914	914	914	911	912	917	921	916	909	906		
20	912	912	910	910	916	918	918	917	912	908	908	905	890	888	887	880	873	877	872	872	874	885	895	890	897		
21	883	885	888	890	892	900	912	902	890	882	885	883	882	882	882	885	890	895	892	888	880	892	895	892	890		
22*	892	892	890	892	892	904	892	902	898	885	888	890	890	887	890	890	890	890	890	890	890	895	900	900	893		
23	896	913	906	893	909	909	903	903	899	891	893	896	896	893	890	893	896	899	901	893	896	909	899	901	899		
24**	901	901	901	903	911	906	921	906	886	891	883	873	879	869	863	861	869	875	879	876	875	881	876	889	889		
25	876	878	879	878	879	879	879	881	881	881	876	876	876	876	879	883	889	883	879	876	871	866	861	866	877		
26	880	872	870	874	874	880	880	880	882	878	874	872	867	857	857	866	872	874	882	884	887	892	894	897	877		
27	890	889	892	897	897	902	907	902	902	892	890	887	887	892	892	892	885	892	897	897	897	897	902	897	895		
28	900	900	900	902	902	914	914	912	902	892	882	884	887	892	892	889	884	888	892	892	894	894	892	894	896		
29	895	893	891	895	905	903	903	903	891	891	885	883	885	883	885	888	883	885	881	881	883	888	888	888	890		
30	888	888	887	889	891	893	893	893	890	881	878	878	881	885	888	888	887	889	887	881	879	885	891	901	887		
31**	888	885	888	888	895	898	903	903	895	881	873	865	868	875	883	883	878	855	873	891	893	893	891	893	885		
Mean	892	892	893	894	897	901	902	900	895	888	884	882	880	880	883	884	884	886	886	889	890	893	893	892	890		
Mean*	890	891	892	893	894	901	899	901	894	888	885	882	883	885	888	890	889	894	896	899	897	898	897	899	893		
Mean**	896	893	894	896	901	903	907	904	899	886	881	877	873	875	873	876	875	868	868	877	880	887	883	884	886		
February.																											
17000 γ + Tabular Quantities.																											
1	894	896	896	898	904	899	904	896	894	892	892	890	888	888	879	876	876	874	876	914	894	892	896	896	892		
2**	897	898	899	904	899	904	904	914	884	882	889	882	881	877	866	862	868	874	904	889	894	902	901	894	890		
3	896	896	904	904	904	904	904	904	902	892	888	892	896	902	904	902	901	902	904	904	904	904	904	904	901		
4	905	905	907	908	909	911	915	913	911	905	907	905	907	910	907	907	910	917	908	900	893	905	913	913	908		
5**	907	903	905	907	913	915	917	918	918	913	890	893	895	880	870	878	855	865	883	872	877	887	883	917	894		
6	927	895	885	890	895	900	903	903	900	895	897	897	891	890	885	880	885	893	893	893	897	903	905	903	898		
7	908	914	906	904	904	906	906	908	908	906	898	894	891	889	888	888	892	906	904	894	893	904	906	908	901		
8*	908	908	906	910	912	914	918	921	916	910	914	908	904	901	898	898	904	906	908	911	916	914	916	916	910		
9*	914	916	916	916	918	918	921	921	921	918	908	904	904	906	908	911	911	914	914	911	916	921	922	920	915		
10	919	919	919	919	921	922	923	919	915	907	897	897	907	909	912	909	905	915	919	921	919	915	907	907	913		
11	919	917	907	909	915	919	915	914	912	912	905	897	902	905	907	907	907	909	912	915	914	912	919	917	911		
12*	914	912	913	915	917	919	919	919	919	915	907	905	899	905	909	912	915	917	919	917	917	917	917	917	914		
13**	918	920	920	922	925	930	923	920	923	920	918	913	910	913	915	898	896	898	908	913	906	913	903	900	914		
14	906	898	913	923	908	910	903	900	900	898	896	890	893	900	906	906	906	904	900	893	893	893	893	900	901		
15	898	893	898	898	900	906	906	900	898	893	890	891	893	898	900	906	908	903	908	908	906	906	906	906	901		
16*	907	909	907	909	909	911	911	911	907	903	899	892	899	901	909	911	911	911	911	914	914	911	911	911	908		
17	909	907	909	917	934	919	917	911	904	904	901	889	891	896	899	901	904	911	909	904	907	909	909	909	907		
18	907	907	907	909	909	911	916	919	919	914	909	899	896	904	907	911	909	901	894	891	904	909	914	911	907		
19**	910	912	918	910	910	915	918	920	925	914	899	899	894	874	890	895	900	900	910	913	918	918	918	918	909		
20	915	912	918	915	912	913	912	910	908	910	910	910	910	910	905	910	908										

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
17000 γ + Tabular Quantities (in γ).																										
March.																										
1	915	913	913	918	918	923	925	928	915	906	905	891	888	885	898	893	898	908	911	913	891	918	921	918	918	909
2	918	914	914	912	919	922	922	924	916	894	891	892	899	894	876	894	906	912	914	914	914	914	919	916	914	909
3	924	916	914	916	916	922	926	916	917	912	909	906	912	914	914	906	909	909	904	914	914	915	915	913	913	911
4	917	915	915	915	920	920	923	920	915	905	900	897	900	903	900	895	905	910	913	915	915	915	913	913	913	910
5*	907	910	913	915	915	920	920	920	917	905	897	893	893	900	907	908	903	905	913	915	915	915	913	915	915	910
6	911	913	909	911	916	918	921	918	916	906	901	898	894	896	896	901	901	911	911	916	916	916	918	924	910	
7	916	916	918	918	918	921	924	924	916	906	901	898	896	904	906	911	906	911	914	916	916	916	928	924	914	
8*	925	917	917	919	922	927	929	930	927	917	915	917	915	915	915	915	917	919	919	920	920	919	922	924	920	
9	922	922	922	922	922	925	929	929	927	919	909	907	907	912	919	919	917	919	927	919	902	922	922	922	935	920
10	918	903	918	918	908	913	923	928	913	900	896	896	896	898	900	900	898	903	903	902	910	916	913	918	908	
11	913	910	910	911	916	918	920	920	910	906	900	895	886	888	896	906	910	916	918	918	918	920	920	922	910	
12	907	914	911	911	914	919	921	921	917	899	889	887	891	899	907	904	904	904	899	917	919	919	921	921	909	
13	917	917	919	919	919	919	924	924	921	911	901	894	889	891	899	904	907	911	912	919	917	916	919	914	912	
14	915	912	918	915	920	930	922	925	908	895	885	885	885	892	905	905	907	898	892	895	907	905	902	905	908	
15**	920	922	920	922	918	925	905	928	905	865	855	863	863	872	865	875	878	890	878	860	898	895	900	902	893	
16	896	896	903	911	921	919	901	899	886	891	886	(879)	(863)	859	863	869	876	884	889	893	894	893	894	895	890	
17*	893	893	893	894	894	896	899	898	893	883	876	876	878	876	881	891	896	896	899	903	903	904	906	906	893	
18	906	904	900	900	899	904	904	900	902	894	887	887	884	882	888	890	894	892	892	894	892	890	894	894	895	
19*	890	884	880	889	892	892	889	884	876	868	869	877	882	887	897	899	902	904	907	909	909	908	908	908	891	
20*	908	908	909	911	913	918	921	923	913	903	898	899	899	907	911	913	913	918	921	923	921	915	919	920	914	
21**	918	918	918	921	923	928	931	931	930	919	908	905	893	890	888	898	901	855	865	891	903	915	911	911	907	
22**	922	924	906	909	914	929	906	872	872	869	856	847	829	842	879	869	882	884	884	882	889	898	894	904	886	
23	894	892	892	894	894	904	906	908	902	892	884	(879)	869	872	882	889	892	896	899	904	904	900	906	904	894	
24	905	907	907	907	907	910	911	910	900	890	885	880	877	885	887	895	902	905	908	903	900	893	903	905	899	
25**	905	909	905	917	930	903	907	915	907	899	887	870	853	877	890	900	897	900	903	907	907	945	927	920	903	
26	898	898	898	904	908	910	904	911	896	886	881	878	871	878	858	878	888	892	901	906	908	908	926	948	901	
27**	908	906	904	902	906	911	911	901	901	894	866	871	874	861	878	896	896	891	901	901	951	906	903	909	902	
28	912	914	907	909	909	912	915	912	907	897	889	887	882	887	889	885	891	893	907	912	915	915	912	912	903	
29	927	917	927	912	907	917	912	912	907	879	855	865	869	887	895	917	922	899	907	939	919	919	915	917	905	
30	910	908	905	906	908	913	915	914	906	895	893	880	876	883	893	896	903	910	913	916	918	918	918	930	905	
31	926	918	916	914	914	914	918	922	918	906	896	886	884	892	903	(906)	905	903	905	906	905	906	905	903	907	
Mean	912	910	910	911	913	916	916	915	910	898	890	886	884	888	893	897	900	902	904	907	911	912	913	915	905	
Mean*	905	902	902	906	907	911	912	912	909	899	892	891	892	896	900	905	906	908	911	914	913	913	914	915	906	
Mean**	915	916	911	914	918	919	912	909	903	889	874	871	862	868	880	888	891	884	896	888	910	912	907	909	898	
17000 γ + Tabular Quantities (in γ).																										
April.																										
1	900	900	900	900	898	900	902	902	898	886	876	875	878	885	893	901	906	912	914	918	920	920	920	918	901	
2	923	923	913	915	918	920	920	916	910	900	888	890	888	888	895	904	908	913	913	913	915	916	920	919	919	
3	915	917	915	913	913	914	916	913	906	905	899	892	895	896	886	873	890	904	907	906	906	906	918	905	907	
4*	903	901	901	903	910	914	914	914	907	898	885	877	878	882	888	895	904	906	913	915	916	917	917	916	903	
5*	915	917	917	917	921	921	924	921	917	909	904	899	904	908	908	913	919	923	924	927	927	927	916	921	917	
6	926	923	922	925	928	930	927	921	912	907	903	890	886	890	899	907	909	915	916	914	916	916	915	915	913	
7*	917	917	916	916	919	924	923	918	913	905	899	892	893	896	898	904	911	912	913	917	918	918	918	918	911	
8	917	914	914	919	920	922	925	922	906	899	876	866	860	866	877	874	875	903	901	905	904	906	909	906	899	
9	907	907	907	907	907	908	911	906	904	896	(892)	884	870	875	883	892	887	902	904	907	909	913	913	916	900	
10	935	932	910	910	918	908	907	903	893	891	883	880	886	888	893	900	907	912	905	922	909	906	911	911	905	
11	907	915	920	933	917	919	917	914	904	894	(872)	870	870	875	883	893	905	905	910	913	915	912	913	904		
12**	915	920	940	933	915	919	925	925	913	897	887	885	893	893	906	931	908	908	908	916	916	916	918	913		
13**	926	918	924	916	928	886	931	903	861	858	858	846	841	851	841	861	879	895	902	903	922	899	899	902	890	
14	912	899	905	897	889	897	897	885	882	877	876	865	865	866	878	870	888	898	898	903	903	895	897	901	—	
15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
16	901	903	905	907	929	917	899	894	889	881	879	874	867	859	859	879	891	894	891	899	907	907	902	902	893	
17	907	922	932	918	920	915	910	902	892	882	878	878	872	875	882	892	905	910	914	920	915	910	908	903		
18**	906	906	906	909	911	911	911	907	903	893	886	883	881	893	916	933	933	916	923	928	928	935	930	912		
19**	926	946	921	926	929	919	924	942	927	907	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
21	938	938	934	899	879	884	904	884	864	864	859	856	854	859	872</											

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
17000 γ + Tabular Quantities (in γ).																									
May.																								Mean.	
1	913	909	909	911	909	913	916	916	907	901	896	893	893	883	896	903	913	916	919	919	916	916	915	915	908
2	914	912	910	912	915	917	920	914	907	902	894	890	892	904	910	912	920	922	922	922	920	920	920	922	912
3	925	925	923	928	928	928	923	918	913	908	905	898	895	878	885	893	903	913	905	903	908	901	891	883	908
4	882	894	894	894	892	909	889	876	866	854	854	856	856	862	874	882	884	899	904	906	906	906	916	914	886
5*	917	913	913	917	917	917	913	905	897	893	900	903	905	910	917	923	925	925	923	927	927	927	927	927	915
6*	928	926	928	930	926	926	924	916	906	901	901	911	916	916	926	928	934	926	924	931	934	931	928	924	923
7*	920	922	922	925	927	927	921	915	909	907	905	902	902	899	902	912	899	925	927	927	932	935	935	935	919
8	948	943	943	940	938	933	918	903	898	893	888	896	886	883	888	900	915	920	928	932	934	933	928	928	922
9	949	944	927	927	925	927	919	911	899	897	894	881	879	884	901	921	927	929	924	921	924	924	917	917	920
10	914	916	915	918	925	925	918	905	890	880	870	868	880	905	898	905	908	908	920	925	930	925	920	922	908
11	921	921	923	923	923	921	916	911	906	901	891	886	881	883	901	913	923	934	936	933	931	936	931	929	916
12	927	927	932	937	937	937	942	942	877	852	867	854	862	872	867	860	864	892	910	912	902	907	907	902	899
13**	905	905	901	891	905	905	901	885	881	879	877	875	883	933	933	958	935	—	—	—	—	—	—	—	—
14**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	866	891	876	866	866	864	881	—
17	842	847	869	852	825	832	847	842	852	847	832	837	839	841	847	862	867	887	895	882	879	882	892	899	858
18	882	868	873	880	880	882	878	876	868	858	848	830	838	863	876	878	888	893	913	908	896	890	888	877	
19	889	891	889	887	891	889	889	881	877	874	869	861	854	859	869	877	884	891	887	904	937	934	889	919	887
20**	885	875	870	840	878	884	848	845	848	848	845	860	865	865	910	910	935	955	930	905	895	890	902	940	885
21	916	891	866	879	883	889	856	838	841	861	859	861	851	856	853	861	889	896	941	906	903	906	893	891	879
22	892	890	890	888	897	897	892	884	874	862	857	862	862	872	887	894	902	912	907	907	910	917	910	907	891
23	903	905	895	896	903	901	898	881	865	868	863	863	863	866	868	880	888	895	899	901	901	900	898	898	888
24	902	894	899	902	902	896	888	882	874	874	874	879	874	874	884	884	889	909	912	914	914	919	914	912	894
25*	910	907	903	900	903	902	897	895	897	895	897	877	873	880	883	890	903	910	910	910	905	903	902	900	898
26	901	901	901	901	901	901	898	891	888	881	878	868	874	884	891	891	891	906	911	914	914	910	909	908	896
27	907	902	902	905	897	902	897	895	895	887	872	869	885	889	895	907	912	917	919	915	915	909	902	900	
28	913	913	910	910	908	903	908	910	900	893	888	883	883	883	886	893	898	908	918	913	916	923	918	913	904
29	909	911	909	901	919	919	909	899	899	894	891	884	884	899	911	914	919	919	921	919	919	919	919	921	909
30*	920	918	917	917	918	918	915	915	905	902	902	890	890	885	895	900	902	912	920	922	920	920	915	915	910
31	916	913	913	916	916	919	911	896	896	893	893	895	889	889	883	899	896	909	916	923	921	921	916	916	916
Mean	909	907	905	905	907	908	902	895	887	883	879	876	876	882	888	898	904	910	915	917	913	913	910	912	901
Mean*	919	917	917	918	918	918	914	909	903	899	900	897	897	898	905	911	913	920	921	923	924	923	921	920	913
Mean**	885	875	870	840	878	884	848	845	848	845	845	860	865	865	910	910	935	955	930	905	895	890	902	940	885
17000 γ + Tabular Quantities (in γ).																									
June.																								Mean.	
1	920	920	922	922	922	917	920	922	920	917	910	900	899	899	907	912	922	922	927	927	930	927	932	934	919
2	935	933	933	935	938	938	938	928	923	915	908	898	885	893	898	905	913	923	925	923	921	919	918	918	919
3	915	915	915	915	915	921	917	907	901	893	885	898	903	903	908	907	921	933	935	945	938	947	949	917	
4**	942	924	916	914	914	919	924	906	894	884	879	884	886	887	876	884	896	912	926	922	919	924	914	909	907
5*	909	909	919	912	912	909	904	896	894	889	886	886	896	902	904	906	912	916	919	916	916	914	912	914	906
6**	915	911	910	913	915	915	913	911	899	897	905	915	925	915	895	893	909	913	925	943	915	913	911	907	912
7	910	907	905	907	905	895	897	889	899	895	875	872	867	880	863	883	890	907	915	920	903	907	903	907	896
8**	904	901	901	901	906	906	901	894	891	881	871	864	861	866	888	911	911	916	926	956	951	904	901	899	
9	904	904	906	908	904	901	906	891	891	888	888	886	876	876	874	884	894	918	928	918	924	916	908	906	900
10	909	915	922	919	907	889	882	887	879	867	869	862	872	877	880	895	907	919	915	917	915	917	907	907	896
11	907	909	917	907	909	907	902	899	897	887	882	872	877	885	889	907	922	919	917	917	915	912	912	912	903
12	912	910	910	913	916	918	916	903	893	900	893	886	888	893	893	910	916	920	923	916	916	913	913	910	908
13	908	906	906	912	918	918	913	908	898	888	886	888	893	898	903	908	910	928	916	923	924	923	926	923	909
14**	924	934	924	929	927	924	919	917	911	899	891	904	899	911	904	899	917	919	921	919	914	914	921	915	
15*	919	907	904	904	903	909	907	899	893	885	884	887	894	899	907	909	911	912	913	914	913	912	911	909	904
16	912	908	910	915	918	922	912	905	895	890	882	880	890	900	902	905	905	910	915	920	918	920	918	918	907
17	918	915	918	908	915	925	920	918	900	888	887	890	898	885	885	882	900	905	910	915	912	910	908	910	905
18*	911	911	911	909	911	913	911	901	896	891	886	886	886	886	896	903	906	906	911	913	915	917	919	919	905
19*	916	915	919	921	921	923	923	923	919	911	909	909	909	915	915	923	923	926	933	929	931	929	933	931	921
20	934	937	940	934	932	930	924	917	912	902	900	904	907	906	908	920	920	914	930	927	924	924	922	922	920
21	917	920	920	917	922	922	917	912	900	894	(892)	894	894	900	908	917	924	928	928	930	927	934	934	937	916
22	933	933	933	918	925	923	923	915	908	895	891	875	878	891	905	917	933	928	928	928					

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.	
July.																											
17000 γ + Tabular Quantities (in γ).																											
1	929	924	927	932	937	937	932	922	915	889	889	887	897	915	927	929	927	930	937	932	931	929	929	931	922		
2*	930	926	923	926	928	933	928	923	920	916	916	913	913	910	908	923	923	936	938	938	936	935	931	929	928	925	
3	928	931	930	928	938	936	933	918	916	910	910	908	900	900	903	918	920	918	933	933	933	938	938	935	923		
4	931	933	935	930	932	933	928	913	906	898	893	900	901	894	904	909	921	931	931	931	949	939	927	929	921		
5	929	937	931	927	924	926	924	921	917	909	907	901	903	911	917	925	931	941	939	935	931	937	941	934	925		
6	929	929	931	934	937	936	929	924	917	904	899	903	909	911	929	922	924	936	939	951	944	949	957	949	929		
7**	940	935	940	942	940	940	938	932	922	912	902	892	872	872	895	905	920	928	940	925	928	928	925	928	921		
8**	930	922	928	928	928	926	922	912	902	880	862	878	895	885	892	903	915	925	918	928	932	938	915	918	912		
9**	925	915	915	918	922	925	920	892	902	895	890	890	889	893	904	916	916	913	923	931	915	916	917	923	911		
10	919	913	911	913	913	913	911	913	907	901	881	871	871	876	889	901	911	913	916	913	913	911	913	906	904		
11*	903	903	907	906	909	908	903	901	899	893	886	883	876	873	879	893	906	911	916	919	916	913	911	909	901		
12	910	910	910	912	912	916	912	904	894	887	882	882	880	887	872	890	904	912	910	907	912	914	912	910	902		
13	912	907	904	904	912	922	914	902	892	882	877	876	880	884	882	890	902	897	910	917	904	904	908	912	900		
14	907	904	912	892	915	910	897	904	902	884	874	874	875	877	883	885	895	901	913	916	913	915	915	919	900		
15**	913	911	922	918	901	917	911	895	883	873	868	875	881	898	911	913	916	915	915	911	921	923	917	923	905		
16**	918	918	910	922	921	911	903	878	877	888	885	873	870	873	893	893	901	911	913	913	908	925	925	901	901		
17	896	899	902	904	892	902	896	889	884	879	886	892	886	892	896	906	916	916	914	909	904	909	912	909	900		
18*	904	898	899	906	906	906	896	892	886	876	874	869	872	884	896	906	904	906	906	906	906	906	902	900	895		
19	902	899	899	902	904	906	902	894	882	874	869	866	873	877	880	883	895	910	912	913	917	937	927	913	898		
20	907	905	897	905	909	910	907	895	880	867	873	873	880	880	887	895	893	897	905	910	905	905	899	897	895		
21*	895	895	900	900	903	905	897	890	885	877	870	867	867	877	883	887	895	903	905	907	907	909	910	909	893		
22	911	908	916	916	918	916	914	904	896	874	868	871	876	886	891	891	896	896	901	908	911	911	916	911	900		
23	924	931	916	906	908	918	908	896	873	876	876	876	871	871	874	878	894	896	908	914	914	911	911	914	899		
24	911	911	918	916	914	911	908	904	896	884	876	871	875	877	887	895	897	895	902	902	902	902	907	907	899		
25*	902	902	899	905	905	905	899	889	882	875	867	875	882	887	899	907	905	899	905	912	912	915	909	907	898		
26	907	905	904	907	907	907	909	909	907	897	885	877	882	879	899	912	907	911	919	917	929	937	919	912	906		
27	916	918	915	920	923	920	916	908	903	898	886	882	886	888	900	906	908	906	915	920	922	920	916	913	909		
28	913	910	908	906	910	910	906	898	880	884	880	882	886	890	898	903	913	910	910	910	913	910	920	900	903		
29	898	898	902	906	904	908	898	893	893	882	878	876	871	866	871	879	899	909	914	912	909	914	934	934	898		
30	914	903	901	905	907	899	889	889	887	871	881	891	884	881	889	901	905	916	919	927	924	919	924	914	902		
31	913	911	909	909	899	899	901	899	887	877	881	891	889	889	899	909	909	909	909	911	909	907	909	909	901		
Mean	915	914	914	914	916	917	912	903	897	888	883	883	884	886	894	902	909	913	917	919	918	920	919	916	906		
Mean*	907	905	906	909	910	911	905	899	894	887	883	881	881	884	891	901	907	911	914	916	915	916	913	911	902		
Mean**	925	920	923	926	922	924	919	902	897	890	881	882	881	884	899	906	914	918	922	922	921	926	920	919	910		
August.																											
17000 γ + Tabular Quantities (in γ).																											
1*	905	905	903	904	910	910	908	900	880	868	872	882	892	898	905	910	910	910	915	915	910	910	905	902			
2	905	905	908	905	905	902	898	890	878	877	890	910	920	917	915	913	915	918	910	915	920	910	902	910	906		
3**	901	903	901	909	921	925	915	863	841	849	861	863	881	881	876	893	886	889	903	903	901	899	893	893	891		
4	899	903	903	906	907	909	903	888	874	869	866	869	876	886	889	891	899	913	916	901	916	919	916	913	897		
5**	930	932	930	910	904	920	912	892	870	835	850	866	872	884	882	894	904	904	904	910	910	904	904	910	897		
6**	912	910	902	920	900	894	892	887	890	867	864	875	882	880	910	917	894	902	904	912	914	917	912	910	899		
7	901	908	917	901	908	913	903	885	875	868	865	871	885	881	883	908	911	913	915	915	913	913	913	911	899		
8	908	908	911	895	921	923	920	905	893	880	865	873	878	888	898	903	911	915	915	913	913	915	916	918	904		
9*	916	909	912	911	914	914	912	899	889	882	884	876	889	889	896	904	909	916	914	916	906	914	914	926	905		
10	916	912	911	914	907	914	919	916	909	896	889	884	886	889	896	904	914	914	919	924	926	924	924	924	910		
11	927	925	915	913	917	923	917	915	917	895	887	890	890	893	892	895	915	920	913	927	923	933	920	915	912		
12	933	920	913	907	907	905	905	895	890	885	885	883	890	895	897	913	915	915	917	919	915	915	915	917	906		
13	916	916	911	914	913	916	913	908	898	891	886	890	893	892	886	891	906	914	921	931	921	921	924	926	906		
14	926	921	921	921	921	916	914	906	896	88																	

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.	
September.																											
17000 γ + Tabular Quantities (in γ).																											
1	913	915	915	913	910	907	905	897	890	885	883	890	900	910	910	907	905	907	913	917	915	915	903	907	906	906	
2**	907	910	917	925	935	935	867	863	840	795	835	863	840	845	850	895	895	883	887	885	897	890	885	885	885	880	
3	891	894	893	893	894	891	886	878	871	871	876	886	889	891	891	901	896	898	899	904	906	908	914	906	893		
4	906	906	908	896	916	918	904	896	884	876	858	868	876	878	878	894	896	906	901	916	906	911	926	906	897		
5	906	914	904	904	896	906	914	906	898	884	858	861	868	876	874	883	896	900	900	906	914	923	918	911	897		
6	909	907	907	909	915	914	907	907	905	892	889	879	877	877	879	879	889	899	905	906	908	914	908	914	900		
7	907	905	905	907	907	917	917	902	892	887	882	877	879	887	889	895	897	897	915	925	917	939	925	905	903		
8**	922	932	922	902	902	907	902	887	879	879	877	887	895	902	899	907	899	895	902	907	907	909	905	907	901		
9	898	898	888	903	893	906	908	898	888	888	880	878	883	886	890	900	908	903	908	908	908	908	918	908	898		
10	906	905	908	916	918	918	913	908	896	886	878	880	890	896	906	908	908	900	906	908	908	908	918	906	904		
11*	915	908	906	908	906	908	906	900	896	886	883	882	886	893	898	900	900	900	910	918	916	916	912	910	903		
12*	914	914	911	911	914	917	917	917	907	904	899	896	889	891	896	904	911	911	917	919	919	921	926	924	910		
13*	921	919	919	919	921	924	927	924	911	901	894	891	889	892	897	899	906	911	917	921	921	924	929	924	913		
14	924	911	911	914	914	917	917	919	911	903	899	897	899	899	901	905	907	919	917	919	919	921	924	927	911		
15	930	928	922	928	930	922	910	905	895	885	875	870	875	880	885	890	898	900	902	908	912	910	910	918	904		
16	915	910	910	910	910	910	910	905	898	890	888	892	900	905	905	905	905	912	918	922	935	932	922	912	909		
17	915	920	920	920	922	910	915	915	908	900	890	894	902	905	908	910	910	912	912	922	935	932	922	912	909		
18	913	916	914	913	913	911	911	901	891	886	883	889	901	909	911	906	903	901	916	923	916	906	911	913	907		
19	911	921	919	916	921	926	911	896	889	899	896	891	896	901	901	896	901	901	903	911	919	916	916	907	907		
20	913	911	911	911	911	911	911	919	911	893	883	876	883	893	899	906	909	909	913	916	919	921	918	913	907		
21	914	920	922	920	922	912	904	907	892	886	882	877	877	882	890	892	900	904	907	910	912	906	917	934	904		
22	910	907	907	910	910	910	910	906	898	889	882	880	885	892	894	900	907	910	917	917	920	914	914	914	904		
23**	917	927	947	932	932	934	922	920	892	892	886	890	880	886	880	874	894	900	907	907	907	904	904	902	906		
24*	903	901	901	903	903	903	905	903	895	883	878	873	868	873	881	888	898	903	905	908	906	905	905	903	896		
25*	905	905	908	909	911	910	910	909	903	895	891	883	883	885	888	893	900	910	913	918	913	913	913	910	903		
26	911	911	911	913	913	913	913	909	903	895	888	885	888	891	893	901	905	911	930	931	933	928	933	935	910		
27	924	932	916	918	916	918	922	914	904	892	884	884	889	896	899	902	906	912	914	919	922	924	932	931	911		
28**	924	926	924	924	926	932	934	934	916	909	904	904	906	912	914	906	906	904	901	882	924	914	932	924	916		
29**	914	924	951	942	906	901	901	896	889	882	879	866	882	889	892	889	894	904	904	939	904	906	906	904	903		
30	905	903	907	907	905	909	909	905	899	901	895	893	889	890	893	902	910	913	905	910	913	925	925	923	906		
Mean	912	913	913	913	913	914	910	905	895	887	883	883	885	890	893	898	902	905	909	913	914	915	916	914	904		
Mean*	912	909	909	910	911	912	913	911	902	894	889	885	883	887	892	897	903	908	912	917	915	916	917	914	905		
Mean**	917	924	932	925	920	922	905	900	883	871	876	882	881	887	887	894	898	897	900	904	908	905	906	904	901		
October.																											
17000 γ + Tabular Quantities (in γ).																											
1	923	910	925	917	927	921	910	903	902	895	885	890	890	907	907	901	905	913	911	913	915	913	913	917	909		
2	915	913	915	917	915	917	917	907	905	895	887	895	893	897	900	903	905	913	917	920	915	915	915	915	909		
3*	915	913	913	915	913	913	915	915	905	897	890	885	887	887	895	905	911	913	915	913	913	915	923	908			
4	916	916	914	913	916	916	911	906	899	894	888	886	886	891	896	894	894	898	904	911	911	913	913	914	904		
5	914	908	914	913	903	906	906	906	904	894	891	878	881	884	891	898	901	898	894	878	896	898	900	898	898		
6	898	901	911	906	896	898	900	898	886	878	878	876	876	884	894	894	896	898	898	906	898	904	898	896	895		
7**	892	895	897	897	897	897	899	897	889	879	872	874	882	892	897	899	902	897	899	882	897	895	894	915	893		
8**	901	909	887	920	902	867	832	807	787	757	762	767	812	837	844	849	847	850	849	855	859	892	897	887	849		
9	875	879	872	905	897	885	872	869	867	860	855	847	849	855	862	867	872	879	885	885	895	897	895	887	875		
10	893	895	886	896	898	896	898	898	898	893	883	873	870	866	868	873	880	883	880	886	888	892	888	888	886		
11**	891	893	888	890	890	886	894	903	898	883	873	883	878	870	863	856	850	843	848	858	858	853	858	858	873		
12**	853	888	888	863	873	880	886	873	870	876	873	866	868	873	878	880	878	888	886	890	903	893	888	888	879		
13	889	889	889	889	894	899	892	892	891	881	871	867	869	874	879	881	891	896	897	899	899	899	901	901	889		
14	904	899	901	899	901	904	905	901	889	884	879	881	887	889	891	889	884	889	896	902	904	901	907	911	896		
15	917	889	897	897	901	903	905	904	897	889	884	884	887	891	871	884	897	907	907	905	907	909	905	905	898		
16*	905	903	903	905	908	908	910	910	908	895	892	898	900	902	903	905	907	908	910	910	918	914	910	910	906		
17*	912	912	910	910	912	912	912	912	910	902	895	898	903	905	908	910	912	912	910	910	918	912	912	912	909		
18*	912	910	912	914	914	918	920	918	908	900	895	892	900	908	912	910	912	918	920	922	922	918	917	915	912		
19*	916	916	921	921	916	919	921	919	913	903	893	891	893	899	903	903	906	909	911	911	911	911	911	909	909		
20	909	909	911	909	911	913	915	911	905	893	886	879	889	899	906	911	913	916	909	901	906	913	916	913	906		
21**	911	911	903	906	909	909	906	911	908	891	869	863	869	879	876	876	873	871	876	881	899	919	908	904	893		
22	902	902	904	904	907	910	912	914	912	902	892	887	890	894	894	887	892	899	904	904	904	910	920	912	903		
23	912	910	910	912	912	904	917	920	912	904	897																

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

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	
November.																										
17000 γ + Tabular Quantities.																										
																									Mean.	
1	907	907	922	930	914	914	914	917	912	904	897	884	884	890	887	892	894	907	917	917	912	907	907	907	907	906
2*	910	910	910	912	912	912	914	912	907	900	884	884	890	897	902	902	910	914	912	914	914	914	914	914	912	907
3*	912	912	912	914	916	916	917	915	907	904	900	900	904	910	912	916	914	914	917	912	917	920	917	917	917	912
4*	914	912	912	914	914	916	919	917	910	902	887	885	892	900	907	912	914	917	919	920	920	917	917	917	917	911
5	919	914	914	914	916	920	922	920	914	906	897	894	894	897	904	910	902	910	917	917	914	902	934	900	911	
6**	900	904	897	902	910	874	884	890	897	882	862	867	862	860	859	877	877	880	897	897	887	887	887	887	887	884
7	894	907	905	899	897	907	900	900	902	900	894	890	884	887	890	894	894	900	890	894	904	919	919	908	899	
8	907	915	910	902	904	907	914	914	904	892	880	882	887	897	900	904	912	914	914	915	915	915	917	914	905	
9	900	904	904	914	912	920	918	914	912	906	897	887	884	892	900	904	904	907	914	914	904	900	910	930	907	
10	910	909	907	910	914	914	912	920	912	894	887	884	880	872	850	872	894	904	904	904	904	904	905	906	899	
11	908	905	905	905	906	911	913	911	905	898	893	888	888	895	901	909	913	915	915	915	911	911	917	915	906	
12	925	918	913	915	915	915	921	921	913	911	903	901	905	908	913	915	918	921	918	918	918	915	915	915	915	
13	913	915	915	917	918	923	923	923	918	913	910	903	901	905	901	901	891	911	921	919	913	915	913	928	913	
14	931	907	907	905	903	908	913	911	905	898	895	895	898	903	905	906	907	906	910	915	913	913	918	913	908	
15	911	908	908	911	915	918	919	918	913	903	898	898	901	908	913	915	921	923	920	915	903	898	900	908	910	
16**	910	916	917	919	923	928	925	895	895	913	903	895	883	853	901	910	908	895	871	868	891	911	901	891	901	
17**	898	913	905	903	895	911	883	881	883	885	—	—	—	855	861	861	888	901	895	888	903	933	903	898	—	
18**	903	905	895	895	883	891	895	898	883	883	881	861	861	863	873	888	903	901	921	933	918	903	911	901	894	
19	895	896	896	898	903	903	901	898	898	895	885	871	883	885	895	891	898	903	903	905	908	908	908	905	897	
20	905	903	903	903	901	905	905	901	898	891	888	883	888	888	893	891	903	901	905	909	909	907	905	905	900	
21	909	906	909	909	909	912	916	912	914	906	894	872	869	879	884	884	884	889	906	906	906	908	912	912	900	
22	906	904	904	904	904	909	914	914	912	904	896	892	892	894	896	899	899	906	889	894	902	909	909	906	902	
23**	906	906	906	910	914	916	919	922	922	919	909	894	886	887	891	887	889	892	882	912	869	869	892	899	900	
24	914	899	894	896	902	906	912	914	909	899	889	884	889	896	899	899	899	904	906	906	909	909	909	909	902	
25	919	909	909	912	914	916	916	914	912	912	909	904	902	899	899	901	899	894	889	892	892	896	896	896	904	
26	889	892	894	894	896	899	902	899	894	889	882	882	884	889	894	899	902	904	906	912	912	912	912	912	898	
27*	909	912	911	916	922	919	919	919	916	912	906	904	902	904	904	904	908	910	912	909	909	912	912	912	911	
28	912	914	932	924	924	921	929	927	916	912	909	904	906	906	909	909	909	912	914	914	914	914	914	914	915	
29*	911	911	912	914	916	919	922	921	919	914	909	907	909	912	916	916	917	920	922	919	916	916	914	914	915	
30	914	914	914	916	916	919	922	922	916	909	906	904	909	916	922	922	922	922	920	918	918	916	914	912	916	
Mean	909	909	909	910	910	912	913	912	908	902	895	890	891	893	897	900	904	907	908	909	908	909	911	908	905	
Mean*	911	911	911	914	916	916	918	917	912	906	897	896	899	905	908	910	913	915	916	915	915	916	915	914	911	
Mean**	905	908	904	907	908	902	906	901	899	899	889	879	873	866	881	891	894	892	893	903	891	893	898	895	895	
December.																										
17000 γ + Tabular Quantities.																										
																									Mean.	
1	919	915	915	915	920	923	925	925	923	917	910	907	900	897	907	907	909	920	919	915	917	915	915	915	915	
2	913	912	910	910	917	920	922	928	920	900	907	907	905	905	907	912	910	913	913	912	910	912	908	908	912	
3	905	923	907	913	920	913	907	905	915	910	907	903	905	897	897	903	905	907	907	907	913	910	913	912	908	
4	910	912	913	913	917	919	919	920	923	913	907	905	900	905	900	900	900	905	905	907	910	915	915	920	911	
5	912	912	910	909	915	917	921	920	920	913	910	907	907	911	913	913	913	915	917	917	915	915	917	915	914	
6*	913	910	913	913	913	915	917	917	917	915	910	905	905	907	909	911	913	915	909	910	917	920	917	915	913	
7*	917	915	920	917	917	920	923	925	921	917	913	907	905	905	909	911	915	917	915	915	917	919	919	915	916	
8	915	915	915	915	917	921	925	923	915	910	907	903	903	899	890	887	900	909	913	910	905	900	910	909	909	
9	907	907	911	915	915	920	915	919	919	917	915	913	912	915	917	912	910	915	913	915	913	909	910	910	914	
10	912	925	903	905	907	909	913	910	913	913	915	913	911	911	907	905	909	917	919	915	917	913	911	907	912	
11	910	911	910	912	913	913	915	915	917	918	919	917	915	913	913	911	917	917	905	897	898	913	913	915	912	
12**	915	910	905	903	930	953	915	900	880	883	897	873	855	885	890	890	890	890	880	883	905	897	900	903	897	
13**	897	903	895	897	897	911	913	900	897	877	865	870	863	860	885	880	877	880	877	890	935	920	900	900	891	
14	887	888	890	890	895	905	907	903	893	897	897	891	895	897	900	900	903	905	905	905	903	905	907	900	899	
15	900	903	903	905	907	910	907	908	910	905	900	903	905	903	900	897	907	913	915	915	915	910	910	910	907	
16**	910	923	917	903	905	919	918	910	897	897	880	860	870	870	870	875	857	865	865	900	895	897	897	910	892	
17	907	905	905	900	900	905	900	897	893	885	880	863	873	885	885	890	897	907	907	893	899	905	903	907	896	
18	913	897	898	899	905	907	905	910	905	887	887	887	897	903	905	905	905	900	900	905	907	905	907	902	902	
19*	905	905	907	909	911	911	915	912	910	900	895	890	895	900	905	903	903	903	905	907	905	907	905	905	905	
20*	907	909	907	910	911	913	917	917	915	910	905	905	903	905	905	907	910	913	913	913	913	912	910	910	910	
21*	910	910	912	913	915	917	918	918	915	913	910	903	903	903	907	907	907	913	913	913	911	913	913	909	911	
22	910	915	915																							

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	Mean.	
January. 43000 γ + Tabular Quantities (in γ)																											
1**	263	261	261	259	259	261	265	265	262	262	265	267	268	270	275	279	277	274	276	278	274	267	259	257	267		
2*	255	255	253	252	252	252	254	252	253	260	264	262	259	256	256	254	251	251	251	249	248	248	248	248	246	253	
3	243	243	243	240	239	239	244	244	243	247	249	249	246	246	244	242	240	241	241	239	239	239	239	239	236	244	
4	233	231	227	229	231	231	232	234	234	234	234	234	236	240	242	242	246	248	248	243	239	235	229	227	236		
5	223	223	223	220	220	222	224	226	225	227	225	223	226	231	235	231	230	230	230	230	226	222	220	220	225		
6	217	215	215	212	211	214	214	216	215	217	219	217	218	218	216	214	214	213	213	213	213	213	211	207	207	214	
7	204	204	204	203	203	204	204	203	203	203	199	197	198	204	204	204	200	200	201	201	202	200	200	199	202		
8*	195	195	195	195	194	194	197	197	193	193	193	193	195	196	196	195	195	195	194	191	191	191	188	188	194		
9	188	186	186	185	183	183	183	179	178	184	184	186	187	190	191	196	197	199	199	195	189	185	183	183	188		
10**	178	178	178	180	179	179	177	177	176	176	176	176	175	179	179	180	184	184	188	190	188	178	174	174	179		
11	173	173	173	174	174	174	173	173	171	172	168	166	167	171	169	169	171	170	170	170	172	170	169	169	171		
12	165	165	165	162	164	166	168	167	167	167	163	161	162	166	171	171	172	171	170	170	170	166	164	162	167		
13*	160	158	157	157	157	159	159	160	160	162	160	157	161	159	159	159	161	162	165	162	160	158	157	155	159		
14*	155	155	155	154	156	158	158	156	155	155	153	147	150	154	156	156	161	160	161	161	157	157	154	154	156		
15	152	152	152	151	153	155	158	158	157	160	158	157	156	156	157	156	156	156	156	156	156	161	158	156	156		
16	154	154	154	154	154	154	153	153	150	150	150	150	152	152	153	153	155	155	157	157	161	161	163	163	155		
17**	156	156	156	156	156	156	155	155	155	157	157	152	148	158	164	162	164	170	147	192	179	174	169	160	161		
18	156	156	152	153	153	155	159	161	160	160	158	154	155	155	157	157	159	162	164	166	167	161	158	158	158		
19	156	156	156	156	155	153	155	155	155	157	157	155	156	159	156	156	154	154	156	159	158	155	153	153	156		
20	151	149	153	149	150	152	152	152	152	154	157	157	—	—	—	—	—	—	—	—	—	—	—	—	—		
21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
22*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
24**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
27	—	—	—	—	—	—	—	—	—	—	—	—	188	190	191	191	195	195	195	195	195	195	197	197	195	—	
28	193	193	193	193	195	195	197	195	193	193	193	195	193	197	197	199	203	201	201	201	201	201	199	197	195	196	
29	193	195	190	188	190	193	195	193	191	190	191	190	193	197	199	201	199	201	201	203	201	201	199	199	195	195	
30	193	193	193	193	193	193	193	193	193	195	195	193	195	197	199	199	197	197	197	197	199	199	197	197	195	195	
31**	188	188	188	190	188	190	191	191	191	191	191	191	193	193	195	195	199	209	213	205	199	197	193	193	194		
Mean	189	189	188	188	188	189	190	190	189	190	190	189	191	193	194	194	195	196	196	197	195	193	191	189	191		
Mean*	191	191	190	190	190	191	192	191	193	193	193	191	190	192	192	191	192	192	193	191	189	189	187	186	191		
Mean**	196	196	196	196	196	197	197	197	196	197	197	197	196	200	203	204	206	209	206	216	210	204	199	196	200		
February. 43000 γ + Tabular Quantities (in γ)																											
1	191	190	190	190	190	191	193	193	193	191	191	191	193	193	197	199	197	201	205	201	197	195	193	191	194		
2**	190	190	188	188	188	190	190	190	191	193	191	190	190	195	201	207	209	207	207	203	201	197	195	195	195	195	
3	193	190	184	184	184	188	191	191	191	193	190	191	193	193	195	195	197	195	197	195	197	195	193	193	192		
4	191	191	191	191	191	191	193	193	193	193	193	191	191	193	193	193	195	195	195	199	203	201	208	197	194		
5**	195	195	195	195	193	193	193	193	193	190	190	193	203	205	209	213	217	219	217	220	220	217	215	201	203		
6	184	188	193	191	193	195	197	197	197	199	199	201	201	201	205	209	209	211	209	209	209	209	207	205	201		
7	201	199	199	201	203	203	203	203	201	201	201	203	207	207	209	209	209	213	211	213	211	209	207	207	205		
8*	205	203	203	205	205	205	207	205	203	199	195	193	195	201	206	211	213	213	213	209	207	207	207	207	205		
9*	205	205	205	207	207	207	207	205	209	209	207	205	207	209	207	209	211	211	211	215	213	211	209	209	208		
10	207	207	207	207	209	209	211	209	211	211	207	203	205	207	213	213	215	217	215	215	215	213	213	215	211		
11	209	209	211	211	213	213	215	215	217	219	217	211	211	213	219	222	222	222	220	220	219	217	215	213	216		
12**	213	213	213	213	215	217	217	217	215	213	209	211	213	215	215	217	217	217	219	217	217	217	217	215	215		
13**	213	213	213	215	215	213	213	213	215	211	213	215	215	217	222	224	226	226	224	226	226	228	228	226	218		
14	224	224	224	213	217	219	220	222	222	224	220	219	219	220	224	228	228	228	230	232	232	234	234	230	224		
15	226	224	224	224	224	226	226	226	224	222	222	224	222	222	226	230	228	228	228	228	230	228	228	226	226		

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.
43000 γ + Tabular Quantities (in γ).																										
March.																										
1	211	211	211	211	211	211	213	213	213	209	206	199	207	211	217	219	220	220	219	224	222	215	215	215	214	
2	211	211	211	211	207	209	211	211	211	207	203	203	205	209	215	220	220	219	219	217	217	217	217	217	212	
3	211	211	209	211	211	213	215	215	213	213	207	203	203	207	213	213	217	219	220	219	217	217	217	213	213	
4	211	211	211	209	209	211	213	215	215	213	207	203	203	207	207	213	217	217	215	215	217	217	215	213	212	
5*	213	213	213	211	211	213	213	215	215	211	209	203	205	205	209	215	215	215	213	213	213	213	213	215	212	
6	211	211	211	211	209	209	209	209	209	205	203	199	197	201	207	215	215	215	213	213	211	213	211	209	209	
7	209	209	209	209	207	209	211	213	215	213	207	199	197	203	207	211	215	213	215	213	215	211	209	209	210	
8*	207	209	209	209	209	209	209	209	207	203	197	195	197	199	201	207	211	211	209	209	209	207	209	209	206	
9	207	207	207	207	207	207	209	211	207	201	193	191	197	203	207	213	209	211	215	220	217	215	213	207	207	
10	207	203	195	191	201	207	207	207	207	201	195	195	199	205	213	220	219	217	219	217	209	213	213	207	207	
11	207	209	209	211	211	211	213	213	213	207	201	199	—	—	—	—	—	—	—	—	—	—	—	—	—	
12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
15**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
17*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
19*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
20*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
21**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
22**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
23	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
25**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
27**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mean	210	210	209	208	208	210	211	212	212	208	204	199	200	204	208	213	216	216	215	215	216	214	213	213	210	
Mean*	210	211	211	210	210	211	211	212	211	207	203	199	201	202	205	211	213	213	211	211	211	210	212	212	209	
Mean**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
43000 γ + Tabular Quantities (in γ).																										
April.																										
1*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
4*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
5*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
7*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
11*	224	211	214	214	214	217	219	222	222	214	204	190	191	191	208	216	221	223	223	223	220	217	217	217	214	
12**	215	212	210	207	204	209	211	211	211	204	201	201	200	203	210	213	215	220	222	224	219	224	217	214	212	
13**	206	206	201	201	196	196	192	195	197	197	200	207	211	216	224	229	229	225	225	223	220	215	212	207	210	
14	202	204	204	201	203	203	206	203	195	187	187	187	189	199	206	211	214	220	225	223	223	218	204	197	205	
15	194	184	184	183	186	196	201	201	192	187	185	182	180	189	204	206	209	213	215	218	213	210	207	199	197	
16	197	194	194	191	186	181	186	188	187	190	187	190	190	199	204	211	219	223	225	223	218	210	202	197	200	
17	192	182	172	176	178	183	183	186	182	180	172	168	167	174	184	186	187	190	188	188	190	190	187	187	182	
18**	184	182	182	181	181	183	183	186	182	172	170	165	166	169	176	—	—	—	—	—	—	—	—	—	—	
19**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	259	266	268	273	276	278	281	286	288	—	
20	292	292	294	297	302	302	299	308	310	313	313	315	321	334	337	332	321	320	318	315	308	300	294	292	310	
21	282	272	262	252	254	254	256	261	267	267	267	272	279	296	299	298	298	300	303	289	284	279	278	273	277	
22	273	263	248	248	258	266	269	269	266	260	260	258	257	259	267	269	272	272	269	264	263	263	254	242	262	
23	242	235	242	249	253	257	257	257	250	245	241	232	233	244	254	253	255	255	253	250	248	248	244	242	248	
24	242	239	236	236	235	238	242	245	241	242	220	218	222	229	233	236	243	247	244	242	239	239	237	235	237	
25	234	234	231	231	234	238	240	242	237	228	219	219	222	227	232	239	242	242	238	235	233	231	231	226	233	
26*	220	218	218	223	225	230	231	233	226	221	215	208	207	214	221	225	225	229	231	229	229	227	223	221	223	
27*	216	216	216	218	220	222	220	219	214	205	198	194	193	195	202	206	211	216	218	218	218	216	214	213	212	
28	213	213	211	208	210	215	214	212	215	193	191	192	199	204	208											

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

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h	Mean.	
43000 γ + Tabular Quantities (in γ).																											
May.																											Mean.
1	216	216	216	216	215	212	212	212	208	198	191	191	193	207	216	214	218	220	220	218	217	217	217	217	215	211	
2	213	215	215	215	216	216	216	218	216	207	205	205	206	206	211	215	220	223	227	227	225	225	225	225	223	216	
3	222	222	219	219	219	222	219	214	210	205	(189)	189	181	176	178	180	179	182	182	182	183	178	176	172	196		
4	175	172	171	171	174	170	178	183	185	185	179	179	183	191	209	227	232	232	232	231	229	229	228	225	199		
5*	224	227	229	229	231	233	233	233	233	227	222	219	226	235	242	248	249	249	246	246	245	245	246	246	236		
6*	245	245	244	244	246	243	242	240	240	230	225	222	224	232	238	237	239	242	233	233	227	229	226	222	235		
7*	220	222	219	221	221	220	218	214	211	205	205	205	206	206	211	214	216	213	213	210	209	203	202	202	212		
8	199	199	198	198	199	197	193	190	185	184	178	176	180	188	191	195	204	205	205	203	197	196	196	193	194		
9	182	182	184	183	186	183	189	185	180	174	174	164	165	173	179	188	202	213	215	212	207	186	184	186	187		
10	185	185	185	184	184	187	186	186	186	180	172	166	160	171	179	191	197	197	193	193	190	189	189	187	184		
11	186	186	186	187	187	190	189	189	186	180	178	178	171	179	182	181	183	189	191	191	188	184	181	181	184		
12	180	180	178	177	174	172	167	170	157	158	153	153	160	171	188	201	206	206	206	203	197	193	187	181			
13**	187	186	186	181	174	177	183	185	182	173	168	169	164	162	180	182	194	210	225	233	88	68	103	172			
14**	87	135	163	164	153	151	161	177	194	202	208	208	213	230	230	223	247	252	249	240	224	216	169	81	191		
15**	—	—	—	—	—	—	—	—	—	—	—	219	228	230	234	238	241	254	253	253	247	236	215	207	—		
16**	200	208	188	156	91	69	10	—1	15	72	151	200	234	253	262	258	255	261	263	254	254	253	253	250	184		
17	224	233	227	217	220	232	235	238	237	234	234	236	236	242	251	254	256	263	259	258	255	255	251	245	241		
18	245	247	247	244	246	249	249	248	248	242	236	239	244	257	263	266	268	268	275	274	267	258	257	257	254		
19	257	253	253	256	255	252	252	248	244	241	241	243	243	253	259	262	262	264	261	264	264	249	213	180	253		
20**	201	229	238	206	225	237	234	247	249	242	236	239	241	248	254	256	256	256	265	285	278	270	257	245	246		
21	228	231	237	221	227	232	245	245	245	244	231	225	233	249	256	258	268	274	278	273	263	257	253	253	247		
22	253	255	255	255	254	254	251	246	240	234	231	224	233	242	249	251	254	261	266	260	256	255	252	248	249		
23	251	231	228	236	239	243	242	242	231	225	225	222	227	236	243	249	252	255	255	252	251	251	247	244	241		
24	240	240	240	243	245	245	249	245	238	225	222	225	227	234	240	246	249	252	248	245	245	240	240	244	240		
25*	239	239	243	242	242	245	244	237	237	230	227	227	229	232	229	232	244	248	248	244	243	240	240	240	238		
26	239	239	239	239	241	245	241	238	230	227	211	217	220	223	229	236	238	238	238	235	234	234	234	234	233		
27	233	233	233	236	239	242	242	245	234	224	224	231	233	237	243	245	245	249	248	248	244	243	240	240	239		
28	236	236	239	241	241	238	238	237	237	234	234	237	236	236	239	246	248	255	255	258	257	254	251	247	243		
29	246	246	246	243	242	245	249	252	248	244	241	238	240	250	253	256	260	259	262	262	259	259	254	251	250		
30*	251	251	251	250	253	253	257	252	256	252	243	239	245	248	251	251	258	258	257	254	250	247	247	244	251		
31	243	243	243	243	246	243	242	242	242	239	232	225	221	231	238	244	246	250	250	250	249	245	245	242	241		
Mean	217	220	220	217	216	217	216	215	213	211	209	210	213	220	226	230	234	238	238	238	235	226	221	216	222		
Mean*	236	237	237	237	239	239	239	235	235	229	224	222	226	231	234	236	241	242	239	237	235	233	232	231	234		
Mean**	169	190	194	177	161	159	145	152	160	172	192	204	214	224	227	229	235	241	247	251	247	207	187	170	198		
43000 γ + Tabular Quantities (in γ).																											
June.																											Mean.
1	241	240	239	239	238	237	236	232	231	220	213	199	205	208	210	217	223	226	231	231	230	230	226	226	226		
2	225	225	225	221	221	220	220	222	219	212	211	215	217	223	223	233	233	235	235	232	227	224	223	223	224		
3	222	222	221	221	223	223	226	222	218	214	207	200	196	203	209	211	215	215	214	214	213	213	208	208	214		
4**	207	207	210	210	212	209	211	211	208	203	203	200	206	209	216	225	232	236	235	231	227	223	212	212	215		
5*	211	211	207	210	209	213	208	207	204	203	199	198	202	214	218	220	220	220	219	219	215	215	214	210	211		
6**	209	209	208	212	211	214	213	210	199	219	180	177	183	197	210	220	233	240	246	246	232	221	218	211	214		
7	210	210	210	209	209	205	204	204	200	196	(189)	182	185	183	201	207	212	210	213	210	213	208	205	202	203		
8**	201	201	201	198	206	206	210	210	204	202	188	185	199	194	200	208	211	213	214	214	209	201	195	187	202		
9	202	202	196	191	202	215	219	216	211	206	197	195	198	196	204	209	217	226	235	237	237	226	222	219	212		
10	217	206	187	196	207	215	223	229	232	224	211	211	214	217	220	225	228	230	234	231	231	229	226	226	220		
11	224	224	216	222	227	230	233	233	233	233	225	223	224	232	232	234	240	243	240	237	234	232	239	239	231		
12	230	230	233	233	233	235	233	233	230	227	222	222	226	226	236	245	247	247	251	251	246	243	240	237	236		
13	238	238	241	244	244	245	242	239	231	229	226	226	230	232	230	235	249	251	251	251	250	247	244	241	240		
14**	241	239	241	239	242	245	242	240	240	237	234	232	235	243	246	249	260	268	262	260	258	255	255	247	246		
15*	244	244	247	250	251	254	254	254	254	243	235	232	268	274	279	282	285	290	258	258	256	256	253	257	257		
16	254	254	254	254	257	257	252	249	252	252	239	240	242	248	253	261	259	261	259	256	256	253	256	253	253		
17	254	254	254	254	251	246	243	243	249	246	243	241	247	255	266	269	274	271	266	262	259	259	259	259	256		
18*	259	256	256	259	260	263	260	260	254	246	249	252	253	261	258	261	264	261	262	262	262	259	259	259	258		
19*	259	262	262	262	263	263	260	260	260	255	249	244	245	253	256	256	258	258	261	261	261	261	261	261	258		
20	259	257	254	257	262	265	265	265	259	254	254	249	250														

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

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h		
July.	43000 γ + Tabular Quantities (in γ).																								Mean.		
1	266	266	266	269	271	271	271	271	269	261	263	263	262	262	265	268	270	276	276	273	273	268	268	265	268	268	
2*	265	265	268	268	273	276	276	276	270	265	260	254	246	242	253	261	267	272	272	269	269	269	267	267	267	265	265
3	267	267	267	264	264	261	256	261	261	261	253	242	245	250	255	258	266	268	271	274	271	271	268	266	263	262	
4	262	262	254	254	262	265	267	270	270	259	259	254	253	256	264	266	272	272	272	269	266	266	266	264	261	263	
5	261	256	253	258	261	261	264	264	258	248	242	245	241	247	257	263	263	268	265	263	260	260	257	257	257	257	
6	257	257	257	260	263	263	263	263	260	255	249	244	246	251	254	254	259	262	259	254	256	254	248	248	256	256	
7**	250	250	247	250	253	253	253	250	250	247	242	236	244	243	254	268	279	284	276	271	265	252	251	251	254	256	
8**	251	251	251	253	256	256	256	256	256	248	243	240	236	244	250	252	260	269	263	260	258	252	250	247	252	252	
9**	235	238	243	246	235	232	241	241	241	235	241	241	226	229	240	253	264	261	267	267	258	253	248	242	245	245	
10	242	245	245	245	248	248	245	245	242	240	234	231	230	230	236	239	241	244	252	249	244	244	241	239	242	242	
11*	238	238	238	240	243	246	246	233	240	232	229	221	223	231	237	234	239	245	242	239	239	237	237	234	237	237	
12	231	234	234	234	237	239	239	239	237	234	228	226	225	230	230	236	244	252	252	244	238	236	236	233	233	236	
13	229	229	232	232	235	235	232	232	235	235	232	229	223	225	231	239	247	252	255	252	250	247	242	236	237	237	
14	230	230	224	224	227	233	235	227	233	227	227	222	218	221	229	234	237	240	240	237	237	234	234	229	230	230	
15**	222	222	209	211	220	220	222	225	231	231	228	221	224	224	221	221	227	230	232	235	232	232	230	230	225	225	
16**	226	223	212	201	212	215	218	218	223	215	201	204	214	222	222	228	230	236	236	241	238	230	222	222	221	221	
17	221	224	224	224	224	224	224	221	218	210	196	194	198	212	220	220	220	226	226	226	228	228	226	223	219	219	
18*	222	222	222	222	225	225	225	227	225	219	214	211	210	215	221	229	229	232	226	221	221	218	218	218	222	222	
19	217	217	217	217	220	223	223	223	214	212	209	203	202	211	219	224	222	222	222	222	219	216	213	213	217	217	
20	213	213	213	213	216	219	219	219	216	213	211	208	210	207	210	223	226	223	221	215	215	215	212	212	215	215	
21*	212	212	212	215	218	221	218	215	218	210	204	196	198	206	214	217	217	214	209	209	209	209	209	209	212	212	
22	209	211	209	203	209	209	211	209	211	211	209	203	208	213	216	219	224	224	221	216	216	213	213	213	213	213	
23	208	197	202	208	210	210	213	210	210	210	208	205	209	212	215	220	226	226	220	218	215	215	215	215	213	213	
24	212	212	207	198	201	204	204	201	201	201	201	204	204	206	211	214	208	211	217	217	214	214	211	211	208	208	
25*	211	211	208	208	214	217	219	219	222	217	211	195	194	199	202	207	213	213	210	210	210	207	207	207	210	210	
26	205	205	205	207	210	213	210	210	207	202	199	199	195	198	206	215	223	225	220	212	212	206	204	204	208	208	
27	204	201	204	204	209	209	206	206	206	198	190	187	190	198	201	204	209	212	215	212	206	206	206	204	204	204	
28	206	204	201	204	206	212	209	209	209	198	190	187	187	193	198	206	212	212	215	217	212	206	206	206	205	205	
29	206	206	206	206	209	212	209	206	206	204	198	190	199	207	218	218	218	221	221	218	216	213	210	199	209	209	
30	194	196	202	207	207	210	210	213	210	210	205	202	199	199	205	210	210	210	216	218	216	216	210	207	208	208	
31	207	207	207	210	213	213	216	218	218	218	213	207	208	214	214	214	214	214	217	217	217	217	217	214	214	214	
Mean	228	228	227	228	231	232	232	231	231	226	222	218	218	223	228	233	237	240	239	237	235	233	231	229	230	230	
Mean*	230	230	230	231	235	237	237	233	234	228	222	214	213	221	227	231	234	236	232	230	230	228	228	227	229	229	
Mean**	237	237	232	232	235	235	238	237	239	235	232	230	228	232	237	244	252	256	255	255	250	246	241	239	240	240	
August.	43000 γ + Tabular Quantities (in γ).																								Mean.		
1*	211	211	211	211	214	217	214	217	214	214	211	203	200	203	203	208	214	211	211	208	211	211	211	211	210	210	
2	208	211	208	208	211	214	214	217	211	208	203	197	195	197	200	206	208	208	208	208	211	214	211	211	208	208	
3**	206	200	206	206	200	200	206	208	211	211	208	211	220	231	236	236	236	236	231	226	223	220	218	220	218	216	
4	218	218	218	220	223	226	226	226	223	218	212	212	212	212	215	226	228	226	226	228	228	223	220	220	221	221	
5**	209	204	201	201	209	209	209	212	215	212	207	204	213	219	227	232	232	235	235	232	213	224	221	216	216	216	
6**	208	210	208	202	210	213	219	219	216	210	210	208	209	204	225	236	238	233	228	225	222	220	217	217	217	217	
7	217	211	211	211	214	217	217	217	214	214	211	211	212	218	223	226	229	229	229	226	223	221	218	218	218	218	
8	218	218	218	218	207	210	215	221	218	212	212	210	211	208	222	232	235	232	227	222	219	219	219	213	218	218	
9*	214	214	217	220	220	222	223	225	220	214	206	206	207	215	224	226	229	232	229	229	229	226	224	218	220	220	
10	215	215	215	215	221	221	221	224	221	221	213	210	208	214	219	227	225	225	222	222	222	222	222	219	219	219	
11	216	216	216	216	216	216	216	219	219	208	205	203	206	212	220	218	231	236	239	231	231	228	231	228	220	220	
12	201	201	212	217	223	223	223	223	223	217	212	209	213	213	216	221	227	229	229	227	224	227	224	224	219	219	
13	221	221	221	224	227	227	227	227	224	221	218	216	217	221	228	233	236	236	233	230	230	228	228	222	226	226	
14	219	219	219	222	219	225	225	228	228	222	222	217	218	223	226	229	231	226	226	223	227	229	227	226	224	224	
15	220	215	218	223	223	226	226	223	220	218	209	207	210	213	219	224	232	248	259	254	246	240	235	224	226	226	
16	213	216	219	224	230	232	232	230	237	216	210	210	214	222	233	233	241	247	249	247	239	236	231	231	224	224	
17	231	231	231	231	233	233	238	238	233	222	217	220	220	228	236	241	247	249	244	239	233	231	228	233	233	233	
18	228	231	231	231	228	228	231	228	222	220	217	222	232	237	248	250	248	242	237	234	232	229	229	232	232	232	
19	229	226	226	226	232	232	232																				

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.
September.																										
43000 γ + Tabular Quantities (in γ).																										
1	221	221	221	221	221	226	226	226	223	218	212	210	215	221	223	226	226	223	221	221	221	221	223	221	221	
2**	221	215	204	201	185	174	188	201	204	212	223	221	226	248	245	267	275	264	261	256	240	232	232	232	232	226
3	232	232	232	234	234	237	234	232	226	215	212	215	218	226	232	240	237	234	229	226	229	226	229	212	218	224
4	226	226	226	229	207	210	212	210	210	210	212	215	223	232	240	242	242	240	237	232	229	229	212	218	224	
5	221	221	223	223	226	226	229	229	223	221	221	218	221	229	237	240	240	240	237	234	231	226	223	223	228	
6	223	223	223	223	226	229	232	234	234	232	229	221	218	226	232	237	240	237	237	234	234	234	232	226	230	
7	226	226	226	229	232	232	234	234	229	221	218	215	215	221	226	232	237	237	234	232	223	221	221	221	227	
8**	215	207	207	223	226	229	232	232	232	226	223	223	221	221	223	223	234	248	245	237	234	232	234	232	227	
9	229	226	223	221	223	226	226	226	221	221	218	215	215	221	223	226	226	226	226	226	229	226	223	221	223	
10	223	223	223	221	221	221	223	223	221	215	212	215	218	221	223	229	229	226	226	226	226	226	223	223	222	
11*	221	218	221	221	221	223	223	221	218	210	210	212	215	218	221	223	226	223	226	226	226	226	226	226	221	221
12*	223	223	223	223	223	226	226	226	223	215	204	201	204	215	218	221	223	226	226	226	226	226	226	223	221	221
13*	223	223	223	223	223	226	226	226	223	216	216	222	222	218	223	223	223	226	226	226	226	226	226	221	223	219
14	223	223	223	223	226	226	226	226	223	218	207	199	201	207	212	218	223	221	223	223	223	223	221	223	219	
15	218	218	218	212	212	215	221	223	221	215	210	210	215	223	223	226	229	229	226	223	223	223	223	223	220	
16	221	218	221	223	223	226	226	223	221	221	218	215	215	218	221	226	229	226	223	223	221	223	221	223	222	
17	223	221	221	223	223	223	226	226	226	218	212	210	212	218	223	229	229	226	226	229	229	226	226	226	223	
18	226	226	226	226	226	229	229	229	223	218	212	212	212	214	221	229	234	232	229	229	232	234	232	229	225	
19	226	221	226	226	226	226	226	226	223	226	218	215	210	207	210	221	232	237	240	234	232	232	229	229	225	
20	226	226	226	229	229	232	229	226	223	218	215	210	210	218	223	232	234	232	229	229	226	229	226	226	225	
21	226	223	218	221	221	223	226	226	226	223	215	215	218	221	229	234	234	237	237	234	234	232	229	212	226	
22	215	221	223	223	226	229	229	229	229	223	221	215	204	207	218	223	226	226	226	226	223	223	223	221	222	
23**	221	221	210	207	201	196	207	212	221	215	212	210	207	210	218	229	232	229	229	226	226	226	223	223	217	
24*	223	221	223	223	223	226	226	226	221	218	218	215	215	215	218	223	226	223	223	223	223	221	221	221	221	
25*	218	218	218	218	218	218	221	221	223	218	212	210	207	207	210	215	218	218	218	218	218	218	218	218	217	
26	215	215	215	215	218	218	221	223	218	210	207	204	204	207	210	215	215	218	221	218	218	218	215	212	215	
27	212	212	212	212	215	215	218	218	215	210	207	204	207	207	210	215	218	218	218	218	218	218	215	212	214	
28**	212	212	212	212	212	212	212	215	215	212	207	201	201	204	210	218	221	223	232	242	240	229	221	215	216	
29**	221	201	174	188	190	207	215	218	221	221	210	207	210	215	223	234	240	234	229	229	226	226	226	223	216	
30	226	223	221	221	223	223	223	223	223	223	221	218	218	223	226	229	232	229	232	232	229	226	223	218	224	
Mean	222	220	219	220	219	221	223	224	222	218	214	212	213	218	222	228	231	230	230	229	228	226	224	223	222	
Mean*	222	221	222	222	222	223	224	224	222	215	212	212	213	215	218	221	223	223	224	224	224	224	223	222	221	
Mean**	218	211	201	206	203	204	211	216	219	217	215	212	213	220	224	234	240	240	239	238	233	229	227	225	220	
October.																										
43000 γ + Tabular Quantities (in γ).																										
1	215	215	204	204	210	212	218	221	223	223	218	218	221	223	229	232	234	229	226	226	226	226	223	223	220	
2	221	221	221	223	223	223	223	226	223	221	218	215	218	223	226	229	229	226	226	223	226	229	226	223	223	
3*	221	221	221	223	223	223	223	223	223	221	218	215	221	223	223	226	223	223	223	221	223	221	218	222	222	
4	215	215	218	218	218	221	221	221	221	215	207	207	204	204	210	218	221	223	237	240	234	226	223	221	218	
5	218	218	212	212	215	215	221	221	221	215	207	207	204	204	210	218	221	223	237	240	234	226	223	221	218	
6	215	210	199	196	204	210	215	218	221	215	204	204	204	212	215	218	221	221	218	218	221	212	210	212	212	
7**	210	210	212	212	212	212	215	218	215	210	204	201	199	199	201	207	210	212	212	218	221	215	212	201	210	
8**	193	179	182	171	171	182	190	201	207	215	229	250	240	229	229	232	232	245	248	240	232	204	182	213	213	
9	196	207	210	188	188	199	207	212	218	218	215	212	215	215	218	221	221	218	218	218	215	215	215	215	212	
10	210	207	207	204	207	207	210	212	210	207	210	207	204	207	212	218	218	221	221	218	218	215	215	215	212	
11**	212	210	210	207	210	210	210	207	204	204	204	201	201	207	215	226	253	258	260	242	234	229	215	196	218	
12**	193	188	182	196	201	210	212	215	212	212	207	207	207	210	212	218	221	223	218	218	215	212	212	210	209	
13	210	210	210	210	210	210	215	218	218	218	212	210	210	212	212	218	215	215	215	212	212	212	212	212	213	
14	207	207	207	207	207	210	212	212	212	210	204	201	201	201	207	215	218	215	215	215	215	215	215	215	210	
15	199	204	204	204	207	210	212	212	210	207	201	201	201	207	218	223	221	218	218	215	215	215	215	215	211	
16*	215	215	212	212	212	212	212	212	210	207	204	207	210	215	218	215	215	215	215	215	215	215	215	212	213	
17*	212	212	215	215	215	215	218	218	215	215	207	199	201	207	212	218	215	215	215	218	221	218	218	215	214	
18*	215	218	215	215	215	215	218	218	218	212	207	201	207	212	212	218	215	215	215	212	215	215	215	218	214	
19*	218	218	215	210	212	212	215	215	215	215	212	210	210	212	215	221	221	218	218	218	215	215	215	215	215	
20	215	212	215	215	215	215	215	215	212	210	207	207	210	212	215	215	212	212	215	215	218	221	215	210	213	
21**	212	207	210	212	212	212	212	210	212	210	212	212	210	215	223	240	234	240	242	242	218	223	221	218	219	
22																										

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

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h		
November.																											
43000 γ + Tabular Quantities (in γ).																											
																											Mean.
1	244	242	232	225	229	231	232	234	236	232	231	232	236	221	244	244	240	238	236	234	232	232	231	231	231	234	
2*	228	228	228	226	226	228	228	228	220	226	224	222	225	229	232	230	230	232	229	229	227	225	225	223	225	223	227
3*	223	223	223	223	223	225	225	225	227	225	221	219	221	223	227	227	227	225	225	225	223	225	221	219	219	224	
4*	219	219	219	219	219	219	221	223	223	221	217	217	214	219	221	223	221	221	219	217	215	214	214	214	214	219	
5	212	210	210	210	212	212	215	217	217	217	210	206	207	211	214	216	214	214	214	214	214	216	218	202	193	212	
6**	188	192	198	198	198	202	202	204	204	202	202	204	209	216	224	237	228	226	222	222	222	224	220	218	211		
7	195	205	202	205	207	209	213	211	211	209	205	204	201	204	208	213	215	217	219	221	219	214	204	208	209		
8	208	199	197	203	206	208	210	213	210	208	203	204	(212)	(216)	221	223	221	221	219	217	217	217	215	215	212		
9	213	213	213	210	212	213	215	217	219	219	215	215	216	218	222	222	222	222	224	224	224	226	224	218	218		
10	216	216	216	216	218	218	222	220	222	222	218	222	223	230	240	246	238	234	234	232	234	234	232	232	232	226	
11	228	226	226	228	228	232	232	234	234	232	230	231	232	236	240	238	236	234	234	234	236	236	236	236	233		
12	230	226	230	232	232	234	236	237	234	230	226	228	233	237	241	241	239	239	239	239	239	241	241	241	235		
13	241	241	239	239	239	239	237	239	239	237	233	235	239	243	249	249	251	251	249	247	247	251	251	247	243		
14	228	232	238	242	246	250	252	254	254	254	254	256	255	259	261	261	261	259	259	257	254	254	254	254	252		
15	254	254	254	254	255	255	257	261	261	261	259	261	264	270	273	269	267	265	266	264	265	270	268	262	262		
16**	258	256	254	251	251	249	246	248	246	241	238	238	239	252	249	244	242	239	243	253	231	217	218	218	243		
17**	197	168	180	188	196	197	194	194	193	190	—	—	—	—	228	224	216	213	207	206	200	192	188	184	—		
18**	182	179	180	185	186	184	185	185	184	186	185	187	193	195	200	207	202	200	200	197	197	193	186	188	190		
19	193	193	190	192	195	195	197	195	195	193	193	195	202	205	209	212	214	207	205	202	200	200	200	199	204		
20	201	198	201	201	201	198	201	201	201	203	198	201	204	207	209	209	211	209	209	209	207	207	207	204	204		
21	205	203	200	203	203	208	208	208	208	208	205	205	211	213	216	218	223	223	218	218	213	211	211	209	210		
22	204	204	206	206	206	209	211	213	211	206	204	204	205	210	212	212	214	214	217	219	214	212	210	210	210		
23**	211	208	208	208	208	208	208	208	206	203	201	203	207	212	214	214	216	219	221	219	220	225	222	217	212		
24	208	205	205	208	211	214	214	214	214	214	211	214	215	215	215	217	219	217	217	217	217	215	215	215	214		
25	213	211	211	211	211	216	216	216	216	213	213	216	217	217	219	221	221	221	224	224	224	224	224	221	218		
26	222	222	220	222	222	222	225	227	230	230	227	230	231	243	247	249	251	251	251	251	253	253	253	253	237		
27*	254	254	254	252	250	250	248	248	248	248	248	250	251	253	251	249	249	249	247	249	249	249	249	247	250		
28	248	246	238	238	238	238	238	238	238	240	(241)	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
29*	—	—	—	—	—	—	—	—	—	—	—	193	200	204	207	207	209	207	207	207	207	207	207	207	—		
30	204	204	204	204	204	207	207	207	204	—	198	198	201	203	208	208	205	205	205	205	205	205	205	205	204		
Mean	219	218	218	218	219	220	222	222	222	221	218	218	220	224	228	229	228	227	227	227	225	225	223	222	223		
Mean*	231	231	231	230	230	231	231	231	230	230	228	227	228	231	233	232	232	232	232	230	230	229	228	227	226	230	
Mean**	210	209	210	210	211	211	210	211	210	208	207	208	212	219	223	226	222	221	222	223	218	215	212	210	214		
December.																											
43000 γ + Tabular Quantities (in γ).																											
																											Mean.
1	206	204	204	202	202	202	204	202	202	201	197	200	203	205	207	207	207	207	205	205	203	203	201	201	203		
2	199	199	199	197	199	199	199	197	195	193	195	195	198	203	203	205	205	205	205	205	205	205	203	200	200		
3	199	190	190	192	197	197	199	199	199	195	192	195	200	205	207	207	207	205	205	205	205	202	202	200	200		
4	199	199	199	199	199	199	199	197	197	197	194	198	200	207	207	207	207	207	207	204	204	202	200	195	201		
5	196	196	199	199	199	201	203	201	201	199	196	194	197	202	204	206	206	204	204	204	202	202	200	200	201		
6*	198	198	198	198	198	201	203	203	203	201	198	198	202	202	204	204	204	204	204	206	204	202	202	199	201		
7*	200	198	198	200	200	200	203	203	203	203	200	200	201	206	208	208	206	206	204	204	204	201	201	199	202		
8	200	198	198	200	200	200	200	200	200	198	198	200	203	206	210	210	212	210	210	208	210	210	208	206	204		
9	204	202	202	200	200	202	202	202	198	198	200	200	201	203	205	205	205	205	205	205	205	205	203	203	203		
10	204	200	200	200	200	202	202	202	200	198	195	198	203	205	205	207	205	205	203	203	203	205	205	205	202		
11	204	202	200	200	200	197	197	195	189	189	191	193	196	194	194	196	196	196	196	205	203	201	201	198	197		
12**	197	197	195	195	189	174	178	182	186	189	191	195	200	205	207	207	207	207	209	211	207	196	197	196	197		
13**	186	182	188	188	191	193	193	195	195	193	197	195	202	216	216	213	216	216	211	205	192	194	196	200	200		
14	195	193	193	195	195	197	199	199	199	201	201	201	202	202	207	207	207	207	207	204	207	202	202	202	201		
15	203	199	192	197	199	199	201	201	199	197	197	197	200	202	204	204	206	202	200	200	198	198	200	200	204		
16**	197	186	186	186	186	188	192	192	192	192	194	197	200	206	217	226	233	228	228	224	213	208	206	200	203		
17	196	192	194	194	192	190	192	192	192	192	194	196	202	206	206	210	208	206	208	206	204	200	200	197	199		
18	186	192	194	196	196	198	196	196	196	194	192	192	195	197	197	202	202	202	202	202	199	197	197	195	196		
19*	196	196	196	194	196	198	198	198	196	196	194	194	193	197	201	204	201	204	201	201	204	199	197	197	198		
20*	196	196	196	196	196	198	198	198	198	198	198	196	195	195	199	201	201	201	201	199	197	197	195	195	198		
21*	196	194	194	194	196	196																					

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

1921.													
Greenwich Civil Time Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	1.1	0.0	1.5	2.4	2.8	3.8	2.9	2.9	1.5	0.8	0.8	1.1	0.98
1h.	1.3	0.1	1.7	2.9	2.6	3.5	2.9	2.3	1.6	1.0	1.2	1.9	1.09
2	1.6	0.6	2.2	2.2	2.5	3.1	2.9	2.1	0.8	1.4	1.8	2.2	1.13
3	1.6	0.6	1.9	2.2	2.3	2.5	2.5	2.3	0.8	1.9	2.0	2.7	1.12
4	1.8	0.5	2.1	2.2	1.2	1.4	1.7	1.4	1.2	1.7	2.1	2.9	0.86
5	1.6	0.6	1.9	2.4	1.0	0.6	0.2	0.5	0.7	1.9	2.3	2.7	0.55
6	1.5	0.7	1.8	1.3	0.4	0.3	0.0	0.0	0.5	1.9	2.4	2.8	0.31
7	1.7	0.7	0.9	0.1	0.0	0.0	0.1	0.1	0.0	1.3	2.1	2.8	0.00
8	2.1	0.6	0.0	0.0	0.3	0.1	0.1	1.1	0.2	0.8	1.8	2.7	0.00
9	2.8	0.6	0.1	1.4	1.9	1.5	1.6	3.3	1.7	1.3	1.8	2.6	0.90
10	3.8	1.4	0.2	3.7	4.5	3.8	3.8	5.7	4.0	3.0	2.9	3.3	2.52
11	4.6	3.2	4.9	7.5	7.3	6.4	7.0	8.3	6.9	5.7	4.5	4.5	5.08
Noon	5.4	4.5	7.4	10.2	9.2	8.4	9.3	9.7	8.6	7.4	5.7	4.7	6.72
13h.	5.1	5.0	8.2	11.1	9.9	9.6	10.5	10.0	8.7	7.2	5.7	4.7	7.16
14	4.3	4.2	7.8	10.3	9.6	9.7	10.1	9.0	7.7	6.6	5.0	4.4	6.57
15	3.6	3.5	6.5	8.9	8.5	8.7	8.8	7.1	5.8	5.2	4.0	3.9	5.38
16	3.3	2.6	5.0	7.1	7.3	7.7	7.5	5.6	4.8	4.1	3.6	3.2	4.33
17	2.9	2.2	4.0	5.3	6.4	6.7	6.1	4.4	3.8	3.4	3.3	3.0	3.47
18	2.0	1.2	3.4	4.0	5.4	5.6	5.2	3.1	3.2	2.5	2.1	2.0	2.49
19	1.4	0.8	2.6	3.3	4.6	5.0	4.6	3.1	2.2	1.3	1.5	1.5	1.84
20	0.7	0.7	1.3	3.3	3.8	4.6	4.2	3.3	1.7	0.1	1.2	1.0	1.34
21	0.5	0.2	1.2	2.8	3.2	4.3	3.5	2.9	1.6	0.0	0.1	0.9	0.95
22	0.0	0.0	1.0	2.3	2.9	4.2	3.3	2.7	1.4	0.3	0.0	0.0	0.69
23	0.4	0.2	0.9	2.5	2.9	3.6	2.9	3.0	0.9	0.7	0.2	0.6	0.75
Means	2.30	1.45	2.85	4.13	4.19	4.38	4.24	3.91	2.93	2.56	2.42	2.59	2.34

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

1921.												
Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d.												
1	7.0	9.8	14.0	8.7	10.0	9.5	14.0	8.5	9.5	10.0	10.2	8.8
2	3.7	10.8	7.3	11.4	9.3	10.2	10.3	9.0	19.0	7.7	6.0	6.7
3	6.0	4.0	6.3	14.8	13.7	9.0	12.8	15.0	7.7	8.3	5.5	4.2
4	5.8	3.7	7.8	10.3	16.7	13.4	13.3	12.0	10.2	10.0	6.3	4.0
5	5.5	10.5	7.5	10.3	11.0	9.2	10.8	12.8	12.6	14.3	21.0	2.8
6	5.2	8.8	7.0	10.0	11.0	14.0	13.6	9.3	11.7	12.0	18.0	3.0
7	7.0	6.0	8.2	10.3	10.3	11.5	15.1	10.5	13.0	11.8	7.5	2.8
8	4.0	5.8	7.8	13.5	12.0	15.6	11.0	11.5	20.5	18.0	11.7	5.2
9	10.7	3.3	17.8	13.1	16.7	14.7	9.0	8.5	11.6	8.6	11.8	3.7
10	14.0	6.3	10.7	14.5	13.8	10.2	9.0	8.2	10.5	6.0	10.3	8.5
11	4.7	5.5	9.2	14.5	10.0	8.3	8.5	16.5	8.3	19.2	5.4	4.0
12	6.0	3.6	9.7	14.5	19.5	8.3	10.9	11.3	7.3	17.3	5.2	9.9
13	4.6	10.0	9.5	13.5	19.0	9.4	12.8	11.2	8.0	6.3	7.8	11.8
14	4.2	9.8	15.7	16.5	16.0	9.8	12.1	10.5	10.8	9.2	11.0	6.3
15	11.5	9.5	14.3	17.0	—	8.5	13.1	13.7	14.2	10.0	6.7	4.3
16	7.8	4.5	7.0	15.8	23.3	9.7	12.3	11.7	9.5	8.4	24.3	14.2
17	11.8	12.2	7.0	11.8	11.8	10.3	10.0	10.0	8.5	7.3	—	11.8
18	6.3	5.5	6.8	11.3	12.0	11.2	12.8	11.7	9.5	8.8	13.0	6.7
19	5.7	9.3	7.8	—	16.5	10.2	12.0	10.7	9.0	7.2	5.5	4.0
20	15.5	4.6	7.0	—	28.5	12.8	12.5	11.0	12.5	7.8	3.3	3.0
21	5.2	10.0	17.8	14.5	15.4	9.5	12.4	13.8	11.0	14.7	6.3	3.0
22	4.0	7.0	11.3	19.8	10.3	10.2	12.0	10.7	7.7	7.7	5.0	9.7
23	4.6	5.0	8.0	15.4	10.0	16.8	10.3	12.0	12.5	7.5	12.0	9.7
24	7.6	6.0	17.4	12.5	8.8	9.8	9.6	10.8	8.5	8.5	6.3	6.7
25	6.0	9.2	19.0	11.5	11.0	8.4	8.9	12.0	7.8	6.6	5.3	4.3
26	6.2	6.5	12.6	9.2	11.4	12.0	10.8	12.3	8.0	8.0	2.2	12.4
27	4.0	7.5	12.5	10.7	9.2	10.2	13.4	10.8	8.6	14.8	4.5	7.0
28	5.6	8.8	10.2	8.5	8.3	8.0	9.8	8.3	18.5	13.0	6.0	17.2
29	5.6	—	15.0	17.2	9.2	11.7	12.8	7.2	19.3	11.8	3.0	8.0
30	7.7	—	8.6	10.0	8.5	9.7	11.8	19.0	6.0	5.8	6.0	7.3
31	7.8	—	10.0	—	10.0	—	10.0	12.3	—	11.4	—	2.6
Means	6.8	7.3	10.7	12.9	13.1	10.7	11.5	11.4	11.1	10.3	8.5	6.9

The mean of the twelve monthly values is 10.10.

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 2, 8, 13, 14, 22. April 4, 5, 7, 26, 27. July 2, 11, 18, 21, 25. October 3, 16, 17, 18, 19.
 February 8, 9, 12, 16, 23. May 5, 6, 7, 25, 30. August 1, 9, 23, 25, 29. November 2, 3, 4, 27, 29.
 March 5, 8, 17, 19, 20. June 5, 15, 18, 19, 25. September 11, 12, 13, 24, 25. December 6, 7, 19, 20, 21.

1921.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	0.6	0.2	1.7	3.5	4.1	3.2	3.0	2.9	2.2	2.2	0.7	0.1	1.80
1h.	0.8	0.5	1.9	3.8	4.0	2.4	3.5	3.0	2.2	1.7	0.5	0.7	1.85
2	1.0	0.6	2.0	3.4	4.0	2.5	3.8	2.8	2.2	1.7	0.7	0.9	1.90
3	0.6	0.5	1.6	3.6	3.3	1.9	3.1	2.9	0.0	1.6	0.9	1.0	1.52
4	1.1	0.3	1.9	3.1	2.2	1.4	1.8	2.2	1.9	1.7	0.8	1.1	1.40
5	0.5	0.3	1.7	4.2	1.3	0.4	0.1	1.1	1.9	1.7	0.6	1.0	1.00
6	0.6	0.2	1.5	2.3	0.7	0.2	0.3	0.4	1.5	1.5	0.6	0.9	0.66
7	0.7	0.2	1.0	0.7	0.0	0.0	0.1	0.0	0.4	0.7	0.4	0.7	0.18
8	0.8	0.0	0.0	0.0	0.1	0.4	0.0	0.7	0.1	0.0	0.0	0.7	0.00
9	1.5	0.0	0.1	0.6	1.7	1.7	1.6	2.8	0.8	0.6	0.2	0.6	0.79
10	2.6	0.9	1.5	2.8	4.7	3.3	3.8	4.9	2.7	2.4	1.3	1.0	2.43
11	2.8	2.4	4.3	6.0	7.7	6.7	6.9	7.4	5.5	5.3	3.0	2.0	4.77
Noon.	3.4	3.7	6.6	8.9	9.6	8.0	8.8	9.2	7.4	7.6	4.2	2.7	6.45
13h.	3.2	3.9	7.2	10.2	9.6	8.7	9.8	9.5	7.8	7.8	4.1	2.9	6.83
14	2.5	3.1	6.2	9.5	8.6	8.8	9.4	8.4	7.0	6.8	3.3	2.3	6.10
15	2.1	2.2	4.9	8.3	7.1	7.9	8.1	6.8	6.0	5.3	2.5	1.6	5.00
16	1.7	1.7	3.3	6.9	6.2	6.7	7.1	5.5	4.9	4.2	2.1	1.7	4.10
17	1.5	1.4	3.1	5.7	5.6	5.4	6.0	4.8	4.2	4.0	1.8	1.4	3.51
18	1.3	0.8	3.2	5.0	5.3	4.6	5.4	4.5	3.8	3.5	1.5	1.2	3.11
19	0.0	0.6	2.8	4.7	5.0	4.1	5.4	4.7	3.5	3.0	1.3	0.8	2.76
20	0.3	0.3	2.7	4.3	4.8	4.1	5.0	4.5	3.2	1.7	0.5	0.6	2.43
21	0.2	0.2	2.6	4.0	4.7	3.9	4.4	4.5	2.9	1.5	0.1	0.0	2.18
22	0.3	0.3	2.2	4.2	4.3	3.8	4.2	4.2	2.4	1.4	0.2	0.1	2.07
23	0.2	0.2	1.8	3.9	4.1	3.6	4.2	3.8	2.1	1.8	0.3	0.1	1.95
Means	1.26	1.02	2.74	4.57	4.53	3.90	4.41	4.23	3.19	2.90	1.32	1.09	5.40

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

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on 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 1, 10, 17, 24, 31. April 12, 13, 18, 29. July 7, 8, 9, 15, 16. October 7, 8, 11, 12, 21.
 February 2, 5, 13, 19, 28. May 13, 14, 16, 20. August 3, 5, 6, 26, 30. November 6, 16, 18, 23.
 March 15, 21, 22, 25, 27. June 4, 6, 8, 14, 23. September 2, 8, 23, 28, 29. December 12, 13, 16, 28, 29.

1921.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	1.0	2.0	2.0	2.3	0.0	6.0	1.6	1.4	5.9	0.8	6.0	3.8	0.71
1h.	1.3	2.1	2.6	2.7	0.6	5.5	2.2	1.3	5.0	2.5	6.2	4.6	1.03
2	1.8	1.6	2.7	1.8	1.0	5.1	2.5	1.7	0.0	2.7	7.0	5.1	0.73
3	2.3	2.3	2.9	1.8	1.5	3.9	1.6	1.2	1.9	5.3	8.8	5.9	1.26
4	2.5	2.1	4.0	2.5	0.1	2.8	1.7	1.1	6.7	4.9	9.5	7.4	1.76
5	3.0	1.9	3.8	2.7	2.6	0.0	0.8	0.1	4.7	7.0	11.0	5.6	1.58
6	2.4	2.2	3.7	0.1	2.8	1.5	0.0	0.0	6.3	7.5	12.1	6.1	1.71
7	2.8	2.3	1.9	0.0	3.3	1.4	1.1	0.8	6.2	6.6	10.8	6.3	1.61
8	3.5	2.2	1.4	0.1	4.7	2.3	0.3	1.4	6.5	6.1	10.1	6.6	1.75
9	4.1	2.6	1.9	2.4	5.1	4.7	1.7	4.9	8.5	6.0	8.8	5.4	2.66
10	5.6	3.1	4.8	4.1	5.2	7.6	3.9	6.8	10.3	7.3	9.9	6.4	4.23
11	6.3	5.4	8.6	7.8	6.5	10.3	6.8	9.5	13.3	9.3	11.3	8.4	6.61
Noon.	7.5	7.2	10.9	9.7	8.3	12.6	9.3	9.9	15.1	10.9	13.4	9.1	8.31
13h.	7.0	7.8	12.1	10.8	11.1	14.1	10.6	9.9	14.9	10.7	13.7	7.8	8.86
14	6.8	6.7	11.2	10.9	12.8	14.1	10.1	8.8	14.7	9.8	12.2	6.4	8.36
15	5.2	6.5	10.7	10.2	12.6	13.3	8.7	6.9	11.1	7.2	10.7	6.8	7.14
16	5.5	5.0	10.2	6.4	13.1	11.9	7.3	5.0	10.6	7.3	11.2	3.7	6.08
17	5.1	5.2	7.4	3.2	10.4	10.3	5.6	4.8	9.2	5.4	9.8	4.1	4.69
18	1.6	2.2	5.3	3.0	9.6	8.0	4.5	0.5	7.9	4.3	7.2	3.0	2.74
19	1.8	2.9	4.2	2.8	6.3	6.6	3.1	0.6	4.5	1.7	3.9	0.3	1.21
20	1.8	2.2	0.9	2.0	3.4	6.8	3.9	1.2	5.1	0.2	3.6	1.2	0.67
21	0.0	0.6	0.0	2.7	3.3	5.3	2.6	0.9	6.6	0.0	0.0	2.2	0.00
22	1.1	0.0	2.0	2.1	1.0	5.4	2.6	0.6	5.7	2.2	4.5	0.0	0.25
23	0.8	0.8	2.3	2.2	3.4	4.1	2.3	2.5	5.2	1.2	6.0	2.2	0.73
Means	3.37	3.20	4.90	3.93	5.36	6.82	3.95	3.41	7.75	5.29	8.66	4.93	6.22

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

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

1921.													
Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	12γ	15γ	28γ	39γ	33γ	28γ	32γ	35γ	29γ	27γ	19γ	10γ	25.0γ
1h.	12	13	26	40	31	27	31	33	30	26	19	12	24.4
2	13	13	26	39	29	27	31	32	30	25	19	11	24.0
3	14	15	27	37	29	27	31	30	30	28	20	12	24.4
4	17	16	29	37	31	28	33	31	30	28	20	15	25.7
5	21	17	32	36	32	27	34	32	31	28	22	20	27.1
6	22	19	32	39	26	25	29	28	27	28	23	18	25.7
7	20	19	31	34	19	20	20	18	22	25	22	16	21.6
8	15	15	26	25	11	13	14	10	12	20	18	13	15.4
9	8	9	14	14	7	5	5	1	4	10	12	9	7.6
10	4	3	6	5	3	1	0	0	0	2	5	5	2.2
11	2	0	2	1	0	0	0	1	0	0	0	1	0.0
Noon	0	0	0	0	0	1	1	8	2	3	1	0	0.7
13h.	0	2	4	3	6	4	3	12	7	7	3	3	3.9
14	3	3	9	11	12	6	11	14	10	11	7	4	7.8
15	4	3	13	20	22	15	19	20	15	13	10	5	12.7
16	4	4	16	26	28	22	26	25	19	15	14	6	16.6
17	6	6	18	33	34	29	30	30	22	18	17	8	20.3
18	6	8	20	35	39	33	34	35	26	18	18	8	22.7
19	9	9	23	38	41	33	36	37	30	20	19	10	24.8
20	10	10	27	39	37	32	35	36	31	23	18	11	25.2
21	13	13	28	38	37	30	37	36	32	27	19	11	26.2
22	13	14	29	39	34	28	36	34	33	27	21	13	26.2
23	12	15	31	37	36	28	33	33	31	27	18	11	25.4
Means	10.0	10.0	20.7	27.7	24.0	20.4	23.4	23.8	21.0	19.0	15.2	9.7	18.2

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.)

1921.													
Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
d.													
1	45γ	30γ	43γ	45γ	33γ	35γ	50γ	47γ	34γ	42γ	46γ	28γ	
2	20	52	31	35✓	30	53	30✓	43	100	33	30	28	
3	25	18	28	45	50	64	38	84	43	38	20	26	
4	43	24	28	40✓	62	63	56	53	68	30	35	23	
5	43	48	27✓	28✓	34	33	40✓	95	65	36	40	14	
6	30	47	30	42	33	32	58	53	38	33	51	15	
7	26	26	38	32✓	36	57	70	50	62	43	35	20	
8	28	23✓	15✓	65	65	95	76	55	55	163	37	38	
9	50	18✓	28	46	68	54	36	50	40	58	46	11	
10	43	16✓	32	55	62	57	48	42	40	32	70	22	
11	22	22	36	63	55	50	43✓	46	36	60	29	21	
12	32	20✓	34	55	90	37	44	50	37	40	24	98	
13	30	34	35	85	—	42	46	45	40	34	37	72	
14	17	30	45	—	—	43	36	50	30	30	36	20	
15	42	18	73	—	—	35	55	43	60	33	25	18	
16	15	19✓	62	70	—	40	55	55	47	26	75	66	
17	47	45	30	57	74	38	32	36	32	17	—	44	
18	21	25	24	54	83	33	34	45	40	30	72	26	
19	32	51	41	—	83	24	71	43	37	30	37	25	
20	46	13	25	—	115	37	43	53	45	37	26	14	
21	30	54	76	84	78	42	43✓	42	57	56	47	15	
22	19	28	100	72	60	58	50	42	40	33	25	36	
23	20	28✓	39	39	42	40	60	44	73	40	53	22	
24	60	32	34	50	45	33	47	47	40	40	30	40	
25	23	35	92	45	37	40	48✓	40	30	38	30	13	
26	40	37	90	51✓	46	50	58	54	50	41	30	30	
27	22	25	85	42✓	50	37	41	43	48	69	20	17	
28	32	46	33	50	40	38	40	25	52	64	28	103	
29	24	84	102	37	35	68	25	85	45	15	28	28	
30	23	54	31	37	39	56	57	36	31	16	22	22	
31	30	42	40	40	40	36	38	38	40	40	17	17	
Means	31.6	30.8	46.3	53.2	55.0	44.5	48.6	48.2	48.7	43.3	36.7	31.0	

The mean of the twelve monthly values is 43.2γ

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 selected 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 2, 8, 13, 14, 22. April 4, 5, 7, 26, 27. July 2, 11, 18, 21, 25. October 3, 16, 17, 18, 19.
 February 8, 9, 12, 16, 23. May 5, 6, 7, 25, 30. August 1, 9, 23, 25, 29. November 2, 3, 4, 27, 29.
 March 5, 8, 17, 19, 20. June 5, 15, 18, 19, 25. September 11, 12, 13, 24, 25. December 6, 7, 19, 20, 21.

1921.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	8γ	10γ	14γ	30γ	22γ	23γ	26γ	30γ	29γ	19γ	15γ	8γ	19.2γ
1h.	9	11	11	29	20	21	24	28	26	18	15	8	18.0
2	10	10	11	27	20	23	25	27	26	19	15	10	18.3
3	11	12	15	27	21	21	28	26	27	20	18	10	19.4
4	12	13	16	30	21	22	29	29	28	20	20	11	20.6
5	19	15	20	34	21	23	30	31	29	21	20	13	22.7
6	17	16	21	36	17	20	24	28	30	23	22	16	22.2
7	19	18	21	33	12	15	18	19	28	22	21	16	19.9
8	12	16	18	15	6	10	13	8	19	16	16	14	13.3
9	6	11	8	15	2	4	6	0	11	6	10	9	7.0
10	3	5	1	6	3	0	2	0	6	0	1	5	2.4
11	0	0	0	0	0	1	0	1	2	0	0	0	0.0
Noon	1	0	1	2	0	3	0	11	0	4	3	0	1.8
13h.	3	2	5	7	1	8	3	15	4	7	9	2	5.2
14	6	5	9	12	8	14	10	21	9	11	12	5	9.9
15	8	7	14	20	14	23	20	25	14	14	14	6	14.6
16	7	9	15	27	16	22	26	29	20	17	17	8	17.5
17	12	11	17	31	23	25	30	31	25	19	19	10	20.8
18	14	12	20	38	24	29	33	33	29	21	20	9	23.2
19	17	12	23	37	26	29	35	35	34	21	19	10	24.5
20	15	15	22	37	27	29	34	33	32	22	19	11	24.4
21	16	15	22	35	26	28	35	34	33	21	20	12	24.5
22	15	16	23	34	24	29	32	33	34	20	19	11	23.9
23	17	16	25	33	23	28	30	35	31	21	18	9	23.5
Means	10.6	10.6	14.7	24.8	15.6	18.8	21.4	23.4	21.9	15.9	15.1	8.9	16.5

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

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on 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 1, 10, 17, 24, 31. April 12, 13, 18, 29. July 7, 8, 9, 15, 16. October 7, 8, 11, 12, 21.
 February 2, 5, 13, 19, 28. May 20. August 3, 5, 6, 26, 30. November 6, 16, 18, 23.
 March 15, 21, 22, 25, 27. June 4, 6, 8, 14, 23. September 2, 8, 23, 28, 29. December 12, 13, 16, 28, 29.

1921.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	28γ	25γ	53γ	55γ	45γ	33γ	44γ	46γ	46γ	40γ	39γ	41γ	34.4γ
1h.	25	25	54	54	35	29	39	48	53	49	42	40	34.2
2	26	26	49	65	30	25	42	45	61	43	38	36	33.6
3	28	29	52	57	0	28	45	47	54	45	41	39	31.9
4	33	29	56	54	38	29	41	42	49	44	42	43	34.8
5	35	33	57	45	44	30	43	47	51	38	36	59	36.3
6	39	33	50	60	8	28	38	42	34	33	40	48	30.9
7	36	36	47	53	5	22	21	24	29	28	35	37	24.2
8	31	29	41	36	8	14	16	15	12	20	33	23	16.3
9	18	22	27	15	8	6	9	0	0	7	33	21	6.9
10	13	15	12	6	5	1	0	3	5	0	23	12	1.0
11	9	11	9	0	20	3	1	4	11	1	13	8	0.6
Noon	5	8	0	2	25	4	0	10	10	12	7	0	0.0
13h.	7	4	6	7	25	8	3	15	16	20	0	8	3.0
14	5	4	18	18	70	0	18	20	16	22	15	6	10.8
15	8	3	26	35	70	11	25	50	23	22	25	15	19.2
16	7	0	29	31	95	18	33	26	27	20	28	13	20.4
17	0	3	22	43	115	30	37	32	26	20	26	11	23.5
18	0	16	34	41	90	34	41	43	29	22	27	11	25.4
19	9	14	26	46	65	40	41	43	33	23	37	27	26.8
20	12	17	48	55	55	39	40	41	37	33	25	37	29.8
21	19	24	50	52	50	37	45	42	34	40	27	35	31.0
22	15	20	45	51	62	25	39	36	35	39	32	41	29.8
23	16	26	47	53	100	25	38	35	33	40	29	32	32.6
Means	19.3	22.6	35.8	38.9	44.5	21.6	29.1	31.5	30.2	27.6	28.9	26.8	22.4

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.)

1921.													
Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	1γ	4γ	11γ	14γ	8γ	14γ	10γ	7γ	10γ	3γ	1γ	4γ	6.7γ
1h.	1	3	11	10	11	15	10	6	8	2	0	1	5.9
2	0	3	10	8	11	13	9	7	7	1	0	1	5.2
3	0	2	9	8	8	13	10	8	8	0	0	0	4.9
4	0	3	9	9	7	15	13	11	7	2	1	1	5.9
5	1	4	11	12	8	17	14	13	9	3	2	1	7.3
6	2	5	12	12	7	17	14	15	11	6	4	2	8.3
7	2	5	13	14	6	16	13	13	12	7	4	2	8.3
8	1	5	13	11	4	16	13	10	10	6	4	2	7.3
9	2	4	9	7	2	10	8	6	6	4	3	1	4.6
10	2	2	5	2	0	4	4	2	2	1	0	1	1.5
11	1	0	0	0	1	0	0	0	0	4	0	1	0.0
Noon	3	2	1	2	4	0	0	2	1	3	2	4	1.4
13h.	5	4	5	10	11	8	5	5	6	5	6	7	5.8
14	6	7	9	19	17	13	10	12	10	9	10	10	10.4
15	6	10	14	27	21	18	15	17	16	14	11	11	14.4
16	7	7	17	30	25	21	19	21	19	15	10	11	16.2
17	8	11	17	32	29	26	22	21	18	15	9	11	17.7
18	8	11	16	31	29	26	21	21	18	16	9	11	17.5
19	9	11	16	28	29	25	19	18	17	16	9	11	16.7
20	7	11	17	26	26	22	17	16	16	14	7	10	15.2
21	5	9	15	23	17	19	15	14	14	12	7	7	12.5
22	3	8	14	20	12	17	13	13	12	9	5	7	10.5
23	1	6	14	16	7	12	11	11	11	6	4	5	8.1
Means	3.4	5.7	11.2	15.5	12.5	14.9	11.9	11.2	10.3	7.2	4.5	5.1	8.8

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.)

1921.												
Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
d.												
1	22γ	15γ	25γ	—	29γ	42γ	15γ	17γ	16γ	30γ	23γ	10γ
2	18	21	17	—	22	24	34	22	101	14	10	12
3	13	13	17	—	50	30	32	36	28	11	8	17
4	21	12	14	—	62	36	19	16	35	19	9	13
5	15	27	12	—	30	22	27	34	22	36	25	12
6	11	27	18	—	24	69	19	36	22	25	49	8
7	7	14	18	—	20	31	48	18	22	22	26	10
8	9	20	16	—	29	29	33	28	41	79	26	14
9	21	10	29	—	51	46	41	26	14	33	16	7
10	16	14	29	—	37	47	22	19	17	17	30	12
11	8	13	—	34	20	27	25	36	16	64	14	16
12	11	10	—	24	53	29	27	28	25	41	15	37
13	10	17	—	37	165	25	32	20	10	8	18	34
14	14	21	—	38	171	36	22	14	27	17	33	14
15	10	8	—	38	—	58	26	52	19	24	19	14
16	13	7	—	44	264	22	40	39	14	14	41	47
17	45	13	—	23	46	33	34	32	19	22	—	20
18	15	15	—	—	39	18	22	33	22	17	28	16
19	6	29	—	—	84	19	22	14	33	11	24	11
20	—	9	—	45	84	22	18	19	24	14	13	6
21	—	23	—	51	57	27	25	25	25	35	23	11
22	—	9	—	31	42	25	21	25	25	19	15	22
23	—	17	—	25	33	25	29	24	36	19	24	25
24	—	12	—	29	30	20	19	22	11	—	14	15
25	—	19	—	23	21	22	28	25	16	—	15	6
26	—	17	—	26	34	39	30	41	19	—	33	19
27	—	21	—	29	25	22	28	30	14	—	7	11
28	10	23	—	24	24	29	30	11	41	—	—	41
29	15	—	—	15	24	27	31	19	66	—	—	36
30	8	—	—	27	19	22	24	50	14	19	10	15
31	25	—	—	—	29	—	11	44	—	21	—	11
Means	14.9	16.3	19.5	31.3	53.9	30.8	26.9	27.6	26.5	25.2	21.0	17.7

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

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on 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	2, 8, 13, 14.	April	26, 27.	July	2, 11, 18, 21, 25.	October	3, 16, 17, 18, 19.
February	8, 9, 12, 16, 23.	May	5, 6, 7, 25, 30.	August	1, 9, 23, 25, 29.	November	2, 3, 4, 27.
March	5, 8.	June	5, 15, 18, 19, 25.	September	11, 12, 13, 24, 25.	December	6, 7, 19, 20, 21.

1921.

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

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

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on 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	1, 10, 17, 31.	April	12, 13, 20.	July	7, 8, 9, 15, 16.	October	7, 8, 11, 12, 21.
February	2, 5, 13, 19, 28.	May	13, 14, 16, 20.	August	3, 5, 6, 26, 30.	November	6, 16, 18, 23.
		June	4, 6, 8, 14, 23.	September	2, 8, 23, 28, 29.	December	12, 13, 16, 28, 29.

1921.

Greenwich Civil Time. Hour commencing	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.*
Midnight	0γ	4γ	—	11γ	24γ	15γ	9γ	7γ	17γ	5γ	3γ	8γ	3·3γ
1h.	0	4	—	10	45	14	9	5	10	0	2	5	3·4
2	0	2	—	7	49	15	4	4	0	0	3	6	2·1
3	0	2	—	6	32	16	4	4	5	1	3	5	1·0
4	0	2	—	4	16	19	7	6	2	2	4	5	0·0
5	1	3	—	6	14	19	7	13	3	6	4	0	0·8
6	1	4	—	4	0	20	10	16	10	9	3	4	1·3
7	1	3	—	5	7	19	9	11	15	11	4	6	2·2
8	0	3	—	4	15	15	11	9	18	11	3	8	2·7
9	1	3	—	0	27	15	7	4	16	11	1	10	2·5
10	1	2	—	1	47	2	4	1	14	12	0	12	2·6
11	1	0	—	4	59	0	2	0	11	15	1	13	3·5
Noon	0	3	—	10	69	6	0	6	12	12	5	16	6·5
13h.	4	6	—	20	79	10	4	10	19	13	12	22	12·0
14	7	10	—	35	82	16	9	19	23	17	16	28	17·7
15	8	15	—	50	84	22	16	25	33	26	19	30	23·7
16	10	17	—	53	90	30	24	29	39	31	15	32	27·5
17	13	17	—	47	96	36	28	30	39	34	14	32	29·0
18	10	13	—	40	102	37	27	31	38	36	15	32	28·5
19	20	12	—	34	106	35	27	25	37	35	16	29	28·1
20	14	12	—	29	102	29	22	17	32	27	11	25	23·0
21	8	10	—	26	62	24	18	14	28	23	8	17	15·5
22	3	9	—	21	42	19	13	13	26	14	5	16	10·4
23	0	5	—	17	25	14	11	11	24	2	3	12	5·2
Means	4·3	6·7	—	18·5	53·1	18·6	11·8	12·9	19·6	14·7	7·1	15·5	10·1

* Omitting the month of March.

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 C.G.S. units) for N.F. and V.F. and in minutes of arc ($1' = 5.37 \gamma$) 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. + $2^\circ 19'$	April + $0^\circ 4'$	July + $1^\circ 21'$	Oct. - $3^\circ 28'$
Feb. + $3^\circ 29'$	May - $0^\circ 52'$	Aug. + $0^\circ 59'$	Nov. - $3^\circ 47'$
Mar. + $2^\circ 12'$	June + $0^\circ 4'$	Sept. - $1^\circ 11'$	Dec. - $1^\circ 6'$

Month, 1921.	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 ..	- 1.85	- 0.31	+ 0.43	+ 0.73	- 0.31	+ 0.12	+ 0.17	+ 0.08	1.88	260.5	0.84	30.5	0.33	291.3	0.20	64.8
February ..	- 1.58	- 0.83	+ 0.38	+ 0.91	- 0.25	- 0.43	+ 0.12	+ 0.23	1.79	242.3	0.98	22.7	0.49	210.2	0.24	27.6
March ..	- 1.76	- 1.65	+ 0.35	+ 2.08	- 0.44	- 0.90	+ 0.35	+ 0.59	2.41	226.9	2.11	9.6	1.00	206.1	0.69	30.7
April ..	- 2.47	- 2.47	+ 1.26	+ 2.22	- 0.67	- 0.97	+ 0.32	+ 0.20	3.49	225.0	2.55	29.6	1.18	214.6	0.37	58.0
May ..	- 2.15	- 2.96	+ 1.18	+ 1.70	- 0.59	- 0.32	+ 0.24	+ 0.13	3.66	216.0	2.07	34.8	0.67	241.5	0.28	61.6
June ..	- 1.44	- 3.22	+ 1.20	+ 1.70	- 0.37	- 0.38	+ 0.06	+ 0.15	3.53	204.1	2.08	35.2	0.53	224.2	0.13	21.8
July ..	- 2.00	- 3.10	+ 1.30	+ 1.91	- 0.60	- 0.46	- 0.01	+ 0.24	3.69	212.8	2.31	34.2	0.76	232.5	0.24	357.6
August ..	- 2.45	- 2.08	+ 1.97	+ 1.31	- 0.73	- 0.37	+ 0.05	- 0.01	3.21	229.7	2.37	56.4	0.82	243.1	0.05	101.3
September	- 2.52	- 1.86	+ 1.30	+ 1.39	- 0.71	- 0.48	+ 0.42	+ 0.18	3.13	233.6	1.90	43.0	0.85	236.0	0.46	66.8
October ..	- 2.36	- 0.86	+ 0.61	+ 1.57	- 0.45	- 0.47	+ 0.51	+ 0.20	2.51	250.0	1.68	21.2	0.65	223.8	0.55	68.6
November	- 1.87	- 0.36	+ 0.11	+ 1.06	- 0.39	- 0.23	+ 0.26	+ 0.27	1.91	259.1	1.06	5.9	0.45	239.5	0.37	43.9
December	- 1.56	+ 0.15	0.00	+ 0.81	- 0.26	- 0.04	+ 0.07	+ 0.13	1.56	275.9	0.81	0.0	0.26	261.3	0.15	28.3
For the Year	- 2.00	- 1.63	+ 0.83	+ 1.45	- 0.47	- 0.41	+ 0.21	+ 0.19	2.58	230.8	1.67	29.8	0.62	228.9	0.28	47.9
NORTH FORCE.																
January ..	+ 4.8	+ 5.8	- 3.7	- 1.8	+ 1.4	- 2.0	+ 0.1	+ 0.3	7.5	39.6	4.1	244.1	2.5	145.0	0.3	18.4
February	+ 5.4	+ 5.0	- 2.6	- 1.8	+ 1.9	- 1.3	+ 0.1	+ 0.9	7.4	47.2	3.1	235.3	2.3	124.4	0.9	6.3
March ..	+ 11.2	+ 4.7	- 5.6	- 2.6	+ 3.2	- 2.2	- 0.6	+ 0.5	12.1	67.2	6.2	245.1	3.9	124.5	0.8	309.8
April ..	+ 17.1	+ 1.7	- 8.5	- 1.3	+ 2.8	0.0	- 0.3	+ 1.2	17.2	84.3	8.6	261.3	2.8	90.0	1.3	346.0
May ..	+ 15.8	+ 4.8	- 7.9	- 0.1	+ 0.9	- 0.4	+ 1.2	- 0.4	16.5	106.9	7.9	269.3	1.0	114.0	1.3	108.4
June ..	+ 13.7	- 2.2	- 7.5	- 0.5	+ 0.3	+ 0.1	+ 1.2	+ 0.6	13.9	99.1	7.5	266.2	0.3	71.6	1.4	63.4
July ..	+ 16.2	- 2.2	- 7.9	+ 0.1	+ 0.8	- 1.6	+ 0.7	- 0.5	16.4	97.7	7.9	270.7	1.8	153.4	0.9	125.5
August ..	+ 15.4	- 3.8	- 6.0	+ 1.9	- 0.4	- 2.3	+ 1.7	+ 1.4	15.8	103.9	6.3	287.6	2.3	189.9	2.2	50.5
September	+ 14.7	0.0	- 5.6	+ 0.5	+ 0.4	- 2.5	+ 0.3	+ 0.6	14.7	90.0	5.6	275.1	2.5	170.9	0.7	26.6
October ..	+ 10.8	+ 3.5	- 4.6	0.0	+ 2.3	- 2.5	- 0.7	+ 0.7	11.3	72.0	4.6	270.0	3.4	137.4	1.0	315.0
November	+ 7.2	+ 2.5	- 5.1	- 1.6	+ 2.3	- 0.4	- 0.4	+ 0.4	7.6	70.8	5.3	252.6	2.3	99.9	0.6	315.0
December	+ 4.0	+ 3.9	- 3.6	- 1.5	+ 1.2	- 1.4	- 0.1	+ 0.1	5.6	45.7	3.9	247.4	1.8	139.4	0.1	315.0
For the Year	+ 11.4	+ 1.1	- 5.7	- 0.7	+ 1.4	- 1.4	+ 0.2	+ 0.6	11.5	84.5	5.8	263.0	2.0	135.0	0.7	18.4
VERTICAL FORCE.																
January	- 0.6	- 3.6	- 1.4	- 0.4	- 0.1	0.0	- 0.1	+ 0.6	3.7	189.5	1.5	254.1	0.1	270.0	0.6	350.5
February	+ 1.1	- 3.5	- 2.2	- 1.1	+ 0.8	- 0.4	- 0.6	+ 0.3	3.7	162.6	2.4	243.4	0.9	116.6	0.7	296.6
March ..	+ 3.4	- 2.7	- 3.8	- 1.3	+ 2.6	+ 0.2	- 1.1	- 0.1	4.3	128.4	4.0	251.1	2.6	85.6	1.1	264.8
April ..	+ 3.6	- 10.1	- 7.1	- 0.6	+ 3.5	- 0.6	- 0.7	0.0	10.7	160.4	7.1	265.2	3.6	99.7	0.7	270.0
May ..	+ 3.0	- 10.5	- 6.5	+ 1.1	- 0.2	+ 0.8	- 0.6	+ 1.0	10.9	164.1	6.6	279.6	0.8	346.0	1.2	329.0
June ..	+ 4.5	- 4.0	- 7.1	- 0.9	+ 2.1	+ 0.4	- 0.2	+ 1.3	6.0	131.6	7.2	262.8	2.1	79.2	1.3	351.2
July ..	+ 3.2	- 3.3	- 6.2	- 0.8	+ 2.0	+ 0.2	+ 1.1	+ 0.7	4.6	135.9	6.2	262.6	2.0	84.3	1.3	57.5
August ..	+ 2.1	- 4.4	- 8.0	- 0.8	+ 2.7	- 0.8	- 0.1	- 0.5	4.9	154.5	8.0	264.3	2.8	106.5	0.5	191.3
September	+ 2.6	- 4.4	- 4.6	- 0.6	+ 2.6	- 0.2	- 0.6	+ 0.3	5.1	149.4	4.6	262.6	2.6	94.4	0.7	296.6
October ..	+ 0.1	- 6.1	- 3.5	- 1.7	+ 1.1	- 0.5	- 0.3	+ 0.2	6.1	179.1	3.9	244.1	1.2	114.4	0.4	303.7
November	- 0.8	- 4.2	- 2.1	- 0.1	+ 1.3	- 1.2	- 0.8	+ 0.3	4.3	190.8	2.1	267.3	1.8	132.7	0.8	290.6
December	- 0.1	- 5.5	- 1.5	+ 0.1	+ 0.8	- 0.7	- 0.2	+ 0.3	5.5	181.0	1.5	273.8	1.0	131.2	0.4	326.3
For the Year	+ 1.8	- 5.3	- 4.4	- 0.5	+ 1.5	- 0.2	- 0.6	+ 0.3	5.6	161.2	4.4	263.5	1.5	97.6	0.7	296.6

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

Greenwich Civil Time, 1921.			Declination.	Deduced value of Base-line.	Greenwich Civil Time, 1921.			Declination.	Deduced value of Base-line.	Greenwich Civil Time, 1921.			Declination.	Deduced value of Base-line.											
d	h	m	°	'	°	'	d	h	m	°	'	°	'	d	h	m	°	'	°	'					
Jan.	1.	11.	40	14.	5.7	14.	28.9	Mar.	15.	12.	0	14.	8.9	14.	29.4	May	11.	13.	44	14.	4.0	14.	11.8		
	4.	12.	0		5.9		28.7			13.	0		10.6		29.2		12.	15.	0		6.1		12.0		
					5.2		28.8		18.	12.	0		5.0		29.5		13.	11.	0		2.7		11.3		
	5.	12.	44		7.3		28.6			12.	40		4.2		29.5			12.	0		5.8		11.8		
	6.	11.	44		5.0		29.0		19.	11.	23		2.9		28.8		17.	14.	0		2.6		11.5		
	7.	12.	0		5.6		29.0		22.	14.	12		5.0		29.0			15.	0		1.9		11.9		
					5.7		29.0			14.	42		9.6		29.6			17.	0		8.3		11.7		
	11.	12.	0		5.1		28.9			15.	9		6.3		29.3		18.	8.	3	13.	53.8		11.8		
					5.3		29.0		24.	12.	0		4.8		29.1		19.	14.	24	14.	2.2		11.6		
	12.	10.	22		2.3		28.6			13.	0		8.1		29.7		20.	11.	25	13.	59.2		11.8		
	14.	12.	0		3.5		28.5			17.	0		2.6		29.3			14.	0	14.	3.7		11.7		
					5.5		29.1		29.	15.	0		7.6		29.6			14.	31		3.6		11.6		
	15.	12.	11		5.8		28.8			15.	37		5.4		29.5		21.	11.	0		0.5		11.9		
	18.	12.	30		4.9		28.9		30.	11.	27		2.3		29.3			11.	40		2.4		11.6		
					4.9		29.0			14.	5		6.0		29.8		23.	13.	0		1.0		11.6		
					3.8		28.9		31.	14.	47		5.2		29.2			13.	38		1.9		11.7		
	20.	11.	42		5.3		29.1										25.	11.	26	13.	58.9		11.5		
					4.6		28.6		April	1.	12.	0	14.	3.1	14.	28.6		26.	13.	0	14.	2.5		12.1	
	21.	12.	0		5.5		28.5				13.	0		5.0		29.0		27.	11.	40	13.	59.4		11.3	
					6.0		28.7				13.	0		6.3		29.0			12.	0	14.	0.0		11.8	
	22.	10.	12		3.0		28.7		2.	12.	27		6.3		29.0		28.	10.	0	13.	56.4		12.0		
					3.2		28.7			4.	15.	15		6.0		29.0		31.	12.	0	14.	4.8		11.8	
	24.	12.	30		8.0		29.0			5.	10.	45	13.	59.3		28.3			13.	0		5.3		12.1	
	25.	12.	0		3.8		29.1				13.	0	14.	6.7		28.8			14.	0		4.8		11.9	
					4.8		29.5				13.	42		6.6		28.8		June	1.	10.	25	13.	55.3	14.	11.1
	27.	11.	38		3.5		29.2			6.	11.	53		2.2		28.6			15.	5	14.	1.5		11.3	
					2.0		27.5			7.	11.	10		0.7		29.0			15.	0		1.8		11.5	
	31.	11.	18		5.6		29.6			8.	9.	26	13.	57.1		28.9			13.	0		1.8		11.6	
											12.	0	14.	6.4		29.3		4.	9.	0	13.	58.8		11.8	
Feb.	1.	12.	34	14.	4.5	14.	29.2				13.	21		9.0		29.0		6.	15.	30	14.	4.3		11.2	
	2.	12.	0		3.4		29.2				13.	50		8.8		29.0		7.	11.	32	14.	2.8		12.8	
					7.5		29.5		10.	12.	10		6.5		28.0			14.	0		7.8		12.7		
	4.	11.	0		3.7		29.2			12.	12.	0		6.0		12.0			14.	30		6.4		12.9	
					4.4		29.4				13.	0		10.5		12.2		8.	11.	40		2.6		13.1	
	8.	15.	35		3.6		29.3				13.	0		11.2		12.0		10.	11.	48	13.	58.3		12.8	
					3.2		29.2				13.	40		4.3		12.2			12.	15	13.	58.5		12.8	
	10.	12.	0		4.3		29.3			13.	11.	36		7.7		11.7		14.	11.	0	13.	58.3		12.4	
	11.	11.	36		2.5		29.5				15.	0		6.5		11.5			12.	0	14.	0.6		13.1	
					2.7		29.3				15.	8		5.5		11.5		18.	11.	33	14.	2.0		12.9	
	12.	12.	6		3.9		28.9			16.	10.	56		4.3		11.5			11.	30	13.	57.8		13.3	
	15.	12.	0		5.2		29.2				11.	30		6.3		11.3		21.	11.	30		59.3		13.3	
					4.7		28.9			20.	11.	50		3.8		11.8			12.	0		55.8		11.9	
					4.0		29.0			22.	11.	30		4.0		12.0		24.	10.	30		56.4		13.2	
	16.	12.	40		4.8		29.4				12.	0		6.1		12.1			11.	5		57.1		12.6	
	18.	12.	0		4.6		29.5			23.	11.	28		4.6		12.1			11.	38		59.6		12.4	
					4.9		29.3			25.	15.	15		4.8		11.9			11.	0		57.5		12.8	
	22.	12.	0		3.6		29.2			26.	13.	28		5.5		12.3		25.	11.	0		59.6		11.8	
					3.3		28.4				14.	0		5.5		12.3		27.	17.	25		58.0		12.5	
	23.	12.	30		3.7		28.7			27.	11.	36		1.3		11.5		28.	11.	4		59.4		12.8	
					4.0		29.5				13.	20		5.4		12.1			11.	35		57.4		12.4	
	25.	12.	0		5.6		29.1			28.	10.	52		0.8		12.0		29.	11.	12				12.4	
					7.7		29.5			29.	11.	30		7.8		12.3		30.	13.	22	14.	2.7		12.5	
	28.	16.	35		2.0		29.0				12.	0		8.0		12.0		July	1.	11.	0	14.	0.4	14.	12.9
										30.	10.	33		1.9		12.1			11.	48		2.2		13.0	
											14.	35		3.8		11.8			13.	0		4.6		12.6	
Mar.	1.	11.	0	14.	5.5	14.	29.5											2.	11.	0	13.	58.9		12.9	
					7.5		29.5												5.	10.	45	14.	1.2		13.1
	2.	11.	39		3.4		29.4												11.	21		2.9		13.1	
	3.	11.	31		2.2		29.3		May	2.	13.	0	14.	4.9	14.	11.9			11.	25	13.	59.3		12.4	
	4.	12.	0		4.5		29.5			3.	11.	0		2.1		12.4			12.	30		58.7		12.6	
					6.5		30.3				12.	0		4.0		11.5			11.	30	14.	0.7		13.1	
	5.	15.	0		2.7		28.9				13.	30		3.8		11.8			11.	30		0.5		13.0	
	7.	14.	30		4.4		29.4				14.	0		2.9		12.1			13.	0		1.3		12.7	
	8.	12.	0		3.7		29.5				14.	0		4.6		11.5		13.	11.	0		1.0		12.6	
					5.0		29.4			4.	14.	16		2.4		11.4			15.	0		3.8		12.3	
	9.	12.	4		5.0		30.0			6.	11.	0		5.1		11.8			15.	0		2.8		12.6	
	10.	11.	23		2.5		29.5				11.	45		0.3		11.3		14.	15.	0		3.1		12.8	
	11.	12.																							

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

Greenwich Civil Time, 1921			Declination.		Deduced value of Base-line.		Greenwich Civil Time, 1921.			Declination.		Deduced value of Base-line.												
d	h	m	°	'	°	'	d	h	m	°	'	°	'											
July	15.	14.	52	14.	2.2	14.	12.7	Sept.	10.	10.	58	13.	59.2	13.	11.5	Nov.	4.	13.	30	13.	57.5	14.	11.9	
	16.	11.	0	13.	59.6		12.7		13.	11.	0		55.7		11.5		5.	11.	58		57.3		11.7	
	18.	13.	26	14.	4.3		12.6			12.	0		58.7		11.8		7.	12.	0		56.8		12.1	
	19.	11.	0	13.	59.1		13.0		14.	11.	42		58.7		11.5			13.	15		56.6		10.6	
		12.	0	14.	1.3		12.6			14.	5	14.	1.0		11.8		10.	11.	53		58.8		11.9	
	20.	11.	8	14.	0.0		12.6		15.	11.	5		0.7		11.6			15.	27		56.8		12.0	
	21.	10.	25	13.	58.2		12.7		16.	11.	0	13.	59.3		11.3		11.	12.	0		56.8		12.1	
		15.	0	14.	1.5		12.9			14.	0		59.6		11.6			12.	45		57.3		12.1	
	22.	10.	38	13.	58.7		12.7			15.	0		57.8		11.3		15.	12.	0		56.3		11.5	
		11.	0	14.	0.8		12.9		17.	10.	30		55.4		11.4			15.	0		53.7		11.2	
		11.	40		2.3		12.8		19.	15.	21		57.9		11.1			15.	30		54.0		11.6	
	23.	11.	30	13.	58.0		13.0		20.	11.	0		56.6		11.5		16.	12.	48	14.	0.3		11.5	
	26.	10.	20		55.4		13.0			12.	0	14.	0.7		11.3		17.	15.	0	13.	57.1		11.6	
		11.	33		58.8		12.8		21.	11.	40	13.	59.9		11.9			16.	0		56.3		11.8	
	29.	13.	0	14.	5.5		13.0		22.	11.	0		56.2		11.2		22.	12.	0		54.7		11.5	
		14.	0		3.0		13.0			15.	23		57.2		11.7			13.	0		55.7		11.7	
	30.	11.	0	13.	56.8		12.8		23.	11.	0		55.2		11.5		24.	12.	0		55.6		11.6	
										11.	45	14.	1.6		11.7			16.	0		53.0		11.9	
Aug.	2.	13.	0	14.	1.6	14.	12.4	30.	11.	9		13.	58.3		11.8		25.	12.	0		56.1		11.9	
		14.	0		1.9		12.4			13.	3		58.2		11.7			12.	40		56.8		11.8	
	4.	14.	58		1.5		12.3			13.	8		57.5		11.5		26.	13.	0		54.6		11.8	
	5.	12.	0		1.9		12.4										29.	12.	0		54.6		11.6	
	6.	14.	0	13.	59.7		12.4	Oct.	1.	10.	0	13.	55.9	14.	11.5			12.	52		54.8		11.6	
	9.	14.	0	14.	1.2		12.3		4.	12.	0		58.2		11.2			14.	17		54.2		11.8	
		15.	0		0.9		12.4			12.	45		59.7		11.4			30.	12.	0		55.7		11.7
	11.	15.	6		5.1		12.6		6.	10.	18		55.2		11.7									
	12.	14.	0		1.9		12.2			12.	26	14.	0.5		11.5	Dec.	2.	12.	0	13.	55.6	14.	11.7	
		14.	40		1.4		12.4		7.	12.	0	13.	58.1		11.3			12.	50		55.6		11.8	
	13.	11.	45		1.1		12.3			12.	40		58.5		11.2		3.	12.	0		54.2		11.7	
	16.	13.	0		3.7		12.5		8.	12.	30	14.	2.0		11.5			12.	24		54.3		11.3	
		14.	0		2.4		12.4		10.	12.	40	13.	58.1		11.4		6.	11.	0		53.7		11.8	
	19.	11.	0		1.6		13.1		11.	12.	0		58.1		11.2			12.	0		54.7		12.1	
		11.	30		3.1		13.1			13.	0		59.4		11.4		8.	12.	0		55.3		11.3	
	20.	10.	0	13.	57.8		12.6		12.	11.	16		56.3		11.5			12.	32		56.1		11.3	
		10.	50	14.	0.3		13.1		13.	11.	50		56.7		11.5		9.	11.	45		54.8		11.8	
	22.	13.	0		2.9		12.1		14.	11.	54		58.2		11.2			12.	0		54.9		11.9	
	23.	11.	0	13.	58.5		12.3			12.	45	14.	1.1		11.4		10.	11.	30		54.7		11.7	
		11.	44	14.	0.2		12.2			12.	36	14.	0.0		11.3			12.	45		54.4		11.8	
	25.	11.	8		1.2		12.2		15.	12.	36	14.	0.0		11.3		14.	11.	20		56.6		11.6	
		15.	5	13.	58.7		11.9		17.	15.	0	13.	56.9		12.0			11.	20		56.2		12.1	
	26.	11.	0		58.1		12.1		18.	14.	48		57.6		11.6		16.	11.	19		56.7		11.8	
		11.	44	14.	0.5		11.7			12.	11		57.5		11.1		17.	12.	0		56.3		12.1	
	28.	14.	25	13.	57.6		12.6		20.	12.	11		57.6		11.6		19.	12.	0		54.2		11.5	
	30.	11.	0	14.	1.1		12.4		21.	11.	0		57.6		11.6			14.	30		53.6		11.6	
		13.	33		4.6		12.0		22.	12.	36	13.	58.8		11.8			15.	0		52.9		11.6	
		14.	0		5.1		12.1		25.	12.	45		58.2		11.2		20.	12.	37		53.7		11.7	
	31.	11.	32		0.6		12.6			13.	15		57.7		11.5		21.	11.	42		54.2		11.9	
Sept.	1.	10.	40	13.	57.3	14.	11.3	28.	12.	0		57.2		11.1			22.	12.	7		54.1		11.6	
	3.	11.	0		58.8		11.7			13.	0		58.5		10.8			13.	0		56.2		11.8	
		11.	29		59.3		11.5		29.	14.	45		57.4		12.4		24.	11.	31		53.3		11.5	
	5.	13.	34	14.	3.5		11.6		31.	12.	36		57.6		10.8		28.	14.	0		57.0		11.0	
	6.	11.	0	13.	56.8		11.9											15.	0		59.4		11.4	
		14.	0	14.	1.7		11.4	Nov.	1.	12.	0	13.	56.8	14.	11.6		29.	11.	39		51.5		10.5	
	7.	15.	0		1.3		11.3			14.	45		57.3		11.6		30.	12.	0		53.3		11.8	
	8.	14.	0		0.7		11.9		4.	12.	40		57.3		11.3			13.	0		54.3		11.7	
		15.	0	13.	57.8		11.3			13.	0		57.8		11.8		31.	12.	37		53.2		11.7	

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, 1921.					In C.G.S. Units.		Greenwich Civil Time, 1921.					In C.G.S. Units.								
					Value of observed Horizontal Force.	Deduced value of North Force Base-line.						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.	4.	12	18-13	3	431	852	May	3.	13	24-14	6	443	805	Aug.	30.	13	25-14	8	448	874
	7.	12	11-12	55	440	851		6.	11	9-11	52	448	780	Sept.	3.	10	53-11	34	423	859
	11.	12	36-13	21	449	857		9.	13	14-13	56	447	803		6.	13	36-14	22	424	864
	14.	11	47-12	51	446	851		13.	11	19-11	59	430	805		8.	14	10-14	55	441	863
	18.	12	33-13	19	432	847		17.	14	20-15	17	402	804		13.	11	28-12	14	424	858
	21.	12	4-12	47	455	868		20.	13	58-14	40	423	810		16.	14	3-15	2	452	872
	25.	11	55-12	38	455	879		23.	13	1-13	43	413	810		20.	11	14-11	58	419	867
	27.	11	29-12	14	458	872		27.	11	34-12	20	409	810		23.	11	6-11	49	446	881
Feb.	2.	12	19-13	5	442	861		31.	13	22-14	6	433	811		30.	13	11-13	52	429	872
	4.	11	29-12	15	456	856	June	3.	13	21-14	4	453	826		4.	12	8-12	52	438	880
	8.	15	28-16	11	449	854		7.	13	53-14	38	427	833	Oct.	7.	12	1-12	44	439	889
	11.	11	30-12	13	441	850		10.	11	40-12	21	409	832		11.	12	20-13	4	435	889
	15.	14	8-15	4	455	858		14.	11	25-12	8	444	827		14.	11	44-12	46	429	877
	18.	11	51-12	41	440	853		17.	11	23-12	23	446	835		18.	14	6-14	49	455	879
	22.	12	10-12	56	451	861		21.	11	29-12	10	421	818		21.	11	26-12	8	408	875
	25.	12	20-13	3	451	866		24.	10	58-11	41	424	823		25.	12	38-13	20	432	870
Mar.	1.	11	38-12	23	445	863		28.	10	57-11	39	436	830	Nov.	1.	14	5-14	50	442	894
	4.	11	58-12	44	440	853	July	1.	11	10-11	54	419	822		4.	12	48-13	36	440	891
	8.	12	18-12	59	469	873		5.	10	43-11	25	439	828		8.	12	17-13	23	427	884
	11.	15	9-15	49	469	877		7.	10	57-11	42	422	824		11.	12	6-12	53	433	891
	15.	12	7-13	5	434	878		11.	13	2-14	3	425	838		15.	14	15-15	19	460	899
	18.	12	5-12	47	440	878		19.	11	21-12	3	426	849		22.	12	22-13	6	429	889
	24.	12	26-13	9	445	877		22.	11	1-11	44	428	845		25.	12	1-12	47	446	900
	29.	15	0-15	40	437	872		26.	10	27-11	25	434	853		29.	12	11-12	56	459	897
April	1.	12	21-13	4	447	736		29.	13	22-14	7	425	852	Dec.	2.	12	9-12	52	449	897
	5.	13	5-13	46	461	735	Aug.	2.	13	15-13	57	483	868		6.	11	58-12	43	441	893
	8.	13	15-13	59	437	745		5.	13	39-14	23	436	857		9.	11	36-12	24	450	893
	12.	12	59-13	43	471	786		9.	14	13-14	56	450	858		13.	12	7-12	51	401	889
	15.	14	9-15	4	445	788		12.	13	57-14	43	447	858		17.	11	51-12	54	415	894
	22.	11	28-12	11	408	778		16.	13	24-14	22	443	863		19.	14	28-15	13	445	899
	26.	13	21-14	5	437	788		19.	10	53-11	37	428	855		23.	12	21-13	6	434	892
	29.	11	28-12	10	392	780		23.	11	2-11	46	433	865		30.	12	16-13	0	437	894
								26.	11	3-11	46	429	865							

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, 1921.	Magnetic Dip.	Deduced Value of Vertical Force Base-line.	Greenwich Civil Time, 1921.	Magnetic Dip.	Deduced Value of Vertical Force Base-line.	Greenwich Civil Time, 1921.	Magnetic Dip.	Deduced Value of Vertical Force Base-line.	Greenwich Civil Time, 1921.	Magnetic Dip.	Deduced Value of Vertical Force Base-line.
d h	° ' "	42900+	d h	° ' "	43000+	d h	° ' "	43000+	d h	° ' "	43000+
Jan. 4. 12.0	66 54.7	124	April 1. 12.1	66 52.7	—	July 1. 10.9	66 55.7	544	Oct. 1. 10.1	66 55.5	543
5. 12.6	66 54.5	84	5. 13.9	66 52.7	—	5. 10.5	66 53.7	529	4. 11.9	66 53.5	494
7. 11.9	66 53.7	120	6. 11.8	66 53.0	478	6. 11.3	66 53.2	500	6. 12.4	66 53.3	473
11. 12.0	66 53.0	108	8. 11.8	66 52.6	519	7. 10.7	66 53.6	506	7. 11.7	66 54.4	509
12. 10.5	66 52.9	106	12. 12.0	66 52.3	520	11. 10.7	66 54.5	502	11. 12.1	66 53.8	490
14. 11.6	66 52.7	122	15. 13.9	66 53.6	518	13. 11.2	66 54.2	491	14. 11.5	66 54.0	503
18. 12.3	66 52.8	66	16. 10.8	66 53.4	503	15. 13.8	66 52.8	511	15. 12.4	66 53.1	502
21. 10.4	66 53.4	—	19. 12.0	66 51.3	—	19. 11.1	66 54.4	478	18. 12.7	66 53.1	528
22. 10.9	66 52.8	—	22. 11.3	66 55.6	568	20. 11.5	66 54.2	489	20. 12.1	66 53.4	498
25. 11.7	66 52.6	—	26. 11.5	66 54.7	592	22. 11.8	66 54.6	504	21. 11.1	66 56.0	516
27. 11.3	66 52.1	28	27. 11.3	66 53.7	584	26. 11.7	66 53.5	469	25. 12.4	66 55.0	—
28. 11.2	66 53.7	79	29. 11.2	66 55.7	563	29. 13.1	66 53.7	457	26. 10.6	66 53.7	—
Feb. 1. 12.5	66 52.7	51	May 3. 11.9	66 52.2	485	30. 11.0	66 53.8	498	28. 12.0	66 53.7	—
2. 12.0	66 52.9	45	4. 14.2	66 53.3	441	Aug. 2. 13.0	66 51.5	502	Nov. 1. 12.6	66 54.5	132
4. 11.2	66 51.8	56	6. 10.9	66 52.5	454	4. 14.8	66 53.4	483	4. 12.5	66 53.3	128
8. 12.2	66 52.3	72	9. 13.0	66 52.4	439	5. 11.9	66 55.0	486	5. 11.9	66 53.2	131
11. 11.3	66 53.0	61	13. 11.1	66 54.8	458	9. 14.0	66 53.9	515	8. 12.7	66 54.3	—
12. 12.0	66 52.5	51	17. 14.1	66 57.4	366	11. 15.0	66 52.8	490	10. 15.4	66 55.9	162
15. 12.3	66 52.3	26	20. 11.3	66 56.0	333	12. 11.5	66 54.1	512	11. 11.8	66 54.1	129
16. 12.6	66 52.3	43	21. 11.6	66 55.9	325	16. 13.2	66 53.0	516	15. 12.2	66 54.4	123
18. 11.6	66 52.4	41	23. 12.8	66 55.1	295	19. 10.6	66 53.9	489	16. 12.7	66 54.1	044
22. 11.9	66 52.4	21	25. 11.3	66 55.3	309	20. 9.9	66 54.7	487	17. 15.0	66 54.8	42965
24. 12.4	66 52.5	51	27. 11.3	66 55.4	293	20. 10.7	66 54.5	496	22. 12.1	66 53.8	42999
25. 12.1	66 52.9	62	June 1. 10.2	66 52.8	263	23. 10.8	66 53.9	495	24. 16.2	66 53.9	42998
Mar. 1. 11.0	66 51.8	24	1. 14.9	66 52.5	266	25. 15.2	66 53.0	500	25. 11.8	66 53.7	43011
2. 11.5	66 53.0	63	3. 13.1	66 52.8	264	26. 10.8	66 51.6	417	29. 11.9	66 53.5	053
4. 11.8	66 52.5	62	7. 11.4	66 54.1	482	30. 11.0	66 52.5	478	Dec. 2. 11.9	66 52.1	007
8. 12.1	66 52.4	99	8. 11.5	66 54.5	473	Sept. 1. 10.5	66 54.4	515	3. 12.3	66 53.2	036
9. 12.1	66 51.4	57	10. 11.5	66 55.8	497	3. 10.7	66 55.2	532	6. 11.8	66 53.0	040
11. 12.9	66 53.3	—	14. 11.2	66 53.5	502	6. 11.5	66 55.4	527	8. 12.4	66 52.0	004
15. 11.8	66 54.2	—	15. 11.3	66 54.0	522	8. 14.0	66 51.2	431	9. 11.4	66 51.9	026
18. 11.8	66 53.3	—	17. 11.2	66 52.9	463	10. 10.9	66 53.7	484	13. 11.8	66 55.3	045
19. 11.3	66 53.4	—	21. 11.3	66 54.1	489	13. 11.2	66 54.2	495	17. 11.6	66 55.6	071
22. 12.1	66 57.2	—	22. 11.2	66 55.3	487	14. 11.6	66 52.2	486	19. 12.7	66 52.6	026
24. 12.1	66 53.2	—	24. 10.7	66 54.7	515	16. 11.4	66 53.3	505	22. 12.0	66 52.8	033
29. 14.8	66 54.6	—	28. 10.8	66 53.8	521	20. 11.0	66 54.6	504	23. 12.1	66 53.9	084
			29. 11.1	66 52.9	505	21. 11.6	66 54.7	512	29. 11.5	66 56.1	091
						23. 10.9	66 53.9	515	30. 12.0	66 52.4	053
						30. 11.8	66 53.8	504	31. 12.5	66 52.7	084

TABLE XX.—ANNUAL SUMMARY OF THE MAGNETIC ELEMENTS.

Month, 1921.	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. 2.8	18441	66. 52.7	04476	17890	43191	5.4	22γ	9γ	30.3	128γ	59γ
February ..	14. 1.6	18457	66. 52.3	04474	17907	43212	5.0	19	11	29.7	127	69
March	14. 0.9	18454	66. 52.4	04469	17905	43210*	8.2	32	17	47.1	209	88
April	14. 0.2	18453	66. 52.9	04465	17905	43225†	11.1	40	32	62.4	287	193
May	13. 59.0	18448	66. 53.2	04458	17901	43222	9.9	41	29	61.7	267	190
June	13. 57.5	18456	66. 53.3	04451	17911	43245	9.7	33	26	57.3	239	123
July	13. 56.7	18450	66. 53.3	04446	17906	43230	10.5	37	22	61.7	277	107
August	13. 56.0	18447	66. 53.2	04442	17904	43219	10.0	37	21	56.9	259	119
September ..	13. 55.4	18446	66. 53.3	04439	17904	43222	8.7	33	19	54.1	239	100
October	13. 54.7	18439	66. 53.7	04433	17898	43220	7.4	28	16	44.5	186	109
November ..	13. 53.7	18444	66. 53.5	04429	17905	43223	5.7	23	11	30.5	140	78
December ..	13. 52.9	18445	66. 52.8	04425	17906	43200	4.7	20	11	24.1	94	90
For the Year.	13. 57.6	18449	66. 53.0	04451	17904	43218	8.0	30.4	18.7	46.7	204.3	110.4

* Mean value of Vertical Force for the period March 1-10.
 † Mean value of Vertical Force for the period April 11-30.

ROYAL OBSERVATORY, GREENWICH.

MAGNETIC DISTURBANCES.

1921.

MAGNETIC DISTURBANCES in DECLINATION, NORTH FORCE, and VERTICAL FORCE,
recorded at the ROYAL OBSERVATORY, GREENWICH, in the Year 1921.

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).

1921.
January
- 1st 7^h to 8^h Wave in N.F. (- 30). 14^h to 15^h Domed wave in N.F. (- 25). 14^h to 15^h Decrease in Dec. (- 4'). 20^h to 22^h Double wave in Dec. (+ 3', - 5'). 21^h to 22^h Wave in N.F. (+ 45).
- 4th 1^h to 3^h Double wave in Dec. ($\pm 3'$). 14^h to 14^h Truncated wave in N.F. (+ 20). 16^h to 16^h Wave in Dec. (- 3'). 16^h to 18^h Two successive waves in N.F. (+ 20). 18^h to 19^h Increase in N.F. (+ 30).
- 5th 14^h to 15^h Increase in N.F. (+ 30). 18^h to 19^h Wave in Dec. (- 3').
- 7th 20^h to 21^h Two consecutive waves in Dec., the second wave truncated (- 4', - 5').
- 9th 11^h to 12^h Serrated wave in Dec. (+ 3'). 17^h to 19^h Irregular decrease in Dec. (- 8'). 19^h to 21^h Sharp wave in Dec., the return steep at first (- 10'). 19^h to 21^h Wave in N.F. (+ 40).
- 10th 0^h to 2^h Double wave in Dec. ($\mp 3'$). 0^h to 1^h Wave in N.F. (+ 20). 12^h to 14^h Domed serrated wave in Dec. (+ 5'). 21^h to 23^h Double wave in N.F. (- 25, + 45). 21^h to 22^h Wave in Dec. (- 12').
- 11th 23^h to 12^h Two consecutive truncated waves in Dec. (- 4', - 3'). 23^h to 12^h Wave in N.F. (+ 35), the return interrupted at 0^h.
- 14th 19^h to 20^h Serrated wave in Dec. (- 3').
- 15th 12^h to 14^h Irregular wave in Dec. (+ 5'). 13^h to 14^h Increase in N.F. (+ 35). 21^h to 23^h Double wave in Dec. (+ 4', - 7'), the middle portion very steep. 22^h to 23^h Wave in N.F. (+ 25).
- 16th 22^h to 23^h Wave in Dec. (- 7').
- 17th 7^h to 9^h Steady decrease in N.F. (- 50). 9^h to 10^h Steady increase in Dec. (+ 7'). 11^h to 13^h Truncated wave in Dec. (+ 4'). 16^h to 17^h Irregular increase in Dec. (+ 7'). 16^h to 17^h Sharp decrease in N.F. (- 30). 17^h to 19^h Increase in V.F. (+ 40), partially returning till 20^h (- 16). 17^h to 18^h Irregular decrease in Dec. (- 8'). 18^h to 18^h Very sharp wave in N.F. (- 35). 18^h to 19^h Serrated wave in Dec. (- 10'). 19^h to 21^h Two consecutive serrated waves in N.F., the second truncated (+ 25), with several sharp oscillations superposed. 20^h to 21^h Wave in Dec. (- 4'). 22^h to 23^h Sharp increase in N.F. (+ 20). 22^h to 23^h Domed wave in Dec. (- 4').
- 18th 19^h to 20^h Wave in Dec. (- 4').
- 19th 19^h to 21^h Three consecutive waves in Dec. (- 3').
- 20th 11^h to 13^h and 14^h to 16^h No register of traces, during the erection of the new V.F. variometer. 22^h to 23^h Irregular wave in Dec. (- 17'), the first part very steep. 22^h to 23^h Wave in N.F. (+ 30).
- 21st 5^h to 6^h Wave in N.F. (- 20). 5^h to 6^h Wave in Dec. (+ 4'). 19^h to 21^h Slow wave in N.F. (- 20).
- 23rd 2^h to 4^h Broad truncated wave in Dec. (- 3'). 20^h to 21^h Wave in Dec. (- 3').
- 24th 3^h to 6^h Two consecutive waves in N.F. (- 30, - 25). 3^h to 6^h Two consecutive waves in Dec. (+ 7', + 3').

- 1921.
- January**
- 24^d 13^h to 27^d 12^h Experiments for temperature adjustment of the V.F. variometer were in progress and the V.F. records are rejected.
- 25^d 21^{3/4}^h to 22^{3/4}^h Wave in Dec. (− 3′). 23^{3/4}^h to 26^d 1^{1/4}^h Wave in Dec. (+ 5′).
- 26^d 11^{1/2}^h to 13^h No register of any trace.
- 29^d 2^h to 3^{1/4}^h Wave in Dec. (+ 4′).
- 30^d 23^{3/4}^h to 31^d 0^{1/4}^h Wave in N.F. (+ 20).
- 31^d 17^{3/4}^h to 20^h Wave in V.F. (+ 18). 17^{1/2}^h to 19^h Double-crested wave in Dec. (− 7′, − 5′). 17^{1/2}^h to 18^{3/4}^h Two consecutive waves in N.F. (− 35, − 20).
- February**
- 1^d 18^{3/4}^h to 20^{1/2}^h Irregular wave in Dec. (− 10′), with a secondary wave superposed from 19^{3/4}^h to 19^{3/4}^h (+ 4′). 18^{3/4}^h to 20^h Serrated wave in N.F. (+ 40), very steep at first.
- 2^d 7^{3/4}^h to 8^{1/2}^h Decrease in N.F. (− 35). 11^{3/4}^h to 13^h Truncated wave in Dec. (− 3′). 17^{1/2}^h to 18^{1/4}^h Irregular increase in N.F. (+ 40). 18^h to 19^{1/2}^h Serrated wave in Dec. (− 9′).
- 3^d 0^{1/2}^h to 1^{3/4}^h Wave in Dec. (− 4′). 22^{1/2}^h to 23^h Wave in Dec. (− 3′).
- 4^d 19^{3/4}^h to 20^{1/2}^h Wave in Dec. (− 5′).
- 5^d 10^{3/4}^h to 11^{3/4}^h Irregular wave in N.F. (− 25). 10^{3/4}^h to 12^{1/4}^h Increase in Dec. (+ 7′). 16^h to 17^h Wave in Dec. (− 4′). 15^{3/4}^h to 16^{1/2}^h Decrease in N.F. (− 30), followed till 18^{3/4}^h by steady increase (+ 40). 20^{3/4}^h to 21^{3/4}^h Truncated wave in N.F. (+ 20). 21^{3/4}^h to 24^h Slow wave in Dec. (+ 7′). 22^{1/2}^h to 23^{3/4}^h Rapid increase in N.F. (+ 45), partially returning till 23^{3/4}^h (− 20), and followed immediately till 6^d 1^h by a further wave (+ 50). 23^h to 6^d 0^{1/2}^h Rapid decrease in V.F. (− 36).
- 6^d 0^{1/4}^h to 1^h Wave in Dec. (+ 5′). 1^h to 3^{1/4}^h Rapid increase in Dec. (+ 15′), followed till 4^{1/2}^h by steady decrease (− 5′). 1^h to 1^{1/2}^h Increase in V.F. (+ 12). 16^{3/4}^h to 17^{1/2}^h Irregular decrease in Dec. (− 7′), rapid towards the end. 17^{3/4}^h to 18^{3/4}^h Steady increase in Dec. (+ 5′). 17^{1/2}^h to 17^{3/4}^h Very rapid increase in N.F. (+ 20).
- 7^d 16^{1/2}^h to 17^{1/2}^h Wave in Dec. (− 3′).
- 10^d 23^{3/4}^h to 11^d 0^{1/2}^h Wave in Dec. (+ 5′).
- 13^d 15^h to 17^h Wave in N.F. (− 25). 17^{3/4}^h to 18^{1/4}^h Wave in N.F. (− 20). 17^{3/4}^h to 19^h Wave in Dec. (− 3′). 20^{1/2}^h to 21^h Decrease in Dec. (− 6′), followed immediately from 21^h to 22^{3/4}^h by a double wave (± 5′). 21^h to 22^{1/2}^h Double wave in N.F. (+ 40, − 20), very steep at beginning. 20^{3/4}^h to 22^{1/4}^h Double wave in V.F. (± 12), the second part truncated. 22^{3/4}^h to 23^{3/4}^h Irregular wave in Dec. (− 3′).
- 14^d 0^h to 1^h Sharp irregular wave in Dec. (+ 4′), accompanied by increase in N.F. (+ 25) with partial return. 2^h to 4^{1/2}^h Double wave in Dec. (+ 7, − 5′), the first part sharp, the second domed. 2^{1/2}^h to 4^h Truncated wave in N.F. (+ 30). 2^{1/2}^h to 3^h Rapid decrease in V.F. (− 20). 22^{1/2}^h to 15^d 0^{3/4}^h Decrease in Dec. (− 6′), with small superposed wave at 23^{1/2}^h to 24^h (+ 2′). 23^{1/2}^h to 15^d 0^{1/2}^h Irregular wave in N.F. (+ 20).
- 17^d 3^{3/4}^h Sudden increase in Dec. (+ 3′), followed immediately by rapid decrease till 4^{3/4}^h (− 6′), and accompanied by a sudden increase in N.F. (+ 20), and rapid decrease in V.F. (− 12).
- 18^d 17^{3/4}^h to 19^h Serrated wave in Dec. (− 5′).
- 19^d 1^{3/4}^h to 3^h Irregular truncated wave in N.F. (+ 20). 1^{1/2}^h to 2^{1/2}^h Decrease in V.F. (− 14), partially recovering till 3^h. 2^h to 3^{1/4}^h Wave in Dec. (− 4′). 13^h to 14^{1/2}^h Truncated wave in N.F., steep at first (− 20). 15^{3/4}^h to 17^{3/4}^h Numerous small oscillations in Dec. and N.F.
- 20^d 12^{1/2}^h to 12^{3/4}^h Sharp wave in Dec. (+ 3′). 23^{3/4}^h to 21^d 1^h Wave in Dec. (− 6′), accompanied by truncated wave in N.F. (+ 40).
- 21^d 0^h to 1^{1/2}^h Decrease in V.F. (− 12). 1^h to 2^{1/2}^h Wave in Dec. (− 4′).
- 22^d 21^h to 22^{1/2}^h Wave in Dec. (− 4′).
- 24^d 23^{3/4}^h to 25^d 0^{3/4}^h Wave in Dec. (− 3′).
- 25^d 11^h to 12^{1/4}^h Increase in Dec. (+ 6′). 19^{3/4}^h to 22^h Slow truncated wave in Dec. (− 4′).
- 26^d 18^{3/4}^h to 19^{3/4}^h Wave in Dec. (− 4′), followed immediately till 20^{3/4}^h by a second wave (− 5′). 18^{3/4}^h to 18^{3/4}^h Decrease in N.F. (− 20), partially recovering till 19^h.
- 28^d 2^{3/4}^h to 3^{1/2}^h Wave in Dec. (+ 5′). 11^{1/2}^h to 12^h Increase in Dec. (+ 3′). 13^{1/4}^h to 13^{1/2}^h Sharp wave in Dec. (+ 3′). 21^h to 21^{1/2}^h Decrease in Dec. (− 4′). 22^{1/2}^h to 22^{3/4}^h Decrease in N.F. (− 20), followed immediately till 23^{3/4}^h by a wave (+ 30). 23^h to 24^h Wave in Dec. (− 3′).

1921.
March

- 1^d 11¹/₂^h to 13¹/₂^h Irregular serrated wave in Dec. (+ 5'). 12³/₄^h to 14¹/₄^h Wave in N.F. (- 20). 20^h to 21¹/₂^h Sharp wave in Dec. (- 10'). 19³/₄^h to 21¹/₂^h Double-crested wave in N.F. (- 30). 20^h to 22^h Wave in V.F. (+ 20).
- 2^d 3^h to 4^h Domed wave in Dec. (+ 5'). 4¹/₂^h to 5^h Decrease in Dec. (- 3'). 13^h to 16^h Slow wave in N.F. (- 30). 22¹/₂^h to 23¹/₂^h Wave in Dec. (- 3'). 23³/₄^h to 24^h Rapid increase in N.F. (+ 20).
- 3^d 0^h to 2^h Two consecutive domed waves in Dec. (- 3'). 22¹/₂^h to 24^h Wave in N.F. (+ 20).
- 5^d 22¹/₂^h to 24^h Wave in Dec. (- 3')
- 6^d 13^h to 15¹/₂^h Increase in V.F. (+ 16).
- 7^d 10¹/₂^h to 13^h Steady increase in Dec. (+ 6'). 20¹/₂^h to 21^h Wave in Dec. (- 3'). 21^h to 22^h Wave in Dec. (- 3'). 20³/₄^h to 21¹/₂^h Increase in N.F. (+ 25).
- 9^d 19^h to 20^h Wave in Dec. (- 3'). 20^h to 21^h Wave in N.F. (- 30). 22¹/₂^h to 10^d 0¹/₂^h Wave in Dec. (- 11'). 23^h to 24^h Wave in N.F. (+ 35).
- 10^d 0^h to 1¹/₂^h Wave in N.F. (+ 35). 0³/₄^h to 1¹/₂^h Increase in Dec. (+ 5'). 0¹/₂^h to 0³/₄^h Decrease in V.F. (- 12). 0³/₄^h Sharp deviation in V.F. (+ 12) lasting about 4 minutes. 2^h to 3^h Sharp wave in Dec. (+ 10'). 2^h to 4^h Wave in N.F. (+ 40). 2¹/₂^h to 2³/₄^h Rapid decrease in V.F. (- 22), steadily recovering till 5^h. 9¹/₂^h to 9³/₄^h Sharp wave in Dec. (+ 4'), accompanied by a similar wave in N.F. (+ 25). 12¹/₂^h to 16^h Steady increase in V.F. (+ 25).
- 11^d 10^h to 12³/₄^h Increase in Dec. (+ 8'). 23³/₄^h to 12^d 0¹/₂^h Decrease in N.F. (- 20).
- March 11^d 11¹/₂^h The new vertical force instrument was set up. Experiments for temperature adjustments, etc., were in progress until April 7^d 17^h at which date continuous V.F. records were resumed.
- 12^d 14³/₄^h Sudden decrease in Dec. (- 3'). 17¹/₂^h to 18³/₄^h Wave in N.F. (- 20).
- 14^d 21¹/₂^h to 22^h Wave in Dec. (+ 3'), followed immediately till 23¹/₂^h by a further wave (- 10'). 22^h to 23^h Wave in N.F. (+ 50).
- 15^d 5¹/₂^h to 7^h Wave in N.F. (- 30). 6¹/₄^h to 7¹/₂^h Truncated wave in Dec. (+ 4'). 8^h to 10^h Decrease in N.F. (- 70). 9^h to 10^h Increase in Dec. (+ 5'). 11¹/₂^h to 12¹/₂^h Increase in Dec. (+ 4'). 17¹/₂^h to 19^h Wave in Dec. (+ 4'), followed immediately till 19¹/₂^h by a rapid increase (+ 5'). 19^h to 20^h Wave in N.F. (- 35), the increase continuing till 20¹/₂^h (+ 20). 19¹/₂^h to 20¹/₂^h Rapid irregular decrease in Dec. (- 13'), followed till 22^h by a general increase (+ 6') with irregular fluctuations, the largest a wave (+ 3').
- 16^d 3^h to 4³/₄^h Sharp serrated wave in Dec. (+ 8'). 2³/₄^h to 4¹/₂^h Double wave in N.F. (- 20, + 30), the first part truncated. 4³/₄^h to 5¹/₂^h Wave in N.F. (- 20). 5¹/₂^h to 6¹/₄^h Increase in Dec. (+ 7'). 6^h to 6¹/₂^h Decrease in N.F. (- 25). 8^h to 8¹/₂^h Decrease in Dec. (- 3'). 10¹/₂^h to 13^h and 14³/₄^h to 15³/₄^h. No register of Dec. and N.F.
- 21^d 10^h to 13^h Steady increase in Dec. (+ 13'). 15¹/₂^h Sudden increase in Dec. (+ 5'), accompanied by a similar increase in N.F. (+ 30). 16¹/₂^h Small increase in N.F. (+ 15), followed till 17^h by a rapid irregular decrease (- 75). 16¹/₂^h to 17¹/₂^h Numerous small fluctuations in Dec., culminating in a rapid oscillating decrease till 18¹/₂^h (- 12'), with a wave superposed at 17¹/₂^h to 18^h (+ 4'). 17¹/₂^h to 18^h Serrated wave in N.F. (+ 25), followed immediately till 18¹/₂^h by a rapid increase (+ 35). 19^h to 19¹/₂^h Wave in N.F. (+ 20).
- 22^d 0¹/₂^h to 1^h Wave in Dec. (- 5'). 0¹/₂^h to 0³/₄^h Wave in N.F. (+ 20). 4^h to 5^h Wave in Dec. (+ 8'). 4^h to 5¹/₂^h Double wave in N.F. (+ 20), followed, after a small increase till 6^h, by a steady decrease till 8^h (- 65). 5^h to 6^h Truncated wave in Dec. (+ 3'). 6¹/₄^h to 8^h Irregular serrated wave in Dec. (- 5'). 11^h to 13^h Loss of register in Dec. and N.F. 13¹/₂^h to 14^h Decrease in Dec. (- 5'). 14^h to 14¹/₂^h Increase in N.F. (+ 30). 14¹/₂^h to 15¹/₂^h Very sharp wave in N.F. (+ 45). 14³/₄^h to 15¹/₂^h Sharp wave in Dec. (+ 5'), sudden at the beginning. 20³/₄^h to 21³/₄^h Irregular wave in Dec. (- 4').
- 24^d 18³/₄^h to 19¹/₂^h Rapid decrease in Dec. (- 6'). 20¹/₂^h to 22^h Domed wave in Dec. (- 7').
- 25^d 2¹/₂^h to 3¹/₂^h Wave in Dec. (+ 5'). 4^h to 5¹/₂^h Domed wave in N.F. (+ 20). 5¹/₂^h to 6¹/₂^h Wave in Dec. (+ 5'). 10¹/₂^h to 13^h Irregular increase in Dec. (+ 10'). 12^h to 14^h Irregular double wave in N.F. (+ 20). 20¹/₂^h to 22¹/₂^h Truncated wave in Dec. (- 10'), with additional wave superposed from 21^h to 21³/₄^h (- 5'). 20³/₄^h to 22¹/₂^h Double wave in N.F. (+ 50, - 30). 22¹/₂^h to 22³/₄^h Very rapid decrease in Dec. (- 16), irregularly recovering till 26^d 1^h. 22¹/₂^h to 23¹/₂^h Wave in N.F. (+ 30).
- 26^d 2¹/₂^h to 3¹/₂^h Wave in Dec. (+ 5'). 6¹/₂^h to 8¹/₂^h Decrease in N.F. (- 35). 11¹/₂^h to 12¹/₂^h Double crested wave in N.F. (- 25). 12¹/₂^h Very rapid increase in Dec. (+ 4'). 13¹/₂^h to 15¹/₂^h Serrated wave in N.F. (- 35). 21¹/₂^h to 22^h No register of Dec. and N.F. 22¹/₂^h to 27^d 0¹/₂^h Two consecutive waves in N.F. (+ 35, + 50). 22¹/₂^h to 27^d 0³/₄^h Two consecutive waves in Dec., both truncated (- 5', - 6').
- 27^d 9¹/₂^h to 10¹/₂^h Increase in Dec. (+ 4'). 11^h to 13^h Increase in Dec. (+ 8'). 13^h to 13¹/₂^h Domed wave in N.F. (- 20). 17^h to 18³/₄^h Serrated double wave in N.F. (+ 20). 17^h to 18^h Decrease in Dec. (- 8'), followed till 19³/₄^h by irregular increase (+ 5'). 19¹/₂^h to 21^h Double-crested wave in N.F. (+ 55, + 100), followed immediately till 21¹/₂^h by a further wave (+ 20). 19³/₄^h to 21¹/₂^h Three consecutive waves in Dec. (- 7', - 12' - 8').

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28^d 2^h to 3^h Wave in Dec. (+ 3'). 10^h to 12^h General increase in Dec. (+ 11').

29^d 0^h to 0^h Irregular wave in Dec. (+ 5'). 0^h Very rapid increase in N.F. (+ 20). 1^h to 3^h Wave in Dec. (+ 10'). 2^h to 3^h Truncated wave in N.F. (+ 30). 4^h to 5^h Wave in N.F. (+ 20). 8^h to 10^h Decrease in N.F. (- 50). 10^h to 14^h Irregular general increase in Dec. (+ 13'). 16^h to 17^h Rapid decrease in Dec. (- 15'), followed till 18^h by partial recovery (+ 8'). 16^h to 18^h Serrated wave in N.F. (+ 60). 19^h to 21^h Very sharp wave in Dec. (- 13'). 20^h to 21^h Wave in N.F. (+ 65), very steep at first. 21^h to 22^h Domed wave in Dec. (- 4'). 22^h to 23^h Decrease in Dec. (- 3').

30^d 0^h to 1^h Wave in Dec. (+ 6'). 0^h to 1^h Wave in N.F. (- 20). 23^h to 24^h Wave in N.F. (+ 20).

31^d 14^h to 16^h No register of Dec. and N.F.

April

2^d 0^h to 1^h Wave in Dec. (- 3').

3^d 21^h to 22^h Truncated wave in N.F. (+ 25). 22^h to 23^h Wave in Dec. (- 8').

7^d 17^h Vertical Force records resumed

8^d 15^h to 16^h Wave in N.F. (+ 20). 22^h to 23^h Wave in Dec. (- 3').

9^d 18^h to 18^h Decrease in Dec. (- 7'), followed immediately till 20^h by a double wave (- 4', + 3'). 18^h to 19^h Wave in N.F. (+ 35). 23^h to 10^d 2^h Two consecutive waves in N.F. (+ 30, + 35). 23^h to 10^d 1^h Double wave in Dec. (+ 2', - 4').

10^d 1^h to 1^h Decrease in Dec. (- 5'). 4^h to 6^h Increase in Dec. (+ 5'). 0^h to 1^h Irregular decrease in V.F. (- 25). 18^h to 19^h Rapid decrease in Dec. (- 7'), partially recovering till 20^h (+ 5'). 18^h to 20^h Truncated wave in N.F. (+ 25). 23^h to 11^d 1^h Wave in Dec. (- 4').

11^d 2^h to 4^h Double-crested wave in Dec. (- 5').

12^d 2^h to 3^h Truncated wave in Dec. (- 3'). 13^h to 15^h Serrated wave in N.F. (- 40). 15^h to 16^h Sharp wave in N.F. (+ 20). 16^h to 17^h Double wave in N.F. (\pm 20).

13^d 0^h to 2^h Irregular double wave in Dec. (- 4', + 5'). 3^h to 4^h Truncated wave in Dec. (+ 6'). 4^h to 7^h Two consecutive waves in V.F. (- 20). 5^h to 6^h Sharp and greatly serrated wave in Dec. (+ 12'), interrupted at 5^h by a very steep double wave (\mp 4'). 4^h to 6^h Sharp serrated wave in N.F. (- 100). 6^h to 8^h Domed and serrated wave in Dec. (+ 6'), with a sharp wave superposed at 7^h (+ 3'). 6^h to 7^h Wave in N.F. (+ 20). 7^h to 8^h Very rapid oscillating decrease in N.F. (- 70). 8^h to 10^h Continuous oscillations in Dec. and N.F., with very sharp waves in Dec. at 8^h (+ 5'), 8^h (- 4') and 9^h (- 4'). 11^h to 13^h Wave in Dec. (+ 5'). 19^h to 20^h Truncated wave in Dec. (- 7'). 19^h to 21^h Truncated wave in N.F. (+ 25) with a small double wave superposed. 23^h to 14^d 1^h Wave in N.F. (+ 20).

14^d 0^h to 1^h Wave in Dec. (- 3'). 10^h to 15^d 9^h No register of N.F. 17^h to 18^h Rapid decrease in Dec. (- 9'). 21^h to 22^h Double wave in Dec. (\mp 3').

15^d 0^h to 2^h Wave in Dec. (+ 7'). 3^h to 3^h Increase in Dec. (+ 9') with partial return till 4^h (- 5'). 9^h to 14^h Steady increase in Dec. (+ 12'). 14^h to 15^h Decrease in Dec. (- 5'). 14^h to 16^h Wave in N.F. (- 20). 13^h to 15^h Increase in V.F. (+ 30). 18^h to 19^h Decrease in Dec. (- 4').

16^d 3^h to 6^h Slow wave in N.F. (+ 30). 20^h to 22^h Two consecutive waves in Dec. (- 5', - 6'). 20^h to 21^h Wave in N.F. (+ 20).

17^d 1^h to 3^h Decrease in Dec. (- 7'). 19^h to 20^h Wave in Dec. (- 3').

18^d 14^h Sudden increase in Dec. (+ 8'), nearly returning by 16^h (- 6'). 14^h Sudden increase in N.F. (+ 30). 16^h to 17^h Irregular decrease in N.F. (- 40). 18^h to 19^h Domed wave in Dec. (- 4') followed immediately till 20^h by two consecutive sharp waves (- 5', - 6'). 19^h to 19^h Wave in N.F. (+ 35). 22^h to 22^h Double-crested wave in Dec. (- 3'). 23^h to 24^h Wave in N.F. (- 20).

19^d 0^h to 5^h Dec. and N.F. in continuous oscillation. 1^h to 2^h A general decrease in Dec. (- 13'), with two well marked waves, the first at 1^h (+ 4'), the second at 2^h to 2^h (+ 5'). 1^h to 3^h Double wave in N.F. (\pm 25), with four or five oscillations of about the same order of amplitude (25) superposed. 1^h to 3^h Serrated wave in V.F. (- 20). 4^h Very sharp serrated wave in Dec. (+ 5'). 7^h Very sharp wave in Dec. (- 5'). 11^h to 20^d 11^h. No register of Dec. and N.F.

20^d 14^h to 14^h Increase in N.F. (+ 20). 15^h to 16^h Double wave in N.F. (\pm 25). 16^h to 16^h Decrease in Dec. (- 3'). 17^h to 19^h Decrease in Dec. (- 11'), irregularly recovering till 21^h. 18^h to 20^h Wave in N.F. (+ 30). 23^h to 24^h Increase in N.F. (+ 20).

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- 21^d 0^h to 1^h Truncated wave in Dec. (− 5′). 0^h to 1^h Wave in N.F. (+ 20). 2^h to 2^h Increase in Dec. (+ 4′). 2^h to 5^h Irregular decrease in N.F. (− 90), interrupted by a temporary small increase from 3^h to 4^h. 2^h to 4^h Truncated wave in Dec. (+ 5′). 4^h to 4^h Steep wave in Dec. (+ 6′), followed immediately till 6^h by a further serrated wave (+ 7′). 5^h to 6^h Wave in V.F. (+ 15). 5^h to 6^h Rapid increase in N.F. (+ 60), steadily returning till 8^h. 6^h to 8^h Rapid decrease in Dec. (− 12′), steadily recovering till 12^h. 13^h Rapid decrease in Dec. (− 3′). 12^h to 13^h Increase in V.F. (+ 25). 18^h to 19^h Sharp serrated wave in Dec. (− 8′), accompanied by a similar wave in N.F. (+ 70), and a decrease in V.F. (− 15).
- 22^d 0^h to 3^h Two consecutive waves in Dec. (+ 10′, + 8′). 3^h to 4^h Decrease in Dec. (− 4′). 1^h to 2^h Rapid decrease in V.F. (− 25), continuing irregularly till 3^h (− 15), and then steadily recovering till 5^h. 21^h to 21^h Very rapid decrease in Dec. (− 15′), partially recovering till 22^h (+ 5′), and, after two small fluctuations between 22^h and 22^h, completely recovering by 23^d 0^h. 21^h to 21^h Increase in N.F. (+ 40). 22^h to 23^h Decrease in N.F. (− 50). 21^h to 23^h Decrease in V.F. (− 30).
- 23^d 9^h to 13^h Steady increase in Dec. (+ 17′). 12^h to 14^h Double-crested wave in N.F. (− 25), followed till 15^h by an increase (+ 30). 13^h to 13^h Rapid decrease in Dec. (− 5′). 22^h to 23^h Wave in N.F. (+ 20), with steep rise.
- 24^d 6^h to 7^h Wave in N.F. (− 20).
- 25^d 1^h to 3^h Wave in Dec. (+ 4′).
- 26^d 1^h to 2^h Wave in Dec. (+ 4′).
- 28^d 19^h Sudden increase in N.F. (+ 20), returning by 20^h.
- 29^d 2^h to 2^h Sharp wave in N.F. (+ 20). 8^h to 9^h Rapid decrease in N.F. (− 60), followed till 11^h by three consecutive serrated waves (− 20). 8^h to 9^h Rapid increase in Dec. (+ 8′). 9^h to 10^h Serrated wave in Dec. (− 5′). 12^h to 18^h Continuous oscillation in Dec. and N.F. The principal waves in Dec. are at 13^h to 13^h (− 4′); 15^h and 15^h (− 5′, − 4′); 16^h (− 6′); and from 16^h to 17^h, the last decreasing 26′ till 17^h and increasing 18′ till 17^h. The principal waves in N.F. are at 12^h to 13^h (+ 40); 13^h to 14^h (− 25); 15^h to 16^h double-crested (+ 30, + 40); 16^h to 16^h truncated (+ 50); and from 16^h to 18^h, the last increasing 130 till 17^h and decreasing 100 till 18^h. 18^h to 19^h Truncated wave in Dec. (− 4′). 18^h to 19^h Sharp wave in N.F. (+ 25). 11^h to 16^h General increase in V.F. (+ 125), followed till 17^h by a wave (− 30), and then till 21^h by a general decrease (− 75). 19^h to 24^h Dec. and N.F. still oscillating in a lesser degree. 23^h to 23^h Wave in N.F. (+ 20).

May

- 1^d 14^h to 14^h Increase in N.F. (+ 25). 12^h to 14^h Increase in V.F. (+ 25).
- 2^d 8^h to 10^h Decrease in V.F. (− 20).
- 3^d 12^h to 13^h Wave in N.F. (+ 20). 9^h to 12^h Increase in Dec. (+ 12′). 19^h to 21^h Wave in Dec. (− 7′). 23^h to 4^d 0^h Wave in N.F. (− 20).
- 4^d 1^h to 2^h Decrease in Dec. (− 7′), followed till 4^h by a general increase (+ 7′). 4^h to 6^h Double wave in N.F. (± 20). 4^h to 6^h Wave in Dec. (+ 9′). 5^h to 6^h Wave in V.F. (− 12). 12^h to 16^h Increase in V.F. (+ 40).
- 5^d 23^h to 23^h Increase in Dec. (+ 3′).
- 6^d 17^h to 19^h Wave in N.F. (− 25).
- 8^d 8^h to 9^h Increase in Dec. (+ 7′). 23^h to 9^d 1^h Wave in Dec. (+ 4′). 23^h to 24^h Increase in N.F. (+ 20).
- 9^d 8^h to 13^h Steady increase in Dec. (+ 13′). 13^h to 15^h Increase in N.F. (+ 40). 15^h to 15^h Wave in N.F. (+ 20). 17^h to 18^h Wave in N.F. (+ 25). 19^h to 19^h Decrease in Dec. (− 4′). 20^h to 21^h Sharp wave in Dec. (+ 7′). 20^h to 21^h Wave in N.F. (− 25). 20^h to 21^h Decrease in V.F. (− 20).
- 10^d 14^h to 15^h Decrease in Dec (− 6′), accompanied by serrated wave in N.F. (− 20). 17^h to 18^h Wave in N.F. (− 20).
- 12^d 2^h to 2^h Decrease in Dec. (− 3′). 7^h to 8^h Oscillating decrease in Dec. (− 7′), followed immediately till 9^h by a very sharp double wave (+ 6, − 7′), and further till 10^h by a rapid oscillating increase (+ 16′). 7^h to 8^h Decrease in N.F. (− 20), followed till 8^h by a very rapid further decrease (− 100), and immediately till 9^h by a serrated wave (+ 50). 8^h to 8^h Truncated wave in V.F. (− 12), followed immediately till 9^h by a sharp serrated wave (− 20). 9^h to 10^h Serrated wave in N.F. (+ 30). 11^h to 16^h Steady increase in V.F. (+ 50). 12^h to 13^h Serrated wave in N.F. (+ 30). 15^h to 16^h Wave in N.F. (+ 30), followed immediately till 18^h by an increase (+ 60).
- 13^d 2^h to 4^h Wave in N.F. (− 25). 3^h to 3^h Sharp wave in Dec. (+ 3′).
- 13^d 12^h to 14^d 12^h. See Plate I

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- 14^d 12^h to 13^h Wave in Dec. (- 7'), with large oscillations superposed, accompanied by two short period waves in N.F. (- 30). 13^h to 13^h Increase in V.F. (+ 25).
- 14^d 15^h to 15^d 15^h. See Plate II.
- 15^d 15^h to 16^d 15^h. See Plate III.
- 16^d 15^h to 17^d 8^h All three traces continuously disturbed. The principal features only are mentioned.
- 16^d 16^h to 17^h Sharp wave in Dec. (- 5'), with truncated wave in N.F. (+ 50), and wave in V.F. (+ 15). 18^h to 19^h General increase in Dec. (+ 7'). 19^h to 20^h Serrated wave in N.F. (+ 40). 23^h to 23^h Serrated wave in Dec. (+ 7'), with a serrated wave in N.F. (+ 50).
- 17^d 0^h to 2^h Serrated wave in Dec. (double-crested) (+ 10', + 8'), accompanied by serrated and truncated wave in N.F. (- 60), and a wave in V.F. (- 30). 2^h to 4^h A general wave, very disturbed, in Dec (- 9'). 3^h to 4^h Rapid decrease in N.F. (- 60). 3^h to 3^h Decrease in V.F. (- 15). 7^h to 8^h Domed wave in N.F. (- 20). 16^h to 18^h Increase in N.F. (+ 35). 21^h to 23^h Wave in N.F. (+ 20). 23^h to 23^h Truncated wave in N.F. (+ 25). 23^h to 18^d 0^h General decrease in Dec. (- 8').
- 18^d 0^h to 1^h Increase in Dec. (+ 5'). 11^h to 11^h Truncated wave in N.F. (- 20). 13^h to 13^h Rapid increase in N.F. (+ 30). 17^h to 18^h Rapid increase in N.F. (+ 30). 19^h to 19^h Irregular decrease in N.F. (- 25), followed immediately till 20^h by a wave (+ 20). 19^h to 21^h Wave in Dec. (- 5'). 20^h to 21^h Decrease in V.F. (- 18), with sudden partial recovery (+ 10) at 21^h.
- 19^d 20^h to 20^h Very sharp wave in N.F. (+ 65), followed immediately till 20^h by an increase (+ 20). 21^h to 22^h Wave in Dec. (- 9'). 21^h to 21^h Rapid increase in N.F. (+ 30), followed immediately till 22^h by a rapid decrease (- 110) interrupted at 21^h. 21^h to 23^h Fluctuating accelerated decrease in V.F. (- 75), followed by a corresponding increase till 20^d 2^h (+ 65), a wave intervening from 23^h to 23^h (+ 20). 22^h to 22^h Irregular decrease in Dec. (- 5'). 22^h to 22^h Wave in N.F. (+ 25). 22^h to 24^h Very steep double wave in Dec. (- 26', + 20'), accompanied by a corresponding wave in N.F. (+ 150, - 85).
- 20^d 0^h to 1^h Truncated wave in Dec. (- 7'). 2^h to 4^h Steep wave in Dec. (+ 17'), accompanied by a similar wave in N.F. (- 75), and a wave in V.F. (- 45). 5^h to 7^h Dec. and N.F. traces continuously disturbed with small oscillations. 5^h to 6^h Wave in Dec. (+ 10'), accompanied by a general decrease in N.F. (- 50). 6^h to 7^h Very sharp wave in Dec. (+ 6'), accompanied by a very sharp double wave in N.F. (± 20). 14^h to 20^h Dec. and N.F. traces greatly disturbed, and in continuous oscillation. The general feature in Dec. is a broad flattened wave 14^h to 19^h (+ 15'). Superposed are:—a sudden increase at 14^h (+ 5'); a sudden increase at 15^h (+ 4'); a wave at 15^h to 16^h (+ 3'); a very steep double wave at 16^h (± 5'); a sharp wave at 18^h to 18^h (+ 5'); and a rapid decrease 19^h to 19^h (- 8'). In N.F. the amplitude of the general wave is about 100 γ. Superposed on this wave are:—a sudden increase at 14^h (+ 110), returning in two stages till 15^h; a sharp double wave 15^h to 15^h (± 30); a very sharp wave 15^h to 15^h (- 40); a sudden increase at 16^h (+ 40), followed by a very sharp double wave at 16^h (± 40); a sharp double wave, 17^h to 17^h (± 30); a sharp wave 17^h to 18^h (+ 40); a rapid decrease 18^h to 19^h (- 60). 19^h to 20^h A serrated domed wave in N.F. (+ 40). 18^h to 19^h Increase in V.F. (+ 25), gradually returning till 23^h. 22^h to 22^h Increase in N.F. (+ 20). 23^h to 23^h Increase in N.F. (+ 25). 23^h to 24^h Wave in N.F. (+ 50), very steep at beginning and end. 23^h to 23^h Wave in Dec. (- 4'), followed immediately till 21^d 0^h by a truncated wave (- 4'). 23^h to 24^h Rapid decrease in V.F. (- 20).
- 21^d 0^h to 2^h General decrease in N.F. (- 70). 0^h to 3^h Irregular double wave in Dec. the first part truncated (- 7', + 6'), on which are superposed at 3^h, 3^h and 3^h three small steep waves (+ 3'). 1^h to 3^h Wave in V.F. (+ 20). 6^h to 6^h Decrease in N.F. (- 40). 7^h to 8^h Wave in N.F. (- 20). 12^h to 12^h Increase in N.F. (+ 25). 14^h to 14^h Serrated wave in N.F. (- 35). 13^h to 14^h Increase in Dec. (+ 5'). 15^h to 15^h Irregular decrease in N.F. (- 20) followed till 16^h by an increase (+ 50). 15^h to 16^h Truncated wave in Dec. (- 3'). 17^h to 19^h Irregular wave in Dec. (- 10'). 17^h to 19^h Irregular serrated wave in N.F. (+ 70).
- 22^d 11^h to 11^h Increase in Dec. (+ 5'). 11^h to 12^h Double-crested wave in N.F. (- 30). 12^h to 14^h Increase in V.F. (+ 25). 20^h to 21^h Wave in Dec. (- 5'). 20^h to 21^h Wave in N.F. (+ 20).
- 23^d 0^h to 1^h Wave in N.F. (+ 35). 0^h to 4^h Slow wave in V.F. (- 25). 1^h to 2^h Double wave in Dec. (± 3'). 6^h to 8^h Decrease in N.F. (- 35).
- 24^d 8^h to 9^h Decrease in V.F. (- 20). 17^h to 18^h Increase in N.F. (+ 20). 22^h to 22^h Decrease in Dec. (- 3').
- 26^d 14^h to 15^h Serrated wave in N.F. (+ 25).
- 27^d 20^h to 22^h Irregular wave in Dec. (- 4').
- 28^d 3^h to 4^h Wave in Dec. (+ 3'). 20^h to 22^h Two consecutive waves in Dec. (- 4'). 21^h to 22^h Wave in N.F. (+ 25).
- 29^d 12^h to 13^h Wave in N.F. (- 20).
- 31^d 15^h to 16^h Serrated wave in N.F. (+ 20).

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- 1^d 10 $\frac{1}{2}$ ^h to 10 $\frac{3}{4}$ ^h Decrease in N.F. (- 20).
- 3^d 20 $\frac{1}{2}$ ^h Sudden increase in N.F. (+ 25). 22 $\frac{1}{2}$ ^h to 23 $\frac{1}{2}$ ^h Truncated wave in N.F. (+ 20). 22 $\frac{3}{8}$ ^h to 4^d 0 $\frac{1}{2}$ ^h Flattened wave in Dec. (- 4').
- 4^d 1^h to 2^h Wave in Dec. (- 6'). 1^h to 1 $\frac{1}{2}$ ^h Decrease in N.F. (- 40). 14 $\frac{3}{8}$ ^h to 15 $\frac{1}{2}$ ^h Wave in N.F. (- 20). 16 $\frac{3}{8}$ ^h to 18 $\frac{1}{2}$ ^h Increase in N.F. (+ 40). 17 $\frac{3}{4}$ ^h to 18 $\frac{1}{2}$ ^h Wave in Dec. (- 3'). 20 $\frac{1}{4}$ ^h to 21 $\frac{1}{2}$ ^h Wave in Dec. (- 3'). 21^h to 22^h Wave in N.F. (+ 20).
- 5^d 2^h to 4^h Wave in Dec. (- 3').
- 6^d 11 $\frac{1}{2}$ ^h to 19^h Steady increase in V.F. (+ 60), partially returning till 22^h (- 30). 14^h to 14 $\frac{1}{2}$ ^h Truncated wave in N.F. (- 20). 14 $\frac{1}{2}$ ^h to 15 $\frac{1}{2}$ ^h Oscillating decrease in N.F. (- 35), followed till 16 $\frac{3}{4}$ ^h by an irregular serrated wave (+ 60). 16^h to 17^h Decrease in Dec. (- 7'). 17^h to 17 $\frac{1}{2}$ ^h Irregular increase in N.F. (+ 40). 17 $\frac{3}{4}$ ^h to 18 $\frac{1}{4}$ ^h Sharp wave in N.F. (+ 20). 18^h to 19^h Accelerated decrease in Dec. (- 14'), partially recovering till 19 $\frac{1}{2}$ ^h (+ 9'). 19^h to 20^h Wave in N.F. (+ 55).
- 7^d 9 $\frac{1}{2}$ ^h to 11 $\frac{1}{2}$ ^h No trace in V.F. 13^h to 14^h Truncated wave in N.F. (+ 25). 15 $\frac{1}{2}$ ^h to 16 $\frac{1}{2}$ ^h Wave in N.F. (+ 50). 15 $\frac{1}{2}$ ^h to 16 $\frac{1}{2}$ ^h Wave in Dec. (+ 3'). 17 $\frac{1}{2}$ ^h to 18^h Wave in N.F. (+ 20). 18^h to 20^h Truncated wave in N.F. (+ 25).
- 8^d 20^h to 20 $\frac{3}{4}$ ^h Truncated wave in N.F. (+ 35). 19 $\frac{1}{2}$ ^h to 20 $\frac{1}{2}$ ^h Wave in Dec. (- 4'), followed till 21 $\frac{1}{2}$ ^h by a rapid decrease (- 10'). 20 $\frac{3}{4}$ ^h to 22^h Four consecutive small waves in N.F., followed till 22 $\frac{3}{4}$ ^h by a double-crested wave (- 50). 22 $\frac{1}{4}$ ^h to 22 $\frac{3}{8}$ ^h Wave in Dec. (+ 4'). 21^h to 24^h Two consecutive waves in V.F. (- 20, - 30). 22 $\frac{3}{8}$ ^h to 24^h Double wave in Dec. (+ 5', - 6'). 23^h to 23 $\frac{1}{2}$ ^h Wave in N.F. (- 30)
- 9^d 1^h to 3 $\frac{1}{2}$ ^h Domed wave in Dec. (+ 7'). 2^h to 5^h Slow wave in V.F. (- 20). 16 $\frac{1}{2}$ ^h to 18 $\frac{1}{2}$ ^h General increase in N.F. (+ 60) with a wave superposed at 17^h to 17 $\frac{3}{4}$ ^h (- 20). 18 $\frac{1}{4}$ ^h to 18 $\frac{3}{8}$ ^h Decrease in N.F. (- 30). 19^h to 20 $\frac{1}{2}$ ^h Wave in N.F. (- 30). 20 $\frac{1}{2}$ ^h to 21^h Decrease in N.F. (- 20).
- 10^d 1^h to 2 $\frac{1}{2}$ ^h Irregular double-crested wave in Dec. (+ 11'). 1 $\frac{1}{2}$ ^h to 2 $\frac{1}{2}$ ^h Rapid decrease in V.F. (- 40), steadily recovering till 6^h. 19 $\frac{1}{2}$ ^h to 20 $\frac{1}{2}$ ^h Wave in Dec. (- 4'). 19 $\frac{1}{2}$ ^h to 20 $\frac{1}{2}$ ^h Wave in N.F. (+ 20).
- 11^d 1 $\frac{1}{2}$ ^h to 2 $\frac{1}{4}$ ^h Wave in Dec. (+ 3'). 14 $\frac{1}{2}$ ^h to 16^h Increase in N.F. (+ 30).
- 13^d 17^h Rapid increase in N.F. (+ 20). 17 $\frac{1}{2}$ ^h to 18 $\frac{1}{2}$ ^h Wave in Dec. (- 3').
- 14^d 0 $\frac{3}{4}$ ^h to 1 $\frac{3}{4}$ ^h Wave in Dec. (+ 4'). 0 $\frac{3}{4}$ ^h to 1^h Rapid increase in N.F. (+ 20). 3 $\frac{1}{8}$ ^h to 4 $\frac{1}{8}$ ^h Decrease in Dec. (- 5'). 12 $\frac{3}{4}$ ^h to 14^h Domed wave in N.F. (+ 20). 15^h to 17^h Increase in V.F. (+ 25). 16^h to 17^h Truncated wave in N.F. (- 25). 22 $\frac{1}{2}$ ^h to 24^h Decrease in Dec. (- 5').
- 15^d 0^h to 1 $\frac{1}{2}$ ^h Wave in Dec. (+ 3').
- 16^d 8 $\frac{3}{8}$ ^h to 9^h Wave in Dec. (- 3'). 16 $\frac{1}{4}$ ^h to 16 $\frac{3}{4}$ ^h Sharp wave in V.F. with large continuous oscillations superposed (+ 50).
- 17^d 2 $\frac{1}{2}$ ^h to 4^h Wave in Dec. (+ 3'). 2 $\frac{1}{2}$ ^h to 4 $\frac{1}{2}$ ^h Wave in N.F. (- 20). 13 $\frac{3}{8}$ ^h to 14 $\frac{3}{8}$ ^h Truncated wave in N.F. (- 20).
- 20^d 0 $\frac{1}{2}$ ^h to 1^h Decrease in Dec. (- 4'). 14 $\frac{1}{4}$ ^h to 14 $\frac{3}{8}$ ^h Increase in N.F. (+ 30). 16 $\frac{1}{4}$ ^h to 16 $\frac{3}{8}$ ^h Wave in N.F. (+ 20).
- 22^d 3^h to 4 $\frac{1}{2}$ ^h Wave in N.F. (- 25). 3^h to 4 $\frac{1}{2}$ ^h Serrated wave in Dec. (+ 5').
- 23^d 13^h to 14^h Wave in N.F. (+ 20). 15 $\frac{1}{2}$ ^h to 16^h Decrease in Dec. (- 6'). 14 $\frac{1}{2}$ ^h to 15 $\frac{1}{2}$ ^h Increase in N.F. (+ 30). 15 $\frac{1}{2}$ ^h to 17 $\frac{1}{4}$ ^h Two consecutive double waves in N.F. (\pm 30, \mp 25).
- 26^d 14 $\frac{1}{2}$ ^h to 15 $\frac{1}{2}$ ^h Increase in N.F. (+ 35). 16 $\frac{3}{8}$ ^h to 18 $\frac{3}{8}$ ^h Truncated wave in N.F. with several small waves superposed (+ 40).
- 27^d 17^h to 17 $\frac{3}{4}$ ^h Increase in N.F. (+ 20).
- 29^d 1 $\frac{1}{2}$ ^h to 3^h Wave in Dec. (+ 3'). 5 $\frac{1}{2}$ ^h Sharp decrease in Dec. (- 3'). 6 $\frac{3}{8}$ ^h to 7^h Irregular decrease in Dec. (- 4'). 16 $\frac{1}{2}$ ^h to 17^h Wave in N.F. (+ 20). 19 $\frac{1}{2}$ ^h to 20 $\frac{1}{2}$ ^h Truncated wave in N.F. (- 20). 20^h to 20 $\frac{1}{2}$ ^h Decrease in Dec. (- 4').

July

- 1^d 0 $\frac{1}{2}$ ^h to 0 $\frac{3}{4}$ ^h Decrease in Dec. (- 3').
- 2^d 14 $\frac{3}{8}$ ^h to 15 $\frac{3}{8}$ ^h Increase in N.F. (+ 20).
- 3^d 15^h to 15 $\frac{1}{2}$ ^h Increase in N.F. (+ 20).
- 4^d 1 $\frac{1}{2}$ ^h to 2 $\frac{1}{2}$ ^h Wave in Dec. (+ 4'). 20 $\frac{1}{4}$ ^h to 21 $\frac{1}{2}$ ^h Truncated wave in Dec. (- 4'). 20 $\frac{1}{4}$ ^h to 21 $\frac{3}{8}$ ^h Double-crested wave in N.F. (+ 30).
- 5^d 22^h to 23 $\frac{3}{4}$ ^h Wave in Dec. (- 3').

1921.
July

- 6^d 14^h Very rapid increase in N.F. (+ 20). 20^h to 20³/₄^h Wave in N.F. (- 20). 21³/₄^h to 22^h Decrease in Dec. (- 3'). 23³/₄^h to 7^d 1³/₃^h Serrated wave in Dec. (- 4').
- 7^d 3¹/₂^h to 4²/₃^h Double wave in Dec. (\pm 4'). 12^h to 14¹/₄^h Wave in N.F. (- 50). 14¹/₄^h to 15^h Wave in N.F. (- 50). 15^h to 16¹/₄^h Double-crested wave in N.F. (- 35). 16¹/₄^h to 16³/₈^h Wave in N.F. (- 20). 19^h to 19³/₄^h Wave in N.F. (- 25).
- 8^d 5^h to 6^h Irregular wave in Dec. (- 4'). 9^h to 10^h Decrease in N.F. (- 40). 11³/₈^h to 13^h Increase in Dec. (+ 5'). 13³/₈^h to 14¹/₂^h Wave in N.F. (- 50). 17¹/₄^h Rapid decrease in Dec. (- 3'). 20³/₄^h to 22^h Double-crested wave in Dec. (- 8', - 4'). 21^h to 22^h Irregular wave in N.F. (+ 40). 23³/₄^h to 9^d 1^h Double wave in Dec. (\pm 3').
- 9^d 0^h to 1^h Double-crested wave in N.F. (+ 20). 0^h to 0¹/₂^h Decrease in V.F. (- 12). 3^h to 5³/₄^h Irregular serrated double-crested wave in Dec. (+ 9', + 7'). 3¹/₂^h to 4¹/₂^h Decrease in V.F. (- 18). 4^h to 7^h Three consecutive small waves of increasing amplitude in N.F. (the last + 20) followed by a decrease (- 20). 7^h to 8¹/₂^h Sharp wave in N.F. (- 20). 6¹/₂^h to 7²/₃^h Wave in Dec. (+ 3'). 15^h to 15¹/₂^h Decrease in N.F. (- 20), followed till 17^h by two consecutive waves (+ 25, + 20). 15¹/₂^h to 15³/₄^h Decrease in Dec. (- 3'). 17^h to 18^h Increase in N.F. (+ 30). 13^h to 16^h Steady increase in V.F. (+ 40). 18¹/₂^h to 19¹/₄^h Double wave in N.F. (- 20, + 40). 18¹/₂^h to 19¹/₄^h Sharp wave in Dec. (- 9'), with incomplete recovery.
- 10^d 21³/₄^h to 22¹/₂^h Wave in N.F. (+ 20).
- 12^d 14^h to 15^h Wave in N.F. (- 30). 15³/₈^h to 16^h Wave in N.F. (+ 20) followed by an increase till 16³/₈^h (+ 20). 17¹/₄^h to 17³/₈^h Decrease in Dec. (- 3').
- 13^d 20^h to 20³/₄^h Decrease in N.F. (- 20).
- 14^d 1¹/₂^h to 2¹/₂^h Wave in Dec. (+ 4'). 2¹/₂^h to 4^h Wave in N.F. (- 30). 2³/₈^h to 4¹/₂^h Wave in Dec. (+ 5'). 5¹/₂^h to 7¹/₂^h Wave in Dec. (+ 4'). 5¹/₂^h to 7^h Wave in N.F. (- 20). 5^h to 7^h Wave in V.F. (+ 12).
- 15^d 1^h to 3^h Double wave in Dec. (+ 5', - 3'). 4^h to 5³/₈^h Truncated wave in N.F. (- 30). 4^h to 5³/₈^h Irregular wave in Dec. (+ 5'). 1¹/₂^h to 2^h Decrease in V.F. (- 15). 16³/₈^h to 17¹/₂^h Wave in N.F. (- 20). 17³/₄^h to 19^h Double wave in N.F. (\pm 20). 22¹/₂^h to 22³/₄^h Rapid decrease in Dec. (- 6'). 22³/₄^h to 23¹/₂^h Wave in N.F. (+ 20).
- 16^d 0^h to 0³/₈^h Wave in Dec. (+ 3'). 2^h to 3¹/₂^h Irregular wave in Dec. (+ 11'), the first part steep. 7^h to 8^h Wave in Dec. (+ 3'). 2^h to 4¹/₂^h Truncated wave in V.F. (- 20). 14³/₈^h to 15¹/₂^h Serrated wave in N.F. (+ 25). 21^h to 22¹/₂^h Double-crested wave in Dec. (- 4', - 3'), accompanied by a similar wave in N.F. (+ 25, + 30).
- 19^d 21¹/₂^h to 22¹/₂^h Slightly truncated wave in Dec. (- 6'). 21¹/₂^h to 22^h Truncated wave in N.F. (+ 30).
- 20^d 13^h to 15¹/₂^h Three consecutive waves in N.F. (+ 15, + 20, + 20). 14¹/₂^h to 15^h Increase in V.F. (+ 15).
- 22^d 2^h to 2¹/₂^h Wave in Dec. (+ 3'). 23^h to 23^d 1¹/₂^h. Two consecutive waves in Dec. (+ 3', + 4').
- 23^d 0^h to 2^h Irregular wave in N.F. (+ 20). 3^h to 5¹/₂^h Wave in Dec. (+ 5'). 0^h to 4^h Slow wave in V.F. (- 15). 16^h to 16³/₈^h Increase in N.F. (+ 30), partially returning till 17^h (- 20).
- 24^d 2^h to 3^h Wave in Dec. (+ 4'). 2¹/₂^h to 3¹/₄^h Wave in N.F. (+ 20). 2¹/₂^h to 3^h Decrease in V.F. (- 12).
- 25^d 20¹/₂^h to 21¹/₂^h Wave in Dec. (- 3'). 20^h to 20¹/₄^h Wave in V.F. (- 12).
- 26^d 15¹/₂^h to 16¹/₄^h Truncated wave in N.F. (+ 20). 20^h to 22¹/₂^h Flat wave in Dec. (- 7'), with a superposed wave at 20³/₈^h to 21^h (+ 3'). 20^h to 20³/₈^h Wave in N.F. (+ 20). 20³/₈^h to 21³/₈^h Wave in N.F. (+ 30).
- 28^d 1^h to 2^h Wave in Dec. (+ 4'). 9^h to 10^h Decrease in V.F. (- 15). 10^h to 19¹/₂^h Decrease in Dec. (- 3'). 21¹/₂^h to 23^h Wave in N.F. (+ 35).
- 29^d 21¹/₂^h to 24^h Two consecutive waves in Dec. (- 5'). 22^h to 24^h Double-crested wave in N.F. (+ 20, + 25). 22^h to 30^d 3^h Slow wave in V.F. (- 20).
- 30^d 17¹/₂^h to 20^h Three consecutive small waves in N.F. (about + 15). 18^h to 20^h Wave in Dec. (- 5').

August

- 2^d 17¹/₂^h to 18¹/₄^h Truncated wave in N.F. (+ 20). 19¹/₂^h to 21^h Wave in N.F. (+ 20). 20¹/₂^h to 21¹/₂^h Wave in Dec. (- 3'). 22^h to 23¹/₂^h Wave in Dec. (- 4').
- 3^d 0^h to 1¹/₂^h Double-crested wave in Dec. (+ 5'). 2¹/₂^h to 3¹/₂^h Increase in Dec. (+ 7'). 3¹/₂^h to 5³/₄^h Decrease in Dec. (- 9'). 6^h to 9¹/₂^h Irregular increase in Dec. (+ 16'). 6¹/₂^h to 8^h Rapid decrease in N.F. (- 95). 9¹/₂^h to 10¹/₂^h Wave in Dec. (- 4'). 13³/₈^h to 15^h Wave in N.F. (- 25).
- 4^d 17¹/₂^h to 18¹/₄^h Truncated wave in N.F., with sudden rise at beginning (+ 25). 20¹/₄^h to 20³/₈^h Wave in N.F. (+ 20). 22^h to 23^h Increase in Dec. (+ 5'). 23^h to 5^d 0¹/₂^h Decrease in Dec. (- 5').

1921.
August

- 5^d 0^h to 1^h Wave in Dec. (− 6′). 2^h to 4^h Irregular double wave in Dec. (± 3′). 3^h to 3^h Rapid decrease in N.F. (− 50), followed till 5^h by gradual partial recovery (+ 40). 6^h to 9^h Steady decrease in N.F. (− 85). 8^h to 10^h Increase in Dec. (+ 8′). 14^h to 15^h Double wave in N.F. (± 20). 18^h to 19^h Wave in Dec. (− 6′). 18^h Sudden increase in N.F. (+ 30). 23^h to 6^d 0^h Wave in Dec. (+ 5′).
- 6^d 1^h to 4^h Double wave in N.F. (± 20). 2^h to 4^h Double wave in Dec. (± 3′). 6^h to 7^h Domed wave in Dec. (+ 5′), with similar wave in N.F. (− 20). 9^h to 10^h Decrease in N.F. (− 30). 12^h to 13^h Truncated wave in N.F. (+ 20). 13^h to 14^h Increase in N.F. (+ 35). 15^h to 16^h Decrease in N.F. (− 30). 17^h to 17^h Wave in N.F. (+ 20). 23^h to 7^d 1^h Double wave in Dec. (± 4′).
- 7^d 3^h to 4^h Wave in N.F. (− 20). 3^h to 4^h Wave in Dec. (+ 5′). 8^h to 10^h Wave in N.F. (− 20). 8^h to 9^h Wave in Dec. (+ 3′). 13^h to 14^h Wave in N.F. (− 30).
- 8^d 3^h to 4^h Wave in Dec. (+ 6′), accompanied by a double-crested wave in N.F. (− 20, − 25). 3^h to 4^h Decrease in V.F. (− 15). 13^h to 16^h Increase in V.F. (+ 35). 15^h to 15^h Decrease in Dec. (− 4′). 22^h to 23^h Wave in Dec. (− 3′), followed till 24^h by a decrease (− 3′).
- 9^d 23^h to 10^d 0^h Wave in N.F. (+ 20).
- 10^d 4^h to 6^h Wave in Dec. (+ 4′).
- 11^d 17^h to 19^h Two consecutive waves in Dec. (− 8′, − 4′). 17^h to 20^h Triple wave in N.F. (+ 30, − 25, + 20). 21^h to 22^h Double-crested wave in N.F. (+ 20). 21^h to 22^h Wave in Dec. (− 11′). 23^h to 12^d 1^h Wave in Dec. (+ 10′). 23^h to 12^d 1^h Double wave in N.F. (± 20).
- 12^d 0^h to 0^h Rapid decrease in V.F. (− 30), nearly recovering by 4^h (+ 25).
- 13^d 22^h to 23^h Wave in Dec. (− 4′).
- 14^d 2^h to 4^h Wave in Dec. (+ 3′). 19^h to 20^h Wave in N.F. (+ 20). 20^h to 21^h Irregular decrease in Dec. (− 6′), followed till 15^d 1^h by a similar increase (+ 7′).
- 15^d 1^h to 2^h Decrease in Dec. (− 5′). 3^h to 4^h Wave in Dec. (+ 3′). 13^h to 14^h Serrated wave in N.F. (+ 20). 14^h to 16^h Serrated wave in N.F. (+ 30). 16^h to 17^h Increase in N.F. (+ 50), with two sharp oscillations at 16^h. 17^h to 18^h Fluctuating decrease in Dec. (− 8′). 18^h to 19^h Wave in N.F. (− 20). 18^h to 19^h Wave in Dec. (− 4′). 16^h to 18^h Increase in V.F. (+ 35), steadily returning till 23^h. 18^h to 16^d 1^h Many minor oscillations in N.F. and Dec. 22^h to 23^h Wave in Dec. (+ 4′). 23^h to 16^d 0^h Wave in N.F. (+ 20).
- 16^d 0^h Rapid increase in Dec. (+ 7′), with partial return till 0^h (− 3′). 18^h to 18^h Oscillations in V.F. (± 20). 18^h to 19^h Wave in Dec. (− 11′). 18^h to 20^h Wave in N.F. (+ 50). 22^h to 22^h Wave in Dec. (− 4′), with corresponding wave in N.F. (+ 20).
- 17^d 17^h to 19^h Wave in N.F. (+ 35). 17^h to 18^h Wave in Dec. (− 5′). 22^h to 23^h Wave in Dec. (− 4′).
- 18^d 3^h to 4^h Wave in Dec. (+ 5′). 3^h to 4^h Increase in N.F. (+ 20).
- 19^d 23^h to 20^d 1^h Two consecutive waves in Dec. (+ 4′, + 3′).
- 20^d 19^h to 21^h Wave in Dec. (− 5′).
- 21^d 12^h to 13^h Wave in N.F. (+ 20). 18^h to 19^h Wave in Dec. (− 5′). 18^h to 18^h Increase in N.F. (+ 20).
- 23^d 19^h to 19^h Wave in V.F. (− 15).
- 24^d 1^h to 3^h Wave in Dec. (+ 4′).
- 26^d 1^h Sudden increase in N.F. (+ 20). 11^h to 12^h Rapid irregular decrease in N.F. (− 35), with fluctuating recovery till 14^h. 14^h to 15^h Wave in N.F. (+ 25), with wave in Dec. (+ 3′). 16^h to 17^h Double wave in N.F. (− 35, + 20). 16^h to 16^h Decrease in Dec. (− 4′). 17^h to 18^h Irregular decrease in Dec. (− 6′). 18^h to 18^h Increase in N.F. (+ 25).
- 27^d 1^h to 3^h Two consecutive waves in Dec. (+ 3′). 1^h to 2^h Truncated wave in N.F. (+ 20). 7^h to 8^h Continuous oscillation in Dec. the largest amplitude at 8^h (+ 3′). 11^h to 14^h Serrated wave in N.F. (+ 25). 14^h to 15^h Accelerated decrease in Dec. (− 7′). 15^h to 16^h Wave in N.F. (+ 20). 19^h to 20^h Wave in Dec. (− 7′) with corresponding wave in N.F. (+ 45).
- 28^d 20^h to 21^h Truncated wave in Dec. (− 3′).
- 30^d 13^h to 14^h Double wave in N.F. (± 20). 15^h to 17^h Sharp wave in N.F. (+ 40). 17^h to 18^h Increase in N.F. (+ 65) with a wave superposed at 18^h to 18^h (− 20). 17^h to 19^h Slow wave in V.F. (+ 20). 18^h to 18^h Decrease in Dec. (− 10′). 18^h to 19^h Wave in Dec. (+ 3′). 18^h to 20^h Irregular decrease in N.F. (− 60) very rapid towards the end. 19^h to 21^h Truncated wave in Dec. (+ 10′). 20^h to 21^h Decrease in V.F. (− 20). 21^h to 22^h Wave in Dec. (+ 4′). 21^h to 21^h Wave in N.F. (+ 25). 22^h to 24^h Truncated wave in N.F. (− 30). 22^h to 31^d 0^h Irregular increase in Dec. rapid at first (+ 15′). 23^h to 31^d 3^h Slow wave in V.F. (− 20).
- 31^d 0^h to 1^h Rapid decrease in Dec. (− 11′), followed till 3^h by an irregular recovery. 1^h to 3^h Decrease in N.F. (− 35). 3^h to 4^h Decrease in Dec. (− 5′). 5^h to 6^h Wave in Dec. (+ 3′).

1921.

September

- 2^d 3 $\frac{1}{2}$ ^h to 8^h Wave in V.F. (- 30). 4^h to 5 $\frac{3}{4}$ ^h Irregular serrated wave in Dec. (+ 10'), steep at first. 5 $\frac{3}{4}$ ^h to 7^h Triple-crested wave in Dec. (+ 10', + 10', + 7'), followed immediately till 8^h by a domed, serrated wave (+ 8'). 6^h to 6 $\frac{3}{4}$ ^h Very rapid decrease in N.F. (- 90) with immediate partial recovery (+ 60). 8^h to 9 $\frac{1}{2}$ ^h Rapid decrease in N.F. (- 90), interrupted temporarily at 9^h. 9^h to 10 $\frac{1}{2}$ ^h Wave in Dec. (+ 10'). 9 $\frac{3}{4}$ ^h to 11^h Increase in N.F. (+ 80). 12^h to 12 $\frac{3}{4}$ ^h Oscillating decrease in N.F. (- 45). 12^h to 13 $\frac{1}{2}$ ^h Increase in V.F. (+ 35). 13 $\frac{1}{2}$ ^h to 14^h Irregular wave in N.F. (+ 30). 14^h to 14 $\frac{3}{4}$ ^h Increase in N.F. (+ 30). 14 $\frac{3}{4}$ ^h to 15 $\frac{1}{4}$ ^h Rapid oscillating decrease in Dec. (- 12'). 15^h to 15 $\frac{3}{4}$ ^h Very rapid increase in N.F. (+ 60), with immediate partial return till 15 $\frac{3}{4}$ ^h (- 30). 15 $\frac{3}{4}$ ^h to 15 $\frac{1}{2}$ ^h Wave in Dec. (+ 3'). 14 $\frac{1}{2}$ ^h to 16^h Increase in V.F. (+ 35), gradually returning till 21^h. 16 $\frac{1}{2}$ ^h to 18^h Flattened serrated wave in Dec. (+ 5'). 16 $\frac{3}{4}$ ^h to 17 $\frac{1}{4}$ ^h Wave in N.F. (+ 20). 19 $\frac{1}{2}$ ^h to 21^h Steep serrated wave in Dec. (- 12'). 19 $\frac{3}{4}$ ^h to 21^h Irregular wave in N.F. (+ 45).
- 3^d 13^h to 15^h Irregular wave in N.F. (- 30). 21 $\frac{1}{2}$ ^h to 23^h Wave in Dec. (- 4').
- 4^d 3^h to 4 $\frac{1}{2}$ ^h Double-crested wave in Dec. (+ 7', + 5'). 2 $\frac{1}{2}$ ^h to 4^h Truncated wave in N.F. (- 20). 3 $\frac{3}{4}$ ^h to 4 $\frac{1}{4}$ ^h Decrease in V.F. (- 15). 16 $\frac{3}{4}$ ^h to 18^h Domed wave in Dec. (- 4'). 19 $\frac{1}{4}$ ^h to 20^h Wave in Dec. (- 6'). 19 $\frac{3}{4}$ ^h to 20^h Wave in N.F. (+ 30). 21 $\frac{1}{2}$ ^h to 22 $\frac{3}{4}$ ^h Double wave in Dec. (\mp 2'). 21 $\frac{1}{2}$ ^h to 23^h Wave in N.F. (+ 35). 22^h to 22 $\frac{1}{4}$ ^h Decrease in V.F. (- 12).
- 5^d 20^h to 21^h Wave in Dec. (- 3').
- 6^d 2^h to 3^h Wave in Dec. (+ 4'). 20^h to 21^h Decrease in Dec. (- 3').
- 7^d 18 $\frac{1}{2}$ ^h to 20 $\frac{3}{4}$ ^h Wave in Dec. (- 5'). 20 $\frac{3}{4}$ ^h to 22^h Wave in N.F. (+ 35). 20 $\frac{3}{4}$ ^h to 21^h Decrease in Dec. (- 4'). 22 $\frac{1}{2}$ ^h to 23 $\frac{3}{4}$ ^h Irregular decrease in Dec. (- 6').
- 8^d 0^h to 4^h Double wave in Dec. (+ 7, - 12'). 0^h to 3^h Flattened wave in N.F. (+ 40). 0 $\frac{1}{4}$ ^h to 3^h Flattened wave in V.F. (- 20). 16^h to 17 $\frac{1}{4}$ ^h Increase in V.F. (+ 20). 14^h to 15 $\frac{1}{2}$ ^h Irregular wave in N.F. (- 25). 16^h to 16 $\frac{1}{2}$ ^h Decrease in N.F. (- 20). 17^h to 17 $\frac{1}{2}$ ^h Sharp wave in N.F. (- 30). 17^h to 17 $\frac{3}{4}$ ^h Very rapid decrease in Dec. (- 10'), followed till 18^h by irregular partial recovery (+ 5'). 21 $\frac{1}{4}$ ^h to 22 $\frac{1}{4}$ ^h Decrease in Dec. (- 5').
- 9^d 1 $\frac{3}{8}$ ^h to 4 $\frac{1}{2}$ ^h Two consecutive waves in Dec. (- 3', - 4'). 2 $\frac{1}{4}$ ^h to 5^h Two consecutive waves in N.F. (- 20).
- 11^d 0^h to 0 $\frac{2}{3}$ ^h Increase in N.F. (+ 20).
- 13^d 22 $\frac{3}{4}$ ^h to 23^h Decrease in Dec. (- 3').
- 15^d 3 $\frac{1}{2}$ ^h to 4 $\frac{1}{4}$ ^h Decrease in Dec. (- 5').
- 16^d 20^h to 21 $\frac{1}{2}$ ^h Truncated wave in N.F. (+ 25). 20 $\frac{1}{4}$ ^h to 22^h Double-crested wave in Dec. (- 5').
- 17^d 12 $\frac{3}{4}$ ^h Sharp wave in V.F. (+ 35).
- 18^d 17 $\frac{3}{8}$ ^h to 19^h Increase in N.F. (+ 30). 20^h to 21 $\frac{1}{2}$ ^h Wave in Dec. (- 5').
- 19^d 0^h to 1 $\frac{1}{4}$ ^h Wave in Dec. (+ 4'). 8^h to 9^h Wave in N.F. (- 20).
- 21^d 2^h to 2 $\frac{1}{2}$ ^h Decrease in Dec. (- 3'). 5 $\frac{1}{2}$ ^h to 7^h Wave in N.F. (- 20). 22 $\frac{3}{4}$ ^h to 23 $\frac{3}{4}$ ^h Wave in Dec. (+ 6'). 22 $\frac{3}{4}$ ^h Very rapid increase in N.F. (+ 35), steadily returning till 22^d 0 $\frac{1}{2}$ ^h. 22 $\frac{3}{4}$ ^h to 23 $\frac{1}{2}$ ^h Rapid decrease in V.F. (- 20).
- 23^d 2^h to 4 $\frac{1}{2}$ ^h Double wave in N.F. (\pm 20). 2^h to 5^h Double wave in Dec. (\mp 6'). 4 $\frac{1}{2}$ ^h to 5^h Decrease in V.F. (- 15), followed till 8 $\frac{1}{2}$ ^h by a steady increase (+ 25). 7 $\frac{1}{2}$ ^h to 8^h Rapid decrease in N.F. (- 30). 11^h to 12^h Rapid oscillating increase in Dec. (+ 7'). 14 $\frac{1}{2}$ ^h to 16^h Irregular wave in N.F. (- 25).
- 27^d 20^h to 21^h Domed wave in Dec. (- 4'). 22 $\frac{1}{2}$ ^h to 23 $\frac{1}{2}$ ^h Wave in N.F. (+ 20)
- 28^d 18 $\frac{3}{4}$ ^h to 20^h Wave in N.F. (- 35). 18^h to 19^h Wave in Dec. (- 3'), followed immediately till 20^h by a rapid decrease (- 10'). 19^h to 21^h Wave in V.F. (+ 20). 20 $\frac{1}{2}$ ^h to 21^h Wave in Dec. (- 7'), with a corresponding wave in N.F. (+ 35). 21 $\frac{3}{4}$ ^h to 22^h Sudden increase in N.F. (+ 20) followed till 23 $\frac{3}{4}$ ^h by a series of minor oscillations, the largest a wave at 23^h (+ 25). 22^h to 29^d 0 $\frac{1}{2}$ ^h Serrated wave in Dec. (- 10').
- 29^d 0 $\frac{3}{4}$ ^h to 1 $\frac{1}{4}$ ^h Sharp wave in N.F. (- 25). 1 $\frac{1}{4}$ ^h to 1 $\frac{1}{2}$ ^h Rapid increase in Dec. (+ 6'), followed immediately till 2^h by a very rapid decrease (- 16'). 1 $\frac{1}{2}$ ^h to 3^h Wave in N.F. (+ 60). 1 $\frac{1}{2}$ ^h to 2^h Very rapid decrease in V.F. (- 50), partially recovering till 3^h (+ 20). 2^h to 3^h Wave in Dec. (- 5'). 3^h to 4^h Serrated wave in N.F. (+ 30). 3 $\frac{1}{2}$ ^h to 4 $\frac{1}{2}$ ^h Rapid increase in Dec. (+ 10'). 4^h to 4 $\frac{3}{4}$ ^h Decrease in N.F. (- 30). 4^h to 6^h Increase in V.F. (+ 25). 11^h to 12^h Flattened wave in N.F. (- 20). 15^h to 15 $\frac{3}{4}$ ^h Wave in N.F. (- 20). 15^h to 16^h Decrease in Dec. (- 5'). 16^h to 17^h Wave in N.F. (+ 20). 16^h to 17 $\frac{1}{2}$ ^h Wave in Dec. (- 4'). 18 $\frac{3}{4}$ ^h to 20 $\frac{1}{4}$ ^h Steep wave in Dec. (- 18'), with a secondary wave superposed at 19 $\frac{3}{4}$ ^h to 20 $\frac{1}{4}$ ^h (- 4'). 18 $\frac{3}{4}$ ^h to 20 $\frac{1}{4}$ ^h Irregular wave in N.F. (+ 75).
- 30^d 1 $\frac{1}{2}$ ^h to 3^h Wave in Dec. (+ 5').

1921.
October

- 1^d 0^h to 1^h Truncated wave in N.F. (- 25). 1^h to 3^h Wave in Dec. (+ 9'). 1^h to 2^h Decrease in V.F. (- 18). 6^h to 7^h Decrease in N.F. (- 25). 11^h to 13^h Wave in N.F. (- 35). 23^h to 24^h Wave in Dec. (+ 3').
- 2^d 20^h to 22^h Wave in Dec. (- 3').
- 3^d 0^h to 1^h Wave in Dec. (+ 3'). 22^h to 24^h Wave in Dec. (+ 3').
- 4^d 19^h to 19^h Wave in N.F. (+ 20). 20^h to 21^h Double wave in N.F. (± 15). 21^h to 22^h Wave in Dec. (- 3').
- 5^d 2^h to 4^h Wave in Dec. (- 3'). 17^h to 18^h Wave in N.F. (- 30), followed immediately till 19^h by a decrease (- 30). 17^h to 19^h Wave in Dec. (- 15'). 19^h to 21^h Steep wave in Dec. (- 16'). 17^h to 19^h Increase in V.F. (+ 20).
- 6^d 1^h to 2^h Decrease in Dec. (- 4'), recovering till 4^h. 1^h to 1^h Increase in N.F. (+ 20). 20^h to 21^h Two consecutive waves in Dec. (- 6', - 3'). 20^h to 21^h Wave in N.F. (+ 40) accompanied by a decrease in V.F. (- 15). 23^h to 7^d 1^h Increase in Dec. (+ 6').
- 7^d 1^h to 2^h Decrease in Dec. (- 3'). 19^h to 21^h Wave in Dec. (- 15'). 19^h to 20^h Double Wave in N.F. (± 20). 23^h to 8^d 1^h Domed wave in Dec. (- 9'), accompanied by irregular wave in N.F. (+ 35). 23^h to 24^h Decrease in V.F. (- 12).
- 8^d 1^h to 2^h Wave in Dec. (- 8'). 1^h to 2^h Wave in N.F. (+ 20), followed till 2^h by a decrease (- 25). 1^h to 1^h Decrease in V.F. (- 15). 2^h to 3^h Rapid increase in Dec. (+ 8'), followed till 3^h by a partial return (- 4'). 2^h to 3^h Irregular increase in N.F. (+ 65), followed till 9^h by a rapid general decrease (- 180) with waves at 7^h to 8^h (+ 25) and 8^h to 8^h (+ 35), superposed. 3^h to 5^h Flattened wave in V.F. (- 15), followed till 11^h by a steady increase (+ 80), accelerating after 10^h. 5^h to 5^h Rapid increase in Dec. (+ 10'). 6^h to 7^h Decrease in Dec. (- 5'). 7^h to 8^h Double wave in Dec. (± 3'). 9^h to 9^h Decrease in Dec. (- 5'). 10^h to 10^h Double wave in Dec. (± 3'), followed till 12^h by three consecutive waves (+ 3'). 9^h to 10^h Domed serrated wave in N.F. (+ 25). 10^h to 11^h Wave in N.F. (+ 20), followed till 14^h by a general increase (+ 90). 11^h to 13^h Decrease in V.F. (- 25). 13^h to 13^h Decrease in Dec. (- 4'). 17^h to 18^h Irregular decrease in Dec. (- 8'). 17^h to 22^h Flattened wave in V.F. (+ 25). 18^h to 19^h Double-crested wave in Dec. (+ 5'). 20^h to 21^h Irregular wave in Dec. (+ 4'). 20^h to 21^h Fluctuating increase in N.F. (+ 50). 21^h to 22^h Double-crested wave in Dec. (+ 4'). 22^h to 22^h wave in Dec. (+ 5'). 22^h to 9^d 1^h Wave in V.F. (- 30). 22^h to 23^h Double wave in N.F. (± 20). 22^h to 9^d 0^h Irregular wave in Dec. (+ 8').
- 9^d 2^h to 4^h Irregular wave in Dec. (+ 9'). 2^h to 3^h Decrease in V.F. (- 20), steadily recovering till 7^h. 3^h to 3^h Rapid increase in N.F. (+ 40), returning gradually till 6^h. 20^h to 20^h Rapid decrease in Dec. (- 6'), with immediate partial recovery (+ 3'). 20^h to 22^h Double-crested wave in N.F. (+ 20), the commencement very steep. 21^h to 22^h Wave in Dec. (+ 3').
- 10^d 16^h to 17^h Wave in N.F. (+ 20). 17^h to 18^h Irregular wave in Dec. (- 5').
- 11^d 5^h to 7^h Broad double-crested wave in Dec. (+ 4'). 15^h to 15^h Irregular decrease in Dec. (- 7'). 15^h to 16^h wave in N.F. (- 20). 15^h to 16^h Rapid increase in V.F. (+ 30). 17^h to 17^h Decrease in N.F. (- 20). 19^h to 19^h Truncated wave in N.F. (+ 20). 20^h to 22^h Two consecutive waves in Dec. (- 5', - 7'). 21^h to 22^h Truncated wave in N.F. (+ 20). 19^h to 23^h Steady decrease in V.F. (- 50). 22^h to 23^h Double-crested wave in N.F. (+ 30, + 25). 22^h to 23^h Rapid decrease in Dec. (- 15'), interrupted temporarily from 22^h to 23^h. 23^h to 12^d 0^h Wave in N.F. (+ 40).
- 12^d 0^h to 0^h Rapid increase in N.F. (+ 35), followed till 2^h by an irregular wave (+ 45). 0^h to 1^h Wave in Dec. (+ 4'). 1^h to 2^h Wave in Dec. (+ 9'). 1^h to 2^h Wave in V.F. (- 20). 2^h to 3^h Fluctuating increase in Dec. (+ 16'). 6^h to 7^h Decrease in N.F. (- 20). 16^h to 18^h Wave in Dec. (- 5'). 19^h to 20^h Wave in Dec. (- 9'). 19^h to 20^h Rapid increase in N.F. (+ 45), partially returning till 20^h (- 25). 23^h to 13^d 0^h Wave in Dec. (+ 3').
- 13^d 23^h to 14^d 1^h Two consecutive waves in Dec. (+ 2', + 3').
- 14^d 12^h to 13^h Wave in Dec. (+ 3'). 21^h to 22^h Wave in Dec. (- 4'), followed till 24^h by a fluctuating increase (+ 7'). 23^h to 15^d 1^h Irregular wave in N.F. (+ 30). 23^h to 15^d 1^h Wave in V.F. (- 15).
- 15^d 0^h to 1^h Wave in Dec. (- 6'). 13^h to 16^h Slow wave in N.F. (- 30). 13^h to 15^h Increase in V.F. (+ 25). 17^h to 18^h Irregular wave in Dec. (- 4'). 17^h to 18^h Irregular wave in N.F. (+ 20).
- 16^d 19^h to 20^h Two consecutive waves in Dec. (- 3'). 20^h to 21^h Wave in N.F. (+ 20).
- 17^d 19^h to 22^h Slow double-crested wave in Dec. (- 3', - 3').
- 20^d 19^h to 21^h Double-crested wave in Dec. (- 5', - 4').
- 21^d 6^h to 7^h Wave in Dec. (+ 3'). 6^h to 7^h Wave in N.F. (+ 20). 14^h to 16^h Wave in Dec. (- 12'), followed till 17^h by a decrease (- 5'), and then till 19^h by a double wave (- 4', + 3'). 14^h to 19^h A series of oscillations in N.F. (- 25, + 20, - 20, - 20, - 25). 13^h to 15^h Increase in V.F. (+ 30). 20^h to 22^h Wave in Dec. (- 7'), with a wave in N.F. (+ 25). 19^h to 21^h Decrease in V.F. (- 20).

1921.
October

- 22^d 18^h to 19^h Irregular wave in N.F. (+ 30). 18^h to 20^h Serrated wave in Dec. (- 7'). 22^h to 23^h Wave in N.F. (+ 25). 22^h to 23^h Wave in Dec. (- 4'), the first part steep.
- 23^d 4^h to 6^h Slow wave in Dec. (+ 3'). 17^h to 18^h Domed wave in Dec. (- 4'). 21^h to 21^h Wave in Dec. (- 5'). 21^h to 22^h Double-crested wave in N.F. (+ 20).
- 24^d 9^h to 9^h Decrease in N.F. (- 20). 16^h to 17^h Wave in Dec. (- 3').
- 16^h The new Vertical Force instrument was re-installed. Adjustments were being carried out until 29^d 12^h during which period the V.F. records were unreliable.
- 25^d 0^h to 2^h Double wave in Dec. (\pm 3'). 0^h to 1^h Wave in N.F. (+ 20). 16^h to 17^h Wave in Dec. (- 4').
- 26^d 13^h to 16^h Steady increase in N.F. (+ 30), followed till 17^h by a decrease (- 20). 18^h to 20^h Decrease in Dec. (- 8'). 22^h to 23^h Wave in Dec. (+ 3').
- 27^d 2^h to 3^h Wave in Dec. (+ 4'). 9^h to 10^h Increase in Dec. (+ 4'). 12^h to 13^h Flattened wave in Dec. (+ 4'). 12^h to 15^h Wave in N.F. (- 45). 22^h to 23^h Wave in N.F. (+ 20). 21^h to 23^h Irregular wave in Dec. (- 7'), followed immediately by a further wave (+ 6'). 23^h to 28^d 1^h Wave in N.F. (+ 40).
- 28^d 1^h to 2^h Wave in Dec. (- 3'). 18^h to 19^h Wave in Dec. (- 5'), followed till 21^h by a decrease (- 5'). 20^h to 21^h Wave in N.F. (+ 20). 21^h to 22^h Truncated wave in Dec. (- 5') with similar wave in N.F. (+ 20).
- 29^d 11^h to 14^h Wave in N.F. (- 30). 12^h to 13^h Wave in Dec. (+ 3'). 18^h to 19^h Wave in Dec. (- 6'). 18^h to 19^h Wave in N.F. (+ 25). 23^h to 30^d 0^h Wave in N.F. (+ 20).
- 30^d 9^h to 10^h Decrease in V.F. (- 15). 20^h to 22^h Wave in Dec. (- 3').
- 31^d 17^h to 18^h Decrease in Dec. (- 7'). 17^h to 18^h Wave in N.F. (- 20). 19^h to 20^h Wave in Dec. (- 11'). 19^h to 20^h Wave in N.F. (+ 35). 21^h to 23^h Increase in N.F. (+ 25). 22^h to 24^h Irregular wave in Dec. (- 5').

November

- 1^d 1^h to 4^h Double wave in Dec. (+ 5', - 3'), the first movement rather rapid. 1^h to 4^h Slow wave in N.F. double-crested (+ 25). 2^h to 2^h Decrease in V.F. (- 20).
- 2^d 17^h to 17^h Wave in V.F. (+ 15), steep at the end.
- 5^d 21^h to 22^h Rapid decrease in Dec. (- 11'), followed immediately till 23^h by a double wave (\pm 4'). 21^h to 23^h Wave in N.F. (+ 65). 22^h to 23^h Rapid decrease in V.F. (- 40), followed till 24^h by a wave (+ 15).
- 6^d 0^h to 0^h Increase in Dec. (+ 5'). 1^h to 2^h Increase in Dec. (+ 7'). 2^h to 3^h Domed wave in Dec. (+ 4'). 5^h to 7^h Truncated wave in Dec. (+ 5'). 4^h to 7^h Wave in N.F. (- 35). 8^h to 8^h Increase in N.F. (+ 30), followed till 10^h by a decrease (- 50). 10^h to 14^h Steady increase in V.F. (+ 30). 14^h to 16^h Wave in Dec. (- 10'), with wave in V.F. (+ 25). 14^h to 15^h Wave in N.F. (+ 20), followed till 15^h by a rapid increase (+ 35). 17^h to 19^h Increase in N.F. (+ 30). 20^h to 21^h Irregular wave in Dec. (- 4'). 23^h to 7^d 0^h Wave in Dec. (+ 3').
- 7^d 1^h to 3^h Wave in Dec. (- 4'). 1^h to 2^h Decrease in V.F. (- 15). 10^h to 11^h Increase in Dec. (+ 3'). 16^h to 18^h Wave in Dec. (- 3'). 16^h to 18^h Wave in N.F. (+ 25). 18^h to 18^h Decrease in Dec. (- 3'). 21^h to 23^h Irregular wave in N.F. (+ 30). 21^h to 22^h Wave in Dec. (+ 4'). 21^h to 22^h Decrease in V.F. (- 15).
- 8^d 0^h to 1^h Wave in Dec. (+ 5'). 1^h to 1^h Decrease in V.F. (- 15). 22^h to 24^h Irregular wave in Dec. (- 8'). 23^h to 24^h Irregular decrease in N.F. (- 25).
- 9^d 2^h to 4^h Truncated wave in Dec. (+ 4'), the first movement rapid. 17^h to 18^h Wave in N.F. (+ 20). 21^h to 22^h Wave in Dec. (- 3'). 21^h to 23^h Serrated wave in N.F. (+ 30). 22^h to 24^h Irregular serrated wave in Dec. (- 8'), the first part steep.
- 10^d 8^h to 10^h Decrease in N.F. (- 30). 11^h to 12^h Increase in Dec. (+ 5'). 13^h to 15^h Increase in V.F. (+ 30). 13^h to 14^h Wave in Dec. (+ 3'). 14^h to 15^h Serrated wave in N.F. (- 40). 21^h to 22^h Wave in Dec. (- 3').
- 11^d 23^h to 12^d 1^h Wave in Dec. (+ 4').
- 12^d 0^h to 1^h Decrease in V.F. (- 12).
- 13^d 17^h to 18^h Increase in N.F. (+ 20). 20^h to 21^h Very rapid decrease in Dec. (- 6'), recovering by 23^h. 23^h to 14^d 1^h Irregular wave in N.F. (+ 45). 23^h to 14^d 0^h Irregular decrease in Dec. (- 10'), recovering by 14^d 4^h, with corresponding movement in V.F. (- 25).

- 1921
November
- 14^d 17 $\frac{1}{2}$ ^h to 18 $\frac{1}{2}$ ^h Truncated wave in Dec. (- 3'), followed till 19 $\frac{1}{2}$ ^h by a double-crested wave (- 3').
- 15^d 20 $\frac{1}{2}$ ^h to 21 $\frac{1}{2}$ ^h Decrease in Dec. (- 6').
- 16^d 6 $\frac{3}{4}$ ^h to 9^h Double-crested wave in N.F. (- 40). 7 $\frac{1}{2}$ ^h to 9 $\frac{1}{2}$ ^h Serrated, truncated wave in Dec. (+ 4'). 11 $\frac{1}{4}$ ^h to 11 $\frac{1}{2}$ ^h Rapid increase in Dec. (+ 4'). 11^h to 13^h Increase in V.F. (+ 15), followed till 13 $\frac{1}{2}$ ^h by a further rapid increase, temporarily interrupted at 13 $\frac{1}{4}$ ^h (+ 20). 13^h to 14^h Truncated wave in N.F. (- 60). 13^h Sudden decrease in Dec. (- 4'), followed till 14^h by a double-crested wave (+ 3', + 4'). 16 $\frac{1}{2}$ ^h to 19 $\frac{1}{2}$ ^h General decrease in N.F. (- 70). 18^h to 18 $\frac{1}{2}$ ^h Decrease in Dec. (- 7'). 19^h to 19 $\frac{1}{2}$ ^h Increase in Dec. (+ 3'), followed till 20^h by a steep wave (- 11'). 19 $\frac{1}{2}$ ^h to 20 $\frac{3}{4}$ ^h Two consecutive waves in N.F. (+ 70, + 90), the second commencing before the first was completed. 18^h to 19 $\frac{3}{4}$ ^h Steady increase in V.F. (+ 25), followed till 19 $\frac{3}{4}$ ^h by a general decrease (- 40), interrupted at 20 $\frac{1}{2}$ ^h. 20^h to 20 $\frac{1}{2}$ ^h Sharp decrease in Dec. (- 3'), followed till 22 $\frac{1}{2}$ ^h by a double wave (+ 19', - 16'), the first very steep. 20 $\frac{3}{4}$ ^h to 21 $\frac{1}{2}$ ^h Rapid increase in N.F. (+ 80), with a wave superposed at 21^h (- 20), followed till 23^h by a steady decrease (- 40). 21^h to 21 $\frac{1}{2}$ ^h Wave in V.F. (- 12). 22 $\frac{3}{4}$ ^h to 17^d 1 $\frac{1}{2}$ ^h General increase in Dec. (+ 14'), with a wave superposed at 17^d 0^h to 0 $\frac{1}{2}$ ^h (+ 4').
- 17^d 0 $\frac{1}{4}$ ^h to 1 $\frac{1}{2}$ ^h Rapid decrease in V.F. (- 55), recovering rapidly at first, till 2 $\frac{1}{2}$ ^h, then more gradually, till 5^h. 1 $\frac{1}{2}$ ^h to 1 $\frac{3}{4}$ ^h Rapid decrease in Dec. (- 13'), followed, after a small double wave, by a rapid partial recovery till 2 $\frac{1}{2}$ ^h (+ 7'). 1 $\frac{1}{2}$ ^h to 2^h Wave in N.F. (+ 25). 3 $\frac{1}{4}$ ^h to 3 $\frac{3}{4}$ ^h Decrease in N.F. (- 20). 4 $\frac{1}{2}$ ^h to 7^h Broad slightly truncated wave in N.F. (+ 30). 5 $\frac{1}{2}$ ^h to 9^h Broad truncated wave in Dec. (+ 9'). 9^h to 14 $\frac{1}{4}$ ^h No register of Dec., N.F., and V.F. 14 $\frac{1}{4}$ ^h to 15 $\frac{1}{4}$ ^h Rapid increase in N.F. (+ 40), followed till 16 $\frac{1}{4}$ ^h by a steep wave (- 60). 15^h to 15 $\frac{3}{4}$ ^h Double wave in Dec. (\pm 3'). 15^h to 17^h Wave in V.F. (- 12). 17^h to 17 $\frac{1}{4}$ ^h Increase in N.F. (+ 20). 20 $\frac{1}{4}$ ^h to 22 $\frac{1}{4}$ ^h Double-crested wave in Dec. (- 15', - 19'). 20^h to 23^h Double-crested wave in N.F. (+ 50, + 60). 22 $\frac{1}{4}$ ^h to 23 $\frac{1}{2}$ ^h Wave in Dec. (- 5').
- 18^d 4^h to 5^h Wave in N.F. (- 20). 6^h to 7^h Increase in N.F. (+ 25), followed till 8 $\frac{1}{2}$ ^h by an irregular decrease (- 30). 10 $\frac{1}{2}$ ^h to 11 $\frac{1}{2}$ ^h Decrease in N.F. (- 30). 14 $\frac{1}{2}$ ^h to 15 $\frac{1}{2}$ ^h Increase in N.F. (+ 35), with a small wave superposed at 14 $\frac{3}{4}$ ^h (- 15). 14 $\frac{1}{2}$ ^h to 16 $\frac{1}{2}$ ^h Two consecutive waves in Dec. (- 3', - 4'). 15 $\frac{1}{4}$ ^h to 15 $\frac{3}{4}$ ^h Wave in N.F. (- 20). 18 $\frac{1}{4}$ ^h to 20 $\frac{1}{2}$ ^h Flattened serrated wave in N.F. (+ 50), the decline rather rapid. 18^h to 18 $\frac{1}{2}$ ^h Rapid decrease in Dec. (- 8'), followed till 19 $\frac{1}{2}$ ^h by an irregular wave (+ 4'), and then by a general increase till 23^h (+ 10'), with six consecutive waves superposed (+ 3', + 4', + 3', + 2', + 4', + 3'). 20 $\frac{3}{4}$ ^h to 21 $\frac{1}{4}$ ^h Sharp wave in N.F. (+ 30). 22^h to 22 $\frac{1}{2}$ ^h Sharp wave in N.F. (+ 25).
- 19^d 10^h to 13^h Wave in N.F. (- 30). 13 $\frac{1}{2}$ ^h to 15 $\frac{1}{2}$ ^h Double-crested wave in Dec. (- 3'), followed till 17^h by a further wave (- 10'). 16^h to 17 $\frac{1}{2}$ ^h Decrease in V.F. (- 12).
- 20^d 15 $\frac{1}{2}$ ^h to 17^h Irregular wave in Dec. (- 4').
- 21^d 0 $\frac{1}{2}$ ^h to 1 $\frac{3}{8}$ ^h Wave in Dec. (- 3'). 13^h to 14 $\frac{1}{4}$ ^h Wave in N.F. (+ 20). 13^h to 14^h Wave in Dec. (- 3'), followed till 15 $\frac{1}{2}$ ^h by a decrease (- 5'). 18^h to 19 $\frac{1}{2}$ ^h Wave in Dec. (- 6'). 23 $\frac{1}{2}$ ^h to 24^h Wave in Dec. (+ 5').
- 22^d 16 $\frac{1}{2}$ ^h to 17 $\frac{1}{4}$ ^h Wave in Dec. (- 6'). 17 $\frac{1}{2}$ ^h to 18 $\frac{3}{4}$ ^h Wave in N.F. (- 20). 18^h to 19 $\frac{1}{2}$ ^h Irregular wave in Dec. (- 7').
- 23^d 18 $\frac{1}{2}$ ^h to 19^h Very rapid decrease in Dec. (- 15'), followed till 19 $\frac{3}{4}$ ^h by rapid partial recovery (+ 8'). 18 $\frac{3}{4}$ ^h to 20^h Steep wave in N.F. (+ 80). 19 $\frac{3}{4}$ ^h to 20 $\frac{1}{2}$ ^h Wave in Dec. (- 3'). 21^h to 21 $\frac{3}{4}$ ^h Wave in N.F. (- 20), the return continuing further till 22^h (+ 20). 22^h to 23^h Increase in Dec. (+ 5'). 23^h to 24^d 0 $\frac{3}{8}$ ^h Decrease in V.F. (- 15). 23^h to 24^d 1 $\frac{1}{2}$ ^h Flattened wave in N.F. (+ 20).
- 24^d 0 $\frac{1}{2}$ ^h to 2^h Wave in Dec. (- 6').
- 25^d 0^h to 1 $\frac{1}{4}$ ^h Wave in N.F. (+ 20), the rise rather rapid. 18 $\frac{1}{4}$ ^h to 19 $\frac{3}{8}$ ^h Wave in Dec. (- 6').
- 26^d 12^h to 14^h Increase in V.F. (+ 25).
- 28^d 1 $\frac{1}{2}$ ^h to 3 $\frac{1}{4}$ ^h Double wave in Dec. (\pm 3'). 1 $\frac{3}{8}$ ^h to 2 $\frac{1}{4}$ ^h Increase in N.F. (+ 25).
- 28^d 10 $\frac{1}{2}$ ^h to 29^d 11 $\frac{1}{4}$ ^h No register of V.F.
- December
- 1^d 1^h to 2^h Increase in Dec. (+ 5').
- 2^d 5 $\frac{3}{4}$ ^h to 7^h Wave in N.F. (- 20), followed till 9 $\frac{3}{8}$ ^h by a decrease (- 40). 6^h to 7^h Wave in Dec. (+ 3'). 22 $\frac{1}{4}$ ^h to 23 $\frac{1}{2}$ ^h Increase in Dec. (+ 3').
- 3^d 0 $\frac{3}{4}$ ^h to 2^h Wave in Dec. (+ 7'). 1^h to 2^h Wave in N.F. (+ 25), the first part rather steep. 1^h to 1 $\frac{1}{4}$ ^h Decrease in V.F. (- 15).
- 4^d 13 $\frac{3}{4}$ ^h to 14 $\frac{1}{4}$ ^h Decrease in Dec. (- 3').

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December

- 10^d 0^h to 2^h Wave in N.F. (+ 22). 0^h to 2^h Wave in Dec. (- 6'). 22^h to 22^h Wave in Dec. (- 5').
22^h to 23^h Wave in N.F. (+ 20).
- 11^d 18^h to 20^h Wave in Dec. (- 8'). 18^h to 18^h Decrease in N.F. (- 25). 18^h to 19^h Increase in V.F.
(+ 12). 20^h to 22^h Increase in N.F. (+ 25).
- 12^d 0^h to 1^h Wave in Dec. (- 4'). 4^h to 5^h Wave in Dec. (+ 9'). 4^h to 4^h Very rapid increase in N.F.,
(+ 85), returning (with minor oscillations) till 8^h. 4^h to 5^h Decrease in V.F. (- 20). 5^h to 6^h
Rapid oscillating increase in Dec. (+ 10'), with partial return till 7^h (- 5'), followed till 8^h by a wave
(+ 3'). 9^h to 10^h Increase in N.F. (+ 30). 9^h to 10^h Flattened serrated wave in Dec. (- 3').
11^h to 13^h Wave in N.F. (- 40). 11^h to 12^h Wave in Dec. (+ 4'). 17^h to 19^h Wave in Dec. (- 8').
20^h to 21^h Double wave in Dec. (∓ 9'), the first part very steep. 20^h to 22^h Double wave in N.F. (+ 40,
- 20), the first part steep. 20^h to 21^h Decrease in V.F. (- 15). 22^h to 23^h Increase in Dec. (+ 3')
23^h to 13^d 1^h Two consecutive waves in Dec. (+ 6', + 5'). 23^h to 13^d 1^h General decrease in V.F.
(- 20).
- 13^d 2^h to 3^h Wave in Dec. (+ 4'). 9^h to 10^h Wave in Dec. (- 4'). 11^h to 14^h Increase in V.F. (+ 30).
12^h to 14^h Wave in N.F. (- 45). 12^h to 14^h Double wave in Dec. (+ 5', - 7'). 14^h to 15^h Increase
in Dec. (+ 4'). 15^h to 17^h Double wave in N.F. (∓ 40). 16^h to 17^h Sharp wave in Dec. (- 19'),
followed immediately till 17^h by a second wave (- 3'). 17^h to 18^h Irregular wave in N.F. (- 30).
18^h to 19^h Wave in Dec. (- 6'). 18^h to 19^h Wave in N.F. (- 20). 19^h to 19^h Decrease in Dec.
(- 6') with partial recovery till 19^h (+ 3'). 19^h to 21^h Decrease in V.F. (- 25). 20^h to 20^h Rapid
increase in N.F. (+ 70) succeeded till 22^h by a general decrease (- 75) with three consecutive waves,
superposed from 21^h to 22^h (+ 30, + 20, + 20). 20^h to 21^h Wave in Dec. (- 9'). 21^h to 21^h Two
consecutive waves in Dec. (- 4'). 21^h to 23^h Double-crested wave in Dec. (- 5').
- 14^d 0^h to 0^h Rapid increase in Dec. (+ 6'). 11^h to 12^h Wave in Dec. (+ 3'). 20^h to 21^h Wave in Dec. (- 5').
- 15^d 1^h to 3^h Wave in Dec. (+ 6'), the first movement very rapid.
- 16^d 0^h to 1^h Accelerated decrease in V.F. (- 15). 0^h to 1^h Wave in Dec. (+ 4'). 0^h to 1^h Increase in
N.F. (+ 20). 1^h to 3^h Double-crested wave in Dec. (- 5', - 6'), followed till 4^h by a further wave
(- 4'). 2^h to 5^h Broad irregular wave in N.F. (- 25). 7^h to 9^h Flattened wave in Dec. (+ 3').
11^h to 12^h Domed, serrated wave in N.F. (- 20). 13^h to 15^h Increase in V.F. (+ 30). 14^h to 14^h Wave
in N.F. (- 25), the return continuing further till 15^h (+ 20). 14^h to 15^h Wave in Dec. (- 10').
15^h to 15^h Rapid decrease in Dec. (- 6'), recovering, generally, with minor oscillations by 17^h.
15^h to 15^h Rapid decrease in N.F. (- 40), followed till 16^h by a small irregular wave (+ 20). 18^h
to 18^h Domed wave in N.F. (- 20). 18^h to 18^h Decrease in Dec. (- 7'). 19^h to 20^h Steep wave in
Dec. (- 15'). 19^h to 20^h Double wave in N.F. (- 20, + 40). 19^h to 17^d 1^h Steady decrease in
V.F. (- 40). 23^h to 17^d 0^h Domed wave in Dec. (- 4').
- 17^d 0^h to 1^h Wave in N.F. (+ 20). 3^h to 4^h Increase in Dec. (+ 6'). 16^h to 17^h Wave in Dec. (- 3').
16^h to 16^h Increase in N.F. (+ 20). 17^h to 19^h Wave in Dec. (- 9'). 18^h to 19^h Irregular wave
in N.F. (+ 20). 23^h to 18^d 0^h Sharp wave in Dec. (+ 8'). 23^h to 18^d 1^h Wave in N.F. (+ 25).
23^h to 18^d 0^h Rapid decrease in V.F. (- 20).
- 18^d 0^h to 3^h Increase in Dec. (+ 6').
- 22^d 17^h to 19^h Wave in Dec. (- 6'). 17^h to 19^h Wave in N.F. (+ 30). 19^h to 20^h Accelerated decrease
in Dec. (- 10'). 20^h to 21^h Double wave in N.F. (∓ 20). 23^h to 24^h Wave in Dec. (- 3'). 23^h to
23^d 0^h Decrease in N.F. (- 30).
- 23^d 0^h to 3^h Decrease in V.F. (- 15). 0^h to 0^h Increase in N.F. (+ 30). 0^h to 2^h Three successive
waves in Dec. of increasing amplitude, the last truncated (- 3'), followed from 2^h to 4^h by a steep wave
(+ 17'). 2^h to 3^h Wave in N.F. (- 40). 3^h to 5^h Wave in V.F. (- 25). 21^h to 22^h Wave in N.F.
(- 20). 21^h to 22^h Rapid decrease in Dec. (- 8'), with irregular partial return till 22^h (+ 4').
- 24^d 2^h to 2^h Decrease in Dec. (- 4'). 4^h to 4^h Increase in Dec. (+ 4'). 18^h to 18^h Decrease in Dec.
(- 5'). 18^h to 19^h Double-crested wave in N.F. (+ 20, + 25). 19^h to 19^h Wave in Dec. (+ 3').
21^h to 22^h Wave in Dec. (- 3').
- 26^d 16^h to 17^h Wave in N.F. (- 25). 17^h to 18^h Wave in Dec. (- 5'). 18^h to 18^h Wave in N.F. (- 20).
18^h to 19^h Wave in Dec. (- 4'). 19^h to 20^h Sharp wave in Dec. (+ 5'). 19^h to 20^h Truncated
wave in N.F. (- 20). 22^h to 24^h Wave in Dec. (- 5'), the first movement rather rapid. 22^h to 23^h
Increase in N.F. (+ 25). 23^h to 27^d 2^h Slow wave in N.F. (- 25).
- 27^d 0^h to 3^h Wave in Dec. (+ 9'). 1^h to 2^h Decrease in V.F. (- 15). 10^h to 11^h Increase in Dec. (+ 5').

1921

December 28^d 3^h to 4^h Wave in N.F. (+ 30). 3^h to 3^h Decrease in Dec. (- 4'), followed till 5^h by a domed wave (+ 11'), with a small wave superposed at 4^h to 4^h (+ 3'). 3^h to 5^h Fluctuating decrease in V.F. (- 35), followed till 9^h by a steady recovery. 4^h to 6^h Irregular double-crested wave in N.F. (+ 30, + 40). 5^h to 8^h Flattened wave in Dec. (+ 5'). 9^h to 11^h Oscillating increase in Dec. (+ 7'). 11^h to 12^h Serrated wave in Dec. (+ 4'). 12^h to 12^h Oscillating decrease in N.F. (- 25). 13^h to 16^h Wave in N.F. (- 60) with several oscillations superposed. 13^h to 15^h Three consecutive waves in Dec. (- 3', - 3', - 4'). 14^h to 14^h Increase in V.F. (+ 30). 15^h to 17^h Oscillating decrease in Dec. (- 10'). 18^h to 19^h Double wave in N.F. (± 40). 18^h to 20^h Two consecutive waves in Dec. (- 9', - 9'). 22^h to 29^d 0^h Double wave in N.F. (± 40), the first part truncated, the second part serrated. 22^h to 23^h Irregular double-crested wave in Dec. (- 8', - 10'). 22^h to 22^h Decrease in V.F. (- 12). 23^h to 24^h Decrease in V.F. (- 20). 23^h to 24^h Rapid decrease in Dec. (- 7').

29^d 0^h to 1^h Wave in Dec. (+ 4'). 1^h to 3^h General increase in Dec. (+ 8'), with waves superposed at 1^h to 2^h (+ 4'), and 2^h to 3^h (+ 5'). 1^h to 2^h Wave in N.F. (- 35). 3^h to 5^h Increase in V.F. (+ 25). 4^h to 5^h Domed wave in Dec. (- 3'). 7^h to 8^h Sharp decrease in N.F. (- 40). 10^h to 10^h Rapid decrease in N.F. (- 50) with partial recovery till 11^h (+ 25). 11^h to 12^h Wave in N.F. (+ 20). 12^h to 13^h Increase in N.F. (+ 35). 14^h to 15^h Increase in N.F. (+ 25). 17^h to 18^h Wave in N.F. (- 30). 17^h to 18^h Wave in Dec. (- 11'). 17^h to 17^h Increase in V.F. (+ 12). 18^h to 19^h Increase in N.F. (+ 30). 20^h to 21^h Two consecutive waves in Dec. (- 6', - 6'). 20^h to 21^h Triple wave in N.F. (- 20, + 20, - 20), the middle part truncated. 20^h to 22^h Irregular decrease in V.F. (- 12).

30^d 0^h to 1^h Oscillating increase in Dec. (+ 6'). 1^h to 3^h Wave in V.F. (- 12). 1^h to 2^h Wave in N.F. (+ 20). 2^h to 2^h Decrease in Dec. (- 3'). 19^h to 21^h Truncated wave in Dec. (- 5'), followed till 22^h by a further wave (- 3'). 20^h to 21^h Two consecutive waves in N.F. (+ 25, + 30). 23^h to 24^h Irregular decrease in N.F. (- 25), with a wave in Dec. (- 4').

EXPLANATION OF THE PLATES.

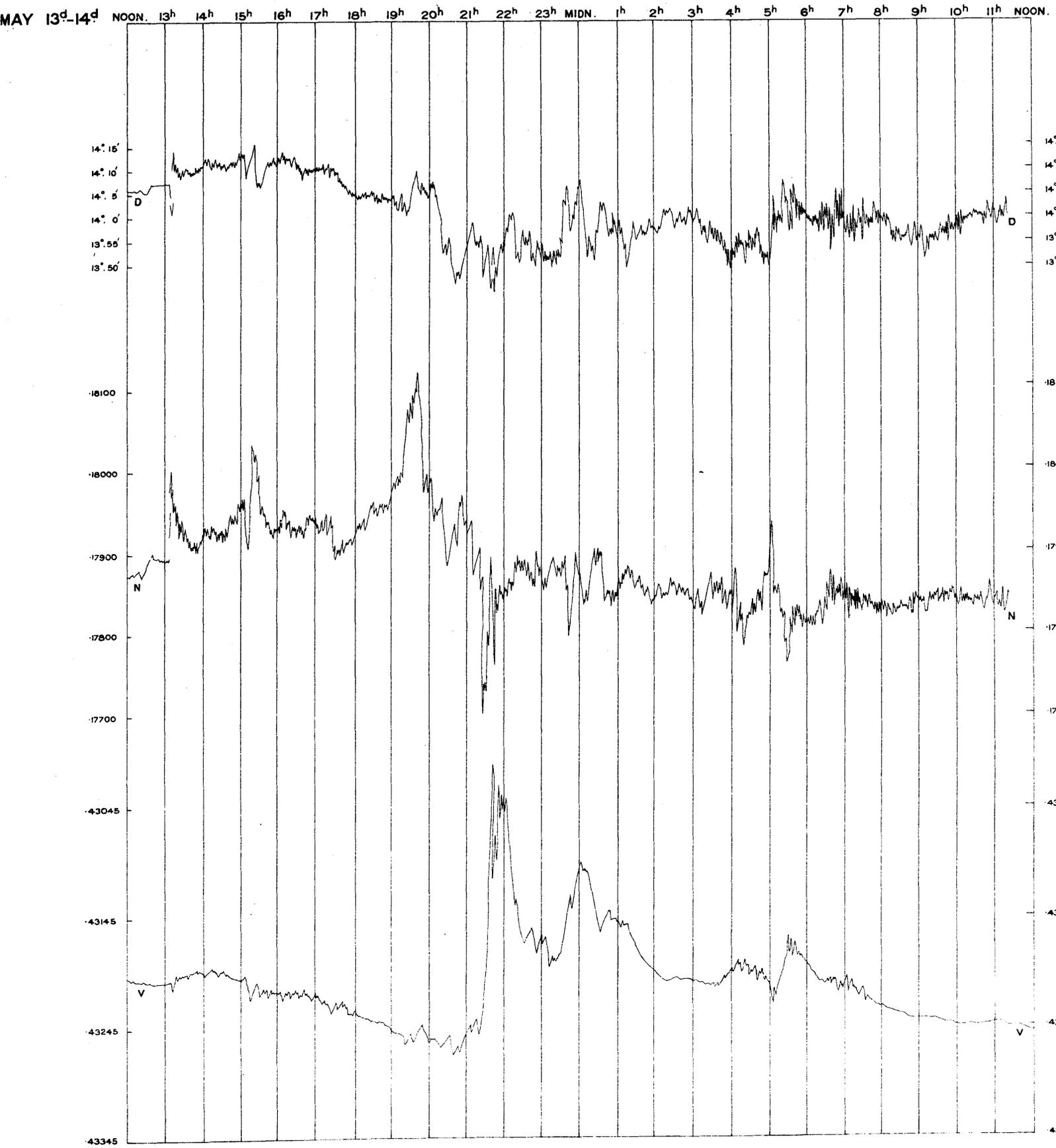
The magnetic motions figured on the Plates are those for days of disturbance selected by the International Committee—May 13^d 12^h to 14^d 12^h; May 14^d 15^h to 15^d 15^h; May 15^d 15^h to 16^d 15^h.

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

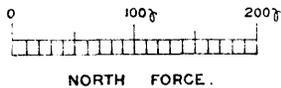
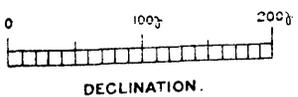
The magnetic declination, north force, and vertical force are indicated by the letters D., N., and V. respectively; the declination (west) is expressed in arc, the unit for north and vertical force is γ (0.00001 C.G.S.), the corresponding scales being given on the sides of each diagram. Equal changes 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 0ⁱⁿ.70 = 17.7 in the declination curve, by 0ⁱⁿ.64 = 16.3 in the north force curve, and by 0ⁱⁿ.87 = 22.0 in the vertical force curve.

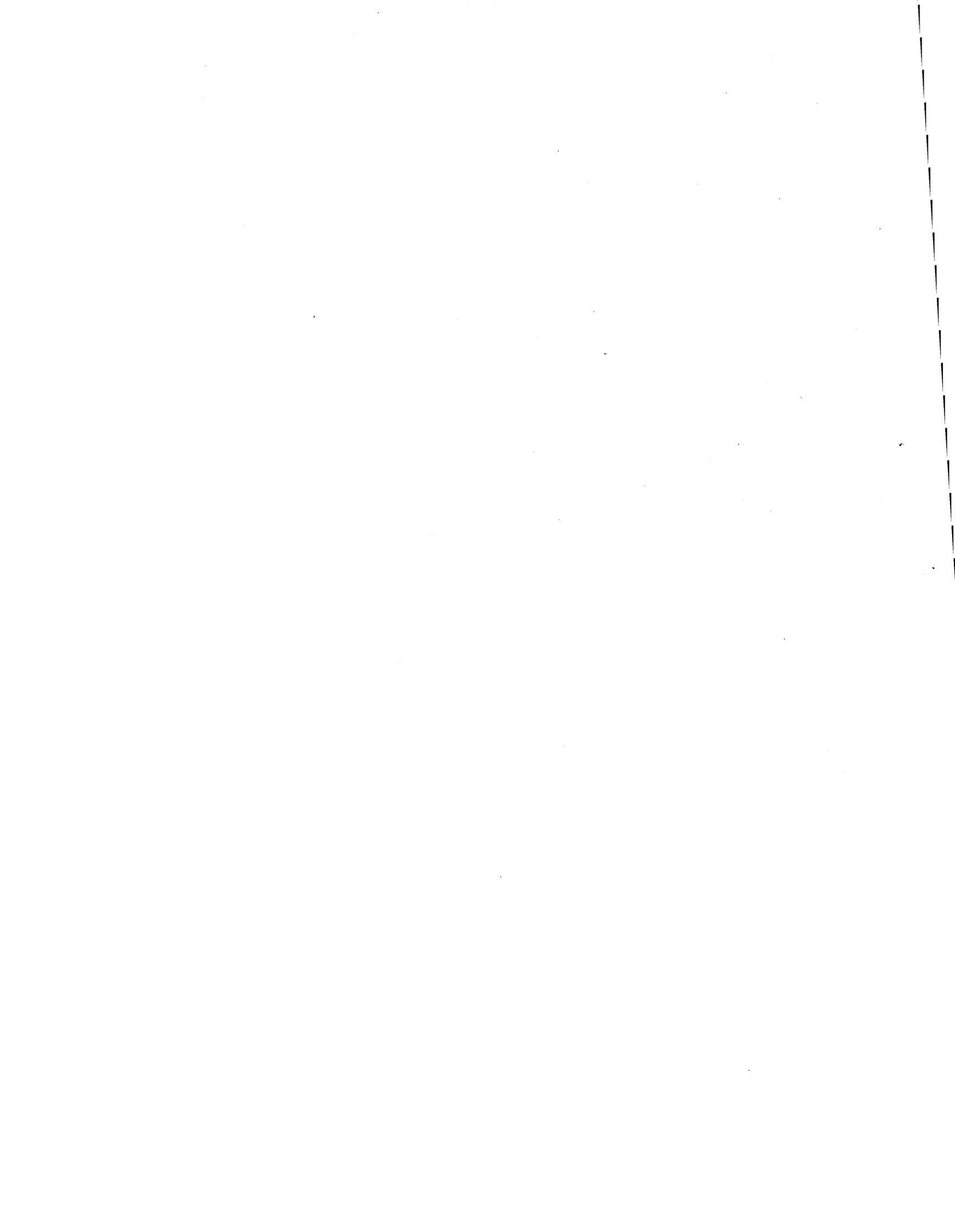
Upward motion indicates increase of declination and north force, and decrease of vertical force.

**MAGNETIC DISTURBANCE RECORDED AT THE ROYAL OBSERVATORY,
GREENWICH, 1921.**

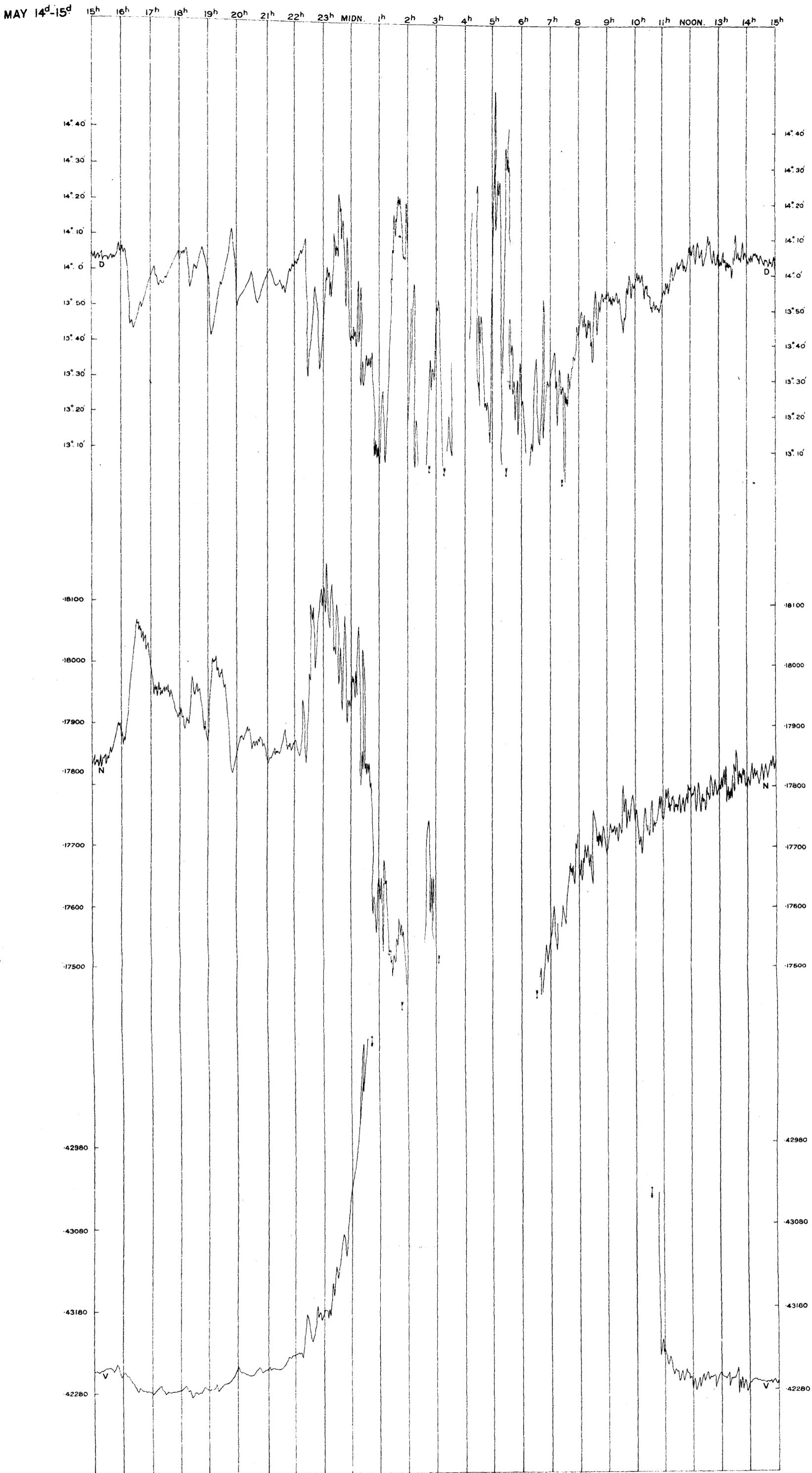


SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS

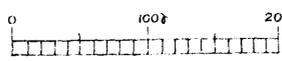




MAGNETIC DISTURBANCE RECORDED AT THE ROYAL OBSERVATORY,
GREENWICH, 1921.



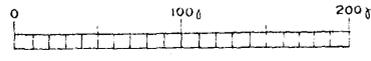
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



DECLINATION.

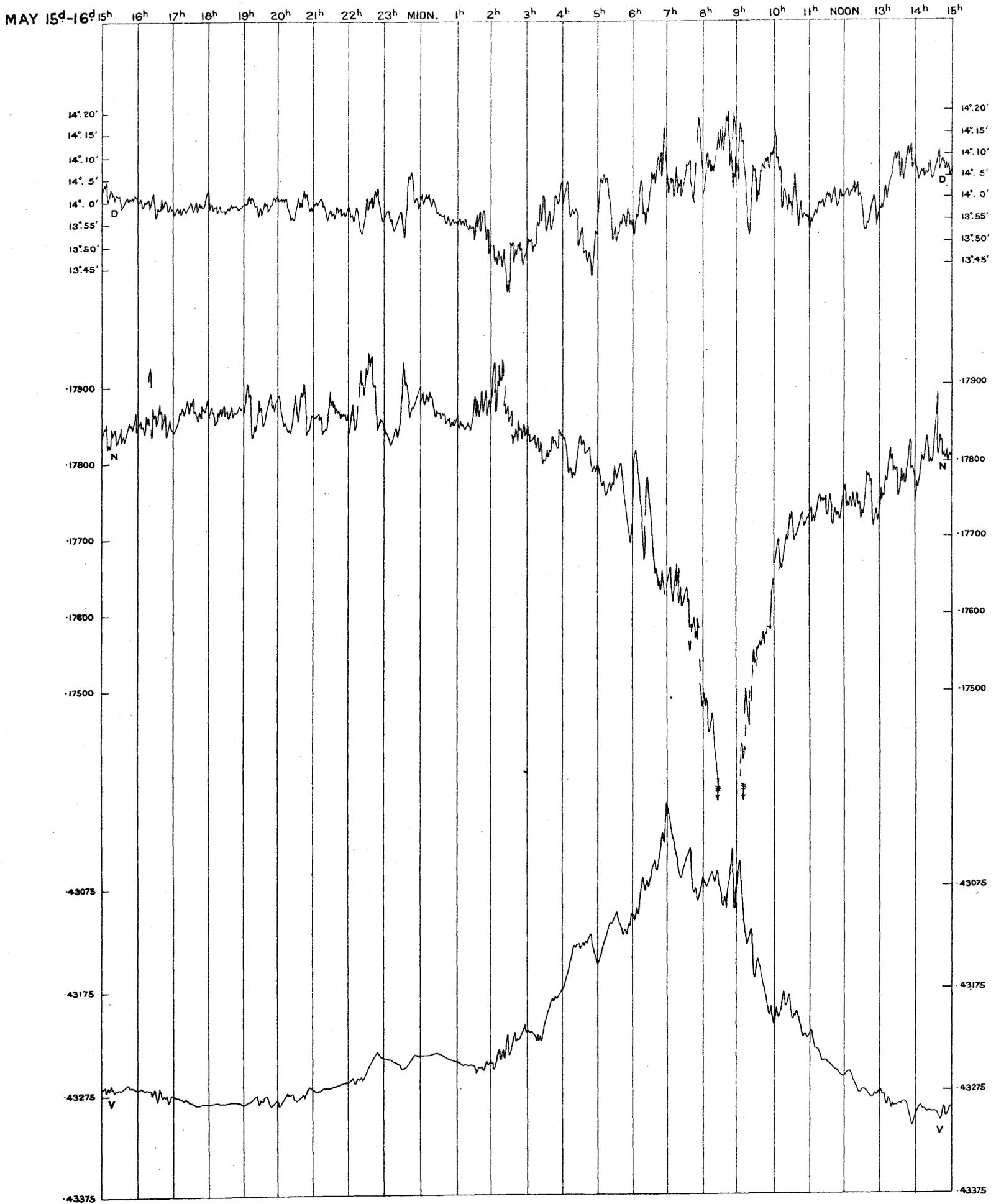


NORTH FORCE.

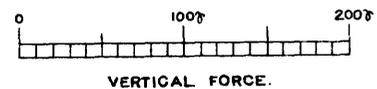
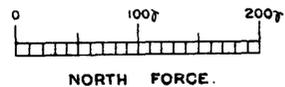
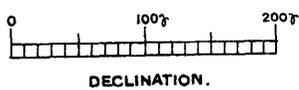


VERTICAL FORCE.

MAGNETIC DISTURBANCE RECORDED AT THE ROYAL OBSERVATORY,
GREENWICH, 1921.



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



ROYAL OBSERVATORY, GREENWICH.

RESULTS

OF

METEOROLOGICAL OBSERVATIONS.

1921.

MONTH and DAY, 1921.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.				
Jan. 1	29.751	54.0	43.9	10.1	50.9	+ 12.3	49.8	48.7	2.2	5.1	0.8	92	60.6	35.0	45.9	0.188	..	0.0
2	29.599	54.1	47.9	6.2	51.1	+ 12.7	49.0	46.8	4.3	9.5	0.0	85	65.7	43.0	46.0	0.104	..	0.1
3	29.968	49.4	45.2	4.2	47.8	+ 9.5	45.8	43.6	4.2	5.8	2.7	87	64.0	39.3	46.1	0.000	..	1.5
4	29.803	54.0	49.4	4.6	51.6	+ 13.3	49.8	48.0	3.6	6.1	1.8	88	57.8	46.2	46.3	0.085	..	0.0
5	29.815	51.7	42.4	9.3	47.6	+ 9.4	45.8	43.8	3.8	7.0	1.7	88	53.0	35.4	46.3	0.018	..	0.0
6	29.955	49.3	41.7	7.6	47.0	+ 8.9	44.7	42.1	4.9	8.5	2.1	84	57.0	35.1	46.4	0.042	..	0.0
7	29.739	48.8	38.0	10.8	45.2	+ 7.2	44.6	43.9	1.3	2.6	0.4	95	52.5	32.2	46.6	0.347	..	0.0
8	29.778	45.6	35.7	9.9	40.9	+ 3.0	39.3	37.3	3.6	5.3	0.9	87	57.0	30.4	46.4	0.004	..	0.7
9	29.733	56.1	45.6	10.5	52.5	+ 14.6	50.5	48.5	4.0	6.8	1.5	87	69.0	43.1	46.9	0.000	..	1.8
10	29.574	55.4	47.9	7.5	52.2	+ 14.3	49.5	46.8	5.4	8.4	2.6	82	63.0	42.4	46.6	0.147	..	0.3
11	29.540	48.8	38.8	10.0	43.7	+ 5.8	41.2	38.3	5.4	9.1	2.3	81	74.7	32.4	46.5	0.157	..	4.1
12	29.210	49.0	39.0	10.0	45.1	+ 7.2	43.5	41.6	3.5	7.0	1.4	88	63.2	31.9	46.6	0.043	..	0.4
13	29.154	46.0	36.1	9.9	42.6	+ 4.6	41.4	40.0	2.6	5.6	1.1	90	54.2	33.0	46.5	0.180	..	0.1
14	29.792	38.9	33.4	5.5	36.3	- 1.7	34.1	30.9	5.4	9.5	2.4	81	54.6	29.2	46.3	0.001*	..	2.1
15	30.199	39.9	29.1	10.8	33.2	- 4.9	32.2	30.3	2.9	5.1	0.8	89	50.5	22.9	46.1	0.004*	..	1.9
16	30.323	44.4	29.2	15.2	36.8	- 1.5	34.7	31.7	5.1	9.2	0.0	83	64.6	21.0	46.0	0.010	..	5.4
17	29.808	51.4	41.2	10.2	47.5	+ 9.0	45.9	44.1	3.4	5.1	1.3	89	50.3	37.3	45.9	0.100	..	0.0
18	29.444	54.1	37.3	16.8	48.3	+ 9.7	44.1	39.5	8.8	12.0	5.5	72	67.4	32.8	45.6	0.140	..	2.0
19	30.021	45.4	38.1	7.3	41.9	+ 3.2	37.8	32.8	9.1	11.4	7.1	71	60.0	31.0	45.6	0.000	..	1.8
20	30.243	53.4	39.5	13.9	46.7	+ 7.9	44.3	41.6	5.1	8.2	2.1	83	70.9	32.6	45.4	0.000	..	1.8
21	30.269	51.9	46.3	5.6	48.4	+ 9.6	45.9	43.2	5.2	8.0	3.2	83	75.8	40.4	45.3	0.000	..	2.9
22	29.993	51.0	40.9	10.1	47.6	+ 8.8	43.9	39.8	7.8	12.6	3.7	75	55.1	32.6	45.4	0.000	..	0.0
23	30.088	50.6	38.6	12.0	43.5	+ 4.6	40.6	37.2	6.3	8.2	3.1	78	56.0	30.6	45.3	0.000	..	0.3
24	29.950	52.2	48.3	3.9	50.5	+ 11.6	47.7	44.8	5.7	7.5	3.1	81	59.6	43.3	45.6	0.000	..	0.0
25	30.008	52.1	45.7	6.4	49.1	+ 10.0	47.7	46.2	2.9	4.2	1.5	90	60.0	39.0	45.5	0.010	..	0.0
26	29.834	50.4	44.4	6.0	47.3	+ 8.0	44.8	42.1	5.2	9.7	2.3	83	56.6	39.0	45.6	0.027	..	0.3
27	29.964	49.9	36.6	13.3	43.9	+ 4.4	41.6	38.9	5.0	8.9	1.2	82	55.5	30.1	45.7	0.000	..	0.0
28	30.039	53.8	41.8	12.0	49.6	+ 10.0	47.6	45.5	4.1	6.8	1.7	87	59.8	36.9	45.8	0.038	mP : sP : ssP, sP	0.8
29	29.907	52.8	48.4	4.4	49.6	+ 9.9	48.2	46.7	2.9	4.6	2.1	90	56.5	41.3	45.8	0.003	.. : sP : sP	0.0
30	29.496	50.7	45.0	5.7	48.4	+ 8.7	46.4	44.2	4.2	5.4	2.3	86	57.0	38.5	45.9	0.013	wP : wP : mP, sP	0.0
31	29.112	46.1	35.3	10.8	42.0	+ 2.3	40.3	38.2	3.8	7.3	1.0	87	64.0	30.0	45.8	0.078	mP : sP : ssP	0.9
Means	29.808	50.0	41.0	9.0	46.1	+ 7.6	44.0	41.5	4.6	7.4	2.1	84.6	60.2	35.1	46.0	Sum 17.39	..	0.9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, 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 Hygrometric 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 January 14 and 15 were derived from frost.

The mean reading of the Barometer for the month was 29ⁱⁿ.808, being 0ⁱⁿ.014 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 56° on January 9; the lowest in the month was 29° on January 15; and the range was 27°. The mean of all the highest daily readings in the month was 50°, being 7° higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 41°, being 7° higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 9°, being 0.4 less than the average for the 65 years, 1841-1905. The mean for the month was 46°, being 7.5 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER						
	POLARIS.		URSAR MINORIS.		OSLER'S.			Robin-son's.								
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.									
					A.M.	P.M.		Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.						
	hours.		hours.			lbs.	lbs.	miles.	A.M.		P.M.					
Jan. 1	0.9	0.07	0.6	0.05	SW	SSW : SW	2.8	0.26	297	0		10, m.-r.-sh.	10, slt.-r		10, slt.-r	
2	4.9	0.35	3.9	0.28	SW	SW : WSW : NW	5.1	0.63	446	10		10, w	10, n, s, oc.-shs		10, r, m.-r.-sh	
3	0.0	0.00	0.0	0.00	WNW : W	WSW : SSW	2.5	0.18	296	9		9	5, s.-cu, th.-cl, h	v.-cl, th.-cl, cl.-s, so.-ha	9	10, th.-r
4	0.0	0.00	0.0	0.00	SSW : SW	SW : SSW	5.6	0.81	483	10, w		10, n, w	10, n, w		10, r, m.-r	
5	4.3	0.31	4.0	0.29	SW : WSW	NW : SW	2.3	0.17	279	10, m.-r.-sh		10, glm	10		10	
6	2.1	0.15	1.6	0.12	SSW	SSW	3.2	0.42	369	5		10	10, s, n		10, r, m.-r,	
7	6.7	0.49	5.7	0.41	SSW : Calm : S	S : NW : SW	2.9	0.12	200	10		7, m.-r, m: 10, n, r, oc.-m.-r	10, m, r, oc.-m.-r	10	0	
8	0.6	0.04	0.4	0.03	SW : NNW : W	WSW : SW	7.0	0.27	290	10		0, ho.-fr, h	10, p.-so.-ha		10, fq.-m.-r, w	
9	4.3	0.31	2.8	0.20	SW : WSW	W : WSW	8.0	0.81	560	10, w		10, w	v.-cl, w	10, w	v.-cl, cu.-s, w	
10	9.2	0.67	8.8	0.64	WSW	SW : WSW	18.0	1.52	686	10, w		9, s.-cu, n, fq.-shs, w	10, n, fq.-shs, w	v.-cl, shs, w	10, r, m.-r, w	
11	3.9	0.29	3.7	0.27	NW : W : WSW	SW	3.8	0.55	460	0, slt.-ho.-fr, w: 0, slt.-ho.-fr, w: 2, cl, w		0, slt.-ho.-fr, w: 2, cl, w	10, s, n		10, r	
12	8.9	0.65	7.7	0.56	WSW : S	S : SW	6.6	0.39	357	6		3	9, cu, n, oc.-slt.-r	9, n, s.-cu, r	v.-cl	1
13	3.2	0.23	2.9	0.21	SW	Calm : NNE : NE	8.8	0.35	289	v.-cl, oc.-r		10, s, n, r	10, s, n, r, gt.-glm	10, fq.-slt.-r	10, oc.-r	
14	9.2	0.67	4.6	0.34	NE : NNE	NW : W : N	7.7	0.28	277	10, ho.-fr		3, th.-cl, ho.-fr: 0, ho.-fr, h	9, s.-cu	p.-cl, h, ho.-fr	1, h, ho.-fr	
15	13.5	1.00	13.5	1.00	Calm	W : Calm : S	0.2	0.00	114	1, ho.-fr		6, cu, m, h, ho.-fr	1, th.-cl, h		0, m, ho.-fr	
16	0.0	0.00	0.0	0.00	S : Calm : SW	SW : SSW	2.5	0.18	269	0, ho.-fr		0, ho.-fr	2	p.-cl	10, oc, slt.-r	
17	0.0	0.00	0.0	0.00	SSW : SW : WSW	WSW	7.3	0.72	527	10, oc.-m.-r: 10, m.-r		10, fq.-r, w	10, n, s, r, w	10, oc.-slt.-r, w	10, r, w	
18	12.1	0.91	11.4	0.86	WSW : W	NW : WNW	19.2	2.13	895	10, g		10, g	10, s.-cu, sc, g, r.-sq	v.-cl, cu.-n, s, oc.-shs, g	v.-cl, sh, w	v.-cl, sh, w
19	6.5	0.49	5.9	0.45	NW	NW : W	9.1	0.72	480	0, w		0, w	v.-cl, cu, cl.-s, w	9, s.-cu, n, w	10	10
20	2.6	0.22	2.1	0.16	WSW : W	W	3.0	0.25	352	v.-cl		10, s, cu, sc	v.-cl		10	
21	0.8	0.06	0.1	0.01	W : WSW	WSW	4.8	0.63	459	10		9, s.-cu	9, w		9, cu, w	
22	11.0	0.85	8.7	0.67	WSW	W : NW	9.6	1.05	592	10, oc.-m.-r, w		10, w	10, w	8	v.-cl, th.-cl, lu.-ha	
23	0.0	0.00	0.0	0.00	W	W : WSW	3.7	0.39	455	v.-cl		1	10, s.-cu	10, s	10, cl.-s, s, th.-cl, lu.-ha, w	
24	0.7	0.05	0.4	0.03	WSW : W	W	7.3	0.60	464	10, m.-r.-sh, w		10, s, n, w	10, s, n		10	
25	4.5	0.35	3.2	0.24	WSW : Calm	WSW	1.7	0.09	224	10, m.-r.-sh		10, s, n, fq.-m.-r	10, s, n, oc.-m.-r	10	9	
26	5.7	0.44	5.1	0.39	WSW	W : WNW	3.6	0.49	456	9, shs		7	10, n, s, cu, fq.-m.-r	10, n, s	10, th.-cl	10, oc.-m.-r
27	5.0	0.38	3.3	0.25	NW : N : Calm	Calm : SSW	3.5	0.10	186	3, th.-cl		1	10, s	10, s.-cu, h		0, ho.-fr
28	4.8	0.37	4.0	0.31	SSW : SW : WSW	WSW	4.2	0.39	443	10, r, m.-r		10, s, s.-cu, fq.-m.-r	10, w	10, w	p.-cl	
29	0.0	0.00	0.0	0.00	WSW : SW	SW	2.9	0.24	329	3, th.-cl		10	10, oc.-m.-r	10, fq.-m.-r	10	
30	4.2	0.33	2.8	0.22	SW	SW : SSW	4.9	0.53	404	10, m.-r.-sh		9	10, oc.-m.-r	10, n, fq.-m.-r	10	10, sh, m.-r.-sh
31	11.4	0.91	8.9	0.71	SSW : SW	SW : S	3.7	0.20	285	10, r		9, s.-cu, cu.-n	10, s.-cu, cu.-n, m.-r	p.-cl	3	
Means	..	..	..	..	..	..	..	0.50	394						
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 44°.0, being 6°.8 higher than
 The mean *Temperature of the Dew Point* for the month was 41°.5, being 6°.0 higher than
 The mean *Degree of Humidity* for the month was 84.6, being 3.4 less than
 The mean *Elastic force of Vapour* for the month was 0^m.262, being 0^m.056 greater than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3^{grs} 1, being 0^{grs}.7 greater than
 The mean *Weight of a Cubic Foot of Air* for the month was 545 grains, being 9 grains less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 8.1.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.113. The maximum daily amount of *Sunshine* was 5.4 hours on January 16.
 The highest reading of the *Solar Radiation Thermometer* was 75°.8 on January 21; and the lowest reading of the *Terrestrial Radiation Thermometer* was 21°.0 on January 16.
 The *Proportions of Wind* referred to the cardinal points were N. 3, E. 0, S. 10, W. 16. Two days were calm.
 The *Greatest Pressure of the Wind* in the month was 19.2 lbs. on the square foot on January 18. The mean daily *Horizontal Movement of the Air* for the month was 394 miles; the greatest daily value was 895 miles on January 8; and the least daily value was 114 miles on January 15.
Rain (0^m.005 or over) fell on 18 days in the month, amounting to 1^m.739 as measured by gauge No. 6 partly sunk below the ground; being 0^m.142 less than the average fall for the 65 years, 1841-1905.

} the average for the 65 years, 1841-1905.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY, 1921.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.								
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
Feb. 1	29.385	48.0	30.7	17.3	38.1	- 1.5	36.8	35.0	3.1	8.3	0.0	89	86.2	27.3	45.8	0.012	sP : wP : mP	4.3	9.1
2	29.540	45.9	32.9	13.0	36.8	- 2.7	36.0	34.9	1.9	5.2	0.0	93	72.0	28.1	45.8	0.001	wP, wwP : wwP	2.0	9.1
3	29.801	44.5	27.1	17.4	34.0	- 5.5	32.8	30.7	3.3	7.1	0.0	87	84.6	23.0	45.6	0.004	wwP : wwP : sP, mP	3.5	9.2
4	29.876	44.4	30.2	14.2	36.8	- 2.7	35.4	33.5	3.3	9.2	0.0	88	86.5	22.3	45.4	0.000	mP : sP, mP : mP	3.7	9.3
5	29.860	43.3	34.5	8.8	38.4	- 1.2	36.3	33.5	4.9	9.6	0.5	83	72.2	30.9	45.1	0.000	wP : mP : sP	1.1	9.3
6	30.069	39.6	34.4	5.2	36.9	- 2.7	35.3	33.1	3.8	6.4	1.5	86	39.0	33.9	44.9	0.015	mP, sP : sP	0.0	9.4
7	30.082	36.2	34.0	2.2	35.4	- 4.1	34.0	31.8	3.6	5.8	2.3	87	37.6	33.4	44.7	0.002	mP, sP : ssP : mP, sP	0.0	9.5
8	30.178	41.1	33.6	7.5	36.8	- 2.5	34.7	31.7	5.1	9.0	3.1	83	56.6	30.1	44.7	0.000	sP : ssP, sP : mP, ssP	0.0	9.5
9	30.401	43.1	35.1	8.0	38.7	- 0.4	36.4	33.3	5.4	7.2	2.1	82	52.0	31.1	44.5	0.000	ssP : ssP : sP	0.0	9.6
10	30.481	45.4	32.9	12.5	38.1	- 0.8	36.3	33.9	4.2	9.4	0.0	85	45.4	32.9	44.4	0.002	mP : mP, sP : ssP, sP	1.7	9.6
11	30.400	42.3	36.2	6.1	39.2	+ 0.4	36.4	32.7	6.5	9.7	2.7	78	55.0	30.2	44.2	0.000	sP : ssP : ssP	0.0	9.7
12	30.332	45.9	39.3	6.6	41.7	+ 2.9	39.0	35.7	6.0	8.9	2.9	80	83.0	35.0	44.2	0.009	sP : ssP	1.3	9.7
13	30.230	44.3	39.0	5.3	41.9	+ 2.9	39.1	35.6	6.3	9.8	3.9	79	51.7	36.9	44.0	0.000	ssP : sP, mP	0.0	9.8
14	30.128	50.8	37.2	13.6	44.8	+ 5.5	41.5	37.7	7.1	12.6	1.8	76	85.2	28.5	44.2	0.000	mP, sP : ssP : ssP	0.6	9.9
15	30.130	49.6	37.0	12.6	42.9	+ 3.5	40.2	37.0	5.9	10.7	1.4	80	68.0	28.4	44.1	0.000	sP, mP : sP, mP	0.0	9.9
16	30.004	53.0	41.7	11.3	47.9	+ 8.4	45.3	42.4	5.5	8.9	3.6	83	70.6	35.0	44.3	0.000	mP : sP	0.0	10.0
17	29.976	50.8	43.3	7.5	47.5	+ 7.9	44.3	40.8	6.7	13.0	2.3	78	78.4	32.9	44.2	0.000	ssP	1.2	10.1
18	30.085	48.4	32.0	16.4	41.5	+ 2.0	38.8	35.5	6.0	10.6	0.5	80	62.3	23.9	44.3	0.000	ssP, sP : ssP	0.0	10.1
19	30.173	42.9	36.6	6.3	40.0	+ 0.5	37.9	35.2	4.8	7.4	2.3	83	60.8	31.1	44.3	0.006	mP, sP : sP : ssP	0.0	10.2
20	30.113	49.1	35.6	13.5	40.3	+ 0.8	37.9	34.8	5.5	14.7	0.0	81	98.0	29.0	44.5	0.000	sP, mP : sP	6.4	10.2
21	30.024	51.6	33.0	18.6	40.8	+ 1.2	37.8	34.1	6.7	17.1	0.0	78	99.2	25.4	44.3	0.003*	wP, mP : ssP : ssP, mP	8.3	10.3
22	29.960	58.5	30.7	27.8	43.6	+ 3.9	40.6	37.1	6.5	14.1	0.0	77	105.2	22.9	44.4	0.002*	mP, wP : sP : sP, mP	7.9	10.4
23	30.026	59.5	42.2	17.3	48.7	+ 8.9	44.1	39.1	9.6	15.4	3.9	69	88.6	30.4	44.4	0.000	mP : sP : sP	2.2	10.4
24	30.075	61.6	36.1	25.5	48.0	+ 8.0	43.4	38.3	9.7	18.2	1.4	69	110.5	26.9	44.3	0.000	mP : sP : ssP	7.8	10.5
25	30.159	51.6	41.9	9.7	45.5	+ 5.4	43.8	41.8	3.7	8.3	0.4	88	62.9	28.1	44.2	0.068	vP : wwP, wP	0.0	10.6
26	30.531	49.8	30.9	18.9	40.6	+ 0.4	37.5	33.6	7.0	13.1	1.0	76	98.6	23.2	44.2	0.000	wP : ssP, vP	6.9	10.6
27	30.590	51.4	26.6	24.8	39.3	- 1.0	36.1	31.9	7.4	13.0	0.0	76	77.8	19.7	44.1	0.000	wwP, vP : sP	2.1	10.7
28	30.379	47.0	36.7	10.3	42.8	+ 2.5	39.6	35.7	7.1	10.5	3.2	77	62.0	30.9	44.2	0.000	wP : mP, sP : sP, mP	0.0	10.8
Means	30.107	47.8	35.0	12.8	41.0	+ 1.4	38.5	35.4	5.6	10.5	1.5	81.1	73.2	29.0	44.5	0.124	..	2.2	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 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 21 and 22 were derived from frost.

The mean reading of the Barometer for the month was 30ⁱⁿ.107, being 0ⁱⁿ.305 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR

The highest in the month was 61^o.6 on February 24; the lowest in the month was 26^o.6 on February 27; and the range was 35^o.0. The mean of all the highest daily readings in the month was 47^o.8, being 2^o.6 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 35^o.0, being 0^o.8 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 12^o.8, being 1^o.8 greater than the average for the 65 years, 1841-1905. The mean for the month was 41^o.0, being 1^o.5 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.		
	POLARIS.		δ URSAE MINORIS.		OSLER'S.				ROBINSON'S.			
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Horizontal Movement of the Air.			
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.		A.M.	P.M.	
Feb. 1	7.5	0.60	6.8	0.55	Calm : S	Calm : SE	0.4	0.00	130	3, ho.-fr	3, th.-cl, cu, m, ho.-fr	9, cu, n, s, shs : 9, m, ho.-fr : 1, ho.-fr
2	6.3	0.51	5.2	0.42	Calm : E	E : S : Calm	0.9	0.02	136	0, f	0, f	6, cu, cu.-n : 1, h, slt.-ho.-fr : 9, s.-cu
3	6.9	0.55	6.7	0.54	Calm	Calm : SE	0.2	0.00	96	0, f, ho.-fr : f, ho.-fr	f, ho.-fr	1, ci.-cu, h : 1, m, ho.-fr : 0, m, ho.-fr
4	7.6	0.61	4.5	0.36	SSE : SE	SE : ESE	3.0	0.17	228	10	9, s.-cu	v.-cl, th.-cl, ci.-s : v.-cl, th.-cl : 10
5	0.0	0.00	0.0	0.00	ESE : SE	SE : E	2.4	0.30	300	3	10, n, cu.-n	10 : 10
6	0.0	0.00	0.0	0.00	E : ENE	NE : ENE	2.3	0.25	314	10	10, oc.-m.-r, fr.-r	10, fq.-m.-r, fr.-r : 10, fq.-m.-r, fr.-r : 10, fq.-m.-r, oc.-r
7	0.0	0.00	0.0	0.00	NE : ENE	NE : Calm	1.2	0.09	193	10, fq.-m.-r	10, fq.-m.-r, fr.-r	10, s, n, fq.-m.-r : 10, oc.-slt.-m.-r : 10
8	0.0	0.00	0.0	0.00	Calm	Calm	0.2	0.00	85	10	10	10 : 10
9	9.3	0.74	8.6	0.69	Calm : N	N : NNE	1.9	0.10	193	10	10, s, m, h	9, cu.-n, n, h, m : 9 : 6
10	4.9	0.39	3.4	0.27	N : NE	NE : NNE	3.6	0.35	340	1, ho.-fr	8, cu, n, sc	9, cu.-n, cu : 9, slt.-sh
11	0.8	0.07	0.1	0.01	NNE : NE	NNE : NE	2.6	0.28	312	9	10, s, n	10, s.-cu, cu.-n : 10
12	0.0	0.00	0.0	0.00	N : NNE	NNE : NE	3.4	0.29	293	10, oc.-m.-r, r : 10, oc.-m.-r, r : 9, cu.-s, cu, oc.-slt.-r	v.-cl	10 : 10
13	1.4	0.12	1.3	0.11	NNE : Calm	WSW : W	1.4	0.07	217	10	10, m, oc.-m.-r	10, m : 10
14	9.4	0.78	9.1	0.76	W : N	N : NW : W	1.7	0.12	259	10	10, cu.-n, cu, cl.-s, m	7, s.-cu, ci.-s : 8, th.-cl, h : 0, d
15	2.8	0.24	2.3	0.19	WSW	WSW : W	3.3	0.27	394	0	10, th.-cl, s, n	10, th.-cl, s, n : 10
16	1.9	0.16	1.8	0.15	WSW : WNW	NW : NNW	1.5	0.19	286	10	p.-cl : 10, s, s.-cu	10, s : 10 : 9
17	4.9	0.41	4.6	0.38	Calm : WSW : NNW	NW : W : N	1.8	0.11	202	10	10, s.-cu, m	5, cu : 10
18	0.2	0.01	0.0	0.00	Calm	NNE : NE	1.4	0.11	173	7, th.-cl, ho.-fr : 1, h, m, ho.-fr : 9, s.-cu, h, m	10, s	10 : 10
19	5.3	0.46	2.8	0.24	NE : E	E	1.8	0.15	240	10, oc.-m.-r	10, s, n, oc.-m.-r	10, s : 10 : 9
20	11.5	1.00	11.5	1.00	NE : E	E : ESE	2.0	0.22	274	10	10 : p.-cl, s	0 : 0, ho.-fr
21	9.8	0.85	9.3	0.81	ESE : E	E : ESE	2.1	0.23	262	0, ho.-fr	0, ho.-fr	0 : 0, ho.-fr
22	3.1	0.27	2.8	0.24	Calm	S : Calm	1.0	0.03	145	0	8, m : 2, cu, m	1, cu : 0, slt.-ho.-fr : 10, cl.-s, cu, m.-r
23	7.2	0.62	5.6	0.49	Calm : SE	SSE : Calm	0.7	0.01	123	10, m.-r	9, s	9 : 3, m : 9, m
24	4.7	0.41	3.9	0.34	Calm : SSE	S : SSW	1.0	0.02	160	7	1, slt.-m : 0	1, cu : 1 : p.-cl
25	3.3	0.29	3.3	0.29	S : Calm	Calm : N : NNE	4.4	0.17	186	10, m.-r-sh	10, sh : 10, n, s, r	10, s, n, r : 10, slt.-r, glm : 10, m.-r
26	11.0	1.00	8.6	0.78	N : NNE	NE : Calm	4.1	0.28	269	9	1 : 1, cu	p.-cl : 0, slt.-m
27	3.1	0.28	2.0	0.18	Calm : SW	W : WSW	1.5	0.07	203	0, slt.-m, ho.-fr	1, m	p.-cl : 10
28	5.3	0.49	5.1	0.47	WSW	WSW : SW	2.9	0.14	321	9, oc.-th.-cl	10, s.-cu, s, m	10, s.-cu : 10
Means	..	..	..	..	..	..	..	0.14	226			
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 38°.5, being 0°.8 higher than
 The mean *Temperature of the Dew Point* for the month was 35°.4, being equal to
 The mean *Degree of Humidity* for the month was 81.1, being 4.4 less than
 The mean *Elastic Force of Vapour* for the month was 0.207, being equal to
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 28.4, being equal to
 The mean *Weight of a Cubic Foot of Air* for the month was 557 grains, being 4 grains greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.1.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.220. The maximum daily amount of *Sunshine* was 8.3 hours on February 21.
 The highest reading of the *Solar Radiation Thermometer* was 110°.5 on February 24; and the lowest reading of the *Terrestrial Radiation Thermometer* was 19°.7 on February 27.
 The *Proportions of Wind* referred to the cardinal points were N. 6, E. 7, S. 4, W. 4. Seven days were calm.
 The *Greatest Pressure of the Wind* in the month was 4.4 lbs. on the square foot on February 25. The mean daily *Horizontal Movement of the Air* for the month was 226 miles; the greatest daily value was 394 miles on February 15; and the least daily value was 85 miles on February 8.
Rain (0.005 or over) fell on 5 days in the month, amounting to 0.124 as measured by gauge No. 6 partly sunk below the ground; being 1.356 less than the average fall for the 65 years, 1841-1905.

} the average for the 65 years, 1841-1905.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY, 1921.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.	Of the Earth 4 ft. below the Surface of the Soil.				
Mar. 1	30.166	53.2	33.6	19.6	42.7	+ 2.3	39.7	36.1	6.6	17.4	0.0	78	97.3	25.5	44.1	0.000	wP, wwP : wP, sP : sP, mP	3.6	10.8
2	30.021	47.5	34.9	12.6	41.2	+ 0.8	37.6	33.1	8.1	16.7	0.2	73	82.2	24.6	44.0	0.071	wP, wwP : sP : ssP, sP	3.7	10.9
3	30.088	51.0	27.4	23.6	39.8	- 0.7	36.3	31.8	8.0	13.7	4.0	73	102.5	21.5	44.0	0.020*	mP : sP, ssP, vP	5.1	11.0
4	29.750	53.6	45.5	8.1	48.9	+ 8.2	46.0	42.9	6.0	8.8	3.2	80	69.8	42.3	44.0	0.032	wwP : wwP, mP : sP	0.0	11.0
5	29.718	52.9	40.8	12.1	47.2	+ 6.3	44.9	42.4	4.8	9.2	2.3	84	83.8	36.6	44.0	0.000	.. : ssP, sP	0.2	11.1
6	29.527	56.4	32.7	23.7	42.0	+ 1.0	39.2	35.7	6.3	15.5	0.0	79	103.0	24.9	44.0	0.280	mP : sP : v, sP	6.2	11.2
7	29.960	45.2	28.4	16.8	37.1	- 3.9	34.1	29.8	7.3	15.2	1.4	75	100.0	25.0	44.1	0.000	sP, ssP : ssP : ssP, mP	5.1	11.2
8	29.976	49.3	27.3	22.0	40.2	- 0.9	37.7	34.5	5.7	10.2	3.4	80	88.3	24.1	44.0	0.016*	sP : ssP, sP : sP	0.9	11.3
9	29.867	54.7	38.0	16.7	46.0	+ 5.0	43.4	40.4	5.6	9.9	2.6	82	97.7	30.6	44.0	0.000	mP : sP : ssP	1.2	11.3
10	29.605	57.2	34.1	23.1	45.1	+ 4.2	40.3	34.8	10.3	22.1	0.0	67	110.9	26.3	44.1	0.000	mP, sP : sP : sP, ssP	10.1	11.4
11	29.597	60.9	41.6	19.3	50.2	+ 9.2	45.9	41.4	8.8	18.5	0.9	72	111.9	31.5	44.1	0.000	wP : mP, sP : sP, mP	1.5	11.5
12	29.645	54.0	39.9	14.1	46.5	+ 5.4	44.6	42.5	4.0	8.6	0.2	87	76.7	30.6	44.0	0.010	wP : mP : sP, mP	0.1	11.6
13	29.592	58.1	46.2	11.9	50.0	+ 8.7	46.9	43.6	6.4	12.3	3.1	79	111.2	39.1	44.2	0.040	mP : mP, v	1.9	11.6
14	29.774	57.1	41.1	16.0	48.2	+ 6.7	44.1	39.6	8.6	15.7	3.1	72	113.0	34.1	44.2	0.031	mP : mP : sP	7.4	11.7
15	30.101	54.8	36.3	18.5	47.0	+ 5.3	42.8	38.1	8.9	16.2	1.7	72	117.4	29.0	44.5	0.000	sP : ssP, sP : sP, mP	8.8	11.8
16	30.144	56.2	46.7	9.5	51.1	+ 9.2	47.2	43.1	8.0	12.9	2.1	75	98.0	40.2	44.6	0.020	wP : sP : sP	1.4	11.8
17	30.100	60.7	47.1	13.6	51.3	+ 9.3	48.3	45.2	6.1	17.5	0.6	80	117.1	40.8	44.9	0.103	vP : ssP, sP : wP, wwP	5.4	11.9
18	29.967	54.7	39.8	14.9	46.4	+ 4.4	41.7	36.5	9.9	17.6	2.9	69	111.4	31.0	44.8	0.050	wwP, wP : sP : ssP, wwP	9.6	11.9
19	30.011	54.4	38.2	16.2	45.3	+ 3.4	41.2	36.5	8.8	14.9	2.2	72	111.1	30.2	45.0	0.101	wwP : sP, ssP : sP, wwP	6.5	12.0
20	29.831	51.7	39.9	11.8	45.0	+ 3.1	41.1	36.6	8.4	14.8	2.1	73	94.3	33.0	45.0	0.088	wP : mP : sP	3.9	12.1
21	30.028	56.0	32.8	23.2	46.1	+ 4.2	42.8	39.1	7.0	14.6	1.3	77	99.7	27.4	45.1	0.000	mP, sP : ssP, sP : sP, mP	3.5	12.1
22	30.011	59.4	46.0	13.4	50.8	+ 8.8	48.0	45.1	5.7	11.1	1.7	81	109.7	39.4	45.2	0.000	mP, wP : sP : sP	4.5	12.2
23	30.091	58.0	41.8	16.2	49.6	+ 7.4	45.5	41.2	8.4	14.3	3.5	73	112.8	31.7	45.2	0.000	mP : sP : sP	2.6	12.3
24	30.175	67.3	41.4	25.9	52.3	+ 9.9	46.5	40.6	11.7	22.7	2.2	65	121.4	28.9	45.4	0.000	wP : sP : sP, mP	9.5	12.3
25	30.133	62.8	35.1	27.7	48.6	+ 5.9	42.9	36.7	11.9	23.1	2.2	64	113.8	19.7	45.4	0.000	mP, wP : sP : sP, vP	10.7	12.4
26	29.955	51.9	34.2	17.7	43.2	+ 0.2	39.9	36.0	7.2	14.1	0.5	76	85.0	24.2	45.5	0.012	wP, wwP : vP : sP	1.4	12.5
27	29.886	53.4	34.0	19.4	43.9	+ 0.6	39.1	33.4	10.5	17.5	3.7	66	104.3	25.6	45.5	0.003	wwP : mP : wP	8.7	12.5
28	29.638	52.2	39.3	12.9	46.4	+ 2.7	43.9	41.1	5.3	10.7	2.1	83	94.0	30.0	45.5	0.158	wwP	0.3	12.6
29	29.244	55.6	38.4	17.2	44.1	- 0.0	40.7	36.7	7.4	16.6	2.9	75	115.1	30.9	45.5	0.147	wwP, wP : sP : wP	6.2	12.7
30	29.649	51.4	35.6	15.8	43.3	- 1.2	39.4	34.8	8.5	14.6	1.5	72	83.6	29.4	45.3	0.027	sP : ssP	3.9	12.7
31	30.073	60.8	40.1	20.7	49.6	+ 4.7	45.7	41.6	8.0	14.1	2.0	74	102.8	32.6	45.5	0.000	mP : ssP : ssP	4.4	12.8
Means	29.881	55.2	38.0	17.2	46.1	+ 4.2	42.5	38.4	7.7	14.9	1.9	75.1	101.3	30.3	44.7	1.209	..	4.5	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.

*Rainfall (Column 16). The amounts entered on March 3 and 8 were partly derived from frost.

The mean reading of the Barometer for the month was 29.881, being 0.135 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 67.3 on March 24; the lowest in the month was 27.3 on March 8; and the range was 40.0. The mean of all the highest daily readings in the month was 55.2, being 5.4 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 38.0, being 2.9 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 17.2, being 2.5 greater than the average for the 65 years, 1841-1905. The mean for the month was 46.1, being 4.2 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.		
	POLARIS.		δURSAE MINORIS.		OSLER'S.			Robinson's Horizontal Movement of the Air.				
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.					
					A.M.	P.M.	Greatest.		Mean of 24 Hourly Measures.	A.M.	P.M.	
Mar. 1	hours. 9.5	0.86	hours. 8.3	0.76	SW : SSW	SSW	lbs. 1.4	lbs. 0.07	miles. 224	I	: 10, th.-cl : th.-cl, cl, cu, so.-ha	10, ci.-s, th.-cl, p.-so.-ha : v.-cl, p.-so.-ha : 0
2	11.0	1.00	11.0	1.00	SW : N : NW	NW : WNW	3.0	0.21	301	0	: 10, r : 10, cu.-n, sh	6, cu, cu.-n : 0, ho.-fr
3	0.0	0.00	0.0	0.00	WSW : SW	SW	4.7	0.30	316	0, ho.-fr	: 0, ho.-fr, m : 3, s.-cu, ci.-s, m	9, s.-cu, n : 10, fq.-r, w
4	0.3	0.03	0.2	0.02	SW : WSW	WSW	5.9	0.74	556	10, r, w	: 10, s, m.-r, w	10, s, s.-cu, w : 10, th.-cl, w
5	6.2	0.58	5.6	0.52	SW : SSW	SSW	1.4	0.13	249	10, m.-r.-sh	: 10, s.-cu, p.-so.-ha	10, slt.-sh : 10
6	3.9	0.36	3.9	0.36	Calm : WSW	WSW : NNE	3.5	0.24	263	0, ho.-fr	: 1, ho.-fr : 6, cu, ci.-cu, h	7, cu, ci.-cu : 10, r : 10, oc.-shs
7	9.8	0.91	9.2	0.85	N : NNE	N : NE : S	2.6	0.27	262	3, th.-cl	: 9 : 7, cu.-n, cu.-s	7, cu : 0, ho.-fr, m
8	6.3	0.63	5.6	0.52	SSW : SW	SW	3.6	0.31	330	1, ho.-fr	: 8, ho.-fr : 10, s, n	10, cu, s.-cu, r : 9, fq.-slt.-r : 9
9	10.1	0.94	10.0	0.93	SW	SW : SSW	3.4	0.30	328	I	: 9 : 9, s.-cu	10, s, n : 10 : 2, slt.-ho.-fr
10	5.5	0.51	5.4	0.50	S : SSE	S : SSW	4.3	0.25	292	0, slt.-ho.-fr	: 0	0 : 1 : 0
11	5.4	0.50	4.6	0.43	SSW : SW	SSW	2.0	0.17	249	9, m.-r.-shs	: 10, s, n	9, s, ci : 9 : 5
12	2.3	0.22	0.6	0.05	Calm : SSW	SSW : S	3.2	0.16	226	9	: 10, s, n, slt.-sh	10, oc.-slt.-r : 10, oc.-slt.-r : 9, r, m.-r
13	6.7	0.65	6.0	0.59	S : SSW	SSW : SW	3.6	0.42	366	p.-cl	: 9, sh, m.-r.-sh : 10, slt.-sh	9, slt.-sh : 10, fq.-r : 10, oc.-r
14	6.7	0.65	6.3	0.61	SW	SSW : SW	8.2	0.66	437	1, sh	: 1 : 7, s.-cu, ci, w	7, th.-cl, ci, cu, w : 10, p.-so.-ha, sh, w : 8
15	5.3	0.51	4.7	0.45	WSW : SW	SSW	5.6	0.46	385	0	: 2, cu, w	9, th.-cl, ci.-s, cu, w : 10, th.-cl, w
16	0.1	0.01	0.1	0.01	SSW	SSW	6.7	0.85	517	8, w	: 9, s, cu, sc, th.-cl, w	10, th.-cl, s, s.-cu, n, w : 10, m.-r, sh, w
17	1.1	0.11	0.9	0.09	SSW : SW	WSW : SSW	5.0	0.25	285	10, sh	: 3, cu, p.-so.-ha	10, s : 10, r, oc.-m.-r
18	10.1	0.99	10.1	0.99	SSW : W	W : WSW	4.8	0.67	504	10, fq.-m.-r, oc.-r	: 7, w : v.-cl, cu, cu.-s, w	v.-cl, cu.-n, slt.-sh, w : 2, w : 0
19	2.9	0.30	2.9	0.30	WSW : W	W : SW	3.5	0.47	433	0	: 4, s.-cu, cu	9 : 10, r : 10, r
20	8.6	0.88	8.5	0.87	W : NNW : NW	NW : NNW	7.4	0.70	467	v.-cl, r	: v.-cl : 7, oc.-slt.-r, w	9, oc.-shs, w : v.-cl : v.-cl
21	1.7	0.17	0.8	0.08	NNW : WSW	SW : SSW	1.4	0.12	236	0	: 0, h : 9, th.-cl, h	9, s.-cu, n : 9
22	5.6	0.58	5.0	0.52	SSW : SW	SW : SSW	2.6	0.28	316	10	: 3 : 9	9 : 8, h, lu.-ha : 9, th.-cl, lu.-ha
23	9.0	0.92	7.8	0.80	SSW : SW	SW	3.5	0.41	370	9, th.-cl	: 1 : 9, s.-cu, ci	9, s, n : 1 : 9
24	9.7	1.00	9.7	1.00	SW : WSW	WSW : SW	2.3	0.22	332	3, th.-cl	: v.-cl, ci, th.-cl	1 : 0, slt.-ho.-fr
25	9.7	1.00	9.7	0.99	WSW	W : N	1.1	0.04	188	0, ho.-fr	: 0, ho.-fr	0 : 0
26	8.2	0.89	8.1	0.87	Calm : SW : NW	NW : W	2.2	0.14	245	0, ho.-fr	: 9, s, oc.-r	10, s, r : 10 : 0, slt.-ho.-fr
27	7.2	0.77	6.6	0.70	W : WSW : WNW	W : WNW	8.0	0.62	474	0, slt.-ho.-fr	: 0, slt.-ho.-fr : 2, w	7, w : 9, slt.-sh, w : v.-cl
28	0.7	0.08	0.1	0.01	SW	SW	7.4	0.70	474	I	: 10, s, n, th.-cl, fq.-slt.-r, p.-so.-ha	10, n, fq.-slt.-r : 10, fq.-slt.-r, w : 10, m.-r, r, w
29	3.5	0.38	3.1	0.33	SW	SW : S	5.0	0.49	396	10, m.-r	: 9 : 7, cu.-n, s	8, n, s.-cu, oc.-shs : v.-cl, oc.-shs, hl : 10
30	5.8	0.63	5.7	0.62	SW : NW	NW : WSW	2.0	0.16	269	10, oc.-r	: 1, th.-cl : 9, s.-cu	9, s.-cu, cu : 2 : 0
31	7.8	0.85	7.0	0.76	WSW : WNW	W : NW	1.3	0.13	251	10	: 9, cu	p.-cl, h : 0, h : 0, m
Means	..	..	..	..	..	..	..	0.35	340			
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 42°.5, being 3°.1 higher than
 The mean *Temperature of the Dew Point* for the month was 38°.4, being 2°.1 higher than
 The mean *Degree of Humidity* for the month was 75.1, being 5.4 less than
 The mean *Elastic Force of Vapour* for the month was 0.1232 being 0.0118 greater than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2.877, being 0.872 greater than
 The mean *Weight of a Cubic Foot of Air* for the month was 547 grains, being 2 grains less than
 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 0.378. The maximum daily amount of *Sunshine* was 10.7 hours on March 25.
 The highest reading of the *Solar Radiation Thermometer* was 121°.4 on March 24; and the lowest reading of the *Terrestrial Radiation Thermometer* was 19°.7 on March 25.
 The *Proportions of Wind* referred to the cardinal points were N. 3, E. 0, S. 13, W. 14. One day was calm.
 The *Greatest Pressure of the Wind* in the month was 8.2 lbs. on the square foot on March 14. The mean daily *Horizontal Movement of the Air* for the month was 340 miles; the greatest daily value was 556 miles on March 4; and the least daily value was 188 miles on March 25.
 Rain (0.1005 or over) fell on 17 days in the month, amounting to 1.209, as measured by gauge No. 6 partly sunk below the ground; being 0.1311 less than the average fall for the 65 years, 1841-1905.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY, 1921.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE. Of the Air.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE. Of Radiation.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Of the Dew Point. Deducted Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.	Of the Earth 4 ft. below the Surface of the Soil.				
Apr. 1	30.185	65.1	36.8	28.3	51.0	+ 5.7	47.5	43.9	7.1	16.1	0.2	77	116.8	29.7	45.6	0.000	sP : sP, mP : mP, vP	9.9	12.9
2	30.064	65.6	41.7	23.9	50.4	+ 4.7	47.4	44.2	6.2	16.4	0.2	80	114.3	31.1	45.7	0.000	wwP : wP, mP : mP, wP	7.1	12.9
3	29.843	70.2	38.7	31.5	54.0	+ 8.0	49.1	44.3	9.7	20.8	0.4	70	114.1	29.7	45.9	0.000	wwP : wP, mP : mP, wP	7.7	13.0
4	29.997	56.9	41.8	15.1	48.5	+ 2.3	42.5	36.0	12.5	20.2	5.8	62	109.8	32.4	45.9	0.000	wP : sP, ssP : ssP	9.1	13.1
5	30.096	59.4	32.8	26.6	47.3	+ 1.0	43.0	38.2	9.1	16.5	2.1	71	105.0	22.2	45.9	0.000	vP : sP : vP, wwP	6.0	13.1
6	30.171	58.0	38.6	19.4	50.6	+ 4.3	47.3	43.8	6.8	13.7	0.0	78	112.2	25.9	46.0	0.000	wwP : wP, sP : mP, wP	1.0	13.2
7	30.249	55.0	38.1	16.9	45.6	- 0.7	40.1	33.8	11.8	19.4	3.2	64	119.0	28.5	46.0	0.000	wP : sP : sP	9.7	13.3
8	30.219	56.4	35.7	20.7	45.0	- 1.1	39.2	32.4	12.6	25.0	1.7	61	113.0	26.7	46.1	0.000	wwP : sP : sP, mP	10.2	13.3
9	30.011	50.2	38.2	12.0	44.1	- 1.9	41.5	38.4	5.7	11.2	0.9	80	107.0	32.0	46.1	0.106	wP : ssP, mP : mP, sP	4.5	13.4
10	29.908	66.0	42.7	23.3	52.7	+ 6.8	48.2	43.7	9.0	17.4	2.4	72	120.7	32.8	46.1	0.000	mP : wP : mP	9.3	13.5
11	30.000	59.0	43.1	15.9	49.4	+ 3.6	46.7	43.8	5.6	10.6	2.1	82	113.1	35.1	46.3	0.000	mP : sP : wP, wwP	4.6	13.5
12	29.990	65.9	41.0	24.9	52.1	+ 6.2	46.1	40.0	12.1	22.7	1.6	64	123.2	26.9	46.5	0.000	wwP : sP, mP : mP	10.3	13.6
13	29.820	72.9	38.2	34.7	54.6	+ 8.5	47.6	40.8	13.8	25.2	3.2	60	122.3	26.3	46.6	0.000	wP : sP, mP : mP, wP	9.8	13.7
14	29.493	51.3	36.1	15.2	44.8	- 1.6	40.3	35.1	9.7	20.8	0.2	69	108.3	29.1	46.4	0.378	wwP : sP, ssP : ssP, sP	8.4	13.7
15	29.524	44.9	31.9	13.0	36.6	- 10.2	33.3	28.5	8.1	15.0	1.4	73	102.7	23.7	46.7	0.044	wP : ssP : sP, wwP	7.7	13.8
16	29.578	50.4	32.0	18.4	38.7	- 8.5	34.2	28.2	10.5	18.7	3.9	66	106.3	26.0	46.7	0.000	wP : ssP : sP	9.6	13.8
17	29.233	40.0	35.0	5.0	37.5	- 10.1	35.9	33.7	3.8	8.1	0.5	87	54.2	29.2	46.4	0.397	wP, wwP : wwP : wwP	0.0	13.9
18	29.634	53.1	37.4	15.7	43.6	- 4.4	39.1	33.8	9.8	17.2	2.1	68	113.0	27.2	46.3	0.009	mP, ssP : ssP : ssP	7.0	14.0
19	29.970	53.6	32.8	20.8	41.0	- 7.3	37.3	32.7	8.3	16.5	1.3	72	107.8	23.4	46.5	0.000	sP, mP : ssP : v	5.5	14.0
20	30.006	55.6	28.1	27.5	42.1	- 6.4	37.8	32.6	9.5	17.7	0.4	70	101.9	21.8	46.3	0.000	... : mP, ssP : sP, mP	5.4	14.1
21	29.877	60.6	37.2	23.4	48.1	- 0.6	42.2	35.7	12.4	20.4	4.3	63	121.4	29.4	46.2	0.000	mP : ssP, sP : ssP	8.0	14.2
22	29.944	59.9	43.7	16.2	50.0	+ 1.3	45.7	41.2	8.8	16.3	1.7	72	111.8	35.3	46.0	0.000	mP : sP, mP : sP, wP	3.5	14.2
23	29.860	58.5	42.5	16.0	47.9	- 0.7	44.4	40.6	7.3	14.5	1.7	76	114.5	34.0	46.0	0.152	mP : wwP, v : ssP, mP	3.1	14.3
24	29.982	55.0	41.9	13.1	45.9	- 2.7	43.0	39.7	6.2	8.4	2.1	80	102.2	35.4	46.2	0.007	wP : wwP, wP : wP	0.4	14.3
25	30.001	58.8	38.9	19.9	46.8	- 1.8	44.4	41.7	5.1	10.9	0.7	83	120.0	32.1	46.2	0.072	wwP : wwP, sP : mP	1.3	14.4
26	30.040	61.4	37.0	24.4	47.7	- 0.9	45.1	42.2	5.5	12.7	0.0	82	121.4	28.7	46.3	0.000	wP : mP, sP : wP	4.7	14.4
27	29.963	67.1	46.0	21.1	53.2	+ 4.5	50.2	47.2	6.0	14.3	0.4	80	129.0	35.1	46.6	0.003	wwP : wP, mP : mP	3.5	14.5
28	29.989	71.9	44.2	27.7	56.8	+ 8.0	50.8	45.3	11.5	22.8	1.1	66	133.3	33.2	46.9	0.000	wP : mP : mP	11.5	14.6
29	30.147	66.2	45.4	20.8	55.4	+ 6.4	48.0	41.0	14.4	24.5	5.3	58	127.8	33.0	46.9	0.000	wP : mP : mP, sP	13.6	14.6
30	30.128	71.4	43.5	27.9	54.5	+ 5.4	48.8	43.3	11.2	24.5	1.1	66	133.2	34.9	47.1	0.028	wwP : sP, mP : mP	9.4	14.7
Means	29.931	59.3	38.7	20.6	47.9	+ 0.6	43.6	38.9	9.0	17.3	1.7	71.7	113.3	29.7	46.3	1.196	..	6.7	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 29.931, being 0.183 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 72.9 on April 13; the lowest in the month was 28.1 on April 20; and the range was 44.8. The mean of all the highest daily readings in the month was 59.3, being 2.1 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 38.7, being 0.3 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 20.6, being 2.4 greater than the average for the 65 years, 1841-1905. The mean for the month was 47.9, being 0.6 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.				
	POLARIS.		δ URSAE MINORIS.		OSLER'S.			Robinson's						
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.							
					A.M.	P.M.	Greatest.		Mean of 24 Hourly Measures.	Horizontal Movement of the Air.	A.M.	P.M.		
Apr. 1	6.0	0.65	5.5	0.59	Calm : NE	E : Calm	0.8	0.05	133	0, m	: 2, th.-cl, m : 0	I	: 0	: 0
2	7.3	0.86	7.1	0.84	Calm	ENE : Calm	0.6	0.03	99	f	: f : 0, f	0	: 0	: 0
3	3.0	0.35	2.2	0.26	Calm	Calm : W : N	1.3	0.06	119	0, slt.-m	: 0, slt.-m	3	: 7, h	: p.-cl
4	8.5	1.00	8.5	1.00	N	N	1.9	0.27	272	10	: 0 : 7, th.-cl	7	: I	
5	0.5	0.05	0.5	0.05	N : WSW	WNW : NNW	3.2	0.23	289	0, ho.-fr	: 7, ci, s, th.-cl, p.-so.-ha, ph	10, s, slt.-sh	: 10, oc.-m.-r	
6	3.6	0.42	3.5	0.41	N : NNE	NE : Calm : E	2.0	0.10	179	10	: 10, s	10, n, cu	: I	
7	8.5	1.00	8.5	1.00	NE : E	ENE	5.5	0.60	425	10	: 3, cu, w	I, cu, w	: 0	
8	3.8	0.45	3.7	0.44	NE : ENE	NE	10.6	0.65	477	0	: I, cu, w	I, w	: 0, w : 7	
9	3.0	0.37	2.8	0.36	NE : E	E : NE : N	5.7	0.45	362	10, m.-r.-sh	: 10, s, oc.-r, hl, sq	9, oc.-r	: 7 : 9	
10	3.8	0.47	3.6	0.45	NE : E	E : ESE	1.5	0.12	231	I	: 9, slt.-sh : I	I		
11	2.0	0.25	1.0	0.13	NE : NNE	N : NNE	1.7	0.16	276	10	: 10, s, n, th.-cl	10, s, ci, th.-cl : 9, th.-cl	: 8	
12	8.0	1.00	8.0	1.00	NNE : NE	E : Calm	1.4	0.10	201	10	: 0	0		
13	0.5	0.06	0.1	0.01	SW : WSW	WSW	4.9	0.43	435		: 0			[oc.-p.-lu.-ha, w
14	6.0	0.75	5.4	0.68	WSW : W : NNW	NW : N	7.6	0.82	520	10, r, w	: 10, r, w : v.-cl, cu, w	p.-cl, th.-cl, w : 9, th.-cl, oc.-p.-lu.-ha, w : 10, oc.-m.-r,		
15	3.4	0.43	3.3	0.41	NNW	N : W : NW	3.0	0.30	314	8	: I : 6, fq.-sl.-sn	v.-cl, sl, w : v.-cl, w : 3, th.-cl		
16	2.6	0.34	2.2	0.29	NNW : N	NW : W : S	3.1	0.26	292	I, slt.-ho.-fr	: I, cu	7	: 7 : p.-cl, h, lu.-ha	
17	1.3	0.17	1.3	0.17	S : SSE	E : NE	3.8	0.25	282	8, r	: 10, n, r, sn, sl	10, n, r, sl	: 10, r, oc.-sl	
18	7.5	1.00	6.9	0.92	NNE : NE	NNE : NE	3.8	0.30	292	v.-cl, oc.-slt.-r	: 5, s, cu, slt.-sh	9, s, th.-cl, slt.-sh	: 9, th.-cl, lu.-ha	
19	7.5	1.00	7.5	1.00	Calm : N	N : NE : Calm	3.0	0.10	154	8, th.-cl, ho.-fr	: 9, ci.-s, th.-cl, p.-so.-ha	8, cu	: p.-cl, slt.-t.-sm : 0, m, h, ho.-fr	
20	0.9	0.12	0.3	0.04	SW : W	W : SW	1.5	0.06	190	0, ho.-fr	: 0, ho.-fr : 9, th.-cl, h	10		
21	0.4	0.05	0.2	0.03	SW : W	W : NW	1.3	0.06	206	9	: th.-cl, so.-ha : p.-cl, h	8, cu	: 9	
22	5.3	0.71	4.5	0.60	WSW	SW : SSW	1.2	0.09	208	10	: 9, s.-cu, ci.-cu	9	: 3 : 3, th.-cl, lu.-ha	
23	5.9	0.85	5.2	0.81	SSW	SW : N	4.8	0.30	312	8	: 10, oc.-r : 10, r	v.-cl, cu.-n, sq, slt.-t.-sm	: v.-cl, t	
24	0.0	0.00	0.0	0.00	N	N	5.2	0.56	431	v.-cl, w	: 10, m.-r, w : 10, s, oc.-slt.-r	10,	: 10, oc.-m.-r	
25	4.6	0.66	4.6	0.66	N : Calm	Calm	2.0	0.06	135	10, m.-r.-sh, r	: 10, s, m.-r, m	10	: 10 : 0	
26	1.1	0.15	1.0	0.15	Calm : NE	NE : E	0.9	0.04	134	10, f	: 10, f : 6, cu, h	8, cu, h	: I : 9	
27	5.9	0.85	5.8	0.83	NE	E	1.8	0.06	179	10	: 10, s	8, sh	: I : 0	
28	7.0	1.00	7.0	1.00	Calm : E	ESE : ENE	2.7	0.16	224	5, sh	: 5 : 3, ci, th.-cl	p.-cl, ci.-cu, cl : I	: 0	
29	7.0	1.00	7.0	1.00	ENE : E	E : NE	4.4	0.39	348	0	: 0 : 2, ci.-cu	I, cu, s, w : 0	: 0	
30	2.5	0.38	1.9	0.29	NNE	NNE : N	3.8	0.35	305	0	: v.-cl	6, shs, hl : 0	: 0	
Means	..	..	..	..	..	..	..	0.25	267					
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°.6, being 0°.3 lower than
 The mean *Temperature of the Dew Point* for the month was 38°.9, being 1°.2 lower than
 The mean *Degree of Humidity* for the month was 71.7, being 4.1 less than
 The mean *Elastic Force of Vapour* for the month was 0^m.237, being 0^m.011 less than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2^{gr}.7, being 0^{gr}.2 less than
 The mean *Weight of a Cubic Foot of Air* for the month was 54.6 grains, being 3 grains greater than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 5.2.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.487. The maximum daily amount of *Sunshine* was 13.6 hours on April 29.
 The highest reading of the *Solar Radiation Thermometer* was 133°.3 on April 28; and the lowest reading of the *Terrestrial Radiation Thermometer* was 21°.8 on April 20.
 The *Proportions of Wind* referred to the cardinal points were N. 10, E. 8, S. 2, W. 5. Five days were calm.
 The *Greatest Pressure of the Wind* in the month was 10.6 lbs. on the square foot on April 8. The mean daily *Horizontal Movement of the Air* for the month was 267 miles; the greatest daily value was 520 miles on April 14; and the least daily value was 99 miles on April 2.
Rain (0^m.005 or over) fell on 9 days in the month, amounting to 1^m.196, as measured by gauge No. 6 partly sunk below the ground; being 0^m.370 less than the average fall for the 65 years, 1841-1905.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY, 1921.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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. Mean of 24 Hourly Values.	Of the Dew Point. Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.							Highest in Sun's Rays.	Lowest on the Grass.					
May 1	30.069	63.5	43.4	20.1	50.7	+ 1.4	46.6	42.3	8.4	18.8	0.9	74	119.8	32.0	47.2	0.000	wP : mP : mP	6.6	14.7
2	29.799	70.4	36.7	33.7	53.4	+ 3.9	47.0	40.6	12.8	26.1	0.2	62	128.9	25.3	47.5	0.030	wP : sP : ssP, wwP	10.3	14.8
3	29.680	51.0	34.8	16.2	44.4	- 5.4	40.8	36.6	7.8	15.5	0.0	74	101.3	26.5	47.5	0.010	wwP : ssP : ssP, mP	1.4	14.9
4	29.464	48.8	34.8	14.0	41.6	- 8.4	39.6	37.1	4.5	7.9	1.8	85	107.1	26.5	47.7	0.290	wP, wwN : wP, sP	0.4	14.9
5	29.676	54.4	33.6	20.8	44.1	- 6.2	39.8	34.8	9.3	16.7	1.3	69	119.3	24.8	47.8	0.004	mP : ssP, mP : sP, mP	5.6	15.0
6	29.619	57.2	39.4	17.8	50.3	- 0.2	47.8	45.2	5.1	10.9	1.2	83	83.2	30.6	47.8	0.014	wP, mP : mP, sP	0.2	15.0
7	29.405	66.0	50.7	15.3	55.6	+ 4.9	53.2	50.9	4.7	10.4	0.8	85	126.7	46.2	47.7	0.066	wP, sP : mP : mP, sP	2.7	15.1
8	29.357	61.5	45.4	16.1	52.7	+ 1.7	49.7	46.7	6.0	12.6	0.6	81	119.6	36.7	47.8	0.147	wP : wP, mP : mP	5.6	15.2
9	29.689	63.0	42.8	20.2	52.0	+ 0.8	47.7	43.3	8.7	17.7	1.1	72	128.0	34.8	48.0	0.131	mP : v, mP : sP	12.2	15.2
10	29.855	67.1	42.4	24.7	53.4	+ 1.9	48.1	42.8	10.6	20.7	1.7	68	137.0	34.5	48.1	0.003	mP : sP, mP : sP	10.4	15.3
11	29.817	69.0	41.1	27.9	55.3	+ 3.5	50.8	46.6	8.7	19.5	1.1	72	124.9	30.1	48.2	0.005	wP : mP : wP, mP	3.7	15.3
12	29.845	68.6	50.7	17.9	58.6	+ 6.5	54.6	51.0	7.6	19.9	0.2	76	112.6	41.4	48.4	0.020	mP, wP : wP, mP : mP	0.9	15.4
13	29.924	74.5	46.8	27.7	58.3	+ 5.9	54.8	51.6	6.7	18.0	0.4	78	127.0	36.9	48.8	0.000	mP, wP : sP, mP : mP, wP	4.2	15.4
14	29.935	75.0	47.7	27.3	60.2	+ 7.6	54.6	49.7	10.5	20.3	0.8	68	132.7	39.0	48.9	0.000	wP, mP	10.5	15.5
15	29.980	60.0	44.9	15.1	54.2	+ 1.4	51.5	48.9	5.3	11.2	1.2	82	77.0	35.4	49.0	0.073	wP, mP	0.0	15.5
16	30.005	66.6	40.4	26.2	52.9	- 0.1	46.7	40.5	12.4	21.5	0.6	64	133.5	30.1	49.2	0.000	wP, mP : wP : wP	14.6	15.6
17	29.841	67.9	38.1	29.8	53.7	+ 0.6	47.7	41.8	11.9	22.8	0.9	64	127.8	27.9	49.4	0.000	wP, sP : mP, sP	10.0	15.6
18	29.907	66.9	43.3	23.6	55.2	+ 1.9	48.3	41.7	13.5	21.5	5.5	61	134.9	29.4	49.8	0.000	mP, sP : sP, wP	9.4	15.7
19	29.865	72.0	44.3	27.7	57.7	+ 4.2	50.1	43.2	14.5	23.3	4.1	59	142.0	33.0	49.7	0.000	wP : mP, wP : mP, wP	13.0	15.7
20	29.924	71.4	48.4	23.0	58.7	+ 4.9	52.0	46.0	12.7	22.6	3.1	63	137.2	34.4	49.8	0.003	wP, sP : sP, mP	9.6	15.8
21	30.137	69.0	42.3	26.7	56.1	+ 1.9	49.4	43.1	13.0	20.8	0.9	62	134.6	27.6	50.0	0.000	wP, sP : mP : wP	14.5	15.8
22	30.070	70.9	43.7	27.2	57.2	+ 2.6	49.6	42.7	14.5	25.5	0.2	59	137.4	27.9	50.1	0.000	wwP, wP : wP	14.7	15.9
23	30.020	73.4	44.8	28.6	58.8	+ 3.9	51.7	45.4	13.4	23.2	2.2	61	139.3	35.4	50.2	0.000	wwP, sP : mP	14.3	15.9
24	29.977	77.0	47.5	29.5	60.6	+ 5.3	54.4	49.0	11.6	21.7	1.3	66	135.0	41.4	50.4	0.000	wwP, mP : mP, wP	10.9	15.9
25	29.797	76.5	50.6	25.9	62.5	+ 7.0	56.8	51.9	10.6	17.1	4.5	69	134.7	39.6	50.6	0.010	wP, wwP : mP : wP	4.2	16.0
26	29.607	75.8	52.4	23.4	63.1	+ 7.3	57.6	53.0	10.1	20.9	1.5	70	132.5	50.1	50.9	0.027	vP	2.6	16.0
27	29.606	67.0	47.1	19.9	53.8	- 2.2	48.4	43.1	10.7	20.3	1.3	67	131.8	43.4	50.9	0.237	... : sP	5.7	16.0
28	29.583	63.5	42.9	20.6	51.1	- 5.1	45.8	40.3	10.8	20.9	4.2	67	143.9	29.9	51.1	0.040	mP, sP : sP, v : wP, mP	10.8	16.1
29	29.650	65.4	39.6	25.8	51.3	- 5.1	45.4	39.3	12.0	20.4	3.4	64	143.0	26.5	51.1	0.080	wP : mP, wP : wP, vN	11.4	16.1
30	29.527	67.0	47.8	19.2	55.9	- 0.8	53.1	50.5	5.4	17.0	0.0	83	125.4	46.6	51.2	0.064	wP, wwP : vP	4.1	16.1
31	29.728	70.6	51.9	18.7	57.8	+ 0.7	51.8	46.4	11.4	23.3	3.9	66	145.1	43.8	51.3	0.000	wwP, sP : mP : mP	9.3	16.2
Means	29.786	66.8	43.9	22.9	54.6	+ 1.5	49.5	44.7	9.8	19.0	1.6	70.1	126.6	34.4	49.2	1.254	..	7.5	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 29^m.786, being 0^m.008 *lower* than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 77° on May 24; the lowest in the month was 33° on May 5; and the range was 43° 4.
 The mean of all the highest daily readings in the month was 66° 8, being 2° 9 *higher* than the average for the 65 years, 1841-1905.
 The mean of all the lowest daily readings in the month was 43° 9, being 0° 2 *higher* than the average for the 65 years, 1841-1905.
 The mean of the daily ranges was 22° 9, being 2° 7 *greater* than the average for the 65 years, 1841-1905.
 The mean for the month was 54° 6, being 1° 6 *higher* than the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	
		Of the Air.					Of Evapo-ration.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			Daily Duration of Sunshine.	Sun above Horizon.
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.					
June 1	30.055	70.8	50.0	20.8	58.9	+ 1.5	52.8	47.4	11.5	22.3	1.2	66	139.0	43.4	51.3	0.000	mP, sP : sP, mP	7.9	16.2
2	30.185	72.6	46.7	25.9	60.4	+ 2.6	52.4	45.4	15.0	24.8	3.6	58	137.5	37.4	51.9	0.000	.. : sP, mP : mP	14.0	16.3
3	30.110	68.0	49.9	18.1	55.7	- 2.4	52.4	49.3	6.4	15.0	0.2	80	108.0	50.9	51.8	0.187	wP, sP : wP, wwP	2.4	16.3
4	29.937	63.0	52.2	10.8	56.5	- 1.8	54.3	52.3	4.2	7.7	2.8	86	91.7	50.2	51.7	0.000	wP : mP : wwP	0.1	16.3
5	29.906	67.1	49.1	18.0	56.2	- 2.2	52.7	49.4	6.8	14.8	0.2	78	124.8	44.8	52.0	0.000	wwP, wP : mP : mP, wP	0.6	16.4
6	29.934	71.9	47.2	24.7	58.6	+ 0.3	51.6	45.4	13.2	29.0	1.3	62	140.3	43.9	52.0	0.000	wP : sP, mP : mP, wwP	9.9	16.4
7	29.864	71.4	51.1	20.3	61.2	+ 3.0	53.3	46.4	14.8	26.9	1.8	58	145.6	38.6	52.2	0.000	wwP : mP : mP	14.2	16.4
8	29.688	78.2	46.6	31.6	61.4	+ 3.3	54.8	49.1	12.3	27.1	0.2	64	130.4	34.0	52.4	0.007	wP : mP : mP, wP	6.7	16.4
9	29.789	70.3	51.3	19.0	58.7	+ 0.7	52.5	47.0	11.7	20.2	3.7	66	120.3	43.8	52.5	0.000	wP : mP : mP, wP	3.6	16.4
10	29.794	71.0	50.6	20.4	58.7	+ 0.6	51.1	44.3	14.4	22.7	5.7	59	127.0	37.2	52.8	0.000	wwP, mP : mP	10.3	16.4
11	29.900	71.8	47.7	24.1	57.9	- 0.3	50.5	43.8	14.1	25.6	2.7	59	137.0	36.6	52.9	0.000	wwP : mP, sP : mP	12.0	16.5
12	30.069	72.9	45.9	27.0	58.3	- 0.1	50.2	42.9	15.4	25.4	6.7	57	140.7	37.2	52.9	0.000	mP : wP : vP	6.4	16.5
13	29.985	67.3	52.6	14.7	60.4	+ 1.9	54.2	48.8	11.6	19.1	4.0	65	124.3	43.2	53.0	0.000	wwP : wP, sP : sP, mP	2.2	16.5
14	30.130	70.7	47.7	23.0	58.7	0.0	53.7	49.3	9.4	17.9	1.9	71	121.6	35.8	53.1	0.000	wwP, sP : sP, wwP	0.7	16.5
15	30.155	79.8	49.4	30.4	63.9	+ 5.1	57.5	52.2	11.7	20.3	0.8	66	142.6	38.0	53.4	0.000	wwP : sP : wP	12.3	16.5
16	30.235	74.4	48.7	25.7	61.5	+ 2.6	55.9	51.1	10.4	20.9	0.8	70	137.0	37.7	53.6	0.000	wwP, wP : mP : wP	8.3	16.5
17	30.119	85.6	46.8	38.8	67.2	+ 8.2	57.4	49.6	17.6	28.6	1.7	53	140.0	36.4	53.9	0.000	wwP : sP, mP : sP, mP	13.9	16.5
18	30.053	67.9	45.6	22.3	57.9	- 1.3	51.0	44.8	13.1	24.0	3.9	61	134.4	35.2	53.9	0.000	wP, wwP : mP : wP, mP	3.8	16.6
19	29.920	63.2	37.3	25.9	52.4	- 7.1	46.5	40.5	11.9	21.5	1.2	65	102.1	21.6	53.9	0.000	wP	2.8	16.6
20	29.864	66.8	50.8	16.0	57.9	- 2.0	54.1	50.7	7.2	15.2	0.6	77	121.7	50.5	54.0	0.018	..	1.0	16.6
21	29.961	66.0	51.3	14.7	58.2	- 2.1	51.9	46.3	11.9	22.6	3.2	65	129.8	52.4	54.0	0.006	..	5.8	16.6
22	30.017	66.9	48.6	18.3	58.8	- 1.8	52.1	46.1	12.7	19.0	4.5	63	108.8	37.0	54.0	0.000	..	1.7	16.6
23	30.029	80.0	46.2	33.8	63.7	+ 2.8	55.6	48.9	14.8	25.7	1.9	59	134.4	35.6	54.2	0.000	..	11.7	16.6
24	30.079	82.6	55.9	26.7	69.0	+ 7.8	60.4	53.7	15.3	27.4	3.8	58	133.5	44.7	54.7	0.000	..	13.2	16.6
25	29.914	85.9	52.2	33.7	68.8	+ 7.4	60.4	53.9	14.9	31.0	0.0	58	146.1	40.0	54.8	0.000	..	13.2	16.6
26	29.795	74.6	55.5	19.1	65.3	+ 3.8	60.9	57.3	8.0	15.9	1.1	76	130.0	51.0	54.7	0.227	..	5.4	16.5
27	30.013	63.3	49.3	14.0	56.6	- 5.0	53.0	49.7	6.9	12.3	2.2	77	105.0	41.4	54.9	0.000	..	1.2	16.5
28	30.118	68.0	45.1	22.9	57.3	- 4.3	50.9	45.1	12.2	20.3	1.3	63	136.4	34.0	55.1	0.000	..	15.1	16.5
29	30.016	72.6	44.4	28.2	58.7	- 2.9	52.5	47.0	11.7	21.2	0.2	66	141.6	30.9	55.1	0.000	..	14.6	16.5
30	29.998	69.1	47.6	21.5	56.4	- 5.1	50.1	44.3	12.1	21.2	3.5	64	144.9	34.5	55.1	0.000	..	6.7	16.5
Means	29.988	71.8	48.8	23.0	59.8	+ 0.4	53.6	48.1	11.8	21.5	2.2	65.7	129.2	39.9	53.4	Sum 0.445	..	7.4	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 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 29.988, being 0.173 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 85.9 on June 25; the lowest in the month was 37.3 on June 19; and the range was 48.6. The mean of all the highest daily readings in the month was 71.8, being 1.1 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 48.8, being 1.1 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 23.0, being 2.2 greater than the average for the 65 years, 1841-1905. The mean for the month was 59.8, being 0.4 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.			
	POLARIS.		MINORIS. δ URSAE.		OSLER'S.				Robinson's Horizontal Movement of the Air.						
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.								
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.		A.M.	P.M.				
June 1	5.0	1.00	5.0	1.00	SW : Calm	N : NE : E	1.4	0.04	146	10, oc.-m.-r : 10	8, s.-cu	7, s.-cu	p.-cl	1, cu	
2	3.5	0.70	3.4	0.67	NNE : NE	NE : NNE	3.7	0.33	344	o		6, cu	1	o	
3	0.0	0.00	0.0	0.00	NNE : NE	NNE	4.5	0.34	356	1	10, th.-cl : 10, s, oc.-slt.-r	10, r	10, fq.-r	10, oc.-r	
4	0.0	0.00	0.0	0.00	NNE : N	N	1.9	0.22	303		10	10, oc.-m.-r : 10, oc.-m.-r	10	10	
5	2.6	0.52	1.6	0.32	N : NNE	NNE	3.2	0.37	389	10	10, m.-r.-sh : 10, s, p.-so.-ha	10, cu	10, th.-cl		
6	5.0	1.00	5.0	1.00	NNE : NE	ENE : NE	6.0	0.60	454	10	10 : 8, th.-cl, so.-ha, w	th.-cl, cl.-s, so.-ha, w	1, th.-cl, w	1, ci, s	
7	5.0	1.00	5.0	1.00	NE : ENE	E : NE	3.8	0.32	315	o	1 : p.-cl, cl.-s, th.-cl, so.-ha	8, th.-cl, cl.-s, so.-ha	1	o	
8	3.8	0.76	3.7	0.73	Calm : N	NW : NNW	2.5	0.15	186	o	1, so.-ha : 9, th.-cl, h	9	10	6, shs	
9	3.3	0.65	3.1	0.63	NW : NNW	NW : WSW	3.2	0.30	323	1	9 : 10, s, so.-ha	10, s	2, w		
10	4.8	0.96	4.3	0.86	WSW : NW	NNW : S	6.0	0.53	383	9, th.-cl, w	9, w : 8, cu, cu.-s, w	7, cu	p.-cl, p.-so.-ha	v.-cl, cu, s, th.-cl	
11	5.0	1.00	5.0	1.00	WSW : NW	NW : NNW	3.7	0.40	364	1	v.-cl, th.-cl : 8, cu, cu.-n	6, cu	p.-cl	o	
12	1.0	0.20	0.8	0.15	NNW : W	W : WSW	3.6	0.26	319	o	th.-cl : 9, cu, ci.-cu	9, s, n, oc.-r	9	9, s, n	
13	4.1	0.82	3.7	0.75	WSW : W : NW	NNW	2.8	0.40	374	10	10, s	10, s.-cu	10, th.-cl, so.-ha	9, n	
14	5.0	1.00	5.0	1.00	N : Calm	NNW : Calm	1.0	0.04	98	1	9, th.-cl, h : 9, cu, s.-cu, h	9, s.-cu, h	9	o	
15	4.6	0.93	4.2	0.83	Calm : NNE	NNE : E	1.2	0.07	125	o, slt.-m	o, slt.-m : v.-cl, cu	6, cu	1	1, s	
16	4.3	0.86	3.2	0.64	Calm : E	E : Calm	1.1	0.06	95	5	10 : 9, s.-cu	p.-cl, cu	o	1, s	
17	4.0	0.80	3.7	0.75	Calm	Calm : W : N	2.6	0.08	104	9	1 : 1, ci	1, cu, ci	p.-cl	1	
18	4.5	0.90	3.8	0.77	N : NE	NE : E	2.2	0.28	291	1	9 : 9, s, so.-ha	8, cl.-cu, cu.-n, so.-ha	7	10, s, n, th.-cl	
19	0.0	0.00	0.0	0.00	Calm : W	NW : WNW	3.0	0.20	234	3	10, s, th.-cl, so.-ha	10, s, slt.-r	10	10, fq.-m.-r	
20	0.1	0.02	0.0	0.00	W : NNW	NW	3.1	0.40	338	10, fq.-slt.-r	10, fq.-slt.-r : 10, s, n, oc.-slt.-r	9, s.-cu, cu.-n	10	10, s	
21	0.0	0.00	0.0	0.00	NW : N	NNW : WNW	3.0	0.27	267	10, oc.-m.-r	10, oc.-m.-r : 10, s, oc.-m.-r	8, cu	10		
22	4.8	0.97	4.0	0.80	W : NW	NNW : Calm	2.6	0.25	252	10	10, n	10, s	6	1, s	
23	5.0	1.00	5.0	1.00	Calm	NW : Calm	1.0	0.04	80	1	9, th.-cl, h : 6, cu, h		1		
24	5.0	1.00	5.0	1.00	Calm : N	Calm : E	1.5	0.03	84	o	o : 1, h	1, h, so.-ha	1, s		
25	0.0	0.00	0.0	0.00	Calm : E	E : Calm	2.7	0.15	148	o	1, ci, cu	1, ci	8, th.-cl	10, n, s, t.-sm	
26	0.0	0.00	0.0	0.00	Calm : SW	SSW : N	2.1	0.20	241	10, t.-sm, r	p.-cl : 9, s, cu, n	9, cl.-cu, s.-cu	10, sh	10, s, m.-r.-sh	
27	5.0	1.00	5.0	1.00	N : NNE	NE : E	1.7	0.22	256	10, m.-r.-sh	10 : 10, s, n	10, s.-cu	8	10, ci, th.-cl	
28	5.0	1.00	5.0	1.00	NE : ENE	E : Calm	1.9	0.21	218	8, th.-cl	1 : 1, ci.-cu	1, ci.-cu	1, ci		
29	2.3	0.45	2.1	0.41	Calm : NNE	NNE : E	2.6	0.23	233	o	o, m : 2, ci.-cu	6, s.-cu, cl.-cu	6	9, s, n	
30	4.2	0.84	3.8	0.77	NNE : N	NNE : E	1.3	0.13	189	10	10 : 10, s, s.-cu.-cl	7, ci, ci.-cu, p.-so.-ha	6, th.-cl	1, s	
Means	..	..	..	..	..	..	..	0.24	250					
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 1°.3 lower than the mean *Temperature of the Dew Point* for the month was 48°.1, being 2°.8 lower than the mean *Degree of Humidity* for the month was 65.7, being 7.9 less than the mean *Elastic Force of Vapour* for the month was 0.336, being 0.037 less than the mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3.8, being 0.4 less than the mean *Weight of a Cubic Foot of Air* for the month was 534 grains, being 3 grains greater than 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 0.449. The maximum daily amount of *Sunshine* was 15.1 hours on June 28. The highest reading of the *Solar Radiation Thermometer* was 146°.1 on June 25; and the lowest reading of the *Terrestrial Radiation Thermometer* was 21°.6 on June 19. The *Proportions of Wind* referred to the cardinal points were N. 11, E. 6, S. 1, W. 5. Seven days were calm. The *Greatest Pressure of the Wind* in the month was 6.0 lbs. on the square foot on June 6 and 10. The mean daily *Horizontal Movement of the Air* for the month was 250 miles; the greatest daily value was 454 miles on June 6; and the least daily value was 80 miles on June 23. *Rain* (0.005 or over) fell on 5 days in the month, amounting to 0.445, as measured by gauge No. 6 partly sunk below the ground; being 1.593 less than the average fall for the 65 years, 1841-1905.

} the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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 the Dew Point.	Of the Dew Point.	Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.								
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.			Mean of 24 Hourly Values.	Deducted Mean Daily Value.			Mean.	Greatest.	Least.					Highest in Sun's Rays.	Lowest on the Grass.
July 1	30.016	73.0	44.5	28.5	59.3	- 2.2	53.4	48.2	11.1	19.9	0.0	67	129.5	30.6	55.2	0.000	..	9.6	16.5
2	30.039	77.5	46.9	30.6	61.6	- 0.0	54.9	49.1	12.5	24.6	0.6	64	140.3	31.8	55.4	0.000	..	11.6	16.5
3	30.023	78.5	51.2	27.3	62.3	+ 0.5	55.8	50.2	12.1	24.4	2.0	65	138.8	40.8	55.7	0.000	..	8.7	16.5
4	30.058	64.2	50.7	13.5	55.4	- 6.7	50.7	46.3	9.1	17.6	5.0	72	105.8	43.0	55.5	0.000	..	1.2	16.4
5	30.106	74.8	49.3	25.5	60.2	- 2.1	52.4	45.6	14.6	27.8	3.6	59	134.0	35.8	55.8	0.000	..	10.5	16.4
6	30.060	85.0	48.7	36.3	66.4	+ 4.0	56.4	48.3	18.1	32.7	2.5	52	143.0	35.0	56.0	0.001	..	9.7	16.4
7	30.020	77.8	55.8	22.0	66.1	+ 3.7	59.7	54.5	11.6	20.4	3.2	66	135.6	43.3	55.9	0.004	..	4.2	16.4
8	30.053	81.8	55.8	26.0	68.1	+ 5.7	60.7	54.9	13.2	24.9	2.5	62	147.9	43.3	56.0	0.000	..	9.4	16.3
9	30.099	83.6	52.7	30.9	68.4	+ 6.0	59.4	52.3	16.1	29.2	1.0	56	146.3	40.0	56.3	0.000	..	14.9	16.3
10	30.037	93.0	51.7	41.3	73.0	+ 10.5	60.2	50.7	22.3	40.8	0.0	46	151.4	37.4	56.6	0.000	..	14.8	16.3
11	29.921	94.0	58.2	35.8	77.1	+ 14.4	61.8	51.1	26.0	46.2	8.1	40	149.4	44.0	56.9	0.000	..	14.8	16.3
12	29.898	87.0	58.7	28.3	72.2	+ 9.3	62.0	54.4	17.8	34.4	5.1	53	142.8	44.8	57.0	0.000	..	14.1	16.2
13	29.862	80.0	55.2	24.8	67.1	+ 4.0	59.3	53.1	14.0	26.7	2.9	61	138.6	43.1	57.3	0.000	..	13.6	16.2
14	29.878	75.7	57.9	17.8	63.9	+ 0.6	58.6	54.2	9.7	20.7	1.3	71	139.1	51.6	57.5	0.000	..	7.1	16.2
15	29.838	77.7	57.6	20.1	65.8	+ 2.4	59.1	53.6	12.2	28.6	0.0	65	136.0	51.0	57.8	0.000	..	7.0	16.1
16	29.764	86.9	56.3	30.6	70.9	+ 7.5	63.0	57.0	13.9	28.1	0.6	61	153.5	47.1	57.9	0.000	..	11.2	16.1
17	29.820	87.6	57.1	30.5	70.2	+ 6.8	63.8	58.9	11.3	27.2	0.0	67	157.4	46.6	58.0	0.078	..	4.3	16.1
18	29.833	88.3	58.7	29.6	72.9	+ 9.6	62.5	54.8	18.1	30.7	0.2	53	145.6	48.5	58.1	0.000	..	12.5	16.0
19	29.908	91.0	60.9	30.1	75.1	+ 11.9	62.1	52.7	22.4	38.2	7.1	46	141.8	52.6	58.3	0.000	..	12.5	16.0
20	29.976	90.0	60.2	29.8	73.9	+ 10.7	63.7	56.3	17.6	28.0	5.8	54	152.1	51.1	58.7	0.000	..	9.4	15.9
21	30.104	79.4	54.3	25.1	65.4	+ 2.2	55.0	46.5	18.9	29.1	8.9	50	136.2	42.1	58.8	0.000	..	10.6	15.9
22	29.862	81.8	55.1	26.7	67.7	+ 4.6	59.7	53.4	14.3	24.5	5.0	60	141.2	41.2	58.9	0.000	..	6.8	15.8
23	29.632	83.5	65.5	18.0	71.6	+ 8.6	65.6	61.1	10.5	20.0	3.6	69	146.8	60.7	59.0	0.000	..	6.9	15.8
24	29.733	82.0	61.3	20.7	70.0	+ 7.1	59.8	51.9	18.1	33.3	5.0	52	138.3	54.7	59.0	0.000	..	11.0	15.8
25	29.739	82.0	58.8	23.2	70.2	+ 7.5	63.4	58.2	12.0	21.3	3.1	66	137.0	52.0	59.4	0.000	.. : wP, wwP	7.4	15.7
26	29.784	79.0	56.8	22.2	67.8	+ 5.3	60.4	54.6	13.2	25.5	6.1	62	133.0	44.2	59.2	0.007	wwN, wP : v	4.7	15.7
27	29.835	77.4	54.2	23.2	65.8	+ 3.4	57.4	50.6	15.2	23.9	2.9	57	136.6	41.1	59.8	0.000	mP : wP	3.2	15.6
28	29.474	84.8	56.1	28.7	70.3	+ 8.0	61.9	55.4	14.9	28.1	0.6	60	143.6	44.0	59.8	0.000	wP : mP	11.0	15.6
29	29.419	74.9	57.7	17.2	63.5	+ 1.2	58.5	54.3	9.2	15.7	0.8	73	130.9	56.1	59.8	0.060	wP : vP : sP	1.1	15.5
30	29.873	77.0	51.2	25.8	64.5	+ 2.2	56.4	49.7	14.8	25.1	2.2	59	140.0	37.0	59.9	0.000	wP, mP : mP	12.7	15.5
31	29.835	78.9	58.2	20.7	67.8	+ 5.6	60.7	55.1	12.7	20.9	4.7	64	138.6	52.1	59.9	0.000	wwP, wP : wP	9.1	15.4
Means	29.887	81.6	55.4	26.2	67.6	+ 4.9	59.3	52.8	14.8	27.0	3.0	59.7	140.4	44.7	57.7	0.150	..	9.2	16.1
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 29.887, being 0.088 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 94.0 on July 11; the lowest in the month was 44.5 on July 1; and the range was 49.5. The mean of all the highest daily readings in the month was 81.6, being 7.4 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 55.4, being 2.1 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 26.2, being 5.3 greater than the average for the 65 years, 1841-1905. The mean for the month was 67.6, being 4.9 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.			
	POLARIS.		δ URSAE MINORIS.		OSLER'S.			Robin-son's	A.M.	P.M.			
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.						
					A.M.	P.M.		Greatest.	Mean of 24 Hourly Measures.	Horizontal Move-ment of the Air.			
July 1	3.9	0.78	3.6	0.71	Calm	SSW : NE	2.0	0.09	158	3, th.-cl	: 9, th.-cl, cu, h	9, cu, s.-cu, h : 6	: 7, s
2	4.7	0.94	4.7	0.94	Calm : N	N : ESE	1.2	0.05	133	0	: 1, cu	6, s.-cu	: 0
3	4.6	0.92	4.3	0.86	Calm : ENE	NE : ESE : Calm	1.1	0.05	137	7	: 3 : 6, cu, s.-cu	7, s.-cu	: 8
4	2.3	0.47	1.8	0.37	N : NNE	N : NNE	1.9	0.18	245	1, th.-cl	: 9, oc.-m.-r : 10, s, n	10, s, n	: 8 : 6, s, n
5	5.0	1.00	5.0	1.00	NNE	N : Calm	1.0	0.06	150	10	: 10 : 1	1	: 1, s
6	0.1	0.03	0.1	0.02	SW	SW : N	1.6	0.10	237	0	: 1 : 7, th. cl, ci.-cu	9, ci.-cu, cu, s.-cu, h, so.-ha :	9, s, n, slt.-sh
7	2.9	0.58	2.4	0.49	N : NE : Calm	NE : Calm	1.7	0.05	162	10, slt.-r	: 10, s, n	9, cu, n	: 1, s.-cu, ci
8	5.0	1.00	5.0	1.00	Calm	Calm : SE : S	0.7	0.00	94	10	: 6, cu, h	6, cu, h	: 0 : 0
9	5.0	1.00	5.0	1.00	Calm : E : NE	Calm : E	1.3	0.05	130	0	: 0	1	: 1
10	5.0	1.00	5.0	1.00	Calm	Calm : SW	1.1	0.02	103	0	: 0, m : 0	1	: 0
11	5.0	1.00	5.0	1.00	SW : WSW	W : NW : N	1.4	0.07	202	0	: 0 : 0, slt.-h	0, slt.-h	: 0, h
12	5.0	1.00	5.0	1.00	N : NNE : Calm	N : ESE	1.0	0.03	141	0, h	: 0, h : 0	1	: 0 : 0
13	4.3	0.85	3.9	0.77	Calm : ESE	E : ESE	3.0	0.25	238	0	: 1, ci	1, ci	: 1, th.-cl : 3, th.-cl
14	3.1	0.62	2.8	0.55	E : ESE	E	3.2	0.28	258	9, th.-cl	: 9, th.-cl	10, s, fq.-slt.-r	: 9, s, th.-cl
15	3.2	0.66	2.5	0.50	E	E	3.5	0.29	272	1	: 4, th.-cl : th.-cl, ci, h	10, s, n	: 10, s, n, th.-cl
16	4.5	0.91	4.4	0.88	Calm : WSW	SW	1.7	0.06	171	9	: 9, slt.-m : 7, cu, s.-cu	7	: v.-cl, th.-cl : 6, th.-cl, lu.-ha
17	4.2	0.84	3.9	0.77	Calm	Calm	1.4	0.00	68	5, th.-cl	: 9, th.-cl : 9, th.-cl, oc.-slt.-r	10, s.-cu, sh, sq	: 9, sh : 3, th.-cl
18	4.2	0.84	3.8	0.76	Calm : NE : N	N : Calm	1.6	0.10	159	3	: p.-cl, ci, cu, th.-cl	p.-cl, cu	: p.-cl : 3
19	5.0	1.00	5.0	1.00	N	N : Calm	1.1	0.05	148	3, m	: 3 : 4, cu	1, ci.-cu	: 6 : 1, cu
20	4.7	0.93	4.3	0.86	Calm : WNW	NNW	4.0	0.23	226	1	: 9 : 5, s.-cu, ci.-cu	7, s.-cu	: 7
21	5.0	1.00	5.0	1.00	NNW : N	NNW : N	1.1	0.12	201	1	: 1, cu, ci.-cu	8, ci.-s, p.-so.-ha :	9, th.-cl : 1, cu, ci
22	2.6	0.52	2.1	0.42	SW : WSW	WSW : SW	3.8	0.46	384	3, th.-cl	: 10 : 8, ci	9, ci.-s, ci.-cu, n	: 9, cu.-n, oc.-m.-r
23	1.5	0.27	1.4	0.25	SW : WSW	SW	5.2	0.95	537	9, m.-r.-sh, w	: 9, s.-cu, cu.-n, w	9, cu, s.-cu, w	: 9, oc.-m.-r, w
24	3.2	0.58	1.7	0.30	SW : W : N	Calm : SW	3.8	0.22	231	9, oc.-slt.-r : 9	: 3, cu	1, ci	: 7, th.-cl : 10
25	4.0	0.72	3.6	0.65	SSW : SW	SW	4.9	0.53	368	9	: 9, s.-cu	9	: 3, s
26	4.6	0.83	4.1	0.75	SW : W	SW : WSW : Calm	3.5	0.30	291	9	: 9 : 9, s.-cu, fq.-slt.-r	1, h	: 1, sh
27	1.0	0.18	0.9	0.16	Calm	E	1.3	0.06	122	9, th.-cl	: 9, s, th.-cl	9, s.-cu	: 10, s
28	1.6	0.28	1.0	0.18	Calm	E : SW	7.8	0.40	237	10, th.-cl	: 0	1, cu	: v.-cl : 7, w
29	1.5	0.27	1.3	0.25	SW : S : W	W : WNW	7.0	0.64	423	8, m.-r.-shs, w	: 10, fq.-r : 10, s.-cu	10, s, n, oc.-m.-r, w :	10, oc.-m.-r, w : 10
30	1.6	0.26	0.7	0.11	W : Calm : SW	SW	2.8	0.18	209	3	: 1 : p.-cl, cu	p.-cl, ci.-cu, cu	: 8
31	2.5	0.41	2.4	0.41	SW	SW	3.8	0.36	300	10	: 9 : 9, cu	8, cu	: 5 : 0
Means	..	..	..	..	..	..	..	0.20	217				
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 59°.3, being 1°.4 higher than
 The mean *Temperature of the Dew Point* for the month was 52°.8, being 1°.0 lower than
 The mean *Degree of Humidity* for the month was 59.7, being 13.1 less than
 The mean *Elastic Force of Vapour* for the month was 0^m.400, being 0^m.015 less than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4^{gr}.4, being 0^{gr}.2 less than
 The mean *Weight of a Cubic Foot of Air* for the month was 524 grains, being 3 grains less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 5.5.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.573. The maximum daily amount of *Sunshine* was 14.9 hours on July 9.
 The highest reading of the *Solar Radiation Thermometer* was 157°.4 on July 17; and the lowest reading of the *Terrestrial Radiation Thermometer* was 30°.6 on July 1.
 The *Proportions of Wind* referred to the cardinal points were N. 6, E. 5, S. 5, W. 6. Nine days were calm.
 The *Greatest Pressure of the Wind* in the month was 7.8 lbs. on the square foot on July 28. The mean daily *Horizontal Movement of the Air* for the month was 217 miles; the greatest daily value was 537 miles on July 23; and the least daily value was 68 miles on July 17.
Rain (0^m.005 or over) fell on 3 days in the month, amounting to 0^m.150, as measured by gauge No. 6 partly sunk below the ground; being 2^m.249 less than the average fall for the 65 years, 1841-1905.

} the average for the 65 years, 1841-1905.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY, 1921.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.								
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
Aug. 1	29.791	76.3	62.9	13.4	67.6	+ 5.4	63.9	61.0	6.6	11.8	2.6	80	118.0	55.3	59.8	0.000	wP, wwP: wP	0.4	15.4
2	29.653	78.9	56.2	22.7	67.6	+ 5.5	60.2	54.3	13.3	24.5	2.6	62	139.9	45.8	59.9	0.000	wwP: wP, wwP: ssP	10.2	15.3
3	29.779	69.0	48.2	20.8	58.5	- 3.6	51.3	44.9	13.6	23.9	4.1	60	124.7	36.1	59.9	0.108	ssP: v: ..	7.4	15.3
4	29.883	71.0	52.4	18.6	60.7	- 1.4	54.8	49.7	11.0	21.9	1.1	67	130.8	44.4	59.9	0.007	..:.. : v, wP	2.7	15.2
5	29.738	78.6	57.0	21.6	66.1	+ 4.0	61.0	56.9	9.2	17.8	1.9	73	140.4	53.5	59.9	0.055	wP, wwP: wP : vP, wP	0.4	15.2
6	29.594	77.0	56.8	20.2	65.9	+ 3.7	57.5	50.7	15.2	26.8	0.4	57	137.1	51.0	59.7	0.000	wwP, wP: mP, sP: mP	12.7	15.1
7	29.751	78.6	55.9	22.7	65.2	+ 3.0	58.3	52.7	12.5	25.1	2.7	64	143.3	48.0	59.7	0.000	wwP, wP: wP : mN	6.0	15.0
8	29.829	73.3	52.9	20.4	62.2	+ 0.1	54.3	47.5	14.7	24.8	3.2	58	135.2	42.9	59.6	0.000	mN, ssP: vP, ssP	11.0	15.0
9	29.811	76.8	49.7	27.1	61.6	- 0.7	54.5	48.4	13.2	26.6	0.8	62	145.6	37.0	59.6	0.000	wP: v : wP	9.4	14.9
10	29.539	79.4	49.5	29.9	62.6	+ 0.3	56.8	51.8	10.8	22.7	0.2	69	148.0	39.6	59.6	0.022	wwP, wP: v	4.4	14.9
11	29.439	77.4	55.8	21.6	64.0	+ 1.6	57.3	51.7	12.3	28.0	2.7	64	135.5	43.5	59.5	0.000	wP: ssP	6.9	14.8
12	29.583	74.2	50.4	23.8	58.8	- 3.7	54.7	51.2	7.6	19.9	0.0	75	133.0	38.2	59.5	0.012	sP: ssP: sP, wP	6.3	14.8
13	29.665	69.1	48.4	20.7	58.0	- 4.5	54.6	51.5	6.5	17.8	0.2	79	123.0	36.0	59.4	0.111	wP, wwP: ssP, sP	3.7	14.7
14	29.850	70.7	54.7	16.0	60.6	- 1.9	55.0	50.1	10.5	20.1	2.7	68	125.2	46.9	59.4	0.000	sP: wP	5.0	14.7
15	29.812	70.8	50.8	20.0	60.0	- 2.4	54.2	49.1	10.9	21.4	1.2	67	120.3	39.0	59.3	0.000	wP: mP: ssP	2.1	14.6
16	29.694	77.0	46.7	30.3	61.5	- 0.8	55.7	50.7	10.8	21.9	0.6	69	139.5	34.4	59.3	0.000	mP, sP: wP, sP	9.0	14.5
17	29.602	72.4	59.7	12.7	64.2	+ 2.1	61.1	58.5	5.7	13.1	0.0	82	127.0	56.6	59.2	0.330	wwP, wP	2.0	14.5
18	29.890	79.1	59.3	19.8	68.2	+ 6.3	59.6	52.8	15.4	27.7	0.0	58	133.5	46.7	59.2	0.000	wwP, wP	12.7	14.4
19	29.869	82.0	57.1	24.9	68.0	+ 6.3	58.6	51.2	16.8	32.4	3.2	54	137.3	45.0	59.3	0.000	wP	11.2	14.4
20	29.642	77.7	58.5	19.2	66.1	+ 4.6	60.3	55.6	10.5	21.2	3.0	69	137.0	48.5	59.4	0.008	wwP, wP	6.6	14.3
21	29.533	62.0	57.5	4.5	59.5	- 1.8	57.4	55.6	3.9	7.7	0.6	87	74.0	47.8	59.1	0.000	wwP: wP	0.0	14.2
22	29.621	74.7	51.7	23.0	62.5	+ 1.4	57.6	53.4	9.1	19.6	0.4	73	133.6	39.4	59.5	0.000	wP	3.0	14.2
23	29.769	71.2	49.1	22.1	60.8	- 0.1	57.9	55.4	5.4	12.7	0.0	83	107.0	37.2	59.4	0.016	wwP, wP: wP, wwP	2.1	14.1
24	29.885	63.6	57.6	6.0	60.1	- 0.7	58.5	57.1	3.0	4.9	1.1	90	76.9	50.7	59.2	0.014	wwP	0.0	14.0
25	29.881	76.0	55.4	20.6	63.3	+ 2.6	58.8	55.0	8.3	19.2	0.0	75	131.7	42.1	59.3	0.000	wwP: vP, sP	3.5	14.0
26	29.936	76.7	46.2	30.5	62.3	+ 1.6	55.4	49.5	12.8	25.4	2.1	63	140.0	31.1	59.2	0.000	mP	8.3	13.9
27	29.826	77.4	59.6	17.8	66.0	+ 5.4	61.2	57.4	8.6	16.8	2.4	74	117.2	52.6	59.1	0.000	wP: mP: mP, wwP	2.3	13.9
28	29.760	77.5	58.1	19.4	65.4	+ 5.0	60.1	55.8	9.6	20.7	1.3	71	135.0	51.1	59.2	0.000	wwP: wP: wP	3.9	13.8
29	29.630	72.5	53.0	19.5	62.5	+ 2.2	54.3	47.3	15.2	26.7	2.8	57	131.5	43.9	59.2	0.000	wP: sP, mP: mP	11.1	13.8
30	29.952	68.0	45.4	22.6	55.1	- 5.0	49.3	43.7	11.4	21.7	3.0	66	124.0	29.8	59.2	0.000	wwP, wP: ..:..	6.4	13.7
31	30.034	72.2	40.3	31.9	57.5	- 2.4	50.3	43.8	13.7	26.9	1.5	60	130.0	25.0	59.2	0.000	..:..:..	8.1	13.6
Means	29.750	74.2	53.4	20.8	62.7	+ 1.0	56.9	52.1	10.6	21.0	1.6	68.9	128.2	43.2	59.4	Sum 0.683	..	5.8	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 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 29.750, being 0.033 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 82.0 on August 19; the lowest in the month was 40.3 on August 31; and the range was 41.7. The mean of all the highest daily readings in the month was 74.2, 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 53.4, being 0.4 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 20.8, being 1.1 greater than the average for the 65 years, 1841-1905. The mean for the month was 62.7, being 1.1 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.							
	POLARIS.		δ URSAE MINORIS.		OSLER'S.			ROBINSON'S.		A.M.		P.M.							
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Greatest.					Mean of 24 Hourly Measures.	Horizontal Movement of the Air.				
					A.M.	P.M.													
Aug. 1	1.8	0.30	1.3	0.22	SSW : SW	SSW	2.8	0.24	245	10		10		9		v.-cl, ci.-s			
2	4.1	0.69	3.9	0.64	SSW : SW	SW : S	7.1	0.73	413	10		9	oc.-slt.-r	8	slt.-shs, w	3, cu, w : 3, w	v.-cl, th.-cl, ci.-s, s		
3	5.6	0.93	5.5	0.92	Calm : SW	W : WSW	5.8	0.33	287	3	th.-cl	9		9	s.-cu, cu, oc.-r, t	v.-cl, cu, s.-cu, shs, t	3 : 3		
4	0.0	0.00	0.0	0.00	WSW : W	SW : SSW	3.8	0.42	353	0		7		9	s.-cu, ci.-cu	10, s, s-cu, oc.-slt.-r	10, oc.-slt.-r		
5	0.7	0.11	0.3	0.06	SW : WSW	SW	9.6	0.72	417	10	m.-r.-sh	9	s, n			10, s, n, w	10, fq.-r, w		
6	6.0	1.00	6.0	0.99	SW : W	W : WSW	7.1	0.98	565	9	oc.-m.-r, w	9	w	3	s.-cu, w	6, cu, w	1, w : 1		
7	3.9	0.65	3.5	0.58	WSW	SW	5.7	0.60	423	th.-cl	7		7	cu.-n, ci.-cu	9, n, w	10, slt.-r, w			
8	6.0	1.00	6.0	1.00	W	W	2.9	0.35	359	0		1		7	cu.-s, cu	8, cu.-s, ci.-cu	1		
9	5.7	0.95	5.1	0.84	SW : W	WSW : Calm	1.3	0.04	168	1						v.-cl, s.-cu	0		
10	1.5	0.24	0.9	0.15	Calm : S : SW	Calm : SSW : NNW	0.8	0.01	107	6	th.-cl	7		9	s.-cu, ci, cu	9, cu, s.-cu, ci.-cu, sh	9		
11	5.7	0.95	5.3	0.88	Calm : WSW	WSW : SW	3.3	0.16	201	9				10	s	6, cu.-s, cu, ci	3, th.-cl	v.-cl, th.-cl	
12	3.1	0.51	2.8	0.46	WSW : W	N : Calm	1.6	0.06	139	1						v.-cl, th.-cl	6, ci, cu, ci.-cu, h	9, s, n, t, h : 10, fq.-slt.-r : 9, n, fq.-slt.-r	
13	3.2	0.46	2.7	0.39	Calm : W	W : NW	1.6	0.08	155	3		9	oc.-r	10	r, glm, m	9, cu.-s, cu.-n, shs	7	8, cu.-n	
14	0.6	0.09	0.3	0.04	NW : W	W : NW	2.1	0.13	210	10	m.-r.-sh		6			9, n, oc.-slt.-r	9, oc.-slt.-r		
15	6.6	0.95	6.6	0.94	NW : W	WNW : Calm	1.0	0.08	168	10				10	n, s, oc.-slt.-r	9, cu, s.-cu, cu.-n	9	th.-cl	
16	0.4	0.06	0.0	0.00	Calm : SW	SSW : S	2.2	0.13	179	0						p.-cl	p.-cl, ci.-cu	8 s.-cu, n : 9	10, n
17	1.0	0.14	0.7	0.10	Calm : SE	ESE : E : NE	1.7	0.08	162	10	r	10	r	9	n, fq.-shs	9, s.-cu, cu.-n, shs	10, fq.-r		
18	7.0	1.00	7.0	1.00	Calm : NE : E	E : ENE	4.5	0.23	230	9						1, ci.-cu	1, ci	0	
19	7.0	1.00	6.2	0.89	NE : NNE	ENE : NE	6.4	0.38	331	0	oc.-slt.-m	1	cu			p.-cl, cu, ci.-cu, w	th.-cl, w	v.-cl, th.-cl, ci	
20	6.0	0.80	6.0	0.80	NNE : NE	E : NE : Calm	1.3	0.10	195	v.-cl, th.-cl		1				9, cu, ci.-cu, s.-cu, r, so.-ha	9, t.-sm	1	
21	0.0	0.00	0.0	0.00	NNW : NW	NW : Calm	1.5	0.08	177	10				10	n, oc.-m.-r	10, n	10, oc.-m.-r		
22	7.5	1.00	7.5	1.00	Calm	S : SSW : Calm	0.6	0.01	116	10	m.-r.-sh	10	m	8	s, cu, cu.-n, ci	8, ci.-s, th.-cl, p.-so.-ha	8, th.-cl	0	
23	0.0	0.00	0.0	0.00	Calm : NE	NE : S : Calm	1.6	0.07	161	0						10, s, n, oc.-r, t	10, oc.-slt.-r	10, s	
24	0.3	0.03	0.0	0.00	N : NNE	N : Calm	1.0	0.07	175	10	r, m	10	oc.-m.-r, m	10	sc, s, m, oc.-m.-r	10, s	10, s, m		
25	5.6	0.75	5.5	0.74	Calm : WNW	WNW : NNW	3.2	0.16	225	10	slt.-m	10	slt.-m	6	cu, s.-cu, ci.-cu, cu.-n	8, s.-cu, cu	9, s.-cu		
26	1.3	0.18	0.7	0.09	NNW : WSW	SW	2.6	0.20	277	1		1		8	ci.-cu, ci	9, s.-cu, cu	10		
27	5.6	0.70	3.6	0.45	SW	SW	3.2	0.43	393	9	m.-r.-sh	10	s			9, s, n	1		
28	3.4	0.43	2.9	0.36	SW	SW : SSW	1.7	0.06	187	9				9	s, n, oc.-slt.-r	6, cu, s.-cu	6		
29	6.8	0.84	6.0	0.74	SW : W	W : WSW	3.5	0.40	390	9						p.-cl, ci.-cu, cu	8, w	8	
30	8.0	1.00	7.9	0.99	WSW : NNW	NW : WSW	1.3	0.08	200	1		9		7	cu.-s	p.-cl, cu.-s	th.-cl	1	
31	2.4	0.30	1.0	0.13	Calm : WSW	SW : SSW	1.5	0.04	164	0		1		3	ci.-cu, s.-cu, cu	9, th.-cl, s, n, so.-ha	9		
Means	0.24	251										
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 56°.9, being 0°.6 lower than
 The mean *Temperature of the Dew Point* for the month was 52°.1, being 1°.9 lower than
 The mean *Degree of Humidity* for the month was 68.9, being 7.4 less than
 The mean *Elastic Force of Vapour* for the month was 0ⁱⁿ.389, being 0ⁱⁿ.029 less than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4^{grs}.3, being 0^{grs}.3 less than
 The mean *Weight of a Cubic Foot of Air* for the month was 527 grains, being 1 grain less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6.9.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.397. The maximum daily amount of *Sunshine* was 12.7 hours on August 6 and 18.
 The highest reading of the *Solar Radiation Thermometer* was 148°.0 on August 10; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°.0 on August 31.
 The *Proportions of Wind* referred to the cardinal points were N. 4, E. 2, S. 7, W. 12. Six days were calm.
 The *Greatest Pressure of the Wind* in the month was 9.6 lbs. on the square foot on August 5. The mean daily *Horizontal Movement of the Air* for the month was 251 miles; the greatest daily value was 565 miles on August 6; and the least daily value was 107 miles on August 10.
Rain (0ⁱⁿ.005 or over) fell on 10 days in the month, amounting to 0ⁱⁿ.683, as measured by gauge No. 6 partly sunk below the ground; being 1ⁱⁿ.661 less than the average fall for the 65 years, 1841-1905.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY, 1921.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.			
		Of the Air.					Of Evapo-ration. Mean of 24 Hourly Values.	Of the Dew Point. Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.			Highest in Sun's Rays.	Lowest on the Grass.	Daily Duration of Sunshine.	Sun above Horizon.
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 years.							Highest in Sun's Rays.	Lowest on the Grass.							
Sept. 1	29.798	77.9	53.4	24.5	63.8	+ 4.0	57.8	52.9	10.9	27.5	3.4	68	139.5	44.4	59.3	0.003	.. : mP, wP	6.2	13.6		
2	29.747	73.0	56.6	16.4	62.8	+ 3.1	57.6	53.2	9.6	20.4	1.5	71	112.5	47.3	59.1	0.000	wwP : vP	0.7	13.5		
3	29.916	69.9	48.5	21.4	59.0	- 0.6	51.6	45.0	14.0	25.1	2.6	59	122.0	32.5	59.1	0.000	mP, wP : vP : vP	8.5	13.4		
4	29.904	74.2	42.4	31.8	58.5	- 1.0	52.0	46.2	12.3	25.9	0.4	64	118.6	28.5	59.0	0.000	wwP : mP, wP : wP	11.0	13.3		
5	29.955	78.2	48.7	29.5	62.8	+ 3.4	55.3	48.9	13.9	26.0	1.8	60	130.9	39.1	59.1	0.000	wwP : wP : wP	9.5	13.3		
6	30.033	76.5	46.9	29.6	61.4	+ 2.2	55.2	49.9	11.5	22.4	2.3	66	100.8	36.0	59.0	0.000	wwP : vP : wP, wwP	7.3	13.2		
7	29.995	81.0	48.0	33.0	63.2	+ 4.2	55.6	49.2	14.0	28.2	0.6	61	130.5	35.6	59.1	0.000	wwP : wP, wwP : wwP, wP	11.1	13.2		
8	29.867	82.6	49.9	32.7	63.9	+ 5.1	55.7	48.9	15.0	32.9	0.4	58	133.6	35.1	59.0	0.000	wwP : wP : wP	11.1	13.1		
9	29.697	87.9	47.8	40.1	67.1	+ 8.5	57.8	50.4	16.7	33.7	2.0	55	142.6	34.8	59.1	0.004	wwP : ..	10.8	13.0		
10	29.645	71.2	53.2	18.0	62.4	+ 4.0	55.3	49.2	13.2	26.2	3.4	62	126.4	43.8	58.7	0.006	.. : sP, mP	4.1	13.0		
11	29.686	72.1	51.9	20.2	58.6	+ 0.5	53.5	49.0	9.6	21.7	0.0	70	132.9	43.0	59.0	0.976	wP : ..	8.0	12.9		
12	29.658	68.0	51.3	16.7	58.3	+ 0.3	53.5	49.2	9.1	19.2	0.6	72	120.2	44.9	58.8	0.326	..	6.8	12.8		
13	29.730	70.6	56.1	14.5	63.0	+ 5.2	60.5	58.4	4.6	12.3	0.9	85	91.0	51.0	58.9	0.489	..	0.0	12.8		
14	29.769	72.0	61.2	10.8	65.5	+ 7.8	61.2	57.7	7.8	14.3	2.2	76	123.3	54.3	58.9	0.000	..	6.2	12.7		
15	29.829	66.5	51.0	15.5	58.7	+ 1.1	51.8	45.7	13.0	20.7	3.0	62	104.0	37.7	58.8	0.000	..	3.4	12.7		
16	29.960	64.2	40.1	24.1	53.7	- 3.8	47.9	42.2	11.5	18.8	0.9	65	124.3	27.4	58.6	0.000	..	10.4	12.6		
17	30.006	63.8	50.1	13.7	55.9	- 1.3	50.0	44.5	11.4	17.3	7.0	66	111.3	43.3	58.6	0.010	..	0.8	12.5		
18	30.009	68.4	54.3	14.1	60.1	+ 3.2	53.9	48.4	11.7	17.5	5.7	65	120.0	46.4	58.5	0.000	..	0.3	12.4		
19	29.991	61.4	55.4	6.0	58.0	+ 1.5	56.2	54.6	3.4	9.2	0.4	88	72.0	53.1	58.3	0.001	..	0.0	12.4		
20	29.963	65.5	56.8	8.7	60.4	+ 4.2	57.6	55.2	5.2	11.3	0.2	84	88.4	50.4	58.3	0.000	..	0.0	12.3		
21	30.054	72.1	53.3	18.8	61.2	+ 5.3	57.3	53.9	7.3	19.9	0.6	77	95.3	37.4	58.1	0.000	..	1.8	12.3		
22	30.200	75.6	47.8	27.8	61.2	+ 5.6	56.7	52.8	8.4	18.4	0.0	75	119.9	33.3	58.1	0.000	..	7.7	12.2		
23	30.161	77.9	53.3	24.6	64.1	+ 8.7	60.0	56.6	7.5	17.6	0.0	76	128.6	42.1	58.2	0.000	..	3.6	12.1		
24	30.160	68.9	50.6	18.3	61.6	+ 6.3	58.3	55.5	6.1	13.1	0.4	81	103.0	39.2	58.0	0.000	..	0.0	12.1		
25	30.193	68.5	42.9	25.6	54.7	- 0.5	50.4	46.3	8.4	19.4	0.2	73	120.0	27.8	58.0	0.000	..	10.1	12.0		
26	30.151	69.0	43.2	25.8	55.5	+ 0.3	51.1	46.9	8.6	20.8	0.0	73	115.0	30.9	58.0	0.000	..	6.7	11.9		
27	30.243	64.0	44.6	19.4	57.0	+ 1.9	52.6	48.5	8.5	17.2	0.9	73	83.1	33.2	58.0	0.000	..	3.5	11.9		
28	30.166	68.4	37.3	31.1	53.3	- 1.6	49.2	45.1	8.2	20.5	0.0	74	115.2	26.2	58.0	0.000	.. : mP	9.0	11.8		
29	30.013	65.2	39.8	25.4	51.9	- 2.8	48.6	45.3	6.6	15.0	0.2	78	109.0	26.9	57.9	0.000	wP, wwP : mP : mP, wP	7.8	11.7		
30	29.873	70.2	42.3	27.9	54.2	- 0.2	49.7	45.3	8.9	27.6	0.0	71	120.8	28.6	57.7	0.000	wP : mP, wP	7.8	11.7		
Means	29.949	71.5	49.3	22.2	59.7	+ 2.5	54.5	49.8	9.9	20.7	1.4	70.3	115.2	38.5	58.6	Sum 1.815	..	5.8	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 29.949, being 0.138 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 87.9 on September 9; the lowest in the month was 37.3 on September 28; and the range was 50.6.

The mean of all the highest daily readings in the month was 71.5, being 4.2 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 49.3, being 0.2 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 22.2, being 4.0 greater than the average for the 65 years, 1841-1905.

The mean for the month was 59.7, being 2.4 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.					
	POLARIS.		δ URSAE MINORIS.		OSLER'S.			Pressure on the Square Foot.	Robin-son's Horizontal Move-ment of the Air.	A.M.	P.M.				
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.										
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.	Miles.						
Sept. 1	4.6	0.58	3.4	0.43	S : SW	SW	3.0	0.25	285	9	: 9	: 9, ci.-cu, s	9, cu.-s	: 9, th.-cl	: 9, shs
2	4.5	0.56	4.1	0.51	WSW : W	NW : N	1.0	0.13	260	9	: 10, oc.-m.-r	: 9, s, n	9, s.-cu, n	: 10, s	
3	8.5	1.00	8.5	1.00	N : Calm	Calm : SE	1.3	0.01	111	3	: 7	: 5			0
4	6.2	0.73	3.0	0.36	Calm	Calm : NW : SSW	0.6	0.01	105	0, ho.-fr	: 1, ho.-fr.	: th.-cl, ci, h	0, h		: 1, h
5	8.5	1.00	8.5	1.00	Calm : SSW	SSW : Calm	1.0	0.02	140	0, h	: 9	: 1, cu	1		: 0
6	8.5	1.00	8.5	1.00	Calm	Calm : SSW	0.5	0.00	99	0		: 0, h, m	1, cu, h	: 0	: 0
7	8.5	1.00	8.5	1.00	Calm : SE	E : Calm	1.2	0.04	109	0	: 0, h, m	: 0, h, m			0
8	8.5	1.00	8.5	1.00	Calm : E	E : Calm	1.8	0.06	146	0, m, d		: 0, m	0		: 0, d
9	2.0	0.23	1.1	0.13	Calm : SW	SW	3.3	0.15	165	0, d, slt.-m	: 1, cu.-s		7, cu.-s, cu	: 1	: 9, oc.-r
10	8.0	0.89	7.4	0.83	WSW : WNW	WNW : W	3.4	0.36	339	9	: 9, oc.-r	: 10, oc.-slt.-r, p.-so.-ha	10, ci.-s, cu, s.-cu, th.-cl, p.-so.-ha	: p.-cl	: v.-cl
11	0.5	0.06	0.4	0.05	WSW : W	WSW : E	3.8	0.45	382	v.-cl	: v.-cl, slt.-sh	: 9, cu, slt.-sh, w	9, w		: 10, r
12	1.2	0.13	1.1	0.12	N : NW : WNW	WNW : WSW	12.0	0.49	355	10, hy.-r, t.-sm	: 10	: 9, s.-cu, n, sh	7, cu, cu.-n, ci	: 2	: 9, s.-cu, n, m.-r.-sh
13	1.1	0.12	0.9	0.10	SW : WSW	W : SW	4.8	0.53	393	10, r	: 10, fq.-r, w	: 10, oc.-slt.-r	10, oc.-slt.-r	: 10, m.-r	: 10, oc.-m.-r
14	1.5	0.16	1.7	0.19	SW	SW : WSW	4.6	0.60	401	10	: 10	: 9, cu, n, slt.-sh, w	9, cu.-n, w	: 9	: 9, ci.-cu
15	9.0	1.00	9.0	1.00	NW : N	Calm : N	0.9	0.03	169	9	: 9, p.-so.-ha	: 9, ci.-s, ci.-cu, th.-cl, so.-ha	7, ci.-s, cu, so.-ha	: 7, th.-cl	: 0
16	5.9	0.66	5.4	0.60	NNE	NE : ENE	3.7	0.19	242	0	: 1	: p.-cl, cu	7, cu, s.-cu	: 3	: 1, ci.-cu
17	6.1	0.62	6.0	0.61	ENE : E	E : ENE	9.1	0.80	444	9		: 9, cu, s.-cu, n, w	10, s, n, fq.-slt.-r, w	: 9, s.-cu	
18	0.0	0.00	0.0	0.00	ENE : E	ENE	5.6	0.60	390	1, th.-cl		: 9, n, cu, s, w	9, cu.-n, p.-so.-ha	: 10, th.-cl	: 10
19	0.0	0.00	0.0	0.00	ENE	Calm	1.0	0.04	114	10, m.-r		: 10, sc, fq.-m.-r	10, n, fq.-m.-r	: 10	: 10
20	0.5	0.05	0.3	0.03	Calm	Calm : N	0.2	0.00	74	10, m		: 10, s, m	10, s, n	: 10	: 10, m
21	9.7	1.00	9.7	1.00	Calm	W : NW	0.6	0.00	123	9, m	: 9, f	: 10, s, th.-cl, h	10, th.-cl, cu	: 1	: 0
22	9.7	1.00	9.7	1.00	WSW : W	W : WSW	0.5	0.01	177	1, d	: 1, d	: p.-cl, ci.-s, th.-cl	9, ci.-cu, ci, th.-cl	: 1, ci.-cu, slt.-d	
23	1.6	0.17	1.4	0.15	Calm : WSW	W : NW : Calm	0.5	0.02	156	1, m		: 9, s, th.-cl, m	9, cu		: 10
24	8.5	0.83	8.5	0.83	Calm	Calm : NE : E	0.8	0.03	149	10		: 10, s, n	10, s, m.-r.-sh	: 10	: 0
25	10.3	1.00	10.1	0.99	Calm	Calm	0.5	0.00	95	0, slt.-m, ho.-fr	: 0		0		: 0, d
26	0.0	0.00	0.0	0.00	Calm	N : NNE : NE	2.4	0.14	201	0, d, m		: 0, m	3, ci.-cu, s.-cu	: 10	: 10
27	10.3	1.00	10.3	1.00	NE : E : ESE	E : Calm	1.5	0.13	205	10, m.-r.-sh		: 10, s	9, s.-cu	: p.-cl	: 0, d
28	9.8	0.96	7.3	0.71	Calm	E : Calm	0.6	0.00	94	0, m, d		: 0, m, d	0		: 0, hy.-d
29	10.2	0.99	10.0	0.97	Calm	E : Calm	1.3	0.05	109	0, hy.-d, m	: 0, tk.-m, hy.-d	: 1, cu, slt.-m	1, cu		: 0
30	7.9	0.77	7.6	0.74	Calm : ESE	ESE : Calm	2.4	0.09	138	0, d, slt.-m		: 2, ci.-cu, th.-cl, m, d	p.-cl, ci.-s, th.-cl	: 3, th.-cl	: 0, d
Means	..	..	..	..	..	..	..	0.17	206						
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 54°.5, being 0°.4 higher than
 The mean *Temperature of the Dew Point* for the month was 49°.8, being 1°.4 lower than
 The mean *Degree of Humidity* for the month was 70°.3, being 9°.9 less than
 The mean *Elastic Force of Vapour* for the month was 0.1358, being 0.019 less than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 4.578.0, being 0.278.2 less than
 The mean *Weight of a Cubic Foot of Air* for the month was 533 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 5.2.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.460. The maximum daily amount of *Sunshine* was 11.1 hours on September 7 and 8.
 The highest reading of the *Solar Radiation Thermometer* was 142°.6 on September 9; and the lowest reading of the *Terrestrial Radiation Thermometer* was 26°.2 on September 28.
 The *Proportions of Wind* referred to the cardinal points were N. 3, E. 5, S. 4, W. 7. Eleven days were calm.
 The *Greatest Pressure of the Wind* in the month was 12.0 lbs. on the square foot on September 12. The mean daily *Horizontal Movement of the Air* for the month was 206 miles; the greatest daily value was 444 miles on September 17, and the least daily value was 74 miles on September 20.
Rain (0.1005 or over) fell on 5 days in the month, amounting to 1.815, as measured by gauge No. 6 partly sunk below the ground; being 0.1333 less than the average fall for the 65 years, 1841-1905.

MONTH and DAY 1921.	BARO-METER. Mean of 24 Hourly Values corrected and reduced to 32° Fahrenheit.	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.								
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.	Of the Earth 4 ft. below the Surface of the Soil.				
Oct. 1	29.768	74.1	40.4	33.7	54.9	+ 0.8	49.4	44.1	10.8	31.0	0.0	67	123.0	26.1	57.4	0.001*	.. : vP	8.1	11.6
2	29.665	76.8	42.0	34.8	58.5	+ 4.8	53.3	48.7	9.8	25.7	0.4	70	119.6	27.6	57.3	0.000	wwP, wP : wP, wwP	2.7	11.5
3	29.721	75.0	62.3	12.7	66.0	+ 12.7	60.1	55.3	10.7	20.5	1.8	69	123.8	54.0	57.1	0.007	wwP : wP, wwP	6.2	11.5
4	29.876	80.8	59.0	21.8	67.1	+ 14.1	61.7	57.4	9.7	22.5	0.2	71	127.0	49.8	57.3	0.000	wwP : sP, wwP	8.7	11.4
5	29.851	83.3	57.7	25.6	67.1	+ 14.3	61.6	57.2	9.9	25.4	0.4	70	129.3	45.9	57.4	0.000	wwP : mP, wP	9.3	11.3
6	29.809	84.4	56.7	27.7	68.7	+ 16.2	62.2	57.1	11.6	24.2	0.9	66	129.8	44.0	57.4	0.000	wwP : wP : wwP	10.1	11.3
7	29.892	79.7	58.2	21.5	65.6	+ 13.3	60.2	55.8	9.8	22.8	0.4	71	129.7	46.0	57.5	0.000	.. : wP, mP : wP	8.9	11.2
8	29.922	78.7	53.3	25.4	62.8	+ 10.8	57.9	53.8	9.0	24.1	0.6	72	128.2	42.3	57.5	0.000	.. : sP, wP	4.9	11.2
9	29.743	80.5	50.7	29.8	64.5	+ 12.9	57.7	52.1	12.4	24.2	1.0	64	129.1	38.3	57.7	0.000	wwP : wP, mP	9.3	11.1
10	29.768	78.8	55.8	23.0	65.2	+ 13.9	61.3	58.1	7.1	20.6	0.6	79	127.3	44.3	57.6	0.299	.. : mP : ..	5.0	11.0
11	29.888	73.6	56.9	16.7	62.8	+ 11.9	60.4	58.4	4.4	12.8	0.0	86	117.8	45.9	57.7	0.000	.. : wP : ..	8.0	10.9
12	30.057	64.3	48.4	15.9	57.0	+ 6.4	53.9	51.0	6.0	11.9	0.4	80	90.2	36.8	57.8	0.003*	..	0.2	10.9
13	30.097	68.4	44.7	23.7	55.4	+ 5.1	53.0	50.7	4.7	14.3	0.0	85	114.0	33.3	57.8	0.004*	.. : wP : ..	6.6	10.8
14	30.162	64.8	46.5	18.3	57.4	+ 7.3	53.6	50.1	7.3	15.4	0.4	77	106.2	34.7	57.8	0.102	.. : ssP, wP	5.1	10.8
15	30.364	63.8	38.1	25.7	49.6	- 0.3	46.5	43.2	6.4	16.3	0.2	79	102.9	29.4	57.4	0.000	.. : sP, ..	8.3	10.7
16	30.174	67.9	40.4	27.5	51.3	+ 1.5	48.4	45.4	5.9	17.0	0.0	81	113.1	29.8	57.3	0.001*	.. : sP, ..	6.8	10.6
17	30.106	70.0	37.1	32.9	52.5	+ 2.9	48.6	44.7	7.8	24.1	0.0	75	117.8	27.1	57.0	0.000	.. : sP, wwP	9.0	10.6
18	29.956	75.9	45.4	30.5	60.1	+ 10.8	55.5	51.5	8.6	22.3	0.0	73	119.8	32.9	56.9	0.000	.. : mP, wwP	9.3	10.5
19	29.904	71.3	55.4	15.9	61.1	+ 12.0	58.6	56.5	4.6	13.4	0.0	85	118.3	44.3	56.6	0.013	..	3.4	10.5
20	29.976	64.6	52.6	12.0	56.1	+ 7.3	55.1	54.2	1.9	6.7	0.0	93	84.4	45.4	56.3	0.056	..	0.2	10.4
21	29.989	58.2	44.6	13.6	51.3	+ 2.7	48.4	45.4	5.9	14.0	0.0	81	87.3	33.0	56.4	0.075	.. : vP	2.9	10.3
22	29.690	63.0	45.6	17.4	53.9	+ 5.6	51.0	48.2	5.7	11.8	0.0	81	107.1	35.1	56.4	0.222	..	2.9	10.2
23	29.741	48.3	39.1	9.2	42.8	- 5.4	39.5	35.5	7.3	13.3	2.7	76	88.0	31.8	56.1	0.016	..	3.6	10.2
24	30.166	49.2	36.3	12.9	42.3	- 5.6	38.4	33.6	8.7	13.7	5.6	73	86.6	30.5	55.9	0.000	..	7.6	10.1
25	30.328	55.6	34.5	21.1	45.9	- 1.8	43.5	40.8	5.1	10.3	0.8	83	75.0	28.4	55.6	0.000	..	0.8	10.1
26	30.327	56.0	39.0	17.0	49.0	+ 1.4	48.2	47.3	1.7	3.9	0.0	94	59.5	33.3	55.3	0.000	.. : wP, sP	0.0	10.0
27	30.306	60.0	50.1	9.9	54.4	+ 6.9	51.7	49.1	5.3	11.5	0.0	82	80.5	39.1	55.1	0.000	mP : ssP, wP	1.0	10.0
28	30.284	57.8	39.0	18.8	49.3	+ 1.9	46.8	44.1	5.2	11.8	0.0	83	87.8	31.1	54.9	0.000	wP, wN : vP : wP, wwP	2.1	9.9
29	30.113	59.9	44.0	15.9	52.1	+ 4.8	48.2	44.2	7.9	13.8	2.4	75	86.4	34.0	54.8	0.000	wwN, wwP : ssP, vP	2.0	9.8
30	30.162	58.2	43.4	14.8	52.0	+ 4.8	49.6	47.2	4.8	7.8	0.4	84	72.0	31.8	54.7	0.000	wwP, mP : ssP	1.1	9.7
31	30.139	58.0	39.2	18.8	49.9	+ 2.8	47.1	44.1	5.8	11.1	0.0	81	76.5	29.2	54.5	0.000	wwN : wP, sP : mP, wP	0.2	9.7
Means	29.998	67.8	47.0	20.8	56.3	+ 6.3	52.6	49.2	7.2	16.7	0.6	77.6	105.1	36.6	56.6	0.799	..	5.0	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 1, 12, 13, and 16 were derived from dew.

The mean reading of the Barometer for the month was 29.998, being 0.277 higher than the average for the 65 years 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 84.4 on October 6; the lowest in the month was 34.5 on October 25; and the range was 49.9. The mean of all the highest daily readings in the month was 67.8, being 10.3 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 47.0, being 3.7 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 20.8, being 6.5 greater than the average for the 65 years, 1841-1905. The mean for the month was 56.3, being 6.3 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.			
	POLARIS.		δ URSAE MINORIS.		OSLER'S.			ROBINSON'S.			A.M.	P.M.		
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Horizontal Movement of the Air.					
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.						
Oct. 1	10.4	0.99	10.0	0.95	Calm : SE	S : Calm	0.4	0.00	102	0,hy.-d,ho.-fr : th.-m	I, ci, cu, m	I, ci	: 0	
2	..	..	..	..	Calm : SE	SE : S : SW	2.9	0.13	175	o	: th.-cl,p.-so.-ha : 9 th.-cl,s,p.-so.-ha	9,ci.-s,th.-cl,oc.-p.-so.-ha	9	: v.-cl
3	0.0	0.00	0.0	0.00	SW : WSW	W : SW	5.3	0.61	442	9, w	: 9, w : 7, cu, cu.-s, ci.-cu, w	7 s, cu.-s, w, so.-ha	10, sh, fq.-slt.-r	: 10, n, oc.-slt.-r
4	8.0	0.76	7.3	0.69	SW : Calm	Calm : E	0.9	0.03	126	10	: 10 : I, ci, cu	I, ci, cu	: I, d	
5	10.5	1.00	10.5	1.00	Calm : ESE	SE : Calm	2.0	0.07	165	1, d	: 10, th.-cl, d, m : 0	0	: 0, d	
6	10.0	0.96	9.7	0.92	SE : Calm	S : SSW	1.5	0.08	156	0, d	: 0	I, cu.-s	: I, s.-cu, d	
7	9.5	0.90	7.3	0.70	SSW : WSW	SW	2.2	0.17	252	0, d	: 1, d : v.-cl, ci.-cu, s.-cu, cu, th.-cl	7, ci.-s, th.-cl, p.-so.-ha	10, th.-cl	: 3
8	11.0	1.00	11.0	1.00	WSW	WSW : Calm	0.8	0.01	151	0	: 9, m : 9, s.-cu, cu, ci	9, th.-cl, p.-so.-ha	3, th.-cl, p.-so.-ha	0, lu.-ha
9	8.0	0.73	7.6	0.70	Calm	SE : ESE	1.6	0.07	149	0	: 3, th.-cl : p.-cl, ci	p.-cl, ci, s.-cu	7	: 9, cu, s.-cu, ci
10	3.5	0.32	3.5	0.32	S : Calm	Calm : S	1.0	0.02	137	9, d	: v.-cl, d : 9, ci, ci.-s, p.-so.-ha	7, ci, s.-cu, p.-so.-ha	9	: 9, t.-sm, hy.-r
11	4.5	0.41	4.5	0.41	Calm	SW : WSW	1.1	0.05	134	8	: 8, s.-cu, cu, m	I, ci, cu, ci.-cu	2	: 10, cu.-n
12	9.5	0.86	9.5	0.86	W : N	N : Calm	0.9	0.03	137	10	: 10, s	10, ci.-s, so.-ha, m	10, th.-cl, m, hy.-d	
13	3.8	0.35	3.9	0.35	Calm	SE : Calm	0.4	0.00	86	0, m, hy.-d	: 1, ci, th.-m, d, so.-ha	th.-cl, oc.-p.-so.-has	p.-cl, th.-cl, slt.-m	10, th.-cl, ci, lu.-ha
14	11.0	1.00	11.0	1.00	Calm : N	N : Calm	3.4	0.12	170	10, r, m.-r, slt.-m	: 10, sh, m : 10, s, n, oc.-m.-r, slt.-m	I, s.-cu, cu, h, slt.-m	0, slt.-m, h, d	
15	10.9	0.95	10.3	0.90	Calm : SW	WSW : Calm : S	1.0	0.00	123	0, slt.-ho.-fr	: 0, slt.-m	I, ci, h, d, m	: I, m, d	
16	11.5	1.00	11.5	1.00	Calm	SW : Calm	0.5	0.00	97	0, m, d	: tk.-f : 0, f	0	: I, d	
17	11.5	1.00	11.4	1.00	Calm : SSW	SSW : Calm	0.3	0.01	132	p.-cl, th.-cl, lu.-ha, d	: I, ci	I, ci	: 3, th.-cl, d, slt.-m	I, m, d
18	9.0	0.78	8.6	0.75	Calm : S	S : SSW	2.2	0.08	167	0, m, d	: 0	0	: I	: v.-cl, cu, s.-cu
19	7.6	0.66	7.4	0.64	SSW : SW	SW	2.4	0.19	277	v.-cl	: 10, oc.-slt.-r : 8, cu, n, ci.-cu, oc.-r	7, cu.-s, n, cu	8, th.-cl, d	v.-cl, th.-cl, ci.-s, ci.-cu, d, lu.-ha
20	0.0	0.00	0.0	0.00	SW : NNE	NE : Calm	0.8	0.01	140	10	: 9, cu, cu.-n, oc.-slt.-r, slt.-glm	10, s, n, fq.-slt.-r, slt.-glm	10, n, m	10, n, m, slt.-r
21	5.6	0.31	2.8	0.24	Calm : NNW	W : SW	0.5	0.00	139	10, r, m	: 10, m : 10, s, th.-cl	th.-cl, ci.-cu	7	: 3
22	5.4	0.45	4.8	0.40	SW : SSW	SSW : SW : WNW	7.6	0.59	411	10, sh	: 9, s.-cu, ci.-cu, oc.-slt.-r	9, th.-cl, oc.-r, w	10, r, w	: 10, w
23	11.6	0.97	11.5	0.95	NW : WNW	WNW : N	6.2	0.46	377	8, w	: 0, w : th.-cl, ci	10, s, n, r	: 0	
24	10.5	0.88	10.2	0.85	N	N	3.7	0.38	345	0, ho.-fr	: 0	I, cu, h	: 0	
25	5.9	0.49	3.4	0.28	WSW	NNW : NW	1.3	0.02	176	v.-cl, slt.-d	: 10, slt.-d, m : 7, m	9, s, s.-cu, ci.-cu, m	10, slt.-f, slt.-d	
26	0.0	0.00	0.0	0.00	Calm	Calm	0.2	0.00	84	0, m	: f	10, f	: 10, m	: 10, slt.-m, d
27	8.6	0.71	6.3	0.53	Calm : NNW	NNW : N	1.1	0.03	130	10, slt.-m, hy.-d	: 10, m, hy.-d : 10, slt.-m	10, th.-cl	: 8	: th.-cl, d
28	11.7	0.97	10.3	0.86	N : W : NW	NW	1.9	0.13	250	0, d	: 0, m : 9, ci, s, th.-cl, m	p.-cl, s.-cu, h	0, h, d	: 0, h, d
29	9.1	0.73	8.0	0.64	W : NW	NW : NNW	3.8	0.37	369	0, h, d	: I, h, d, m : 10, s, m	8, cu.-s, ci.-s, th.-cl	I	: I, ci
30	10.4	0.84	10.3	0.83	NNW : W	Calm : WSW	1.7	0.06	153	v.-cl	: v.-cl, cu.-n, m	8, cu, m	: 8, m	: 0, m, hy.-d
31	3.1	0.24	1.1	0.08	Calm : WSW	WSW : SW	4.5	0.20	283	I, hy.-d	: I, m, hy.-d : 10, s, cu	9, s	: 9	: 9, th.-cl, w
Means	..	..	..	..	..	..	..	0.13	195					
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 52°.6, being 4°.7 higher than
 The mean *Temperature of the Dew Point* for the month was 49°.2, being 3°.5 higher than
 The mean *Degree of Humidity* for the month was 77.6, being 7.4 less than
 The mean *Elastic Force of Vapour* for the month was 0.351, being 0.044 greater than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 3.879, being 0.874 greater than
 The mean *Weight of a Cubic Foot of Air* for the month was 538 grains, being 2 grains less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 5.2.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.468. The maximum daily amount of *Sunshine* was 10.1 hours on October 6.
 The highest reading of the *Solar Radiation Thermometer* was 129°.8 on October 6; and the lowest reading of the *Terrestrial Radiation Thermometer* was 26°.1 on October 1.
 The *Proportions of Wind* referred to the cardinal points were N. 4, E. 1, S. 7, W. 7. Twelve days were calm.
 The *Greatest Pressure of the Wind* in the month was 7.6 lbs. on the square foot on October 22. The mean daily *Horizontal Movement of the Air* for the month was 195 miles; the greatest daily value was 442 miles on October 3; and the least daily value was 84 miles on October 26.
Rain (0.005 or over) fell on 8 days in the month, amounting to 0.799, as measured by gauge No. 6 partly sunk below the ground; being 1.983 less than the average fall for the 65 years, 1841-1905.

} the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.					
Nov. 1	29.966	57.7	46.1	11.6	52.5	+ 5.5	47.6	42.6	9.9	13.1	6.1	70	60.5	40.0	54.3	0.000	wP : ssP	0.0	9.6
2	29.960	47.9	43.8	4.1	45.8	- 1.0	44.1	42.1	3.7	10.5	0.8	87	57.0	42.5	54.1	0.533	ssP, mP : wP, wwP	0.0	9.6
3	29.750	57.1	42.2	14.9	49.1	+ 2.5	48.6	48.1	1.0	2.3	0.6	96	56.3	43.0	54.0	0.227	wwP : wN	0.0	9.5
4	29.488	58.0	48.5	9.5	52.8	+ 6.4	51.9	51.0	1.8	9.5	0.2	94	63.0	38.8	54.0	0.300	wwN : wN	0.0	9.5
5	29.579	55.0	45.1	9.9	49.1	+ 3.0	44.9	40.4	8.7	12.3	5.2	72	98.6	37.9	53.7	0.006	wN : v, ssP : mP, wP	5.0	9.4
6	29.415	55.0	37.5	17.5	46.3	+ 0.5	42.9	39.1	7.2	12.4	2.6	77	81.7	29.9	53.6	0.230	wP : sP, wP	5.3	9.3
7	29.888	42.5	31.6	10.9	37.2	- 8.2	33.5	28.3	8.9	15.8	3.5	70	65.3	25.3	53.3	0.000	vP : ..	3.5	9.3
8	30.026	39.2	30.1	9.1	34.4	- 10.6	32.0	28.0	6.4	13.8	0.7	76	68.2	24.7	53.0	0.000	.. : .., wwP	5.9	9.2
9	30.339	39.2	28.9	10.3	32.9	- 11.7	31.4	28.4	4.5	5.7	1.3	83	53.2	23.8	52.6	0.003*	wwN : mP, sP : sP, wwP	0.6	9.2
10	30.397	41.5	25.5	16.0	33.1	- 11.2	30.6	25.7	7.4	13.1	0.0	73	82.3	16.0	52.2	0.001*	mN : .. : ..	8.0	9.1
11	30.124	42.6	27.2	15.4	34.4	- 9.6	31.0	25.2	9.2	18.1	1.9	70	85.9	15.0	51.9	0.004	..	4.2	9.1
12	29.976	37.1	27.1	10.0	33.5	- 10.2	31.6	28.1	5.4	6.0	0.5	80	41.6	21.4	51.2	0.000	..	0.0	9.0
13	29.893	41.8	25.3	16.5	33.2	- 10.3	31.6	28.5	4.7	8.7	0.0	82	54.0	17.1	50.9	0.000	..	3.9	8.9
14	29.749	42.6	33.0	9.6	38.0	- 5.3	35.4	31.9	6.1	9.7	2.9	78	67.0	27.7	50.5	0.000	..	1.2	8.9
15	29.767	46.1	31.2	14.9	39.2	- 3.9	37.6	35.5	3.7	6.2	1.3	87	52.6	24.5	50.0	0.001*	..	0.0	8.8
16	29.679	49.6	40.2	9.4	45.0	+ 2.2	43.8	42.4	2.6	5.4	0.0	91	58.7	30.8	49.8	0.177	..	0.0	8.8
17	29.880	46.8	41.2	5.6	43.2	+ 0.6	41.3	39.0	4.2	6.8	1.1	85	71.5	39.3	49.5	0.103	..	1.0	8.8
18	29.948	44.1	38.2	5.9	41.4	- 1.0	39.1	36.2	5.2	7.8	3.2	82	57.2	30.2	49.4	0.000	..	0.2	8.7
19	29.872	44.5	38.7	5.8	41.6	- 0.7	40.0	38.0	3.6	5.5	2.7	88	55.9	37.8	49.3	0.000	..	0.0	8.6
20	29.911	42.0	37.9	4.1	39.2	+ 3.0	37.2	34.6	4.6	7.4	2.7	84	41.5	36.1	49.2	0.000	..	0.0	8.6
21	30.000	41.1	34.9	6.2	37.9	- 4.2	36.4	34.4	3.5	5.9	0.0	87	48.5	34.6	49.1	0.113	..	0.0	8.6
22	30.093	50.5	34.9	15.6	41.2	- 0.9	40.3	39.2	2.0	4.9	0.0	93	67.0	30.0	49.0	0.045	..	0.3	8.5
23	30.090	56.5	37.4	19.1	44.5	+ 2.5	41.0	36.9	7.6	18.4	0.4	74	89.2	27.2	49.0	0.000	..	5.4	8.5
24	30.032	47.9	33.9	14.0	39.2	- 2.8	37.1	34.4	4.8	10.8	0.0	83	75.4	25.1	48.9	0.000	..	4.7	8.4
25	29.954	37.0	31.2	5.8	34.8	- 7.1	34.5	34.0	0.8	1.7	0.0	97	43.7	25.7	48.7	0.001*	..	0.1	8.4
26	29.872	35.9	29.4	6.5	31.9	- 9.9	31.6	30.9	1.0	4.3	0.0	97	42.1	26.3	48.4	0.003*	..	0.0	8.3
27	29.918	33.9	28.9	5.0	31.3	- 10.4	31.2	31.0	0.3	2.0	0.0	99	40.7	23.5	48.1	0.006*	..	0.2	8.3
28	29.914	44.2	27.8	16.4	34.3	- 7.2	33.3	31.6	2.7	5.9	0.0	89	53.5	29.1	48.0	0.010	..	4.5	8.2
29	29.876	44.8	31.2	13.6	38.9	- 2.3	37.8	36.3	2.6	5.5	1.4	92	56.0	28.4	47.7	0.001	..	0.0	8.2
30	29.666	35.8	29.1	6.7	31.4	- 9.6	30.5	28.3	3.1	6.0	0.8	87	47.9	28.0	47.5	0.000	..	1.7	8.2
Means	29.901	45.3	34.6	10.7	39.6	- 3.9	37.7	35.0	4.6	8.5	1.3	84.1	61.2	29.3	50.7	Sum 1.764	..	1.8	8.9
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 amounts entered on November 9, 10, 15, 25, 26, and 27 were derived from dew, fog and frost.

The mean reading of the Barometer for the month was 29.901, being 0.143 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 58.0 on November 4; the lowest in the month was 25.3 on November 13; and the range was 32.7.

The mean of all the highest daily readings in the month was 45.3, being 3.7 lower than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 34.6, being 3.3 lower than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 10.7, being 0.5 less than the average for the 65 years, 1841-1905.

The mean for the month was 39.6, being 3.9 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.					
	POLARIS.		δ URSAE MINORIS.		OSLER'S.			ROBINSON'S.							
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.	A.M.		P.M.	
					A.M.	P.M.									
Nov. 1	0.2	0.02	0.0	0.00	WSW : W	N : NNW	5.5	0.57	431	IO, w	: IO, n, s, oc.-m.-r, w.	IO, n, s, oc.-slt.-r	: IO, s.-cu		
2	0.0	0.00	0.0	0.00	WSW : SW	Calm : NE	1.4	0.04	166	IO, r	: IO, oc.-slt.-r : IO, s.-cu, r	IO, n, r	: IO, silt.-r, m		
3	4.5	0.36	2.7	0.22	NNE : Calm : SSW	WSW : NW	0.9	0.05	178	IO, oc.-m.-r : IO	: IO, s, m.-r, m	IO, s, silt.-r, m	: IO, m, r		
4	1.4	0.11	1.0	0.08	WNW : SW	Var. : NW	3.5	0.10	235	I, m	: 9, r : IO, r, m	IO, r, silt.-glm, m	: IO, th.-cl, m : IO		
5	0.7	0.06	0.3	0.02	WNW : W	W : SW	3.5	0.41	423	IO	: IO : 8, cu, s, n, w	8, n, ci.-cu, w	: 9 : IO, oc.-r, w		
6	12.5	1.00	12.2	0.98	SW : NW	WNW	21.8	1.42	626	9, r, w	: IO, st.-w, oc.-slt.-r : 9, s, oc.-slt.-r, w	p.-cl, cu, cu.-n, w	: I, w : O		
7	10.2	0.81	9.8	0.78	WNW : W	NW : N	4.0	0.32	305	o, ho.-fr	: o, h, ho.-fr	o, h	: v.-cl : o, silt.-ho.-fr		
8	12.1	0.96	12.1	0.96	NW : N	N	6.1	0.51	364	o, silt.-ho.-fr	: I : I, cu, ci	I, cu, ci, h, w	: v.-cl, ho.-fr : p.-cl, s, ho.-fr		
9	..	..	..	..	N : Calm	Calm	1.0	0.02	108	I, ho.-fr	: I, m, ho.-fr : f, ho.-fr	silt.-f, h, ho.-fr	: IO : f, ho.-fr
10	12.5	1.00	12.5	1.00	Calm : SE	ESE : E ENE	1.0	0.02	148	I, m, ho.-fr	: I, m, ho.-fr : o, m	O	: o, silt.-m, ho.-fr : o, silt.-m, ho.-fr		
11	5.7	0.45	5.7	0.45	ENE : E	E : NE	3.8	0.23	270	o, ho.-fr	: o, ho.-fr, silt.-m	8, s.-cu, cu.-n	: IO, fq.-slt.-sn : 9, oc.-slt.-sn		
12	11.1	0.85	9.5	0.73	N : Calm	NNW : Calm	1.0	0.02	127	o, ho.-fr, m	: IO, s, m, ho.-fr	IO, m	: IO, m : IO, silt.-f, ho.-fr		
13	4.2	0.32	4.2	0.32	Calm : SW	Calm : S	0.8	0.02	158	th.-cl, ho.-fr	: o, ho.-fr : o, m, ho.-fr	I, s.-cu, m	: IO, oc.-slt.-sn, m		
14	8.5	0.65	8.4	0.65	S : SSE	SSE : SE : E	1.6	0.10	218	v.-cl, th.-cl	: 7, s.-cu, ci.-s	IO, s, n	: IO, th.-cl, lu.-ha : v.-cl, s.-cu		
15	11.8	0.91	11.2	0.86	E : Calm	SE	1.0	0.01	161	v.-cl, ho.-fr	: v.-cl, ho.-fr, m : IO, s, silt.-m	IO, s, n, oc.-m.-r, silt.-m	: v.-cl, ci.-cu, cu, hy.-d		
16	0.0	0.00	0.0	0.00	SSE : SE	SE	2.2	0.13	221	1, hy.-d	: IO, s, se, hy.-d, fq.-slt.-r	IO, s, oc.-slt.-r	: IO, r		
17	0.0	0.00	0.0	0.00	ESE : E	E : NE	2.7	0.18	269	IO, r	: IO	9, cu.-n	: 9, cu.-n		
18	0.0	0.00	0.0	0.00	NE	E : Calm	1.1	0.07	201	IO	: IO	9, cu.-s, n	: IO		
19	0.0	0.00	0.0	0.00	E : SE	E	2.2	0.16	231	IO	: IO, s	p.-cl, cu, cu.-n	: IO, n		
20	0.0	0.00	0.0	0.00	E : NE	NE	1.5	0.12	268	IO	: IO, n	IO	: IO, n		
21	2.2	0.17	1.6	0.12	E	SE : ESE	0.8	0.04	180	IO	: IO, m.-r.-sh : IO, n, s, fq.-sl.-r	IO, n, s, fq.-r	: IO, m.-r.-sh.		
22	9.3	0.71	7.7	0.60	Calm : ESE	Calm : ESE	0.2	0.00	118	IO, sh	: 9, m : IO, ci.-s, p.-so.-ha, m	IO, s, th.-cl, m, p.-so.-ha	: I, m : 8, th.-cl, hy.-d, m		
23	13.0	1.00	13.0	1.00	SE : Calm	SE : ESE	1.7	0.08	174	I, hy.-d	: 3, ci.-s, ci.-cu, hy.-d, m	8, ci.-cu, ci.-s	: I, m : O		
24	8.1	0.62	6.3	0.48	ESE : Calm	E : ESE	0.9	0.03	158	o, silt.-ho.-fr	: o, silt.-ho.-fr : 9, ci.-s	th.-cl, ci.-cu, s.-cu	: o, m, hy.-d		
25	0.0	0.00	0.0	0.00	Calm	Calm	0.2	0.00	92	IO, f, th.-cl, hy.-d	: IO, f, hy.-d	f	: tk.-f, hy.-d		
26	7.2	0.53	5.6	0.42	Calm : E	Calm : E	0.3	0.00	128	tk.-f	: tk.-f	f	: o, silt.-f, ho.-fr : tk.-f, ho.-fr		
27	0.0	0.00	0.0	0.00	Calm : E	Calm	0.1	0.00	84	o, tk.-f, ho.-fr	: tk.-f, ho.-fr	o, tk.-f, ho.-fr	: tk.-f, ho.-fr		
28	2.5	0.19	1.7	0.12	Calm	SSE : Calm	0.3	0.00	99	tk.-f, ho.-fr	: tk.-f, ho.-fr : o, f, ho.-fr	I, s, silt.-f	: 9, d, r, m		
29	4.8	0.35	3.8	0.28	Calm	Calm : SE	0.3	0.00	119	IO, m	: IO, m, silt.-sh : IO, n, s, m	9, cu, cu.-s	: I, ho.-fr : 9, s.-cu, ho.-fr		
30	0.2	0.01	0.0	0.00	SE : ESE	E	1.2	0.12	218	IO	: IO, s	p.-cl, ci.-s, silt.-m	: IO, m : IO, silt.-f		
Means	..	..	..	..	..	..	..	0.16	216				
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 37°.7, being 4°.2 lower than
 The mean *Temperature of the Dew Point* for the month was 35°.0, being 5°.0 lower than
 The mean *Degree of Humidity* for the month was 84.1, being 3.2 less than
 The mean *Elastic Force of Vapour* for the month was 0ⁱⁿ.204, being 0ⁱⁿ.043 less than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 28^{grs}.4, being 0^{grs}.4 less than
 The mean *Weight of a Cubic Foot of Air* for the month was 555 grains, being 7 grains greater than
 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 0.202. The maximum daily amount of *Sunshine* was 8.0 hours on November 10.
 The highest reading of the *Solar Radiation Thermometer* was 98°.6 on November 5; and the lowest reading of the *Terrestrial Radiation Thermometer* was 15°.0 on November 11.
 The *Proportions of Wind* referred to the cardinal points were N. 4, E. 8, S. 5, W. 4. Nine days were calm.
 The *Greatest Pressure of the Wind* in the month was 21.8 lbs. on the square foot on November 6. The mean daily *Horizontal Movement of the Air* for the month was 216 miles; the greatest daily value was 626 miles on November 6; and the least daily value was 84 miles on November 27.
Rain (0ⁱⁿ.005 or over) fell on 11 days in the month, amounting to 1ⁱⁿ.764, as measured by gauge No. 6 partly sunk below the ground; being 0ⁱⁿ.456 less than the average fall for the 65 years, 1841-1905.

the average for the 65 years, 1841-1905.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY, 1921.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	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. Mean of 24 Hourly Values.	Of the Dew Point. Deduced Mean Daily Value.	Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.								
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.			Highest in Sun's Rays.	Lowest on the Grass.									
Dec. 1	29.467	43.6	29.6	14.0	37.7	- 3.2	36.8	35.6	2.1	5.5	0.0	93	42.0	30.0	47.5	0.279	..	0.0	8.1
2	29.612	42.5	36.1	6.4	39.1	- 1.8	36.7	33.6	5.5	8.1	4.4	81	45.6	34.1	47.2	0.016	..	0.0	8.1
3	29.892	38.1	34.3	3.8	36.6	- 4.5	34.1	30.5	6.1	7.7	4.9	79	42.2	29.1	47.0	0.000	..	0.0	8.1
4	30.054	37.2	33.1	4.1	35.1	- 6.2	33.0	29.7	5.4	6.5	4.1	79	54.3	28.5	47.0	0.000	..	0.2	8.0
5	30.137	43.6	29.4	14.2	34.3	- 7.2	33.3	31.6	2.7	5.9	0.0	89	43.0	29.0	46.7	0.000	..	0.0	8.0
6	30.110	54.0	43.6	10.4	48.2	+ 6.7	46.9	45.5	2.7	6.2	0.0	91	66.6	41.4	46.9	0.000	..	0.4	8.0
7	30.036	52.9	44.5	8.4	49.1	+ 7.8	46.9	44.5	4.6	9.7	0.8	85	63.2	35.0	46.9	0.000	..	0.5	8.0
8	30.039	52.2	43.3	8.9	48.1	+ 7.1	46.3	44.3	3.8	6.3	1.8	87	57.8	37.3	46.8	0.000	..	0.0	7.9
9	30.095	54.2	48.9	5.3	51.5	+ 10.9	49.5	47.5	4.0	5.9	2.8	87	61.0	43.0	47.1	0.000	..	0.0	7.9
10	30.073	52.4	47.1	5.3	50.3	+ 9.9	48.1	45.8	4.5	8.1	1.9	85	58.6	40.1	47.0	0.000	..	0.0	7.9
11	29.995	49.0	44.3	4.7	47.7	+ 7.5	46.6	45.4	2.3	4.2	1.1	92	50.0	41.1	47.1	0.006	..	0.0	7.9
12	30.196	48.1	41.6	6.5	46.1	+ 5.8	44.6	42.9	3.2	4.2	1.3	90	56.9	33.0	47.4	0.000	..	0.0	7.8
13	30.138	46.1	37.7	8.4	42.4	+ 1.9	40.9	39.1	3.3	7.9	0.0	89	57.0	29.5	47.4	0.068	..	1.6	7.8
14	30.002	47.0	31.8	15.2	38.6	- 2.1	37.6	36.3	2.3	4.1	0.3	92	49.0	27.0	47.4	0.214	..	0.0	7.8
15	29.722	47.0	43.9	3.1	46.0	+ 5.2	44.6	43.0	3.0	4.3	1.5	90	46.0	40.1	47.4	0.013	..	0.0	7.8
16	29.936	49.1	37.7	11.4	43.7	+ 3.0	42.3	40.6	3.1	5.6	1.2	89	50.8	29.3	47.4	0.003	..	0.0	7.8
17	29.808	55.1	48.1	7.0	50.8	+ 10.4	48.3	45.7	5.1	8.8	0.8	83	66.0	40.3	47.3	0.000	..	4.0	7.8
18	29.893	55.9	48.4	7.5	51.5	+ 11.5	48.6	45.7	5.8	8.2	3.3	81	71.0	41.6	47.3	0.000	..	2.4	7.8
19	29.783	54.0	51.1	2.9	52.1	+ 12.6	49.4	46.7	5.4	7.2	4.2	82	63.9	46.9	47.4	0.000	..	0.1	7.8
20	29.649	53.9	41.6	12.3	46.9	+ 7.9	42.8	38.3	8.6	13.8	2.0	72	67.0	34.0	47.4	0.123	..	4.9	7.7
21	29.774	52.3	42.9	9.4	49.0	+ 10.3	45.3	41.3	7.7	10.4	6.1	75	67.6	35.8	47.8	0.000	..	0.5	7.7
22	29.503	52.2	39.8	12.4	47.9	+ 9.5	44.9	41.7	6.2	8.9	3.7	80	65.9	33.6	47.9	0.148	..	0.7	7.7
23	29.603	45.1	36.3	8.8	41.2	+ 3.0	38.6	35.4	5.8	8.2	2.6	80	57.8	32.6	47.4	0.080	..	1.6	7.7
24	30.058	37.8	33.2	4.6	35.4	- 2.8	31.6	25.7	9.7	12.8	3.1	66	51.3	28.2	47.3	0.010	..	3.5	7.7
25	29.903	50.7	31.8	18.9	42.4	+ 4.0	41.0	39.3	3.1	6.0	0.0	89	51.3	27.8	47.5	0.079	..	0.0	7.8
26	29.982	50.2	29.3	20.9	40.0	+ 1.4	38.5	36.6	3.4	6.6	0.0	88	62.5	27.5	47.0	0.009	..	3.0	7.8
27	29.715	53.9	44.1	9.8	49.3	+ 10.5	46.8	44.1	5.2	8.4	2.7	83	66.6	35.9	46.9	0.188	..	1.9	7.8
28	29.592	57.4	39.2	18.2	50.9	+ 12.0	46.8	42.5	8.4	14.8	3.8	74	57.9	30.9	47.0	0.053	..	1.6	7.8
29	29.979	45.1	37.4	7.7	40.6	+ 1.6	37.2	32.9	7.7	10.3	5.4	74	60.8	30.0	46.9	0.000	..	1.0	7.8
30	29.771	53.9	36.8	17.1	46.7	+ 7.8	43.5	39.9	6.8	11.0	4.1	78	62.0	30.0	46.8	0.088	..	0.0	7.8
31	30.003	49.1	38.7	10.4	43.6	+ 4.9	39.4	34.4	9.2	13.7	4.7	70	55.2	30.3	46.6	0.004	..	0.6	7.8
Means	29.888	49.1	39.5	9.6	44.6	+ 4.7	42.3	39.6	5.1	8.0	2.3	83.0	57.1	34.0	47.2	Sum 1.381	..	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.

The mean reading of the Barometer for the month was 29.888, being 0.103 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 57.4 on December 28; the lowest in the month was 29.3 on December 26; and the range was 28.1. The mean of all the highest daily readings in the month was 49.1, being 4.9 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 39.5, being 4.5 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 9.6, being 0.4 greater than the average for the 65 years 1841-1905. The mean for the month was 44.6, being 4.7 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1921.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.				CLOUDS AND WEATHER.						
	POLARIS.		δ URSAE. MINORIS.		OSLER'S.				ROBINSON'S.						
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.	A.M.		P.M.	
					A.M.	P.M.									
Dec. 1	0.0	0.00	0.0	0.00	E	E : ENE	lbs. 2.9	lbs. 0.21	miles. 292	IO, oc.-f	: IO, r	: IO, r	IO, s, oc.-slt.-r	: 9, cu, oc.-m.-r	
2	0.0	0.00	0.0	0.00	ENE : E	E : ENE	4.2	0.52	453	IO	: IO, m.-r, r	: IO, n, fq.-m.-r	IO, n	: IO, oc.-m.-r : IO, n	
3	0.8	0.06	0.8	0.06	ENE : NE	ENE	4.2	0.50	402	IO	: IO	: IO, s, n, oc.-w	9, n	: IO : IO	
4	0.4	0.03	0.1	0.01	ENE : E	E : ENE : Calm	2.1	0.20	259	IO	: 9, n		9	: IO : IO	
5	0.0	0.00	0.0	0.00	Calm : WSW	SW	0.9	0.03	194	IO	: IO, s		IO, s	: IO, m : IO	
6	0.0	0.00	0.0	0.00	SW	SW	2.8	0.16	277	IO	: IO, s.-cu, n, m		IO, s, n, m	: IO, s, n, m	
7	3.0	0.22	1.4	0.10	WSW : W	W	2.9	0.21	355	IO	: IO, s, m		3, s.-cu, cu	: IO, th.-cl	
8	1.9	0.14	0.9	0.06	WSW : W	WSW	2.2	0.15	335	IO	: IO, oc.-m.-r, m	: IO, th.-s, slt.-m, p.-so.-ha	IO, th.-s, n, slt.-m	: 9, th.-cl, d : IO, s, n, d	
9	2.0	0.15	1.0	0.07	WSW : NW : W	W : WSW	1.2	0.09	248	IO	: 9, s, th.-cl, m		IO, s, th.-cl, m, d	: IO, th.-cl, slt.-m, d	
10	0.0	0.00	0.0	0.00	W	WSW	0.8	0.02	205	9, slt.-m, d	: 9, m, d	: 9, s.-cu, n, m	IO, cu.-s, m	: IO, slt.-d	
11	0.0	0.00	0.0	0.00	Calm : N	N	0.7	0.01	135	9	: IO, n, slt.-m		IO, n, m.-r, slt.-m	: IO, n, slt.-m	
12	2.9	0.21	2.2	0.16	N : Calm : WSW	Calm	0.6	0.00	107	IO	: IO, m, slt.-glm		IO, s, m	: IO, m	
13	10.5	0.76	10.3	0.75	Calm : N	N	1.9	0.17	216	IO, r	: IO, n, s, m, fq.-slt.-r		1, cu, ci.-cu, slt.-m	: 1, h, d, slt.-m : 1, h, d, slt.-m	
14	0.0	0.00	0.0	0.00	NNW : WSW	SSW	1.8	0.10	242	1, f, ho.-fr	: f, ho.-fr		IO, slt.-m	: IO, slt.-sh : IO, r	
15	0.5	0.03	0.1	0.01	NW : N	N	2.0	0.18	267	IO	: IO, s, oc.-m.-r, m		IO, s, n, m	: IO, n, sh, m.-r : IO, n	
16	2.2	0.16	1.6	0.12	N : Calm : WSW	SW : WSW	1.7	0.14	258	IO	: IO, n, s, m, slt.-sh		IO, s, oc.-slt.-r	: IO, oc.-m.-r : 9	
17	..	..	..	..	WSW : W	W	5.4	0.61	552	IO	: IO, w		3, ci.-s.-cu, w	: 3, w : IO
18	0.9	0.07	0.4	0.03	W	W : WSW	3.5	0.50	493	IO, w	: v.-cl, w	: 9, s, cu.-s	9, w	: IO	
19	3.0	0.22	2.0	0.15	WSW	WSW : SW	5.9	0.68	519	IO	: IO, w	: IO, sc, w	9, sc, w	: 9, fq.-m.-r, w : 9, s, sc, oc.-m.-r, w	
20	9.0	0.66	8.3	0.61	SW : WSW : W	W : WSW	8.2	0.95	621	9, sh, w	: 9, w	: 2, cu, n, w	1, cu, cu.-s, w	: 1, w	
21	5.2	0.38	3.8	0.28	WSW	WSW : SW	6.8	0.94	625		9, w		9, w	: v.-cl, s.-cu, w	
22	10.0	0.73	9.4	0.69	SW	SW : WSW	4.8	0.68	489	9, w	: 9	: 9, s.-cu, n, w	IO, s, n, r, w	: v.-cl : v.-cl, cu, w	
23	9.1	0.66	8.3	0.60	WSW : W	WNW : N	4.9	0.49	127	1, w	: v.-cl, sh, m		9, s.-cu	: 9, hy.-sh, fq.-m.-r, r : 2	
24	0.0	0.00	0.0	0.00	N	NNW : SW	4.3	0.25	319		o, ho.-fr		7, cu, s.-cu	: IO : IO, fq.-m.-r	
25	5.1	0.36	3.6	0.26	SSW : SW : N	N : Calm	4.0	0.27	305	IO, fq.-m.-r	: IO, s, n, r, glm		8, ci.-cu, cu, th.-cl	: 8, th.-cl, m : 5, m, ho.-fr	
26	1.1	0.08	1.0	0.07	Calm : SSW	SSW	4.9	0.35	358	f	: f, oc.-m.-r	: o, f, d	9, s.-cu	: 9, w : IO, fq.-m.-r, w	
27	1.9	0.14	1.4	0.10	SW : W	SW : SSW	6.1	0.62	474	IO, m.-r, r, w	: 5, w, r	: 9, sc, cu.-n, ci	9, sc, cu.-n, ci	: p.-cl, th.-cl : 9, w, m.-r	
28	12.4	0.89	11.8	0.84	SW : WSW	W	14.3	1.57	757	IO, oc.-m.-r, w, g	: IO, sc, fq.-slt.-r, w, g		v.-cl, s, sc, oc.-slt.-r, w	: o, w : o, w	
29	6.8	0.48	5.7	0.41	W : WSW	WNW : W	6.5	0.43	418	o, ho.-fr	: v.-cl, th.-cl, ho.-fr	: 8, s, s.-cu, p.-so.-ha	8, cu, cu.-n, w	: o, w : o	
30	4.4	0.31	4.1	0.29	WSW : SW	WSW : W	16.2	1.35	715	IO	: IO, oc.-r, w	: IO, sc, oc.-r, w	IO, sc, oc.-slt.-r, g	: IO, r, g : 4, sc, sh, g	
31	7.0	0.50	6.1	0.44	N : NNW	NW : WSW	11.0	0.80	467	IO, w	: IO, sh	: v.-cl, th.-cl, s.-cu, so.-ha	1, h	: th.-cl : o	
Means	..	..	..	..	..	..	..	0.43	380					
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 42°.3, being 3°.8 higher than
 The mean *Temperature of the Dew Point* for the month was 39°.6, being 2°.9 higher than
 The mean *Degree of Humidity* for the month was 83.0, being 5.6 less than
 The mean *Elastic Force of Vapour* for the month was 0^m.243, being 0^m.025 greater than
 The mean *Weight of Vapour in a Cubic Foot of Air* for the month was 2.8^{grs.}, being 0.28^{grs.} greater than
 The mean *Weight of a Cubic Foot of Air* for the month was 549 grains, being 3 grains less than
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.9.
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.117. The maximum daily amount of *Sunshine* was 4.9 hours on December 20.
 The highest reading of the *Solar Radiation Thermometer* was 71°.0 on December 18; and the lowest reading of the *Terrestrial Radiation Thermometer* was 27°.0 on December 14.
 The *Proportions of Wind* referred to the cardinal points were N. 5, E. 3, S. 6, W. 14. Three days were calm.
 The *Greatest Pressure of the Wind* in the month was 16.2 lbs. on the square foot on December 30. The mean daily *Horizontal Movement of the Air* for the month was 380 miles; the greatest daily value was 757 miles on December 28; and the least daily value was 107 miles on December 12.
Rain (0^m.005 or over) fell on 15 days in the month, amounting to 1^m.381, as measured by gauge No. 6 partly sunk below the ground; being 0^m.446 less than the average fall for the 65 years, 1841-1905.

} the average 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, 1921.	Reading.	Greenwich Civil Time, 1921.	Reading.	Greenwich Civil Time, 1921.	Reading.	Greenwich Civil Time, 1921.	Reading.	Greenwich Civil Time, 1921.	Reading.	Greenwich Civil Time, 1921.	Reading.
January.		January.		May.		May.		September.		September.	
d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.
1. 10. 0	29·815	2. 12. 10	29·531	10. 21. 50	29·882	11. 12. 0	29·788	22. 11. 0	30·236	23. 17. 0	30·117
3. 11. 25	30·046	5. 1. 5	29·677	15. 23. 0	30·076	17. 17. 0	29·808	25. 9. 0	30·236	26. 4. 5	30·122
5. 22. 45	29·969	7. 14. 45	29·602	18. 9. 0	29·937	19. 17. 10	29·813	27. 10. 50	30·277		
8. 10. 20	29·865	9. 6. 0	29·668	21. 8. 0	30·177	28. 12. 10	29·562				
9. 22. 0	29·793	10. 20. 20	29·347	29. 21. 0	29·667	30. 9. 10	29·504				
11. 10. 45	29·656	13. 5. 20	29·064					October.		October.	
16. 10. 20	30·388	18. 11. 0	29·250	June.		June.		4. 22. 10	29·919	2. 15. 15	29·584
21. 10. 40	30·318	22. 13. 50	29·910	2. 1. 0	30·210	5. 16. 45	29·877	8. 8. 0	29·958	6. 16. 5	29·785
23. 11. 0	30·154	24. 7. 0	29·909	6. 8. 30	29·956	8. 16. 10	29·627	12. 22. 20	30·161	9. 16. 20	29·659
25. 3. 50	30·039	26. 22. 30	29·706	9. 9. 15	29·858	10. 1. 55	29·669	15. 9. 0	30·419	14. 3. 0	29·975
27. 22. 20	30·125	31. 8. 45	29·033	12. 8. 20	30·129	13. 10. 0	29·945	21. 9. 0	30·019	19. 5. 20	29·879
February.		February.		16. 10. 15	30·265	17. 18. 10	29·989	26. 10. 20	30·356	22. 20. 5	29·417
4. 8. 0	29·934	5. 3. 40	29·776	18. 11. 0	30·095	20. 4. 10	29·825	30. 21. 0	30·218	29. 15. 40	30·035
10. 2. 0	30·513	14. 6. 10	30·052	24. 6. 0	30·122	26. 17. 15	29·773	November.		November.	
14. 23. 40	30·232	17. 16. 45	29·927	28. 8. 30	30·161	30. 17. 50	29·969	1. 22. 20	30·068	1. 8. 0	29·900
19. 11. 20	30·206	22. 4. 0	29·917	July.		July.		3. 1. 40	29·902	2. 18. 40	29·823
27. 0. 0	30·658	March.		1. 8. 0	30·046	1. 17. 55	29·968	5. 18. 10	29·630	4. 15. 0	29·352
March.		2. 5. 50	29·948	2. 8. 0	30·065	3. 17. 0	29·995	10. 10. 40	30·439	6. 5. 35	29·065
3. 1. 35	30·187	4. 7. 5	29·710	5. 9. 10	30·138	6. 22. 20	29·985	17. 23. 0	30·011	16. 14. 45	29·639
4. 23. 50	29·800	6. 15. 0	29·459	9. 9. 0	30·123	16. 5. 15	29·731	22. 21. 40	30·137	19. 6. 0	29·845
7. 19. 10	30·062	10. 17. 0	29·490	21. 8. 5	30·159	23. 19. 55	29·600	27. 23. 5	29·943	26. 15. 5	29·840
11. 23. 0	29·665	13. 17. 0	29·563	27. 7. 0	29·895	29. 6. 25	29·118	December.		December.	
17. 9. 0	30·183	18. 4. 0	29·818	30. 8. 5	29·913	August.		August.		1. 14. 15	29·437
18. 21. 25	30·086	20. 14. 20	29·779	August.		2. 8. 0	29·601	5. 10. 0	30·167	7. 5. 0	29·973
21. 10. 0	30·059	22. 3. 0	29·982	4. 8. 25	29·914	6. 3. 25	29·482	7. 23. 45	30·105	8. 13. 50	29·987
24. 9. 55	30·209	29. 15. 55	29·200	7. 7. 15	29·828	7. 21. 15	29·636	9. 19. 5	30·142	11. 5. 30	29·863
April.		April.		8. 10. 0	29·873	11. 4. 25	29·399	12. 10. 0	30·246	13. 6. 0	30·077
1. 11. 0	30·221	3. 16. 40	29·749	14. 9. 0	29·873	17. 5. 0	29·533	13. 23. 40	30·220	15. 5. 25	29·642
7. 23. 0	30·272	10. 5. 5	29·839	18. 22. 0	29·971	21. 8. 25	29·515	16. 9. 5	30·011	17. 8. 5	29·738
11. 8. 0	30·036	14. 5. 5	29·437	26. 8. 25	29·987	29. 4. 55	29·579	18. 10. 20	29·944	20. 4. 20	29·531
16. 9. 0	29·614	17. 11. 0	29·119	31. 0. 20	30·071	September.		20. 23. 45	29·848	22. 20. 5	29·359
19. 23. 0	30·072	21. 16. 0	29·844	September.		2. 4. 10	29·671	24. 17. 35	30·116	25. 10. 0	29·793
22. 10. 0	29·968	23. 15. 20	29·788	3. 7. 20	29·951	4. 18. 0	29·873	26. 2. 35	30·067	27. 4. 20	29·624
26. 9. 25	30·070	27. 16. 50	29·921	6. 9. 5	30·062	10. 3. 40	29·556	30. 0. 10	30·227	30. 23. 25	29·340
29. 21. 0	30·192	May.		11. 9. 0	29·761	12. 0. 40	29·177	31. 19. 45	30·267		
May.		4. 16. 0	29·382	12. 21. 10	29·834	13. 7. 0	29·654				
5. 21. 0	29·742	8. 5. 0	29·270	18. 10. 0	30·137	20. 3. 0	29·936				

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^a to 24^a. 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 1921.

	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.....	30·388	30·658	30·209	30·272	30·177	30·265	30·159	30·071	30·277	30·419	30·439	30·267
Lowest.....	29·033	29·248	29·200	29·119	29·270	29·627	29·118	29·399	29·177	29·417	29·065	29·340
Range.....	1·355	1·410	1·009	1·153	0·907	0·638	1·041	0·672	1·100	1·002	1·374	0·927

The highest reading in the year was 30ⁱⁿ.658. The lowest reading in the year was 29ⁱⁿ.033. The range of reading in the year was 1ⁱⁿ.625.

MONTHLY RESULTS of METEOROLOGICAL ELEMENTS for the YEAR 1921.

MONTH, 1921.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR.								Mean Temperature of Evaporation.	Mean Temper- ature of the Dew Point.	Mean Degree of Humidity. (Saturation = 100).
		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.			
January	29.808	56.1	29.1	27.0	50.0	41.0	9.0	46.1	+ 7.6	44.0	41.5	84.6
February	30.107	61.6	26.6	35.0	47.8	35.0	12.8	41.0	+ 1.4	38.5	35.4	81.1
March	29.881	67.3	27.3	40.0	55.2	38.0	17.2	46.1	+ 4.2	42.5	38.4	75.1
April	29.931	72.9	28.1	44.8	59.3	38.7	20.6	47.9	+ 0.6	43.6	38.9	71.7
May	29.786	77.0	33.6	43.4	66.8	43.9	22.9	54.6	+ 1.5	49.5	44.7	70.1
June	29.988	85.9	37.3	48.6	71.8	48.8	23.0	59.9	+ 0.4	53.5	48.1	65.7
July	29.887	94.0	44.5	49.5	81.6	55.4	26.2	67.6	+ 4.9	59.3	52.8	59.7
August	29.750	82.0	40.3	41.7	74.2	53.4	20.8	62.7	+ 1.0	56.9	52.1	68.9
September	29.949	87.9	37.3	50.6	71.5	49.3	22.2	59.7	+ 2.5	54.5	49.8	70.3
October	29.998	84.4	34.5	49.9	67.8	47.0	20.8	56.3	+ 6.4	52.6	49.2	77.6
November	29.901	58.0	25.3	32.7	45.3	34.6	10.7	39.6	- 3.9	37.7	35.0	84.1
December	29.888	57.4	29.3	28.1	49.1	39.5	9.6	44.6	+ 4.7	42.3	39.6	83.0
Means	29.906	Highest 94.0	Lowest 25.3	Annual Range 68.7	61.7	43.7	18.0	52.2	+ 2.6	47.9	43.8	74.3

MONTH, 1921.	Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean Weight of a Cubic Foot of Air.	Mean Tempera- ture at Noon of the Earth 4 feet below the surface of the soil.	Mean Amount of Cloud (0-10.)	RAIN.		WIND.										
						Number of Rainy Days (0.1.005 or over).	Amount collected in Gauge No. 6, whose receiving Surface is 5 inches above the Ground.	From Osler's Anemometer.								Number of Calm or nearly Calm Hours.	Mean Daily Pressure on the Square Foot.	From Robin- son's Anemo- meter. Mean Daily Horizontal Movement of the Air.
								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.			
January	0.262	3.1	545	46.0	8.1	18	1.739	17	15	0	0	79	320	213	52	48	0.50	394
February	0.207	2.4	557	44.5	7.1	5	0.124	81	105	92	57	37	46	65	21	168	0.14	226
March	0.232	2.7	547	44.7	6.6	17	1.209	29	10	0	2	138	335	136	63	31	0.35	340
April	0.237	2.7	546	46.3	5.2	9	1.196	150	150	96	14	19	74	49	49	119	0.25	267
May	0.296	3.3	536	49.2	6.2	16	1.254	108	83	50	20	94	170	47	24	148	0.17	230
June	0.336	3.8	534	53.4	6.6	5	0.445	148	141	60	5	5	30	63	100	168	0.24	250
July	0.400	4.4	524	57.7	5.5	3	0.150	103	39	92	18	25	175	53	18	221	0.20	217
August	0.389	4.3	527	59.4	6.9	10	0.683	51	48	24	8	50	208	157	52	146	0.24	251
September	0.358	4.0	533	58.6	5.2	5	1.815	45	55	89	22	27	114	82	26	260	0.17	206
October	0.351	3.9	538	56.6	5.2	8	0.799	67	3	7	36	61	150	83	55	282	0.13	195
November	0.204	2.4	555	50.7	6.8	11	1.764	49	59	122	117	32	40	52	40	209	0.16	216
December	0.243	2.8	549	47.2	7.9	15	1.381	88	32	60	0	20	242	206	34	62	0.43	380
Sums .....	..	..	..	..	..	122	12.559	936	740	692	299	587	1904	1206	534	1862	..	..
Means	0.293	3.3	541	51.2	6.4	..	..	..	..	..	..	..	..	..	..	..	0.25	264

The greatest recorded pressure of the wind on the square foot in the year was 21.8 lbs. on November 6.
 The greatest recorded daily horizontal movement of the air in the year was 895 miles on January 18.
 The least recorded daily horizontal movement of the air in the year was 68 miles on July 17.

MONTHLY MEAN READING of the BAROMETER at every HOUR of the DAY, as deduced from the PHOTOGRAPHIC RECORDS.														
Hour, Greenwich Civil Time.	1921.												Yearly Means.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
Midnight	in. 29·818	in. 30·097	in. 29·885	in. 29·942	in. 29·800	in. 29·996	in. 29·898	in. 29·754	in. 29·951	in. 30·001	in. 29·919	in. 29·885	in. 29·912	
1 ^h	29·815	30·095	29·883	29·938	29·795	29·992	29·895	29·750	29·946	30·001	29·915	29·879	29·909	
2	29·816	30·093	29·879	29·931	29·789	29·988	29·892	29·744	29·946	29·997	29·911	29·879	29·905	
3	29·815	30·089	29·875	29·926	29·785	29·984	29·889	29·740	29·944	29·993	29·905	29·877	29·902	
4	29·812	30·087	29·873	29·924	29·784	29·984	29·887	29·739	29·940	29·993	29·901	29·872	29·900	
5	29·806	30·087	29·875	29·926	29·788	29·987	29·888	29·739	29·941	29·955	29·896	29·869	29·900	
6	29·805	30·089	29·883	29·933	29·792	29·991	29·893	29·743	29·948	29·997	29·896	29·870	29·903	
7	29·808	30·097	29·889	29·940	29·796	29·996	29·898	29·751	29·955	30·005	29·900	29·877	29·909	
8	29·814	30·107	29·897	29·942	29·798	29·998	29·903	29·755	29·961	30·015	29·906	29·885	29·915	
9	29·821	30·116	29·902	29·944	29·797	29·998	29·902	29·758	29·967	30·020	29·910	29·895	29·919	
10	29·824	30·119	29·902	29·941	29·794	29·998	29·900	29·759	29·967	30·020	29·912	29·899	29·920	
11	29·818	30·122	29·898	29·938	29·788	29·996	29·896	29·758	29·962	30·014	29·909	29·898	29·916	
Noon	29·811	30·116	29·893	29·931	29·784	29·992	29·890	29·753	29·957	30·003	29·897	29·888	29·910	
13 ^h	29·803	30·110	29·884	29·925	29·780	29·986	29·884	29·751	29·949	29·993	29·889	29·880	29·903	
14	29·795	30·100	29·873	29·918	29·775	29·981	29·878	29·748	29·941	29·984	29·883	29·876	29·896	
15	29·797	30·096	29·865	29·912	29·770	29·974	29·872	29·745	29·936	29·978	29·882	29·878	29·892	
16	29·796	30·096	29·861	29·910	29·766	29·971	29·866	29·743	29·932	29·976	29·885	29·883	29·890	
17	29·800	30·101	29·862	29·911	29·764	29·966	29·862	29·741	29·932	29·978	29·888	29·891	29·891	
18	29·801	30·111	29·869	29·917	29·767	29·969	29·864	29·741	29·936	29·987	29·894	29·895	29·896	
19	29·805	30·118	29·878	29·927	29·774	29·976	29·868	29·746	29·945	29·992	29·898	29·902	29·902	
20	29·805	30·121	29·881	29·936	29·784	29·984	29·878	29·756	29·953	29·998	29·902	29·906	29·909	
21	29·805	30·126	29·884	29·943	29·793	29·997	29·890	29·760	29·956	30·004	29·907	29·908	29·914	
22	29·805	30·133	29·883	29·942	29·796	29·999	29·894	29·760	29·955	30·006	29·908	29·907	29·916	
23	29·804	30·134	29·882	29·942	29·796	30·001	29·894	29·760	29·950	30·007	29·906	29·907	29·915	
24	29·804	30·134	29·882	29·940	29·794	30·000	29·892	29·758	29·946	30·007	29·904	29·907	29·914	
Means	{ 0 ^h .-23 ^h .	29·808	30·107	29·881	29·931	29·786	29·988	29·887	29·750	29·949	29·998	29·901	29·888	29·906
	{ 1 ^h .-24 ^h .	29·807	30·108	29·881	29·931	29·786	29·988	29·886	29·750	29·948	29·998	29·900	29·889	29·906
Number of Days employed	31	28	31	30	31	30	31	31	30	31	30	31	..	

MONTHLY MEAN TEMPERATURE of the AIR at every HOUR of the DAY, as deduced from the PHOTOGRAPHIC RECORDS.														
Hour, Greenwich Civil Time.	1921.												Yearly Means.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
Midnight	45·6	38·7	42·6	42·8	47·8	53·5	59·6	57·7	54·6	52·1	38·6	43·6	48·1	
1 ^h	45·4	38·5	42·1	42·2	47·3	52·6	58·7	57·1	53·6	51·3	38·1	43·3	47·5	
2	45·1	38·2	41·7	41·5	46·6	52·2	57·7	56·6	52·9	50·7	37·9	43·3	47·0	
3	45·2	37·7	41·1	41·2	46·1	51·4	57·2	56·1	52·2	50·0	37·6	43·3	46·6	
4	44·8	37·3	40·6	40·9	45·8	50·6	56·7	55·6	52·0	49·6	37·5	43·3	46·2	
5	44·7	37·1	39·9	40·9	46·2	51·5	57·4	55·5	51·7	49·5	37·3	43·5	46·3	
6	44·7	37·1	40·1	41·4	48·8	54·0	60·2	56·9	52·1	49·3	37·3	43·6	47·1	
7	44·9	37·1	41·0	43·6	52·2	56·9	63·7	59·3	54·5	50·1	37·4	43·7	48·7	
8	45·1	37·6	43·7	46·2	55·2	59·6	67·3	62·1	57·9	52·6	37·8	43·8	50·7	
9	45·8	39·5	46·6	49·0	57·8	61·8	70·8	64·1	61·1	56·3	38·7	44·2	53·0	
10	46·9	41·7	49·2	51·4	59·6	63·8	73·3	66·7	64·2	59·6	40·3	44·9	55·1	
11	47·6	43·7	50·9	53·7	61·1	65·8	75·2	68·5	66·3	62·5	41·7	45·6	56·9	
Noon	48·0	45·3	51·8	55·0	62·5	67·2	76·6	70·1	68·3	64·5	42·6	46·3	58·2	
13 ^h	48·4	46·2	52·3	55·9	62·9	67·7	77·5	70·1	69·1	65·5	43·4	46·7	58·8	
14	48·5	46·6	52·8	56·4	62·9	68·3	78·0	70·3	69·1	65·9	43·7	46·7	59·1	
15	47·9	46·2	52·6	56·0	62·5	68·3	77·5	70·2	68·7	65·4	43·0	46·3	58·7	
16	47·4	45·4	51·8	55·0	61·9	68·1	76·9	69·5	67·8	63·8	41·8	45·7	57·9	
17	46·5	44·1	50·6	54·0	60·7	67·1	75·8	68·0	66·0	61·4	40·7	45·4	56·7	
18	46·1	42·5	48·8	51·7	59·4	65·3	73·8	66·2	63·4	58·6	39·9	45·0	55·1	
19	45·7	41·7	47·1	49·2	56·8	62·9	70·9	64·2	60·9	56·8	39·4	44·8	53·4	
20	45·6	41·0	46·0	47·3	54·0	60·3	67·7	62·1	59·0	55·7	39·3	44·7	51·9	
21	45·6	40·5	45·1	45·7	52·2	57·5	65·0	60·5	57·3	54·4	38·9	44·5	50·6	
22	45·4	40·1	44·3	44·4	50·6	55·8	62·9	59·1	56·0	53·7	38·7	44·2	49·6	
23	45·4	39·4	43·7	43·3	49·0	54·5	61·3	58·2	54·9	52·9	38·3	44·0	48·7	
24	45·2	38·9	42·7	42·8	48·1	53·4	60·1	57·4	54·2	52·4	37·8	43·9	48·1	
Means	{ 0 ^h .-23 ^h .	46·1	41·0	46·1	47·9	54·6	59·9	67·6	62·7	59·7	56·3	39·6	44·6	52·2
	{ 1 ^h .-24 ^h .	46·0	41·0	46·1	47·9	54·6	59·8	67·6	62·7	59·7	56·3	39·6	44·6	52·2
Number of Days employed	31	28	31	30	31	30	31	31	30	31	30	31	..	

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

Hour, Greenwich Civil Time.	1921.												Yearly Means.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
Midnight	43.6	37.0	40.6	40.6	45.7	50.3	55.8	54.8	52.2	50.3	36.9	41.7	45.8	
1 ^h	43.4	36.8	40.3	40.2	45.4	50.0	55.3	54.7	51.5	49.7	36.6	41.5	45.5	
2	43.1	36.5	39.9	39.7	44.9	49.8	54.8	54.4	50.9	49.1	36.4	41.5	45.1	
3	43.1	36.2	39.4	39.4	44.6	49.4	54.6	54.2	50.5	48.7	36.1	41.5	44.8	
4	42.8	35.8	39.0	39.1	44.4	48.8	54.5	53.8	50.2	48.4	36.2	41.2	44.5	
5	42.7	35.6	38.6	39.1	44.7	49.5	55.0	53.8	50.1	48.4	36.0	41.5	44.6	
6	42.8	35.7	38.6	39.7	46.5	51.1	56.6	54.7	50.4	48.4	36.0	41.6	45.2	
7	43.1	35.8	39.2	41.3	48.7	52.5	58.3	56.1	52.0	49.2	36.1	41.8	46.2	
8	43.3	36.4	41.1	43.1	50.4	53.6	59.8	57.6	53.9	51.2	36.3	41.9	47.4	
9	44.0	37.8	43.1	44.8	51.7	54.6	61.4	58.2	55.9	53.5	37.1	42.2	48.7	
10	44.9	39.1	44.5	46.0	52.3	55.5	61.9	59.0	57.2	55.2	38.2	42.7	49.7	
11	45.5	40.6	45.4	47.2	53.0	56.3	62.6	59.4	57.7	56.5	39.1	43.0	50.5	
Noon	45.6	41.4	45.7	47.7	53.7	57.0	63.0	59.9	58.4	56.7	39.7	43.4	51.0	
13 ^h	45.7	41.8	45.8	48.1	53.8	57.2	63.1	59.7	58.5	57.0	40.2	43.6	51.2	
14	45.6	42.2	46.2	48.2	54.1	57.2	63.1	59.9	58.4	57.1	40.6	43.5	51.3	
15	45.3	41.9	46.0	48.1	53.7	57.2	62.9	59.7	58.2	56.9	40.1	43.3	51.1	
16	44.7	41.4	45.6	47.5	53.5	57.2	62.5	59.2	57.9	56.3	39.3	43.0	50.7	
17	44.2	40.6	45.1	46.9	52.8	56.8	62.2	58.7	57.3	55.4	38.6	42.8	50.1	
18	43.8	39.7	44.2	45.7	52.0	56.2	61.8	58.2	56.3	54.3	38.1	42.7	49.4	
19	43.6	39.2	43.4	44.4	50.7	55.2	60.8	57.5	55.5	53.5	37.7	42.6	48.7	
20	43.6	38.8	42.9	43.5	49.5	54.0	59.9	56.8	54.6	52.8	37.6	42.4	48.0	
21	43.6	38.3	42.2	42.5	48.4	52.6	58.8	56.0	53.8	52.1	37.3	42.2	47.3	
22	43.5	38.0	41.8	41.6	47.5	51.7	57.8	55.5	53.0	51.4	37.0	42.0	46.7	
23	43.5	37.6	41.4	41.0	46.5	50.9	56.9	55.1	52.3	50.9	36.8	42.0	46.2	
24	43.2	37.2	40.7	40.6	45.9	50.3	56.2	54.6	51.9	50.4	36.2	42.0	45.8	
Means.	0 ^h .-23 ^h .	44.0	38.5	42.5	43.6	49.5	53.5	59.3	56.9	54.4	52.6	37.7	42.3	47.9
	1 ^h .-24 ^h .	44.0	38.5	42.5	43.6	49.5	53.6	59.3	56.9	54.5	52.6	37.7	42.3	47.9
Number of Days employed	31	28	31	30	31	30	31	31	30	31	30	31	..	

MONTHLY MEAN TEMPERATURE of the DEW POINT at every HOUR of the DAY, as deduced by GLAISHER'S TABLES from the corresponding AIR and EVAPORATION TEMPERATURES.

Hour, Greenwich Civil Time.	1921.												Yearly Means.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
Midnight	41.3	34.7	38.2	38.0	43.4	47.2	52.4	52.2	49.9	48.5	34.6	39.5	43.3	
1 ^h	41.1	34.5	38.1	37.7	43.3	47.4	52.2	52.5	49.5	48.1	34.5	39.4	43.2	
2	40.8	34.2	37.6	37.4	43.0	47.4	52.2	52.4	48.9	47.4	34.4	39.4	42.9	
3	40.7	34.2	37.3	37.1	42.9	47.4	52.2	52.4	48.8	47.3	34.1	39.4	42.8	
4	40.5	33.7	37.0	36.8	42.8	46.9	52.5	52.1	48.4	47.1	34.4	38.7	42.6	
5	40.4	33.5	36.9	36.8	43.0	47.5	52.8	52.2	48.5	47.2	34.2	39.2	42.7	
6	40.6	33.7	36.7	37.6	44.1	48.3	53.5	52.7	48.7	47.4	34.2	39.3	43.1	
7	41.0	34.0	36.9	38.6	45.1	48.5	53.8	53.2	49.5	48.2	34.3	39.6	43.6	
8	41.2	34.8	38.1	39.6	45.8	48.3	53.8	53.8	50.3	49.8	34.3	39.7	44.1	
9	41.9	35.6	39.1	40.3	46.2	48.4	54.2	53.3	51.4	50.9	34.9	39.8	44.7	
10	42.7	35.9	39.5	40.4	45.9	48.6	53.5	52.8	51.4	51.3	35.5	40.2	44.8	
11	43.2	37.0	39.7	40.8	45.9	48.6	53.6	52.3	50.7	51.4	35.9	40.0	44.9	
Noon	43.0	36.9	39.5	40.7	46.2	48.9	53.4	52.1	50.6	50.3	36.2	40.1	44.8	
13 ^h	42.8	36.8	39.2	40.8	46.1	48.9	53.1	51.7	50.2	50.0	36.4	40.1	44.7	
14	42.5	37.2	39.6	40.6	46.6	48.5	52.8	51.9	50.1	50.0	36.9	39.9	44.7	
15	42.4	37.0	39.4	40.7	46.2	48.5	52.7	51.6	50.0	49.9	36.6	39.9	44.6	
16	41.7	36.8	39.3	40.3	46.2	48.6	52.4	51.2	50.1	50.1	36.2	39.9	44.4	
17	41.6	36.5	39.4	39.9	45.9	48.6	52.5	51.4	50.2	50.2	35.9	39.8	44.3	
18	41.2	36.3	39.2	39.6	45.5	49.1	53.1	51.7	50.4	50.4	35.8	40.0	44.4	
19	41.2	36.1	39.2	39.2	45.1	48.6	53.0	51.9	50.8	50.4	35.5	40.0	44.3	
20	41.3	36.0	39.4	39.2	45.1	48.4	53.7	52.2	50.6	50.1	35.4	39.7	44.3	
21	41.3	35.5	38.8	38.8	44.5	48.1	53.7	52.1	50.6	49.8	35.2	39.5	44.0	
22	41.3	35.3	38.9	38.3	44.2	47.8	53.5	52.3	50.2	49.2	34.7	39.4	43.8	
23	41.3	35.3	38.7	38.3	43.8	47.5	53.1	52.3	49.8	48.9	34.7	39.6	43.6	
24	40.9	34.9	38.3	38.0	43.5	47.2	52.8	52.1	49.6	48.4	34.0	39.7	43.3	
Means.	0 ^h .-23 ^h .	41.5	35.5	38.6	39.1	44.9	48.2	53.1	52.3	50.0	49.3	35.2	39.7	43.9
	1 ^h .-24 ^h .	41.5	35.5	38.6	39.1	44.9	48.2	53.1	52.3	50.0	49.3	35.2	39.7	43.9

MONTHLY MEAN DEGREE of HUMIDITY (Saturation=100) at every HOUR of the DAY, as deduced by GLAISHER'S TABLES from the corresponding AIR and EVAPORATION TEMPERATURES.

Hour, Greenwich Civil Time.	1921.												Yearly Means.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
Midnight	86	86	85	84	86	79	78	82	84	88	87	85	84	
1 ^h	85	86	86	85	87	82	79	85	86	89	87	86	85	
2	85	86	87	87	88	84	82	86	87	89	87	86	86	
3	85	87	87	86	89	86	84	88	88	91	87	86	87	
4	86	87	87	86	90	88	86	89	87	92	89	84	88	
5	85	87	90	86	90	87	85	89	89	92	89	84	88	
6	86	88	88	87	84	81	79	86	88	94	89	85	86	
7	86	89	86	82	77	74	71	81	83	94	89	86	83	
8	87	90	80	78	71	67	62	75	76	91	87	86	79	
9	86	86	76	72	65	62	56	68	71	82	87	84	75	
10	86	81	69	66	60	58	50	61	63	74	83	84	70	
11	86	77	66	61	58	53	47	56	58	67	81	81	66	
Noon	83	73	63	59	55	51	45	52	52	60	79	80	63	
1 ^h	82	71	62	57	54	50	43	52	51	57	76	79	61	
14	80	71	62	55	55	49	41	52	51	56	77	78	61	
15	83	71	62	56	55	49	43	52	50	57	79	79	61	
16	82	72	63	58	56	49	43	52	52	61	82	81	63	
17	84	74	66	59	58	51	44	55	57	67	84	81	65	
18	84	79	69	64	59	55	48	60	63	75	86	83	69	
19	85	81	75	68	65	59	54	64	69	79	86	84	72	
20	86	83	78	74	71	65	61	70	74	82	86	83	76	
21	86	83	79	77	75	71	67	74	78	84	87	83	79	
22	86	83	81	79	79	75	71	78	81	85	86	83	81	
23	86	86	82	82	83	77	73	81	83	87	88	84	83	
24	85	86	85	84	85	79	77	83	84	86	86	85	84	
Means.	0 ^h -23 ^h	85	82	76	73	71	67	62	70	72	79	85	83	75
	1 ^h -24 ^h	85	82	76	73	71	67	62	70	72	79	85	83	75

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 1921.

Month, 1921.	Registered Duration of Sunshine in the Hour ending																Total Registered Duration of Sunshine in each Month.	Corresponding aggregate Period during which the Sun was above the Horizon.	Proportion of Sunshine.	Mean Altitude of the Sun at Noon.
	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h				
January	..	..	..	..	1.1	3.5	4.0	7.0	5.9	5.0	2.2	0.5	..	..	..	..	29.2	259.1	0.113	18
February	..	..	..	0.8	5.0	5.3	7.5	10.2	9.2	8.8	7.7	5.1	1.4	..	..	..	61.0	277.5	0.220	26
March	..	..	3.6	12.0	16.1	15.5	14.8	16.0	14.3	13.9	13.8	9.2	8.5	0.6	..	..	138.3	366.2	0.378	37
April	..	1.9	10.5	15.7	19.3	20.2	20.8	19.0	18.7	18.1	18.3	17.3	14.8	5.3	1.9	..	201.8	414.0	0.487	48
May	3.3	12.3	16.3	16.5	19.0	19.5	18.4	18.7	17.3	16.5	16.6	15.2	15.4	14.9	12.0	2.0	233.8	481.6	0.485	57
June	5.8	13.1	14.9	13.5	11.7	12.6	13.5	15.7	16.4	17.3	15.7	18.0	18.3	16.6	13.9	4.7	221.7	494.3	0.449	62
July	3.9	14.9	17.7	19.7	23.2	23.6	23.1	23.4	22.6	20.7	20.3	17.9	20.2	19.8	13.1	1.4	285.6	498.4	0.573	60
August	0.3	4.4	11.4	14.7	14.7	16.2	16.3	18.9	13.4	13.7	14.4	13.0	11.2	10.5	5.5	0.2	178.8	450.2	0.397	52
September	..	..	5.5	11.0	15.2	16.0	15.5	18.4	19.1	18.6	18.3	17.8	13.3	5.5	..	..	174.2	378.4	0.460	41
October	..	..	0.2	5.0	11.7	16.8	17.7	17.1	19.5	19.7	20.1	16.8	9.5	0.2	..	..	154.3	329.8	0.468	30
November	..	..	..	0.2	2.9	6.5	6.6	7.5	9.7	10.2	7.9	2.2	..	..	..	..	53.7	265.5	0.202	20
December	..	..	..	..	0.5	3.2	5.9	5.7	5.9	4.5	2.8	..	..	..	..	..	28.5	243.4	0.117	16
For the Year	13.3	46.6	80.1	109.1	140.4	158.9	164.1	177.6	172.0	167.0	158.1	133.0	112.6	73.4	46.4	8.3	1760.9	4458.4	0.395	..

The hours are reckoned from "apparent" midnight.

READINGS OF THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE in the YEAR 1921.
(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending 21^h)

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.				Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.						Wet Bulb Thermometers, 4 ft. above the Ground.			
	Maximum.	Minimum.	9 ^h	Noon.	15 ^h	21 ^h	9 ^h	Noon.	15 ^h	21 ^h		Maximum.	Minimum.	9 ^h	Noon.	15 ^h	21 ^h	9 ^h	Noon.	15 ^h	21 ^h
JANUARY.										MARCH.											
d	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	
1	54.7	43.9	50.3	53.6	53.6	53.4	49.7	52.6	52.8	52.3	1	53.2	33.6	42.8	50.1	52.2	39.5	41.6	45.6	44.1	37.9
2	54.1	47.9	51.4	53.4	51.5	48.3	50.4	50.8	50.1	47.4	2	47.5	35.1	40.5	44.9	45.7	40.6	39.8	40.1	38.8	35.8
3	49.4	45.2	47.6	48.4	48.0	49.4	45.9	46.3	45.3	47.5	3	51.0	27.4	38.3	47.5	47.3	43.3	34.0	41.0	41.7	40.6
4	54.0	49.0	53.3	54.0	52.5	50.7	51.0	51.1	50.0	49.8	4	53.6	43.1	48.4	51.7	52.5	49.0	46.8	48.3	48.7	45.7
5	51.7	42.4	49.9	45.0	46.6	45.0	48.6	43.6	43.8	41.6	5	52.9	43.9	48.8	50.9	48.3	43.9	46.3	46.8	46.4	41.9
6	49.3	41.7	47.5	48.5	48.7	47.8	44.8	46.0	46.2	47.0	6	56.4	32.7	43.9	50.8	53.2	39.8	41.7	45.0	45.8	37.8
7	48.8	40.9	46.6	48.6	48.2	40.9	46.6	47.8	47.7	39.9	7	45.2	31.2	36.8	40.6	43.8	31.2	35.0	36.8	36.9	29.8
8	44.8	35.7	36.6	41.6	42.7	44.8	35.4	39.5	40.4	43.4	8	49.3	27.3	39.2	47.2	48.9	45.6	36.6	42.4	44.7	44.1
9	56.1	44.6	52.6	54.4	55.7	52.3	50.8	52.3	52.7	50.3	9	54.7	40.1	47.6	53.2	51.1	43.1	44.8	48.8	47.2	40.6
10	55.4	48.1	54.7	53.4	53.4	48.6	51.7	51.6	51.4	45.9	10	57.2	34.1	47.6	56.1	55.0	43.2	42.3	46.0	44.8	39.6
11	49.0	38.8	40.1	46.1	46.0	45.9	38.1	42.4	42.3	45.0	11	60.9	43.0	52.2	55.5	58.5	45.1	47.4	48.2	49.3	42.8
12	49.0	39.0	42.4	47.9	47.6	45.8	41.7	46.5	45.0	43.7	12	54.0	39.9	47.6	51.6	49.5	46.2	45.6	48.5	46.8	45.2
13	46.0	41.1	42.1	44.6	43.4	41.7	40.8	43.1	43.0	40.7	13	58.1	45.3	49.7	53.7	55.8	49.3	46.8	48.3	48.9	46.8
14	41.8	33.4	33.7	37.8	38.4	36.7	31.8	34.0	35.4	35.2	14	57.1	41.1	49.6	55.0	53.8	45.4	45.8	48.2	46.8	43.1
15	39.9	29.1	31.2	37.0	39.0	30.2	30.4	35.0	36.3	29.8	15	54.8	36.3	47.6	54.7	53.0	49.4	43.2	47.2	45.8	44.9
16	44.4	29.2	32.5	41.6	42.9	41.2	31.0	39.5	38.5	38.0	16	56.2	46.7	49.8	55.0	54.8	51.5	46.7	48.9	48.4	47.9
17	50.4	40.4	47.5	47.8	48.0	50.4	46.9	45.0	46.0	49.0	17	60.7	47.1	51.4	57.8	54.6	49.9	47.5	48.6	48.8	48.8
18	54.1	37.3	53.5	50.2	45.0	40.0	49.4	46.6	39.3	37.0	18	54.7	41.0	43.7	48.9	50.2	43.0	39.1	41.3	42.9	38.7
19	45.4	38.1	39.7	43.9	45.0	44.0	36.5	39.4	40.2	40.1	19	54.4	38.2	45.4	52.5	51.4	45.6	40.9	44.6	44.4	44.2
20	53.4	39.5	46.1	50.6	52.7	49.2	45.1	48.2	48.7	46.8	20	51.7	39.9	45.1	47.6	49.7	44.3	40.6	41.8	42.6	40.7
21	51.9	46.3	48.3	51.1	49.5	47.7	45.9	47.3	46.0	44.7	21	56.0	32.8	44.0	52.9	54.8	47.8	41.4	45.2	48.2	46.1
22	51.0	43.1	49.0	50.4	50.7	43.7	45.8	47.1	48.9	38.8	22	59.4	46.0	52.3	55.5	57.1	47.6	48.5	50.6	51.4	45.8
23	47.3	38.6	40.9	45.3	45.4	47.3	38.3	41.2	41.9	44.9	23	58.0	41.8	50.5	55.2	54.0	48.8	45.8	48.1	47.8	44.8
24	52.2	47.1	50.6	51.4	51.7	49.6	47.3	48.0	48.3	47.6	24	67.3	41.4	51.5	61.8	66.2	47.8	47.4	51.4	53.6	43.2
25	52.1	45.7	47.6	50.6	51.9	49.5	46.4	49.4	49.8	47.9	25	62.8	35.1	49.4	55.5	62.6	48.0	45.5	47.0	50.8	43.2
26	50.4	44.4	46.5	48.3	49.9	46.6	44.1	47.3	46.8	44.0	26	51.9	34.2	48.5	47.8	48.1	41.7	45.1	45.6	43.7	37.0
27	49.9	36.6	44.5	46.2	45.8	37.5	42.1	42.7	43.0	36.6	27	53.4	34.0	44.6	49.3	52.3	45.2	39.4	41.4	43.5	40.4
28	53.8	37.5	49.6	51.6	52.4	52.5	48.8	49.3	50.1	50.0	28	52.2	39.3	47.8	47.8	51.3	49.8	44.1	45.2	48.8	46.6
29	52.8	48.4	50.6	49.7	49.6	49.1	49.2	48.8	48.2	47.2	29	55.6	39.0	45.2	52.6	48.5	40.2	40.5	44.5	42.8	37.6
30	50.7	45.0	49.1	50.3	48.0	47.1	47.6	48.0	46.6	44.8	30	51.4	35.6	43.2	47.0	48.8	45.1	40.0	40.8	41.3	40.7
31	47.2	36.1	44.6	44.9	40.7	36.4	42.8	41.8	39.4	35.7	31	60.8	40.1	50.3	56.3	59.0	46.5	47.2	49.6	51.5	45.0
Means	50.0	41.1	45.8	48.0	47.9	45.6	44.0	45.6	45.3	43.6	Means	55.2	38.3	46.6	51.8	52.6	45.1	43.1	45.7	46.0	42.2
FEBRUARY.										APRIL.											
d	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	
1	48.0	30.7	35.0	46.4	43.6	37.9	34.2	42.9	41.2	36.8	1	65.1	36.8	52.1	61.8	63.0	47.6	48.9	54.2	55.8	45.7
2	45.9	32.9	34.1	39.4	43.1	36.7	33.8	39.0	40.8	36.0	2	65.6	41.7	44.8	57.6	65.1	47.1	44.4	53.0	56.0	45.4
3	44.5	27.1	29.3	37.6	43.8	32.4	28.9	34.4	40.5	32.1	3	70.2	38.7	52.5	66.5	69.8	55.1	50.0	56.8	57.8	50.7
4	44.4	30.2	36.6	41.0	41.5	36.5	35.1	38.1	39.7	35.3	4	56.9	42.2	49.6	53.3	55.4	44.7	42.7	44.5	45.4	39.7
5	43.3	34.5	37.7	41.9	41.4	39.7	36.1	38.4	37.6	37.6	5	59.4	32.8	48.0	56.7	54.2	51.7	42.8	48.1	48.4	49.0
6	40.0	34.8	37.4	36.9	35.2	34.9	35.6	35.4	34.5	33.4	6	58.0	42.1	51.6	56.8	56.1	42.1	48.8	49.9	50.7	40.8
7	36.2	34.0	35.2	35.8	36.2	35.8	33.9	34.4	34.8	34.4	7	55.0	38.6	48.9	52.6	52.6	41.9	42.6	43.1	43.4	36.4
8	41.1	33.6	35.7	39.2	40.6	36.5	33.3	35.8	37.1	34.5	8	56.4	35.7	44.3	53.8	54.4	43.2	40.7	42.8	41.8	39.8
9	43.1	35.1	37.6	40.2	43.0	39.9	34.8	37.7	39.7	38.3	9	50.2	38.2	42.5	46.0	48.9	43.9	40.7	42.8	43.4	42.6
10	45.4	32.9	35.4	42.2	43.8	38.2	34.6	39.6	39.9	36.0	10	66.0	42.3	56.8	63.9	63.1	49.5	51.6	55.2	53.0	46.1
11	42.3	36.2	38.9	40.8	41.2	40.3	36.1	37.6	37.3	38.0	11	59.0	44.3	51.1	55.9	56.8	45.7	48.2	50.9	51.2	44.2
12	45.9	39.3	42.6	43.8	43.9	40.7	39.8	40.2	39.9	37.2	12	65.9	41.6	52.8	64.7	63.8	47.2	47.8	53.2	51.0	42.6
13	44.3	39.0	40.7	42.5	44.1	43.6	38.5	39.6	40.5	41.6	13	72.9	38.2	60.0	68.7	71.0	51.4	49.9	56.8	56.9	46.1
14	50.8	41.1	44.7	48.2	48.6	41.2	43.0	43.6	43.0	38.9	14	51.4	38.1	44.8	48.2	47.8	38.7	40.1	40.2	38.6	34.7
15	49.6	37.0	40.5	45.8	48.9	45.4	38.9	42.4	44.8	42.5	15	44.9	31.9	39.7	39.1	38.4	35.8	34.0	33.1	34.7	33.8
16	53.0	41.7	45.9	50.9	51.9	49.5	43.7	47.8	48.4	47.2	16	50.4	32.0	39.9	44.6	46.7	35.9	34.6	36.5	39.0	33.1
17	50.8	44.7	47.8	48.9	50.0	47.6	46.4	44.2	44.7	43.1	17	40.0	35.0	39.0	36.0	37.2	39.0	38.0	35.4	36.4	37.9
18	48.4	32.0	34.3	46.4	46.8	43.5	33.8	42.6	41.6	41.0	18	53.1	36.5	45.8	50.5	48.9	41.4	41.2	44.0	41.9	37.6
19	43.5	38.7	40.1	41.4	41.8	39.2	38.4	39.2	38.3	36.4	19	53.6	32.8	44.2	49.2	49.6	35.5	40.1	41.7	41.2	34.7
20	49.1	35.6	39.6	47.7	47.4	37.0	38.7	40.7	41.8	35.9	20	55.6	28.1	46.9	50.7	50.5	44.6	41.8	42.6	41.7	41.0
21	51.6	36.1	39.5	48.6	49.4	37.3	37.9	44.0	40.7	36.5	21	60.6	37.2	49.5	56.6	58.1	48.2	44.0	47.7	47.7	42.4
22	58.5	30.7	42.7	55.4	57.2	41.7	40.5	49.0	49.7	39.9	22	59.9	44.1	54.9	56.5	52.6	47.1	48.1	48.3	48.4	45.0
23	59.5	41.2	46.2	55.0	58.4	46.3	42.5	47.8	50.3	41.1	23	58.5	42.5	47.1	49.4	55.2	46.6	45.8	48.0	52.5	40.9
24	61.6	36.1	46.7	60.2	60.4	42.9	43.8	51.0	51.4	39.8	24	55.0	41.9	44.6	46.6	53.8	46.5	42.9	44.8	49.3	43.0
25	51.6	41.9	48.6	50.2	42.6	46.7	47.0	48.5	47.8	40.8	25	58.8	41.7	43.7	50.0	52.9	45.8				

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 21^h)

Days of the Month.	Dry Bulb Thermometers, 4 ft. above the Ground.					Wet Bulb Thermometers, 4 ft. above the Ground.				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	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
MAY.										JULY.											
d	63.5	43.4	47.0	54.9	59.2	51.6	45.0	50.3	52.2	44.6	d	73.0	44.5	61.7	68.4	70.8	59.7	53.8	57.8	60.8	55.5
1	70.4	36.7	57.4	65.1	67.6	50.1	49.9	51.9	53.6	48.0	1	77.5	46.9	65.0	73.4	72.7	59.2	56.2	60.3	59.9	55.3
2	51.0	37.7	47.2	48.5	48.3	37.9	41.5	41.9	41.8	36.1	2	75.8	51.2	69.7	70.4	74.6	58.7	59.7	59.1	61.1	54.3
3	48.8	34.8	41.0	43.8	46.6	43.4	40.3	42.3	43.2	41.0	3	64.2	50.7	55.2	56.8	59.4	57.0	51.0	51.8	52.4	51.0
4	54.4	33.6	47.9	52.0	52.4	41.0	42.5	44.6	43.6	37.6	4	74.8	50.8	57.7	66.2	73.1	57.8	51.0	54.9	58.2	53.4
5	57.2	38.0	52.2	51.8	56.2	53.0	48.6	50.0	53.3	51.5	5	85.0	48.7	71.4	78.4	81.0	67.5	60.2	61.6	62.4	56.8
6	66.0	51.7	59.4	61.6	57.6	52.0	55.4	56.5	55.5	50.4	6	77.8	58.7	65.9	71.4	73.6	62.6	61.0	61.9	63.4	58.4
7	61.5	47.9	56.5	56.7	52.5	48.4	53.6	52.0	50.5	45.6	7	81.8	55.8	72.4	77.4	81.0	64.5	64.1	64.2	65.9	59.1
8	63.0	44.4	50.6	60.7	58.8	48.4	48.8	52.5	50.5	45.1	8	83.6	52.7	74.7	81.3	81.4	64.6	62.2	64.6	65.7	58.1
9	67.1	42.4	58.0	60.7	62.8	49.6	51.4	51.9	52.8	45.3	9	93.0	51.7	78.8	86.0	90.8	71.5	64.4	64.2	65.2	60.4
10	69.0	41.1	66.6	65.5	59.6	55.8	55.6	55.6	55.1	53.0	10	94.0	58.2	82.1	88.8	90.4	78.0	66.8	66.1	63.7	61.6
11	68.6	50.7	58.7	66.4	68.2	54.7	56.4	60.0	57.4	52.1	11	87.0	58.7	75.2	83.8	85.0	65.0	64.2	66.3	63.2	59.1
12	74.5	46.8	64.1	70.8	62.0	56.4	58.1	61.0	58.3	55.1	12	80.0	55.2	76.5	78.8	76.8	60.7	66.7	64.7	61.8	57.4
13	75.0	47.7	66.0	71.0	72.6	55.6	57.8	60.9	61.1	51.2	13	75.7	57.9	70.3	72.4	66.8	59.6	60.8	62.0	59.2	56.9
14	60.0	49.4	55.6	57.8	58.6	51.8	53.6	54.0	53.3	50.6	14	77.7	57.6	70.7	76.6	71.4	62.7	61.4	62.5	58.5	58.7
15	66.6	40.4	59.2	62.5	64.0	48.2	50.1	50.9	53.0	43.9	15	86.9	56.3	75.5	81.6	85.4	68.5	66.7	67.6	67.6	62.0
16	67.9	38.1	60.4	65.6	62.0	54.6	52.5	52.9	52.7	49.8	16	87.6	57.1	73.6	78.8	74.2	68.1	63.7	66.7	68.9	64.8
17	66.9	43.3	58.6	62.3	63.5	53.4	50.5	51.1	52.0	50.4	17	88.3	58.7	76.7	83.3	85.6	68.8	63.8	67.3	65.8	62.0
18	72.0	44.3	62.8	69.7	68.8	53.7	51.2	56.9	55.9	49.8	18	91.0	60.9	75.5	84.7	90.5	70.8	62.2	66.0	66.8	61.8
19	71.4	49.8	61.6	65.5	68.7	55.4	55.4	54.9	55.8	48.4	19	90.0	60.2	80.2	85.7	85.4	69.4	68.5	70.5	68.0	60.7
20	69.0	42.3	61.6	67.0	66.6	52.4	52.7	55.0	55.5	47.9	20	79.4	54.3	73.1	73.1	76.2	62.1	55.7	57.5	59.6	55.0
21	70.9	43.7	64.5	67.7	68.9	54.3	57.0	54.9	53.9	46.9	21	81.8	55.1	69.9	76.5	77.7	68.6	60.1	62.8	64.9	63.0
22	73.4	44.8	61.8	72.6	70.2	56.0	56.0	60.6	57.4	49.5	22	83.5	65.4	72.4	78.5	79.7	67.2	65.9	68.6	69.4	64.7
23	77.0	47.5	58.7	71.1	74.6	61.3	54.4	61.1	62.1	54.7	23	82.0	62.2	68.2	74.0	79.4	65.8	58.5	58.6	59.6	59.0
24	76.5	50.6	59.4	70.2	75.6	62.6	55.3	62.5	64.8	57.0	24	82.0	58.8	74.5	78.9	76.8	68.2	66.7	67.3	66.2	63.6
25	75.8	56.1	68.7	74.4	68.0	59.6	57.7	61.9	59.6	55.7	25	79.0	61.9	68.8	65.4	75.9	64.4	62.9	61.9	61.0	57.8
26	67.0	47.1	57.1	57.3	61.6	51.3	50.2	49.1	51.1	45.8	26	77.4	54.2	68.5	75.7	74.5	65.8	57.6	61.4	61.7	57.3
27	63.5	44.1	56.2	59.8	54.6	46.8	48.3	48.3	50.8	43.2	27	84.8	56.1	73.1	81.9	78.4	69.8	64.2	64.7	65.7	63.1
28	65.4	39.6	55.8	58.7	60.8	50.6	47.9	48.7	50.1	45.9	28	74.9	57.7	65.6	73.6	63.1	61.7	63.4	64.1	57.8	55.4
29	67.0	47.7	55.1	58.8	63.8	56.0	53.6	56.4	54.4	54.5	29	77.0	51.2	67.9	74.2	75.6	60.9	58.6	59.8	61.0	55.8
30	70.6	51.9	60.9	68.3	64.0	52.5	52.1	55.6	54.2	49.9	30	78.9	58.2	71.2	78.5	76.5	64.6	61.6	66.7	65.3	59.8
31											31										
Means	66.8	44.4	57.8	62.5	62.5	52.2	51.7	53.7	53.7	48.4	Means	81.5	55.7	70.8	76.6	77.5	65.0	61.4	63.0	62.9	58.8
JUNE.										AUGUST.											
d	70.8	50.0	61.1	66.6	68.5	55.8	53.1	55.8	56.4	52.4	d	76.3	62.2	70.7	72.0	72.8	65.4	65.8	66.3	66.8	62.9
1	72.6	46.7	64.6	71.1	70.6	58.3	54.9	57.6	57.6	51.1	1	78.9	61.4	67.6	73.7	76.7	62.3	63.6	62.4	62.4	51.9
2	68.0	49.9	60.6	64.0	57.7	52.8	55.1	57.6	54.4	50.4	2	69.0	48.2	60.5	60.1	66.6	57.9	54.9	53.9	56.8	49.9
3	63.0	52.4	58.5	60.2	60.4	55.2	55.6	57.0	57.2	53.4	3	71.0	52.4	64.9	66.8	67.1	59.5	54.9	55.3	56.3	58.0
4	67.1	51.1	54.6	63.1	64.6	53.0	51.8	56.7	56.9	50.3	4	78.6	59.3	68.7	72.2	68.8	62.0	63.7	63.4	62.1	56.0
5	71.9	47.2	57.0	68.7	69.3	57.6	53.4	56.9	55.0	52.4	5	77.0	56.8	68.6	74.2	72.1	62.5	59.5	59.6	57.3	55.2
6	71.4	51.1	67.8	69.2	67.4	57.6	55.3	55.4	56.0	52.2	6	78.6	55.9	66.0	76.0	70.4	64.5	58.1	61.2	61.0	60.8
7	78.2	46.6	65.0	72.2	72.1	60.5	57.8	60.7	58.1	53.7	7	73.3	52.9	62.8	70.8	69.8	60.3	54.4	57.2	56.6	53.2
8	70.3	51.3	57.8	63.5	66.4	56.9	53.0	55.4	55.8	51.0	8	76.8	49.7	64.6	72.7	73.3	59.3	56.2	58.4	58.7	54.7
9	71.0	52.4	57.8	64.3	65.6	53.8	49.9	54.2	54.8	49.2	9	79.4	49.5	65.8	72.5	73.7	60.7	59.0	61.1	61.9	57.1
10	71.8	47.7	56.6	65.7	66.7	55.2	50.8	53.8	53.9	47.4	10	77.4	57.3	60.9	71.2	75.2	59.6	57.6	62.0	61.3	53.1
11	72.9	45.9	60.9	67.2	67.0	59.7	51.4	54.5	53.7	54.2	11	74.2	50.4	63.6	71.1	65.2	56.6	57.8	60.8	58.0	55.2
12	67.3	56.2	61.0	64.6	63.3	58.8	55.4	56.3	53.3	51.9	12	69.1	48.4	55.0	64.5	64.6	59.7	54.5	59.4	57.8	55.0
13	70.7	47.7	59.1	67.6	67.7	56.0	53.4	57.8	58.5	54.4	13	70.7	54.7	62.1	64.6	65.5	59.6	55.2	55.4	55.7	55.2
14	79.8	49.4	67.7	73.8	74.7	60.6	60.3	64.0	63.1	54.6	14	70.8	55.4	58.5	65.1	66.4	56.6	55.1	57.5	55.4	52.8
15	74.4	51.5	65.6	68.8	72.9	55.7	59.0	59.9	61.4	50.9	15	77.0	46.7	67.1	73.1	71.0	62.6	58.6	59.8	60.8	59.4
16	85.6	46.8	70.4	79.6	83.3	66.5	55.0	64.0	67.0	59.8	16	72.4	59.7	62.7	70.3	68.6	61.4	61.4	63.1	62.7	60.4
17	69.0	51.1	55.6	60.6	65.1	51.1	50.5	51.3	52.7	44.8	17	79.1	59.3	70.6	78.5	77.7	63.8	62.8	61.6	61.1	55.1
18	63.2	37.3	57.6	61.2	58.2	54.4	48.8	50.6	49.5	49.8	18	82.0	57.1	68.2	81.4	79.9	66.3	61.0	64.6	59.9	57.5
19	66.8	50.8	58.2	62.8	63.3	60.4	54.8	55.8	55.8	54.6	19	77.7	59.3	69.6	74.4	73.6	62.5	61.7	64.5	64.5	59.4
20	66.0	51.3	52.7	59.1	63.2	58.8	49.9	51.5	52.3	51.4	20	63.0	57.5	60.4	58.6	60.5	59.9	57.4	56.1	56.9	57.1
21	66.9	52.9	59.5	61.4	63.4	52.9	51.2	52.6	54.1	49.4	21	74.7	57.3	63.6	71.6	70.8	57.5	59.0	60.5	61.0	53.8
22	80.0	46.2	65.8	71.5	76.4	67.6	56.7	59.0	61.4	59.1	22	71.2	49.1	67.2	68.2	67.7	61.2	61.5	63.0	64.3	59.8
23	82.6	55.9	71.7	79.7	81.2	64.2	62.0	65.3	64.0	59.8	23	63.6	57.6	59.4	60.9	61.5	58.5	57.9	58.8	59.0	57.7
24	85.9	52.2	76.4	82.4	83.0	65.4	63.7	64.8	65.7	60.4	24	76.0	57.4	62.4	70.7	69.7	62.5	58.8	60.7	61.3	57.0
25	74.6	58.1	71.6	68.0	71.6	60.6	64.0	60.9	64.0	58.6	25	76.									

