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# RESULTS OF THE MAGNETIC & METEOROLOGICAL OBSERVATIONS

MADE AT THE ABINGER MAGNETIC STATION, SURREY  
AND THE ROYAL OBSERVATORY, GREENWICH  
RESPECTIVELY IN THE YEAR

## 1936

UNDER THE DIRECTION OF

H. SPENCER JONES, Sc.D., F.R.S.

ASTRONOMER ROYAL

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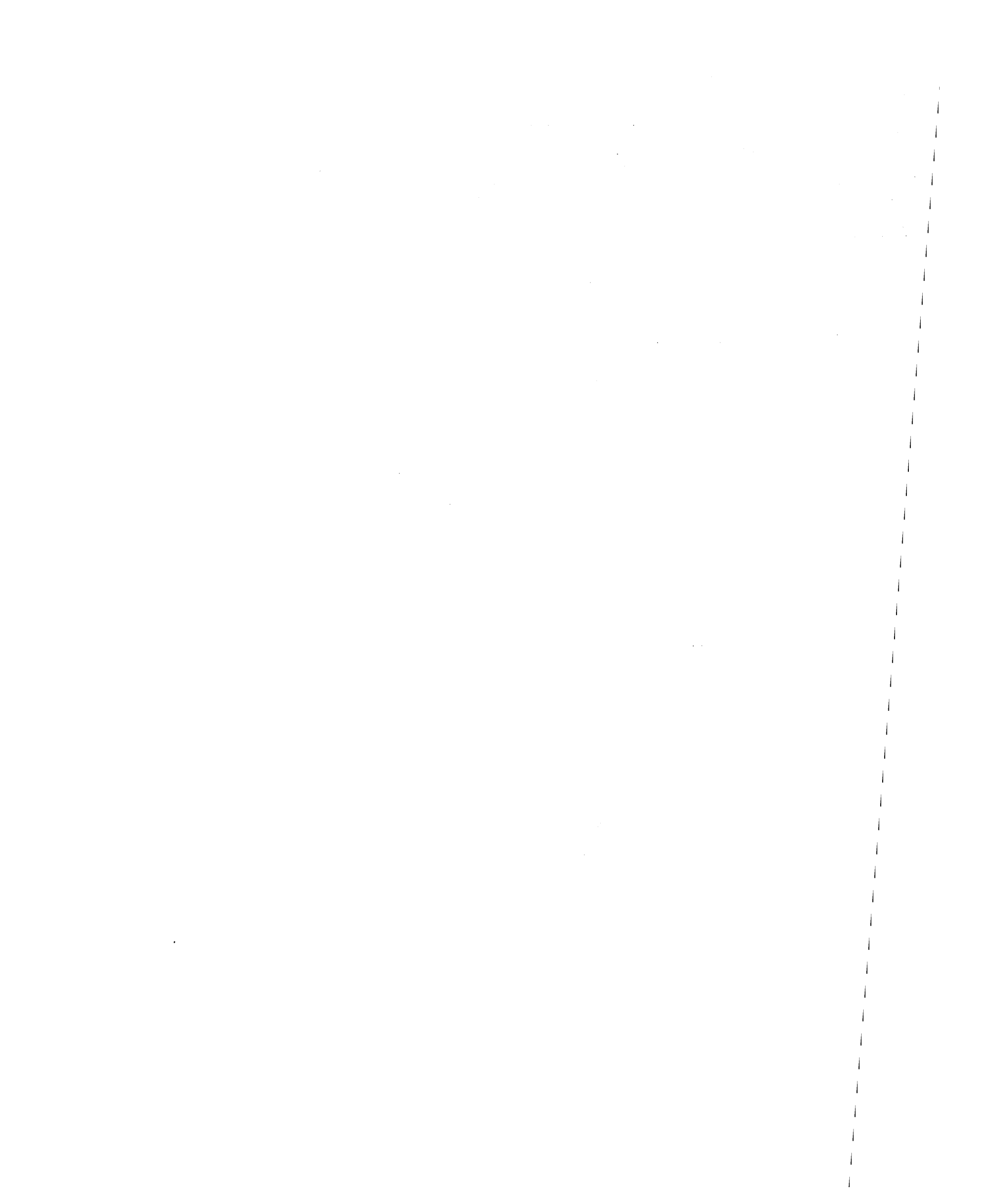
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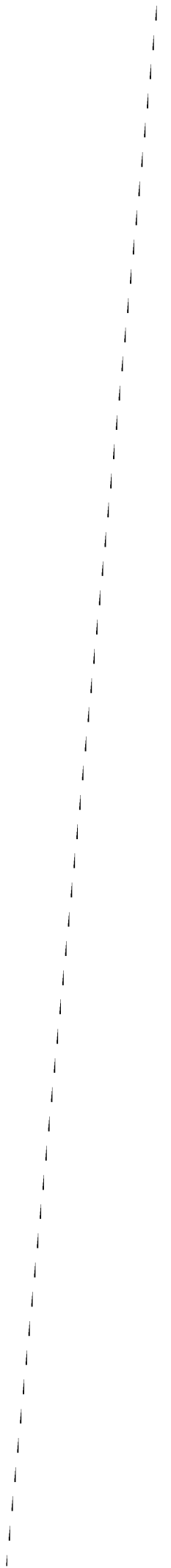
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THE ROYAL OBSERVATORY, GREENWICH  
AND  
ABINGER MAGNETIC STATION, SURREY.

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MAGNETIC AND METEOROLOGICAL  
OBSERVATIONS, 1936.

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INTRODUCTION.

During the year 1936 the staff employed in the Magnetic and Meteorological Department of the Royal Observatory consisted of W. M. Witchell, Superintendent, W. Stevens, G. F. Wells, P. L. Rickerby, Miss Clack, W. J. H. Dennis and F. E. Deeks.

On account of electric railways in the neighbourhood of Greenwich, magnetic observations are made at an out-station about six miles from the town of Dorking in Surrey, and one and a half miles from the village of Abinger Common. Mr. Stevens, resident observer and assistant-in-charge of the station, is assisted by Mr. Rickerby.

THE MAGNETIC STATION AT ABINGER, NEAR DORKING, SURREY.

The Station was established in 1924 on a site on the northern slope of Leith Hill, 800 feet above sea level. It is approximately 26 miles from the Royal Observatory in a direction a little south of south-west. The nearest railway track approaches to about  $2\frac{1}{2}$  miles. The adopted geographical position is Latitude  $51^{\circ} 11' 5.2''$  N., Longitude  $0^{\circ} 23' 12.1''$  W

*General Description of the Buildings and Instruments of the Magnetic Observatory.*

The Magnetic Pavilion for absolute observations is constructed of carefully chosen non-magnetic materials, and measures approximately 28 feet by 15 feet. It contains four circular tables stoutly built of hard wood into concrete piers which are free from contact with the floor. On the north pier is mounted the declination instrument, on the central pier the coil magnetometer for observing horizontal intensity, on the

south-east pier the coil-magnetometer for observing vertical intensity, and on the south-west pier the dip inductor.

A smaller pavilion, measuring 16 feet by 12 feet, erected in 1926 for the testing and standardising of magnetic instruments (work formerly carried on at Kew Observatory), is situated about 40 feet south-east of the Magnetic Pavilion, and contains three concrete piers passing through the floor without contact.

The unifilar magnetometer, mounted until August 1928 in the Magnetic Pavilion, is at present used in this pavilion. It has been ascertained by interchange of two coil-magnetometers, simultaneously operated, that as regards horizontal intensity the site difference is negligible.

A second pavilion, 20 feet in length and breadth, suitable for comparative observations and more convenient than the first for standardising magnetic instruments, was completed in 1932. It occupies a position on the north-east of the pavilion for absolute observations corresponding to that of the testing pavilion on the south-east and contains three circular wooden tables built into concrete piers free from contact with the floor, similar to those in the Magnetic Pavilion.

The Magnetograph House stands 50 feet east of the Magnetic Pavilion in which the absolute magnetic observations are made. The recording instruments are situated in an inner chamber 15 feet long, 12 feet wide, and 8 feet high. This chamber is supported on small concrete piers and is 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.

A small power-house with storage battery and alternating generator for the supply of electric current required in lighting and heating is situated about 125 yards south of the observation houses.

The temperature of the Magnetograph House 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 departure from a mean temperature is not more than  $0^{\circ}\cdot 2$  C.

The centres of the three instrument piers are situated as follows: For the horizontal intensity instrument, 2 feet west and 2 feet 6 inches south of the north-east angle of the room; for the declination instrument, 5 feet 6 inches west and 5 feet south of the same angle; for the vertical intensity instrument, 2 feet east and 3 feet north of the south-west angle. The two piers which support the recording mechanism occupy the north-west and south-east corners of the room, their longer sides being in the direction at right angles to 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 horizontal intensity instrument.

The horizontal intensity and declination instruments record on the south-east drum; the vertical intensity instrument 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 time 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 north and south 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 Universal Time, the current being controlled by a relay connected to a mean solar clock in the computing room. The effect is to produce narrow dark hour-lines right across the photographic records.

The error of the clock is observed daily by comparison with a radio time signal from one of the official broadcasting stations. Correction is made by magnetically altering the rate until the observed error has been removed. The error thus seldom exceeds one second.

It should be mentioned that in order to dispense with the necessity of continuously running an alternator in circuit with the storage battery, the illuminating lamps for the recording drums and also the hourly-signal lamps are lit by *direct* current, special care being taken with the return circuit. Experiments have shown that, with the precautions taken, the effect of this current on the variometer records is negligible. Alternating current for heating the chamber or for general illumination is supplied as required, the alternating generator being started and stopped automatically by the thermostat at the same time as the heating circuit is switched in and out. Very considerable saving in running cost is effected by this device.

## INSTRUMENTS.

DECLINATION MAGNET FOR ABSOLUTE DETERMINATIONS.—A hollow cylindrical magnet with scale and collimating lens is used in conjunction with a small telescope mounted independently on the same pier. The magnet is suspended by tungsten wire, of diameter 0·02 mm. Frequent reversals are made to eliminate the collimation error of the magnet from the results, and the position of torsional zero of the suspension wire is also frequently checked. 90° of torsion deflects the magnet about 3' of arc. The telescope has a six-inch circle on which azimuths are read by means of two microscope-micrometers to 1" of arc. An azimuth-mark is fixed on the top of a concrete pillar, 10 feet high, erected at the northern extremity of the Observatory grounds at a distance of approximately 300 feet from the observing pier. Determinations of the azimuth of this mark have been made at intervals by means of observations of Polaris. During each observation of Polaris, both direct and reflected views are taken. The effect of error of level of the telescope is thus entirely eliminated. Reflection is obtained from the surface of mercury contained in a shallow copper dish.

## ABSOLUTE HORIZONTAL INTENSITY INSTRUMENTS.

THE SCHUSTER-SMITH COIL MAGNETOMETER.—This instrument has been lent to the Observatory by the Director of the National Physical Laboratory. It is the second constructed of the type and is rather smaller than the original instrument, a detailed description of which is to be found in *Philosophical Transactions of the Royal Society*, Vol. 223 (1923), pp. 175-200. It is erected on a pier in the centre of the absolute observation pavilion and was brought into use as the standard instrument for observation of horizontal intensity on 1927, February 1. In general, eight independent determinations are made each week-day.

The following is a brief description of the instrument and the method employed in measuring horizontal intensity :—

A hollow marble cylinder of 50 cms. diameter rests, with its axis horizontal, on a brass support which can be turned in azimuth. The azimuth may be read to 10" of arc from a graduated circle on the base-plate, by the usual vernier attachment. On the periphery of the cylinder, near each end and at a mean distance of 25 cms. from each other, are two windings, in series, of ten turns of bare silver wire, the method of winding the ten loops in a double spiral being that adopted in the original instrument

referred to above. The whole forms a Helmholtz-Gaugain system at the centre of which a very uniform magnetic field parallel to the axis exists when an electric current is passing through the coils.

A chromium-steel magnet, 15 mm. long and 2 mm. square in cross section is supported horizontally in a light vertical aluminium frame; the frame carries also a small concave mirror and a damping vane, and is suspended by a single silk fibre in a suspension tube passing through a hole in the upper surface of the cylinder. A square box with optically-plane glass sides supports the tube and encloses the magnet frame, allowing the mirror to project an image of a source of light during observation. The suspension fibre is adjusted so that the magnet hangs at the centre of the coil system.

To afford an easy means of reading the azimuth of the cylinder and the indications of the magnet, graduated ivorine scales are placed horizontally on stands at a distance of a little over 7 feet from the pier, and spots of light are reflected to them by small concave mirrors in the instrument.

Situated outside the observing pavilion, at the south-west corner, is a storage battery of 25 cells which produces the current required for the observation. The amount of current employed is very accurately adjusted to a specific quantity by rheostat according to the indications of a Broca galvanometer in a potentiometer circuit in which the e.m.f. across a known resistance is balanced against that of a Weston standard cell.

Careful precaution is exercised in arranging the circuits both to eliminate accidental magnetic fields and to secure the highest degree of insulation. The latter has been found, in practice, to be of great importance, especially with regard to the insulation of the galvanometer circuit, as any stray current here will lead to a difference of potential between the terminals of the standard cell and the standard resistance. It is desirable that the resistance of the galvanometer should be as low as possible consistent with sensitivity.

Theory of the observation :—

If a horizontal magnetic field whose intensity is slightly greater than that of the earth is imposed at an angle of nearly  $180^\circ$  with the earth's field, a position angle can be found at which the resultant of the two fields becomes directed at right angles to the earth's field. The intensity  $F$  of the imposed field, and its angle  $\alpha$  with the



earth's field being known, the horizontal intensity of the earth's field can then be calculated from the simple relation :  $H = F \cos \alpha$ .

An observation proceeds as follows :—

Torsion having been eliminated from the suspension thread by substituting a copper piece for the magnet, the magnet is replaced and allowed to hang freely in the earth's field. The position, on the appropriate scale, of the spot of light reflected by the magnet-mirror is noted. This scale is normally on the west side of the instrument. By optical methods, reference marks on two other scales placed respectively to the magnetic north and south of the instrument are adjusted accurately to points  $90^\circ$  from the spot reflected by the magnet-mirror. A current is next passed round the coil in the direction that produces a field augmenting that of the earth, and the coil is turned in azimuth until the addition of the imposed field produces no alteration in the direction of the magnet. The axis of the coil is then accurately parallel to the earth's field, and the coil-mirror can be adjusted so that it reflects a spot of light to the reference mark, *i.e.*, to the zero graduation of the north scale, as already set.

The current is now reversed in the coil by a commutator switch and the coil is turned until the resultant force on the magnet is in a direction at right angles to the earth's field. This is indicated on either the north or south scale by the magnet-mirror, which is carried round  $90^\circ$  by the magnet. The azimuth angle through which the coil has been turned is read from the north scale, and the coil is then turned to an approximately equal angle on the opposite side of the magnetic meridian. This reverses the direction of the resultant field ; and a further small adjustment of the coil brings the spot of light reflected by the magnet-mirror accurately to the reference mark on the opposite scale to that last used. A second reading of the azimuth of the coil completes the observation.

The suspension box and tube are turned by the observer as the magnet turns, so that no torsional change is introduced. The effect of any small error in the assumed direction of the earth's horizontal field due, say, to residual torsion on the suspension thread, is eliminated on taking the mean of the two results.

After preliminary details have been gone over, a complete observation of horizontal intensity is readily obtained in two minutes.

The constants of the coil and of the potentiometer at various standard temperatures have been precisely determined at the National Physical Laboratory and

are checked from time to time. The dimensions of the coil were re-examined in November 1931. The electrical constants on which the reduction of observations made in 1936 is based were verified in November 1936. The factor at present adopted to convert the measure of current from international units to C.G.S. units is 0.99997.

If  $F$  be the factor of the coil and  $i$  be the current passing in ampères, then the intensity of the field at the centre of the coil in  $\gamma$  units is  $Fi \times 10^4$ . The adopted value of the factor "F" of the coil is 3.59570 ( $1 - .0000043 t$ ),  $t$  being temperature Centigrade.

The observed value of horizontal intensity obtained from this instrument is subject to a correction of  $-1\gamma$  for the effect of the field of magnets in instruments placed permanently in the vicinity. The effect is determined experimentally by reversal of the magnets. The correction is applied in the reduction of the observation.

A KEW-PATTERN UNIFILAR MAGNETOMETER by Messrs. C. F. Casella & Co. (No. 181) is also used to determine absolute horizontal intensity. Deflection observations are made at three distances, namely, 22.5 cms., 30 cms. and 40 cms. 18 observations of the moment of inertia of the collimator magnet were made during the year 1936. The mean observed value of  $\log K$  from these determinations was 2.42367. This value has been used in the reductions and is based on the Greenwich Standard Inertia Cylinder. (See Appendix II of the Magnetic Results, 1926).

The mean values of the distribution constants  $P$  and  $Q$  derived from 203 normal determinations made during the year are +10.44 and -1857 respectively.

The values used in the reduction of the 1936 observations, however, are the mean values obtained from a series of 235 special observations made during the year. These values are:  $P = +9.17$ ,  $Q = -1409$ .

The method employed in reducing the special series was as follows:—

A deflection observation gives  $H$  through the equation  $H \sin \alpha = \frac{2m}{r^3} \left( 1 + \frac{P}{r^2} + \frac{Q}{r^4} + \dots \right)$

If deflections,  $\alpha$ , are made at several distances,  $r$ , and the values of  $H$  and  $m$  are known from some other source, a direct solution of the equations for  $P$  and  $Q$  is possible by "least squares." The value of  $m$  was determined from the period of vibration and the moment of inertia of the deflecting magnet, in combination with the value of  $H$

as observed by a coil-magnetometer at the time of the vibration experiment. The values of  $r$  were 22·5, 25, 30, 35, 40, 45, 50 cms.

In 1936 the deflection at 22·5 cms. has not been used in computing observed values of horizontal intensity.

VERTICAL INTENSITY COIL MAGNETOMETER.—This instrument, designed by the late Dr. W. D. Dye, F.R.S., for direct measurement of vertical intensity, and constructed under his supervision at the National Physical Laboratory, Teddington, has been lent to the Royal Observatory by the Director of the National Physical Laboratory. It is erected on the south-east pier of the observing pavilion, and was adopted as the standard for observation of vertical intensity from 1929 January 1.

A full description of the instrument is published in *Proceedings of the Royal Society*, Ser. A, Vol. 117 (1928), pp. 434–458.

In brief, the instrument consists of a Helmholtz-Gaugain Coil wound on a marble cylinder, the axis of which is vertical as truly as can be determined, together with accessory apparatus for accurately controlling and measuring the current passed through the coil, and for testing the resultant field at its centre.

The observation consists in an adjustment of the current until the artificial field imposed at the centre of the coil exactly annuls the vertical component of the earth's field. The intensity of this component is then easily calculable from a knowledge of the dimensions of the coil and the amount of current indicated by potentiometer measurement. (*cf.* p. D 13).

The adopted value of the factor is  $F=3\cdot59643 (1 - \cdot0000079 t)$ ,  $t$  being temperature Centigrade.

The constants of the potentiometer in use during the year for the measurement of the current were determined at the National Physical Laboratory in March 1936.

The special feature of the instrument is the means adopted for ascertaining when the vertical component of the earth's field is exactly annulled at the centre of the marble cylinder.

This consists of a diamond-shaped vibrating test-coil about 2 cms. long suspended by bronze strip stretched horizontally between two supports and carrying a light plane mirror. The principle of the instrument requires that the axis of rotation of the detector coil should be horizontal and its plane vertical, in the equilibrium position.

The method of securing these adjustments is included in the full description of the instrument mentioned above.

A weak alternating current, supplied from a generator at some distance from the instrument, passes through the test coil. The reaction between this current and the magnetic field causes the coil to receive an alternating rotatory force which only vanishes when the vertical field is annulled. The resulting vibration is brought to a maximum by adjustment of the generator frequency to synchronism with the natural frequency of the coil (about 15 per second), and high sensitivity is thus obtained. Microscopic vibration is exhibited by projection, from the mirror, of an image of cross wires to a screen erected about 2 metres distant.

ABSOLUTE INCLINATION INSTRUMENT.—An Earth Inductor by The Cambridge Instrument Co., in conjunction with a Broca galvanometer, is used to determine magnetic inclination. About six determinations are made each week. Observations are made in four positions to eliminate any small errors arising from slight asymmetry in the instrument. After the first adjustment, the coil-support is reversed about a horizontal axis and a second adjustment is obtained: the instrument is then reversed in azimuth and two further adjustments are made. The circle for the measurement of inclination is 8 inches in diameter, and is read by means of microscope micrometers to one second of arc. The levels on the base can likewise be read to one second. A detailed description of the inductor will be found in the volume for 1915. Since 1929, January 1, the observations of inclination have not been used for determination of vertical intensity.

THE DECLINATION VARIOMETER.—The magnet is a single short needle of chromium steel, 10 mm. long and 0.4 mm. in diameter. The mirror for reflecting a beam of light on to the recording drum is  $2\frac{1}{2}$  mm. square, and is fastened by shellac to a small piece of stout aluminium foil. The foil is shaped above the mirror to form two small V hooks, by which it is hung on to the magnet. A small mica damping vane is fixed to the foil below the mirror, and the needle is rendered aperiodic by adjusting brass damping plates on either side of the vane. Adjustment of the beam of light is made solely by adjusting the position of the illuminating lamp, which has sliding attachment to a vertical wooden pillar capable of being fixed in any desired position in the room.

A very fine quartz filament .003 mm. in diameter forms the suspension-thread, and the displacement produced by revolving the torsion head  $360^\circ$  is only a fraction of a minute of arc. The distance of the magnet-mirror from the recording cylinder is

such that the geometric scale-value at the centre of the photographic sheet is  $6' \cdot 610$  per mm. As the beam is not normal to the drum, however, the scale value varies from  $0' \cdot 605$  at the top of the sheet to  $0' \cdot 615$  at the bottom. Expressed as magnetic intensity the corresponding mean scale-value would be  $3 \cdot 29\gamma$  per mm. at the present time.

A base-line mirror, with lens, is mounted rigidly on the pier at the side of the variometer and serves to provide a common base line for both declination and horizontal intensity records.

THE HORIZONTAL INTENSITY VARIOMETER.—The general construction of the instrument is in all respects similar to that of the declination variometer. The suspension filament is of quartz  $0 \cdot 012$  mm. diameter. The needle is adjusted to a position at right angles to the magnetic meridian by means of the torsion head in the following manner. Orientation marks have been drawn on the western wall of the room subtending successive degrees of azimuth at the centre of the variometer pier. An ordinary magnetometer distance-bar, securely held beneath the base of the variometer in a wooden frame, is by this means easily set at right angles to the magnetic meridian, and upon it is placed, about 25 cms. from the variometer, the usual carrier with a magnet mounted in position. A relatively strong magnetic field is thus imposed at right angles to that of the earth, and the torsion head is adjusted until the needle of the variometer is negligibly disturbed by the reversal of the imposed field. The magnet is then transferred to an equal distance on the opposite side of the variometer, and the experiment is repeated. Any error due to imperfect correspondence of the centre of the distance-bar with the point of suspension of the variometer needle is eliminated by setting the torsion head to the mean position.

An adjustment of orientation was made on February 13, 1935, by which the needle will be maintained within about  $30'$  of the correct azimuth until the end of 1942.

The scale value of the variometer is determined from the deflections produced electro-magnetically by passing measured current through a Helmholtz coil of 50 cms. radius which envelopes the instrument. The factor for the coil is determined, absolutely, by using the coil in the same manner to deflect the needle of the declination variometer. The horizontal intensity at the time of the experiment being known, the strength of the field necessary to produce the observed deflection is readily computed.

The adopted scale value was  $2 \cdot 60\gamma$  per mm. throughout the year.

THE QUARTZ-THREAD VERTICAL INTENSITY VARIOMETER.—For a detailed description of the instrument reference may be made to the *Philosophical Magazine*, vol. vii.,

sixth series (1904), p. 393. 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. By an ingenious arrangement the length of the frame, carrying the horizontal quartz fibre that suspends the magnet system, is defined by quartz tubes. The metal rods composing the sides of the frame pass through these tubes and, by the reaction of stiff springs, press the ends of the frame firmly on to the ends of the quartz tubes. The change in tension of the suspension thread with change of temperature, which would be produced by the difference in the coefficients of expansion of quartz and brass, is avoided by this design. The instrument was carefully adjusted at Greenwich for elimination of other temperature effects, in the manner explained in the description given in the *Philosophical Magazine*, but a small effect has developed since 1927.

The magnet system 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, whose upper surface is optically worked and platinised to form a plane mirror. The quartz rods are drawn out at their other ends into fibres of about 0.08 to 0.10 mm. diameter; one fibre is fused 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, supported in a frame above the mirror, reflects the light from the illuminating lamp on to the mirror and then, after reflection from the mirror, back in a horizontal direction to the recording drum. A single lens, placed between the mirror and the prism, brings the light to a focus on the drum. The prism frame is adjustable in azimuth to enable the trace to be brought to any desired part of the drum. 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 raising or lowering the centre of gravity of the magnet system. Coarse adjustment is obtained by means of small aluminium discs pierced centrally to allow them to rest on a slender vertical quartz pin provided for this purpose at one side of the mirror. To obtain fine adjustment a small vertical screw is fixed at the opposite side of the mirror and a small piece of aluminium can be moved up and down the screw.

The scale value is obtained by electro-magnetic deflections. The radius of the coil used for this purpose is 30.15 cms. The mean of the scale values adopted during the year 1936 was  $2.45\gamma$  per mm. until May 7; afterwards  $2.53\gamma$ . Slight deviations from

the mean value occur when the standard temperature of the room is raised or lowered. The value is sensibly uniform over the range allowed by the photographic sheet.

#### MAGNETIC REDUCTIONS.

The time used is *Universal Time* (U.T.).

The estimated mean ordinates of the photographic traces for each hour are measured from the base-lines 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 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 hourly mean ordinates.

Base-line values are adopted from smooth curves drawn through points plotted on a chart, each point representing the mean result from several independent observations.

Ten observations of declination, eight of horizontal intensity and six of vertical intensity are made, on an average, each week-day. Previous to 1929 the base-line values for vertical intensity traces were computed from absolute observations of inclination combined with simultaneous values of horizontal intensity taken from the magnetograms. From 1929 January 1, the values have been obtained directly from observations of vertical intensity with the coil-magnetometer. A discontinuity arises in the definitive values of vertical intensity at the time of changing the method of deriving the base-line value of the magnetograms.

The magnetograph chamber being maintained at a sensibly constant temperature, no temperature corrections are required in general. When the seasonal changes are made in the temperature at which the chamber is maintained, new base-line values are adopted from the hour at which control is observed to be established, and during the period of change interpolated values are applied at hourly intervals.

#### ARRANGEMENT OF RESULTS.

Tables I to III contain the hourly results for declination, horizontal intensity and vertical intensity respectively.

Table IV gives for each element the mean daily value, the maximum and minimum values with the times of their occurrence, and the daily range.

Then follow in Tables V to VII the monthly and annual mean diurnal inequalities for all days, and for quiet and disturbed days as selected by the International Committee. In addition to monthly and annual values there are also given mean values.

of the diurnal inequalities grouped into the seasonal periods, Winter (that is January, February, November, December), Equinox (March, April, September, October) and Summer (May, June, July, August). The values in these tables have *not* been adjusted for the effect of non-cyclic change.

From the inequalities in declination, horizontal intensity and vertical intensity, corresponding inequalities in the north and west components and in inclination have been computed and appear at the same opening of the page. In general, the computations are carried to one significant figure beyond the actual figure printed.

The extremes of any inequality are indicated by heavy type.

The inequalities in the north, west and vertical components (that is in X, -Y, Z) have been subjected to harmonic analysis, the results being given in Tables VIII and IX. In the case of the International Quiet and Disturbed Days, the inequalities were adjusted for non-cyclic change before analysis, but in analysing the results for "All" Days the non-cyclic change was ignored. The phase angles in Table IX are corrected to refer to Abinger Local Mean Time.

In Table X are given the mean diurnal ranges in declination, horizontal intensity and vertical intensity for each month, for the year and for the seasons. The corresponding results for quiet and disturbed days are also given. The quantities are derived from Tables V to VII.

Table XI gives in similar arrangement the non-cyclic change  $24^h$  minus  $0^h$ . The quantities were computed from Tables I to III, the value for  $0^h$  or  $24^h$  being taken as the mean of the last value on one day and the first on the next.

Table XII contains the mean monthly and annual values of the components collected together. In this table corrections have been applied, when necessary, to the values of H and V taken from Table IV, to remove the effect of any small secular changes in potentiometer constants found at the periodical re-measurement of the constants at the National Physical Laboratory.

Tables XIII to XV contain the daily values of the base lines of the magnetograms deduced from absolute observations of declination, horizontal and vertical intensity.

On p. D 62 is printed a table giving mean annual values of Magnetic Elements determined at the Royal Observatory, Greenwich, over the whole period of observation. Included in the Table are results of observations of declination made in 1818 to 1820. These observations were taken with a Dollond magnet thrice daily from June



1818 to December 1820. As a general rule the times of observation were 8 a.m., noon and 4 p.m., and there were comparatively few intermissions. The results were published in detail in "Astronomical Observations at the Royal Observatory," by John Pond, Astronomer Royal. Corrections for a presumed diurnal inequality have been applied to the monthly means in 1818-19-20 according to the hour of observation, the quantities being derived from years—1909-10-11, respectively,—in a corresponding relation to the cycle of solar activity.

A table follows giving the values determined at the Abinger Station since 1925.

Reduced copies of the magnetograms for certain disturbed days have been printed in each volume since 1882. The days are now those selected at De Bilt for the International Committee. These dates in 1936 are April 17-18, 21-22 ; June 18-19 ; October 16-17 ; November 28-29. Where two days are mentioned together, it is to be understood that the reference is to a series of 24 consecutive hours comprising parts of two consecutive days.

The plates are preceded by a brief descriptive summary of 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 given, viz. : declination, horizontal intensity, and vertical intensity marked D, H and V respectively.

At the foot of each plate, scales, in C.G.S. measure, are given for each of the magnetic registers and a datum line is marked for each trace at the side of the diagrams. Upward motion indicates increase of declination west and increase of intensity in all cases.

H. SPENCER JONES.

ROYAL OBSERVATORY, GREENWICH.  
1937 *July* 17.

ROYAL OBSERVATORY, GREENWICH.  
ABINGER MAGNETIC STATION.

# Results of Magnetic Observations

## 1936

GREENWICH MAGNETIC AND METEOROLOGICAL RESULTS, 1936

TABLE I.—HOURLY MEANS OF MAGNETIC DECLINATION AT THE ABINGER MAGNETIC STATION.

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
<b>January.</b>																									
11° + Tabular Quantities.																									
1	23.1	22.9	23.1	23.2	24.3	23.7	24.0	24.0	24.3	25.1	26.5	27.3	28.2	28.1	27.4	26.2	26.4	26.2	24.2	24.9	24.8	24.1	24.0	24.0	24.0
2	23.7	24.0	23.5	23.4	23.7	23.5	23.8	23.3	23.9	24.5	25.8	26.9	27.3	26.7	25.9	25.4	25.8	25.4	25.3	25.3	24.7	24.4	24.3	24.3	24.1
3*	23.5	23.3	23.3	23.5	23.6	23.3	23.4	23.3	23.3	24.2	25.3	26.3	26.8	27.3	26.7	26.3	26.3	25.7	25.6	24.7	23.7	24.3	24.3	24.2	24.2
4*	22.9	23.4	23.3	23.6	23.6	23.8	24.0	23.5	23.3	24.3	25.4	26.2	26.6	27.0	26.1	25.6	25.7	25.6	25.7	25.3	24.4	24.7	24.1	24.2	24.1
5	24.1	23.5	24.1	24.2	24.0	24.3	23.7	23.6	23.7	24.3	25.1	25.1	26.6	27.0	26.6	26.2	26.1	25.5	25.1	24.7	24.1	24.2	24.1	24.2	24.1
6*	24.1	23.9	24.0	23.6	23.8	24.1	24.1	23.9	23.5	24.1	25.1	26.0	27.1	28.1	27.7	27.1	26.7	25.9	25.1	24.4	24.0	23.5	23.9	23.8	23.8
7*	24.1	24.6	25.2	25.2	24.7	24.3	24.0	23.2	22.4	23.1	24.8	26.2	27.1	27.2	26.8	26.2	25.2	24.9	24.5	24.4	24.0	23.8	23.9	23.6	23.6
8**	23.5	24.0	24.4	24.5	24.5	24.0	22.9	23.5	23.3	23.2	24.6	26.0	28.5	28.7	30.4	29.2	27.8	25.9	23.8	24.2	22.8	22.5	22.2	21.9	21.9
9	21.8	22.9	24.3	26.8	24.5	24.1	24.6	24.5	24.6	25.5	25.9	26.4	27.4	27.4	27.0	26.0	25.1	25.6	24.4	22.3	17.3	18.4	21.1	21.1	21.1
10	22.6	24.9	25.2	25.5	25.3	25.8	25.9	24.7	23.6	24.6	27.4	29.6	29.0	28.6	25.6	26.5	26.4	24.5	16.0	19.1	20.6	22.8	22.9	22.8	22.8
11	23.8	24.5	24.4	24.5	24.0	23.7	23.6	23.2	23.3	26.7	26.4	27.5	27.1	27.5	26.0	23.8	24.6	23.2	23.8	24.0	23.5	23.5	23.6	23.7	23.7
12	24.1	24.7	22.6	24.6	24.8	24.3	25.6	25.1	25.1	26.7	26.9	28.7	29.1	30.6	28.5	28.1	25.6	24.6	23.1	18.4	18.8	21.3	21.8	21.6	21.7
13	23.1	26.2	23.6	21.7	23.5	23.9	24.9	25.5	24.8	24.9	27.0	26.9	28.4	26.4	26.9	25.4	25.0	26.0	20.8	20.9	18.3	21.8	19.9	21.9	21.8
14	21.4	22.2	22.2	22.8	23.2	23.7	24.0	23.7	23.7	24.0	25.9	26.1	26.4	26.9	26.8	26.0	25.9	25.0	25.2	25.1	24.3	23.8	19.9	21.8	21.8
15	21.2	23.2	23.9	24.7	25.1	24.6	24.3	24.3	24.6	24.2	25.3	25.7	26.5	26.6	26.7	26.2	25.4	23.9	24.6	24.2	24.0	23.9	22.5	22.5	22.5
16*	23.2	24.1	24.5	24.9	24.9	24.7	24.6	24.4	23.8	23.3	24.0	25.0	26.4	27.3	26.7	26.4	25.4	24.9	24.4	24.3	23.9	23.8	22.7	21.4	21.4
17	23.2	23.2	23.3	24.9	22.9	22.5	23.7	23.6	23.3	23.3	24.3	25.3	26.6	27.2	26.7	26.1	25.3	25.0	24.6	24.5	24.4	24.3	23.8	23.1	23.1
18**	24.2	24.5	24.2	25.8	27.2	20.9	21.6	23.2	22.7	24.4	25.8	28.6	29.2	31.2	29.2	28.6	27.6	25.8	22.2	24.9	23.2	23.5	22.5	20.5	20.5
19	21.2	21.8	22.2	23.4	23.0	23.2	23.6	24.1	24.2	24.9	25.5	26.2	26.2	28.1	28.0	27.2	26.6	26.0	24.2	19.2	21.6	23.6	24.2	24.2	24.2
20	24.2	24.2	24.3	23.9	24.3	24.2	24.0	23.9	23.9	24.7	25.3	26.1	26.4	27.6	27.4	27.4	27.6	28.0	27.4	27.0	21.8	21.4	22.4	22.9	22.9
21	22.8	21.4	22.6	22.9	21.5	23.4	23.3	23.4	23.9	24.4	24.3	24.2	25.1	27.6	28.6	27.6	27.1	26.8	26.9	26.9	25.3	22.1	23.0	20.4	20.4
22	18.6	19.1	18.9	19.5	20.0	21.6	22.3	23.1	24.6	26.5	27.6	26.8	29.5	30.0	29.2	28.5	29.5	29.6	26.5	27.5	27.3	23.7	21.2	19.6	19.6
23	19.9	21.0	21.2	19.8	22.8	24.4	23.4	23.2	25.6	25.5	25.8	26.0	26.9	27.0	26.4	26.6	26.4	25.9	25.4	25.0	24.4	23.9	24.1	23.5	23.5
24**	21.6	16.5	19.1	22.2	23.4	23.6	23.4	23.6	24.3	24.6	24.9	25.8	26.6	27.6	27.4	27.4	26.9	28.4	30.0	32.1	24.0	18.9	15.6	17.8	17.8
25**	16.5	21.5	23.6	22.8	22.7	21.3	22.7	23.2	24.1	24.5	26.2	27.0	26.8	29.5	30.9	27.3	25.5	25.5	24.1	24.2	23.1	22.9	22.8	21.5	21.5
26**	17.3	16.5	19.4	18.9	19.5	21.8	23.5	25.5	25.0	25.8	26.5	29.7	27.4	29.3	27.6	26.1	25.9	24.8	23.9	23.6	23.6	13.6	21.6	23.1	23.1
27	22.7	23.6	24.0	21.6	22.7	23.1	22.8	22.1	22.6	22.7	23.6	24.6	25.3	27.8	27.7	27.3	26.3	24.1	24.3	24.1	23.1	22.8	19.9	20.7	20.7
28	20.4	21.8	21.6	22.2	20.8	21.7	25.2	23.1	22.9	23.8	24.4	24.7	27.0	25.5	26.3	26.1	24.9	25.3	24.8	24.8	23.0	23.3	23.2	23.1	23.1
29	23.2	23.1	23.1	23.4	23.4	23.3	23.1	23.3	24.1	24.7	25.1	25.7	25.4	24.8	24.5	25.2	26.2	25.2	24.2	24.6	20.5	23.2	22.0	20.6	20.6
30	21.9	21.4	21.1	22.1	21.2	21.1	23.6	23.1	24.3	25.8	27.0	28.2	27.7	27.1	26.1	24.5	26.4	25.6	25.8	25.0	22.5	21.8	21.4	21.3	21.3
31	19.5	18.5	21.1	22.6	22.8	23.0	22.9	22.8	23.4	24.0	25.7	27.0	26.3	26.7	26.5	26.7	25.5	24.5	25.4	24.8	22.1	22.5	22.9	21.9	21.9
Mean	22.2	22.6	23.0	23.3	23.4	23.4	23.8	23.7	23.9	24.6	25.5	26.5	27.1	27.7	27.2	26.6	26.2	25.6	24.6	24.3	23.5	22.7	22.5	22.4	22.4
Mean*	23.6	23.9	24.1	24.2	24.1	24.0	24.0	23.7	23.3	23.8	24.9	25.9	26.8	27.4	26.8	26.3	25.9	25.4	25.1	24.6	24.0	24.0	23.8	23.4	23.4
Mean**	20.6	20.6	22.1	22.8	23.5	22.3	22.8	23.8	23.9	24.5	25.6	27.4	27.7	29.3	29.1	27.7	26.7	26.1	24.8	25.8	23.3	20.3	20.9	21.0	21.0
<b>February.</b>																									
11° + Tabular Quantities.																									
1*	21.6	23.2	22.1	21.9	21.5	21.5	22.0	22.5	23.2	24.0	25.2	25.5	27.0	27.3	27.1	26.1	26.5	26.1	25.5	25.0	23.5	22.8	23.0	23.1	23.1
2	23.4	22.5	22.5	22.9	22.5	22.9	22.9	22.4	23.1	23.6	24.9	25.5	27.0	27.3	26.9	27.6	27.6	29.8	29.6	29.5	24.5	23.8	23.6	23.6	23.6
3	20.5	19.5	19.5	18.4	18.5	20.1	20.9	21.6	22.5	23.1	23.8	25.4	27.0	26.7	25.4	24.8	24.5	24.0	23.9	23.6	23.8	23.4	23.6	23.6	23.6
4	23.7	23.7	24.7	23.6	24.3	23.3	22.4	23.5	25.3	28.5	28.2	28.2	27.6	28.3	26.7	26.6	25.8	25.2	23.7	22.5	23.6	23.2	23.1	23.5	23.5
5*	23.3	23.7	23.7	23.0	23.0	23.0	23.3	23.1	22.9	22.8	23.1	24.8	25.7	27.0	26.3	25.4	25.3	24.7	24.4	24.0	23.9	23.7	23.7	22.9	22.9
6	23.6	22.3	22.3	23.0	23.6	23.8	23.7	23.7	22.9	22.7	23.0	24.1	24.8	25.1	25.4	25.5	25.2	24.9	25.0	24.6	24.2	23.5	23.0	23.5	23.5
7*	23.6	23.9	24.0	24.3	24.1	24.1	24.0	23.6	24.0	23.9	23.9	24.1	23.6	23.3	23.6	24.2	24.3	24.3	23.6	23.6	23.8	23.3	22.7	22.9	22.9
8	23.2	23.5	23.7	23.7	23.7	23.4	23.4	23.3	23.2	23.2	24.1	25.2	26.4	26.7	25.7	24.8	24.6	24.4	24.4	24.6	23.1	21.3	22.1	24.1	24.1
9	23.9	23.2	22.9	25.3	25.1	23.1	24.0	23.4	23.7	24.4	26.4	27.7	30.0	29.5	27.4	25.4	23.9	21.5	25.2	25.0	22.5	20.9	21.5	23.9	23.9
10	22.0	20.8	20.5	22.7	21.8	22.2	22.8	22.8	23.4	24.1	24.2	27.4	27.8	27.0	27.3	27.3	19.8	23.1	23.6	21.8	19.8	17.5	15.0	21.2	21.2
11	21.7	24.4	22.7	22.5	23.1	25.5	23.8	23.7	23.1	23.3	25.1	26.3	27.2	27.0	25.4	25.6	25.5	24.0	23.2	23.2	23.6	22.4	22.0	23.1	23.1
12	23.0	22.9	23.1	23.4	23.5	23.0	22.7	22.9	22.5	22.5	23.5	24.5	26.2	26.4	26.5	26.0	25.4	25.4	24.1	24.3	23.8	23.1	23.0	23.0	23.0
13*	23.0	23.1	23.3	23.4	23.4	23.3	23.5	23.3	23.2	23.3	24.3	25.8	27.0	26.8	26.3	25.4	24.7	24.3	23.8	23.7	23.2	22.7	22.7	22.5	22.5
14	22.3	23.0	23.2	23.2	23.3	23.2	22.8	23.2	23.2	24.0	25.2	25.2	25.6	27.1	27.7	28.2	28.1	25.5	24.7	22.7	20.6	22.0	21.8	22.1	22.1
15	20.1	21.6	18.5	20.1	21.9	22.1	22.1	22.5	22.7	22.5	23.9	26.4	27.5	26.6	26.2	26.6	24.1	24.1	23.1	23.1	21.6	18.4	18.8	19.1	19.1
16**	18.7	20.7	20.5	21.6	22.1	22.5	23.2	23.9	25.1	25.7	25.8	26.0	29.0	29.7	28.3										

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

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
<b>March.</b>																										
11° + Tabular Quantities.																										
1	22.1	22.2	22.8	22.1	21.5	22.7	21.4	20.6	19.9	20.5	22.1	24.4	26.3	26.4	26.4	26.1	25.1	24.8	24.2	23.9	23.4	23.2	23.1	23.0	23.0	23.0
2	22.5	22.3	22.3	22.3	22.3	22.3	22.5	21.6	20.1	19.1	20.1	23.3	26.1	27.2	27.1	25.7	24.1	23.6	23.1	23.1	23.3	23.1	21.1	21.1	21.1	21.1
3*	22.1	22.5	22.5	22.5	22.5	22.5	22.1	22.1	21.1	20.3	21.4	23.7	25.3	26.0	26.0	25.5	24.4	24.0	23.5	23.4	23.4	23.1	23.1	23.1	23.1	23.1
4*	22.5	22.5	22.3	21.8	21.7	21.5	21.6	21.8	20.9	20.2	21.5	23.7	26.2	27.5	27.7	26.7	25.2	24.8	24.3	24.1	23.9	23.4	23.3	23.3	23.5	23.5
5	21.3	17.9	18.6	21.3	22.1	21.8	22.1	21.8	20.3	19.6	21.3	24.3	27.1	28.8	28.5	26.8	25.3	24.4	24.1	23.6	23.4	23.0	23.2	23.2	23.2	23.2
6	23.0	23.0	23.1	22.9	22.8	22.4	22.5	21.9	20.0	19.4	21.8	26.5	27.9	29.2	28.7	27.9	25.5	24.9	24.5	23.5	22.5	21.5	17.4	20.5	20.5	20.5
7*	22.4	22.6	22.7	22.7	22.5	21.9	22.2	21.9	20.5	19.9	21.5	24.8	27.9	28.6	27.4	26.4	25.1	24.6	23.8	23.0	23.1	22.9	22.6	22.6	22.6	22.6
8	23.0	23.5	22.8	22.6	22.6	22.6	22.2	20.5	18.6	18.9	22.6	27.2	29.2	29.8	31.0	29.3	24.6	24.6	23.6	22.8	22.6	20.5	18.4	22.3	22.3	22.3
9	22.7	22.9	22.7	23.7	22.2	22.0	21.7	20.7	19.6	19.1	21.0	26.3	29.6	31.4	31.8	31.3	29.3	26.6	23.3	21.6	21.9	21.6	22.6	22.2	22.2	22.2
10	22.2	21.6	22.2	22.6	21.9	20.8	21.1	20.3	18.7	20.0	23.0	26.5	29.3	29.3	29.4	27.2	25.2	24.0	23.4	23.0	23.0	22.2	22.0	22.6	22.6	22.6
11*	22.5	22.4	22.2	21.7	21.9	21.8	22.1	21.2	19.5	19.6	22.1	25.3	28.1	29.0	28.6	27.1	25.1	24.7	24.3	23.7	23.4	23.1	22.9	22.7	22.7	22.7
12*	22.7	22.3	22.2	22.2	22.3	22.2	22.1	21.1	19.1	18.7	21.1	25.1	27.1	27.3	27.4	26.0	24.1	23.3	23.1	23.1	23.1	23.1	23.0	22.8	22.8	22.8
13	23.0	22.9	23.0	22.9	22.9	22.6	22.5	21.5	19.6	19.0	20.6	24.1	27.2	29.7	28.5	26.9	24.9	24.2	24.4	23.5	23.1	22.9	22.9	22.9	22.9	22.9
14	22.8	22.8	22.8	22.5	22.4	21.4	21.4	20.1	19.2	19.2	20.5	23.2	25.7	26.6	26.7	26.3	24.7	23.7	23.7	23.9	23.8	23.3	23.1	21.7	21.7	21.7
15	19.4	18.0	19.6	22.5	21.6	21.0	20.6	20.6	21.4	20.4	22.6	25.2	26.8	28.3	28.0	27.0	24.6	22.6	22.6	22.4	21.6	20.5	20.2	19.6	19.6	19.6
16	21.7	22.3	22.4	21.5	20.5	21.3	20.9	20.4	19.1	19.5	22.5	25.6	27.9	28.8	28.5	26.2	24.2	23.8	23.1	23.5	23.5	23.7	23.5	21.8	21.8	21.8
17	20.7	19.1	17.5	18.0	18.0	18.7	20.1	20.3	19.5	20.0	21.7	24.9	26.1	28.0	27.5	25.5	23.7	22.6	22.5	22.8	22.0	20.0	20.6	23.7	23.7	23.7
18	19.3	18.0	21.5	20.4	20.6	20.7	20.1	18.5	18.1	19.0	22.0	26.5	27.9	28.7	28.2	26.3	24.1	23.2	22.9	21.5	19.6	19.9	18.6	21.7	21.7	21.7
19	21.0	19.9	18.7	19.6	20.2	19.2	19.4	18.8	18.4	18.5	21.1	25.1	28.5	29.1	28.8	26.7	24.7	23.9	23.5	20.7	20.5	18.9	20.2	21.1	21.1	21.1
20**	20.4	19.7	18.4	21.6	16.5	18.0	19.6	20.4	18.5	20.5	21.2	26.1	28.7	30.6	28.9	29.7	28.7	27.9	25.3	23.8	23.8	23.6	18.6	16.8	16.8	16.8
21**	14.3	16.3	18.3	14.9	17.2	19.8	17.9	19.9	18.5	20.4	25.9	28.9	30.0	30.0	30.8	27.8	25.5	23.9	21.4	20.0	17.0	20.0	20.0	20.0	20.0	20.0
22	16.4	19.5	21.1	18.9	21.1	20.9	20.1	18.9	17.4	18.1	20.9	24.8	29.3	30.2	28.3	28.2	25.3	24.3	22.6	20.2	16.2	18.8	22.0	22.7	22.7	22.7
23**	22.3	21.7	20.2	16.8	17.2	19.7	24.2	20.3	19.8	20.4	23.8	27.8	29.2	30.3	30.8	29.4	26.9	23.5	17.8	15.4	21.2	22.2	21.9	21.4	21.4	21.4
24**	18.5	17.6	19.2	19.0	20.6	19.5	25.0	21.0	18.7	19.9	20.2	25.4	30.1	32.4	32.4	29.0	26.4	24.7	22.7	19.7	24.2	17.7	15.1	14.7	14.7	14.7
25**	18.8	15.5	15.8	18.5	20.2	20.4	20.0	18.8	18.4	18.7	21.7	25.3	29.6	32.9	30.9	28.1	25.3	23.7	23.1	22.6	22.4	15.8	18.5	10.0	10.0	10.0
26	11.5	12.1	20.5	18.1	20.1	21.9	21.7	18.7	18.1	19.1	22.3	25.8	30.2	32.1	30.8	28.1	25.4	24.2	23.4	22.6	21.3	18.3	16.1	19.5	19.5	19.5
27	20.1	19.8	20.1	20.1	20.1	19.5	19.3	19.1	18.1	19.2	21.7	26.1	30.6	30.9	30.9	28.1	25.8	23.0	22.0	17.6	16.6	16.6	16.7	18.3	18.3	18.3
28	18.0	19.0	16.0	16.5	19.4	19.6	18.2	16.0	15.4	16.2	18.9	22.8	26.8	28.6	29.0	26.6	24.3	22.8	22.5	22.3	23.0	23.0	22.2	22.0	22.0	22.0
29	21.4	21.1	21.4	20.5	18.0	17.8	18.7	16.5	16.5	17.5	20.3	25.1	28.6	30.5	29.2	26.4	24.1	22.2	21.8	21.6	21.6	22.1	21.5	20.1	20.1	20.1
30	19.1	19.2	19.2	19.3	19.2	19.1	18.8	17.3	16.2	15.6	19.4	24.4	28.4	29.2	28.9	27.4	25.3	23.5	22.9	22.3	22.4	22.4	22.1	21.1	21.1	21.1
31	18.5	18.5	19.8	19.0	18.5	18.3	17.5	16.0	16.2	16.7	20.6	24.2	27.4	29.6	29.6	28.1	26.2	24.3	23.1	23.0	22.4	22.1	22.3	22.2	22.2	22.2
Mean	20.5	20.3	20.7	20.6	20.7	20.8	21.0	20.0	18.9	19.1	21.5	25.2	28.1	29.3	28.9	27.4	25.3	24.1	23.1	22.2	22.0	21.4	20.9	21.0	21.0	21.0
Mean*	22.4	22.5	22.4	22.2	22.2	21.9	22.0	21.6	20.2	19.7	21.5	24.5	26.9	27.7	27.4	26.3	24.8	24.3	23.8	23.5	23.4	23.1	23.0	22.9	22.9	22.9
Mean**	18.9	18.2	18.4	18.2	18.3	19.5	21.3	20.1	18.8	20.0	22.6	26.7	29.5	31.2	30.8	28.8	26.6	24.7	22.1	20.3	21.7	19.9	18.8	16.6	16.6	16.6
<b>April.</b>																										
11° + Tabular Quantities.																										
1	21.8	21.8	21.7	21.5	21.2	20.6	19.3	16.7	15.2	16.7	20.3	23.6	26.3	27.3	30.3	27.8	27.8	26.0	19.8	20.8	22.6	21.8	22.2	19.2	19.2	19.2
2	21.9	22.6	22.5	20.3	20.0	20.5	20.0	18.9	18.2	19.1	22.1	25.9	28.5	29.1	29.3	28.1	26.1	24.7	23.8	23.4	22.8	12.8	17.5	22.4	22.4	22.4
3	23.1	22.8	22.1	21.9	21.3	20.0	18.7	16.7	16.3	17.9	21.9	26.4	29.5	30.7	30.1	27.5	24.6	23.5	22.9	18.2	10.3	16.1	16.6	18.7	18.7	18.7
4	18.0	20.8	21.3	20.2	21.1	21.4	19.6	18.0	17.0	18.0	20.7	24.4	27.9	28.8	27.4	25.3	22.8	21.7	21.5	22.2	22.2	22.2	22.6	22.9	22.9	22.9
5*	23.0	22.6	22.6	22.6	22.1	21.5	19.4	17.0	15.9	16.5	20.0	25.9	30.0	30.9	29.2	26.8	23.7	21.5	20.5	21.2	21.3	21.7	22.5	23.1	23.1	23.1
6*	23.1	22.9	22.4	22.2	22.0	21.2	19.2	16.5	16.9	19.0	22.2	26.0	28.5	29.9	29.2	26.9	23.9	22.8	22.7	23.0	22.6	22.6	22.7	22.8	22.8	22.8
7	22.2	21.9	21.7	21.5	21.3	20.7	19.5	17.5	15.9	17.0	20.7	25.1	30.6	33.1	33.7	30.8	27.7	24.6	22.1	21.6	21.8	22.2	22.5	22.6	22.6	22.6
8	22.5	22.1	21.7	21.1	20.5	21.1	20.4	17.0	16.7	17.3	20.2	25.6	31.4	31.9	28.5	28.2	25.5	22.7	20.1	20.5	21.5	22.1	22.5	22.4	22.4	22.4
9	21.8	22.0	22.4	22.3	22.3	21.9	20.3	18.5	17.5	18.1	20.5	24.1	28.3	29.7	28.5	26.4	24.5	23.5	22.5	21.6	20.2	21.2	22.1	22.5	22.5	22.5
10*	22.5	22.3	22.5	22.1	22.1	22.0	21.6	19.5	17.5	18.5	20.5	24.5	29.3	30.6	29.6	27.3	24.9	22.9	22.0	22.5	22.5	22.5	22.4	22.4	22.4	22.4
11	21.8	21.8	21.9	21.7	21.5	20.9	21.4	19.6	19.0	21.5	22.9	25.1	27.4	28.0	28.0	26.4	25.4	23.4	22.4	22.5	22.4	22.0	21.0	19.8	19.8	19.8
12	16.3	19.5	20.7	22.0	20.9	20.2	19.5	18.3	17.3	19.3	23.0	27.5	30.1	30.7	31.2	28.2	27.2	26.3	24.8	24.3	22.7	18.4	22.6	19.5	19.5	19.5
13	18.1	18.1	18.2	20.0	18.3	21.6	20.1	17.7	18.4	20.5	23.1	27.5	28.7	31.2	31.0	30.8	29.4	23.1	23.9	23.3	19.0	20.4	21.0	21.5	21.5	21.5
14	21.5	21.3	20.4	20.2	19.9	19.9	18.8	16.7	16.8	18.7	21.4	23.9	26.9	28.7	28.2	26.9	25.									

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

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
<b>May.</b>																									
11° + Tabular Quantities.																									
1	17.4	17.6	18.0	18.0	18.4	17.5	17.4	17.0	17.0	17.7	21.6	24.8	28.1	28.1	26.7	25.1	23.0	21.4	20.8	21.4	21.8	22.3	22.0	22.4	22.4
2	22.8	23.1	21.8	20.0	19.3	18.3	17.0	16.4	15.9	18.3	21.8	25.5	27.7	28.7	27.4	25.1	23.4	22.4	21.6	21.9	22.4	22.8	22.7	22.4	22.4
3	22.0	22.0	21.2	21.2	19.3	17.3	14.6	14.2	15.3	18.2	21.6	24.8	27.3	28.2	27.1	25.9	24.9	24.2	23.6	23.3	23.2	23.1	22.8	22.2	22.2
4	21.2	20.7	20.7	20.9	21.0	21.5	18.9	19.1	19.1	21.2	24.7	28.2	29.3	29.7	28.6	25.9	24.7	23.3	16.3	17.7	22.4	18.8	20.8	20.3	20.3
5	22.0	21.7	21.4	19.5	18.0	16.0	13.7	14.3	16.3	18.9	23.1	26.4	27.8	27.5	26.5	25.0	23.5	22.5	22.0	22.3	21.6	22.6	22.9	22.7	22.7
6	22.7	22.4	22.0	21.2	19.4	17.7	15.8	15.1	16.1	19.3	24.8	28.2	30.9	29.5	27.3	24.8	22.3	21.3	21.1	21.3	21.5	21.9	22.1	22.3	22.3
7*	22.2	22.2	22.0	21.5	20.1	18.0	15.9	14.0	14.3	18.4	23.4	28.5	31.6	30.4	26.4	23.7	21.9	20.4	21.0	21.6	22.0	22.2	22.2	22.0	22.0
8*	21.6	21.5	21.1	21.0	20.1	18.9	17.7	17.1	17.1	19.5	23.1	27.1	30.0	29.4	26.8	24.7	22.8	21.5	21.1	21.3	21.9	21.7	21.9	21.5	21.5
9*	21.1	21.0	20.8	20.1	19.1	17.8	16.4	14.5	14.7	18.1	21.1	24.1	26.1	27.1	26.5	25.4	24.1	22.8	22.1	22.1	22.1	22.1	22.1	22.1	22.1
10	21.7	21.2	20.8	20.2	19.4	17.8	16.2	15.5	16.2	19.6	24.2	29.2	31.2	30.2	30.2	30.2	29.6	28.5	26.6	23.7	19.4	22.0	20.3	18.5	18.5
11**	18.3	17.7	19.7	18.2	16.9	16.7	16.0	15.7	17.2	19.9	23.7	29.3	32.7	33.3	33.3	29.3	29.0	27.5	26.5	24.3	23.3	22.9	22.1	21.1	21.1
12**	21.6	21.0	20.1	19.1	20.1	22.3	19.8	17.1	19.3	21.6	23.1	27.2	30.1	32.3	32.0	28.6	27.6	25.1	22.4	19.2	20.2	21.9	19.9	19.6	19.6
13	21.2	18.4	18.0	20.8	18.6	17.6	15.9	16.4	16.8	19.4	21.4	23.3	25.9	27.5	26.9	25.3	23.4	21.4	21.0	21.4	21.2	19.4	18.4	19.1	19.1
14	19.4	19.8	19.8	18.7	19.4	17.7	15.1	13.8	14.0	15.9	19.0	22.7	25.5	28.9	28.5	27.9	25.3	23.3	19.9	19.5	17.3	18.5	19.8	19.8	19.8
15	20.3	19.7	17.8	18.3	18.4	18.7	16.3	15.9	16.7	18.9	20.8	23.5	26.5	28.0	27.7	26.5	25.3	24.0	22.7	21.9	16.0	17.7	15.9	15.7	15.7
16	14.8	17.8	19.8	16.8	16.4	19.0	19.0	16.8	18.8	20.4	22.5	27.1	31.9	32.5	30.5	29.5	27.9	24.5	20.9	18.5	19.3	21.5	23.1	20.9	20.9
17	19.0	18.2	19.8	19.9	18.3	16.6	15.4	17.0	16.7	19.1	22.6	26.0	28.7	29.6	27.7	25.1	23.3	21.7	21.4	19.9	19.4	20.0	18.7	18.7	18.7
18**	21.8	19.2	18.5	17.7	17.8	14.8	16.5	18.9	21.2	18.9	22.1	27.8	30.0	31.5	29.8	28.0	25.2	23.2	19.5	11.7	15.5	19.6	24.1	19.5	19.5
19**	19.1	21.9	22.7	22.3	20.5	19.6	16.5	13.2	12.5	17.1	21.5	27.1	29.6	29.8	29.2	25.9	22.2	20.8	20.5	15.3	18.9	20.9	19.9	20.4	20.4
20	21.4	21.4	20.4	21.4	21.8	19.7	16.7	13.3	13.7	17.2	20.5	24.3	27.2	28.7	27.1	25.4	24.4	23.1	19.1	20.1	21.3	22.4	22.1	21.9	21.9
21	21.1	20.6	21.0	21.4	21.3	19.9	19.6	17.7	14.6	15.3	18.9	21.9	26.0	26.3	25.0	25.0	24.3	20.6	20.4	21.2	19.2	20.6	19.7	19.1	19.1
22	21.6	22.3	20.9	20.3	17.6	15.8	14.0	12.6	13.0	16.8	21.3	25.1	28.3	29.3	27.1	23.9	22.7	21.5	21.1	21.2	21.6	21.7	21.1	21.6	21.6
23*	20.2	19.1	20.7	20.1	19.1	17.0	15.6	14.1	14.9	17.7	21.7	25.7	29.1	28.5	27.2	25.7	23.9	22.7	22.2	21.7	21.2	21.2	21.2	20.6	20.6
24*	20.1	19.7	19.4	19.2	18.7	16.9	15.8	15.1	15.7	18.4	22.7	26.7	29.3	29.7	28.9	26.7	24.7	23.4	22.4	21.7	21.5	21.1	20.9	20.7	20.7
25	20.2	20.2	20.2	19.8	19.5	18.5	16.4	14.5	13.9	15.3	17.3	20.9	24.1	27.5	27.8	25.9	24.2	23.0	22.4	21.3	20.0	21.2	21.8	21.0	21.0
26	20.5	19.5	21.2	21.0	19.1	17.3	16.1	15.4	15.5	18.3	21.1	25.1	28.3	28.7	28.4	28.2	26.8	23.2	20.1	21.1	21.7	22.2	20.3	20.3	20.3
27	20.5	20.3	19.7	19.6	18.4	16.2	14.3	13.7	15.3	17.7	20.4	21.2	23.9	25.5	25.4	23.9	23.0	21.8	20.8	21.1	21.3	21.8	19.4	20.4	20.4
28	21.4	19.5	18.3	18.9	18.7	18.3	16.1	14.2	14.9	16.9	20.1	23.9	27.2	28.2	27.2	25.4	24.2	22.9	20.9	22.3	22.2	22.3	22.1	22.3	22.3
29**	21.4	20.6	20.3	19.5	18.1	15.9	15.1	13.3	14.6	17.6	23.3	26.1	27.6	28.1	27.1	26.0	24.6	22.7	20.5	21.3	22.3	19.2	17.6	19.6	19.6
30	19.6	19.7	19.4	16.9	15.9	15.2	16.2	17.0	16.0	17.8	21.5	24.5	25.6	26.6	25.8	24.6	23.1	23.2	23.5	24.6	23.6	22.5	22.0	22.6	22.6
31	21.6	17.4	15.8	12.5	13.2	13.5	14.2	14.6	16.0	18.6	21.0	24.3	26.2	25.8	24.3	22.7	20.4	19.4	20.1	20.7	20.6	21.1	21.6	21.7	21.7
Mean	20.6	20.2	20.1	19.6	18.8	17.7	16.3	15.4	15.9	18.3	21.8	25.5	28.2	28.9	27.8	26.0	24.4	22.8	21.4	20.9	20.9	21.2	21.0	20.7	20.7
Mean*	21.0	20.7	20.8	20.4	19.4	17.7	16.3	15.0	15.3	18.4	22.4	26.4	29.2	29.0	27.2	25.2	23.5	22.2	21.8	21.7	21.7	21.7	21.7	21.4	21.4
Mean**	20.4	20.1	20.3	19.4	18.7	17.9	16.8	15.6	17.0	19.0	22.7	27.5	30.0	31.0	30.3	27.6	25.6	23.9	21.9	18.4	20.0	20.9	20.7	20.0	20.0
<b>June.</b>																									
11° + Tabular Quantities.																									
1**	20.9	20.1	19.6	19.3	18.2	16.1	14.7	16.4	19.1	21.1	25.5	28.5	26.1	26.7	25.3	24.5	23.5	23.3	22.5	23.1	18.4	18.9	20.1	21.1	21.1
2**	20.4	19.9	18.2	16.2	16.4	18.9	17.5	15.6	16.1	19.4	23.2	26.7	27.8	28.2	28.1	26.3	25.2	25.0	21.8	17.3	15.3	15.9	18.6	18.3	18.3
3	18.7	18.0	17.0	16.8	17.7	17.4	14.4	14.8	14.4	16.4	20.2	23.8	26.8	27.1	26.9	26.5	25.9	23.2	22.0	21.5	21.3	21.5	20.8	17.6	17.6
4	18.9	19.4	19.5	19.5	18.5	17.7	16.1	14.2	13.3	14.7	17.5	22.5	26.5	28.0	28.4	25.5	23.5	21.8	20.6	20.4	20.4	20.9	19.9	19.9	19.9
5*	20.5	20.3	19.5	19.2	18.5	16.9	14.9	14.8	14.5	15.7	18.1	21.8	24.5	25.8	25.2	23.9	22.9	21.7	20.9	20.4	20.5	20.5	20.6	20.7	20.7
6*	20.7	19.9	19.9	18.9	17.5	16.5	14.3	12.7	11.7	12.7	16.2	19.9	22.7	25.2	26.0	25.6	23.9	21.6	20.5	20.7	20.9	21.2	21.3	21.1	21.1
7	20.7	20.4	20.2	20.1	19.1	18.4	17.6	16.4	16.1	16.9	19.5	23.4	26.1	28.0	29.0	27.9	25.8	23.3	22.0	21.5	21.7	21.4	21.1	21.3	21.3
8	21.5	20.2	17.6	17.5	17.2	16.7	14.6	13.5	13.7	16.2	19.6	23.2	26.6	28.3	27.9	26.1	25.3	25.1	23.2	22.2	21.2	20.7	14.6	13.5	13.5
9**	18.7	18.9	20.1	20.5	21.4	17.1	17.0	17.0	21.7	20.3	21.3	23.3	28.3	30.3	28.3	29.0	26.3	24.3	23.0	20.7	20.7	20.0	20.2	16.9	16.9
10**	17.9	18.0	17.9	18.3	17.4	14.6	14.6	13.2	12.0	13.7	18.0	20.5	24.6	27.2	26.9	26.0	25.2	21.9	21.1	16.8	17.9	20.9	20.8	19.1	19.1
11	19.6	21.6	19.0	18.0	16.6	16.6	14.3	14.1	13.8	16.5	19.3	21.6	24.2	25.2	25.7	25.7	24.2	22.7	22.1	20.7	19.9	20.3	20.7	20.2	20.2
12	18.2	19.4	18.1	17.4	16.0	16.2	16.3	17.8	19.3	20.7	21.9	23.5	24.9	25.3	24.1	22.9	21.9	21.5	21.7	21.4	20.8	19.8	18.3	18.2	18.2
13	17.3	15.9	17.3	15.9	15.3	16.4	14.9	15.5	17.9	20.1	22.8	24.4	25.9	27.3	26.8	26.3	24.5	22.9	22.6	18.0	19.9	20.9	19.7	19.6	19.6
14	17.8	17.7	17.7	17.2	15.7	16.8	17.2	16.3	16.2	17.1	19.1	21.7	23.6	24.5	24.3	23.2	22.1	20.3	18.9	20.2	20.3	20.8	22.4	17.9	17.9
15	15.7	18.8	21.8	20.2	16.3	14.2	14.2	15.2	14.8	18.8	20.7	23.4	25.1	26.2	27.7	25.3	24.4	22.1	20.8	20.7	20.2	22.2	21.7	20.0	20.0
16	21.2	21.2	20.1	16.9	17.6	15.5	14.7	14.2	15.2	16.8	20.6	24.0	25.6	27.9											

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

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>			
July.																												
11° + Tabular Quantities.																												
1	18.9	18.3	18.2	17.7	15.7	13.6	13.3	13.3	14.3	16.8	20.5	24.0	26.1	27.3	26.7	25.8	24.2	22.5	21.3	21.0	20.2	20.3	20.1	19.5	19.5	19.5	19.5	
2**	19.0	17.7	16.7	16.0	13.7	11.1	9.7	6.2	11.1	15.3	16.9	20.7	26.4	29.8	32.2	30.6	22.7	21.8	20.8	19.6	19.7	20.9	19.7	18.7	18.7	18.7	18.7	18.7
3	21.2	19.8	17.7	17.7	16.9	16.3	16.4	17.3	18.0	18.9	21.2	24.3	27.3	27.3	26.6	24.7	23.3	22.3	20.9	20.1	20.7	21.2	20.5	19.9	19.9	19.9	19.9	19.9
4	19.1	18.7	18.2	17.6	16.7	15.8	15.2	14.9	15.4	17.2	20.0	22.2	23.8	24.6	23.9	22.9	21.6	21.2	20.8	20.4	20.2	20.5	19.8	19.8	19.8	19.8	19.8	19.8
5	19.5	19.5	19.3	19.1	18.4	17.9	17.2	19.7	17.4	17.0	20.4	22.5	23.8	25.4	25.0	23.9	23.0	21.8	19.0	19.1	19.4	19.8	19.5	19.8	19.8	19.8	19.8	19.8
6**	18.0	13.9	13.6	16.6	17.1	16.6	16.2	13.9	14.2	16.2	19.9	23.6	29.0	29.3	31.1	29.3	26.3	22.3	22.5	22.1	21.0	17.7	17.7	19.3	19.3	19.3	19.3	19.3
7	14.7	17.4	19.4	17.0	16.3	15.4	13.4	12.2	11.5	14.4	18.4	19.7	24.9	25.0	24.5	24.2	23.6	22.4	21.2	20.3	20.0	20.1	20.0	19.3	19.3	19.3	19.3	19.3
8	18.7	18.1	16.6	17.3	18.3	16.2	15.7	15.3	14.7	15.9	18.1	22.7	26.3	18.3	17.9	16.4	15.6	23.7	21.8	18.2	19.2	19.5	19.0	19.6	19.6	19.6	19.6	19.6
9	18.8	18.8	18.5	18.2	16.7	15.5	14.5	13.8	13.1	14.0	15.1	18.2	21.7	24.8	26.1	25.8	24.4	23.4	22.6	20.8	20.1	19.7	20.0	18.8	18.8	18.8	18.8	18.8
10**	18.2	18.2	17.7	17.9	18.8	18.7	18.3	14.7	14.3	14.3	16.6	20.3	24.2	27.9	30.1	27.8	25.7	23.3	23.2	21.0	18.3	14.4	15.2	12.9	12.9	12.9	12.9	12.9
11**	9.8	13.1	17.1	16.2	17.1	15.7	13.6	13.8	13.8	18.8	20.1	20.9	23.4	25.5	28.5	26.5	32.4	28.9	24.6	21.9	21.4	20.5	20.5	20.9	20.9	20.9	20.9	20.9
12	18.6	17.4	17.7	18.0	15.3	15.3	14.4	13.5	13.4	14.9	18.2	20.4	22.8	25.6	26.9	26.3	24.5	22.8	21.3	21.1	19.5	17.3	15.3	18.1	18.1	18.1	18.1	18.1
13	16.9	19.5	18.8	15.3	18.4	18.3	15.5	14.8	15.5	16.4	18.4	21.2	22.5	24.7	24.5	23.5	20.9	20.7	18.9	19.6	20.3	20.4	20.1	19.6	19.6	19.6	19.6	19.6
14*	19.0	19.0	18.9	18.4	16.9	15.6	14.0	12.4	12.4	13.5	14.9	18.9	22.4	25.3	25.6	24.0	22.3	20.8	20.9	20.5	20.0	20.3	20.0	20.0	20.0	20.0	20.0	20.0
15*	19.3	19.1	18.9	17.9	16.7	15.9	16.4	17.0	16.0	17.0	19.0	22.4	25.0	26.6	26.0	23.8	22.0	21.0	20.2	19.9	19.2	19.2	20.0	20.0	20.0	20.0	20.0	20.0
16	19.1	19.3	22.2	20.5	20.1	16.9	12.9	10.9	11.5	13.4	15.9	20.2	23.2	25.3	24.9	23.9	22.9	22.9	21.5	20.9	21.0	20.8	20.1	20.5	20.5	20.5	20.5	20.5
17	18.1	18.4	19.1	16.9	15.6	13.8	13.7	14.2	14.9	16.6	19.2	22.9	24.7	26.2	26.9	26.3	24.4	24.8	23.5	18.9	20.3	20.5	19.6	19.0	19.0	19.0	19.0	19.0
18	19.0	17.0	20.0	18.7	17.2	16.6	14.6	14.0	14.2	14.9	17.0	21.0	23.5	26.0	26.0	24.4	23.0	21.8	20.6	19.6	18.7	19.6	19.2	19.5	19.5	19.5	19.5	19.5
19	19.1	21.1	20.1	19.1	17.1	16.1	14.1	12.5	11.9	13.0	16.0	20.6	25.1	27.6	26.6	24.6	22.3	20.1	18.4	18.6	18.5	18.8	18.6	18.1	18.1	18.1	18.1	18.1
20	19.0	21.3	20.3	19.0	17.5	18.5	16.3	14.4	14.6	14.4	17.0	21.4	24.6	25.6	26.2	25.0	22.6	21.6	19.8	19.5	20.0	20.0	19.7	19.5	19.5	19.5	19.5	19.5
21*	19.7	19.9	19.6	18.4	16.9	15.3	13.5	12.8	12.7	13.6	16.5	19.9	25.2	26.8	25.9	24.2	21.9	20.3	19.1	19.4	19.1	19.1	19.4	19.2	19.2	19.2	19.2	19.2
22	19.3	19.4	19.8	19.9	18.1	15.5	13.7	11.8	11.4	13.6	16.8	20.8	23.6	25.7	25.4	22.8	20.8	19.8	19.5	19.3	19.0	19.4	19.3	18.8	18.8	18.8	18.8	18.8
23*	19.2	19.3	18.9	18.7	17.7	15.7	14.3	13.7	14.4	17.1	20.3	23.2	24.2	24.0	24.2	22.9	21.7	20.1	19.2	19.7	19.4	19.2	19.3	19.6	19.6	19.6	19.6	19.6
24*	19.5	19.3	18.4	18.2	17.0	15.2	14.8	14.4	14.8	16.2	18.8	22.2	25.1	25.4	25.5	24.9	22.9	20.8	20.1	20.0	19.5	19.5	20.0	20.0	20.0	20.0	20.0	20.0
25	19.8	18.3	17.5	17.0	16.1	14.9	12.9	12.4	12.9	14.9	18.6	22.5	25.9	27.5	25.5	23.9	21.9	19.8	18.5	19.1	19.9	17.2	18.3	18.5	18.5	18.5	18.5	18.5
26	18.9	18.7	16.3	16.7	16.0	14.9	13.8	13.0	14.1	17.4	20.6	25.1	27.5	27.4	26.2	24.8	22.8	21.0	19.8	19.7	20.0	19.7	19.0	18.9	18.9	18.9	18.9	18.9
27	18.7	18.2	17.7	17.3	16.3	14.7	14.3	13.0	13.4	15.4	17.7	21.6	24.9	26.9	26.6	26.3	23.6	22.0	20.4	19.4	17.9	19.9	20.2	19.2	19.2	19.2	19.2	19.2
28	19.2	14.4	16.8	17.8	14.2	12.2	12.5	13.5	14.5	18.5	22.4	25.5	27.3	26.8	25.6	22.6	21.6	21.5	21.7	20.7	20.4	20.3	20.0	19.6	19.6	19.6	19.6	19.6
29**	18.7	18.2	17.7	17.3	16.3	15.8	15.7	16.3	17.7	20.9	23.9	24.0	26.1	26.3	30.2	31.8	30.6	26.3	18.5	17.8	17.9	18.4	18.8	18.8	18.8	18.8	18.8	18.8
30	20.2	23.0	21.8	18.5	18.3	16.3	14.9	13.9	15.9	16.4	19.3	22.2	23.7	24.2	23.9	21.8	19.9	18.9	18.8	18.9	19.4	19.5	19.3	19.0	19.0	19.0	19.0	19.0
31	18.4	17.9	17.5	17.3	16.5	15.1	14.7	15.7	16.4	18.3	21.0	22.3	24.9	26.9	26.9	24.8	23.0	18.6	18.5	19.5	19.9	18.9	16.9	18.1	18.1	18.1	18.1	18.1
Mean	18.6	18.5	18.4	17.8	16.9	15.7	14.5	13.9	14.2	16.0	18.7	21.9	24.8	26.0	26.2	24.9	23.2	21.9	20.6	19.9	19.7	19.4	19.2	19.1	19.1	19.1	19.1	19.1
Mean*	19.3	19.3	18.9	18.3	17.0	15.5	14.6	14.1	14.1	15.5	17.9	21.3	24.4	25.6	25.4	24.0	22.2	20.6	19.9	19.9	19.4	19.5	19.7	19.8	19.8	19.8	19.8	19.8
Mean**	16.7	16.2	16.6	16.8	16.6	15.6	14.7	13.0	14.2	17.1	19.5	21.9	25.8	27.8	30.4	29.2	27.5	24.5	21.9	20.5	19.7	18.4	18.4	18.1	18.1	18.1	18.1	18.1
August.																												
11° + Tabular Quantities.																												
1	17.8	20.8	19.3	17.0	15.4	14.0	12.9	13.4	13.9	15.0	16.9	19.9	22.9	24.4	25.2	23.5	20.9	18.5	17.5	17.9	18.6	18.8	18.6	18.4	18.4	18.4	18.4	18.4
2	19.2	20.3	18.6	17.6	16.7	16.0	14.9	13.6	13.0	14.7	18.0	21.2	24.2	26.0	25.9	24.0	21.8	20.4	20.1	20.0	19.9	17.4	18.0	18.5	18.5	18.5	18.5	18.5
3	18.6	18.3	18.4	17.5	16.0	15.1	14.5	14.1	14.7	16.9	20.8	25.1	28.0	30.3	29.1	25.1	22.3	20.3	19.1	19.1	19.1	16.1	17.1	19.1	19.1	19.1	19.1	19.1
4	18.5	19.1	19.6	17.2	18.0	14.9	14.7	14.9	15.6	17.5	20.0	23.0	25.0	26.9	25.9	23.9	21.9	19.6	18.6	18.5	18.6	18.8	18.4	18.8	18.8	18.8	18.8	18.8
5**	18.8	18.8	18.3	17.4	16.3	14.2	13.7	12.6	13.5	16.3	20.3	25.2	29.8	30.8	28.8	26.4	23.8	21.8	18.4	17.4	15.0	17.2	17.1	16.9	16.9	16.9	16.9	16.9
6**	15.0	14.1	17.1	18.1	16.8	15.6	15.5	14.0	12.9	14.9	19.1	23.1	25.9	27.9	27.1	24.6	23.2	21.4	19.9	19.0	19.0	19.0	18.9	18.5	18.5	18.5	18.5	18.5
7*	18.3	18.1	17.7	17.2	15.8	14.3	13.1	12.1	13.1	15.1	17.7	21.0	22.7	23.9	24.7	23.7	22.1	21.0	19.7	19.3	19.9	19.6	19.4	18.7	18.7	18.7	18.7	18.7
8**	18.2	17.5	16.7	16.4	15.5	13.6	12.4	14.7	16.8	19.2	22.5	24.5	26.8	28.2	27.1	25.8	24.7	23.2	20.5	20.2	14.4	14.8	18.8	18.7	18.7	18.7	18.7	18.7
9	17.8	16.6	17.7	15.2	15.5	14.9	12.4	12.5	13.2	15.8	18.2	21.2	23.9	24.7	25.6	24.2	22.2	20.2	20.1	19.4	19.3	20.2	20.0	20.5	20.5	20.5	20.5	20.5
10**	16.5	15.7	15.1	14.3	13.9	13.9</																						



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

Table with columns for U.T. (0h to 24h) and rows for months (September, October). It contains hourly magnetic declination values and summary statistics (Mean, Mean\*, Mean\*\*) for each day. Includes a note: \* Denotes an International Quiet Day. \*\* Denotes an International Disturbed Day.

\* Denotes an International Quiet Day.

\*\* Denotes an International Disturbed Day.

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

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>		
<b>November</b>																											
<i>i</i> ° + Tabular Quantities.																											
1	15.7	16.1	16.2	16.3	15.9	15.3	14.6	13.7	12.9	13.7	15.7	18.0	18.5	19.6	18.8	18.2	17.7	17.8	17.1	16.6	16.2	15.6	16.0	16.1			
2	16.4	16.5	16.5	16.6	16.5	15.6	15.0	14.1	12.6	13.5	16.0	18.3	19.5	19.9	20.0	18.9	18.3	18.1	17.5	17.5	16.5	14.0	12.1	13.0			
3**	14.6	15.1	15.0	14.4	19.5	15.7	15.6	16.9	14.5	13.3	15.6	20.2	22.3	25.3	26.1	25.5	24.9	22.9	18.4	16.7	12.5	10.5	11.4	7.4			
4	12.4	13.5	11.9	7.0	11.6	14.5	14.0	13.1	11.5	11.6	14.0	16.1	18.3	19.8	21.0	20.1	18.0	16.8	16.7	16.5	16.0	15.5	15.7	15.0			
5	13.0	9.5	15.5	15.3	14.8	14.6	14.8	14.6	13.6	13.8	15.1	18.5	19.5	20.7	20.2	19.4	18.0	17.3	16.9	16.7	16.2	13.0	14.4	15.5			
6	15.6	15.4	16.6	16.6	16.1	15.5	15.3	14.1	12.6	12.8	14.6	17.5	19.5	20.6	20.6	19.6	18.4	17.8	17.3	16.9	16.2	14.8	10.2	9.6			
7	13.3	14.9	16.1	16.1	15.6	15.2	15.3	14.6	12.6	12.9	15.2	18.4	20.6	22.6	23.9	22.6	20.7	20.0	19.4	15.8	15.6	11.1	10.4	12.9			
8	14.9	15.6	16.5	16.0	15.7	16.1	16.4	14.9	13.6	14.2	15.9	18.1	19.6	20.1	19.5	18.9	17.0	16.7	18.1	17.2	16.3	14.8	8.3	12.1			
9	11.9	11.3	17.7	14.1	15.8	15.5	14.5	14.2	12.5	13.3	15.4	18.0	19.9	19.8	19.5	19.3	18.4	17.8	17.5	17.0	16.6	16.5	16.4	16.3			
10	16.2	15.6	15.4	15.9	15.5	15.3	15.3	14.9	14.1	14.1	16.3	18.4	20.2	20.5	20.3	19.4	18.8	19.8	20.0	20.0	17.6	15.3	14.1	15.3			
11**	16.3	15.7	15.9	16.4	13.9	13.9	16.2	16.0	15.8	14.9	17.5	18.3	20.1	20.9	20.5	20.9	21.6	11.8	14.2	16.4	11.8	9.2	10.3	11.2			
12	11.7	13.3	13.6	15.9	13.8	15.3	14.4	13.8	13.6	14.3	16.5	18.5	20.3	20.6	20.4	19.6	19.2	18.7	17.7	15.4	15.7	16.3	16.3	16.2			
13*	16.3	16.3	16.3	16.1	15.7	15.3	14.8	14.2	14.0	14.1	16.3	18.6	19.6	19.4	18.6	17.9	17.7	17.3	16.6	16.4	16.2	15.9	16.3	16.2			
14	15.0	14.3	14.3	15.1	15.3	14.9	14.6	14.2	13.5	13.9	16.2	18.8	19.5	19.8	19.5	18.8	18.1	17.1	17.1	16.3	16.1	15.2	15.2	15.2			
15**	15.0	13.2	14.1	15.4	15.8	15.6	15.3	15.6	15.0	14.0	17.0	18.6	21.0	23.4	23.9	25.0	21.1	18.3	17.1	16.1	13.1	6.3	10.1	12.1			
16**	14.5	16.4	16.4	16.2	17.1	17.2	16.4	15.2	14.0	14.2	15.2	18.8	20.3	22.3	19.8	21.1	16.1	17.5	16.0	12.5	13.4	12.4	14.7	14.5			
17	15.4	15.2	15.5	15.9	15.4	14.8	14.4	13.9	13.4	13.4	15.4	17.4	18.2	19.2	18.4	18.3	18.6	15.7	16.7	15.7	13.3	9.8	10.8	11.4			
18	13.2	12.0	13.8	16.0	14.7	14.4	14.9	16.8	19.3	16.1	18.4	18.6	20.9	19.4	17.4	17.4	13.5	15.2	15.8	15.4	13.8	11.7	13.6	12.1			
19	13.3	14.0	14.4	14.5	14.9	13.9	13.9	13.6	13.0	13.2	15.9	18.0	18.4	20.6	19.7	20.0	19.4	16.6	14.6	16.0	12.0	13.6	14.6	14.4			
20	14.7	15.4	16.4	16.3	15.6	15.3	15.1	15.2	14.4	15.1	18.4	20.1	20.6	21.9	21.6	20.9	18.5	17.0	15.3	14.8	14.3	14.1	13.3	14.5			
21	16.1	15.2	15.7	15.6	15.8	15.5	15.4	15.2	14.3	14.7	16.1	19.0	20.1	19.1	18.9	18.6	17.6	16.9	16.5	15.9	15.6	15.0	15.0	15.2			
22*	14.9	14.9	15.1	15.1	15.4	14.9	15.0	15.1	14.7	14.9	16.5	18.1	18.4	18.6	18.6	17.8	17.5	16.8	16.3	15.9	15.8	15.5	15.3	15.0			
23*	15.6	15.7	15.6	15.7	15.5	15.2	15.3	15.1	13.9	14.1	15.8	17.2	18.0	18.2	17.6	17.1	16.5	16.0	15.5	15.4	15.5	15.5	15.7	15.8			
24*	15.9	16.0	16.0	16.1	16.2	15.9	15.5	15.4	14.7	14.7	16.7	18.3	19.8	19.5	19.3	19.4	18.1	17.4	16.5	16.2	15.7	15.3	15.3	15.7			
25*	15.1	15.1	15.1	15.6	15.5	15.8	15.0	14.6	14.1	14.8	16.5	18.8	19.5	19.2	18.8	18.5	17.5	16.9	16.2	16.0	15.8	15.3	15.3	15.1			
26	14.8	14.6	14.9	15.3	15.3	14.2	14.8	14.4	14.2	14.8	17.4	19.6	20.8	20.3	19.2	19.2	19.4	18.2	20.7	18.6	17.4	15.8	15.3	14.7			
27	14.5	13.9	13.8	15.4	15.3	14.8	14.8	14.3	13.8	14.5	16.6	18.8	19.4	19.4	18.7	18.0	17.1	16.4	15.8	15.8	15.6	15.2	15.4	15.8			
28	15.6	15.9	15.9	16.1	15.9	15.3	14.9	14.3	13.8	14.2	15.7	17.7	19.7	20.0	20.0	19.5	18.6	17.4	17.0	17.0	16.8	16.5	15.6	15.7			
29**	6.9	8.9	11.4	14.7	22.5	25.0	22.4	16.0	19.5	21.0	17.2	19.6	20.4	20.6	19.2	17.0	16.1	15.9	15.4	15.0	11.9	13.6	13.5	14.3			
30	14.5	14.4	14.5	14.6	14.3	14.1	13.7	13.3	12.5	12.5	14.0	(15.1)	(16.7)	18.3	(17.9)	(17.9)	15.3	15.6	(16.6)	15.5	14.7	14.2	13.9	13.1			
Mean	14.4	14.5	15.2	15.3	15.7	15.5	15.3	14.7	14.1	14.2	16.1	18.3	19.7	20.3	19.9	19.5	18.3	17.3	16.9	16.2	15.1	13.9	13.8	14.1			
Mean*	15.6	15.6	15.6	15.7	15.7	15.4	15.1	14.9	14.3	14.5	16.4	18.2	19.1	19.0	18.6	18.1	17.5	16.9	16.2	16.0	15.8	15.5	15.6	15.6			
Mean**	13.5	13.9	14.6	15.4	17.8	17.5	17.2	15.9	15.8	15.5	16.5	19.1	20.8	22.5	21.9	21.9	20.0	17.3	16.2	15.3	12.5	10.4	12.0	11.9			
<b>December</b>																											
<i>i</i> ° + Tabular Quantities.																											
1	13.6	14.8	14.8	15.5	15.2	14.9	13.6	14.1	13.6	14.5	14.7	16.5	18.6	(18.0)	19.4	19.3	17.5	16.0	15.2	13.2	13.7	13.5	13.5	14.0			
2	14.5	15.4	16.0	16.8	15.9	15.0	15.0	14.6	13.4	13.6	15.5	17.0	18.2	19.1	18.5	18.0	17.3	16.7	16.1	15.7	15.3	13.3	13.7	11.6			
3	12.7	12.7	12.8	13.0	13.7	14.8	14.8	14.3	13.8	14.5	16.0	(18.3)	(19.4)	(19.9)	19.6	19.8	18.6	16.5	16.8	16.2	14.6	13.6	14.1	12.6			
4**	12.6	14.1	14.6	16.5	17.6	15.8	14.9	14.6	14.6	13.1	14.5	18.3	18.6	19.6	18.6	19.9	18.2	17.5	16.1	16.4	15.9	15.5	15.1	14.7			
5	15.8	15.6	13.9	14.3	14.7	14.4	14.7	14.5	14.4	14.7	15.4	17.3	18.2	19.1	18.7	18.2	17.6	17.1	17.1	16.1	15.4	15.1	13.8	13.5			
6	14.4	14.4	14.9	14.0	14.5	15.1	14.8	14.4	13.7	14.0	15.3	17.2	18.4	19.1	19.6	18.1	18.4	18.5	18.6	17.1	14.6	15.1	14.2	12.0			
7	13.5	13.3	14.6	15.3	14.7	14.6	14.7	14.5	14.0	14.6	15.6	17.1	18.6	19.1	19.1	18.4	18.6	18.5	18.4	17.4	13.8	15.2	14.8	14.9			
8	15.0	14.4	14.8	14.8	15.1	14.6	15.0	14.7	14.1	13.5	(13.7)	(15.5)	17.3	18.8	18.1	17.7	16.8	16.1	16.4	16.4	13.8	15.3	15.1	15.1			
9*	15.1	15.0	15.3	15.3	15.2	14.9	14.9	14.5	13.5	13.1	13.9	16.1	18.5	19.5	19.0	17.9	17.3	16.1	16.1	16.3	16.0	15.1	14.6	14.6			
10*	15.1	15.0	14.8	14.5	15.5	15.0	14.1	13.7	13.5	13.5	15.3	17.5	18.9	19.2	18.6	17.8	16.8	16.4	15.3	15.3	14.9	14.7	14.7	14.8			
11	15.2	15.3	15.7	15.2	14.8	14.4	14.2	13.3	13.0	13.0	15.1	17.6	18.6	18.1	17.1	17.5	16.5	15.1	15.5	15.0	14.2	14.3	14.1	14.6			
12**	14.9	14.9	14.9	15.9	15.9	15.8	15.1	14.2	14.3	14.1	14.9	16.9	18.4	19.4	20.1	19.9	19.5	18.8	18.0	17.4	18.9	16.2	14.9	14.0			
13**	14.8	15.6	15.1	15.4	16.0	15.8	15.2	14.6	14.6	14.6	16.0	16.9	17.5	17.6	16.7	16.7	16.5	16.1	16.1	17.1	14.7	13.8	11.5	13.8			
14	14.6	14.5	15.2	14.2	14.7	13.3	14.4	14.2	14.7	14.7	14.7	16.2	18.3	18.8	17.9	17.8	17.2	14.7	15.3	14.8	14.3	13.7	13.7	13.7			
15	14.3	14.8	14.8	14.8	14.5	14.3	13.9	13.8	13.8	13.3	14.9	17.3	17.4	17.7	17.3	17.0	16.4	15.9	15.4	15.0	14.4	13.7	14.0	14.3			
16	14.6	15.0	15.6	15.6	15.6	15.2	14.9	14.6	13.8	13.5	14.4	15.6	17.5	17.9	17.7	17.8	17.0	16.2	15.7	15.6	14.1	11.8	13.7	13.7			
17	14.4	14.8	15.2	15.2	15.4	15.2	15.1	14.7	14.2	13.8	15.5	17.0	18.9	17.9	17.1	16.9	16.6	16.1	15.6	15.2	14						



TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER.

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>			
<b>January.</b>	18000 γ + Tabular Quantities (in γ).																											
	1	527	528	523	520	520	520	519	516	513	507	506	507	513	522	524	523	526	529	533	535	533	531	529	528	528	528	
	2	528	529	528	527	526	526	526	523	520	518	519	520	522	526	527	528	527	532	533	531	531	534	531	531	531	531	531
	3*	526	529	529	526	526	526	526	525	520	515	513	511	516	523	526	525	520	526	530	531	536	533	533	533	533	533	533
	4*	532	529	528	527	528	528	527	526	522	515	511	514	523	528	528	528	527	529	536	531	535	537	536	536	536	532	532
	5	529	528	529	531	530	529	531	532	533	526	519	520	516	518	520	520	528	529	531	533	533	533	535	535	535	535	535
	6*	531	529	529	531	533	536	539	539	537	533	531	523	524	528	528	528	528	527	529	532	533	535	538	537	537	537	536
	7*	534	534	534	536	538	538	536	535	532	528	526	523	527	531	533	535	535	530	536	539	540	541	541	541	541	541	538
	8**	539	530	530	541	549	555	547	534	535	534	531	521	510	505	504	501	501	506	503	518	519	524	529	529	529	529	534
	9	539	526	527	533	537	540	531	529	519	519	506	510	519	524	522	514	521	522	513	505	490	503	517	522	522	522	522
10	519	521	522	524	533	538	539	529	531	527	510	509	513	510	516	514	507	510	528	506	516	521	519	519	522	522	522	
11	521	523	523	525	528	530	530	530	523	517	519	519	516	521	514	515	526	517	528	530	530	530	528	527	527	527	527	
12	530	543	530	522	539	542	534	535	532	526	510	506	504	504	500	515	512	517	519	535	522	519	522	522	522	522	524	
13	527	540	544	532	530	538	531	525	519	513	516	513	509	512	518	502	519	525	522	523	504	510	522	522	522	522	530	
14	525	523	520	519	522	528	528	522	518	502	506	499	508	518	523	528	523	515	524	527	528	524	532	524	532	524	524	
15	525	524	525	528	525	533	535	532	524	527	527	521	522	522	521	522	524	526	532	527	529	530	527	527	527	527	527	
16*	526	528	529	532	535	537	537	537	537	528	526	520	520	523	521	524	528	528	529	532	532	531	524	521	521	521	521	
17	520	524	523	527	539	537	537	535	534	524	518	516	520	518	520	524	528	533	535	536	534	531	526	526	526	526	526	
18**	533	533	533	526	540	544	539	536	532	523	505	506	497	501	510	515	507	489	500	499	507	526	524	524	523	523	523	
19	516	517	517	515	519	522	523	530	528	531	528	522	520	514	510	515	520	515	520	520	517	520	523	524	524	524	524	
20	526	528	528	522	524	529	529	524	525	523	520	515	520	526	526	523	521	522	519	515	514	508	515	524	524	524	524	
21	524	526	518	520	523	523	527	528	531	531	532	528	523	521	518	515	526	531	528	531	513	509	510	533	533	533	533	
22	507	510	514	517	525	523	526	524	522	528	520	513	520	529	533	531	525	519	519	516	510	510	512	505	512	512	512	
23	520	518	521	523	519	522	524	519	519	520	523	528	528	529	528	531	531	532	533	533	533	531	532	532	532	532	532	
24**	518	516	515	514	515	518	520	524	523	522	523	526	527	523	521	520	531	523	487	470	448	492	453	474	474	474	474	
25**	477	483	484	481	494	503	501	509	507	497	500	503	497	497	481	484	509	509	513	513	509	513	515	515	515	515	515	
26**	513	513	510	510	515	513	515	518	511	507	492	492	494	515	509	496	499	520	523	523	523	523	523	511	518	518	518	
27	519	519	525	523	517	527	524	522	524	519	513	509	514	512	511	513	517	516	522	521	520	523	541	526	526	526	526	
28	519	522	522	527	531	532	526	519	513	511	508	509	512	519	520	518	519	523	525	527	513	520	522	522	522	522	522	
29	523	523	524	522	523	526	525	521	521	520	518	519	523	524	525	526	525	517	519	519	518	521	527	527	527	527	527	
30	517	518	517	514	522	526	533	528	520	517	509	504	501	512	517	514	522	515	522	529	527	527	513	514	514	514	514	
31	530	515	515	517	520	521	519	517	510	509	514	512	509	516	519	520	521	527	527	525	528	525	540	527	527	527	527	
Mean	523	524	523	523	527	529	529	527	524	520	516	514	515	518	519	518	521	522	523	523	520	523	523	523	523	523	524	
Mean*	530	530	530	530	532	533	533	532	530	524	521	518	522	527	527	528	528	530	533	533	536	536	534	532	532	532	532	
Mean**	516	516	516	514	523	527	524	524	522	517	510	510	505	508	505	503	500	509	505	505	501	516	506	512	512	512	512	
<b>February.</b>	18000 γ + Tabular Quantities (in γ).																											
	1*	518	520	518	525	526	529	526	525	523	520	517	517	521	519	526	526	526	529	526	526	529	526	526	526	526	526	526
	2	527	525	523	524	526	528	527	526	522	521	517	513	514	518	524	530	524	527	509	500	501	505	511	511	511	511	511
	3	517	517	514	514	513	514	532	528	527	518	509	515	521	528	527	523	518	512	512	514	521	522	525	524	524	524	524
	4	529	531	531	536	534	536	535	532	509	517	513	512	509	512	510	505	501	505	511	514	521	522	525	524	524	524	524
	5*	526	529	531	531	530	527	527	532	535	527	523	522	523	518	520	521	526	526	530	531	531	529	528	528	528	528	528
	6	539	536	535	535	536	539	539	538	534	531	526	523	523	523	524	521	519	520	527	528	528	526	528	531	529	535	535
	7*	532	533	535	539	541	541	541	537	541	541	539	539	542	545	544	535	526	526	522	524	528	528	531	529	535	535	535
	8	532	533	535	533	534	535	533	533	536	532	526	526	532	541	542	533	524	523	520	516	514	516	529	528	528	528	528
	9	531	533	537	534	549	541	542	535	532	519	509	519	514	511	513	513	510	519	536	533	515	523	520	525	525	525	525
10	524	528	516	523	528	529	528	527	529	529	514	521	514	520	527	516	493	518	521	521	519	532	514	520	520	520		
11	532	536	519	521	521	520	529	534	529	519	515	512	516	515	516	521	524	525	525	527	527	532	537	534	534	534	534	
12	527	527	527	527	530	529	530	532	528	528	521	516	514	516	523	525	525	529	530	534	533	533	533	533	533	533	533	
13*	534	532	532	533	534	538	540	542	538	534	532	528	525	524	527	526	525	527	534	533	533	532	532	533	533	533	533	
14	537	530	532	533	534	536	537	540	536	536	525	525	532	545	550	542	505	511	519	516	521	516	511	516	516	516	516	
15	516	518	520	519	514	519	524	524	525	528	523	516	519	517	531	524	493	510	514	521	521	513	512	512	512	512	512	
16**	534	527	531	533	533	536	534	527	527	525	519	484	507	528	509	508	497	503	520	537	541	529	532	530	530	530	530	
17**	525	532	516	519	511	517	516	510	508	514	519	511	517	519	512	487	488	495	523	500	487	510	509	506	506	506	506	
18	514	507	506	504	504	507	507	507																				

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER—*continued*.

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h			
March.																												
18000 γ + Tabular Quantities (in γ).																												
1	528	526	527	530	530	528	531	533	521	517	519	517	510	516	519	524	526	531	535	534	532	533	532	531				
2	531	530	531	531	531	533	533	530	528	524	516	512	513	518	523	525	523	527	535	534	531	534	528	530				
3*	532	532	532	532	532	534	536	539	539	535	530	528	526	527	528	527	530	533	541	541	540	541	540	538				
4*	538	536	535	537	537	538	539	545	544	538	532	525	522	525	527	530	534	538	543	543	544	542	543	543				
5	538	536	529	532	534	536	538	540	540	532	527	530	533	531	532	526	531	534	539	540	540	539	538	536				
6	538	535	535	538	536	539	542	544	544	538	522	526	512	518	523	530	519	527	533	537	531	527	526	522				
7*	530	531	532	530	530	531	530	534	534	530	525	522	519	514	514	519	524	528	532	534	535	535	535	535	539			
8	538	542	541	540	540	538	543	550	540	528	522	512	504	518	529	508	504	518	525	531	533	530	532	532				
9	530	531	532	533	532	535	535	535	532	522	518	519	506	514	522	516	508	518	529	512	528	530	530	530				
10	534	536	537	539	538	536	532	534	532	527	519	509	506	510	519	519	528	529	532	534	535	536	540	537				
11*	538	538	539	538	539	543	544	542	536	530	522	519	519	526	529	525	526	531	536	540	541	541	542	543				
12*	544	541	543	544	546	543	544	545	539	527	519	518	516	510	520	526	526	532	535	536	539	541	541	540				
13	540	539	541	541	543	546	550	553	544	532	526	521	526	530	535	539	540	544	543	537	536	538	538	537				
14	537	536	538	542	540	542	541	540	535	528	528	528	528	529	529	534	533	529	528	535	538	535	537	534				
15	537	530	523	531	535	535	535	527	525	531	530	519	510	518	516	526	524	529	521	518	526	540	539	536	536			
16	528	528	530	532	537	540	540	535	531	521	514	514	517	519	520	526	531	534	533	539	539	539	536	536	545			
17	532	534	539	526	522	522	523	523	521	516	513	514	516	526	528	520	521	528	531	538	537	535	533	535	545			
18	530	530	531	535	523	526	530	526	517	517	516	509	506	517	522	519	527	530	535	523	507	528	528	536	536			
19	538	528	525	517	522	527	527	519	514	509	509	502	503	510	513	519	527	532	538	532	545	530	525	534	518			
20**	531	528	527	530	533	539	525	534	519	506	514	517	501	495	506	514	512	506	513	527	532	530	532	518	518			
21**	520	504	525	521	515	526	509	506	510	499	461	481	499	504	510	497	509	512	530	527	518	527	515	518				
22	509	511	518	512	516	517	519	521	519	514	511	503	498	507	505	520	512	521	520	520	543	525	525	527	527			
23**	526	526	529	538	530	512	522	518	497	499	499	478	505	505	517	520	508	495	508	532	508	515	522	524	524			
24**	538	539	524	521	522	518	516	529	518	494	490	498	505	507	497	508	518	525	522	515	529	513	517	526	531			
25**	544	518	521	512	513	516	518	512	502	498	495	482	489	492	497	508	517	510	524	526	518	531	525	531	525	531		
26	512	514	518	518	509	505	512	505	499	493	488	492	504	511	516	519	520	523	524	531	526	525	508	514	518			
27	521	526	518	521	518	518	513	523	521	503	498	482	489	499	509	509	518	516	517	536	525	509	510	527	527			
28	522	532	530	524	529	522	518	520	509	497	484	475	483	496	507	514	521	527	535	527	527	531	526	527	527			
29	528	527	524	540	535	525	534	526	522	512	503	494	491	500	509	511	519	524	528	530	520	531	527	522	533			
30	519	525	527	526	524	533	534	524	522	512	499	490	497	506	513	522	529	532	537	539	539	539	538	533	533			
31	540	526	532	533	533	538	538	534	526	520	512	494	499	494	496	504	515	531	540	544	542	542	549	549	549			
Mean	531	530	530	531	530	530	531	531	525	518	512	507	508	513	517	519	522	526	530	532	532	532	531	532	532			
Mean*	536	536	536	536	537	538	539	541	538	532	526	522	520	522	524	525	528	532	537	539	540	540	540	541	541			
Mean**	532	523	525	524	523	522	518	520	509	499	492	491	500	501	505	509	513	511	519	525	521	523	522	523	523			
April.																												
18000 γ + Tabular Quantities (in γ).																												
1	542	538	538	538	539	539	544	543	537	525	519	514	515	511	519	508	513	517	508	511	515	531	537	539	539			
2	527	530	537	527	524	528	528	527	524	514	505	503	495	504	508	515	521	535	540	540	544	542	540	531	531			
3	533	533	533	537	540	542	542	534	527	517	508	501	504	513	521	516	540	529	527	530	530	530	531	532	531			
4	530	519	518	523	524	534	527	518	521	513	495	493	496	503	511	520	526	529	530	530	530	531	532	531	536	536		
5*	531	530	528	527	527	532	535	532	521	506	493	489	494	498	504	513	521	521	527	530	532	532	532	536	536			
6*	537	536	535	537	541	542	541	535	524	515	506	501	502	506	515	522	527	538	540	542	541	541	541	542	542			
7	542	540	541	540	540	544	542	537	532	522	503	491	492	497	500	494	511	522	525	537	541	541	541	541	540			
8	538	537	538	541	541	539	545	532	521	521	515	503	499	499	500	509	519	522	522	541	541	540	536	535	532			
9	537	532	534	535	537	535	540	537	531	511	500	493	501	511	522	527	529	532	541	541	540	536	535	532	537			
10*	533	532	532	536	538	541	542	537	529	511	503	496	506	516	518	521	528	534	537	540	537	535	535	537	537			
11	541	542	540	535	536	537	535	532	519	509	500	495	506	504	514	514	527	533	540	549	542	540	534	533	533			
12	533	524	529	534	535	536	535	537	536	528	515	503	512	525	526	515	520	538	521	526	537	523	530	538	538			
13	536	531	525	528	523	518	523	529	519	523	510	519	514	532	526	528	532	529	537	536	527	531	529	531	531			
14	530	530	527	526	526	533	530	529	519	518	497	502	504	513	517	521	533	536	543	535	515	502	513	521	521			
15	524	523	522	523	521	525	517	504	484	480	489	478	486	491	499	533	520	525	528	530	530	542	528	525	525			
16	521	517	502	507	510	515	513	510	502	491	480	478	485	499	512	526	535	533	536	537	546	535	530	530	530			
17	532	535	527	525	526	527	523	512	507	494	481	487	495	513	522	535	535	540	546	540	529	517	516	516	516			
18**	538	522	533	538	537	483	499	485	495	490	483	481	486	501	504	527	536	529	527	533	531	542	527	521	527			
19**	533	520	527	540	516	520	514	514	510	481	468	462	487	483	504	499	530	534	530	531	542	527	521	527	527			
20**	522	505	523	508	514	502	488	476	472	468	464	474	468	472	475	490	525	520	536	527	521	529	533	519	519			
21**	528	525	518	497	508	510	505	4																				

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER—*continued.*

Table with columns for U.T. (0h to 24h) and rows for May and June. Each row contains 24 columns of magnetic intensity values. Includes sub-headers for '18000 γ + Tabular Quantities (in γ)'. Summary rows for 'Mean', 'Mean\*', and 'Mean\*\*' are provided at the end of each month's data.

\* Denotes an International Quiet Day.

\*\* Denotes an International Disturbed Day.

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER—*continued*.

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h			
July.																												
18000 γ + Tabular Quantities (in γ).																												
1	548	540	540	542	542	538	532	525	516	509	509	509	517	523	530	540	540	548	552	555	555	553	550	549				
2**	558	566	570	574	557	533	540	522	503	482	464	464	465	462	494	493	485	508	516	541	520	521	522	520				
3	524	519	516	522	524	516	505	494	493	492	489	490	496	501	507	525	531	535	538	545	535	528	525	524				
4	523	523	524	523	523	521	515	512	506	490	487	497	506	509	516	530	541	544	549	535	546	548	535	537				
5	536	537	555	563	566	556	545	530	530	509	483	486	493	498	505	510	540	544	535	551	537	537	532	532				
6**	535	514	527	522	527	522	512	507	510	506	501	506	498	527	531	530	520	545	537	536	527	541	535	537				
7	529	518	521	519	514	516	506	496	481	447	451	488	511	506	523	532	551	559	542	542	540	533	535	533				
8	549	538	534	528	535	527	511	500	490	483	480	495	506	524	528	528	545	551	550	503	535	533	532	532				
9	527	528	528	529	531	531	527	518	509	501	503	509	516	516	520	532	545	555	558	549	540	528	536	535				
10**	545	535	535	532	541	525	536	524	522	518	511	499	497	506	535	577	564	542	562	555	527	516	498	509				
11**	519	506	535	510	511	518	506	494	473	464	477	497	509	515	538	555	562	553	553	536	535	526	529	531				
12	530	535	527	532	528	526	526	520	508	507	498	498	497	495	511	519	529	540	548	555	550	575	541	534				
13	531	532	541	530	522	528	524	521	510	489	480	481	492	506	510	528	544	550	554	543	533	533	535	533				
14*	528	528	528	529	530	529	523	518	514	512	506	504	506	515	519	530	540	542	548	546	544	540	534	532				
15*	532	529	532	530	529	526	518	516	515	510	507	506	509	519	533	536	533	539	544	547	537	541	539	541				
16	537	539	552	557	548	544	528	513	507	503	500	496	493	506	519	535	544	554	552	549	552	555	557	562				
17	557	536	548	535	535	533	523	515	505	501	497	505	518	536	540	552	546	575	570	570	550	555	559	578				
18	567	562	561	554	542	536	524	513	497	489	505	520	520	515	514	531	539	542	554	552	545	545	542	543				
19	540	536	537	536	533	531	526	515	502	495	488	493	501	513	522	531	536	546	546	548	545	544	545	541				
20	533	537	537	536	535	528	523	511	497	489	489	500	509	515	532	542	547	545	537	536	539	538	537	540				
21*	538	536	538	534	536	538	535	527	512	504	495	496	505	515	527	540	545	545	545	542	543	541	540	540				
22	540	540	540	540	540	545	538	525	512	509	505	499	504	514	518	528	534	543	551	553	551	545	543	535				
23*	535	535	536	539	540	538	532	519	502	489	487	493	509	521	525	532	541	543	543	545	543	542	541	540				
24*	540	540	539	540	540	542	538	527	518	517	514	517	519	519	519	535	544	550	555	558	554	551	548	550				
25	548	545	544	545	545	552	540	528	517	508	504	496	510	520	514	535	545	549	553	552	553	552	553	542				
26	541	552	543	537	535	535	531	521	506	501	500	512	519	528	535	540	544	543	545	545	544	542	541	538				
27	539	535	535	538	541	543	538	531	517	502	500	509	519	528	530	540	535	549	556	559	556	540	544	540				
28	547	535	531	527	551	541	527	518	514	513	512	527	534	540	543	527	531	544	556	551	547	543	543	545				
29**	545	546	545	544	543	535	542	541	534	519	527	518	519	509	547	514	501	540	540	536	540	538	522	526				
30	519	515	528	535	515	525	522	506	499	496	505	500	500	508	515	523	527	532	536	538	536	536	532	531				
31	530	530	531	531	532	533	531	522	508	491	487	513	519	519	514	531	547	537	544	549	547	551	544	548				
Mean	538	534	537	536	535	533	527	517	507	498	496	501	507	514	523	532	538	545	547	548	542	541	538	538				
Mean*	535	534	535	534	535	535	529	521	512	506	502	503	510	518	525	535	541	544	547	546	545	543	540	541				
Mean**	540	533	542	536	536	527	527	518	508	498	496	497	498	504	529	534	526	538	542	541	530	528	521	525				
August.																												
18000 γ + Tabular Quantities (in γ).																												
1	544	541	535	538	538	533	514	514	515	506	501	504	505	509	517	530	538	538	537	532	538	539	545	545				
2	535	538	532	533	532	530	530	522	506	497	500	509	518	529	538	542	534	541	553	549	545	560	538	538				
3	540	538	542	540	537	532	528	520	512	504	502	509	514	531	546	536	542	551	558	545	551	551	534	532				
4	535	535	539	530	538	535	525	514	506	500	487	499	510	522	536	540	543	545	543	543	540	541	541	540				
5**	540	540	540	542	540	538	531	525	514	513	512	512	515	519	534	522	540	558	553	546	541	536	532	530				
6**	532	527	530	540	541	523	501	501	493	493	496	499	504	513	517	538	548	547	545	548	541	538	536	536				
7*	537	536	536	537	537	536	531	521	510	504	504	510	522	530	535	539	545	547	548	551	548	547	544	539				
8**	545	539	536	537	540	539	532	526	522	512	510	513	530	532	524	537	556	509	553	507	549	536	530	530				
9	539	535	540	532	529	535	530	523	516	510	506	500	502	506	517	517	527	545	545	551	540	541	538	540				
10**	535	530	535	541	543	540	532	516	505	509	504	500	501	490	507	517	529	540	546	544	540	539	536	536				
11*	532	533	530	526	530	528	526	517	508	502	502	507	507	508	520	521	531	538	543	542	539	540	536	535				
12	534	534	535	535	531	527	525	523	518	518	516	518	516	514	529	529	535	538	543	548	547	541	553	545				
13	532	532	534	540	546	538	530	521	510	505	507	521	522	522	523	529	535	541	551	552	545	539	538	538				
14	536	539	539	539	539	537																						

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER—continued.

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>			
<b>September.</b>	18000 γ + Tabular Quantities (in γ).																											
	1	536	534	537	531	527	525	519	513	500	492	494	504	519	524	526	523	526	530	532	539	535	534	533	534	536	536	
	2	530	538	541	525	526	522	517	508	493	484	481	495	512	520	524	527	532	534	534	535	535	534	533	534	534	534	
	3*	534	535	534	533	530	528	521	508	495	485	484	495	514	523	525	532	531	533	534	536	536	536	536	538	536	536	
	4	540	539	546	534	534	535	528	520	501	479	483	497	510	520	527	528	540	527	533	540	539	549	546	546	535	535	
	5	538	540	545	544	534	538	535	519	504	493	495	503	512	522	530	535	535	535	533	533	535	539	542	535	535	535	
	6	534	535	540	531	527	526	520	512	499	488	491	500	511	525	530	530	530	532	534	538	539	542	542	536	533	533	
	7*	534	534	534	535	535	534	530	524	515	506	506	504	507	514	522	530	536	536	540	541	542	542	542	543	543	543	
	8	541	540	540	540	541	538	535	530	509	501	501	505	511	513	517	521	518	526	536	541	542	542	536	535	536	536	
	9	544	544	534	534	534	534	528	521	523	502	495	489	504	510	499	502	520	532	531	536	541	539	536	536	536	538	
	10	535	530	537	545	537	534	531	527	518	509	496	486	502	510	516	513	511	523	529	533	535	537	537	537	537	538	
	11**	537	531	529	536	534	532	537	535	525	511	490	493	502	509	502	503	511	497	506	519	521	526	529	542	528	542	
	12	527	525	529	525	535	529	525	520	512	505	500	503	505	505	511	516	518	522	529	535	532	541	528	528	528	528	
	13*	532	533	532	532	533	529	529	522	509	498	499	506	511	515	518	520	525	529	535	540	540	540	537	536	537	537	
	14	537	538	540	537	538	537	536	528	517	503	496	505	506	510	519	513	516	524	538	540	540	540	540	540	540	542	
	15	545	541	535	534	537	536	533	526	522	511	506	501	511	519	517	514	522	534	532	532	529	532	532	532	534	534	
	16*	537	536	537	537	535	532	527	519	511	501	495	502	514	524	531	531	533	535	535	538	537	537	537	537	538	538	
	17	538	542	543	540	538	540	535	527	517	507	502	512	518	523	525	529	533	537	540	540	541	542	549	549	549	549	
	18	550	550	548	547	546	542	541	541	532	521	510	503	498	511	516	519	526	535	543	545	545	548	545	545	545	545	
	19	540	540	539	540	540	540	537	534	529	518	509	507	512	522	529	533	535	540	544	545	549	548	547	545	545	545	
	20	542	540	537	539	537	540	544	536	526	513	504	498	505	516	522	528	529	537	544	547	547	547	547	545	545	545	
	21	545	545	547	548	549	552	554	544	532	515	497	501	501	509	519	529	534	539	544	546	545	540	544	540	540	540	
	22	541	545	545	544	547	547	544	538	530	514	498	492	497	505	518	534	540	544	545	549	550	552	552	552	545	545	
	23**	545	548	550	561	562	553	526	531	526	505	487	484	485	492	487	502	522	530	532	534	532	532	534	534	534	534	
	24	534	531	527	525	534	536	534	520	508	495	487	480	487	500	511	517	520	527	533	535	536	534	540	540	540	540	
	25*	534	530	531	532	535	536	535	530	520	504	495	490	495	508	520	528	531	536	540	539	540	540	539	543	543	543	
	26**	554	546	539	540	548	540	523	511	489	484	479	471	470	480	480	491	497	502	496	503	510	510	528	518	518	518	
	27**	518	519	519	521	522	523	522	514	511	508	493	485	492	505	513	515	518	521	530	534	537	534	535	531	531	531	
	28	528	528	530	531	530	528	521	509	496	489	492	496	491	509	519	522	524	528	532	536	540	530	536	536	546	546	
	29**	538	534	529	527	528	526	525	515	505	500	497	497	496	498	498	516	511	521	526	524	527	533	541	536	536	536	
	30	532	531	530	529	529	529	527	520	508	499	499	503	507	512	516	523	524	526	531	530	533	541	540	539	543	543	
	Mean	538	537	537	536	536	535	531	523	513	501	495	497	504	512	516	521	525	529	533	536	537	538	538	538	538	538	
Mean*	534	534	534	534	534	532	528	521	510	499	496	499	508	517	523	528	531	534	537	539	539	538	539	539	539	539		
Mean**	538	536	533	537	539	535	527	521	511	502	489	486	480	497	496	505	512	514	518	523	525	527	533	532	532	532		
<b>October.</b>	18000 γ + Tabular Quantities (in γ).																											
	1	539	540	536	543	541	535	528	513	499	485	481	481	495	506	513	523	526	530	525	523	530	533	551	535	535		
	2*	533	533	534	534	533	530	525	518	508	495	487	488	497	512	524	525	518	527	537	538	535	535	535	537	534	537	
	3*	537	537	537	537	539	538	533	529	521	504	491	485	491	506	515	521	521	529	534	538	537	537	534	534	532	532	
	4	530	531	534	537	538	539	536	531	526	513	505	498	503	507	524	533	538	539	542	543	542	546	540	540	535	535	
	5	538	540	542	544	547	551	551	544	531	520	505	505	503	508	520	525	522	525	520	497	519	516	512	514	514	514	
	6	524	530	531	527	529	547	539	531	521	507	487	474	481	494	500	502	515	521	523	527	523	520	546	526	526		
	7	525	523	524	528	531	536	533	531	507	487	483	485	484	501	500	505	509	522	528	533	518	537	520	515	515		
	8	522	534	544	553	532	524	522	518	506	497	488	488	491	499	503	505	515	520	525	541	528	530	529	528	528		
	9	526	526	529	535	533	533	531	522	497	488	493	481	474	493	499	496	507	519	519	513	516	515	525	525	525		
	10**	542	531	541	537	532	530	522	510	475	455	459	453	468	478	483	487	503	510	515	515	519	518	518	518	518	518	
	11	520	520	518	519	521	521	521	513	500	485	481	481	489	500	513	515	521	527	533	533	534	531	531	531	531	531	
	12	528	528	528	528	529	529	527	520	509	497	495	498	500	503	505	513	522	528	531	532	533	533	536	534	534		
	13	534	534	533	532	532	533	537	530	522	511	506	505	507	518	523	529	534	530	531	531	533	535	534	534	534		
	14	535	535	535	535	534	533	531	525	513	510	508	507	505	504	503	504	498	498	516	525	532	533	535	537	537	537	
	15	535	532	543	529	531	530	534	530	512	496	498	500	504	510	512	512	520	528	530	532	530	517	531	528	528	528	
	16**	526	530	533	531	531	534	533	518	509	501	498	492	494	505	513	519	509	494	481	466	485	495	500	500	500	500	
	17**	485	492	496	529	511	487	495	492	485	479	466	457	473	481	481	495	505	511	514	526	524	521	518	521	521		
	18	519	521	522	522	521	527	523	507	497	492	485	487	490	499	508	512	512	517	520	521	523	521	523	523	524	524	
	19	524	525	527	529	530	527	525	521	511	498	492	481	487	499	505	521	525	525	527	530	518	518	526	522	522	522	
	20	528	546	520	513	515	519	517	513	504	495	487	484	494	507	506	508	512	505	500	504	517	520	522	522	522	522	
	21	525	520	524	525	525	524	522	519	513	504	494	494	497	503	506	509	516	522	525	529	529	529	530	530	530	530	
	22*	529	527	52																								





TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER.

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
<b>January</b>																										
42000 γ + Tabular Quantities (in γ).																										
1	1001	999	999	1000	1001	1003	1004	1004	1004	1004	1004	1003	1004	1006	1006	1004	1004	1006	1006	1006	1006	1004	1004	1004	1003	1003
2	1003	1001	1001	1001	1001	1003	1003	1004	1004	1004	1003	1004	1001	1001	1004	1004	1003	1004	1004	1006	1005	1004	1005	1004	1004	1003
3*	1002	1002	1000	1000	1000	1002	1002	1003	1003	1003	1003	999	998	999	1002	1000	1003	1003	1005	1004	1004	1003	1003	1003	1003	1003
4*	999	999	999	998	999	999	999	1001	999	1000	1002	1002	999	999	1002	1001	999	999	1002	1002	1002	1002	1002	1002	1002	1001
5	998	998	998	996	996	996	996	998	998	996	998	998	996	998	998	998	998	998	998	998	1001	1000	1000	1000	1000	998
6*	998	998	998	996	996	996	995	996	997	998	1001	1000	996	998	998	998	998	1000	1000	1000	1001	1000	999	998	998	998
7*	997	995	995	994	993	995	994	994	992	987	987	990	992	995	997	997	997	997	997	997	996	996	996	996	996	997
8**	997	996	996	996	994	992	991	992	994	992	992	992	994	1001	1010	1010	1010	1011	1011	1012	1009	1006	1003	1002	1000	1000
9	990	991	994	993	993	995	995	995	995	998	996	996	996	998	999	1001	1005	1005	1006	1010	1010	1009	1002	1002	996	996
10	994	995	996	999	999	1000	997	996	995	991	991	994	1001	1004	1010	1011	1013	1013	1015	1010	1010	1006	1004	1004	1004	1004
11	1004	1003	1002	1002	1002	1003	1001	1001	1000	999	999	998	996	1004	1004	1009	1010	1009	1009	1005	1002	1001	1001	1001	1000	1000
12	1000	996	994	996	996	996	996	994	994	993	995	996	999	1004	1013	1013	1013	1013	1012	1010	1004	1004	1004	1004	1004	1000
13	998	996	986	991	994	996	996	999	996	995	999	1001	1004	1009	1011	1010	1011	1008	1009	1007	1006	1006	1006	1004	999	999
14	997	997	996	997	1000	1001	1001	1002	1000	999	997	997	1000	1002	1006	1005	1006	1007	1007	1005	1003	1003	1001	999	999	999
15	997	998	998	997	997	998	997	997	994	990	990	990	993	995	999	1002	1003	1002	1001	1000	1000	999	998	998	996	996
16*	995	995	995	995	995	997	996	996	996	993	993	991	987	990	997	999	1000	1000	1000	999	998	997	997	997	997	997
17	997	995	993	993	991	992	993	993	992	988	985	983	988	991	996	996	996	996	996	995	993	993	993	993	994	994
18**	992	991	991	991	984	981	984	986	988	986	988	991	992	997	1001	1000	1006	1008	1017	1013	1015	1008	1003	1003	1003	1003
19	998	998	996	996	995	993	993	992	991	986	986	986	991	991	993	996	998	1001	1001	1003	1003	1001	998	997	997	
20	997	994	992	992	993	994	994	994	994	995	997	997	994	995	997	995	997	999	1002	1004	1007	1007	1007	1007	1004	1004
21	1003	999	999	998	996	998	996	995	993	993	994	995	991	991	997	997	998	998	1000	1000	1004	1010	1009	1005	1005	
22	1001	1002	1001	999	996	995	994	992	991	991	991	991	987	987	994	995	998	1000	1004	1006	1009	1011	1011	1011	1011	
23	1009	1007	1004	998	996	994	993	994	995	996	997	995	991	991	994	993	994	995	996	995	995	996	996	996	997	997
24**	999	1001	999	998	997	998	996	996	994	994	994	991	987	989	994	994	998	1000	1014	1038	1060	1053	1045	1029	1029	
25**	1028	1021	1018	1014	1005	1001	1001	1003	1004	1006	1006	1001	999	1005	1015	1018	1020	1016	1011	1009	1007	1007	1005	1006	1006	
26**	1008	999	999	1001	1001	1000	996	991	989	988	991	994	995	999	1004	1014	1015	1010	1008	1006	1005	1006	1003	1001	1001	
27	1001	1001	1001	1001	1001	1001	996	996	998	1000	1001	1000	1004	1006	1011	1010	1010	1009	1009	1006	1005	1004	1001	995	995	
28	996	998	999	995	994	995	991	991	994	996	1000	1000	1000	1000	1000	997	1000	1003	1005	1005	1005	1005	1002	1002	1002	
29	1001	1001	1001	1001	1001	1003	1002	1001	1003	1003	1001	1001	998	999	999	999	999	1001	1005	1006	1006	1006	1004	1001	1001	
30	1001	1001	1001	1001	1003	1004	1001	999	999	996	1000	1000	999	1001	1001	1004	1004	1006	1009	1007	1008	1006	1006	1006	1006	
31	1001	999	1001	1001	1002	1004	1004	1004	1004	1005	1004	1001	999	1001	1005	1005	1006	1007	1008	1007	1006	1007	1004	1000	1000	
Mean	1000	999	998	998	997	998	997	997	997	996	996	996	996	998	1002	1002	1004	1004	1006	1006	1006	1005	1003	1001	1001	
Mean*	998	998	997	997	997	998	997	998	997	996	997	996	994	996	999	999	1000	1000	1001	1000	1000	999	999	999	999	
Mean**	1005	1002	1001	1000	996	994	994	994	994	993	994	994	993	998	1005	1007	1010	1009	1012	1015	1019	1015	1012	1008	1008	
<b>February</b>																										
42000 γ + Tabular Quantities (in γ).																										
1*	1000	1001	1001	1003	1001	1002	1001	1001	1001	997	993	994	994	998	1000	1000	1001	1003	1005	1007	1008	1007	1005	1005	1005	
2	1004	1003	1003	1002	1002	1002	1000	1000	998	998	997	998	999	1002	1003	1004	1004	1008	1011	1024	1028	1027	1024	1020	1020	
3	1013	1010	1009	1007	1008	1006	1002	998	997	998	999	996	992	997	999	1002	1002	1004	1007	1006	1004	1004	1004	1004	1004	
4	1003	1002	999	996	996	996	995	997	998	999	1001	1001	1003	1003	1006	1006	1009	1010	1010	1007	1007	1004	1003	1002	1002	
5*	1002	999	999	998	997	997	994	995	997	999	996	994	990	990	994	997	998	998	998	998	998	998	998	998	998	
6	997	993	992	992	991	991	990	991	995	995	993	993	993	994	994	995	997	999	998	998	998	998	998	998	998	
7*	996	996	996	996	995	995	992	991	991	991	987	983	981	982	990	990	989	992	995	995	995	994	994	994	994	
8	994	994	992	992	992	992	992	991	991	990	985	982	982	986	988	989	991	992	996	997	1000	999	997	994	994	
9	994	993	992	991	982	985	985	986	985	985	981	982	988	990	1000	1004	1006	1005	1000	995	997	1000	997	992	992	
10	985	984	986	990	991	992	991	992	991	988	987	989	987	990	990	993	998	1007	1011	1007	1003	1005	1001	996	993	
11	990	986	989	993	993	993	992	991	990	988	987	987	990	990	998	1001	1000	1000	999	998	996	995	993	988	988	
12	991	992	992	994	994	994	994	994	992	990	988	986	987	991	994	996	995	997	997	995	994	993	992	992	992	
13*	991	991	991	991	992	993	992	991	991	988	983	980	980	985	989	991	993	995	995	994	994	993	992	991	991	
14	990	990	992	992	993	992	992	992	993	990	985	984	981	981	985	994	996	999	999	1001	1001	1000	1001	999	999	
15	1000	997	996	995	996	998	997	994	992	992	988	980	982	988	994	997	1004	1006	1005	1004	1002	1002	1000	997	997	
16**	990	989	989	990	990	990	990	989	989	986	981	976	981	989	996	1008	1008	1017	1018	1009	1011	1007	1008	1002	1002	
17**	1000	995	991	992	991	991	991	991	992	994	991	987	990	995	1002	1014	1029	1034	1031	1011	1015	1012	1007	1005	1005	
18	1003	1001	998	1000	1002	1004	1002	1000	1000	998	994	994	996													

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER—continued.

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>		
<b>March</b>																											
	42000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1	1002	1002	1000	1001	999	999	999	1000	1001	997	991	987	987	990	995	1001	1002	1001	1002	1002	1002	1002	1002	1002	1002	1001	
2	999	999	999	998	999	999	998	999	1002	995	985	980	985	987	992	996	998	999	1000	1000	1001	1001	1000	1001	1000	1001	
3*	999	999	998	997	997	998	996	996	997	994	989	985	985	987	989	991	993	994	997	997	997	997	997	997	997	997	
4*	998	997	997	995	995	994	992	992	993	991	983	982	991	987	989	991	994	992	995	993	994	995	996	996	996	996	
5	996	997	997	996	995	996	992	996	997	991	982	977	973	980	990	995	999	999	999	999	998	997	997	997	996	997	
6	996	996	996	995	995	995	992	993	995	990	981	976	976	984	990	997	1000	999	997	997	997	999	1001	1001	1001	1001	
7*	999	997	997	996	996	995	992	993	992	987	985	983	987	991	995	998	998	997	997	996	995	996	995	996	995	996	
8	996	996	994	994	994	994	992	996	998	989	982	978	981	984	994	1007	1013	1011	1008	1005	1003	1002	1002	1002	1002	1000	
9	999	999	999	998	998	999	998	998	996	988	982	978	988	996	1000	1005	1008	1005	1008	1010	1008	1005	1003	1005	1003	1002	
10	1003	1001	1000	997	997	998	996	995	992	986	981	978	981	986	992	997	1003	1003	1003	1001	1000	1000	1000	999	998	998	
11*	999	999	999	998	999	999	997	999	1000	994	983	978	981	986	989	994	1000	1000	1000	1000	998	998	998	998	997	997	
12*	998	998	998	998	998	998	998	999	1000	993	987	983	982	986	991	998	1000	999	999	998	996	995	994	994	994	994	
13	993	994	995	995	996	996	996	997	994	991	983	979	978	981	983	988	993	995	995	996	996	994	994	994	994	994	
14	994	994	995	994	994	995	993	994	991	986	978	977	976	978	983	991	997	1002	1003	1000	998	996	996	996	996	996	
15	996	993	994	993	992	993	992	993	991	983	972	969	972	978	982	990	1000	1004	1005	1005	1004	1000	1000	996	992	992	
16	990	992	993	994	994	991	989	992	990	989	981	977	982	987	992	997	1000	998	999	999	998	998	998	998	998	999	
17	998	998	995	992	993	994	992	997	999	995	993	991	987	991	997	1002	1005	1004	1004	1002	1000	1000	999	994	994	994	
18	990	993	993	989	993	995	995	997	994	992	984	978	977	983	989	998	1006	1004	1006	1009	1011	1007	1003	1009	1009	1009	
19	984	986	988	990	993	996	999	1002	1004	1002	993	983	983	987	994	998	1000	1000	1001	1002	1005	1000	1002	1002	1001	1001	
20**	1000	998	995	998	983	987	988	990	993	993	988	980	980	988	993	1002	1012	1017	1017	1015	1012	1010	1010	1010	1007	1007	
21**	999	994	982	980	982	985	985	988	988	983	978	978	985	993	1002	1010	1021	1022	1021	1014	1012	998	995	998	998	998	
22	994	987	984	992	998	997	998	1000	998	991	982	977	974	985	986	996	1001	1004	1010	1013	1005	1002	1001	1001	1001	1001	
23**	1001	1003	1002	995	987	985	987	991	995	993	986	982	987	990	999	1013	1024	1033	1034	1024	1013	1011	1008	1009	1009	1009	
24**	1002	995	996	996	995	998	995	992	992	984	986	980	982	997	1015	1015	1017	1015	1015	1018	1012	1002	999	999	999	999	
25**	976	984	978	984	996	1000	1002	1005	1004	996	990	980	981	989	997	1004	1011	1011	1010	1008	1010	1009	996	984	984	984	
26	979	978	978	983	995	997	995	998	999	993	983	973	975	984	993	1000	1008	1009	1007	1007	1009	1004	1003	1003	1005	1005	
27	1001	997	994	995	998	1001	1003	1001	996	989	981	974	978	983	992	1003	1012	1022	1023	1021	1009	1009	1009	1009	1005	1005	
28	996	982	983	989	992	995	1003	1005	1003	997	988	978	975	986	994	1002	1007	1008	1007	1007	1007	1005	1004	1004	1003	1003	
29	1003	1003	1002	993	989	991	995	997	996	992	987	979	978	983	991	999	1005	1008	1005	1005	1004	1005	1004	1004	1004	1004	
30	1004	1004	1000	998	999	1000	1002	1002	1000	995	984	972	975	982	989	995	1001	1003	1004	1004	1002	1002	1002	1002	1002	1002	
31	998	997	997	996	996	998	1000	1000	996	987	980	974	975	981	991	996	999	1006	1008	1005	1005	1004	1001	1000	1000	1000	
Mean	996	995	994	994	994	995	995	997	996	991	984	979	980	986	993	999	1004	1005	1006	1005	1003	1001	1000	999	999	999	
Mean*	999	998	998	997	997	997	995	996	996	992	985	982	983	987	991	994	997	996	998	997	996	996	996	996	996	996	
Mean**	996	995	991	991	989	991	991	993	994	990	986	980	983	991	1001	1009	1017	1020	1019	1016	1012	1006	1002	998	998	998	
<b>April</b>																											
	42000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1	999	998	998	997	997	999	1003	1003	997	991	986	980	976	979	992	1004	1019	1029	1040	1029	1021	1013	1007	1001	1001	1001	
2	999	1002	994	995	998	1001	1003	1002	999	994	989	991	990	987	988	996	1001	1006	1004	1004	1005	1005	1001	1000	1000	1000	
3	1002	1001	1001	1000	998	999	1000	1000	999	991	979	976	977	985	991	997	1010	1015	1026	1032	1027	1007	1005	1002	1002	1002	
4	988	993	997	999	997	997	999	1003	999	993	986	982	985	994	1001	1002	1005	1006	1004	1002	1002	1002	1002	1002	1002	1002	
5*	1003	1002	1002	1002	1001	1001	1004	1005	1000	989	975	967	971	999	991	996	1001	1004	1005	1002	1001	1000	999	999	998	998	
6*	999	999	1000	999	997	997	1000	998	995	987	981	975	975	983	988	993	998	998	997	996	996	996	998	998	997	997	
7	999	999	997	997	997	998	1001	999	994	985	980	975	972	981	991	998	1003	1009	1008	1005	1001	999	999	998	998	998	
8	1000	999	999	999	998	998	996	996	996	988	981	972	972	980	987	995	1001	1010	1012	1010	1005	1002	1000	1000	1000		
9	998	1000	1001	1000	1001	1002	1002	1001	996	991	982	971	971	977	986	994	999	1002	1003	1002	1002	1002	999	999	999	999	
10*	1000	1000	1002	1000	1001	1002	1003	1005	1003	998	990	976	976	982	993	996	1000	1004	1004	1004	1001	1001	1001	1001	1001	1000	
11	1000	999	995	998	999	1001	1002	1002	999	989	979	977	977	980	984	992	999	1004	1005	1003	1001	1001	1001	1001	1001	1000	
12	1001	1000	1000	999	997	997	1000	1002	997	988	978	969	968	977	987	1002	1005	1015	1016	1015	1013	1011	1007	992	992	992	
13	995	996	999	999	998	997	997	995	987	978	970	968	968	976	984	995	1006	1019	1017	1016	1015	1008	1005	1004	1004	1004	
14	1002	1002	1002	1002	1001	1002	1002	1002	998	989	977	973	970	975	984	992	1000	1007	1016	1017	1016	1010	1010	1007	1007	1007	
15	1005	1002	1002	1004	1002	1002	1002	1000	992	983	979	978	985	990	999	1001	1027	1038	1032	1025	1021	1008	1002	1002	1000	1000	
16	994	985	990	995	1000	1002	1004	1006	1004	994	986	980	978	984	992	999	1005	1007	1007	1006	1005	1002	1004	1004	1004	1004	
17	1002	996	995	998	998	1003	1006	1006	998	984	976	975	981	989	996	1002	1010	1013	1017	1016	1016	1016	1009	1009	1006	1006	
18**	972	979	97																								



TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER—continued.

Table with columns for U.T. (0h to 24h) and rows for May and June. May data includes daily means from 1st to 31st. June data includes daily means from 1st to 30th. Each day has 24 columns representing hourly means. Summary rows for Mean, Mean\*, and Mean\*\* are provided for both months.

† May 7 and 8 were combined into one day in computing means.

\* Denotes an International Quiet Day. \*\* Denotes an International Disturbed Day.

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER—*continued.*

U.T.	0 <sup>h</sup>	1 <sup>h</sup>	2 <sup>h</sup>	3 <sup>h</sup>	4 <sup>h</sup>	5 <sup>h</sup>	6 <sup>h</sup>	7 <sup>h</sup>	8 <sup>h</sup>	9 <sup>h</sup>	10 <sup>h</sup>	11 <sup>h</sup>	12 <sup>h</sup>	13 <sup>h</sup>	14 <sup>h</sup>	15 <sup>h</sup>	16 <sup>h</sup>	17 <sup>h</sup>	18 <sup>h</sup>	19 <sup>h</sup>	20 <sup>h</sup>	21 <sup>h</sup>	22 <sup>h</sup>	23 <sup>h</sup>	24 <sup>h</sup>	
<b>July</b>																										
42000 γ + Tabular Quantities (in γ).																										
1	1006	1006	1006	1008	1010	1010	1006	1003	1000	997	990	989	989	991	998	1006	1006	1006	1010	1007	1007	1007	1006	1006		
2**	1007	1006	1003	1003	1004	1003	1003	998	995	988	994	992	1011	1028	1052	1075	1071	1061	1054	1041	1032	1026	1022	1019		
3	1016	990	1008	1016	1017	1018	1016	1015	1013	1011	1008	1005	1007	1017	1021	1022	1025	1026	1026	1023	1021	1017	1017	1017		
4	1019	1019	1019	1018	1018	1017	1015	1014	1009	1004	1001	996	1000	1005	1011	1014	1020	1024	1023	1018	1017	1013	1014	1014		
5	1015	1015	1018	1013	1013	1008	1008	1007	1005	996	994	1000	1013	1021	1029	1035	1044	1045	1043	1035	1024	1018	1016	1018		
6**	1009	996	1001	1011	1019	1021	1020	1014	1006	1003	996	999	1003	1024	1039	1044	1041	1043	1039	1031	1026	1021	1010	1003		
7	996	991	996	1001	1014	1021	1022	1019	1016	1003	1000	1001	998	1000	1006	1016	1026	1031	1031	1031	1024	1016	1015	1015		
8	1011	1007	1008	1010	1015	1011	1011	1011	1007	998	997	998	1000	1004	1010	1014	1017	1021	1021	1021	1020	1016	1015	1012		
9	1012	1013	1015	1016	1017	1017	1018	1019	1013	1008	999	990	990	990	1000	1013	1018	1021	1024	1026	1026	1021	1017	1014		
10**	1009	1006	1009	1012	1013	1006	1008	1006	1004	1001	995	994	991	989	1001	1024	1042	1049	1052	1041	1014	1012	1001	990		
11**	986	985	982	986	1006	1015	1021	1023	1015	1013	995	991	995	1000	1018	1032	1023	1030	1035	1032	1025	1020	1016	1009		
12	1010	1009	1004	1008	1008	1013	1014	1015	1015	1005	993	989	988	990	1002	1010	1015	1021	1022	1023	1020	1014	1008	1008		
13	1007	1008	1003	998	1004	999	1002	1004	1006	1004	1003	999	1004	1007	1015	1020	1027	1031	1027	1027	1020	1016	1015	1013		
14*	1013	1013	1014	1014	1017	1017	1016	1014	1013	1002	995	991	989	995	999	1010	1018	1024	1024	1021	1021	1016	1014	1015		
15*	1014	1014	1013	1013	1014	1011	1011	1008	1004	1003	1001	999	1001	1009	1011	1019	1021	0022	1020	1017	1017	1014	1014	1011		
16	1012	1013	1009	987	987	987	992	1002	1006	1009	997	990	985	997	1005	1010	1012	1018	1018	1016	1014	1012	1011	1009		
17	1006	1008	1005	997	1006	1008	1005	1004	1003	1003	998	992	991	998	1006	1011	1015	1024	1025	1024	1019	1013	1011	1011		
18	1009	1011	1006	1003	1007	1009	1010	1007	1003	999	989	982	984	990	1001	1011	1016	1020	1021	1020	1017	1014	1012	1013		
19	1013	1013	1010	1013	1014	1017	1021	1016	1010	1005	1000	997	1000	1000	1008	1017	1021	1023	1022	1018	1015	1014	1012	1012		
20	1011	1010	1010	1013	1016	1016	1016	1015	1014	1010	1008	1000	995	1000	1013	1022	1029	1033	1029	1022	1016	1014	1014	1014		
21*	1014	1015	1014	1015	1020	1021	1023	1022	1017	1010	1002	997	993	1000	1010	1016	1023	1027	1025	1023	1020	1017	1015	1012		
22	1013	1013	1013	1014	1018	1018	1017	1012	1011	1003	997	996	993	995	1003	1013	1018	1021	1021	1018	1016	1013	1011	1010		
23*	1011	1012	1013	1014	1017	1017	1017	1018	1014	1004	987	979	989	997	1002	1009	1012	1014	1017	1016	1013	1009	1009	1009		
24*	1010	1010	1010	1013	1015	1018	1018	1020	1021	1001	997	1000	997	999	1007	1012	1016	1017	1014	1010	1007	1004	1004	1004		
25	1002	1001	1002	1004	1008	1004	1006	1004	1004	1002	993	989	980	986	997	1007	1012	1015	1012	1009	1007	1004	1001	999		
26	999	997	995	998	1004	1004	1007	1006	1003	996	992	989	992	994	1002	1014	1018	1018	1015	1013	1011	1010	1009	1009		
27	1008	1008	1008	1011	1013	1013	1014	1009	1005	1003	999	990	987	991	1001	1009	1016	1021	1022	1021	1015	1011	1011	1008		
28	1003	1002	1003	1003	1003	1002	1001	998	995	986	976	982	984	993	1001	1008	1014	1013	1008	1011	1010	1008	1008	1008		
29**	1006	1006	1006	1007	1008	1007	1007	1006	1000	996	989	991	995	1001	1020	1030	1031	1049	1056	1049	1036	1025	1013	1013		
30	1013	1007	1000	996	998	1004	1008	1008	1010	1006	1002	1000	1003	1006	1015	1020	1023	1021	1020	1017	1015	1014	1015	1014		
31	1014	1014	1013	1013	1016	1016	1016	1017	1014	1007	1002	1002	1001	1007	1013	1018	1025	1030	1027	1021	1017	1015	1012	1011		
Mean	1009	1007	1007	1007	1011	1011	1012	1011	1008	1003	997	994	995	1001	1010	1019	1023	1026	1026	1023	1018	1014	1012	1010		
Mean*	1012	1013	1013	1014	1017	1017	1017	1016	1014	1008	997	993	994	1000	1004	1012	1017	1021	1021	1018	1016	1013	1011	1010		
Mean**	1003	1000	1000	1004	1010	1010	1012	1009	1004	1000	994	993	999	1008	1026	1041	1042	1046	1047	1039	1027	1021	1012	1007		
<b>August.</b>																										
42000 γ + Tabular Quantities (in γ).																										
1	1006	1002	993	1000	1006	1009	1013	1017	1017	1012	1011	1008	1010	1011	1016	1021	1025	1026	1021	1016	1015	1013	1013	1013		
2	1008	1007	1008	1010	1011	1013	1013	1018	1013	1010	1003	996	991	993	1003	1011	1013	1016	1016	1014	1013	1008	1007	1010		
3	1011	1011	1010	1011	1011	1013	1013	1013	1008	1002	998	996	996	1001	1016	1018	1021	1018	1016	1012	1011	1011	1010	1011		
4	1012	1012	1009	1009	1012	1008	1004	998	994	989	992	996	995	997	1000	1007	1014	1014	1016	1014	1012	1009	1008	1008		
5**	1008	1009	1009	1009	1013	1012	1009	1007	1002	996	989	982	983	992	1007	1014	1022	1030	1031	1028	1023	1016	1014	1012		
6**	1007	1003	1002	1003	1000	1004	1003	1003	1002	999	993	990	988	994	1003	1012	1019	1023	1020	1017	1014	1012	1010	1010		
7**	1010	1010	1012	1013	1017	1017	1016	1013	1008	1002	990	985	987	990	993	1001	1008	1012	1010	1010	1009	1008	1007	1008		
8**	1005	1005	1007	1009	1012	1010	1010	1008	1001	993	985	981	985	993	1003	1009	1012	1018	1020	1026	1023	1017	1013	1013		
9	1010	1009	1008	1004	1010	1009	1008	1006	1000	989	980	977	980	990	1003	1013	1015	1023	1023	1026	1020	1017	1013	1008		
10**	1005	1006	1005	1004	1003	999	1000	1000	999	995	985	993	993	996	1004	1009	1014	1020	1022	1020	1015	1014	1014	1013		
11*	1012	1010	1010	1012	1015	1015	1013	1013	1010	1009	1006	997	989	996	1007	1014	1018	1020	1019	1017	1015	1015	1014	1014		
12	1013	1012	1011	1010	1013	1014	1015	1014	1008	999	991	985	985	992	1003	1008	1012	1013	1010	1010	1011	1010	1010	1002		
13	1005	1007	1008	1008	1006	1007	1005	1002	999	1000	995	989	984	989	997	1009	1013	1009	1009	1010	1010	1010	1010	1009		
14	1009	1008	1007	1007	1008	1008	1009	1007	1004	1000	993	981	980	993	1003	1005	1005	1006	1007	1008	1008	1007	1005	1004		
15	1005	1005	1004	1005	1008	1008	1008	1006	1005	998	992	986	985	992	1001	1008	1010	1013	1011	1009	1008	1007	1007	1007		
16	1007	1004	1003	1005	1008	1010	1011	1009	1008	1003	998	995	1000	1003	1008	1013	1015	1017	1017	1017	1015	1013	1010	1010		
17	1010	1010	1010	1007	1010	1013	1015	1013	1006	999	994	991	992	997	999	1006	1012	1017	1014	1012	1009	1009	1007	1008		
18*	1007	1007	1007	1008	1010	1010	1010	1008	1001	990	983	979	983	993	1001	1007	1009	1009	1007	1007	1007	1005	1006	1006		
19*	1006	1007	1008	1009	1011	1012	1010	1007	1001	990																

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER—continued.

U.T.	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	12h	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
<b>September</b>																									
42000 γ + Tabular Quantities (in γ).																									
1	1010	1010	1009	1008	1009	1007	1006	1006	1008	1004	995	993	997	1002	1010	1012	1012	1008	1005	1006	1006	1007	1007	1009	1009
2	1009	1008	1004	1006	1011	1008	1006	1006	1001	996	991	990	994	999	1004	1007	1012	1011	1010	1009	1009	1008	1008	1008	1008
3*	1010	1010	1012	1012	1013	1014	1014	1013	1009	998	990	989	990	992	996	1003	1007	1009	1007	1007	1007	1006	1006	1006	1006
4	1008	1009	1005	1007	1010	1013	1013	1014	1008	1003	993	988	993	1003	1007	1009	1010	1007	1006	1008	1009	1008	1006	1006	1003
5	1004	1004	1001	999	1000	1002	1007	1010	1010	1005	994	992	997	1002	1006	1012	1015	1014	1013	1008	1009	1009	1008	1008	1008
6	1009	1009	1007	1006	1009	1009	1010	1011	1007	1002	992	988	989	996	1003	1008	1011	1009	1007	1009	1009	1008	1008	1008	1007
7*	1008	1008	1008	1009	1010	1011	1012	1011	1008	1004	994	989	995	1000	1004	1007	1007	1005	1004	1006	1006	1005	1004	1004	1004
8	1004	1004	1004	1005	1005	1005	1005	1005	1001	1000	993	988	987	987	996	1008	1010	1015	1014	1013	1012	1010	1009	1008	1008
9	1006	1001	1001	1004	1006	1006	1009	1011	1009	1004	1001	999	1002	1005	1007	1007	1011	1015	1014	1014	1011	1010	1007	1006	1006
10	1007	1006	1006	1003	998	1001	1006	1008	1006	1003	998	997	998	1002	1007	1013	1016	1018	1017	1017	1017	1014	1010	1010	1010
11**	1008	1008	1008	1008	1007	1006	1006	1008	1005	996	987	985	995	1003	1014	1030	1039	1038	1035	1030	1028	1023	1020	1015	1015
12	1012	1014	1012	1011	1009	1011	1015	1017	1016	1012	1009	1009	1005	1005	1012	1016	1016	1016	1016	1016	1018	1015	1014	1016	1016
13*	1016	1015	1015	1013	1012	1013	1017	1019	1017	1011	1002	993	997	1001	1007	1012	1011	1012	1012	1013	1015	1015	1015	1015	1014
14	1014	1014	1013	1013	1013	1013	1016	1018	1016	1009	999	998	999	1006	1011	1016	1016	1014	1013	1013	1011	1011	1011	1011	1013
15	1012	1012	1012	1012	1012	1011	1013	1016	1015	1012	1007	1006	1005	1007	1012	1017	1019	1022	1022	1022	1020	1019	1017	1017	1017
16*	1015	1015	1015	1015	1015	1014	1014	1013	1008	995	987	987	987	990	997	1003	1004	1005	1008	1008	1008	1008	1008	1008	1008
17	1009	1009	1007	1007	1009	1007	1006	1005	1000	992	982	977	976	983	993	1001	1005	1007	1006	1006	1007	1007	1005	1005	1005
18	1006	1007	1007	1006	1007	1006	1007	1007	1006	999	992	989	987	984	989	998	1007	1013	1015	1013	1013	1008	1007	1007	1007
19	1008	1008	1008	1009	1011	1010	1011	1009	1004	995	991	989	984	982	990	997	1003	1006	1006	1007	1007	1006	1006	1006	1006
20	1007	1008	1008	1008	1008	1008	1008	1009	1005	996	989	980	981	986	996	1004	1007	1009	1009	1009	1008	1008	1007	1007	1007
21	1007	1007	1006	1005	1007	1005	1008	1009	1005	998	990	981	979	983	990	1000	1004	1008	1008	1009	1010	1009	1009	1008	1008
22	1008	1007	1006	1006	1008	1008	1011	1012	1008	1000	989	982	978	984	992	1001	1008	1009	1009	1009	1009	1009	1009	1009	1007
23**	1009	1008	1009	1007	1002	1000	1005	1008	1010	1008	1000	992	992	995	1004	1013	1017	1019	1018	1018	1018	1015	1014	1013	1013
24	1014	1011	1013	1012	1013	1013	1019	1021	1018	1011	1005	998	998	1001	1007	1012	1016	1019	1019	1019	1018	1019	1016	1015	1015
25*	1015	1015	1015	1016	1017	1017	1017	1020	1017	1015	1004	997	994	997	1006	1014	1015	1017	1017	1017	1017	1018	1018	1018	1017
26**	1016	1009	1009	1009	1010	1008	1013	1017	1019	1018	1012	1011	1014	1028	1037	1048	1059	1064	1056	1051	1046	1041	1035	1028	1028
27**	1027	1025	1024	1023	1022	1022	1023	1023	1018	1007	999	1000	999	1001	1005	1008	1012	1009	1012	1012	1012	1013	1013	1014	1014
28	1015	1015	1014	1013	1013	1013	1017	1018	1015	1007	1001	995	992	998	1003	1008	1009	1009	1010	1011	1011	1013	1014	1012	1012
29**	1010	1008	1008	1008	1011	1011	1013	1016	1016	1011	1005	1000	1002	1007	1014	1026	1020	1016	1016	1017	1018	1016	1015	1013	1013
30	1013	1014	1013	1013	1013	1012	1014	1016	1013	1004	996	991	993	996	998	1004	1007	1007	1008	1009	1011	1011	1008	1007	1007
Mean	1011	1010	1009	1009	1010	1010	1011	1013	1010	1004	996	992	993	998	1004	1011	1014	1014	1014	1014	1013	1012	1011	1010	1010
Mean*	1013	1013	1013	1013	1013	1014	1015	1015	1012	1005	995	991	993	996	1002	1004	1009	1010	1010	1010	1011	1010	1010	1010	1010
Mean**	1014	1012	1012	1011	1010	1009	1012	1014	1014	1008	1001	998	1000	1007	1015	1025	1029	1029	1027	1026	1024	1022	1020	1017	1017

<b>October</b>																									
42000 γ + Tabular Quantities (in γ).																									
1	1008	1006	1006	1004	1004	1004	1009	1011	1010	1006	1005	1003	1004	1006	1008	1011	1013	1014	1014	1017	1014	1014	1011	1009	1009
2*	1012	1012	1015	1014	1015	1014	1017	1018	1015	1010	1002	998	1000	1002	1006	1010	1014	1015	1014	1013	1012	1012	1012	1012	1012
3*	1013	1013	1013	1013	1014	1013	1014	1013	1008	1003	996	991	992	994	1003	1011	1017	1017	1016	1013	1011	1011	1011	1011	1011
4	1012	1013	1012	1012	1013	1013	1014	1016	1012	1002	997	996	994	996	999	1006	1010	1009	1012	1012	1011	1009	1009	1008	1008
5	1010	1010	1011	1010	1010	1010	1010	1013	1008	1001	991	988	991	993	1000	1010	1015	1020	1025	1025	1032	1028	1024	1019	1019
6	1014	1008	1005	1009	1011	1009	1008	1012	1011	1010	1005	1006	1005	1006	1013	1025	1029	1026	1026	1026	1025	1024	1015	1011	1011
7	1011	1013	1015	1016	1016	1019	1021	1023	1020	1015	1005	1003	1005	1009	1014	1024	1028	1024	1021	1021	1023	1015	1013	1010	1010
8	1012	1006	997	992	993	1000	1008	1016	1022	1020	1013	1009	1011	1010	1018	1029	1029	1023	1021	1021	1017	1015	1015	1014	1014
9	1013	1013	1013	1010	1008	1011	1015	1019	1016	1011	1001	1000	1007	1013	1020	1030	1036	1029	1028	1024	1021	1021	1018	1016	1016
10**	1010	1000	990	982	979	979	991	998	1002	1004	1004	1007	1009	1013	1021	1033	1038	1032	1028	1025	1024	1022	1020	1020	1020
11	1019	1017	1017	1017	1016	1018	1022	1025	1023	1016	1007	1005	1009	1012	1013	1017	1017	1013	1013	1014	1014	1015	1015	1015	1015
12	1014	1015	1014	1013	1012	1013	1015	1017	1014	1009	1005	1003	1005	1005	1007	1013	1014	1012	1013	1013	1013	1013	1013	1013	1013
13	1013	1013	1012	1012	1010	1012	1012	1014	1012	1005	1000	996	1000	1004	1009	1011	1011	1011	1011	1011	1011	1011	1011	1011	1011
14	1011	1011	1011	1011	1010	1010	1011	1013	1013	1006	1000	999	1004	1011	1019	1026	1029	1029	1030	1025	1021	1019	1017	1016	1016
15	1014	1015	1009	1003	1005	1007	1011	1014	1011	1002	998	996	1001	1006	1012	1019	1021	1017	1018	1017	1017	1019	1016	1013	1013
16**	1015	1015	1016	1016	1016	1016	1016	1020	1018	1012	1007	1009	1014	1017	1022	1030	1043	1058	1070	1060	1055	1038	1015	1002	1002
17**	996	982	972	979	978	990	1002	1010	1012	1017	1018	1020	1022	1029	1034	1038	1035	1030	1027	1025	1023	1022	1022	1021	1021
18	1021	1022	1022	1022	1021	1021	1021	1022	1020	1014	1008	1011	1012	1015	1019										

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC INTENSITY AT ABINGER.—continued.

Table with 24 columns representing hours (0h to 24h) and rows for each day of the month (November 1 to 30, plus Mean, Mean\*, and Mean\*\*). Values are magnetic intensity in gamma (γ). Includes sub-headers for 'November' and '42000 γ + Tabular Quantities (in γ)'. Similar structure for December is also present.

\* Denotes an International Quiet Day.

\*\* Denotes an International Disturbed Day.



TABLE IV.—DAILY MEAN AND EXTREME VALUES OF MAGNETIC ELEMENTS AS RECORDED BY THE MAGNETOGRAPHS.

Date.	DECLINATION WEST.						HORIZONTAL INTENSITY.						VERTICAL INTENSITY.								
	Mean Value for the Day.		Maximum.		Minimum.		Range.	Mean Value for the Day.		Maximum.		Minimum.		Range.	Mean Value for the Day.		Maximum.		Minimum.		Range.
	II°+	U.T. h m	II°+	II°+	U.T. h m	18000γ+		U.T. h m	18000γ+	18000γ+	U.T. h m	γ	42000γ+		U.T. h m	42000γ+	42000γ+	U.T. h m	γ		
<b>JAN.</b>	II°+	U.T. h m	II°+	II°+	U.T. h m		18000γ+	U.T. h m	18000γ+	18000γ+	U.T. h m	γ	42000γ+	U.T. h m	42000γ+	42000γ+	U.T. h m	γ			
1	25.0	13 30	28.8	22.0	1 0	6.8	522	1 10	544	502	10 8	42	1003	19 4	1009	996	1 35	13			
2	24.8	12 43	28.1	22.6	3 20	5.5	527	21 25	543	513	10 0	30	1003	18 40	1009	999	3 18	10			
3*	24.7	13 20	27.8	22.3	20 20	5.5	525	20 30	542	507	11 27	35	1002	18 41	1007	995	12 55	12			
4*	24.7	13 8	27.8	21.8	0 20	6.0	527	21 10	544	508	10 44	36	1000	20 17	1006	996	12 54	10			
5	24.6	13 20	27.7	21.7	9 0	6.0	528	8 40	541	513	12 25	28	998	8 30	1003	993	12 24	10			
6*	24.9	13 52	28.8	22.9	8 42	5.9	532	7 20	543	517	11 40	26	998	19 17	1005	993	6 55	12			
7*	24.7	12 41	27.7	21.5	9 3	6.2	535	17 57	546	520	11 40	26	994	16 16	1000	985	9 56	15			
8**	24.8	14 0	32.8	20.6	22 49	12.2	526	23 55	567	487	12 58	80	1000	18 40	1016	987	6 39	29			
9	24.2	3 10	28.8	15.6	20 38	13.2	520	0 0	563	481	20 29	82	999	21 7	1015	986	0 16	29			
10	24.6	13 14	31.2	11.0	18 21	20.2	520	18 29	553	487	19 39	66	1002	18 26	1022	988	9 54	34			
11	24.6	11 5	29.2	20.4	17 53	8.8	524	8 1	535	507	17 50	28	1003	18 7	1015	994	11 28	21			
12	24.8	13 40	32.8	14.3	19 40	18.5	523	19 50	553	479	14 6	74	1001	14 38	1018	989	9 58	29			
13	24.1	12 30	29.8	14.3	18 50	15.5	522	1 50	560	480	15 25	80	1001	15 43	1016	983	2 33	33			
14	24.2	10 58	27.8	17.5	22 30	10.3	520	0 2	535	495	11 23	40	1001	17 50	1010	995	2 10	15			
15	24.5	13 19	28.6	20.6	0 11	8.0	526	7 1	539	517	11 49	22	997	16 42	1006	987	11 24	19			
16*	24.5	13 49	27.8	20.2	23 10	7.6	529	8 0	541	515	11 39	26	996	17 9	1003	984	12 33	19			
17	24.4	13 10	27.6	20.9	4 50	6.7	528	4 37	542	512	11 56	30	993	15 10	1001	981	11 54	20			
18**	25.1	13 10	33.5	17.7	23 19	15.8	519	5 0	550	458	17 55	92	997	18 15	1024	981	5 8	43			
19	24.3	14 4	30.0	17.2	19 28	12.8	520	9 5	538	502	14 19	36	995	19 54	1007	984	11 23	23			
20	25.0	17 30	28.7	18.2	20 48	10.5	522	23 22	537	493	21 21	44	998	21 2	1012	990	8 55	22			
21	24.4	14 50	30.0	16.8	21 11	13.2	524	23 40	556	491	21 14	65	998	21 24	1015	988	13 34	27			
22	24.6	13 6	31.3	16.9	0 34	14.4	519	9 14	537	494	0 31	43	998	21 59	1016	984	12 58	32			
23	24.3	13 30	27.6	18.8	0 40	8.8	526	19 14	539	507	0 0	32	996	0 7	1013	987	12 54	26			
24**	24.0	19 44	34.7	8.5	22 15	26.2	508	16 52	548	432	22 12	116	1007	21 2	1070	985	12 30	85			
25**	24.2	14 16	33.2	14.6	0 14	18.6	500	7 19	526	464	0 15	62	1009	0 9	1035	994	12 18	41			
26**	23.3	11 20	33.2	4.6	21 12	28.6	511	21 20	565	475	11 50	90	1001	15 31	1021	986	10 2	35			
27	23.7	13 1	29.6	17.4	22 40	12.2	520	22 44	564	503	13 42	61	1003	14 20	1014	992	23 4	22			
28	23.7	12 30	28.9	19.0	2 38	9.9	520	4 6	544	499	13 1	45	999	21 8	1010	986	6 57	24			
29	23.8	16 52	27.2	16.3	20 25	10.9	522	22 59	541	501	20 17	40	1002	20 39	1013	996	14 59	17			
30	24.0	11 20	30.1	18.8	22 48	11.3	518	6 4	542	495	12 25	47	1003	18 20	1013	994	9 42	19			
31	23.7	12 1	28.0	16.5	1 3	11.5	520	22 31	555	503	12 40	52	1004	22 10	1011	995	0 55	16			
Mean	24.4	—	29.6	17.8	—	11.9	522	—	546	495	—	50.8	1000	—	1014	989	—	24.6			
Mean*	24.7	—	28.0	21.7	—	6.2	530	—	543	513	—	29.8	998	—	1004	991	—	13.6			
Mean**	24.3	—	33.5	13.2	—	20.3	513	—	551	463	—	88.0	1003	—	1033	987	—	46.6			
<b>FEB.</b>	II°+	h m	II°+	II°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ			
1*	24.1	13 36	28.6	20.0	0 12	8.6	524	5 40	534	513	11 17	21	1001	20 9	1010	990	12 55	20			
2	24.7	19 30	33.9	16.5	23 9	17.4	519	15 10	542	482	19 38	60	1007	20 50	1032	993	10 24	39			
3	22.9	13 30	27.9	17.2	3 29	10.7	521	6 40	539	506	10 21	33	1003	19 14	1012	989	12 40	23			
4*	25.0	9 25	30.4	21.3	6 39	9.1	520	3 6	545	493	8 46	52	1002	17 7	1013	992	6 37	21			
5*	24.0	13 34	28.2	22.0	23 38	6.2	527	8 0	542	512	13 41	30	997	23 59	1000	987	13 20	13			
6	23.9	15 24	26.2	20.8	1 2	5.4	530	0 30	550	515	17 7	35	995	18 17	1002	989	6 59	13			
7*	23.8	17 16	25.5	22.0	18 51	3.5	535	14 6	554	517	19 10	37	992	19 23	999	977	13 0	22			
8	24.0	13 24	27.5	19.9	21 44	7.6	529	13 54	546	511	20 0	35	992	20 44	1002	980	12 17	22			
9	24.6	12 16	32.6	18.2	17 39	14.4	525	21 26	557	496	13 1	61	992	17 43	1009	980	10 58	29			
10	22.7	11 50	30.8	12.3	22 21	18.5	521	21 28	550	472	16 18	78	994	17 0	1019	980	1 20	39			
11	24.1	11 3	28.7	19.6	0 21	9.1	524	1 9	550	505	11 18	45	993	15 10	1003	981	1 53	22			
12	23.9	12 28	27.8	21.2	9 2	6.6	527	23 59	537	501	12 55	36	993	18 8	999	982	12 40	17			
13*	24.0	12 32	28.1	21.8	23 10	6.3	532	7 57	543	520	13 1	23	990	18 41	998	976	11 27	22			
14	24.0	16 12	30.9	19.0	20 7	11.9	528	14 9	558	493	16 38	65	993	20 18	1006	977	13 30	29			
15	22.7	12 40	29.7	16.8	2 11	12.9	518	14 54	535	482	16 22	53	996	16 51	1010	978	12 12	32			
16**	24.1	14 25	33.0	14.8	21 39	18.2	523	20 52	581	447	11 47	134	996	18 22	1025	970	11 22	55			
17**	22.2	13 57	34.9	12.2	19 21	22.7	511	18 43	567	469	15 40	98	1002	18 20	1042	983	11 47	59			
18	23.1	13 54	28.2	18.6	0 44	9.6	511	23 30	527	490	16 45	37	1003	17 1	1020	991	10 51	29			
19**	23.2	15 20	31.4	8.7	20 50	22.7	511	20 59	584	449	21 36	135	1006	16 43	1038	985	13 0	53			
20	22.7	12 57	27.9	17.8	2 16	10.1	515	1 53	542	495	0 23	47	1001	20 39	1016	985	11 56	31			
21**	23.8	12 35	33.0	15.4	21 12	17.6	513	18 47	556	478	17 55	78	1005	18 20	1032	988	10 22	44			
22**	22.4	13 54	30.1	11.9	21 34	18.2	514	21 40	575	472	14 39	103	1001	15 41	1027	987	12 20	40			
23	23.0	13 29	29.5	10.1	23 37	19.4	514	19 23	536	489	20 5	47	1003	19 11	1024	985	11 23	39			
24	23.1	11 51	29.9	14.7	0 0	15.2	519	21 28	551	500	12 39	51	1001	17 7	1011	985	11 2	26			
25	23.1	13 44	30.8	18.2	22 39	12.6	519	2 50	533	495	21 31	38	1002	21 40	1019	980	11 31	39			
26	23.2	14 20	34.8	11.4	24 0	23.4	515	1 0	564	478	18 40	86	1004	19 12	1035	981	12 20	54			
27	22.5	13 24	31.6	10.3	0 7	21.3	514	2 39	539	489	15 8	50	1004	18 5	1028	985	11 44	43			
28*	23.1	13 42	28.6	19.8	0 26	8.8	519	19 31	533	503	12 42	30	1000	18 10	1008	984	12 23	24			
29	23.8	12 34	30.2	16.5	23 17	13.7	525	14 53	538	505	15 59	33	999	20 8	1010	983	12 32	27			
Mean	23.5	—	30.0	16.9	—	13.2	521	—	549	493	—	56.2	999	—	1016	984	—	31.9			
Mean*	23.8	—	27.8	21.1	—	6.7	527	—	541	513	—	28.2	996	—	1003	983	—	20.2			
Mean**	23.1	—	32.5	12.6	—	19.9	514	—	573	463	—	109.6	1002	—	1034	983	—	50.2			

\* Denotes an International Quiet Day.

\*\* Denotes an International Disturbed Day.

TABLE IV.—DAILY MEAN AND EXTREME VALUES OF MAGNETIC ELEMENTS—continued.

Date.	DECLINATION WEST.						HORIZONTAL INTENSITY.						VERTICAL INTENSITY.					
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
MAR.	11°+	U.T. h m	11°+	11°+	U.T. h m		18000γ+	U.T. h m	18000γ+	18000γ+	U.T. h m	γ	42000γ+	U.T. h m	42000γ+	42000γ+	U.T. h m	γ
1	23.3	13 24	27.2	18.9	8 35	8.3	526	7 30	538	505	12 46	33	999	0 10	1006	982	12 17	24
2	22.9	14 1	28.0	18.5	9 41	9.5	527	21 35	547	509	11 58	38	996	21 28	1006	977	11 28	29
3*	23.2	14 9	26.6	19.6	9 36	7.0	534	18 30	545	523	11 54	22	994	23 34	1000	983	11 55	17
4*	23.4	14 19	28.7	19.5	9 30	9.2	537	8 14	549	517	12 18	32	992	23 30	999	977	12 1	22
5	23.1	13 27	30.2	16.2	2 0	14.0	534	20 46	545	517	15 24	28	993	17 6	1003	971	12 36	32
6	23.5	13 59	30.1	15.6	22 24	14.5	531	8 23	549	509	12 53	40	993	22 35	1006	971	11 59	35
7*	23.5	13 40	30.3	19.2	9 10	11.1	529	23 10	543	506	14 8	37	994	16 20	1003	981	11 12	22
8	23.6	14 39	33.3	16.8	22 25	16.5	529	7 50	555	491	15 54	64	996	16 10	1019	974	11 18	45
9	24.1	14 26	33.6	18.4	9 3	15.2	525	18 40	545	498	16 27	47	999	18 40	1014	976	11 26	38
10	23.4	13 5	30.6	18.2	8 50	12.4	529	22 10	544	502	12 20	42	995	17 4	1007	976	11 59	31
11*	23.5	14 6	29.7	18.7	9 10	11.0	534	7 8	547	515	12 20	32	995	17 40	1003	976	11 59	27
12*	23.1	14 19	28.4	17.6	9 31	10.8	534	7 27	548	511	12 0	37	995	17 7	1003	979	12 0	24
13	23.6	13 24	31.6	18.4	9 23	13.2	538	7 29	559	516	11 40	43	992	17 7	999	975	12 41	24
14	23.0	13 48	27.4	18.4	8 41	9.0	534	5 40	547	524	18 20	23	992	17 43	1005	973	12 56	32
15	22.4	13 57	30.1	17.1	23 4	13.0	528	23 10	551	506	12 30	45	991	19 34	1009	964	11 23	45
16	23.2	13 45	29.7	18.3	8 55	11.4	530	6 30	545	511	11 17	34	992	18 50	1003	974	11 21	29
17	21.8	13 20	29.4	16.5	2 27	12.9	527	23 30	557	508	12 10	49	997	16 12	1009	982	23 58	27
18	22.0	13 30	30.7	16.7	1 52	14.0	524	23 48	548	499	12 25	49	995	20 57	1014	973	12 17	41
19	21.9	13 20	30.0	16.5	21 40	13.5	523	20 42	561	496	11 48	65	996	20 13	1011	979	12 24	32
20**	22.8	13 42	32.4	15.4	23 10	17.0	520	3 53	551	485	14 2	66	998	18 40	1020	973	11 58	47
21**	21.6	14 21	31.7	12.4	20 40	19.3	510	21 4	558	449	10 50	109	996	18 36	1026	973	10 58	53
22	21.9	13 20	31.6	12.8	20 49	18.8	516	19 55	558	490	12 23	68	995	19 32	1017	969	12 23	48
23**	22.7	13 0	33.0	7.2	18 49	25.8	514	18 58	557	468	11 13	89	1002	18 52	1044	977	11 11	67
24**	22.2	14 20	34.2	10.7	22 4	23.5	516	23 59	555	478	10 1	77	1000	20 13	1026	975	11 39	51
25**	21.5	13 54	34.6	8.9	23 38	25.7	513	21 31	550	466	11 38	84	996	17 1	1015	970	2 46	45
26	21.7	13 30	34.2	9.7	1 21	24.5	512	21 23	546	482	10 42	64	994	20 42	1015	971	11 33	44
27	21.7	13 50	32.0	12.0	19 56	20.0	513	19 40	574	479	11 40	95	1000	19 35	1028	972	11 20	56
28	21.2	13 54	30.3	14.7	8 7	15.6	516	1 54	546	472	11 32	74	997	17 20	1010	971	11 55	39
29	21.9	13 17	31.1	15.6	9 0	15.5	521	3 9	544	486	12 22	58	997	17 10	1010	973	12 17	37
30	21.8	13 31	29.7	14.7	9 12	15.0	523	20 22	542	486	11 40	56	997	18 40	1008	971	11 38	37
31	21.8	14 25	30.6	14.3	7 59	16.3	526	23 20	554	486	11 40	68	995	18 1	1012	973	12 22	39
Mean	22.6	—	30.7	15.7	—	15.0	525	—	550	497	—	53.8	996	—	1012	975	—	36.7
Mean*	23.4	—	28.7	18.9	—	9.8	534	—	546	514	—	32.0	994	—	1002	979	—	22.4
Mean**	22.2	—	33.2	10.9	—	22.3	515	—	554	469	—	85.0	998	—	1026	974	—	52.6
APRIL	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
1	22.2	14 5	31.8	14.0	8 21	17.8	527	6 48	550	480	18 16	70	1002	18 40	1046	972	12 31	74
2	22.5	14 42	30.4	4.0	21 44	26.4	525	1 53	547	489	12 38	58	998	7 20	1030	984	14 31	46
3	21.6	13 30	32.5	3.7	20 28	28.8	523	23 45	561	475	20 24	86	1001	19 22	1038	972	11 33	66
4	22.0	13 40	29.6	15.5	8 49	14.1	520	0 2	548	488	11 0	60	998	17 10	1009	979	11 55	30
5*	22.6	13 20	31.8	14.9	8 52	16.9	521	6 29	538	484	11 23	54	996	18 6	1008	964	11 45	44
6*	23.0	13 57	31.3	15.7	7 40	15.6	529	19 6	549	496	11 40	53	993	6 45	1002	973	11 57	29
7	23.3	14 4	35.0	15.4	8 42	19.6	526	5 15	548	487	11 41	61	995	17 40	1012	971	12 14	41
8	22.7	13 24	34.0	13.6	7 55	20.4	525	6 6	551	478	13 55	73	996	19 7	1016	969	12 16	47
9	22.6	13 43	30.7	16.4	8 22	14.3	528	19 22	550	488	11 17	62	995	18 10	1008	970	12 20	38
10*	23.1	13 58	31.5	16.5	8 36	15.0	528	5 58	547	490	11 20	57	997	17 42	1008	976	12 18	32
11	22.8	13 0	28.6	17.6	23 59	11.0	527	19 56	559	489	11 34	70	995	7 0	1006	973	11 52	33
12	22.9	15 2	32.2	14.8	0 34	17.4	528	22 44	551	494	11 12	57	997	18 6	1021	965	12 20	56
13	22.7	13 30	32.6	16.6	7 45	16.0	526	16 28	557	482	16 57	75	996	17 26	1025	963	11 50	62
14	21.6	13 58	29.3	13.7	20 0	15.6	522	19 29	555	494	21 54	61	998	19 29	1022	968	12 30	54
15	22.5	13 53	31.6	14.1	20 10	17.5	514	21 10	553	464	12 0	89	1003	17 29	1043	975	11 27	68
16	20.4	13 59	29.8	9.9	2 7	19.9	515	20 40	554	476	11 33	78	997	18 41	1011	976	12 32	35
17	20.8	24 0	31.1	13.1	23 14	18.0	520	23 59	590	478	10 44	112	1000	21 7	1021	973	11 1	48
18**	19.8	16 10	34.0	3.5	2 38	30.5	513	0 2	590	466	5 33	124	998	19 5	1060	957	5 18	103
19**	21.3	13 13	34.1	9.9	21 32	24.2	513	24 0	565	453	11 27	112	1001	17 22	1057	969	23 44	88
20**	20.6	13 56	33.2	12.5	21 34	20.7	501	0 2	570	455	12 35	115	1003	18 9	1055	964	0 24	91
21**	22.1	12 41	38.0	4.6	23 20	33.4	506	22 19	607	449	12 15	158	1000	19 10	1043	941	23 56	102
22**	21.8	14 10	36.5	8.2	19 59	28.3	497	20 7	572	435	9 13	137	998	14 43	1059	943	0 0	116
23	23.2	13 26	35.1	13.3	20 50	21.8	508	16 44	580	455	11 33	125	1006	16 49	1058	976	0 0	82
24	22.6	13 57	29.8	16.4	9 0	13.4	514	23 41	562	481	10 40	81	1009	17 27	1034	990	12 32	44
25	21.9	13 1	32.6	15.1	9 5	17.5	515	21 30	560	461	12 4	99	1005	18 28	1026	981	11 35	45
26*	22.1	13 57	29.2	15.6	8 27	13.6	523	17 39	545	494	10 24	51	1004	19 10	1017	976	12 18	41
27	22.2	14 21	30.1	15.5	8 6	14.6	527	20 12	563	492	11 35	71	1000	18 10	1015	969	12 36	46
28	21.5	14 58	28.4	15.0	8 38	13.4	528	20 42	551	499	13 47	52	1001	18 38	1026	971	12 20	55
29*	22.3	13 28	29.8	15.7	8 7	14.1	528	23 41	543	490	11 41	53	1000	17 40	1013	977	12 40	36
30	21.7	13 29	27.9	14.3	8 2	13.6	530	23 6	554	494	11 20	60	1000	18 15	1013	978	12 59	35
Mean	22.1	—	31.8	13.0	—	18.8	520	—	559	479	—	80.5	999	—	1027	971	—	56.2
Mean*	22.6	—	30.7	15.7	—	15.0	526	—	544	491	—	53.6	998	—	1010	973	—	36.4
Mean**	21.1	—	35.2	7.7	—	27.4	506	—	581	452	—	129.2	1000	—	1055	955	—	100.0

\* Denotes an International Quiet Day.

\*\* Denotes an International Disturbed Day.

TABLE IV.—DAILY MEAN AND EXTREME VALUES OF MAGNETIC ELEMENTS—continued.

Date.	DECLINATION WEST.						HORIZONTAL INTENSITY.						VERTICAL INTENSITY.						
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	
		U.T. h m	U.T. h m	U.T. h m	U.T. h m			U.T. h m	U.T. h m	U.T. h m	U.T. h m			U.T. h m	U.T. h m	U.T. h m	U.T. h m		U.T. h m
MAY	11°+			11°+			18000γ+			18000γ+	18000γ+		γ	42000γ+		42000γ+	42000γ+		γ
1	21-1	12 47	29-7	14-7	0 55	15-0	527	0 9	578	487	11 40	91	996	17 18	1011	972	12 10	39	
2	22-0	13 15	29-4	15-0	8 3	14-4	531	1 48	550	496	11 35	54	998	18 10	1011	972	11 32	39	
3	22-0	13 3	28-9	13-3	7 6	15-6	537	23 20	562	507	10 30	55	994	6 1	1005	969	12 29	36	
4	22-3	14 10	32-1	11-3	18 49	20-8	535	14 10	578	492	15 19	86	1002	18 54	1035	971	11 22	64	
5	21-6	12 28	28-5	11-8	6 54	16-7	523	17 26	554	498	7 58	56	1002	18 14	1013	981	11 56	32	
6	22-1	13 0	31-5	14-3	7 23	17-2	531	17 50	553	505	10 40	48	999	17 40	1014	971	11 58	43	
7*	21-9	12 53	32-8	13-2	7 30	19-6	535	19 11	550	502	9 16	48	—	—	—	—	—	—	
8*	22-1	12 57	30-4	16-2	7 40	14-2	534	17 29	559	495	10 20	64	—	—	—	—	—	—	
9*	21-4	13 16	27-9	13-9	7 54	14-0	532	18 10	557	503	10 20	54	993	18 9	1004	964	11 36	40	
10	23-0	12 3	32-3	14-7	8 3	17-6	537	17 25	599	493	12 46	106	995	19 29	1030	957	10 44	73	
11**	23-1	14 33	35-8	14-3	7 54	21-5	539	14 33	581	484	9 19	97	990	19 58	1003	960	10 38	43	
12**	22-9	13 52	34-5	12-8	7 59	21-7	529	18 36	661	466	11 59	195	995	18 32	1043	963	11 55	80	
13	20-8	13 53	28-4	14-5	6 55	13-9	524	0 34	562	481	11 5	81	998	18 14	1018	974	11 54	44	
14	20-4	13 42	30-2	12-5	8 7	17-7	530	18 17	570	492	12 12	78	1002	18 58	1035	963	12 12	72	
15	20-6	13 56	28-6	14-3	23 58	14-3	525	20 21	569	479	8 50	90	996	19 48	1017	972	12 0	45	
16	22-1	13 30	34-6	14-3	0 30	20-3	522	23 3	581	476	13 2	105	999	17 47	1038	973	12 8	65	
17	21-0	13 20	30-9	13-9	6 0	17-0	518	19 25	559	482	10 52	77	996	19 25	1015	970	11 59	45	
18**	21-4	13 14	33-5	13-8	5 32	19-7	522	19 32	604	457	8 0	147	997	19 31	1024	967	23 32	57	
19**	21-1	12 16	31-4	11-1	7 27	20-3	515	19 28	581	454	10 20	127	1000	16 1	1037	973	10 57	64	
20	21-4	13 54	30-3	11-9	7 22	18-4	519	18 1	577	465	8 51	112	1006	18 17	1033	979	12 0	54	
21	20-9	13 50	27-1	13-3	8 47	13-8	520	17 58	572	480	13 7	92	1003	18 16	1025	978	11 18	47	
22	20-9	13 50	30-0	11-4	7 43	18-6	520	23 26	549	477	10 13	72	1001	16 10	1022	975	11 55	47	
23*	21-3	12 35	30-2	13-6	7 42	16-6	524	19 20	551	488	9 59	63	996	17 8	1014	962	11 54	52	
24*	21-6	13 20	30-6	14-4	7 21	16-2	528	18 57	548	490	9 40	58	999	19 12	1012	972	12 17	40	
25	20-7	13 58	28-8	13-3	8 30	15-5	535	18 36	563	503	12 36	60	1003	18 36	1018	975	12 53	43	
26	21-6	13 6	30-1	14-6	8 30	15-5	530	18 27	559	473	13 27	86	1002	18 24	1036	971	11 30	65	
27	20-2	13 57	26-5	12-7	7 34	13-8	529	19 18	559	484	10 31	75	1005	18 29	1021	981	12 20	40	
28	21-2	13 29	29-3	12-6	7 36	16-7	533	17 37	578	498	14 2	80	1002	18 23	1019	976	10 57	43	
29**	20-9	13 50	30-0	12-3	7 52	17-7	526	17 8	557	472	14 24	85	1008	17 40	1035	972	10 39	63	
30	21-1	13 5	27-4	14-1	5 16	13-3	535	23 55	607	500	14 4	107	1002	17 30	1027	980	11 53	47	
31	19-5	12 42	27-3	10-6	3 29	16-7	532	0 54	601	494	12 3	107	997	17 10	1019	972	3 10	47	
Mean	21-4	—	30-3	13-3	—	17-0	528	—	572	486	—	85-7	999	—	1022	971	—	50-7	
Mean*	21-7	—	30-4	14-3	—	16-1	531	—	553	496	—	57-4	996	—	(1010)	(966)	—	(44-0)	
Mean**	21-9	—	33-1	12-9	—	20-2	526	—	597	467	—	130-2	998	—	1028	967	—	61-4	
JUNE	11°+			11°+			18000γ+			18000γ+	18000γ+		γ	42000γ+		42000γ+	42000γ+		γ
1**	21-4	11 35	30-6	9-5	21 0	21-1	533	16 46	614	488	9 14	126	1007	16 47	1044	988	9 29	56	
2**	20-7	14 20	30-8	12-9	20 50	17-9	534	17 6	616	481	11 52	135	1004	19 20	1035	969	11 50	66	
3	20-4	14 5	28-1	13-3	8 46	14-8	523	23 5	579	482	11 10	97	1003	18 28	1021	983	10 28	38	
4	20-3	14 19	29-3	12-7	8 14	16-6	529	19 50	556	471	11 55	85	1004	16 14	1016	980	11 55	36	
5*	20-1	13 53	26-6	13-5	7 53	13-1	527	18 31	553	489	12 54	64	1003	18 36	1016	985	12 12	31	
6*	19-6	14 46	26-9	11-1	8 40	15-8	531	18 30	557	500	10 44	57	1000	17 10	1014	972	11 32	42	
7	21-6	14 20	29-6	15-5	8 11	14-1	540	19 36	574	500	10 36	74	996	18 10	1013	962	11 46	51	
8	20-3	13 50	30-0	7-5	22 40	22-5	536	17 48	607	492	12 36	115	1004	17 48	1033	979	11 1	54	
9**	21-9	16 0	33-8	11-9	6 5	21-9	522	17 52	614	429	16 16	185	1005	17 50	1046	969	13 14	77	
10**	19-4	13 1	28-6	11-1	8 50	17-5	522	19 54	580	465	13 13	115	1012	19 45	1042	983	10 59	59	
11	20-1	15 0	27-4	12-7	8 32	14-7	526	18 18	560	484	13 32	76	1008	18 16	1024	988	12 7	36	
12	20-2	13 31	26-0	15-1	4 30	10-9	529	19 46	556	501	12 59	55	1004	19 40	1020	983	11 59	37	
13	20-3	13 56	29-4	13-1	6 40	16-3	532	19 50	583	493	12 15	90	1003	19 46	1033	969	11 18	64	
14	19-5	13 53	25-4	13-5	6 6	11-9	533	16 49	575	494	7 20	81	1006	18 13	1031	983	11 18	48	
15	20-4	14 49	28-6	13-0	6 50	15-6	529	17 53	595	476	9 12	119	1002	17 50	1036	974	11 58	62	
16	20-3	13 53	29-2	12-3	6 40	16-9	527	20 20	581	478	11 36	103	1005	17 8	1029	981	11 21	48	
17	20-1	13 54	27-4	13-1	7 40	14-3	528	18 23	559	500	12 24	59	1005	18 14	1027	983	12 29	44	
18	20-7	14 2	30-4	12-5	23 33	17-9	536	20 15	600	493	11 47	107	999	18 21	1017	969	11 30	48	
19**	23-9	3 49	34-9	11-7	0 19	23-2	483	0 11	601	<365	8 5	>236	1002	15 2	1088	905	4 44	183	
20	19-2	14 10	27-7	10-0	6 23	17-7	510	4 57	561	460	10 34	101	1014	18 9	1030	988	13 1	42	
21	19-8	14 36	27-4	12-6	8 33	14-8	518	20 40	550	459	10 47	91	1008	5 10	1021	980	11 50	41	
22	20-0	13 48	27-8	11-2	8 3	16-6	525	19 20	560	464	10 46	96	1013	18 14	1031	988	11 22	43	
23*	20-1	13 44	27-7	13-1	7 40	14-6	525	19 0	553	471	10 59	82	1008	5 24	1021	985	12 32	36	
24	20-7	14 9	29-6	12-8	8 6	16-8	536	16 15	570	490	10 12	80	1009	19 26	1028	981	11 55	47	
25	19-8	14 12	25-4	13-1	8 22	12-3	534	19 52	558	497	11 17	61	1008	17 13	1021	988	11 53	33	
26	20-0	14 56	29-6	11-8	6 27	17-8	536	18 58	586	497	10 32	89	1004	18 43	1021	985	13 1	36	
27	19-7	13 59	27-3	12-9	7 3	14-4	531	18 32	559	492	10 4	67	1003						

TABLE IV.—DAILY MEAN AND EXTREME VALUES OF MAGNETIC ELEMENTS—*continued.*

Date.	DECLINATION WEST.						HORIZONTAL INTENSITY.						VERTICAL INTENSITY.					
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
		U.T. h m	U.T. h m	U.T. h m	U.T. h m			U.T. h m	U.T. h m	U.T. h m	U.T. h m			U.T. h m	U.T. h m	U.T. h m	U.T. h m	
JULY	11°+	11°+	11°+	11°+		18000γ+	18000γ+	18000γ+	18000γ+	18000γ+	γ	42000γ+	42000γ+	42000γ+	42000γ+	42000γ+	γ	
1	20.0	13 51	28.0	12.4	7 9	15.6	536	19 21	564	501	11 0	63	1003	5 27	1014	984	10 59	30
2**	19.0	14 48	35.8	4.3	7 44	31.5	516	19 8	586	443	11 59	143	1020	15 44	1083	983	9 30	100
3	20.9	0 49	28.6	15.3	5 54	13.3	516	0 50	558	483	10 33	75	1016	17 9	1027	985	1 7	42
4	19.6	13 36	25.4	14.2	7 40	11.2	523	21 6	555	481	10 31	74	1013	17 19	1026	991	11 19	35
5	20.3	13 21	26.4	15.5	6 2	10.9	529	2 34	579	470	10 20	109	1018	17 25	1050	987	9 49	63
6**	20.3	14 57	33.3	11.3	21 44	22.0	523	21 54	580	450	12 30	130	1017	17 8	1052	988	10 54	64
7	19.0	12 47	26.8	10.5	8 48	16.3	516	17 13	571	438	9 49	133	1012	17 14	1035	987	1 50	48
8	18.5	14 1	29.2	13.2	8 24	16.0	525	19 22	576	469	10 21	107	1011	19 11	1032	993	9 58	39
9	19.3	14 53	26.7	12.4	8 32	14.3	528	18 43	564	497	9 25	67	1012	19 40	1030	987	13 23	43
10**	19.7	14 23	31.0	12.4	7 53	18.6	530	16 1	597	477	22 11	120	1011	18 18	1056	983	23 44	73
11**	20.2	16 23	35.0	7.9	0 40	27.1	519	16 3	631	438	8 56	193	1011	18 19	1045	977	3 1	68
12	19.1	14 57	28.1	12.2	7 12	15.9	526	21 27	595	487	13 21	108	1009	19 10	1027	983	12 1	44
13	19.4	13 54	26.6	13.4	3 28	13.2	523	18 51	581	470	11 44	111	1011	18 41	1040	994	3 21	46
14*	19.0	14 10	26.4	11.6	8 1	14.8	527	18 59	556	499	12 1	57	1011	17 54	1026	985	12 24	41
15*	19.9	13 30	27.7	14.7	5 10	13.0	528	21 0	550	497	11 57	53	1012	18 57	1024	994	11 52	30
16	19.6	2 55	27.6	9.9	7 55	17.7	533	23 58	570	485	12 16	85	1004	17 54	1022	981	5 57	41
17	19.9	14 33	28.0	12.7	5 30	15.3	539	23 42	602	484	10 50	118	1008	19 31	1031	985	11 56	46
18	19.4	13 49	28.2	12.7	6 47	15.5	534	1 22	583	481	9 7	102	1006	19 19	1024	977	12 4	47
19	19.1	13 32	28.6	11.3	8 33	17.3	527	19 56	554	481	10 38	73	1012	17 10	1026	995	11 50	31
20	19.9	14 32	27.1	13.3	7 52	13.8	526	17 2	569	484	10 24	85	1014	17 10	1039	993	12 55	46
21*	19.1	13 24	27.2	11.8	8 2	15.4	530	18 24	555	486	10 58	69	1015	18 20	1030	992	12 22	38
22	18.9	14 10	26.6	10.4	7 50	16.2	531	19 53	559	494	11 27	65	1011	18 10	1024	988	12 15	36
23*	19.4	14 10	25.1	13.3	7 44	11.8	528	19 6	549	481	10 1	68	1008	8 1	1022	977	11 0	45
24*	19.7	14 58	26.2	13.4	8 1	12.8	536	19 59	562	506	10 59	56	1010	17 40	1021	995	11 42	26
25	18.9	13 14	28.6	11.7	7 46	16.9	535	5 12	560	489	11 55	71	1002	18 10	1018	974	12 48	44
26	19.7	12 40	28.3	12.3	7 25	16.0	532	1 44	561	494	10 20	67	1004	17 23	1023	987	11 30	36
27	19.4	14 13	28.4	11.8	8 13	16.6	534	19 30	569	494	10 10	75	1008	17 49	1026	983	12 55	43
28	19.6	12 42	28.0	11.4	5 3	16.6	535	19 4	567	504	10 15	63	1001	16 59	1018	971	10 34	47
29**	21.1	16 13	36.3	13.3	6 34	23.0	532	14 31	605	450	16 20	155	1014	18 39	1067	983	10 44	84
30	19.5	13 58	24.9	11.9	7 40	13.0	520	3 10	541	489	9 1	52	1010	16 40	1025	991	3 58	34
31	19.5	13 54	28.3	14.1	6 38	14.2	529	16 20	568	477	10 21	91	1014	17 18	1036	995	11 57	41
Mean	19.6	—	28.5	12.2	—	16.3	528	—	572	480	—	91.6	1011	—	1033	986	—	46.8
Mean*	19.4	—	26.5	13.0	—	13.5	530	—	554	494	—	60.6	1011	—	1025	989	—	36.0
Mean**	20.1	—	34.3	9.8	—	24.5	524	—	600	452	—	148.2	1015	—	1061	983	—	77.8
AUG.	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
1	18.4	14 34	26.0	11.7	6 31	14.3	527	0 50	550	496	12 1	54	1012	17 16	1030	991	2 8	39
2	19.2	13 57	27.1	11.9	8 34	15.2	531	21 8	573	493	9 32	80	1009	7 29	1021	986	13 1	35
3	19.8	13 41	31.3	12.8	7 40	18.5	533	17 58	563	496	10 15	67	1010	16 40	1024	992	12 18	32
4	19.5	13 43	27.4	13.8	5 38	13.6	529	21 40	550	482	10 51	68	1005	18 34	1019	986	9 57	33
5**	19.5	13 22	32.5	11.4	7 51	21.1	532	17 22	569	499	11 27	70	1009	18 10	1033	976	12 20	57
6**	19.2	13 49	29.1	12.4	8 38	16.7	524	18 52	559	485	6 28	74	1005	17 40	1025	984	12 53	41
7*	18.7	14 41	25.5	11.5	7 21	14.0	533	19 7	555	497	9 40	58	1006	4 45	1019	983	11 29	36
8**	19.6	13 28	28.7	7.4	20 47	21.3	536	17 2	584	504	11 0	80	1007	19 38	1029	980	11 43	49
9	18.8	14 40	26.3	11.4	6 50	14.9	528	19 29	562	487	11 6	75	1006	19 24	1030	973	11 27	57
10**	19.3	12 20	28.7	12.7	5 35	16.0	526	18 40	554	478	13 12	76	1006	18 39	1025	990	12 57	35
11*	17.9	14 29	24.7	11.8	8 36	12.9	525	20 3	548	494	9 40	54	1011	17 49	1023	985	12 22	38
12	19.1	14 29	27.5	14.2	8 42	13.3	531	22 42	568	507	10 44	61	1006	6 43	1019	980	11 58	39
13	18.6	13 30	24.4	11.4	6 31	13.0	531	18 59	557	499	10 0	58	1004	16 10	1015	981	12 12	34
14	19.1	13 2	26.8	13.2	7 22	13.6	535	20 11	561	509	15 20	52	1003	19 43	1012	975	11 56	37
15	19.7	13 55	27.9	14.1	7 46	13.8	531	0 31	554	494	13 40	60	1004	17 50	1017	982	12 21	35
16	18.7	13 59	24.9	13.7	9 1	11.2	530	18 25	553	499	11 41	54	1008	18 23	1023	990	11 40	33
17	18.1	13 30	23.7	12.8	7 45	10.9	528	21 52	549	497	10 20	52	1007	17 27	1020	990	11 52	30
18*	18.6	12 48	25.1	13.0	8 8	12.1	529	18 28	546	496	10 1	50	1003	4 45	1015	977	11 57	38
19*	19.1	13 15	26.9	11.7	8 0	15.2	533	19 58	552	499	12 28	53	1001	16 1	1015	974	11 55	41
20	19.1	13 26	26.0	13.5	7 50	12.5	535	18 45	560	495	10 49	65	1006	17 39	1021	985	12 16	36
21	18.9	13 1	27.6	12.1	7 3	15.5	530	0 18	565	493	11 14	72	1002	17 9	1018	975	11 57	43
22	18.2	13 17	24.1	12.4	6 33	11.7	532	18 24	559	494	12 50	65	1004	19 10	1019	983	11 58	36
23*	19.1	13 20	26.2	12.5	8 12	13.7	530	19 20	554	495	12 14	59	1004	17 52	1016	976	12 3	40
24	18.6	12 30	25.8	11.6	7 51	14.2	532	19 6	560	498	10 40	62	1002	6 22	1011	976	11 56	35
25	18.7	13 6	27.3	11.5	7 55	15.8	536	19 8	565	492	10 59	73	1001	6 40	1012	978	11 38	34
26	18.3	14 12	24.8	12.9	6 46	11.9	537	18 49	557	506	11 58	51	998	1 2	1009	971	11 58	38
27	19.3	12 14	28.5	14.2	7 32	14.3	536	23 38	559	495	11 4	64	1000	17 10	1013	962	11 37	51
28	19.0	12 22	24.4	14.8	0 10	9.6	533	21 50	563	507	7 57	57	1006	7 24	1013	989	11 18	24
29	18.4	12 40	23.1	14.5	6 50	8.6	537	23 11	583	514	10 59	69	1001	21 1	1011	974	13 13	37
30**	17.4	13 15	25.1	7.4	2 36	17.7	524	17 53	589	488	9 39	101	1000	17 50	1027	988	14 20	39
31	18.4	12 43	25.7	11.5	3 38	14.2	525	19 0	551	496	11 31	55	1003	0 14	1015	977	12 1	38
Mean	18.8	—	26.6	12.3	—	14.3	531	—	560	496	—	64.2	1005	—	1019	981	—	38.4
Mean*	18.7	—	25.7	12.1	—	13.6	530	—	551	496	—	54.8	1005	—	1018	979	—	38.6
Mean**	19.0	—	28.8	10.3	—	18.5	528	—	571	491	—	80.2	1005	—	1028	984	—	44.2

\* Denotes an International Quiet Day. \*\*



TABLE IV.—DAILY MEAN AND EXTREME VALUES OF MAGNETIC ELEMENTS—continued.

Table with columns for Date, Declination West (Mean Value, Maximum, Minimum, Range), Horizontal Intensity (Mean Value, Maximum, Minimum, Range), and Vertical Intensity (Mean Value, Maximum, Minimum, Range). Rows are labeled with months SEP and OCT and individual days. Data points include magnetic field intensity and declination values in degrees and minutes.

\* Denotes an International Quiet Day.

\*\* Denotes an International Disturbed Day.

TABLE IV.—DAILY MEAN AND EXTREME VALUES OF MAGNETIC ELEMENTS—continued.

Date.	DECLINATION WEST.						HORIZONTAL INTENSITY.						VERTICAL INTENSITY.								
	Mean Value for the Day.		Maximum.		Minimum.		Range.	Mean Value for the Day.		Maximum.		Minimum.		Range.	Mean Value for the Day.		Maximum.		Minimum.		Range.
	h	m	h	m	h	m		U.T. h m	U.T. h m	U.T. h m	U.T. h m	U.T. h m	U.T. h m		U.T. h m	U.T. h m	U.T. h m	U.T. h m			
<b>NOV.</b>	11°+	h m	11°+	h m	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ		
1	16.3	13 20	20.4	12.3	8 48	8.1		505	21 43	523	481	12 21	42	1028	15 53	1032	1021	10 33	11		
2	16.4	14 25	23.8	10.6	22 16	13.2		520	14 26	549	491	12 2	58	1022	14 24	1031	1014	11 22	17		
3**	17.3	15 1	28.4	2.1	20 7	26.3		504	20 13	574	447	20 46	127	1028	20 2	1069	1007	5 22	62		
4	15.0	14 30	22.0	5.0	3 20	17.0		503	6 0	534	401	12 8	73	1024	0 1	1039	1005	3 9	34		
5	15.9	12 3	21.8	8.1	1 30	13.7		513	2 42	535	479	12 24	56	1023	16 34	1032	1006	2 51	26		
6	16.0	13 58	21.9	7.3	22 41	14.6		518	22 20	543	487	12 30	56	1024	18 40	1032	1017	23 50	15		
7	16.5	14 32	24.8	6.1	21 52	18.7		512	7 27	538	483	12 10	55	1023	19 41	1041	1005	12 9	36		
8	16.1	13 2	20.9	6.2	22 30	14.7		515	22 20	549	481	16 10	68	1023	16 29	1038	1012	10 53	26		
9	16.2	2 37	21.6	9.6	0 47	12.0		512	0 53	539	487	11 54	52	1020	8 51	1035	987	2 48	48		
10	17.0	19 22	22.3	12.3	21 59	10.0		524	17 2	561	502	11 30	59	1024	20 19	1038	1015	12 34	23		
11**	15.8	16 33	25.0	2.5	21 42	22.5		507	21 24	557	445	17 14	112	1029	17 30	1069	1012	11 29	57		
12	16.3	13 40	22.1	10.2	0 4	11.9		507	3 59	539	486	10 42	53	1026	13 59	1033	1009	4 28	44		
13*	16.5	12 58	19.9	12.8	8 42	7.1		520	22 20	534	500	11 23	34	1025	8 20	1032	1018	11 24	14		
14	16.2	13 39	20.8	12.8	9 15	8.0		521	0 15	547	497	12 19	50	1023	17 30	1031	1016	11 27	15		
15**	16.3	15 50	26.4	3.8	21 26	22.6		519	5 41	548	476	14 38	72	1023	15 40	1039	1011	11 22	28		
16**	16.3	13 30	24.6	10.1	19 32	14.5		517	19 38	542	476	13 44	66	1021	17 2	1038	1001	11 59	37		
17	15.3	13 30	20.6	7.9	21 37	12.7		524	21 51	567	507	13 59	60	1023	17 35	1033	1015	22 56	18		
18	15.6	12 43	21.7	9.1	21 36	12.6		519	20 59	567	488	14 25	79	1026	15 10	1047	1016	10 27	31		
19	15.5	13 41	22.1	7.5	20 39	14.6		520	20 50	557	475	12 24	82	1023	17 57	1035	1013	12 0	22		
20	16.6	13 30	23.0	12.7	22 32	10.3		514	6 20	544	475	12 53	69	1024	17 24	1039	1013	10 32	26		
21	16.4	12 30	21.0	14.3	23 59	6.7		523	23 45	551	493	13 6	58	1022	16 40	1029	1016	12 10	13		
22*	16.1	14 20	19.2	14.0	0 4	5.2		525	0 1	543	509	10 59	34	1019	16 57	1025	1014	11 50	11		
23*	15.9	13 37	18.4	13.3	8 54	5.1		529	6 34	538	513	10 55	25	1018	17 7	1024	1012	11 24	12		
24*	16.7	13 6	20.6	14.0	9 4	6.6		532	19 42	543	515	11 46	28	1016	16 15	1022	1006	10 50	16		
25*	16.3	12 56	20.2	13.4	8 49	6.8		531	21 46	542	516	11 14	26	1015	16 40	1020	1005	11 19	15		
26	16.8	12 58	21.5	12.0	9 3	9.5		530	15 57	549	513	19 30	36	1018	20 10	1034	1009	10 2	25		
27	16.0	13 30	19.8	13.0	2 22	6.8		529	21 37	541	508	10 23	33	1017	0 6	1023	1011	10 40	12		
28	16.6	13 21	20.8	10.8	24 0	10.0		536	23 40	620	518	10 59	102	1014	23 40	1037	1004	23 58	33		
29**	16.6	4 23	44.7	4.2	0 16	40.5		495	0 2	600	444	8 32	156	1012	11 50	1057	950	5 57	107		
30	(14.9)	—	—	—	—	—		501	—	—	—	—	—	1029	—	—	—	—	—		
Mean	16.2	—	22.8	9.6	—	13.2		517	—	551	488	—	62.8	1022	—	1036	1008	—	28.1		
Mean*	16.3	—	19.7	13.5	—	6.2		527	—	540	511	—	29.4	1019	—	1025	1011	—	13.6		
Mean**	16.5	—	29.8	4.5	—	25.3		508	—	564	458	—	106.6	1023	—	1054	996	—	58.2		
<b>DEC.</b>	11°+	h m	11°+	11°+	h m		18000γ+	h m	18000γ+	18000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ			
1	15.3	15 3	20.2	10.6	19 56	9.6		507	20 11	538	479	11 36	59	1030	16 8	1042	1021	11 58	21		
2	15.7	13 49	19.4	9.7	23 19	9.7		519	5 44	534	501	22 2	33	1030	22 20	1043	1013	11 30	30		
3	15.5	15 20	20.7	10.9	24 0	9.8		515	24 0	538	(500)	12 0	38	1033	21 10	1040	1027	23 57	13		
4**	16.1	13 0	22.9	10.8	0 1	12.1		526	4 47	563	501	13 35	62	1024	18 26	1035	1012	11 0	23		
5	15.8	13 44	20.0	11.1	22 48	8.9		521	19 59	549	500	11 59	49	1026	22 14	1034	1018	2 4	16		
6	15.8	14 15	20.2	11.0	23 42	9.2		519	23 12	540	500	12 39	40	1025	19 40	1036	1018	11 50	18		
7	16.0	20 0	20.5	11.4	20 32	9.1		519	19 58	539	495	20 6	44	1022	19 57	1038	1010	12 43	28		
8	15.9	13 27	19.4	11.3	20 20	8.1		522	20 30	542	509	11 34	33	1020	20 29	1026	1014	11 58	12		
9*	15.7	13 56	20.0	12.9	9 30	7.1		525	22 50	539	507	11 17	32	1018	16 15	1023	1011	12 0	12		
10*	15.6	13 28	19.8	12.7	8 49	7.1		530	18 17	534	521	15 24	13	1015	0 5	1019	1007	11 30	12		
11	15.3	12 30	19.2	12.3	8 50	6.9		528	5 11	539	503	10 40	36	1016	16 34	1023	1012	11 20	11		
12**	16.6	13 44	21.3	12.9	22 50	8.4		534	14 0	556	517	22 26	39	1016	22 20	1029	1009	10 58	20		
13**	15.6	19 23	18.5	8.4	22 17	10.1		536	22 43	559	515	19 40	44	1017	22 40	1030	1008	10 5	22		
14	15.2	13 46	20.0	12.1	5 30	7.9		532	5 23	553	507	14 30	46	1020	15 40	1031	1011	11 28	20		
15	15.1	13 31	18.6	12.7	9 22	5.9		532	22 19	540	512	12 44	28	1021	15 40	1027	1017	23 58	10		
16	15.3	13 25	18.8	10.4	21 10	8.4		536	17 59	544	526	11 18	18	1018	17 1	1027	1012	12 24	15		
17	15.4	12 58	19.3	12.9	23 59	6.4		535	15 47	546	522	10 58	24	1019	18 50	1025	1010	10 31	15		
18	15.1	13 3	19.1	11.0	0 30	8.1		532	0 10	554	509	13 25	45	1021	17 10	1031	1011	11 34	20		
19*	15.4	12 30	18.9	12.8	9 2	6.1		534	22 21	542	515	10 30	27	1019	19 18	1025	1014	11 33	11		
20	15.5	14 1	21.0	9.7	23 19	11.3		529	7 6	551	505	12 8	46	1020	21 0	1028	1014	10 27	14		
21	15.6	13 11	20.4	8.1	22 40	12.3		529	22 58	548	508	12 53	40	1021	15 24	1032	1013	12 50	19		
22*	15.1	14 24	17.9	12.3	23 56	5.6		533	17 32	548	514	13 0	34	1022	15 51	1026	1017	9 55	9		
23	15.2	14 58	18.9	12.2	23 40	6.7		527	5 46	546	(509)	11 50	37	1023	15 54	1030	1018	10 8	12		
24*	15.0	13 54	18.1	12.5	1 30	5.6		528	23 15	541	516	13 59	25	1022	0 13	1029	1012	10 26	17		
25	15.3	15 17	18.5	11.2	8.59	7.3		533	18 26	544	520	9 59	24	1020	0 10	1022	1014	13 12	8		
26	15.3	13 40	18.2	12.5	8 40	5.7		538	19 41	548	525	13 58	23	1017	16 22	1024	1009	9 59	15		
27**	14.9	13 22	20.7	2.2	21 10	18.5		526	3 32	568	472	20 0	96	1022	20 41	1045	1005	9 28	40		
28**	14.8	5 53	26.3	3.5	0 13	22.8		489	2 4	538	438	16 0	100	1034	15 3	1086	983	5 37	103		
29	14.4	12 58	19.0	10.7	20 53	8.3		500	23 9	516											

TABLE V.—MEAN DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS—DECLINATION, INCLINATION AND HORIZONTAL INTENSITY.

“All” Days.

DECLINATION WEST.

Table with 24 columns (Universal Time 0-23) and rows for Month and Season (1936), Year, Winter, Equinox, Summer. Values range from -2.23 to +1.60.

INCLINATION.

Table with 24 columns (Universal Time 0-23) and rows for Month and Season (1936), Year, Winter, Equinox, Summer. Values range from -0.82 to +1.53.

HORIZONTAL INTENSITY.

Table with 24 columns (Universal Time 0-23) and rows for Month and Season (1936), Year, Winter, Equinox, Summer. Values range from -29.4 to +11.8.

TABLE V.—continued.—MEAN DIURNAL INEQUALITIES OF GEOGRAPHICAL COMPONENTS OF MAGNETIC INTENSITY.

"All" Days.

NORTH COMPONENT.

Month and Season, 1936.	Universal Time. Hour commencing—																							
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+3.6	+3.6	+2.8	+2.2	+5.6	+8.4	+7.1	+5.3	+2.3	-2.2	-7.0	-10.0	-9.7	-7.1	-6.5	-5.9	-2.8	-1.8	+1.2	+1.0	-0.2	+3.1	+3.4	+4.1
Feb.	+5.2	+7.5	+5.3	+5.9	+5.3	+5.4	+5.5	+6.0	+4.6	+2.3	-2.9	-8.4	-8.3	-7.0	-6.5	-8.2	-10.8	-6.4	-2.0	-1.1	-1.2	+3.6	+2.5	+3.4
Mar.	+8.5	+7.0	+7.2	+7.7	+6.9	+7.4	+7.5	+8.4	+4.3	-3.3	-11.8	-20.0	-22.3	-18.9	-14.4	-10.5	-5.9	-0.7	+4.7	+7.4	+7.6	+8.3	+7.7	+8.6
Apr.	+11.7	+9.4	+9.2	+8.6	+8.2	+7.6	+8.3	+4.3	-3.6	-14.0	-23.9	-31.4	-32.0	-25.7	-16.4	-9.8	+2.4	+9.0	+12.3	+13.7	+14.1	+12.8	+12.1	+13.1
May	+11.3	+9.4	+8.9	+8.0	+7.8	+6.0	+1.7	-6.4	-15.5	-21.4	-26.6	-27.5	-27.4	-24.3	-14.9	-4.6	+5.1	+15.8	+21.8	+21.4	+16.3	+13.4	+11.7	+11.2
June	+10.6	+11.2	+10.8	+9.3	+8.6	+7.9	+2.0	-6.8	-15.3	-26.1	-32.0	-32.8	-30.9	-27.2	-17.2	-5.5	+7.0	+17.5	+23.1	+23.8	+21.1	+15.9	+13.6	+12.4
July	+10.7	+7.5	+10.3	+9.6	+9.9	+8.7	+4.1	-4.5	-14.5	-25.3	-30.9	-29.1	-26.2	-20.9	-12.0	-1.5	+5.8	+14.1	+17.9	+18.8	+13.8	+12.9	+9.9	+10.3
Aug.	+9.3	+8.3	+7.4	+7.4	+9.1	+8.3	+3.5	-3.3	-11.7	-18.5	-24.5	-25.9	-23.0	-18.5	-10.5	-5.8	+2.9	+11.5	+14.6	+15.5	+13.2	+12.1	+9.4	+9.1
Sept.	+13.5	+13.1	+13.2	+12.6	+13.1	+12.0	+8.9	+3.1	-6.8	-19.7	-29.0	-31.6	-27.7	-20.1	-15.1	-8.2	-2.5	+2.8	+7.1	+10.8	+11.9	+13.0	+14.1	+13.4
Oct.	+10.6	+12.0	+13.0	+14.2	+13.3	+13.6	+13.0	+8.3	-2.1	-14.3	-23.3	-29.5	-27.4	-20.8	-14.9	-9.4	-3.5	+0.3	+2.9	+5.4	+7.8	+9.3	+11.3	+9.9
Nov.	+8.5	+5.2	+4.2	+6.0	+7.4	+11.1	+10.7	+8.2	+2.3	-6.6	-14.2	-20.1	-21.0	-18.6	-14.1	-9.2	-4.6	+2.1	+4.4	+4.1	+7.7	+10.8	+10.6	+8.9
Dec.	+4.3	+3.5	+2.9	+4.1	+5.8	+7.6	+8.0	+6.9	+4.5	-1.4	-8.4	-12.7	-13.2	-11.0	-8.4	-5.3	-4.4	-0.0	+2.5	+1.5	+2.4	+2.8	+4.0	+5.4
Year	+9.0	+8.1	+7.9	+8.0	+8.4	+8.7	+6.7	+2.5	-4.3	-12.5	-19.5	-23.3	-22.4	-18.3	-12.6	-7.0	-0.9	+5.4	+9.2	+10.2	+9.5	+9.8	+9.2	+9.2
Winter	+5.4	+5.0	+3.8	+4.6	+6.0	+8.1	+7.8	+6.6	+3.4	-2.0	-8.1	-12.8	-13.1	-10.9	-8.9	-7.2	-5.7	-1.5	+1.5	+1.4	+2.2	+5.1	+5.1	+5.5
Equinox	+11.1	+10.4	+10.7	+10.8	+10.4	+10.2	+9.4	+6.0	-2.1	-12.8	-22.0	-28.1	-27.4	-21.4	-15.2	-9.5	-2.4	+2.9	+6.8	+9.3	+10.4	+10.9	+11.3	+11.3
Summer	+10.5	+9.1	+9.4	+8.6	+8.9	+7.7	+2.8	-5.3	-14.3	-22.8	-28.5	-28.8	-26.9	-22.7	-13.7	-4.4	+5.2	+14.7	+19.4	+19.9	+16.1	+13.6	+11.2	+10.8

WEST COMPONENT.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-11.5	-9.2	-7.4	-5.6	-4.3	-3.9	-2.1	-2.7	-2.4	+0.4	+4.8	+9.6	+13.1	+16.8	+14.3	+10.6	+9.1	+6.2	+1.1	-0.1	-7.7	-9.0	-9.8	-10.4
Feb.	-11.3	-8.0	-10.9	-10.0	-8.3	-6.2	-4.7	-3.1	-2.1	+0.4	+3.8	+11.4	+19.4	+22.7	+19.5	+14.9	+7.0	+5.9	+3.5	-0.6	-6.4	-12.5	-12.1	-12.4
Mar.	-9.8	-11.5	-9.1	-9.5	-9.4	-8.7	-7.7	-13.0	-19.7	-19.8	-8.4	+10.4	+25.4	+32.7	+31.8	+23.9	+13.3	+7.8	+3.6	-0.8	-1.7	-5.2	-7.7	-7.2
Apr.	-5.8	-9.3	-11.0	-10.3	-9.8	-10.6	-14.6	-24.7	-27.8	-21.2	-7.5	+11.9	+30.6	+39.1	+36.9	+27.9	+20.9	+8.7	+2.7	-1.9	-5.1	-8.8	-4.8	-5.2
May	-2.0	-4.6	-5.3	-8.8	-13.0	-19.4	-28.1	-34.5	-33.5	-21.4	-3.4	+16.8	+31.6	+36.1	+31.8	+24.0	+17.2	+10.8	+4.5	+1.2	+0.5	+1.5	+0.1	-1.5
June	-3.9	-5.5	-6.3	-8.2	-14.3	-20.6	-27.4	-31.7	-30.9	-23.7	-10.0	+6.9	+21.8	+30.1	+32.4	+27.2	+22.1	+15.9	+11.7	+7.0	+4.2	+4.2	+1.8	-2.6
July	-3.3	-4.6	-4.2	-7.8	-12.7	-19.8	-26.9	-32.4	-32.5	-25.0	-11.2	+6.6	+23.5	+31.2	+34.1	+28.8	+21.0	+15.7	+9.2	+5.6	+3.4	+1.9	-0.0	-0.5
Aug.	-3.4	-5.0	-7.0	-9.4	-12.8	-19.0	-24.6	-27.6	-26.3	-19.1	-5.5	+11.3	+26.4	+31.8	+29.6	+21.6	+14.8	+9.8	+6.4	+5.3	+1.7	+1.5	+0.1	-0.6
Sept.	-3.6	-5.4	-6.3	-8.0	-9.3	-10.8	-16.3	-23.9	-28.8	-22.7	-6.3	+14.0	+27.9	+34.5	+29.5	+18.8	+10.2	+4.9	+4.0	+2.4	+1.7	+0.7	-2.8	-3.3
Oct.	-6.9	-6.7	-5.6	-5.7	-2.5	-2.2	-5.3	-14.2	-22.3	-19.4	-3.7	+13.4	+22.5	+26.7	+23.7	+14.5	+9.9	+7.7	+4.7	-1.2	-3.5	-6.6	-8.2	-9.3
Nov.	-7.9	-8.4	-4.5	-3.4	-1.2	-1.5	-2.9	-6.4	-11.1	-12.1	-3.3	+8.6	+13.2	+19.0	+17.8	+16.4	+10.5	+6.4	+4.8	+1.2	-4.2	-10.3	-10.9	-9.9
Dec.	-6.5	-4.5	-3.5	-1.1	+0.4	+0.3	-1.7	-4.1	-8.1	-10.0	-5.0	+3.8	+10.9	+14.7	+13.3	+11.9	+6.9	+5.1	+3.9	+1.1	-4.4	-7.6	-8.3	-7.7
Year	-6.3	-6.9	-6.8	-7.3	-8.1	-10.2	-13.5	-18.2	-20.5	-16.2	-4.6	+10.4	+22.2	+28.0	+26.2	+20.0	+13.6	+8.7	+5.0	+1.6	-1.8	-4.2	-5.2	-5.9
Winter	-9.3	-7.5	-6.6	-5.0	-3.4	-2.8	-2.9	-4.1	-5.9	-5.5	+0.1	+8.4	+14.2	+18.3	+16.2	+13.5	+8.4	+5.9	+3.3	+0.4	-5.7	-9.9	-10.3	-10.1
Equinox	-6.5	-8.2	-8.0	-8.4	-7.8	-8.1	-11.0	-19.0	-24.7	-20.8	-6.5	+12.4	+26.6	+33.3	+30.5	+21.3	+13.6	+7.3	+3.8	-0.4	-2.2	-5.0	-5.9	-6.3
Summer	-3.2	-4.9	-5.7	-8.6	-13.2	-19.7	-26.8	-31.6	-30.8	-22.3	-7.5	+10.4	+25.8	+32.3	+32.0	+25.4	+18.8	+13.1	+8.0	+4.8	+2.5	+2.3	+0.5	-1.3

VERTICAL COMPONENT.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	0.0	-1.2	-2.0	-2.3	-3.0	-2.5	-3.4	-3.3	-3.6	-4.6	-3.8	-4.2	-4.3	-1.7	+1.7	+2.3	+3.7	+4.0	+5.4	+5.4	+5.7	+5.0	+3.2	+1.3
Feb.	+1.5	-1.4	-2.3	-2.1	-2.3	-1.6	-2.9	-3.6	-4.0	-6.1	-9.2	-10.7	-9.7	-6.0	-1.0	+4.1	+7.7	+9.4	+9.5	+7.8	+8.3	+6.1	+4.5	+2.8
Mar.	+0.7	-0.3	-1.4	-1.6	-1.1	-0.1	-0.3	+1.2	+0.8	-4.3	-11.4	-16.6	-15.3	-9.4	-3.0	+3.5	+8.6	+9.8	+10.3	+9.4	+7.7	+5.9	+4.6	+3.3
Apr.	-4.1	-3.7	-2.2	-1.8	-1.4	-0.1	+1.7	+2.5	-1.2	-8.4	-16.1	-21.1	-19.7	-12.1	-1.9	+4.7	+12.1	+18.3	+18.9	+15.8	+11.6	+6.8	+3.5	-0.8
May	+1.0	-0.9	-0.8	-0.2	+2.6	+3.6	+3.2	+1.3	-4.3	-11.7	-19.4	-23.1	-20.8	-11.7	-2.0	+5.7	+11.0	+15.0	+15.8	+13.6	+9.9	+6.1	+3.9	+2.3
June	+0.5	-0.3	-1.0	-1.5	-0.6	+0.4	+0.4	-0.4	-4.6	-10.5	-15.7	-19.5	-17.0	-9.8	-2.0	+4.5	+10.1	+13.3	+14.3	+13.4	+11.1	+7.4	+4.8	+2.0
July	-1.8	-3.6	-3.6	-3.2	+0.3	+0.6	+1.3	+0.1	-2.5	-7.5	-14.0	-18.9	-15.4	-9.9	-0.7	+8.0	+12.3	+15.8	+15.7	+12.3	+7.6	+3.8	+1.3	-0.3
Aug.	+2.2	+1.3	+0.9	+1.6	+3.5	+3.9	+4.4	+3.0	-1.6	-8.1	-14.2	-18.6	-17.4	-11.5	-3.6	+2.8	+6.7	+9.0	+8.3	+8.1	+6.7	+5.0	+3.9	+3.0
Sept.	+2.5	+1.9	+1.3	+1.1	+1.7	+1.5	+3.4	+4.5	+1.9	-4.2	-11.8	-15.6	-14.7	-10.5	-4.1	+2.5	+5.5	+6.3	+5.7	+5.6	+5.4	+4.3	+3.0	+2.4
Oct.	-0.6	-2.1	-3.9	-4.4	-4.5	-3.2	-1.1	+1.6	-0.0	-5.0	-9.9	-10.9	-7.8	-4.2	+0.8	+6.6	+9.0	+8.6	+8.9	+8.0	+6.7	+4.9	+2.7	+0.7
Nov.	-1.7	-3.7	-4.4	-4.9	-4.5	-3.6	-3.5	-1.9	-1.0	-3.4	-6.0	-6.1	-4.0	-0.0	+3.5	+5.9	+7.2	+7.8	+7.0	+6.6	+5.6	+3.8	+2.0	+0.4
Dec.	-0.7	-2.4	-3.1	-3.3	-3.5	-2.8	-2.8	-2.0	-1.8	-3.7	-5.3	-5.2	-4.2	+0.1	+2.3	+4.2	+5.6	+5.1	+4.9	+4.5	+4.6	+3.9	+3.1	+1.3
Year	-0.0	-1.4	-1.9	-1.9	-1.1	-0.3	+0.0	+0.3	-1.8	-6.5	-11.4	-14.0	-12.5	-7.2	-0.8	+4.6	+8.3	+10.2	+10.4	+9.2	+7.6	+5.3	+3.4	+1.5
Winter	-0.2	-2.2	-3.0	-3.2	-3.3	-2.6	-3.2	-2.7	-2.6	-4.5	-6.1	-6.6	-5.6	-1.9	+1.6	+4.1	+6.1	+6.6	+6.7	+6.1	+6.1	+4.7	+3.2	+1.5
Equinox	-0.4	-1.1	-1.6	-1.7	-1.3	-0.5	+0.9	+2.5	+0.4	-5.5	-12.3	-16.1	-14.4	-9.1	-2.1	+4.3	+8.8	+10.8	+11.0	+9.7	+7.9	+5.5	+3.5	+1.4
Summer	+0.5	-0.9	-1.1	-0.8	+1.5	+2.1	+2.3	+1.0	-3.3	-9.5	-15.8	-19.5	-17.7	-10.7	-2.1	+5.3	+10.0	+13.3	+13.5	+11.9	+8.8	+5.6	+3.5	+1.8

TABLE VI.—MEAN DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS—DECLINATION, INCLINATION AND HORIZONTAL INTENSITY.

International Quiet Days.

DECLINATION WEST.

Month and Season, 1936.	Universal Time.												Hour commencing—											
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
Jan.	-1.14	-0.84	-0.64	-0.54	-0.58	-0.66	-0.68	-1.04	-0.84	-0.90	+0.22	+1.24	+2.10	<b>2.68</b>	+2.10	+1.62	+1.16	+0.70	+0.36	-0.08	-0.70	-0.68	-0.92	<b>-1.32</b>
Feb.	<b>-1.40</b>	-0.62	-0.78	-0.06	-1.20	-1.12	-0.94	-1.08	-0.98	-0.78	0.00	+1.26	+2.08	<b>2.52</b>	+2.08	+1.52	+1.28	+0.96	+0.40	+0.10	-0.38	-0.70	-0.82	-1.06
Mar.	-0.91	-0.89	-0.97	-1.17	-1.17	-1.43	-1.33	-1.73	-3.13	<b>-3.61</b>	-1.83	+1.17	+3.57	<b>4.33</b>	+4.07	+2.99	+1.43	+0.93	+0.45	+0.11	+0.03	-0.23	-0.37	-0.41
Apr.	-0.38	-0.56	-0.64	-0.56	-0.94	-1.74	-3.18	-5.20	<b>-5.96</b>	-4.66	-1.80	+2.34	+5.86	<b>7.14</b>	+6.20	+4.16	+1.94	+0.20	-0.72	-0.54	-0.40	-0.26	-0.16	-0.04
May	-0.63	-0.97	-0.87	-1.29	-2.25	-3.95	-5.39	<b>-6.71</b>	-6.33	-3.25	+0.73	+4.75	<b>7.55</b>	+7.35	+5.49	+3.57	+1.81	+0.49	+0.09	+0.01	+0.07	-0.01	-0.01	-0.29
June	+0.22	-0.32	-0.78	-1.50	-2.48	-3.04	-5.40	-6.16	<b>-6.18</b>	-4.52	-1.72	+1.52	+4.30	<b>5.86</b>	+5.84	+4.82	+3.38	+1.98	+1.24	+0.76	+0.78	+1.02	+0.80	+0.46
July	-0.08	-0.10	-0.48	-1.10	-2.38	-3.88	-4.82	<b>-5.36</b>	-5.36	-3.94	-1.52	+1.90	+4.96	<b>6.20</b>	+6.02	+4.54	+2.74	+1.18	+0.48	+0.48	+0.02	+0.04	+0.32	+0.34
Aug.	-0.30	-0.48	-0.98	-1.20	-2.04	-3.50	-4.86	<b>-5.80</b>	-5.50	-4.10	-1.68	+1.66	+4.86	<b>5.96</b>	+5.52	+4.20	+2.72	+1.62	+0.90	+0.86	+0.86	+0.70	+0.38	+0.04
Sept.	-1.28	-1.24	-1.44	-1.80	-2.36	-2.76	-3.90	-5.06	<b>-5.14</b>	-3.36	+0.08	+3.66	+5.92	<b>6.16</b>	+4.80	+2.78	+1.20	+0.30	+0.20	-0.16	-0.30	-0.48	-0.46	
Oct.	-0.92	-0.72	-0.78	-0.88	-1.00	-1.46	-2.06	-3.26	<b>-4.40</b>	-3.98	-0.88	+2.22	+4.18	<b>5.18</b>	+4.38	+2.70	+1.54	+0.92	+0.66	+0.20	-0.10	-0.26	-0.56	-0.70
Nov.	-0.74	-0.70	-0.68	-0.58	-0.64	-0.88	-1.18	-1.42	<b>-2.02</b>	-1.78	+0.06	+1.90	+2.76	+2.68	+2.28	+1.84	+1.16	+0.58	-0.08	-0.32	-0.50	-0.80	-0.72	-0.74
Dec.	-0.92	-0.96	-0.90	-0.70	-0.44	-0.54	-0.86	-1.14	-1.60	<b>-1.78</b>	-0.58	+1.12	+2.46	<b>2.98</b>	+2.50	+1.82	+1.06	+0.48	+0.08	+0.04	-0.24	-0.58	-0.72	-0.90
Year	-0.71	-0.70	-0.83	-0.95	-1.46	-2.13	-2.88	-3.66	<b>-3.95</b>	-3.06	-0.74	+2.06	+4.22	<b>4.92</b>	+4.27	+3.05	+1.79	+0.86	+0.34	+0.12	-0.08	-0.17	-0.27	-0.42
Winter	-1.05	-0.78	-0.75	-0.47	-0.72	-0.80	-0.92	-1.17	<b>-1.36</b>	-1.31	-0.08	+1.38	+2.35	<b>2.72</b>	+2.24	+1.70	+1.17	+0.68	+0.19	-0.07	-0.46	-0.69	-0.80	-1.01
Equinox	-0.87	-0.85	-0.96	-1.10	-1.37	-1.85	-2.62	-3.81	<b>-4.66</b>	-3.90	-1.11	+2.35	+4.88	<b>5.70</b>	+4.86	+3.16	+1.53	+0.58	+0.15	-0.10	-0.16	-0.26	-0.39	-0.40
Summer	-0.20	-0.47	-0.78	-1.27	-2.29	-3.74	-5.12	<b>-6.01</b>	-5.84	-3.96	-1.05	+2.46	+5.42	<b>6.34</b>	+5.72	+4.28	+2.66	+1.32	+0.68	+0.53	+0.43	+0.44	+0.37	+0.14

INCLINATION.

Jan.	-0.01	-0.03	-0.04	-0.10	-0.21	-0.25	-0.26	-0.20	-0.03	+0.33	+0.53	<b>+0.71</b>	+0.40	+0.15	+0.20	+0.13	+0.18	+0.04	-0.17	-0.19	-0.36	<b>-0.40</b>	-0.28	-0.13
Feb.	+0.16	+0.09	+0.09	-0.07	-0.14	-0.20	-0.24	<b>-0.26</b>	-0.22	-0.07	+0.05	+0.08	-0.01	+0.09	0.00	+0.14	<b>+0.23</b>	+0.19	+0.02	+0.02	+0.02	-0.07	-0.02	-0.04
Mar.	-0.06	-0.02	-0.07	-0.10	-0.14	-0.20	-0.32	<b>-0.45</b>	-0.26	+0.04	+0.28	+0.40	<b>+0.57</b>	<b>+0.57</b>	+0.56	+0.56	+0.46	+0.14	-0.16	-0.27	-0.37	-0.37	-0.39	-0.42
Apr.	-0.25	-0.26	-0.17	-0.28	-0.42	-0.48	-0.59	-0.28	+0.24	+0.91	+1.32	<b>+1.37</b>	+1.03	+0.80	+0.62	+0.30	+0.03	-0.31	-0.49	-0.58	-0.60	-0.58	-0.61	<b>-0.66</b>
May	-0.39	-0.29	-0.24	-0.32	-0.35	-0.17	+0.31	+1.00	+1.39	<b>+1.61</b>	+1.32	+0.95	+0.58	+0.32	+0.07	-0.31	-0.42	-0.74	<b>-0.88</b>	-0.84	-0.77	-0.63	-0.59	-0.51
June	-0.49	-0.41	-0.21	-0.20	-0.28	-0.12	+0.19	+1.11	+1.07	<b>+1.48</b>	+1.47	+1.20	+0.87	+1.02	+0.53	-0.08	-0.42	-0.93	<b>-1.22</b>	-1.04	-0.83	-0.70	-0.63	-0.64
July	-0.28	-0.21	-0.27	-0.23	-0.19	-0.16	+0.21	+0.71	+1.26	<b>+1.49</b>	+1.48	+1.25	+0.87	+0.47	+0.15	-0.29	-0.55	-0.67	<b>-0.89</b>	-0.86	-0.87	-0.85	-0.71	-0.70
Aug.	-0.42	-0.41	-0.36	-0.25	-0.20	-0.08	+0.20	+0.75	+1.15	<b>+1.32</b>	+1.29	+1.01	+0.79	+0.55	+0.19	+0.09	-0.24	-0.67	-0.90	<b>-0.96</b>	-0.82	-0.85	-0.77	-0.65
Sept.	-0.40	-0.37	-0.36	-0.38	-0.35	-0.21	+0.04	+0.58	+1.20	<b>+1.74</b>	+1.68	+1.30	+0.76	+0.28	+0.02	-0.27	-0.32	-0.48	-0.68	-0.79	-0.80	-0.76	-0.78	<b>-0.84</b>
Oct.	-0.44	-0.37	-0.40	-0.45	-0.49	-0.52	-0.42	-0.05	+0.45	+1.06	+1.31	<b>+1.49</b>	+1.17	+0.68	+0.35	+0.26	+0.18	-0.20	-0.51	-0.65	-0.66	<b>-0.70</b>	-0.64	-0.63
Nov.	-0.27	-0.15	-0.12	-0.16	-0.27	-0.40	-0.40	-0.28	+0.10	+0.43	+0.68	<b>+0.83</b>	+0.78	+0.59	+0.49	+0.47	+0.24	-0.09	-0.32	-0.35	-0.38	<b>-0.45</b>	<b>-0.45</b>	-0.35
Dec.	-0.03	-0.13	-0.04	-0.05	-0.06	-0.32	-0.38	-0.25	-0.08	+0.28	+0.63	<b>+0.66</b>	+0.55	+0.44	+0.43	+0.17	+0.03	-0.16	-0.28	-0.24	-0.26	-0.25	-0.28	<b>-0.39</b>
Year	-0.24	-0.21	-0.18	-0.22	-0.26	-0.26	-0.14	+0.20	+0.52	+0.89	<b>+1.00</b>	+0.94	+0.70	+0.50	+0.30	+0.10	-0.05	-0.32	-0.54	<b>-0.56</b>	-0.56	-0.55	-0.51	-0.50
Winter	-0.04	-0.06	-0.03	-0.10	-0.17	-0.29	<b>-0.32</b>	-0.25	-0.06	+0.24	+0.47	<b>+0.57</b>	+0.43	+0.32	+0.28	+0.23	+0.17	-0.01	-0.16	-0.19	-0.25	-0.29	-0.26	-0.23
Equinox	-0.29	-0.26	-0.25	-0.30	-0.35	-0.35	-0.32	-0.05	+0.41	+0.94	<b>+1.15</b>	+1.14	+0.88	+0.58	+0.39	+0.21	+0.09	-0.21	-0.46	-0.57	-0.61	-0.60	-0.61	<b>-0.64</b>
Summer	-0.40	-0.33	-0.27	-0.25	-0.26	-0.13	+0.23	+0.89	+1.22	<b>+1.48</b>	+1.39	+1.10	+0.78	+0.59	+0.24	-0.15	-0.41	-0.75	<b>-0.97</b>	-0.93	-0.82	-0.76	-0.68	-0.63

HORIZONTAL INTENSITY.

Jan.	+0.3	+0.3	+0.3	+0.9	+2.5	+3.5	+3.5	+2.9	+0.1	-5.7	-8.1	<b>-11.3</b>	-7.5	-2.9	-2.3	-1.5	-1.9	+0.1	+3.7	+3.9	+6.3	+6.5	+4.7	+2.5
Feb.	-1.4	-0.6	-0.6	+2.0	+2.8	<b>+3.8</b>	+3.6	+3.8	+3.2	0.0	-3.2	<b>-4.6</b>	-3.8	-4.2	-1.0	-2.2	-3.2	-1.8	+1.2	+1.2	+1.4	+2.2	+1.2	+1.4
Mar.	+2.8	+2.0	+2.6	+2.6	+3.2	+4.2	+5.0	<b>+7.4</b>	+4.8	-1.6	-8.0	<b>-11.2</b>	-13.2	-11.4	-10.0	-8.2	-5.6	-1.2	+3.8	+5.2	+6.2	+6.4	+6.6	+7.0
Apr.	+6.0	+6.0	+4.8	+6.2	+7.8	+9.0	<b>+11.6</b>	+7.2	-1.8	-15.4	-25.4	<b>-29.6</b>	-24.6	-18.6	-12.2	-5.2	+1.0	+7.6	+10.4	+11.2	+11.2	+10.4	+10.8	+11.2
May	+7.9	+6.7	+6.1	+7.7	+9.1	+6.3	-1.3	-12.9	-22.1	-28.9	<b>-29.1</b>	-25.3	-18.1	-11.3	-3.5	+4.9	+8.9	+15.5	+17.3	+16.3	+13.9	+11.5	+10.5	+9.3
June	+9.0	+7.6	+4.8	+5.0	+7.0	+5.2	+0.4	-14.4	-15.8	-25.2	<b>-28.6</b>	-26.4	-22.8	-2.22	-11.8	0.0	+8.0	+17.2	+22.6	+19.6	+16.0	+12.8	+11.2	+11.2
July	+4.8	+3.8	+4.8	+4.6	+5.2	+4.8	-0.6	-8.4	-17.6	-23.4	<b>-28.0</b>	-26.6	-20.2	-12.0	-5.2	+4.8	+10.8	+14.0	+17.2	+15.8	+15.2	+13.2	+10.6	+10.8
Aug.	+7.6	+7.4	+7.0	+6.0	+6.2	+4.6	0.0	-8.8	-17.0	-22.8	<b>-25.8</b>	-24.2	-20.6	-14.0	-5.2	-0.6	+6.4	+13.4	+16.2	+16.6	+14.0	+13.8	+12.4	+10.6
Sept.	+8.2	+7.6	+7.6	+7.8	+7.6	+5.8	+2.4	-5.4	-16.0	-27.2	<b>-30.2</b>	-26.6	-17.8	-9.2	-2.8	+2.2	+5.2	+7.8	+10.8	+12.8	+13.0	+12.4	+12.6	+13.4
Oct.	+7.4	+6.2	+6.8	+7.4	+8.2	+8.4	+7.4	+3.0	-5.4	-16.6	-22.8	<b>-26.8</b>	-21.6	-13.4	-6.2	-3.2	-1.4	+4.2	+8.6	+10.4	+10.2	+10.8	+10.0	+9.6
Nov.	+3.8	+1.8	+1.0	+1.8	+3.4	+5.8	+5.8	+4.6	-0.6	-7.0	-12.0	<b>-14.8</b>	-12.8	-9.2	-6.8	-5.8	-2.0	+3.0	+6.0	+6.0	+6.4	+7.2	+7.0	+5.2
Dec.	+1.0	+1.6	-0.2	-0.2	+0.2	+4.6	+5.4	+3.8	+1.6	-5.0	-11.2	<b>-11.6</b>	-9.6	-7.2	-5.8	-2.0	+0.6	+3.6	+5.0	+4.4	+4.8	+4.4	+4.8	+5.6
Year	+4.8	+4.2	+3.8	+4.3	+5.3	+5.5	+3.6	-1.4	-7.2	-14.9	-19.4	<b>-19.9</b>	-16.1	-11.3	-6.1	-1.4	+2.2	+7.0	+10.2	+10.3	+9.9	+9.3	+8.5	+8.2
Winter	+0.9	+0.8	+0.1	+1.1	+2.2	+4.4	+4.6	+3.8	+1.1	-4.4	-8.6	<b>-10.6</b>	-8.4	-5.9	-4.0	-2.9	-1.6	+1.2	+4.0	+3.9	+4.7	+5.2	+4.4	+3.7
Equinox	+6.1	+5.5	+5.5	+6.0	+6.7	+6.9	+6.6	+3.1	-4.6	-15.2	-21.6	<b>-23.6</b>	-19.3	-13.2	-7.8	-3.6	-0.2	+4.6	+8.4	+9.9	+10.2	+10.0	+10.0	+10.3
Summer	+7.3	+6.4	+5.7	+5.8	+6.9	+5.2	-0.4	-11.1	-18.1	-25.1	<b>-27.9</b>	-25.6	-20.4	-14.9	-6.4	+2.3	+8.5	+15.0	+18.3	+17.1	+14.8	+12.8	+11.2	+10.5

TABLE VI.—continued.—MEAN DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC INTENSITY.

International Quiet Days.

NORTH COMPONENT.

Table with columns for Month and Season, 1936, and Universal Time (0-23). Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer, showing magnetic intensity variations.

WEST COMPONENT.

Table with columns for Month and Season, 1936, and Universal Time (0-23). Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer, showing magnetic intensity variations.

VERTICAL COMPONENT.

Table with columns for Month and Season, 1936, and Universal Time (0-23). Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer, showing magnetic intensity variations.



TABLE VII.—MEAN DIURNAL INEQUALITIES OF THE MAGNETIC ELEMENTS—DECLINATION, INCLINATION AND HORIZONTAL INTENSITY.

International Disturbed Days.

DECLINATION WEST.

Table with columns for Month and Season (1936), Universal Time (0-23), and Hour commencing. Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer.

INCLINATION.

Table with columns for Month and Season (1936) and Universal Time (0-23). Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer.

HORIZONTAL INTENSITY.

Table with columns for Month and Season (1936) and Universal Time (0-23). Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer.

TABLE VII.—*continued.*—MEAN DIURNAL INEQUALITIES OF GEOGRAPHICAL COMPONENTS OF MAGNETIC INTENSITY.

International Disturbed Days.

NORTH COMPONENT.

Month and Season, 1936.	Universal Time.											Hour commencing—												
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
Jan.	+7.2	+7.4	+5.1	+3.2	+10.6	<b>+15.7</b>	+13.0	+11.8	+9.2	+3.6	-3.9	-6.4	-11.2	-9.8	-12.7	<b>-13.0</b>	-5.9	-5.2	-7.9	-9.6	-10.3	+7.1	-2.6	+3.3
Feb.	+10.3	<b>+18.7</b>	+11.2	+15.2	+9.3	+9.0	+6.0	+5.6	+2.7	+4.5	+2.3	-13.6	-10.7	-9.2	-21.6	<b>-23.2</b>	-16.6	-12.5	+2.6	+2.4	-2.7	+8.1	+1.6	+0.1
Mar.	<b>+20.3</b>	+12.4	+14.4	+13.8	+11.9	+10.2	+4.1	+7.2	-1.8	-12.9	-22.9	<b>-27.9</b>	-22.5	-23.6	-18.4	-12.3	-6.6	-6.0	+4.7	+12.5	+6.6	+10.8	+10.9	+14.5
Apr.	+15.2	+11.4	+21.3	+15.7	+11.6	+1.2	-4.9	-17.3	-25.3	-33.9	-35.1	-36.2	<b>-38.8</b>	-31.9	-16.1	-9.3	+8.5	+17.2	+24.2	<b>+28.0</b>	+24.6	+19.9	+25.2	+26.3
May	+18.7	+8.7	+10.3	+8.1	+8.5	+7.2	+0.5	-12.0	-19.9	-22.5	-30.8	-27.1	<b>-32.7</b>	-27.7	-21.3	-11.9	+7.7	+18.6	+28.3	<b>+35.5</b>	+23.3	+16.3	+8.6	+7.0
June	+22.8	+26.7	+26.7	+17.0	+5.7	+7.2	-8.2	-24.6	-33.0	<b>-46.5</b>	-46.1	-40.6	-28.0	-28.8	-23.6	-6.3	+6.1	+26.4	<b>+38.2</b>	+34.4	+29.6	+17.9	+15.1	+10.8
July	+19.6	+13.3	<b>+21.8</b>	+15.7	+15.3	+7.4	+8.9	+1.4	-9.0	-22.5	-26.8	-28.6	<b>-32.1</b>	-28.1	-6.3	-0.2	-5.7	+8.5	+15.3	+16.0	+6.1	+6.1	-0.9	+2.7
Aug.	+12.6	+9.0	+7.8	+8.3	+16.4	+11.5	+1.9	-5.1	-16.0	-22.0	-25.7	<b>-27.4</b>	-23.9	-21.8	-14.4	-8.9	+6.2	+20.7	+14.5	<b>+21.0</b>	+17.2	+9.8	+5.5	+4.9
Sept.	+22.7	+20.9	+17.8	+21.1	<b>+23.2</b>	+19.3	+12.3	+7.6	-0.8	-11.8	-28.1	-36.2	<b>-36.3</b>	-31.2	-30.3	-17.8	-9.7	-5.3	-0.5	+5.5	+8.3	+10.0	+17.7	+15.8
Oct.	+19.9	+23.5	+27.6	<b>+30.8</b>	+23.9	+21.2	+21.1	+15.1	+0.6	-17.7	-30.3	<b>-38.8</b>	-32.2	-30.0	-25.5	-18.2	-9.5	-10.4	-10.7	-2.6	+5.9	+7.8	+11.7	+13.5
Nov.	+24.8	+20.4	+14.4	+15.6	+18.0	<b>+25.4</b>	+13.5	+11.0	+5.1	-5.2	-14.2	-20.3	-25.1	<b>-27.3</b>	-24.3	-18.6	-13.6	-7.2	-6.8	-9.2	+1.7	+6.3	+8.1	+4.1
Dec.	+8.4	+9.3	+10.5	+11.7	<b>+15.0</b>	+10.7	+8.6	+7.7	+7.0	+4.3	-4.7	-11.9	<b>-14.3</b>	-11.0	-10.1	-7.5	-12.4	-6.2	-2.0	-5.8	-5.3	-2.8	-2.5	+0.7
Year	<b>+16.9</b>	+15.1	+15.7	+14.7	+14.1	+12.2	+6.4	+0.7	-6.8	-15.2	-22.2	<b>-26.3</b>	-25.7	-23.4	-18.7	-12.3	-4.3	+3.2	+8.3	+10.7	+8.8	+9.8	+8.2	+8.6
Winter	+12.7	+14.0	+10.3	+11.4	+13.2	<b>+15.2</b>	+10.3	+9.0	+6.0	+1.8	-5.1	-13.1	-15.3	-14.3	<b>-17.2</b>	-15.6	-12.1	-7.8	-3.5	-5.6	-4.2	+4.7	+1.2	+2.1
Equinox	+19.5	+17.1	+20.3	<b>+20.4</b>	+17.7	+13.0	+8.2	+3.2	-6.8	-19.1	-29.1	<b>-34.8</b>	-32.5	-29.2	-22.6	-14.4	-4.3	-1.1	+4.4	+10.9	+11.4	+12.1	+16.4	+17.5
Summer	+18.4	+14.4	+16.7	+12.3	+11.5	+8.3	+0.8	-10.1	-19.5	-28.4	<b>-32.4</b>	-30.9	-29.2	-26.6	-16.4	-6.8	+3.6	+18.6	+24.1	<b>+26.7</b>	+19.1	+12.5	+7.1	+6.4

WEST COMPONENT.

Jan.	-18.7	-18.8	-10.7	-7.3	-2.4	-7.6	-5.4	-0.3	-0.4	+1.9	+6.5	+16.0	+16.6	+25.4	+24.0	+16.3	+12.3	+8.9	+1.3	+6.4	-7.3	-20.6	-18.9	-17.6
Feb.	-14.2	-11.0	-19.2	-20.3	-14.2	-7.6	-4.8	+1.3	+5.3	+8.6	+10.1	+16.2	+27.8	<b>+35.6</b>	+29.4	+19.5	+9.8	+10.9	-0.0	-2.3	-10.6	<b>-30.4</b>	-23.5	-16.2
Mar.	-14.1	-19.5	-17.9	-19.2	-18.6	-12.7	-3.7	-10.0	-19.0	-14.6	-2.4	+19.3	+35.9	<b>+45.2</b>	+43.6	+34.1	+22.9	+13.0	+0.4	-7.7	-1.1	-10.5	-16.2	<b>-27.8</b>
Apr.	-12.9	-27.5	<b>-31.7</b>	-27.4	-17.6	-17.5	-18.7	-28.1	-22.9	-13.3	+3.6	+25.1	+44.8	<b>+54.1</b>	+49.3	+37.3	+33.8	+14.5	+5.8	-10.9	-4.1	-14.2	-6.0	-15.2
May	-4.2	-8.3	-6.9	-12.3	-16.0	-20.8	-28.1	<b>-36.9</b>	-31.2	-20.4	-1.6	+25.3	+38.0	<b>+44.5</b>	+41.8	+28.8	+21.9	+14.6	+5.6	-12.3	-5.5	-2.2	-4.8	-8.8
June	-11.3	-11.2	-7.4	-4.6	-12.7	-19.7	-17.3	<b>-29.0</b>	-23.8	-20.0	-4.8	+10.6	+28.6	<b>+33.4</b>	+31.3	+27.3	+22.8	+19.3	+14.6	+1.0	-6.6	-7.0	-3.5	-10.4
July	-14.3	-18.4	-14.9	-14.8	-16.0	-23.2	-27.7	<b>-38.7</b>	-34.0	-20.9	-8.6	+4.3	+25.2	<b>+36.7</b>	+55.8	+50.3	+40.0	+26.3	+13.3	+5.6	-1.0	-8.0	-9.4	-10.1
Aug.	-7.9	-15.0	-18.2	-14.0	-18.6	-26.4	-28.2	<b>-29.2</b>	-24.9	-15.2	+2.9	+20.2	+37.0	<b>+41.8</b>	+38.5	+29.8	+23.8	+18.5	+8.2	+4.3	-13.5	-5.9	-2.9	-4.1
Sept.	-9.5	-14.3	-11.4	-8.4	-9.8	-10.6	-17.5	-21.3	<b>-30.3</b>	-24.2	-6.5	+17.4	+32.9	<b>+47.1</b>	+38.8	+24.0	+16.6	+7.2	+2.3	-2.9	-3.8	-2.7	-9.5	-6.6
Oct.	<b>-19.5</b>	-19.3	-11.5	-11.0	+5.0	+7.4	+7.8	-1.9	-15.1	-10.1	+7.6	+21.3	+28.8	<b>+31.9</b>	+24.9	+17.0	+9.6	+1.1	-2.5	-8.5	-13.8	-13.3	-17.1	-19.4
Nov.	-11.5	-10.2	-7.5	-2.6	+10.8	+10.8	+6.7	-0.6	-2.8	-6.5	-2.7	+10.4	+18.9	<b>+27.7</b>	+25.0	+26.2	+16.5	+3.1	-2.7	-8.0	-21.3	<b>-32.1</b>	-22.9	-24.3
Dec.	-13.4	-7.7	-8.2	+1.7	+8.7	+11.9	+4.1	+2.5	-6.5	-10.2	-6.8	+2.3	+11.3	<b>+17.0</b>	+13.4	+12.7	+0.8	+3.3	+2.0	+1.5	-4.9	-14.4	<b>-14.9</b>	-10.3
Year	-12.6	-15.1	-13.8	-11.7	-8.5	-9.7	-11.1	-16.0	<b>-17.1</b>	-12.0	-0.2	+15.7	+28.8	<b>+36.7</b>	+34.7	+26.9	+19.2	+11.7	+4.0	-2.8	-7.8	-13.4	-12.5	-14.2
Winter	-14.5	-11.9	-11.4	-7.1	+0.7	+1.9	+0.2	+0.7	-1.1	-1.6	+1.8	+11.2	+18.7	<b>+26.4</b>	+23.0	+18.7	+9.9	+6.6	+0.2	-0.6	-11.0	<b>-24.4</b>	-20.1	-17.1
Equinox	-14.0	-20.2	-18.1	-16.5	-10.3	-8.4	-8.0	-15.3	<b>-21.8</b>	-15.6	+0.6	+20.8	+35.6	<b>+44.6</b>	+39.2	+28.1	+20.7	+9.0	+1.5	-7.5	-5.7	-10.2	-12.2	-17.3
Summer	-9.4	-13.2	-11.9	-11.4	-15.8	-22.5	-25.3	<b>-33.5</b>	-28.5	-19.1	-3.0	+15.1	+32.2	+39.1	<b>+41.9</b>	+34.1	+27.1	+19.7	+10.4	-0.4	-6.6	-5.8	-5.2	-8.4

VERTICAL COMPONENT.

Jan.	+2.2	-1.0	-2.0	-2.6	-6.4	-8.2	-9.0	-9.0	-8.8	<b>-9.4</b>	-8.4	-8.8	-9.2	-4.4	+2.2	+4.6	+7.4	+6.4	+9.8	+12.4	<b>+16.0</b>	+12.8	+9.0	+5.2
Feb.	+1.3	-4.7	-6.7	-6.7	-8.1	-7.7	-8.3	-8.5	-8.1	-9.7	-12.1	<b>-14.7</b>	-12.7	-8.1	-0.3	+11.5	+18.7	+19.5	<b>+19.9</b>	+11.3	+13.7	+7.9	+6.9	+5.7
Mar.	-2.7	-3.5	-7.7	-7.7	-9.7	-7.3	-6.9	-5.1	-3.9	-8.5	-12.7	<b>-18.3</b>	-15.3	-6.9	+2.9	+10.5	+18.7	<b>+21.3</b>	+21.1	+17.5	+13.5	+7.7	+3.3	-0.7
Apr.	<b>-26.9</b>	-21.9	-15.1	-17.7	-17.1	-10.9	-6.9	-3.3	-5.9	-10.1	-16.3	-18.3	-12.5	+1.3	+17.5	+22.9	+28.1	<b>+38.7</b>	+38.5	+31.3	+17.3	+8.5	-3.3	-18.5
May	+0.2	-4.0	-3.2	-2.8	+0.2	-0.4	-0.6	-4.2	-8.2	-14.8	-21.6	<b>-25.6</b>	-20.8	-6.2	+3.2	+13.0	+18.8	<b>+20.8</b>	+20.4	+17.8	+12.4	+5.0	+0.8	-1.4
June	-1.7	-0.5	-2.3	-9.9	-18.3	-17.1	-18.3	-17.7	-19.1	<b>-19.7</b>	-17.3	-17.5	-7.5	+3.9	+13.3	+19.9	+21.1	<b>+22.7</b>	+21.3	+20.1	+17.9	+12.3	+8.5	+6.1
July	-11.2	-14.8	-14.4	-10.8	-4.6	-4.2	-2.8	-5.2	-10.6	-14.4	-20.8	<b>-21.2</b>	-15.6	-6.2	+11.4	+26.4	+27.0	+31.8	<b>+32.6</b>	+24.2	+12.0	+6.2	-2.2	-7.8
Aug.	-1.4	-2.8	-2.8	-2.0	-1.8	-1.4	-1.0	-1.8	-5.2	-10.2	-14.6	<b>-17.4</b>	-16.4	-12.0	-3.0	+3.4	+8.8	+15.0	+15.6	<b>+16.4</b>	+13.0	+8.6	+6.8	+6.4
Sept.	-0.8	-3.2	-3.2	-3.8	-4.4	-5.4	-2.8	-0.4	-1.2	-6.8	-14.2	<b>-17.2</b>	-14.4	-8.0	-0.0	+10.2	+14.6	+14.4	+12.6	+10.8	+9.6	+6.8	+4.8	+1.8
Oct.	-8.8	-13.8	-19.6	-20.0	<b>-20.4</b>	-17.6	-12.8	-8.8	-9.6	-11.0	-11.8	-9.4	-4.6	+2.8	+9.4	+17.8	+23.6	+26.8	<b>+28.6</b>	+22.6	+17.4	+11.2	+5.0	-1.0
Nov.	-5.8	-10.8	-10.2	-10.6	-13.4	<b>-17.2</b>	-15.2	-11.6	-10.0	-11.0	-10.8	-8.0	-4.0	+3.2	+10.2	+14.4	+16.8	<b>+19.4</b>	+18.6	+17.8	+13.0	+10.8	+6.4	+4.4
Dec.	-2.8	-5.2	-8.6	-9.2	-11.4	<b>-13.2</b>	-11.2	-8.2	-7.0	-7.8	-7.4	-4.6	-2.2	+5.8	+9.2	+11.2	<b>+12.8</b>	+11.6	+9.4	+8.2	+9.2	+9.0	+8.2	+5.4
Year	-4.9	-7.2	-8.0	-8.7	-9.6	-9.2	-8.0	-7.0	-8.1	-11.1	-14.0	<b>-15.1</b>	-11.3	-2.9	+6.3	+13.8	+18.0	<b>+20.7</b>	<b>+20.7</b>	+17.5	+13.8	+8.9	+4.5	+0.5
Winter	-1.3	-5.4	-6.9	-7.3	-9.8	<b>-11.6</b>	-10.9	-9.4	-8.5	-9.5	-9.7	-9.0	-7.0	-0.9	+5.3	+10.4	+13.9	+14.2	<b>+14.4</b>	+12.4	+13.0	+10.1	+7.6	+5.2
Equinox	-9.8	-10.6	-11.4	-12.3	-12.9	-10.3	-7.4	-4.4	-5.2	-9.1	-13.8	<b>-15.8</b>	-11.7	-2.7	+7.5	+15.4	+21.3	<b>+25.3</b>	+25.2	+20.6	+14.5	+8.6	+2.5	-4.6
Summer	-3.5	-5.5	-5.7	-6.4	-6.1	-5.8	-5.7	-7.2	-10.8	-14.8	-18.6	<b>-20.4</b>	-15.1	-5.1	+6.2	+15.7	+18.9	<b>+22.6</b>	+22.5	+19.6	+13.8	+8.0	+3.5	+0.8



TABLE VIII.—HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC INTENSITY.

Values of  $a_n, b_n$ , in the Series  $\Sigma (a_n \cos nt + b_n \sin nt)$ ,  $t$  being reckoned in hours from  $O^h$  U.T. and converted into arc at the rate of  $15^\circ$  to each hour.

Table VIII: Harmonic components of the diurnal inequality of magnetic intensity. It is divided into three sections: 'ALL' DAYS, INTERNATIONAL QUIET DAYS, and INTERNATIONAL DISTURBED DAYS. Each section contains data for months and seasons (Jan to Dec, Year, W. Eq., S.) across four components: North, West, and Vertical. Each component has four sub-columns (a1, b1, a2, b2, a3, b3, a4, b4).

TABLE IX.—HARMONIC COMPONENTS OF THE DIURNAL INEQUALITY OF MAGNETIC INTENSITY.

Values of  $c_n, \alpha_n$ , in the series  $\Sigma (c_n \sin nT + \alpha_n)$ ,  $T$  being reckoned in hours from Midnight, Abinger Local Mean Time, and converted into arc at the rate of  $15^\circ$  to each hour. New phase-angles expressing the inequalities relative to apparent local time may be obtained from the tabulated angles by applying corrections  $\alpha, 2\alpha, 3\alpha, 4\alpha$ , respectively, where  $\alpha$  has the following values:—

Table IX: Phase-angle corrections for different months. It lists months (January to December) and seasons (Winter, Equinox, Summer) with their corresponding values for alpha.

Table IX: Harmonic components of the diurnal inequality of magnetic intensity. It is divided into three sections: 'ALL' DAYS, INTERNATIONAL QUIET DAYS, and INTERNATIONAL DISTURBED DAYS. Each section contains data for months and seasons (Jan to Dec, Year, W. Eq., S.) across four components: North, West, and Vertical. Each component has four sub-columns (c1, alpha1, c2, alpha2, c3, alpha3, c4, alpha4).

TABLE X.—RANGE OF MEAN DIURNAL INEQUALITIES for the MONTHS, YEAR and SEASONS of 1936.

Month and Season.	" All " Days.			Quiet Days.			Disturbed Days.			" All " Days.			Quiet Days.			Disturbed Days.		
	D.	I.	H.	D.	I.	H.	D.	I.	H.	N.	W.	V.	N.	W.	V.	N.	W.	V.
January	5.55	0.98	15.3	4.00	1.11	17.8	8.98	2.43	25.4	18.4	28.3	10.3	19.5	20.1	6.4	28.7	46.0	25.4
February	6.78	1.31	14.5	3.92	0.49	8.4	12.62	2.84	35.0	18.3	35.2	20.2	11.7	20.2	13.0	41.9	66.0	34.6
March	10.38	1.13	24.6	7.94	1.02	20.6	14.66	2.40	40.6	30.9	52.5	26.9	25.9	40.0	16.4	48.2	73.0	39.6
April	12.95	2.11	41.4	13.10	2.03	41.2	17.54	4.20	61.2	46.1	66.9	40.0	46.3	66.0	29.0	66.8	85.8	65.6
May	13.47	2.40	49.0	14.26	2.49	46.4	15.36	3.15	62.8	49.3	70.6	38.9	46.8	74.7	36.2	68.2	81.4	46.4
June	12.03	3.05	58.3	12.04	2.70	51.2	11.48	4.86	(89.8)	56.6	64.1	33.8	48.9	64.3	33.2	84.7	62.4	42.4
July	12.35	2.74	52.0	11.56	2.38	45.2	17.44	3.01	46.4	49.7	66.6	32.7	44.4	62.6	28.0	53.9	94.5	53.8
August	11.34	2.13	41.3	11.76	2.28	42.4	13.62	2.54	48.6	41.4	59.4	27.6	40.8	61.2	29.0	48.4	71.0	33.8
September	11.99	2.47	43.0	11.30	2.58	43.6	15.18	3.19	52.8	45.7	63.3	21.9	43.6	58.2	24.2	59.5	77.4	31.8
October	9.59	2.44	39.1	9.58	2.19	37.6	11.28	4.48	61.8	43.7	49.0	19.9	39.6	49.1	16.0	69.6	51.4	49.0
November	6.50	1.91	28.8	4.78	1.28	22.0	12.10	3.89	48.2	32.1	31.1	13.9	24.4	23.1	9.4	52.7	59.8	36.6
December	4.83	1.23	19.2	4.76	1.05	17.2	6.24	2.62	28.4	21.2	24.7	10.9	19.1	24.7	6.8	29.3	31.9	26.0
Year	9.81	2.00	35.5	9.08	1.80	32.8	13.04	3.30	50.1	37.8	51.0	24.8	34.2	47.0	20.6	54.3	66.7	40.4
Winter	5.92	1.36	19.5	4.37	0.98	16.4	9.99	2.95	34.3	22.5	29.8	13.8	18.7	22.0	8.9	38.2	50.9	30.7
Equinox	11.23	2.04	37.0	10.48	1.96	35.8	14.67	3.57	54.1	41.6	57.9	27.2	38.7	53.3	21.4	61.0	71.9	46.5
Summer	12.30	2.58	50.2	12.41	2.46	46.3	14.48	3.39	61.9	49.3	65.2	33.3	45.2	65.7	31.6	63.8	77.3	44.1

TABLE XI.—NON-CYCLIC CHANGE (24h—0h).

Month, 1936.	" All " Days.			Quiet Days.			Disturbed Days.		
	Declination West.	Horizontal Intensity.	Vertical Intensity.	Declination West.	Horizontal Intensity.	Vertical Intensity.	Declination West.	Horizontal Intensity.	Vertical Intensity.
January	-0.06	-0.1	-0.1	-0.18	+0.6	-0.6	-0.84	-3.2	+1.8
February	-0.04	+0.2	+0.1	+0.54	+3.8	-1.0	-0.24	-6.8	+2.6
March	+0.05	+0.6	-0.1	+0.48	+5.0	-2.6	-2.86	-4.8	-4.8
April	-0.08	+0.1	-0.1	+0.08	+6.2	-2.0	+0.56	+1.2	-1.8
May	+0.06	-0.3	+0.4	-0.16	+1.0	+0.7	+0.06	-9.4	-1.6
June	-0.07	+0.2	+0.0	-0.02	+1.4	-0.4	+1.04	-12.2	+7.8
July	-0.03	-0.1	+0.1	+0.18	+4.6	-2.0	+0.08	-12.8	+0.4
August	-0.01	-0.3	+0.0	+0.18	+2.2	-1.4	-0.16	-6.4	+6.0
September	-0.08	+0.1	-0.1	+0.56	+7.0	-2.6	+0.68	-8.2	+2.2
October	+0.02	-1.0	+0.7	+0.12	+1.2	-1.2	+1.08	-8.8	+6.0
November	-0.08	+0.2	-0.1	-0.16	+0.4	-1.0	-1.04	-23.0	+7.2
December	0.00	+0.4	+0.1	+0.38	+5.0	-2.8	+0.18	-10.0	+4.8
Year 1936	—	—	—	+0.17	+3.2	-1.4	-0.12	-8.7	+2.6

TABLE XII.—MEAN MONTHLY AND ANNUAL VALUES OF TERRESTRIAL MAGNETIC ELEMENTS at the ABINGER MAGNETIC STATION.

Month, 1936.	Declination (West).	Inclination.	Horizontal Intensity.	North Intensity.	West Intensity.	Vertical Intensity.	Total Intensity.
January .. ..	II 24.4	66 41.8	.18522	.18156	.03663	.43000	.46820
February .. ..	II 23.5	66 41.8	.18521	.18156	.03658	.42999	.46819
March .. ..	II 22.6	66 41.5	.18525	.18161	.03654	.42996	.46817
April .. ..	II 22.1	66 41.9	.18520	.18156	.03651	.42999	.46816
May .. ..	II 21.4	66 41.4	.18528	.18165	.03648	.42999	.46821
June .. ..	II 20.3	66 41.5	.18528	.18166	.03643	.43005	.46826
July .. ..	II 19.6	66 41.7	.18528	.18167	.03639	.43011	.46832
August .. ..	II 18.8	66 41.3	.18531	.18171	.03635	.43005	.46827
September .. ..	II 18.1	66 41.8	.18525	.18166	.03630	.43008	.46828
October .. ..	II 17.6	66 42.4	.18519	.18161	.03627	.43015	.46832
November .. ..	II 16.2	66 42.8	.18517	.18160	.03619	.43022	.46837
December .. ..	II 15.4	66 42.2	.18525	.18168	.03616	.43023	.46842
Year 1936 .. ..	II 20.0	66 41.8	.18524	.18163	.03640	.43007	.46826

TABLE XIII.—DAILY MEAN VALUE OF THE BASE-LINE OF THE DECLINATION MAGNETOGRAMS AT ABINGER MAGNETIC STATION.

1936 Day	January	February	March	April	May	June	July	August	September	October	November	December
1	II. 16.2	II. 16.4	II. 15.1	II. 17.7	II. 13.4	II. 13.1	II. 4.5	II 3.9	II. 4.7	II. 2.2	II. 1.7	IO. 58.5
2	16.3	16.6	15.0	$\frac{17.9}{18.7}$	13.4	13.3	4.3	4.0	4.7	2.7	1.3	58.6
3	16.3	16.5	15.2	18.6	13.2	13.5	4.3	4.2	4.7	2.3	1.5	58.6
4	16.1	15.9	15.1	17.8	13.1	13.4	4.2	3.8	4.8	2.0	1.5	58.7
5	16.1	15.5	15.5	17.1	13.4	13.5	4.1	3.7	4.6	2.0	1.5	58.1
6	16.0	15.7	15.5	16.9	13.9	13.4	4.3	4.1	4.2	1.3	1.6	57.6
7	16.3	15.3	15.4	16.5	13.9	14.1	4.4	4.2	4.1	1.2	1.6	57.0
8	16.1	15.2	15.7	16.6	14.2	14.3	4.9	4.2	3.6	1.3	1.6	56.7
9	16.5	15.1	15.7	16.5	14.0	14.3	4.2	4.2	3.9	1.1	1.4	56.5
10	16.6	14.7	16.1	16.5	14.3	14.6	4.2	4.4	3.8	1.1	1.4	56.5
11	16.6	14.6	16.1	16.5	14.3	14.8	4.1	4.4	4.1	0.9	1.0	56.0
12	16.7	14.5	16.3	16.1	14.4	14.8	3.6	4.4	4.2	1.1	1.4	55.9
13	16.3	14.6	15.8	16.1	14.4	15.0	4.0	4.2	4.6	1.4	1.4	56.0
14	15.9	14.1	15.5	15.9	14.1	14.9	4.0	4.3	4.3	1.4	1.2	56.3
15	15.1	14.1	15.5	15.9	14.3	14.7	3.9	3.9	4.1	2.2	0.8	56.7
16	15.5	14.3	15.4	16.0	14.5	14.5	3.9	4.3	3.7	2.7	1.4	56.7
17	15.4	14.8	15.5	12.2	14.6	14.6	4.0	4.6	3.7	2.7	1.5	56.9
18	15.1	15.0	15.5	11.9	15.1	14.9	4.0	4.7	3.7	2.9	1.4	57.4
19	15.1	15.5	15.4	12.2	15.7	15.4	4.2	4.5	3.2	2.4	1.4	57.6
20	15.4	15.5	15.8	12.0	15.3	15.6	3.9	4.7	3.3	2.0	1.4	57.5
21	15.7	15.6	16.0	12.0	14.3	16.1	3.9	4.7	3.4	1.9	0.9	57.5
22	15.4	15.3	16.2	12.1	13.7	16.1	3.7	4.5	3.7	2.2	0.8	57.5
23	15.4	15.7	16.3	12.0	13.8	16.2	3.7	4.3	3.6	2.1	0.5	58.1
24	15.3	15.2	16.5	12.2	13.6	16.3	4.1	4.2	3.8	2.1	0.2	57.9
25	15.5	15.4	17.2	12.6	13.9	16.2	3.9	4.7	4.8	2.3	IO. 59.8	58.1
26	15.6	15.3	17.2	13.3	14.2	16.4	3.8	5.0	4.9	1.8	59.7	57.9
27	15.8	15.3	17.0	13.3	14.5	16.3	3.6	4.6	3.8	1.9	59.9	57.9
28	16.0	15.2	17.0	13.1	14.2	16.1	3.5	4.7	2.9	1.1	II. 0.0	57.5
29	16.2	15.1	17.2	13.3	13.6	16.0	3.8	4.4	2.2	0.9	0.0	57.7
30	16.4		17.4	13.4	13.6	$\frac{16.1}{4.3}$	3.9	4.7	1.9	1.4	$\frac{II. 0.2}{IO. 58.5}$	58.5
31	16.6		17.7		13.4		3.7	4.8		1.8		58.2

TABLE XIV.—RESULTS of the DETERMINATIONS of the ABSOLUTE VALUE of HORIZONTAL INTENSITY from OBSERVATIONS made with the SCHUSTER-SMITH COIL MAGNETOMETER in the MAGNETIC PAVILION at ABINGER, with the DEDUCED VALUES of the BASE-LINE of the HORIZONTAL INTENSITY MAGNETOGRAMS.

U.T., 1936.				U.T., 1936.				U.T., 1936.																	
h	m	h	m	No. of Obs.	Observed Horizontal Intensity.	Deduced Value of Base Line.	h	m	h	m	No. of Obs.	Observed Horizontal Intensity.	Deduced Value of Base Line.	h	m	h	m	No. of Obs.	Observed Horizontal Intensity.	Deduced Value of Base Line.					
Jan.	1.	16	49-17	5	8	18526	18692	Mar.	6.	10	52-11	5	8	18521	18691	May	9.	10	31-10	44	8	18503	18697		
	2.	12	53-13	4	8	18522	18692		7.	10	50-11	2	8	18524	18693		11.	15	19-15	33	8	18522	18698		
	3.	16	58-17	4	4	18523	18693		9.	10	54-11	6	8	18520	18691		12.	11	57-12	9	8	18471	18698		
	4.	12	43-12	57	8	18524	18693		10.	10	27-10	40	8	18521	18691		13.	11	37-11	50	8	18493	18695		
	6.	16	34-16	47	8	18528	18692		11.	10	19-10	41	8	18522	18691		14.	11	50-12	3	8	18506	18697		
	7.	12	41-12	54	8	18528	18693		12.	11	5-11	21	10	18524	18692		15.	9	57-10	10	8	18510	18696		
	8.	12	47-13	0	8	18495	18693		13.	10	47-11	1	8	18523	18690		16.	9	43-9	56	8	18492	18695		
	9.	12	55-13	12	10	18521	18692		14.	11	10-11	24	8	18527	18692										
	10.	12	38-12	53	8	18515	18692		16.	10	18-10	34	8	18513	18691		18.	15	8-15	23	8	18524	18719		
	11.	12	29-12	44	8	18514	18691		17.	12	17-12	32	8	18515	18691		19.	8	55-9	6	8	18492	18720		
	13.	15	13-15	24	8	18490	18690		18.	12	53-13	6	8	18513	18691		20.	10	7-10	21	8	18506	18720		
	14.	10	41-10	52	8	18506	18690		19.	12	41-12	52	8	18504	18691		21.	11	17-11	30	8	18489	18718		
	15.	16	15-16	28	8	18524	18692		20.	15	51-16	5	8	18506	18691		22.	9	36-9	47	8	18482	18721		
	16.	13	4-13	20	10	18523	18692		21.	12	39-12	51	8	18501	18692		23.	9	10-9	21	8	18495	18723		
	17.	12	40-12	53	8	18520	18692		23.	16	20-16	34	8	18513	18690		25.	9	54-10	6	8	18513	18722		
	18.	12	42-12	55	8	18491	18692		24.	12	27-12	40	8	18502	18690		26.	10	10-10	23	8	18493	18723		
	20.	15	32-15	43	8	18521	18690		25.	14	41-14	56	8	18502	18689		27.	11	36-11	49	8	18506	18723		
	21.	10	41-10	52	8	18529	18690		26.	16	38-16	49	8	18518	18690		28.	11	41-11	53	8	18508	18729		
	22.	10	47-11	0	8	18519	18692		27.	12	36-12	48	8	18487	18691		29.	8	35-8	48	8	18516	18723		
	23.	9	41-9	53	8	18517	18692		28.	12	46-12	59	8	18487	18690										
	24.	10	23-10	37	8	18523	18692		30.	14	47-15	0	8	18517	18691		30.	15	13-15	28	8	18509	18725		
	25.	10	25-10	36	8	18499	18692		31.	11	50-12	1	8	18492	18690										
	27.	12	51-13	6	8	18523	18691																		
	28.	12	37-12	49	8	18513	18692																		
	29.	12	59-13	13	8	18523	18691																		
	30.	13	14-13	25	8	18510	18692																		
	31.	9	31-9	48	10	18507	18689																		
								April	1.	11	12-11	30	10	18513	18690		June	1.	11	6-11	12	4	18509	18727	
									2.	10	51-11	3	8	18499	18690			2.	14	1-14	15	8	18515	18725	
									2.	16	5-16	20	8	18519	18712			3.	9	46-9	58	8	18494	18724	
									3.	10	53-11	6	8	18505	18713			4.	13	40-13	53	8	18506	18726	
									4.	11	6-11	19	8	18491	18713			5.	10	15-10	27	8	18506	18725	
									4.	11	6-11	19	8	18491	18713			6.	10	49-10	59	8	18502	18725	
									6.	18	3-18	10	4	18541	18714			8.	11	35-11	49	8	18500	18724	
									7.	11	48-12	0	8	18490	18714			9.	10	22-10	37	8	18483	18725	
									8.	13	2-13	16	8	18497	18714			10.	9	55-10	9	8	18492	18725	
									9.	10	39-10	54	8	18500	18715			11.	11	24-11	39	8	18509	18725	
									14.	11	32-11	47	8	18502	18715			12.	10	28-10	43	8	18519	18724	
									15.	11	5-11	18	8	18489	18716			13.	11	3-11	19	8	18505	18726	
									16.	12	54-13	10	10	18493	18716			15.	19	44-20	10	8	18544	18725	
									17.	10	59-11	9	8	18481	18699			16.	15	36-15	57	8	18540	18724	
									18.	11	44-11	56	8	18482	18699			17.	10	14-10	25	8	18512	18724	
									18.	11	44-11	56	8	18482	18699			18.	11	37-11	51	8	18496	18724	
									20.	11	44-11	57	8	18478	18700			19.	14	6-14	21	8	18491	18723	
									20.	11	44-11	57	8	18478	18700			20.	11	36-11	54	8	18475	18723	
									21.	11	39-11	52	8	18478	18700			22.	17	1-17	14	8	18541	18721	
									22.	10	9-10	28	10	18458	18699			23.	11	24-11	37	8	18481	18721	
									23.	10	1-10	14	8	18											



TABLE XIV (A).—RESULTS of the DETERMINATIONS of the ABSOLUTE VALUE of HORIZONTAL INTENSITY from OBSERVATIONS made with the UNIFILAR MAGNETOMETER CASELLA 181 at ABINGER, with the DEDUCED VALUES of the BASE-LINE of the HORIZONTAL INTENSITY MAGNETOGRAMS.

U.T., 1936.				Observed Horizontal Intensity.	Deduced Value of Base Line.	U.T., 1936.				Observed Horizontal Intensity.	Deduced Value of Base Line.	U.T., 1936.				Observed Horizontal Intensity.	Deduced Value of Base Line.			
h	m	h	m			h	m	h	m			h	m	h	m			h	m	h
Jan.	9.	15	26-16	39	18510	18687	April	23.	13	35-14	54	18506	18692	Aug.	4.	13	36-14	54	18535	18641
	10.	10	24-11	21	18497	18682		24.	13	35-14	49	18502	18697		5.	10	29-11	59	18505	18632
	11.	10	1-11	2	18509	18681		28.	13	52-15	11	18508	18695		6.	10	23-11	40	18496	18636
	16.	10	26-11	20	18521	18690		29.	10	27-11	32	18495	18699		7.	13	35-14	52	18536	18642
	17.	10	19-11	13	18514	18688								10.	13	31-14	53	18513	18649	
	18.	10	18-11	18	18498	18688	May	1.	10	39-11	53	18494	18697		11.	10	32-11	57	18507	18639
	21.	10	54-11	50	18520	18683		2.	10	19-11	27	18495	18689		12.	10	27-11	51	18520	18640
	22.	11	20-12	5	18503	18680		4.	13	36-14	58	18547	18693		13.	10	23-11	41	18516	18639
	23.	10	54-11	38	18513	18678		5.	10	39-11	53	18502	18696		14.	10	32-11	43	18526	18639
	24.	9	27-10	13	18508	18678		7.	14	16-15	27	18531	18691		17.	10	30-11	48	18508	18639
	25.	11	18-12	2	18495	18683		11.	13	29-14	58	18544	18695		18.	10	32-11	54	18512	18642
Feb.	20.	15	49-16	52	18505	18690		12.	13	31-15	4	18501	18693		19.	10	20-11	50	18504	18637
	21.	14	35-15	30	18492	18689		13.	8	50-10	10	18493	18688		20.	10	24-11	40	18502	18638
	22.	11	13-12	0	18502	18683		14.	9	47-10	55	18501	18688		21.	10	33-11	55	18503	18642
	24.	15	17-16	27	18520	18690		15.	13	33-14	51	18532	18696		24.	8	46-10	11	18501	18635
	25.	12	11-13	0	18511	18685		19.	8	55-10	48	18480	18714		26.	10	31-11	55	18524	18647
	26.	10	7-11	7	18504	18686		20.	13	28-14	53	18505	18721		27.	10	28-11	52	18517	18647
	27.	12	20-13	12	18502	18684		21.	14	35-15	48	18521	18721		28.	10	33-11	57	18534	18648
	28.	12	27-13	15	18508	18693		22.	9	50-10	54	18488	18725		29.	10	34-12	4	18528	18650
	29.	11	11-11	59	18514	18688		23.	10	27-11	44	18496	18721		31.	13	19-14	49	18531	18640
Mar.	2.	12	14-13	1	18508	18686		25.	14	50-16	0	18528	18718	Sept.	1.	10	27-11	49	18508	18642
	3.	14	27-15	27	18526	18689		26.	14	9-15	28	18524	18724		2.	10	12-11	25	18485	18636
	4.	15	19-16	14	18525	18686		27.	14	19-15	34	18527	18723		3.	10	5-11	24	18487	18634
	5.	15	15-16	9	18524	18691		28.	14	38-15	53	18526	18718		4.	10	25-11	41	18485	18628
	6.	11	10-11	59	18527	18692		29.	9	42-10	54	18489	18722		7.	10	5-11	40	18502	18633
	7.	11	9-11	57	18522	18691		30.	8	31-9	45	18514	18725		8.	10	15-11	41	18498	18632
	9.	14	47-15	42	18517	18691	June	2.	14	22-15	44	18537	18729		9.	9	19-10	39	18498	18636
	10.	11	11-11	58	18503	18685		3.	14	32-15	42	18511	18723		10.	10	24-11	53	18495	18642
	11.	15	26-16	48	18517	18684		4.	13	58-15	17	18512	18721		11.	10	29-11	55	18492	18634
	12.	15	6-16	14	18522	18687		5.	13	26-14	43	18501	18725		14.	14	20-15	37	18515	18635
	13.	15	52-17	4	18537	18688		6.	8	42-10	1	18506	18725		15.	13	25-14	48	18522	18639
	14.	10	1-11	9	18525	18689		8.	13	38-14	56	18519	18723		16.	10	23-11	46	18502	18640
	16.	12	12-12	57	18517	18690		9.	14	2-15	18	18469	18726		17.	9	33-10	41	18502	18635
	21.	10	31-11	26	18467	18694		10.	9	24-10	37	18492	18720		18.	10	29-11	58	18502	18633
	24.	15	57-17	10	18521	18693		11.	9	18-10	33	18495	18715		21.	13	30-14	51	18519	18638
	25.	15	41-17	0	18519	18692		12.	13	32-14	58	18514	18727		22.	13	27-14	43	18513	18638
	27.	15	8-16	32	18517	18696		13.	8	59-10	17	18511	18717		23.	14	7-15	12	18490	18636
	30.	10	41-11	56	18486	18685		16.	13	48-15	19	18545	18734		24.	10	13-11	18	18486	18636
	31.	15	1-16	9	18500	18685		17.	13	32-14	52	18522	18728		25.	10	34-11	59	18488	18631
April	1.	14	42-16	1	18512	18694		18.	9	10-10	29	18505	18722		26.	10	7-11	38	18471	18631
	3.	16	18-17	24	18530	18703		19.	9	12-10	32	(18363)	(18719)		28.	14	12-15	29	18525	18639
	7.	14	35-15	56	18492	18712		20.	9	16-10	29	18467	18722	Oct.	1.	14	16-15	45	18516	18636
	8.	14	53-16	20	18502	18715		23.	9	4-10	25	18484	18716		2.	10	22-11	52	18486	18637
	14.	14	44-16	4	18517	18711		24.	9	8-10	30	18496	18720		6.	11	33-12	56	18478	18614
	15.	14	30-15	50	18517	18709		25.	9	5-10	27	18510	18719		7.	11	33-12	51	18485	18616
	16.	14	29-15	46	18518	18715		26.	8	59-10	21	18496	18713		8.	15	9-16	37	18511	18618
	17.	10	7-11	23	18484	18701		27.	9	3-10	27	18497	18721		9.	11	29-12	54	18490	18629
	20.	13	59-15	24	18479	18703	July	28.	9	14-10	51	18503	18630		12.	15	23-16	44	18512	18607
	21.	14	44-16	1	18498	18696		29.	13	51-15	18	18545	18643		13.	11	24-12	48	18504	18611
	22.	10	39-11	46	18471	18697		30.	13	56-15	12	18522	18645		14.	11	32-12	53	18495	18604
								31.	14	27-15	47	18525	18642		15.	11	25-12	51	18500	18609
														16.	11	28-12	51	18491	18611	
														19.	14	26-16	11	18511	18606	
														20.	11	29-12	53	18486	18608	
														21.	11	37-13	3	18495	18611	

April 2. Temperature raised to 16.0°.

May 18. Temperature raised to 21.0°.

October 5. Temperature lowered to 16.0°.

TABLE XIV (A).—RESULTS of the DETERMINATIONS of the ABSOLUTE VALUE OF HORIZONTAL INTENSITY from OBSERVATIONS made with the UNIFILAR MAGNETOMETER, CASELLA 181 at ABINGER, with the DEDUCED VALUES of the BASE-LINE of the HORIZONTAL INTENSITY MAGNETOGRAMS—*continued*.

U.T., 1936.		Observed Horizontal Intensity.	Deduced Value of Base Line.	U.T., 1936.		Observed Horizontal Intensity.	Deduced Value of Base Line.	U.T., 1936		Observed Horizontal Intensity.	Deduced Value of Base Line.						
h	m	h	m	γ	γ	h	m	h	m	γ	γ						
Oct. 22.	11	36-12	57	18504	18605	Nov. 9.	11	32-12	54	18478	18599	Nov. 25.	11	32-12	56	18518	18611
23.	11	23-12	48	18509	18606	10.	11	30-12	56	18506	18607	26.	11	30-12	51	18525	18611
26.	11	28-12	51	18488	18604	11.	11	26-13	2	18478	18600	27.	11	31-12	55	18517	18610
27.	11	28-12	51	18506	18606	12.	9	56-11	39	18486	18608	28.	11	26-12	27	18520	18609
28.	11	27-12	54	18504	18611	13.	11	43-12	58	18501	18608						
29.	11	30-12	51	18511	18606	14.	11	38-12	34	18497	18609						
30.	11	26-12	52	18521	18608	16.	14	31-15	51	18510	18608						
						17.	11	28-12	51	18510	18606	Dec. 1.	11	47-12	46	18482	(18603)
						18.	11	47-12	56	18496	18604	9.	14	32-15	49	18514	18604
						19.	11	27-12	51	18478	18600	10.	11	32-12	58	18519	18601
Nov. 3.	11	33-12	56	18473	18606	20.	11	34-12	49	18474	18601	11.	11	42-12	57	18515	18607
4.	11	33-12	46	18464	18611	21.	11	31-12	32	18507	18608	15.	11	39-12	57	18519	18611
5.	11	34-12	55	18479	18606	23.	14	33-15	51	18522	18609						
6.	11	26-12	47	18489	18604	24.	14	29-15	45	18528	18613	16.	15	2-16	7	18533	18600



TABLE XV.—RESULTS of the DETERMINATIONS of the ABSOLUTE VALUE of VERTICAL INTENSITY from OBSERVATIONS made with the DYE COIL-MAGNETOMETER in the MAGNETIC PAVILION at ABINGER, with the DEDUCED VALUES of the BASE-LINE of the VERTICAL INTENSITY MAGNETOGRAMS.

U.T., 1936.				U.T., 1936.				U.T., 1936.												
h m h m		No. of Obs.	Observed Vertical Intensity.	h m h m		No. of Obs.	Observed Vertical Intensity.	h m h m		No. of Obs.	Observed Vertical Intensity.									
			γ				γ				γ									
Jan.	1.	16 6-16 27	8	43006	43214	Mar.	5.	10 39-10 53	8	42979	43217	May	13.	10 44-11 3	8	42980	43160			
	2.	16 20-16 44	8	43002	43212		6.	10 18-10 39	8	42981	43220		14.	14 3-14 20	8	42985	43156			
	3.	16 36-16 45	4	43006	43213		7.	10 21-10 40	8	42986	43221		15.	9 30-9 48	8	42987	43159			
	4.	11 49-12 3	8	43000	43209		9.	10 5-10 22	8	42985	43221		16.	8 54-9 14	8	42986	43157			
	6.	15 43-16 7	8	43000	43211		17.	10 34-11 9	8	42993	43220		18.	14 30-14 44	5	43003	43186			
	7.	16 6-16 28	8	43001	43211		18.	11 47-12 4	8	42978	43222		18.	18 52-19 16	8	43019	43189			
	8.	11 46-12 10	8	42990	43207		19.	11 37-11 55	8	42979	43219		19.	8 24-8 43	8	42988	43193			
	9.	11 35-12 3	10	42997	43208		20.	15 13-15 34	8	43000	43222		19.	14 31-14 48	8	43010	43193			
	10.	11 45-12 4	8	42998	43207		21.	11 46-12 1	8	42980	43224		20.	9 29-9 56	8	42995	43267			
	11.	11 30-11 50	8	42996	43205		23.	15 46-16 4	8	43019	43221		20.	14 38-15 26	10	43008	43201			
	13.	14 41-15 3	8	43011	43207		24.	11 8-11 30	8	42979	43217		21.	9 17-9 45	8	42996	43206			
	14.	11 0-11 18	8	42990	43201		25.	12 46-13 21	8	42983	43218		21.	13 36-14 4	8	42994	43205			
	15.	15 11-15 34	8	43003	43211		26.	15 12-16 18	8	43005	43218		22.	8 52-9 30	12	42985	43206			
	16.	11 46-12 3	8	42992	43211		27.	11 42-12 2	8	42975	43217		22.	13 56-14 6	4	43001	43207			
	17.	11 37-12 1	10	42986	43212		28.	11 29-11 47	8	42975	43216		23.	15 14-15 22	4	43014	43206			
	18.	11 47-12 4	8	42995	43213		30.	12 40-12 57	8	42976	43215		23.	8 33-9 5	10	42989	43209			
	20.	15 53-16 17	9	43006	43219		31.	11 3-11 22	8	42973	43214		25.	9 12-9 41	8	43006	43216			
	21.	9 58-10 14	8	42999	43216		April	1.	10 27-10 56	10	42986		43216	26.	9 6-9 26	8	42988	43215		
	22.	10 13-10 40	10	42992	43214			2.	10 16-10 39	8	42988		43214	27.	9 47-10 10	8	42993	43210		
	23.	10 0-10 18	9	42991	43207			3.	14 56-15 23	8	42993		43241	28.	16 30-16 41	4	43013	43212		
	24.	10 43-11 7	8	42987	43206			4.	10 21-10 42	8	42979		43247	28.	10 5-10 36	8	42978	43210		
	25.	9 47-10 19	9	43007	43212			6.	16 59-17 34	8	42986		43250	29.	14 17-14 58	8	42994	43209		
	27.	14 55-15 17	8	43012	43215			7.	11 13-11 38	8	(43005)		(43262)	29.	8 13-8 29	8	42999	43205		
	28.	11 50-12 4	8	43002	43215			8.	11 42-12 0	8	42973		43252	15 43-16 4	8	43023	43210			
	29.	11 39-11 58	8	43003	43214			8.	11 42-12 0	8	42971		43257	30.	8 36-8 57	8	42994	43214		
	30.	11 43-11 59	8	43001	43213			9.	10 3-10 28	8	42989		43259	June	1.	10 45-10 57	4	42997	43212	
	31.	10 7-10 23	8	43002	43209			14.	10 22-10 53	8	42976		43260		2.	11 44-12 8	8	42982	43215	
	Feb.	1.	11 44-12 10	8	42995			43211	15.	10 19-10 45	8		42978		43261	16 6-16 17	4	43004	43212	
		3.	15 9-15 37	8	43001			43210	16.	11 34-12 4	10		42978		43262	3.	9 8-9 29	8	42994	43217
		4.	12 43-13 0	8	42997			43203	17.	10 26-10 50	8		42974		43262	4.	15 57-16 7	4	43014	43214
		5.	12 56-13 17	10	42990			43211	18.	11 13-11 36	8		42982		43264	4.	10 36-10 55	8	42992	43218
6.		11 27-11 47	8	42998	43216	20.		10 44-11 4	8	42977	43259	15 44-15 54	4		43017	43219				
7.		14 50-15 9	8	42992	43212	21.	10 18-10 39	8	42986	43268	5.	9 44-10 4	8		42996	43219				
8.		10 9-10 36	8	42986	43212	22.	9 21-9 56	10	42988	43267	15 15-15 27	4	43000		43217					
10.		12 41-12 57	8	42991	43216	23.	9 22-9 53	8	42987	43268	6.	10 18-10 40	8		42994	43216				
11.		11 31-11 58	10	42986	43213	24.	9 18-9 48	8	43005	43268	8.	9 39-10 0	8		42997	43221				
12.		10 44-11 3	8	42986	43214	25.	9 4-9 28	8	43003	43268	9.	9 16-9 46	8		42992	43217				
13.		11 5-11 23	8	42982	43218	27.	13 41-14 4	8	42980	43266	10.	9 19-9 46	8		43000	43219				
14.		10 41-11 5	8	42987	43218	28.	9 17-9 43	8	42995	43265	11.	10 42-10 56	8		42991	43218				
15.		10 47-11 7	8	42989	43223	29.	10 31-10 58	10	42985	43264	12.	9 57-10 20	8		42993	43215				
17.		10 23-10 41	8	42993	43220	30.	9 4-9 28	8	42997	43264	13.	10 30-10 52	8		42975	43216				
18.	11 49-12 4	8	42995	43220	May	1.	9 2-9 22	8	42998	43264	15.	19 6-19 30	8		43031	43212				
19.	10 13-10 36	8	42995	43221		2.	9 5-9 23	8	42996	43262	16.	11 52-12 8	8		42986	43213				
20.	10 59-11 15	8	42988	43218		4.	11 44-12 7	8	42973	43261	17.	9 14-9 42	8	42999	43215					
21.	11 28-11 46	8	42996	43220		5.	9 12-9 47	8	42985	43260	18.	10 42-10 57	8	42977	43215					
22.	10 15-10 39	10	42993	43217		6.	13 56-14 10	8	42998	43263	19.	11 31-11 52	8	42999	43212					
24.	12 36-12 57	8	42965	43217		7.	11 30-11 45	6	42971	43266	20.	10 40-10 59	8	42996	43208					
25.	10 41-10 58	8	42984	43216		8.	14 30-14 46	6	42991	43192	22.	16 32-16 52	8	43023	43209					
26.	11 33-11 46	8	42985	43218		9.	9 45-10 6	8	42980	43191	23.	10 36-10 52	8	42994	43213					
27.	10 37-10 57	8	42993	43219		11.	9 21-9 37	6	42977	43187	24.	10 41-11 1	8	42995	43212					
28.	10 27-10 55	8	42990	43216		10 26-10 38	5	42963	43186	25.	10 40-10 59	8	42994	43210						
29.	10 22-10 43	8	42988	43219		12.	10 27-10 41	6	42981	43162	26.	10 33-10 52	8	42989	43209					
Mar.	2.	11 42-12 2	8	42982	43221	11 34-11 47	6	42971	43161	27.	10 36-10 54	8	43000	43213						
	3.	10 35-10 54	8	42988	43220	July	1.	11 32-11 53	8	42991	43213	30.	9 10-9 26	8	43000	43212				
	4.	12 21-12 40	8	42980	43219		2.	9 7-9 28	8	42988	43214									

April 2. Temperature raised 16.0°.

May 18. Temperature raised to 21.0°.





TABLE XV(A).—DAILY VALUE of the BASE-LINE of the VERTICAL INTENSITY MAGNETOGRAMS at the ABINGER MAGNETIC STATION, DEDUCED from OBSERVATIONS of MAGNETIC DIP made with the EARTH INDUCTOR.

Day of Month	January	February	March	April	May	June	July	August	September	October	November	December
	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ
1	43204	43205	—	43208	43261	—	43211	43193	43187	43225	—	43173
2	202	—	43219	242	263	43211	215	—	198	224	43206	176
3	—	208	214	241	—	221	211	—	201	231	206	—
4	214	203	211	247	259	214	217	186	197	—	208	175
5	—	207	219	—	269	221	—	187	193	197	203	178
6	202	207	210	254	272	216	221	192	—	193	207	—
7	202	212	212	250	—	—	228	192	198	195	205	177
8	199	210	—	252	193	210	223	186	202	204	—	177
9	205	—	215	254	194	207	224	—	206	202	207	176
10	200	222	217	—	—	217	229	184	211	200	212	176
11	200	212	216	—	161	217	222	190	205	—	207	177
12	—	219	221	—	159	214	—	187	207	203	216	177
13	199	216	220	—	162	213	226	196	—	202	214	—
14	201	217	216	261	162	—	222	189	208	201	215	180
15	198	216	—	257	163	215	224	194	208	198	—	181
16	204	—	215	262	155	217	226	—	216	199	213	181
17	205	216	217	262	—	215	224	192	221	202	214	177
18	204	222	213	263	—	216	226	193	224	—	214	178
19	—	210	216	—	206	217	—	190	214	197	212	174
20	209	212	216	261	203	218	230	193	—	203	208	—
21	206	210	219	263	203	—	225	194	219	200	216	177
22	207	214	—	262	208	217	233	193	216	202	—	174
23	205	—	215	267	209	210	227	—	212	201	212	176
24	211	212	215	264	—	212	218	193	209	200	214	175
25	212	215	216	267	214	210	178	196	215	—	218	—
26	—	211	212	—	212	211	—	186	214	204	220	—
27	209	218	215	265	213	219	189	196	—	206	222	—
28	210	216	216	263	219	—	177	192	217	204	221	184
29	206	216	—	262	217	218	184	200	220	203	—	184
30	200	—	212	261	211	212	185	—	222	201	221	—
31	202	—	207	—	—	—	189	186	—	206	—	185

April 2. Temperature raised to 16.0°.

May 18. Temperature raised to 21.0°.

October 5. Temperature lowered to 16.0°.

MEAN ANNUAL VALUES OF MAGNETIC ELEMENTS DETERMINED AT THE ROYAL OBSERVATORY, GREENWICH, BETWEEN THE YEARS 1818-1925.									
Year.	Declination West	Horizontal Intensity.	Vertical Intensity.	Dip.	Year.	Declination West.	Horizontal Intensity.	Vertical Intensity.	Dip.
	° ' †	C.G.S. Unit	C.G.S. Unit	° ' †		° ' †	C.G.S. Unit	C.G.S. Unit	° ' †
1818	24 19 †	..	..	..	1882	18 22.3	0.1806	0.4375	67 34.2
1819	24 21	..	..	..	1883	18 15.0	0.1812	0.4381	67 31.7
1820	24 21	..	..	..	1884	18 7.6	0.1814	0.4379	67 29.7
1841	23 16.2	..	..	..	1885	18 1.7	0.1817	0.4380	67 28.0
1842	23 14.6	..	..	..	1886	17 54.5	0.1818	0.4377	67 27.1
1843	23 11.7	..	..	69 0.6	1887	17 49.1	0.1819	0.4380	67 26.6
1844	23 15.3	..	..	69 0.3	1888	17 40.4	0.1822	0.4383	67 25.6
1845	22 56.7	..	..	68 57.5	1889	17 34.9	0.1823	0.4380	67 24.3
1846	22 49.6	0.1731	..	68 58.1	1890	17 28.6	0.1825	0.4381	67 23.0
1847	22 51.3	0.1736	..	68 59.0	1891	17 23.4	0.1827	0.4380	67 21.5
1848	22 51.8	0.1731	..	68 54.7	1892	17 17.4	0.1829	0.4379	67 20.0
1849	22 37.8	0.1733	..	68 51.3	1893	17 11.4	0.1831	0.4373	67 17.9
1850	22 23.5	0.1738	..	68 46.9	1894	17 4.6	0.1831	0.4374	67 17.4
1851	22 18.3	0.1744	..	68 40.4	1895	16 57.4	0.1834	0.4378	67 16.1
1852	22 17.9	0.1745	..	68 42.7	1896	16 51.7	0.1835	0.4382	67 15.1
1853	22 10.1	0.1748	..	68 44.6	1897	16 45.8	0.1838	0.4377	67 13.5
1854	22 0.8	0.1749	..	68 47.7	1898	16 39.2	0.1840	0.4377	67 12.1
1855	21 48.4	0.1756	..	68 44.6	1899	16 34.2	0.1843	0.4380	67 10.5
1856	21 43.5	0.1759	..	68 43.5	1900	16 29.0	0.1846	0.4380	67 8.8
1857	21 35.4	0.1769	..	68 31.1	1901	16 26.0	0.1850	0.4381	67 6.4
1858	21 30.3	0.1762	..	68 28.3	1902	16 22.8	0.1852	0.4377	67 3.8
1859	21 23.5	0.1761	..	68 26.9	1903	16 19.1	0.1852	0.4368	67 1.2
1860	21 14.3	..	..	68 30.1	1904	16 15.0	0.1854	0.4359	66 57.6
1861	21 5.5	0.1773	..	68 24.6	1905	16 9.9	0.1854	0.4355	66 56.3
					1906	16 3.6	0.1854	0.4353	66 55.6
1861		0.1759	..	68 15.8	1907	15 59.8	0.1855	0.4357	66 56.2
1862	20 52.6	0.1763	0.4403	68 9.6	1908	15 53.5	0.1854	0.4356	66 56.3
1863	20 45.9	0.1764	0.4396	68 7.0	1909	15 47.6	0.1854	0.4348	66 54.1
1864	..	0.1767	0.4393	68 4.1	1910	15 41.2	0.1855	0.4345	66 52.8
1865	20 33.9	0.1767	0.4388	68 2.7	1911	15 33.0	0.1855	0.4342	66 52.1
1866	20 28.0	0.1773	0.4397	68 1.3	1912	15 24.3	0.1855	0.4340	66 51.8
1867	20 20.5	0.1777	0.4392	67 57.2	1913	15 15.2	0.1853	0.4333	66 50.5
1868	20 13.1	0.1779	0.4395	67 56.5					
1869	20 4.1	0.1782	0.4396	67 54.8	1914	15 6.3	0.1853	0.4333	66 50.8
1870	19 53.0	0.1784	0.4392	67 52.5	1915	14 56.5	0.1851	0.4331	66 51.6
1871	19 41.9	0.1786	0.4389	67 50.3	1916	14 46.9	0.1848	0.4326	66 52.2
1872	19 36.8	0.1789	0.4383	67 47.8	1917	14 37.1	0.1848	0.4330*	66 53.0
1873	19 33.4	0.1793	0.4386	67 45.8	1918	14 27.8	0.1846	0.4325	66 52.8
1874	19 28.9	0.1797	0.4387	67 43.6	1919	14 18.2	0.1845	0.4324	66 53.3
1875	19 21.2	0.1797	0.4383	67 42.4	1920	14 8.6	0.1845	0.4325	66 53.6
1876	19 8.3	0.1799	0.4383	67 41.0	1921	13 57.6	0.1845	0.4322	66 53.0
1877	18 57.2	0.1800	0.4381	67 39.7	1922	13 46.7	0.1844	0.4318	66 52.3
1878	18 49.3	0.1802	0.4382	67 38.2	1923	13 35.1	0.1843	0.4314	66 51.9
1879	18 40.5	0.1805	0.4382	67 37.0	1924	13 22.8	0.1843	0.4311	66 51.6
1880	18 32.6	0.1805	0.4380	67 35.7	1925	13 9.9	0.1841	0.4308	66 51.4
1881	18 27.1	0.1807	0.4379	67 34.7					

In 1818, 1819 and 1820 numerous observations of Declination were made with a Dollond needle. See Introduction, p. D19.

In 1861 new Unifilar Apparatus for absolute Horizontal Intensity 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 an Inductor.

N.B.—In the above table the values of Vertical Intensity for the years 1862-1913 inclusive were computed from the corresponding values of Horizontal Intensity and Dip, the values of Dip being the mean of all the absolute observations taken in any year, and the time of observation approximating to noon on the average. Beginning with 1914 the values of Dip have been computed from the corresponding annual mean values of Horizontal and Vertical Intensity.

† Mean of seven months June to December.

\* Mean of ten months, March to December.

MEAN ANNUAL VALUES OF MAGNETIC ELEMENTS DETERMINED AT THE ABINGER MAGNETIC STATION,  
FOR THE YEARS 1925-1936.

Year.	Declination West.	Horizontal Intensity.	Vertical Intensity.	Inclination.
	°   '   ''	C.G.S. Unit	C.G.S. Unit	°   '   ''
1925	13 22.7	0.18597	0.42946	66 35.1
1926	13 10.4	0.18581	0.42947	66 36.3
1927	12 58.4	0.18575	0.42932	66 36.2
1928	12 47.0	0.18564	0.42941	66 37.3
1929	12 35.8	0.18555	0.42918	66 37.2
1930	12 24.6	0.18542	0.42924	66 38.2
1931	12 13.7	0.18543	0.42923	66 38.1
1932	12 2.6	0.18536	0.42940	66 39.1
1933	11 51.7	0.18532	0.42942	66 39.4
1934	11 41.1	0.18533	0.42955	66 39.7
1935	11 30.3	0.18527	0.42981	66 40.9
1936	11 20.0	0.18524	0.43007	66 41.8

The values of Inclination are computed from the corresponding values of horizontal and vertical intensity.

Commencing with the years 1927 and 1929 respectively, the values of horizontal and vertical intensity are based upon observations with Coil-magnetometers.

## MAGNETIC DISTURBANCES.

The following notes briefly summarise, month by month, the magnetic conditions exhibited by the traces of Declination, Horizontal Intensity and Vertical Intensity recorded at the Abinger Magnetic Station in the year 1936.

**January.**—With the exception of a few small undulations traces were quiet until 4<sup>h</sup> on 8th. Some irregular disturbance then began, not of any great extent, which lasted until the end of 14th. The largest movements occurred at 10<sup>d</sup>.18<sup>h</sup> and 13<sup>d</sup>.2<sup>h</sup> when a wave approaching 15' in D and 50γ in H appeared in each case. After a short quiet interval further unsteadiness developed at 18<sup>d</sup>.0<sup>h</sup>, at first oscillatory and then irregular, which finally culminated in a brisk disturbance lasting from 24<sup>d</sup>.17<sup>h</sup>. to 25<sup>d</sup>.16<sup>h</sup>. The features of this disturbance were: a temporary decrease in D of 15', from 24<sup>d</sup>.20<sup>h</sup> to 25<sup>d</sup>.2<sup>h</sup>, a range of 110γ in H, and a rapid increase of 80γ in V between 24<sup>d</sup>.18<sup>h</sup> and 21<sup>h</sup>. Unsteadiness, often of a marked oscillatory character, persisted until the end of the month, excepting a quiet interval from 28<sup>d</sup>.14<sup>h</sup> to 29<sup>d</sup>.16<sup>h</sup>. A conspicuous wave in D (−20') and in H (+70γ) occurred at 26<sup>d</sup>.21<sup>h</sup>, which however had no counterpart in V.

The range in declination during the month was from 11°4'·6 on 26th to 11°34'·7 on 24th; in horizontal intensity, from ·18432 on 24th to ·18567 on 8th; in vertical intensity from ·42981 on 17th and 18th to ·43070 on 24th.

**February.**—After nearly two days of quiet conditions, moderate unsteadiness began rather abruptly, at 15<sup>h</sup>.7<sup>m</sup> on 2nd. This gradually died away on 4th, but did not wholly disappear. On 9th unsteadiness increased again, becoming continuous on 10th with several movements approaching 10' in D and 50γ in H. From 12th to noon on 14th conditions were almost quiet. During the second half of 14th further unsteadiness developed and gradually increased; and conditions remained disturbed generally until the end of 27th. The most active periods were 16<sup>d</sup>.11<sup>h</sup> to 17<sup>d</sup>.22<sup>h</sup>—a series of rapid oscillations in all traces—; 19<sup>d</sup>.15<sup>h</sup> to 20<sup>d</sup>.2<sup>h</sup>—a sharp rise in V (50γ), followed by waves in all traces, (130γ in H)—; and 21<sup>d</sup>.15<sup>h</sup> to 22<sup>d</sup>.23<sup>h</sup>—movements exceeding 50γ in H. A quiet day on 28th was followed by slight general unsteadiness from 29<sup>d</sup>.14<sup>h</sup>, which however had practically ceased at the end of the month.

The range in declination during the month was from 11°8'·7 on 19th to 11°34'·9 on 17th; in horizontal intensity, from ·18447 on 16th to ·18584 on 19th; in vertical intensity, from ·42970 on 16th to ·43042 on 17th.

**March.**—The traces, though occasionally rather unsteady, were not subject to any marked disturbance until 17th. From 2nd to 4th and from 11th to 13th conditions were quiet. After 17<sup>d</sup> disturbances steadily increased. Prominent movements occurred each day, those between 24<sup>d</sup>.20<sup>h</sup> and 26<sup>d</sup>.3<sup>h</sup> being perhaps the most conspicuous. None, however, much exceeded 15' in D or 50γ in H. By 28<sup>d</sup> disturbance had subsided to normal slight unsteadiness and no further movements of note occurred during the remainder of the month.

The range in declination during the month was from 11°7'·2 on 23rd to 11°34'·6 on 24th; in horizontal intensity from ·18449 on 21st to ·18574 on 27th; in vertical intensity, from ·42964 on 15th to ·43044 on 23rd.

**April.**—Slight disturbance was recorded during the first three days and, in addition, two prominent waves occurred in D,—at 2<sup>d</sup>.21<sup>h</sup> (−20') and 3<sup>d</sup>.20<sup>h</sup> (−15'). A quiet period ensued, persisting, with short intermittent unsteadiness, until the end of 11th. Disturbance then became general until 24th. It was of minor extent at first, although a feature was the daily rapid increase of V (about 50γ) between 11<sup>h</sup> and 17<sup>h</sup>, but after 17<sup>d</sup>.0<sup>h</sup> considerable movements in all traces were to be seen. The traces during two interesting stages of activity are reproduced in Plates I and II, and a few of the most prominent movements are mentioned here. At 17<sup>d</sup>.0<sup>h</sup>—2<sup>h</sup> a decrease of 30' in D, partially recovering by 17<sup>d</sup>.5<sup>h</sup>, accompanied by related movements in H (90γ) and V (−40γ); at 21<sup>d</sup>.22<sup>h</sup>—24<sup>h</sup>, several large oscillations in H (the largest, +100γ), with corresponding movements in V, the whole range in V being almost 100γ. After 22<sup>d</sup>.0<sup>h</sup> disturbance gradually diminished, but several waves of 10' in D and 50γ in H occurred each day until 24th. There was also a very rapid rise in V (80γ) between 22<sup>d</sup>.12<sup>h</sup>—14<sup>h</sup>. From 25th to the end of the month slight general unsteadiness prevailed, no day being absolutely quiet.

The range in declination during the month was from 11°3'·5 on 18th to 11°38'·0 on 21st; in horizontal intensity, from ·18435 on 22nd to ·18607 on 21st; in vertical intensity, from ·42941 on 21st to ·43060 on 18th.

**May.**—A sequence of nine almost quiet days at the beginning of the month was temporarily interrupted by a short period of disturbance extending from 12<sup>h</sup> to 23<sup>h</sup> on 4th, in which movements of 15' in D, 90γ in H and 50γ in V occurred. From 10th to 22nd conditions were disturbed generally. The largest movements took place on 10th, 12th, 18th and 19th, while on 11th, from 10<sup>h</sup> to 14<sup>h</sup>, there was a period of unusually rapid oscillation in H. The principal features were:—10<sup>d</sup>.18<sup>h</sup>—20<sup>h</sup> two waves in H (+80γ); 12<sup>d</sup>.18<sup>h</sup> a sharp wave in H (+90γ) following seven hours of remarkably uniform undulation which coincided with a steady increase in V (80γ); 18<sup>d</sup>.19<sup>h</sup> waves of −18' in D and +80γ in H; 18<sup>d</sup>.10<sup>h</sup> to 19<sup>d</sup>.2<sup>h</sup> considerable unsteadiness in V, with a range of 50γ. After 23<sup>d</sup>.0<sup>h</sup> there was a nearly quiet interval which lasted until 25<sup>d</sup>.12<sup>h</sup>, and then moderate unsteadiness set in again which persisted in varying degree for the rest of the month. An additional feature was a short period of rapid irregular oscillation in H and V, commencing suddenly at 30<sup>d</sup>.17<sup>h</sup>.27<sup>m</sup> and lasting until about 31<sup>d</sup>.4<sup>h</sup>.

The range in declination during the month was from 11°10'·6 on 31st to 11°35'·8 on 11th; in horizontal intensity, from ·18454 on 19th to ·18661 on 12th; in vertical intensity, from ·42957 on 10th to ·43043 on 12th.

**June.**—At 1<sup>d</sup>.16<sup>h</sup>.44<sup>m</sup> an abrupt increase of intensity occurred (90γ in H and 30γ in V), rather like the sudden commencement of a disturbance. The increase rapidly disappeared and was lost in less than fifteen minutes. Marked unsteadiness persisted, however, during the next two days. Then followed a nearly quiet period ending at about 7<sup>d</sup>.12<sup>h</sup>. Unsteadiness developed to a state of moderate disturbance by 8<sup>d</sup>.18<sup>h</sup>. This continued to increase in activity until 9<sup>d</sup>.18<sup>h</sup>. There were several large movements in H between 9<sup>d</sup>.6<sup>h</sup> and 18<sup>h</sup>, the total range being 180γ comprised within two hours. Activity subsided considerably after 10<sup>d</sup>, but a condition of unsteadiness resembling irregular undulation was left which did not wholly disappear until the end of 17th. At 18<sup>d</sup>.9<sup>h</sup>.44<sup>m</sup> a small displacement of the horizontal intensity trace is seen which probably marks the commencement of the large disturbance, the subject of Plate III. The development of this disturbance was delayed, however, until 18<sup>d</sup>.16<sup>h</sup> and was confined largely to intensity, disturbance in declination being relatively small. The period of greatest activity coincided remarkably with the occurrence of a solar eclipse which was total in south-east Europe, middle and north east Asia. Reference to the magnetic records made at Greenwich on the day 54 years earlier when a similar eclipse occurred under closely similar circumstances, showed no sign of a similar magnetic disturbance, so that nothing more than coincidence is indicated. Echoes of the disturbance, in the form of a train of small irregular waves, continued until about 20<sup>d</sup>.8<sup>h</sup>. From 21<sup>d</sup> to the end of the month the traces were practically featureless, with the exception of two short periods of minor disturbance, 24<sup>d</sup>.14<sup>h</sup> to 25<sup>d</sup>.2<sup>h</sup> and 26<sup>d</sup>.12<sup>h</sup> to 27<sup>d</sup>.3<sup>h</sup>.

The range in declination during the month was from 11° 7' 5" on 8th to 11° 34' 9" on 19th; in horizontal intensity, from less than ·18365 (representing the edge of the recording sheet) on 19th to ·18616 on 2nd; in vertical intensity, from ·42905 to ·43088 both on 19th.

**July.**—Conditions were rather unsteady at first, and several waves in the H trace approached 50γ on 2nd. An abrupt movement in all traces occurred at 4<sup>d</sup>.2<sup>h</sup>.32<sup>m</sup>, followed by small range agitation which lasted till 4<sup>d</sup>.5<sup>h</sup>. Unsteadiness increased during the next day, and on the succeeding day there were again several waves of 50γ in the H trace. By 10<sup>d</sup>.12<sup>h</sup> a state of moderate disturbance was existing, with ranges of 100γ in H, 60γ in V and numerous fluctuations in D.

Agitation became very marked between 11<sup>d</sup>.14<sup>h</sup> and 20<sup>h</sup>, oscillations of 50 γ and more in H occurring within a few minutes, though disturbance in D remained comparatively small. A similar outburst of agitation even more rapid but not so extensive in range, took place between 17<sup>d</sup>.22<sup>h</sup> and 18<sup>d</sup>.4<sup>h</sup> and was preceded by an abrupt movement at 17<sup>d</sup>.17<sup>h</sup>.16<sup>m</sup>. Unsteadiness declined after this to a nearly quiet state from 21<sup>d</sup>.0<sup>h</sup> to 25<sup>d</sup>.0<sup>h</sup>. Activity then recommenced, increasing generally until 29<sup>d</sup>.17<sup>h</sup> and falling off temporarily for a quiet spell between 30<sup>d</sup>.10<sup>h</sup> and 31<sup>d</sup>.8<sup>h</sup>.

The range in declination during the month was from 11° 4' 3" on 2nd to 11° 36' 3" on 29th; in horizontal intensity, from ·18438 on 7th and 11th to ·18631 on 11th; in vertical intensity, from ·42971 on 28th to ·43083 on 2nd.

**August.**—The prevailing characteristic of the traces throughout the month was general unsteadiness. This varied from days which were nearly but never altogether quiet, namely 7th, 18th, 19th to 23rd, to days on which one or two movements of 50γ in H and 10' in D were to be seen, namely 8th, 27th, 30th. On no day of the month was there any activity which could rank as a "disturbance," and taken as a whole the magnetic conditions were unusually uniform, a circumstance which is reflected to a certain extent in the ranges.

The range in declination during the month was from 11° 7' 4" on 8th and 30th to 11° 32' 5" on 5th; in horizontal intensity, from ·18478 on 10th to ·18589 on 30th; in vertical intensity, from ·42962 on 27th to ·43033 on 5th.

**September.**—As in the previous month, there were very few movements which could not be included in the broad classification of general unsteadiness. The unsteadiness was sometimes definitely undulatory in character. This was specially noticeable on 1st, 5th, 8th, 15th, 18th to 20th, 23rd, 27th and 29th, periods ranging from ten minutes to one hour being found. Quiet days were 7th, 13th, 16th and 25th. The day which approached nearest to a state of disturbance was 26th, but even on that day no superposed movement exceeded 50γ.

The range in declination during the month was from 11° 8' 1" to 11° 33' 6", both on 26th; in horizontal intensity from ·18462 to ·18574 both on 26th; in vertical intensity, from ·42972 on 17th to ·43068 on 26th.

**October.**—After four nearly quiet days activity gradually increased from 12<sup>h</sup> on 5th. At 6<sup>d</sup>.22<sup>h</sup> there was a wave of +75γ in H accompanied by a small decrease in V. Activity reached a maximum during the first half of 10th. It then rapidly declined and conditions were nearly quiet between 12<sup>d</sup>.0<sup>h</sup> and 14<sup>d</sup>.15<sup>h</sup>. Further activity then began, which at 16<sup>d</sup>.15<sup>h</sup> suddenly increased to a condition of moderate disturbance. In the subsequent sixteen hours a series of irregular movements occurred in all traces. In V there was a general rise amounting to 90γ between 14<sup>h</sup> and 19<sup>h</sup>, followed by an even larger fall of 115γ between 16<sup>d</sup>.19<sup>h</sup> and 17<sup>d</sup>.3<sup>h</sup>. In H the range was 130γ and in D almost 30'. The traces are reproduced in Plate IV. After 17<sup>d</sup>.8<sup>h</sup> activity died rapidly away, though general unsteadiness persisted until 21<sup>d</sup>.6<sup>h</sup>. A second rather active period began at 23<sup>d</sup>.18<sup>h</sup>, lasting until about 25<sup>d</sup>.16<sup>h</sup>. The largest movement was one of -80γ in H, and there was a slow surge in V of nearly the same amount (+70γ) between 24<sup>d</sup>.12<sup>h</sup> and 25<sup>d</sup>.0<sup>h</sup>. No further movement of note took place until 31st, when a short period of unsteadiness began with a sudden impulse at 1<sup>h</sup>.24<sup>m</sup> and ended at about 18<sup>h</sup>.

The range in declination during the month was from 10° 57' 6" on 16th to 11° 30' 4" on 17th; in horizontal intensity, from ·18427 on 16th to ·18592 on 6th; in vertical intensity, from ·42965 on 17th to ·43084 on 16th.

**November.**—There was some unsteadiness on 3rd followed by a conspicuous wave in each trace at 3<sup>d</sup>.20<sup>h</sup> (-20' in D, +120γ in H and -50γ in V). Unsteadiness persisted in varying amount until 22nd. It was greatest during the period between 11<sup>d</sup>.16<sup>h</sup> to 23<sup>h</sup> when it attained the dimensions of a slight disturbance, ranges of 20' in D and 100γ in H being shown, while between 9<sup>d</sup>.12<sup>h</sup> and 10<sup>d</sup>.12<sup>h</sup> and again between 13<sup>d</sup>.0<sup>h</sup> and 14<sup>d</sup>.0<sup>h</sup> there was almost complete steadiness. From 22<sup>d</sup>.0<sup>h</sup> to 28<sup>d</sup>.23<sup>h</sup> conditions were quiet or nearly so. Then, at 28<sup>d</sup>.23<sup>h</sup>.38<sup>m</sup>, an abrupt

movement in all traces marked the sudden commencement of a brisk disturbance which lasted for about fifteen hours. The ranges were not remarkable (less than 200γ in H and 40' in D) but at one time the oscillations were unusually rapid, and on this account were partially lost in H. The traces are reproduced in Plate V. By 30<sup>d</sup>.0<sup>h</sup> the disturbance had subsided to normal slight unsteadiness.

The range in declination during the month was from 11°.2'.1 on 3rd to 11°.44'.7 on 29th; in horizontal intensity, from 18444 on 29th to 18620 on 28th; in vertical intensity, from 42950 on 29th to 43069 on 3rd and 11th.

**December.**—The prevailing characteristic of the traces throughout the month was slight general unsteadiness, intensified on 4th and 13th, abating on 8th—11th, 14th—15th, 19th, 24th—26th, but seldom entirely absent. Nothing approaching a disturbance occurred until 27th when, after a premonitory movement in all traces at 3<sup>h</sup>.30<sup>m</sup>, a period of moderate activity began which extended from about 27<sup>d</sup>.17<sup>h</sup> to 28<sup>d</sup>.18<sup>h</sup>. The movements were numerous and of an oscillatory type, but the individual amplitudes did not exceed 10' in D and 50γ in H. The total range in V, however, reached 100γ. By 29<sup>d</sup>.0<sup>h</sup> conditions were nearly quiet again, and so continued during the remainder of the month.

The range in declination during the month was from 11°.2'.2 on 27th to 11°.26'.3 on 28th; in horizontal intensity, from 18438 on 28th to 18568 on 27th; in vertical intensity, from 42983 to 43086 both on 28th.

The absolute maximum and minimum values respectively of the elements recorded during the year were :

Declination 11°.44'.7 on November 29th; 10°.57'.6 on October 16th.

Horizontal intensity 18661 on May 12th; less than 18365 (probably about 18340) on June 19th (The actual minimum was beyond the range of the recording sheet).

Vertical intensity, 43088 on June 19th; 42905 on June 19th.

# GREENWICH METEOROLOGICAL OBSERVATIONS. 1936.

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## INTRODUCTION.

### *Meteorological Instruments.*

The majority of the meteorological instruments are situated in an enclosure in Greenwich Park, 350 yards to the east of the Astronomical Observatory. In the enclosure (which will be referred to as "The Christie Enclosure") there are the 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, the self-registering rain gauge and the sunshine recorder are fixed above the roof of the Octagon Room (the ancient part of the Observatory).

### *Subjects of Observation in the year 1936.*

The observations comprise eye observations of the ordinary meteorological instruments, including the barometer, dry-bulb and wet-bulb thermometers, radiation and earth thermometers; continuous photographic record of the variations of the barometer, dry-bulb and wet-bulb thermometers; continuous automatic record of the direction, pressure and velocity of the wind, and of the amount of rain; registration of the duration of sunshine and, at night, of the visibility of stars near the Pole; general record of ordinary atmospheric changes of weather, including numerical estimation of the amount of cloud, estimations of "visibility", and occasional phenomena. Beginning on 1935 January 1, continuous record of the electric current discharged from a point 30 feet above the surface of the ground has been in operation. Registration of atmospheric potential gradient was discontinued at the end of June, 1933. On 1935 January 1, daily measurement was begun of the amount of sulphur dioxide polluting the air. Registration and measurement of the pollution of the air by suspensoids was commenced on 1934 July 1, the instrument employed being an Owens automatic filter.

*Universal Time (U.T.)*—which at the Royal Observatory coincides with local mean solar time—has been employed throughout the meteorological section, except in regard to the sunshine registers (see p. E. 7).



STANDARD BAROMETER.—The standard barometer is Newman No. 64. Its tube is 0·565 inches in diameter, and the depression of the mercury due to capillary action is 0·002 inches, but no correction is applied on this account. The cistern is of glass, and the graduated scale and attached rod are of brass ; at its lower end the rod terminates in a point of ivory, which in observation is made just to meet the reflected image of the point as seen in the mercury. The scale is divided to 0·05 inches, subdivided by vernier to 0·002 inches. 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. On 1917 April 3, it was transferred to the new magnetograph house in the Christie Enclosure, where the height above mean sea level is 152 feet. (See also p. E 9.)

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

THE PHOTOGRAPHIC BAROMETER.—A siphon barometer is employed which, at its open end, operates a plunger resting on the surface of the mercury. On account of the optical magnification associated with a moving mirror at some distance from the recording drum, the motion of the plunger must be mechanically reduced in being transferred to the arm which carries the mirror. In the actual arrangement two levers are used. One is connected to the stem of the plunger resting on the free surface of the mercury and is 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 pivot to the 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 horizontally in a suitable frame attached to the lever, just above the pivots of the latter. The first lever lies east and west, so that the axis about which the mirror turns is in the same direction. The recording drum is horizontal and 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 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 the directions

of the two beams of light. 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.

The instrument is 12 feet from the recording drum. At this distance the calculated scale value of the record is 3 in. on the sheet for 1 in. change of height of the mercury column of the standard barometer. (Both arms are, near the surface of the mercury, of the same bore, so that the plunger moves through one half the change of the indication of the standard barometer.)

The scale value of the instrument is, in effect, determined experimentally by comparison with the readings of the standard barometer. The base-line values corresponding to the four daily readings of the latter are represented graphically by points on a chart. The adopted value at any time is read from a smooth curve drawn through the points.

The photographic sheets being  $9\frac{1}{2}$  inches wide, a range of over 3 inches barometric motion can be included, and change of zero is unnecessary.

DRY-BULB AND WET-BULB THERMOMETERS.—The standard dry-bulb and wet-bulb thermometers and maximum and minimum self-registering thermometers, both dry and wet, are mounted on a revolving frame planned by Sir George Airy. This, together with details of the thermometers and the corrections applicable to them, may be found fully described in the volumes for 1912 and previous years.

Since 1899 January 4 this stand has occupied an open position in the Christie Enclosure.

The corrections to be applied to the thermometers in ordinary use are determined by comparison with the Kew standard thermometer No. 515.

The dry-bulb thermometer used throughout the year was Negretti and Zambra, No. 45354. The correction  $-0^{\circ}\cdot 4$  has been applied to the readings of this thermometer. The wet-bulb thermometer used throughout the year was Negretti and Zambra, No. 94737. The correction  $-0^{\circ}\cdot 2$  has been applied to the readings of this thermometer.

The dry-bulb and wet-bulb thermometers are read at 9h., 12h. (noon), 15h., 21h. every day. Readings of the maximum and minimum thermometers are taken at 9h., 15h., and 21h. every day. Those of the dry-bulb and wet-bulb thermometers are employed to correct the indications of the photographic dry-bulb 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. Until 1917 it stood in substantially the same position in the Observatory grounds, to the north of the New Observatory. It was transferred to the Christie 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 described in connection with the magnetometers. The traces consist of broad bands, due to the free passage of light (above the mercury column of the dry-bulb thermometer, and through an air bubble in that of the wet-bulb thermometer) to the drum, crossed by fine lines caused by the shadows of the graduations of 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  $10^{\circ}$  per inch.

RADIATION THERMOMETERS.—These thermometers are placed in an open position in the Christie Enclosure. The thermometer for solar radiation is a mercurial maximum thermometer with its bulb blackened and enclosed in a glass sphere from which the air has been exhausted. The thermometer employed was Negretti and Zambra, No. K2254. The thermometer for radiation to the sky is a spirit minimum thermometer, Negretti and Zambra, No. D11197. The thermometers are laid on short grass, freely exposed to the sky.

EARTH THERMOMETERS.—There are two thermometers now in use, the bulbs of which are sunk to depths of 4 feet and 1 foot respectively below the surface. Both thermometers are read daily at noon, the readings of the former being given in the daily results.

OSLER'S ANEMOMETER.—This self-registering anemometer, devised by Mr. A. F. 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 most recent determination was made on 1934 November 20.

The recording sheet is changed daily at noon. The time scale, ordinarily 15mm. to the hour, can be increased 24-fold by altering the gearing.

ROBINSON'S ANEMOMETER.—This instrument, for registration of the horizontal movement of the air, is mounted above the roof of the Octagon Room and was brought into use in 1866. The four hemispherical cups are 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 approximately to horizontal motion of the air through 100 miles. The time scale is the same as for the Osler Anemometer and the sheet is changed daily at noon.

The velocity recorded by the instrument is three times the actual velocity  $v$  of the cups. From tests made by Mr. W. H. Dines at Hershams in 1889, on his whirling machine, it would appear that the relation between the velocity of the wind  $V$  and the velocity of the cups  $v$  is approximately

$$V=4.0+2.0v$$

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  $V=3v$  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. Until 1931, for the sake of continuity and simplicity the formula  $V=3v$  was retained in use, although the greatest hourly measures according to the revised formula were given in a table at the end of the volumes. From 1932 January all measures have been calculated from the revised formula.

RAIN GAUGES.—During the year 1936 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 volumes previous to 1914.

Gauge No. 6 is an 8-inch circular gauge placed with the receiving surface 5 inches above the ground. No. 8 is a newer 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, and is read daily at 9h., 15h., and 21h. No. 8 is used as a check on the readings of No. 6 and is read at 9h. only as a rule. The gauges are also read at midnight on the last day of each calendar month.

The erection in the Christie Enclosure of a building to the north-west of gauges 6 and 8 to accommodate a large equatorial telescope made desirable the removal of these gauges to new positions. The removal was carried out on 1932 September 29, the new sites being approximately 42 feet east of the old ones.

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 Christie Enclosure in 1899 January.

The monthly amounts of rain collected in gauges Nos. 6 and 8 are given on page E 46 of the Meteorological Results.

SUNSHINE RECORDER.—The hourly results relate to *apparent* time. The instrument in use is of the Campbell-Stokes pattern, with 4-inch glass globe. It was examined at the Meteorological Office on September 13, 1926, and was found to be in satisfactory condition. It now bears the serial number M.O. 113. 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. Conformity with Meteorological Office standards of measurement is maintained as far as possible, and with this in view independent measures of nine selected sunshine cards taken from the months of January, July and September, 1936, have been made at the Meteorological Office. These showed, in general, good agreement with the Greenwich estimations, though on one day of very intermittent sunshine, the Greenwich estimate showed an excess of more than 0·5 h. over the Meteorological Office estimate.

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

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

The lens is of 18·8 inches focal length and 0·8 inch aperture. The actual camera is enclosed in a larger box about twice its length, extending 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  $10^\circ$  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 selected for measurement are those of Polaris and of  $\delta$  Ursæ Minoris. The measurement is effected by means of a glass scale, on which pairs of concentric circles are photographically imprinted. The radii of these circles are slightly greater and slightly less than the radius of the trace to be measured, and the circles are 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 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 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, due allowance being made for the acceleration of sidereal time over mean time. When the sky is not clear at commencement, a computed quantity is used which includes an adopted mean value of the error of orientation. Variations in the error of orientation are found seldom to exceed two or three minutes of time, and are unimportant to the records.

#### *Meteorological Reductions.*

The results given in the Meteorological Section refer to the day commencing at 0h. U.T., 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 9h., 15h., and 21h., reference being made, however, to the photographic register when necessary to obtain the values corresponding to the limits "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, dry-bulb 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  $45^{\circ}$ . The monthly mean barometer reading is, however, corrected for the effect of the change of site of April 1917 before deducing the deviation from the mean of sixty-five years 1841-1905 (pp. E 14-36). This correction, amounting to  $-.007$  inch, was by oversight omitted in the years 1917-1926.

From 1926 January 1 the mean daily temperature of the dew-point and degree of humidity have been deduced from the mean daily temperatures of the air and of evaporation by use of *Hygrometric Tables* issued by the Meteorological Office, Air Ministry.

In the same way the mean hourly values of the dew-point temperature and degree of humidity in each month (pages E 41 and E 42) have been calculated from the corresponding mean hourly values of air and evaporation temperatures (pages E 40 and E 41).

The excess of the mean temperature of the air on each day above the average of sixty-five years, given in the "Daily Results of the Meteorological Observations," is found by comparing the numbers contained in column 5 with a table of average daily temperatures found by smoothing the accidental irregularities of the daily means reduced from the observations for the sixty-five years 1841-1905. In this series the mean daily temperature from 1841 to 1847 depends usually on 12 observations daily, in 1848 on 6 observations daily, and from 1849 to 1905 on 24 hourly readings from the photographic record. The smoothed numbers are given in Table VII, *Reduction of the Greenwich Meteorological Observations*, Part IV and also in the introduction for 1910.

The daily register of rain contained in column 16 is that recorded by the gauge No. 6, whose receiving surface is 5 inches above the ground. This gauge is read at 9h., 15h., and 21h. The continuous record of Osler's self-registering gauge shows whether the amounts measured at 9h. are to be placed to the same, or to the preceding day; and in cases in which rain fell both before and after midnight, also gives the means of ascertaining the proper proportion of the 9h. amount which should be placed to each day. The number of days of rain given in the footnotes, and in the abstract tables, pages E 39 and E 46, is formed from the records of gauge No. 6. In this numeration only those days are counted on which the fall amounted to or exceeded  $0^{\text{in}}.005$ .

## E 10 INTRODUCTION TO GREENWICH METEOROLOGICAL OBSERVATIONS, 1936.

No particular explanation of the anemometric results is 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.

With regard to the "Proportions of Wind referred to the cardinal points" in the monthly summary on pp. E 14—37, formerly the figures were such that the whole month was represented by the number of days in the month. In the 1933 volume a change was made, and the whole month is now represented by 100, so that the figures are the equivalent of "percentages."

The mean amount of cloud given in the footnotes on the right-hand pages E 15 to E 37, and in the abstract table, page E 39, is the mean found from observations made at 9h., 12h. (noon), 15h., and 21h. each day.

As regards the notation for clouds and weather, several changes were made in the 1934 volume in order to bring the symbols into general accord with those in use at the British Meteorological Office.

The following are the symbols which have been adopted. Where a change from the symbol previously in use has been made, an asterisk (\*) is placed after the word or words for which the symbol stands.

### BEAUFORT WEATHER NOTATION.

(modified in conformity with the usage of the British Meteorological Office).

- b, blue sky (less than one quarter covered with cloud)
- bc, sky partially cloudy (less than three-quarters covered)
- c, sky generally cloudy, but not completely overcast
- d, drizzle
- e, wet air without falling rain
- f, fog, with objects invisible distant more than 1100 yards
- F, fog, with objects invisible distant more than 220 yards
- g, gloom (\*)
- h, hail (\*)
- i, intermittent
- k, storm (in combination with other symbols) (\*)

l,	lightning
m,	mist, with limit of visibility between 1100 and 2200 yards
o,	sky overcast with unbroken cloud
p,	passing showers (*)
q,	squall (*)
r,	rain
s,	snow (*)
rs,	sleet (*)
t,	thunder
u,	threatening sky
v,	exceptional visibility ; i.e. abnormal transparency of air
w,	dew (*)
x,	hoar frost (*)
y,	dry air ; i.e. relative humidity less than 60 per cent.
z,	haze (*)

A capital letter indicates "intense"

The suffix *o* indicates "slight"

A letter repeated indicates "continuous"

## CLOUD FORMS (\*)

<i>Acu</i> ,	Alto-cumulus	<i>Cu</i> ,	Cumulus
<i>Ast</i> ,	Alto-stratus	<i>Cunb</i> ,	Cumulo-nimbus
<i>Ci</i> ,	Cirrus	<i>Nbst</i> ,	Nimbo-stratus
<i>Cicu</i> ,	Cirro-cumulus	<i>St</i> ,	Stratus
<i>Cist</i> ,	Cirro-stratus	<i>Stcu</i> ,	Strato-cumulus
		<i>Fr</i> ,	Fracto-

## ADDITIONAL SYMBOLS

*lu-ha*, lunar halo  
*prhn*, parhelion

*so-ha*, solar halo

1937, July 17.

H. SPENCER JONES,  
ASTRONOMER ROYAL.



ROYAL OBSERVATORY, GREENWICH.

Results of  
Meteorological Observations  
1936

GREENWICH MAGNETIC AND METEOROLOGICAL RESULTS 1936.

MONTH and DAY, 1936	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.	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.				
Jan. 1	29.018	48.7	44.4	4.3	46.5	+ 7.9	45.6	44.5	2.0	5.4	0.4	93	55.3	41.2	45.0	0.299	0.0	7.9
2	29.017	46.5	41.6	4.9	44.9	+ 6.5	44.2	43.5	1.4	2.9	0.9	94	53.5	35.9	45.0	0.017	0.0	7.9
3	29.184	44.1	35.2	8.9	38.1	- 0.2	37.5	36.6	1.5	2.5	0.4	94	41.4	31.6	45.1	0.012	0.0	7.9
4	29.711	45.5	36.2	9.3	41.6	+ 3.3	40.2	38.3	3.3	5.0	1.2	88	55.7	31.9	45.2	0.000	0.7	8.0
5	29.551	45.2	34.1	11.1	40.8	+ 2.6	39.5	37.7	3.1	7.7	0.7	88	50.3	30.0	45.3	0.046	0.0	8.0
6	29.122	46.8	42.0	4.8	44.9	+ 6.8	43.0	40.5	4.4	6.0	3.1	85	57.0	38.1	45.2	0.185	1.1	8.0
7	29.125	45.0	40.6	4.4	43.3	+ 5.3	42.3	41.0	2.3	3.6	1.2	92	49.2	36.3	45.1	0.310	0.1	8.0
8	29.316	49.1	41.0	8.1	45.4	+ 7.5	44.2	42.7	2.7	4.5	1.0	91	53.2	37.0	45.1	0.104	0.0	8.1
9	29.302	56.1	44.7	11.4	50.8	+ 12.9	49.1	47.3	3.5	9.8	1.6	88	55.2	40.2	45.1	0.253	0.0	8.1
10	29.326	55.0	48.7	6.3	51.7	+ 13.8	48.7	45.5	6.2	8.6	5.4	79	74.0	44.5	45.2	0.088	2.6	8.1
11	29.872	48.8	39.6	9.2	43.3	+ 5.4	39.1	32.5	10.8	13.9	7.5	66	52.0	33.2	45.2	0.000	0.0	8.2
12	30.059	41.0	29.7	11.3	36.6	- 1.3	35.1	32.7	3.9	8.8	0.8	85	48.9	24.1	45.2	0.000	0.2	8.2
13	30.045	40.1	30.3	9.8	35.1	- 2.9	33.9	31.8	3.3	7.1	0.8	88	43.8	25.1	45.2	0.000	0.0	8.2
14	30.125	37.3	26.8	10.5	31.3	- 6.7	30.1	27.7	3.6	13.0	0.3	86	43.2	17.7	45.0	0.000	1.1	8.3
15	29.981	35.4	24.8	10.6	30.6	- 7.5	29.2	26.3	4.3	8.9	0.7	84	39.2	16.9	44.8	0.002	0.0	8.3
16	29.450	36.9	31.7	5.2	34.0	- 4.3	32.9	30.9	3.1	3.8	0.0	89	48.8	28.6	44.5	0.173	0.0	8.3
17	29.226	35.3	27.8	7.5	32.6	- 5.9	31.2	28.7	3.9	7.9	0.0	86	43.4	24.6	44.0	0.110	1.0	8.4
18	29.246	37.3	28.1	9.2	33.7	- 4.9	32.5	30.3	3.4	6.8	0.3	87	39.8	25.9	43.8	0.199	0.1	8.4
19	29.187	38.0	25.1	12.9	32.2	- 6.5	31.7	30.9	1.3	3.3	0.0	95	44.5	25.3	43.5	0.055	0.0	8.5
20	28.817	48.4	38.0	10.4	43.4	+ 4.6	41.5	38.9	4.5	9.8	0.0	84	65.8	35.9	43.3	0.262	1.0	8.5
21	29.051	43.0	35.4	7.6	38.7	- 0.1	35.4	29.5	9.2	14.4	4.7	69	66.3	31.6	43.1	0.000	4.7	8.6
22	29.331	40.7	29.6	11.1	34.6	- 4.2	33.3	31.0	3.6	8.6	0.5	86	56.2	26.2	43.0	0.129	1.7	8.6
23	29.560	41.6	31.6	10.0	36.5	- 2.4	34.7	31.6	4.9	7.0	1.3	82	57.7	28.6	42.9	0.000	2.9	8.6
24	29.441	44.0	33.5	10.5	38.8	- 0.1	37.1	34.5	4.3	10.6	0.9	84	57.3	30.6	42.8	0.114	0.0	8.7
25	29.158	49.0	39.0	10.0	44.9	+ 5.8	44.5	44.1	0.8	2.2	0.0	97	59.8	38.0	42.7	0.034	0.0	8.7
26	29.215	48.0	37.6	10.4	44.3	+ 5.0	43.1	41.6	2.7	8.7	0.4	90	67.5	32.3	42.7	0.110	3.5	8.8
27	29.258	47.2	36.9	10.3	43.4	+ 3.9	41.9	39.9	3.5	5.1	0.4	87	54.0	32.8	42.8	0.076	0.0	8.9
28	29.221	51.6	42.5	9.1	46.5	+ 6.9	44.3	41.6	4.9	14.3	0.8	83	68.0	38.7	43.0	0.584	0.4	8.9
29	28.966	50.7	37.6	13.1	45.7	+ 6.0	44.2	42.3	3.4	6.3	1.2	88	70.1	32.7	43.1	0.042	0.2	8.9
30	29.321	49.9	37.8	12.1	44.3	+ 4.6	43.0	41.4	2.9	7.1	1.2	89	71.1	32.9	43.2	0.059	1.5	9.0
31	29.151	52.1	46.6	5.5	49.2	+ 9.5	47.3	45.2	4.0	9.2	1.4	86	55.3	41.4	43.4	0.290	0.0	9.1
Means	29.366	45.1	36.1	9.0	40.9	+ 2.3	39.4	37.1	3.8	7.5	1.3	86.5	54.8	31.9	44.1	Sum 3.553	0.7	8.4
Number of Column for Reference.	I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the astronomical day, 0<sup>h</sup>-24<sup>h</sup> Universal Time, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the 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 Hygrometrical Tables, published by the Meteorological Office, Air Ministry. 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 29.366in., being 0.435in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 56.1 on January 9; the lowest in the month was 24.8 on January 15; and the range was 31.3. The mean of all the highest daily readings in the month was 45.1, being 2.0 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 36.1, being 2.4 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 9.0, being 0.4 less than the average for the 65 years, 1841-1905. The mean for the month was 40.9, being 2.3 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1936.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.				CLOUDS AND WEATHER.				
	POLARIS		8 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.			
								0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>		
Jan. 1	0.9	0.07	0.3	0.03	S : SSW	S : Calm : WSW	3.6	0.15	262	c d <sub>o</sub> rr	r c Nbst r <sub>o</sub> r	c Nbst ir	c i r m
2	0.9	0.07	0.8	0.06	SW : S	SW	0.2	0.01	214	c d	d c r <sub>o</sub> m	r <sub>o</sub> c Acu m	c m <sub>o</sub> o
3	2.0	0.15	0.9	0.06	Calm	N : W	0.2	0.00	176	o m <sub>o</sub>	o m f	ff	f c r m
4	10.4	0.75	9.1	0.66	W : WSW	WSW	1.0	0.05	285	c m	c Stcu m	c b m	b m w
5	4.3	0.31	3.5	0.26	S	SSE : S	4.0	0.35	337	b w c	c Ast	c Stcu bc	c r c
6	5.7	0.41	4.3	0.31	S : SSW	SSW	4.6	0.50	383	c	c i r	c b c Ci Acu	c lu.-ha r b c
7	2.3	0.16	1.9	0.14	S : SSE	SSW : SW	1.2	0.08	275	c r <sub>o</sub> r	r r <sub>o</sub>	r R r b Acu m <sub>o</sub>	c r <sub>o</sub>
8	5.3	0.39	4.7	0.34	WSW : SSW	SSW	5.0	0.39	354	c	c Ast r <sub>o</sub>	r <sub>o</sub> rr d <sub>o</sub>	d <sub>o</sub> d <sub>o</sub>
9	..	..	..	..	SW : SSW	SSW : SW	20.0	1.98	481	r b c	c Nbst i r <sub>o</sub>	c i r <sub>o</sub> q r	r <sub>o</sub> c
10	..	..	..	..	SW	SW : WSW	16.0	2.30	—	c r <sub>o</sub> r	c p b Frcu	bc Frcu	c b
11	0.0	0.00	0.0	0.00	W	W : WSW	10.5	1.03	414	b c b	b bc m <sub>o</sub>	c Ci so.-ha y b c	c m
12	4.9	0.37	4.3	0.32	WSW : Calm	Calm	0.0	0.00	147	c m	c b Ci m f	b f m f	b x f
13	12.0	0.91	6.6	0.50	Calm	W : Calm	0.1	0.01	174	c f	c Acu f	c Acu b f	b f x
14	13.3	1.00	10.3	0.78	Calm	NE : Calm	0.0	0.00	174	b f b x	b Ci f	b Ci f m	b m x
15	6.3	0.47	2.0	0.15	Calm	Calm : ESE	0.5	0.01	180	b c m x	c Stcu m f	c s <sub>o</sub> f b m	c
16	0.0	0.00	0.0	0.00	ESE : E	Calm : NE : NNE	0.4	0.01	218	c	c s <sub>o</sub> s d <sub>o</sub> m	c s r c m	c ss rs
17	5.4	0.41	5.1	0.39	NNE : N	N : NW : WSW	3.9	0.47	391	rs d	d c r <sub>o</sub> s <sub>o</sub> c m	c b Frcu m <sub>o</sub>	b c
18	2.3	0.17	0.0	0.00	SW : NW	NNW : Calm	2.2	0.15	261	c s c r r	rr ss c f	c b m c f	f F
19	0.0	0.00	0.0	0.00	Calm : ENE	E : ESE	0.6	0.03	212	f b x F	F c s f	c f c	c r r <sub>o</sub>
20	5.2	0.40	3.8	0.29	SE : SSW	SSW : SW	7.1	0.85	425	c r r	c Stcu	c Nbst R i r	c i r <sub>o</sub>
21	12.5	0.97	12.5	0.97	SW : WSW	WSW	6.0	0.90	—	c b	b c Stcu	c Stcu y b	b
22	9.5	0.73	8.2	0.63	WSW : SW	SW : WSW	1.4	0.05	—	b x	b c Ast m	c m <sub>o</sub> r <sub>o</sub> rs	rs c b
23	2.5	0.20	1.9	0.14	WSW	WSW : SW	0.8	0.09	—	b x	b f c m	c Cist so.-ha c m	c r <sub>o</sub>
24	0.0	0.00	0.0	0.00	Calm : SE	ESE	2.0	0.06	—	c r <sub>o</sub> b	c Ci so.-ha	c r <sub>o</sub> r	r r <sub>o</sub>
25	0.0	0.00	0.0	0.00	Calm : SE	SE : Calm	0.3	0.01	—	o d <sub>o</sub>	o d <sub>o</sub> F m	c d <sub>o</sub> r d <sub>o</sub>	c r <sub>o</sub> c
26	9.0	0.71	8.6	0.67	Calm : WSW	SW : SSW	1.2	0.04	—	c r dd	b c Frcu m	c m	c b
27	5.7	0.44	5.1	0.40	S : SSW	SSW : SW	5.5	0.36	—	b w c	c Nbst r <sub>o</sub> r	r c Ast b	c r c b
28	0.0	0.00	0.0	0.00	SSW	WSW : Calm : S	3.7	0.55	—	b c	c r r c Cist	c Cist so.-ha c	c r r
29	8.0	0.62	7.3	0.57	S	S : W : SW	3.9	0.40	341	d c	c d c Nbst	c d c Nbst	c b
30	0.0	0.00	0.0	0.00	SSW : SW	SSW	1.6	0.16	312	b c r d	b c Acu m <sub>o</sub>	c r <sub>o</sub> d <sub>o</sub>	d <sub>o</sub> d <sub>o</sub>
31	2.8	0.22	2.3	0.18	SW : WSW	WSW : SW	11.0	0.80	421	c d d <sub>o</sub>	c d c m <sub>o</sub>	r R c m <sub>o</sub>	c b c
Means	4.5	0.34	3.6	0.27	..	..	..	0.38	293				
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean Temperature of Evaporation for the month was 39°.4, being 2°.2 higher than  
 The mean Temperature of the Dew Point for the month was 37°.1, being 2°.0 higher than  
 The mean Degree of Humidity for the month was 86.5, being 0.3 less than  
 The mean Elastic Force of Vapour for the month was 0.221 in., being 0.016 in. greater than  
 } the average for the 65 years, 1841-1905.

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.7.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.088. The maximum daily amount of Sunshine was 4.7 hours on January 21.

The highest reading of the Solar Radiation Thermometer was 74°.0 on January 10; and the lowest reading of the Terrestrial Radiation Thermometer was 16°.9 on January 15.

The Proportions of Wind referred to the cardinal points were N. 5, E. 9, S. 37, W. 32, calm or nearly calm conditions, 17, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 20.0 lbs. on the square foot on January 9. The mean daily Horizontal Movement of the Air for the month was 293 miles; the greatest daily value was 481 miles on January 9, and the least daily value was 147 miles on January 12.

Rain (0.005 in. or over) fell on 23 days in the month, amounting to 3.553 ins., as measured by gauge No. 6 partly sunk below the ground; being 1.672 in. greater than the average fall for the 65 years, 1841-1905.



MONTH and DAY, 1936.	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.	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.				
Feb. 1	29.028	51.4	43.3	8.1	46.9	+ 7.3	44.9	42.5	4.4	9.3	1.4	84	64.8	39.6	43.6	0.098	1.1	9.1
2	28.985	45.5	36.0	9.5	42.3	+ 2.8	40.7	38.5	3.8	6.9	0.9	86	64.7	34.0	43.8	0.096	0.1	9.2
3	29.437	38.0	32.2	5.8	35.9	- 3.6	33.1	27.7	8.2	10.8	4.1	72	50.9	27.2	43.8	0.001	1.0	9.2
4	29.840	35.6	25.0	10.6	30.6	- 8.9	28.2	22.7	7.9	14.2	1.6	73	52.2	17.0	43.7	0.000	0.5	9.3
5	30.069	40.2	24.6	15.6	33.7	- 5.9	31.5	27.3	6.4	14.3	1.2	78	62.0	16.6	43.6	0.004	0.1	9.3
6	30.261	44.0	30.6	13.4	36.7	- 2.9	34.1	29.2	7.5	18.6	3.7	74	83.4	25.5	43.3	0.000	6.8	9.4
7	30.322	38.0	27.0	11.0	31.7	- 7.8	29.6	25.3	6.4	15.0	4.3	77	75.6	21.1	43.0	0.000	7.9	9.4
8	30.060	36.7	27.0	9.7	32.2	- 7.1	30.1	26.0	6.2	11.7	3.2	77	76.0	21.3	42.7	0.000	5.3	9.5
9	29.752	40.2	28.6	11.6	33.9	- 5.2	31.7	27.5	6.4	12.8	1.0	78	82.1	24.6	42.5	0.000	7.2	9.6
10	29.823	37.2	28.0	9.2	32.9	- 6.0	30.3	25.2	7.7	11.9	4.1	73	82.8	24.2	42.2	0.000	4.6	9.6
11	29.745	30.8	25.0	5.8	28.2	-10.6	25.4	17.5	10.7	14.6	5.9	65	44.7	21.9	41.9	0.000	0.3	9.7
12	29.918	39.4	19.4	20.0	29.2	- 9.6	27.2	22.5	6.7	22.0	1.2	75	74.8	8.3	41.7	0.000	6.9	9.7
13	29.939	40.8	23.6	17.2	32.0	- 7.0	30.4	27.3	4.7	12.8	0.6	83	78.9	12.0	41.5	0.000	3.7	9.8
14	29.641	42.7	30.0	12.7	34.8	- 4.5	33.3	30.5	4.3	11.3	1.1	84	84.0	26.5	41.2	0.009	5.8	9.9
15	29.328	42.8	34.5	8.3	38.6	- 0.8	38.1	37.4	1.2	1.9	0.0	95	44.2	30.1	41.0	0.116	0.0	9.9
16	29.323	37.0	30.9	6.1	34.1	- 5.4	33.6	32.8	1.3	2.2	0.0	95	46.3	27.1	40.8	0.000	0.0	10.0
17	29.244	52.6	35.7	16.9	43.2	+ 3.6	42.2	40.9	2.3	7.6	0.0	92	93.0	35.1	40.9	0.053	1.2	10.0
18	28.973	54.3	44.5	9.8	48.5	+ 9.0	46.9	45.1	3.4	8.2	1.7	88	83.0	42.3	40.9	0.385	1.7	10.1
19	29.159	50.1	41.6	8.5	46.5	+ 7.0	44.9	43.0	3.5	10.1	1.8	87	62.3	35.5	40.9	0.094	0.0	10.2
20	29.597	52.0	37.0	15.0	42.7	+ 3.2	40.0	36.0	6.7	20.4	2.8	77	102.5	32.9	41.1	0.001*	7.9	10.2
21	29.545	47.4	31.4	16.0	41.9	+ 2.3	40.1	37.6	4.3	10.1	2.8	84	56.2	25.6	41.3	0.058	0.0	10.3
22	29.305	44.8	29.8	15.0	38.1	- 1.6	37.4	36.3	1.8	5.1	0.0	93	47.4	24.9	41.4	0.296	0.0	10.4
23	29.197	43.2	36.3	6.9	39.6	- 0.2	38.5	36.9	2.7	7.3	1.8	90	52.9	30.7	41.4	0.055	0.0	10.5
24	29.427	47.4	34.9	12.5	39.6	- 0.4	38.3	36.4	3.2	9.5	1.5	88	86.7	30.4	41.7	0.011	1.3	10.5
25	29.857	38.8	35.7	3.1	37.5	- 2.6	35.9	33.4	4.1	6.5	1.0	85	48.7	34.0	41.7	0.092	0.0	10.6
26	29.812	43.1	34.8	8.3	38.4	- 1.8	35.7	31.1	7.3	14.9	2.8	75	59.8	31.9	41.7	0.002	0.0	10.7
27	29.249	44.9	30.4	14.5	40.3	- 0.0	38.7	36.5	3.8	9.0	0.9	86	68.9	25.4	41.8	0.070	0.9	10.7
28	29.025	40.9	29.4	11.5	34.0	- 6.3	33.1	31.5	2.5	6.5	0.0	91	80.5	24.5	41.7	0.002*	0.8	10.8
29	28.960	38.5	32.8	5.7	36.1	- 4.2	34.9	32.8	3.3	5.0	1.6	88	54.1	28.0	41.8	0.029	0.1	10.9
Means	29.546	42.7	31.7	11.0	37.2	- 2.3	35.5	32.3	4.9	10.7	1.8	82.5	67.7	26.8	42.0	Sum 1.472	2.3	9.9
Number of Column for Reference.	I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the astronomical day, 0<sup>h</sup>-24<sup>h</sup> Universal Time, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the 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 Hygrometrical Tables, published by the Meteorological Office, Air Ministry. 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 29.546in., being 0.263in. lower than the average for the 65 years, 1841-1905.

\*Rainfall (Column 16). The amount entered on February 20 is derived from hoar frost, and that on February 28 from wet fog.

TEMPERATURE OF THE AIR.

The highest in the month was 54.3 on February 18; the lowest in the month was 19.4 on February 12; and the range was 34.9. The mean of all the highest daily readings in the month was 42.7, being 2.5 lower than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 31.7, being 2.5 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 11.0, being equal to the average for the 65 years, 1841-1905. The mean for the month was 37.2, being 2.3 lower than the average for the 65 years, 1841-1905.

MONTH and DAY 1936.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.			
	POLARIS		δ URSÆ 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.		0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>		
Feb. 1	0.0	0.00	0.0	0.00	SW : S	WSW	WSW : SW	2.5	0.13	293	c		c R r r. c Stcu	c	c lu.-ha r.
2	4.5	0.36	3.7	0.30	WSW : NW		NW : N	3.4	0.14	306	c rr		rr c m.	c Stcu m.	c r b
3	11.1	0.89	11.0	0.88	NNW : NW		NNW	4.5	0.31	364	b c		c b c s. m.	c b Frcu c m.	c b x
4	3.9	0.31	3.1	0.25	NNW		NNW: Calm : SSW	0.5	0.02	214	b x		b f	b m f	b f x c
5	3.5	0.28	2.8	0.23	SSW : SSE		SE : Calm	0.1	0.00	210	c		c Acu m	c Acu m. c	c d. c
6	12.5	1.00	12.5	1.00	Calm : SE		SE : ESE	0.7	0.04	219	c b x		b m c Ci	b c b Ci	b x
7	12.5	1.00	12.5	1.00	ESE		E : ESE	0.8	0.05	237	b x		b m.	b	b x
8	9.2	0.77	9.0	0.75	ESE		E : ESE	5.3	0.61	333	b x		c Acu m.	c b c	c b
9	7.6	0.63	7.0	0.58	ESE		E	4.2	0.31	333	b x		b m.	b	b c
10	6.8	0.57	5.0	0.42	E		ESE	17.2	3.12	554	c		c bc Frcu q	b c Cist so.-ha c q	c b
11	11.7	0.97	10.7	0.89	ESE		ESE : E	3.5	0.16	276	b c		c Stcu y	c Stcu m.	c b
12	12.0	1.00	12.0	1.00	Calm : E		E : Calm	0.1	0.02	180	b x		b f m	b m.	b m x
13	11.6	0.97	11.1	0.92	ENE : Calm : E		E	1.0	0.06	243	b m x		b F f z.	b y c Acu z.	c b m.
14	2.3	0.19	1.7	0.14	E		E : Calm	1.7	0.12	290	b x		b Ci m.	b Ci c m.	c b o r
15	1.6	0.14	0.4	0.03	Calm		Calm : NNW	0.0	0.00	124	r d		o F d. d.	o F d. D d. f	o f d.
16	0.0	0.00	0.0	0.00	NW : Calm : WSW		Calm : ENE : E	0.0	0.00	186	o f		ff	f Fe	Fe Fe
17	2.5	0.22	2.1	0.19	E : Calm : S		S : SE	0.6	0.03	215	r d.		c f c Stcu	c Stcu	c b c r.
18	5.5	0.48	4.1	0.36	SE : S		SSW	5.0	0.84	409	c rr		dd c	c p b Frst	b c
19	10.5	0.91	9.2	0.80	SSW : S		SSW : WSW	2.7	0.12	284	c d		c d c r d.	d. c r c b	b c b
20	3.6	0.31	2.3	0.20	WSW : SW		SW : S : SE	0.4	0.06	247	b x		b m b Frcu	b c Frcu y	bc c
21	8.7	0.76	5.7	0.50	SSE : SW		W : Calm	1.9	0.09	231	c i r d.		c Stcu	c Stcu	b x f m
22	3.6	0.32	3.3	0.30	Calm : ENE		E : SSW	3.6	0.16	241	b x c m		rr m	rr m c r. c	c b c
23	3.3	0.30	2.5	0.22	SSW : WSW		WNW : WSW	0.9	0.05	250	c d. d.		d. c m	c m. d.	d. b c
24	0.6	0.05	0.3	0.03	SSW : Calm		Calm : ESE : NE	0.6	0.02	172	c d.		c m c Stcu	c p. Cumb b	c r
25	0.0	0.00	0.0	0.00	NE		NE : NNE	3.0	0.27	324	rr		rr c Ast	c h c	c
26	0.3	0.02	0.0	0.00	Calm : SW		SW	2.3	0.13	239	c		c f c Ast	c Stcu y	c d. d.
27	3.3	0.29	0.0	0.00	SW : WSW		Calm	2.4	0.14	221	r d. d. r		c r. c Acu m	c Stcu m	b x f
28	0.5	0.04	0.3	0.03	Calm		NNW : Calm	0.4	0.01	124	FeFe x		F c Stcu f	c m	c m f
29	0.0	0.00	0.0	0.00	Calm : W		NNW : NW	0.6	0.05	214	c f		c r. m.	c g r. m.	o d. d.
Means	5.3	0.44	4.6	0.38	..		..	..	0.24	260					
Number of Column for Reference.	19	20	21	22	23		24	25	26	27	28		29	30	31

The mean *Temperature of Evaporation* for the month was 35°.5, being 2°.2 lower than  
 The mean *Temperature of the Dew Point* for the month was 32°.3, being 2°.7 lower than  
 The mean *Degree of Humidity* for the month was 82.5, being 1.1 less than  
 The mean *Elastic Force of Vapour* for the month was 0.183in., being 0.021in. less than

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

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6.3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.226. The maximum daily amount of *Sunshine* was 7.9 hours on February 7 and 20.

The highest reading of the *Solar Radiation Thermometer* was 102°.5 on February 20; and the lowest reading of the *Terrestrial Radiation Thermometer* was 8°.3 on February 12.

The *Proportions of Wind* referred to the cardinal points were N. 12, E. 30, S. 22, W. 16, calm or nearly calm conditions, 20, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 17.2 lbs. on the square foot on February 10. The mean daily *Horizontal Movement of the Air* for the month was 260 miles; the greatest daily value was 554 miles on February 10, and the least daily value was 124 miles on February 15 and 28.

*Rain* (0.005in. or over) fell on 14 days in the month, amounting to 1.472in., as measured by gauge No. 6 partly sunk below the ground; being 0.008in. less than the average fall for the 65 years, 1841-1905.

MONTH and DAY 1936.	BAROMETER. Mean of 24 Hourly Values (corrected to 32° and reduced to 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.	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.				
Mar. 1	29.028	39.0	33.3	5.7	36.0	- 4.4	35.0	33.1	2.9	5.7	1.0	90	47.0	32.0	41.8	0.042	0.0	10.9
2	29.306	41.3	35.0	6.3	38.1	- 2.3	36.4	33.8	4.3	7.6	1.8	84	53.0	32.0	41.6	0.028	0.0	11.0
3	29.610	42.4	32.1	10.3	37.5	- 3.0	35.9	33.4	4.1	8.9	1.3	85	64.7	25.6	41.7	0.000	0.6	11.0
4	29.735	38.1	28.0	10.1	33.2	- 7.5	32.5	31.3	1.9	5.9	0.0	93	51.7	21.5	41.6	0.001*	0.0	11.1
5	29.671	50.3	36.5	13.8	41.3	+ 0.4	38.6	34.4	6.9	16.5	0.7	77	87.1	32.2	41.7	0.073	3.8	11.2
6	29.679	50.7	35.1	15.6	41.7	+ 0.7	38.7	33.9	7.8	14.4	1.8	74	88.2	30.9	41.6	0.026	2.1	11.2
7	29.670	51.6	30.5	21.1	41.7	+ 0.7	40.2	38.2	3.5	10.7	1.4	87	78.1	25.2	41.6	0.024	1.7	11.3
8	29.680	52.8	41.5	11.3	46.4	+ 5.3	45.8	45.0	1.4	4.7	0.3	95	71.6	33.6	41.7	0.005	0.1	11.3
9	29.629	55.5	43.1	12.4	48.1	+ 7.1	46.9	45.5	2.6	7.5	0.6	91	85.2	37.7	41.9	0.078	0.0	11.4
10	29.656	60.4	43.0	17.4	50.5	+ 9.6	48.3	45.9	4.6	12.0	0.6	84	103.9	37.9	42.1	0.007	5.0	11.5
11	29.658	47.8	40.3	7.5	43.5	+ 2.5	42.4	41.0	2.5	4.6	0.7	91	48.9	39.5	42.3	0.002	0.0	11.6
12	29.739	41.8	37.1	4.7	39.5	- 1.6	36.8	32.3	7.2	12.3	3.8	76	57.3	35.6	42.6	0.000	0.0	11.6
13	29.868	42.0	36.2	5.8	38.3	- 3.0	35.3	30.1	8.2	10.4	6.5	72	63.9	33.1	42.7	0.000	0.1	11.7
14	30.031	45.7	32.3	13.4	38.3	- 3.2	35.4	30.3	8.0	13.9	3.7	73	88.1	25.3	42.7	0.000	1.7	11.8
15	30.072	43.5	33.7	9.8	39.0	- 2.7	36.0	30.7	8.3	12.6	3.9	73	69.0	27.0	42.9	0.000	0.1	11.8
16	30.078	49.4	35.0	14.4	40.7	- 1.2	37.4	32.1	8.6	19.6	2.0	71	93.1	25.9	42.8	0.000	2.1	11.9
17	30.058	54.7	31.3	23.4	42.0	- 0.0	39.3	35.1	6.9	18.0	1.0	77	96.0	25.1	42.8	0.000	4.6	12.0
18	29.971	54.7	32.0	22.7	43.0	+ 1.0	38.4	30.8	12.2	23.9	2.0	62	106.2	22.9	42.8	0.000	9.7	12.0
19	29.738	59.0	33.5	25.5	46.7	+ 4.8	42.7	37.4	9.3	17.9	1.7	69	107.8	23.6	42.8	0.000	5.8	12.1
20	29.701	59.5	44.4	15.1	50.3	+ 8.4	47.3	43.9	6.4	12.1	3.7	79	109.1	36.1	42.9	0.000	1.3	12.1
21	29.651	65.3	43.1	22.2	53.9	+ 12.0	49.2	44.1	9.8	20.6	1.9	69	112.8	34.1	43.1	0.000	5.9	12.2
22	29.393	65.3	48.5	16.8	54.6	+ 12.6	49.5	44.0	10.6	19.0	7.3	68	127.3	44.3	43.2	0.000	2.7	12.3
23	29.294	57.1	42.8	14.3	50.6	+ 8.4	48.0	45.2	5.4	10.9	1.9	81	94.9	36.7	43.5	0.050	1.0	12.3
24	29.576	63.4	38.8	24.6	50.5	+ 8.1	47.2	43.4	7.1	18.0	0.5	77	121.9	29.6	44.0	0.001*	8.7	12.4
25	29.528	61.3	42.9	18.4	48.9	+ 6.2	46.3	43.3	5.6	16.7	0.4	80	111.0	39.1	44.2	0.000	4.1	12.5
26	29.400	53.1	43.9	9.2	48.5	+ 5.5	47.8	47.1	1.4	2.2	0.6	95	79.4	36.6	44.4	0.348	0.0	12.6
27	29.539	59.3	41.2	18.1	49.1	+ 5.8	46.4	43.3	5.8	13.3	0.4	80	101.4	33.9	44.7	0.003	1.5	12.6
28	29.671	62.6	40.8	21.8	51.6	+ 7.9	48.8	45.8	5.8	12.9	0.8	81	114.9	34.0	45.0	0.005	6.4	12.7
29	29.567	59.0	48.3	10.7	52.6	+ 8.5	51.2	49.8	2.8	5.3	1.4	90	74.3	44.9	45.0	0.104	0.0	12.7
30	29.618	61.9	48.1	13.8	53.8	+ 9.3	50.3	46.8	7.0	11.7	2.8	77	116.2	44.2	45.3	0.000	5.6	12.8
31	29.699	63.8	48.9	14.9	53.7	+ 8.8	50.0	46.3	7.4	13.6	2.8	75	116.8	44.9	45.6	0.000	3.4	12.9
Means	29.662	53.3	38.7	14.6	45.3	+ 3.4	42.7	39.3	6.0	12.4	1.9	79.9	88.4	33.1	43.0	Sum 0.797	2.5	11.9
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 astronomical day, 0h-24h Universal Time, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the 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 Hygrometrical Tables, published by the Meteorological Office, Air Ministry. 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 29.662in., being 0.091in. lower than the average for the 65 years, 1841-1905.

\*Rainfall (Column 16). The amount entered on March 4 is derived from frost and fog, and that on March 24 from dew.

TEMPERATURE OF THE AIR.

The highest in the month was 65.3 on March 21, 22; the lowest in the month was 28.0 on March 4; and the range was 37.3. The mean of all the highest daily readings in the month was 53.3, being 3.5 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 38.7, being 3.6 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 14.6, being 0.1 less than the average for the 65 years, 1841-1905. The mean for the month was 45.3, being 3.4 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1936.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.			
	POLARIS		δ URSÆ MINORIS.		OSLER'S.						ROBINSON'S			
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.			Pressure on the Square Foot.			0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.					
Mar. 1	0.4	0.04	0.2	0.02	NW : W	W : NW	0.7	0.05	230	rs id.	id. c m	cd. m.	cd c	
2	0.0	0.00	0.0	0.00	NW : N	N	1.1	0.09	246	cr	crs d. m.	c Stcu m.	c	
3	7.7	0.72	2.7	0.25	Calm	Calm	0.1	0.00	131	c	c Stcu m	c Stcu b	cf x	
4	0.1	0.01	0.0	0.00	Calm	Calm : SW	0.2	0.01	137	cb x c	c F f	f f	f x c	
5	8.0	0.75	7.8	0.72	SW : WSW : W	W : WSW	1.7	0.10	265	cr d c	c b c Stcu	c Frcu y	b m	
6	7.7	0.71	6.5	0.60	WSW : W : NW	WNW : SW	1.3	0.11	278	b c r	d. c Stcu m.	c Stcu y	c b	
7	0.0	0.00	0.0	0.00	SW : S	S : SSE	1.5	0.15	258	b lu.-ha x	c so.-ha c	c Stcu	d. r. c	
8	2.5	0.24	1.4	0.14	Calm	Calm	0.9	0.01	136	cd. c	c f m	c Stcu m	c m	
9	1.4	0.14	0.5	0.05	Calm : SSW	SSW : Calm	0.5	0.02	178	ir	ir c Stcu	c Nbst r. r	c m	
10	1.3	0.12	0.4	0.04	Calm	NE : ENE	0.7	0.03	176	cm d	c f c Acu m	bc Acu	cb o	
11	0.0	0.00	0.0	0.00	NE	ENE	2.5	0.23	327	od. m	o m	o St m.	o	
12	0.0	0.00	0.0	0.00	ENE : E	ENE : NE	2.0	0.28	334	o	o c Stcu	c Stcu	c	
13	3.4	0.33	1.1	0.11	NE : E	ESE : E	1.5	0.10	265	c	c Stcu	c Stcu	c	
14	3.1	0.32	2.1	0.21	Calm : ESE	E : Calm	0.8	0.03	160	c	c Stcu	c y b	b x c	
15	4.1	0.42	3.2	0.33	Calm : WSW : NW	NNW : Calm	0.3	0.02	187	cd c	c Ast m	c Acu m b	b f c	
16	7.0	0.72	5.0	0.51	NNE : Calm	Calm : S	0.1	0.00	183	bc	bc so.-ha y	bc Cist so.-ha	cb	
17	9.2	0.94	8.1	0.83	SSW : SW	SW : Calm	0.0	0.00	197	b x	c Acu m	b z. y	b m.	
18	9.7	1.00	9.7	1.00	Calm : SE	ESE : E	2.7	0.17	227	b x	b z. y	b y	b	
19	3.5	0.38	2.9	0.30	E : Calm	SE : S : SSW	0.9	0.07	220	b x	b c Ci so.-ha	c so.-ha y c	cr.	
20	5.3	0.54	4.3	0.44	SSE : S : SSW	SSW : SSE	1.0	0.07	250	c	c Acu	c p. c	cb	
21	4.7	0.50	2.6	0.28	Calm : SSE	SSE : SE	3.0	0.13	242	c	c p. b Frcu	b c y	c	
22	0.5	0.05	0.3	0.03	SSE : S	SSW : SSE : ESE	5.1	0.23	280	c	c Acu y	bc y c	cr. c	
23	9.3	1.00	8.7	0.94	S : E : ENE	SSW	3.1	0.19	284	cr r	c Stcu	cd. r c	b	
24	9.1	0.99	9.0	0.97	S : SSE	SE : ESE : E	2.1	0.15	267	b w	b c Frcu y	c Frcu y b	b w	
25	0.0	0.00	0.0	0.00	E : ENE	ESE : E	1.3	0.13	279	b c	c b Acu	b c Ci so.-ha	c	
26	6.3	0.69	5.9	0.64	NE : E	ESE : Calm	1.2	0.07	246	cr r	rr m	rr c b m	b c m. b	
27	4.6	0.50	4.0	0.43	Calm : SE : SSW	SSW : S	1.0	0.07	240	b c w	c Stcu	c Stcu bc	b c p	
28	2.1	0.24	1.6	0.18	Calm : S	SSW : S	0.6	0.05	205	cb	b c Frcu	c	cd. r	
29	2.7	0.32	2.1	0.23	S : SSE	SSW : SW	2.2	0.20	297	cr	rr d	cd. d.	c	
30	1.9	0.22	1.7	0.19	SW : WSW	SW	4.0	0.44	370	cb	b c Acu	c Stcu	c	
31	1.1	0.12	0.4	0.04	SW	SW	3.0	0.18	312	c	c so.-ha c	d. c Stcu	cd	
Means	3.8	0.39	3.0	0.31	..	..	..	0.11	239					
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29	30	31	

The mean Temperature of Evaporation for the month was 42°.7, being 3°.3 higher than  
 The mean Temperature of the Dew Point for the month was 39°.3, being 3°.7 higher than  
 The mean Degree of Humidity for the month was 79.9, being 1.8 greater than  
 The mean Elastic Force of Vapour for the month was 0.241in., being 0.032in. greater than  
 } the average for the 65 years, 1841-1905.

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 8.1.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.212. The maximum daily amount of Sunshine was 9.7 hours on March 18.

The highest reading of the Solar Radiation Thermometer was 127°.3 on March 22; and the lowest reading of the Terrestrial Radiation Thermometer was 21°.5 on March 4.

The Proportions of Wind referred to the cardinal points were N. 9, E. 23, S. 30, W. 16, calm or nearly calm conditions, 22, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 5.1 lbs. on the square foot on March 22. The mean daily Horizontal Movement of the Air for the month was 239 miles; the greatest daily value was 370 miles on March 30, and the least daily value was 131 miles on March 3.

Rain (0.005in. or over) fell on 12 days in the month, amounting to 0.797in., as measured by gauge No. 6 partly sunk below the ground; being 0.723in. less than the average fall for the 65 years, 1841-1905.

MONTH and DAY 1936.	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.	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.				
April 1	29.600	58.4	47.3	11.1	51.3	+ 6.0	50.4	49.5	1.8	6.3	0.8	93	73.5	46.3	46.0	0.296	0.0	12.9
2	29.738	52.1	41.9	10.2	47.7	+ 2.0	46.4	44.9	2.8	6.0	0.6	90	56.0	40.6	46.1	0.029	0.0	13.0
3	29.895	46.2	36.8	9.4	41.8	- 4.2	39.4	35.8	6.0	10.2	0.8	79	67.8	34.7	46.2	0.059	0.0	13.1
4	29.810	48.9	35.5	13.4	40.6	- 5.6	37.4	32.2	8.4	18.0	1.7	72	100.5	29.5	46.3	0.174	3.5	13.1
5	30.035	44.6	34.3	10.3	39.6	- 6.7	36.1	30.2	9.4	14.7	2.8	68	70.7	27.9	46.1	0.000	0.3	13.2
6	29.994	44.7	35.8	8.9	40.2	- 6.1	36.3	29.5	10.7	14.1	5.1	66	68.0	25.5	46.0	0.000	0.1	13.3
7	29.802	49.5	35.8	13.7	42.1	- 4.2	38.2	32.0	10.1	18.3	5.1	67	103.2	25.5	45.9	0.000	2.0	13.3
8	29.899	48.3	36.3	12.0	42.2	- 3.9	38.6	33.1	9.1	14.0	4.6	69	72.2	29.8	45.7	0.000	0.4	13.4
9	29.986	51.9	40.6	11.3	45.0	- 1.0	41.3	35.9	9.1	24.6	2.8	71	111.2	36.1	45.6	0.000	5.1	13.4
10	29.958	52.2	39.0	13.2	43.2	- 2.7	39.5	33.9	9.3	19.0	4.4	69	109.2	28.0	45.4	0.000	3.7	13.5
11	29.740	48.0	36.8	11.2	40.8	- 5.0	37.6	32.4	8.4	13.7	3.4	72	105.1	28.5	45.4	0.032	3.0	13.6
12	29.610	47.7	33.9	13.8	37.6	- 8.3	35.5	31.9	5.7	17.6	1.6	80	117.5	28.5	45.4	0.088	3.1	13.7
13	29.481	44.3	33.2	11.1	37.1	- 9.0	35.7	33.5	3.6	7.8	1.2	87	70.4	27.5	45.3	0.037	0.1	13.7
14	29.456	48.9	29.2	19.7	39.9	- 6.5	36.7	31.3	8.6	18.9	0.5	71	106.4	21.3	45.2	0.000	4.6	13.8
15	29.357	47.1	36.1	11.0	41.4	- 5.4	39.1	35.7	5.7	10.1	0.4	80	79.6	25.5	45.1	0.000	0.6	13.8
16	29.371	49.9	35.9	14.0	41.6	- 5.6	38.4	33.4	8.2	17.3	1.7	73	87.0	30.2	45.1	0.000	1.5	13.9
17	29.573	50.3	33.3	17.0	41.6	- 6.0	36.6	27.5	14.1	26.3	2.7	58	111.8	27.8	45.1	0.000	7.3	14.0
18	29.798	53.8	35.2	18.6	44.6	- 3.4	39.0	29.8	14.8	24.2	3.9	56	111.1	27.0	45.1	0.000	10.5	14.0
19	29.783	53.4	35.6	17.8	44.1	- 4.2	38.3	28.5	15.6	26.5	5.5	54	113.3	26.9	45.1	0.000	9.9	14.1
20	29.584	45.2	33.8	11.4	41.0	- 7.5	38.9	35.8	5.2	13.4	1.1	81	56.9	25.1	45.0	0.402	0.0	14.2
21	29.403	48.5	28.3	20.2	37.6	- 11.1	35.9	33.2	4.4	15.3	0.3	84	77.2	20.8	45.1	0.212	0.1	14.2
22	29.512	48.3	35.1	13.2	40.6	- 8.1	36.9	30.8	9.8	18.4	1.2	67	114.8	26.4	45.1	0.035	6.1	14.3
23	29.821	55.5	30.1	25.4	42.3	- 6.3	37.7	29.9	12.4	27.7	4.0	61	119.5	21.9	45.2	0.010	6.9	14.4
24	29.803	61.7	41.1	20.6	51.3	+ 2.7	46.4	40.5	10.8	23.0	1.5	66	120.2	38.7	45.1	0.060	6.3	14.4
25	29.910	62.0	50.1	11.9	54.8	+ 6.2	52.1	49.8	5.0	10.3	3.5	82	109.9	47.7	45.3	0.000	1.2	14.5
26	29.848	61.9	45.4	16.5	52.0	+ 3.4	48.6	45.0	7.0	18.5	1.7	77	129.7	36.8	45.7	0.234	5.1	14.5
27	30.073	59.7	42.1	17.6	49.4	+ 0.7	45.4	40.5	8.9	19.5	2.9	71	104.0	33.2	45.8	0.030	6.6	14.6
28	30.139	62.9	36.7	26.2	51.0	+ 2.2	46.3	40.6	10.4	20.1	1.2	68	109.7	28.6	46.2	0.000	8.2	14.7
29	30.138	63.1	43.1	20.0	53.6	+ 4.6	49.1	44.3	9.3	17.3	2.4	70	104.0	35.6	46.3	0.000	5.5	14.7
30	30.149	61.9	44.3	17.6	53.2	+ 4.1	47.4	40.5	12.7	21.4	4.5	62	124.1	35.2	46.7	0.000	4.7	14.8
Means	29.776	52.4	37.4	14.9	44.3	- 3.0	40.8	35.7	8.6	17.1	2.5	72.1	96.8	30.6	45.6	1.698	3.5	13.9
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 astronomical day, 0h-24h Universal Time, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the 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 Hygrometrical Tables, published by the Meteorological Office, Air Ministry. 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 29.776 in., being 0.021 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 63.1 on April 29; the lowest in the month was 28.3 on April 21; and the range was 34.8. The mean of all the highest daily readings in the month was 52.4, being 4.8 lower than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 37.4, being 1.6 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 14.9, being 3.3 less than the average for the 65 years, 1841-1905. The mean for the month was 44.3, being 3.0 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1936.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.			
	POLARIS		8 URSE 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.	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>	
hours	hours	hours	hours	lbs.	lbs.	miles.							
April 1	0·0	0·00	0·0	0·00	SW : Calm : SSE	SSW	3·0	0·12	251	c d rr	rr	r c r r	d <sub>o</sub> d <sub>o</sub>
2	0·0	0·00	0·0	0·00	SW : W : N	N : NE : E	1·0	0·08	265	c d o m	o St m <sub>o</sub>	o m <sub>o</sub> r <sub>o</sub> o	o d <sub>o</sub> d
3	0·0	0·00	0·0	0·00	E : ENE	E : ENE	4·7	0·76	409	o m <sub>o</sub>	o m <sub>o</sub> c Stcu	c Stcu	c r <sub>o</sub> s
4	8·3	0·97	8·1	0·96	ENE : NE	NE	13·1	1·06	451	rr d	c Nbst	c b Acu y	b c
5	0·0	0·00	0·0	0·00	NE : NNE	NE	2·6	0·32	365	b c	c Stcu y	c	c
6	4·4	0·52	2·1	0·25	NE	NNE : Calm	1·3	0·09	253	c	c Stcu	c Stcu	c
7	8·3	0·98	8·1	0·95	N : NNE	NE	1·7	0·21	333	c	c Stcu y	c Stcu y	c bc lu.-ha
8	1·3	0·15	0·7	0·08	NE	ENE : NE	3·7	0·20	328	c	c Stcu	c Stcu	b c
9	2·0	0·24	1·9	0·23	NE	ENE	5·5	0·59	387	c	c d <sub>o</sub>	c b y	b c
10	3·4	0·40	2·7	0·31	ENE : NE	NE : ESE : NNE	1·8	0·15	289	c	c Stcu	c b c y	c b c
11	6·0	0·75	5·2	0·66	N	N	8·5	0·35	314	c p	c Nbst i r <sub>o</sub>	c y p r h s c	b
12	3·0	0·37	2·4	0·30	N	Var : N	2·5	0·05	216	b c	c Stcu	c r s s b c	c r s c
13	7·0	0·88	6·4	0·80	W : Calm	Calm	0·0	0·00	190	c s r c	c Ast m	c Stcu b m	b c r <sub>o</sub> b
14	0·0	0·00	0·0	0·00	Calm : NE	NE : NNE	0·7	0·03	209	b x m	b c Stcu y	c Stcu y	c
15	2·1	0·26	1·1	0·14	Calm : N	N : NNE	0·6	0·02	204	c m F m	c Stcu	c r <sub>o</sub> c	c
16	6·9	0·86	6·7	0·84	N	N : NNE	1·1	0·07	246	c m <sub>o</sub>	c Stcu	c p bc y	c b
17	8·0	1·00	8·0	1·00	N	N : NNW	2·6	0·33	332	b	b c Frcu y	c bc Frcu y	c b
18	6·9	0·92	6·9	0·92	NNW : NW	NW : W	3·0	0·30	322	b	b Frcu y	b c y	b y
19	3·6	0·48	2·4	0·32	WSW : NW	NW : NNW	2·2	0·12	287	b c	c b c Frcu y	c Stcu y	c y b c
20	7·4	0·99	7·4	0·99	SW	NE : NNW	1·9	0·11	263	b c	c i r r r	rr c	bc b x
21	0·0	0·00	0·0	0·00	Calm : SW : S	S : SE : E	4·5	0·25	290	b x	c Cist so.-ha	c r s r	rr
22	7·5	1·00	7·5	1·00	NE : NNE	N : NW	5·0	0·65	366	i r <sub>o</sub>	c s <sub>o</sub> c y	c r s c y	b x
23	0·0	0·00	0·0	0·00	WSW	SW : SSW	1·3	0·10	268	b x	b c Acu y	c Ast y	c i r
24	0·3	0·03	0·1	0·01	S : W : NW	NW : W : SW	2·0	0·19	323	c i r	c Frcu y	c b Frcu y	b c p <sub>o</sub>
25	0·0	0·00	0·0	0·00	SW	SW	5·1	0·60	388	c	c Stcu	c Stcu	d <sub>o</sub> c
26	6·9	0·99	6·9	0·99	WSW	Var : W	2·0	0·16	283	c R i r	c Stcu y	c r <sub>o</sub> r c	b
27	6·3	0·90	6·1	0·88	WNW : NNW	NNW : Calm	4·0	0·15	249	b	b c Stcu	c Stcu y	c r h r <sub>o</sub> b m
28	3·3	0·47	3·3	0·47	Calm	Calm : SSE	1·0	0·02	161	b m w	b c y z <sub>o</sub>	c so.-ha y z <sub>o</sub>	c
29	0·0	0·00	0·0	0·00	Calm : N : NE	N : Calm	1·2	0·04	202	b c m	c m c Stcu	c Acu y	c
30	..	..	..	..	N : NNE	NNE : NE	1·5	0·14	273	c m	c Stcu y	c Frcu y	c b
Means	3·5	0·45	3·2	0·42	..	..	..	0·24	291				
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 40°.8, being 3°.1 lower than  
 The mean *Temperature of the Dew Point* for the month was 35°.7, being 3°.9 lower than  
 The mean *Degree of Humidity* for the month was 72.1, being 2.4 less than  
 The mean *Elastic Force of Vapour* for the month was 0.209in., being 0.035in. less than

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

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.7.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.256. The maximum daily amount of *Sunshine* was 10.5 hours on April 18.

The highest reading of the *Solar Radiation Thermometer* was 129°.7 on April 26; and the lowest reading of the *Terrestrial Radiation Thermometer* was 20°.8 on April 21.

The *Proportions of Wind* referred to the cardinal points were N. 40, E. 20, S. 10, W. 19, calm or nearly calm conditions, 11, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 13.1 lbs. on the square foot on April 4. The mean daily *Horizontal Movement of the Air* for the month was 291 miles; the greatest daily value was 451 miles on April 4, and the least daily value was 161 miles on April 28.

*Rain* (0.005in. or over) fell on 14 days in the month, amounting to 1.698in., as measured by gauge No. 6 partly sunk below the ground; being 0.132in. greater than the average fall for the 65 years, 1841-1905.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY, 1936.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation. Mean of 24 Hourly Values.	Of the Dew Point. Deducted 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	30.179	53.3	40.6	12.7	46.1	- 3.2	43.2	39.5	6.6	11.0	3.0	78	101.1	32.2	47.0	0.000	2.9	14.8
2	30.183	54.7	39.1	15.6	45.4	- 4.1	42.4	38.3	7.1	14.0	2.6	76	116.2	30.8	47.1	0.000	3.6	14.9
3	30.123	57.3	41.7	15.6	47.9	- 1.9	44.9	41.1	6.8	14.1	2.4	77	109.2	35.2	47.2	0.000	4.1	14.9
4	29.843	63.9	46.0	17.9	52.1	+ 2.1	48.9	45.5	6.6	17.6	1.4	78	133.3	41.0	47.5	0.004	8.4	15.0
5	29.614	68.0	47.4	20.6	55.4	+ 5.1	52.6	50.0	5.4	16.2	0.4	82	125.4	42.8	47.7	0.002	8.2	15.1
6	29.587	79.6	47.5	32.1	61.8	+ 11.3	56.3	51.5	10.3	24.1	1.2	69	133.6	40.3	48.0	0.000	9.9	15.1
7	29.729	66.4	49.2	17.2	56.5	+ 5.8	54.0	51.9	4.6	10.4	1.6	85	115.5	43.3	48.2	0.000	3.9	15.2
8	29.778	55.9	46.5	9.4	49.9	- 1.1	47.6	45.1	4.8	9.1	2.6	83	78.2	45.8	48.5	0.000	0.0	15.2
9	29.773	56.8	45.6	11.2	49.9	- 1.3	47.9	45.7	4.2	7.1	1.8	86	90.5	45.0	48.9	0.000	0.1	15.3
10	29.808	63.1	46.8	16.3	53.1	+ 1.6	50.0	46.7	6.4	12.3	1.7	79	110.1	46.1	49.1	0.000	1.4	15.3
11	29.881	66.9	45.8	21.1	55.3	+ 3.5	51.0	46.9	8.4	15.8	2.7	74	123.7	39.8	49.3	0.000	6.9	15.4
12	29.882	66.5	49.1	17.4	55.8	+ 3.7	52.3	48.9	6.9	14.8	2.7	77	104.4	41.2	49.2	0.000	1.5	15.5
13	29.905	66.7	50.3	16.4	57.6	+ 5.2	53.4	49.5	8.1	18.8	2.4	75	108.1	42.0	49.7	0.000	1.3	15.5
14	29.943	72.0	46.1	25.9	57.0	+ 4.4	51.7	46.3	10.7	21.5	3.8	68	139.3	37.4	50.0	0.000	7.1	15.6
15	29.796	74.8	42.1	32.7	59.9	+ 7.1	53.3	46.9	13.0	23.5	1.7	62	130.5	30.0	50.1	0.000	5.3	15.6
16	29.640	75.0	52.0	23.0	63.2	+ 10.2	57.0	51.8	11.4	21.3	2.2	67	130.3	42.8	50.2	0.068	13.0	15.7
17	29.703	72.8	53.5	19.3	60.1	+ 7.0	57.9	56.2	3.9	15.9	1.3	87	128.8	44.8	50.6	0.089	3.5	15.7
18	29.860	74.6	50.7	23.9	62.5	+ 9.2	57.0	52.4	10.1	18.2	1.2	70	132.7	43.0	51.0	0.000	13.6	15.7
19	29.918	72.2	49.4	22.8	60.7	+ 7.2	53.0	45.3	15.4	30.1	3.4	57	134.5	41.9	51.2	0.000	14.0	15.8
20	29.876	64.8	45.1	19.7	53.0	- 0.8	47.2	40.2	12.8	25.9	3.9	62	130.4	38.0	51.5	0.000	8.9	15.8
21	29.872	54.9	41.6	13.3	47.0	- 7.2	42.0	34.6	12.4	19.3	6.9	63	122.8	36.5	51.5	0.015	7.6	15.9
22	29.744	61.9	39.0	22.9	49.3	- 5.3	44.7	38.9	10.4	20.9	1.4	67	124.6	32.2	51.9	0.103	4.1	15.9
23	29.628	56.1	43.6	12.5	49.6	- 5.3	46.4	42.6	7.0	14.5	1.2	77	113.5	37.6	51.8	0.054	2.2	16.0
24	29.683	64.6	42.6	22.0	53.0	- 2.3	48.8	44.3	8.7	19.7	1.6	72	135.1	36.8	52.0	0.000	6.3	16.0
25	29.816	67.1	48.0	19.1	56.1	+ 0.6	52.7	49.5	6.6	15.6	1.9	78	135.3	47.3	52.1	0.000	4.7	16.1
26	29.927	66.2	46.0	20.2	54.8	- 1.0	51.1	47.5	7.3	14.8	1.4	76	131.6	46.1	52.0	0.000	6.1	16.1
27	29.917	65.8	49.7	16.1	56.2	+ 0.2	52.2	48.3	7.9	14.5	3.0	75	105.3	44.4	52.1	0.000	3.8	16.2
28	29.973	52.6	39.3	13.3	48.8	- 7.4	43.0	34.9	13.9	17.8	6.5	59	95.2	30.8	52.1	0.000	0.6	16.2
29	29.727	67.9	33.7	34.2	52.3	- 4.1	45.6	37.0	15.3	22.6	2.5	56	132.8	25.0	52.2	0.000	9.0	16.2
30	29.486	59.1	42.2	16.9	50.6	- 6.1	46.6	41.9	8.7	16.2	2.6	72	104.4	39.0	52.2	0.041	1.0	16.2
31	29.703	58.2	40.0	18.2	48.6	- 8.5	43.5	36.7	11.9	21.4	3.4	63	125.8	35.1	52.2	0.032	8.9	16.3
Means	29.822	64.5	45.2	19.3	53.9	+ 0.8	49.6	45.0	8.8	17.4	2.5	72.6	119.4	39.2	50.1	Sum 0.408	5.5	15.6
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the astronomical day, 0<sup>h</sup>-24<sup>h</sup> Universal Time, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the 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 Hygrometrical Tables, published by the Meteorological Office, Air Ministry. 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 29.822in., being 0.021in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 79°.6 on May 6; the lowest in the month was 33°.7 on May 29; and the range was 45°.9. The mean of all the highest daily readings in the month was 64°.5, being 0°.6 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 45°.2, being 1°.5 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 19°.3, being 0°.9 less than the average for the 65 years, 1841-1905. The mean for the month was 53°.9, being 0°.8 higher than the average for the 65 years, 1841-1905.



MONTH and DAY, 1936.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.			
	POLARIS		δ URSÆ 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.	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>		
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.							
May 1	6.8	0.98	6.8	0.98	NE : ENE	ENE : ESE	0.6	0.07	242	b c	c <i>Stcu</i>	c <i>Stcu</i> b so.-ha	b lu.-ha w		
2	3.2	0.50	3.0	0.46	NE : E	ENE : E	1.0	0.08	258	b lu.-ha w c	c <i>Stcu</i>	c <i>Stcu</i> b	b c		
3	0.9	0.13	0.6	0.09	NE : ENE	ENE : NE	2.1	0.21	296	c d <sub>5</sub>	c <i>Stcu</i>	c b <i>Frcu</i>	c		
4	0.6	0.09	0.5	0.07	NE : ENE	ESE : ENE	2.5	0.22	286	c r <sub>5</sub> c	c <i>Acu</i>	c <i>Frcu</i> b	b c		
5	6.2	0.95	6.2	0.95	NNE : ENE	E	1.6	0.14	252	c d <sub>5</sub> m	c b <i>Ci</i> z <sub>5</sub>	b <i>Cicu</i> z <sub>5</sub>	b		
6	6.5	1.00	5.7	0.88	Calm : E	SSW : E : Calm	1.1	0.05	185	b w c	c b <i>Acu</i> y	b c <i>Cunb</i> t y	c b w		
7	0.0	0.00	0.0	0.00	Calm : NNE	N : NE	2.5	0.22	281	c w	c <i>Ast</i>	c b <i>Cu</i> c z <sub>5</sub>	c		
8	0.0	0.00	0.0	0.00	NNE : N	N	3.0	0.30	339	c	c <i>Ast</i>	c <i>Stcu</i>	c		
9	0.0	0.00	0.0	0.00	NNW : N	N : NNW	1.1	0.07	257	c	c m <sub>5</sub>	c	c		
10	3.0	0.50	3.0	0.50	NNW	N : NNW	1.5	0.10	259	c d <sub>5</sub>	o d <sub>5</sub> c m <sub>5</sub>	c	b c r <sub>5</sub>		
11	1.9	0.31	1.6	0.27	N : NNW	NE : ESE	0.8	0.06	221	c b c	c <i>Stcu</i> m <sub>5</sub>	c <i>Frcu</i> y	b w c		
12	0.5	0.08	0.0	0.00	Calm	Calm : SW	0.0	0.00	151	c m	c <i>Stcu</i> m <sub>5</sub>	c b c <i>Acu</i> z <sub>5</sub>	c m <sub>5</sub>		
13	3.9	0.65	3.7	0.62	Calm	Calm : WSW	2.0	0.04	184	c w m	c <i>Stcu</i> z <sub>5</sub>	c so.-ha z <sub>5</sub>	c b		
14	6.0	1.00	6.0	1.00	WSW	SW : SSW	0.5	0.04	209	b c	c <i>Cist</i> so.-ha b	b c <i>Stcu</i> y	c b		
15	5.1	0.84	4.9	0.82	Calm : S	S : SE : E	1.4	0.15	241	b c	c <i>Cist</i> so.-ha y	c <i>Ci</i> so.-ha b y	b c b		
16	1.2	0.22	1.1	0.19	E : Calm : ESE	E : Calm	2.7	0.27	254	b w m	b <i>Frcu</i> z <sub>5</sub>	b bc b z <sub>5</sub>	c r		
17	5.4	0.98	5.4	0.98	Calm	E : Calm	1.0	0.03	177	c	c <i>Nbst</i> r m	c r l r r <sub>5</sub>	b		
18	5.5	1.00	5.5	1.00	ENE	E : NE	2.2	0.17	280	b	b y	b y	b		
19	5.5	1.00	5.5	1.00	NE	ENE : NE	3.5	0.33	323	b	b <i>Cu</i> y	b <i>Cu</i> y	b y		
20	1.6	0.29	1.1	0.21	NNE : NE	NNE	6.5	1.15	411	b y	b <i>Frcu</i> y	b c <i>Acu</i> y	c		
21	5.0	0.91	4.9	0.90	N	N : NNE	7.8	1.00	414	c p <sub>5</sub>	c <i>Nbst</i> p c	c <i>Nbst</i> p c	c		
22	0.0	0.00	0.0	0.00	N : NNW	Calm : SW : SSW	0.8	0.07	241	b c	c <i>Frcu</i> <i>Ci</i> y	c <i>Stcu</i> y r <sub>5</sub>	c i r		
23	4.1	0.81	4.0	0.79	SSE : E	ENE	1.9	0.16	270	c i r	c i r c <i>Ast</i>	c y b	b		
24	0.2	0.03	0.1	0.01	NE : ENE	E : ENE	1.3	0.12	279	b c	c b c <i>Frcu</i> y	c <i>Stcu</i> y	c		
25	0.2	0.03	0.1	0.01	ENE : E	ESE : E	0.9	0.07	247	c	c bc <i>Acu</i> y	c <i>Stcu</i>	c		
26	0.0	0.00	0.0	0.00	E : NE	NE	1.5	0.15	286	c m	c <i>Ci</i> <i>Acu</i>	c b <i>Ci</i> c y	c		
27	0.3	0.05	0.2	0.04	NNE : NE	N : NE	4.5	0.27	312	c d <sub>5</sub>	c d <sub>5</sub> c <i>Stcu</i>	c <i>Acu</i> b c y	c d <sub>5</sub>		
28	5.0	1.00	5.0	1.00	NNE : NE	NNE	2.0	0.20	298	c	c <i>Stcu</i> y	c <i>Stcu</i> y	c b		
29	0.0	0.00	0.0	0.00	SW : WSW	W : NNW	1.7	0.11	262	b	b bc <i>Frcu</i> z <sub>5</sub> y	c y	c		
30	0.0	0.00	0.0	0.00	Calm : WSW : SW	NW : N	3.7	0.29	265	c	c i r <sub>5</sub> c	c r <sub>5</sub> c r y	c r <sub>5</sub> c		
31	0.1	0.02	0.0	0.00	N	N : Calm	2.0	0.16	273	c b	b c <i>Frcu</i> y	c <i>Acu</i> y	c r <sub>5</sub> r		
Means	0.25	0.43	2.4	0.41	..	..	..	0.20	266						
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29	30	31		

The mean *Temperature of Evaporation* for the month was 49°.6, being 0°.6 higher than the average for the 65 years, 1841-1905.  
 The mean *Temperature of the Dew Point* for the month was 45°.0, being 0°.2 higher than  
 The mean *Degree of Humidity* for the month was 72.6, being 1.3 less than  
 The mean *Elastic Force of Vapours* for the month was 0.300in., being 0.002in. 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 0.355. The maximum daily amount of *Sunshine* was 14.0 hours on May 19.

The highest reading of the *Solar Radiation Thermometer* was 139°.3 on May 14; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°.0 on May 29.

The *Proportions of Wind* referred to the cardinal points were N. 36, E. 36, S. 7, W. 8, calm or nearly calm conditions, 13, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 7.8 lbs. on the square foot on May 21. The mean daily *Horizontal Movement of the Air* for the month was 266 miles; the greatest daily value was 414 miles on May 21, and the least daily value was 151 miles on May 12.

*Rain* (0.005in. or over) fell on 7 days in the month, amounting to 0.408in., as measured by gauge No. 6 partly sunk below the ground; being 1.507in. less than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1936.	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.	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.							Highest in Sun's Rays.	Lowest on the Grass.				
June 1	29.785	66.1	43.4	22.7	50.4	- 7.0	46.3	41.5	8.9	26.6	3.1	71	138.6	35.1	52.3	0.138	5.2	16.3
2	29.702	60.8	43.1	17.7	48.5	- 9.3	46.7	44.7	3.8	11.2	0.6	86	112.3	33.6	52.1	0.184	2.8	16.4
3	29.577	58.9	41.4	17.5	48.8	- 9.3	46.6	44.2	4.6	14.3	0.4	83	129.5	31.8	52.2	0.472	5.9	16.4
4	29.688	62.9	43.1	19.8	51.0	- 7.3	47.6	43.7	7.3	16.4	1.9	77	116.8	35.0	52.3	0.000	2.5	16.4
5	29.798	62.6	47.1	15.5	53.3	- 5.1	49.9	46.4	6.9	12.4	0.5	78	122.7	39.1	52.3	0.064	8.5	16.4
6	29.810	68.4	44.3	24.1	54.9	- 3.4	50.1	45.1	9.8	26.8	1.3	69	125.4	34.6	52.3	0.005	4.6	16.5
7	29.779	60.8	51.0	9.8	55.4	- 2.8	53.0	50.9	4.5	9.8	1.0	85	103.4	42.8	52.3	0.162	0.4	16.5
8	29.939	72.5	52.1	20.4	61.0	+ 2.9	53.2	45.5	15.5	21.7	3.7	57	126.6	42.6	52.6	0.000	8.9	16.5
9	29.925	75.4	50.4	25.0	62.7	+ 4.7	56.6	51.4	11.3	19.8	2.4	67	133.5	40.7	52.7	0.000	9.5	16.5
10	29.869	68.0	53.8	14.2	59.3	+ 1.2	56.5	54.2	5.1	8.9	1.5	83	101.2	47.1	52.9	0.003	0.2	16.6
11	29.839	67.1	52.2	14.9	58.1	- 0.1	54.6	51.4	6.7	12.2	2.5	79	125.1	48.1	53.1	0.000	0.8	16.6
12	29.765	72.0	51.3	20.7	59.4	+ 1.0	55.5	52.2	7.2	15.5	1.5	77	133.8	45.2	53.4	0.003	2.6	16.6
13	29.787	63.3	54.4	8.9	57.3	- 1.2	55.6	54.2	3.1	6.4	0.9	89	88.5	48.9	53.4	0.323	0.0	16.6
14	29.835	69.9	52.3	17.6	58.7	- 0.0	53.6	48.8	9.9	21.3	1.4	70	131.4	49.3	53.8	0.000	5.1	16.6
15	29.748	65.8	51.1	14.7	57.9	- 0.9	52.7	47.7	10.2	17.9	1.0	69	128.9	43.1	53.9	0.092	9.1	16.6
16	29.885	69.5	48.6	20.9	57.8	- 1.1	52.5	47.3	10.5	18.3	3.6	68	132.3	40.0	54.1	0.000	12.3	16.6
17	29.903	79.5	48.3	31.2	64.4	+ 5.4	56.8	50.3	14.1	31.4	1.4	60	137.9	38.2	54.5	0.000	14.8	16.6
18	30.016	75.5	56.1	19.4	65.4	+ 6.2	61.0	57.9	7.5	12.6	1.6	77	130.6	45.6	54.7	0.202	2.7	16.6
19	29.862	79.6	59.0	20.6	69.5	+ 10.0	63.9	60.2	9.3	17.2	0.0	72	133.4	51.3	55.0	0.582	7.7	16.6
20	29.680	85.3	61.3	24.0	73.0	+ 13.1	66.4	62.3	10.7	22.5	0.9	69	142.0	56.1	55.5	0.000	14.3	16.6
21	29.647	87.8	61.0	26.8	72.1	+ 11.8	65.7	61.7	10.4	21.9	1.5	70	143.3	53.4	55.8	0.427	8.2	16.6
22	29.788	79.3	58.2	21.1	67.8	+ 7.2	61.8	57.5	10.3	22.3	0.7	70	142.4	53.2	56.2	0.000	13.0	16.6
23	29.965	82.6	59.8	22.8	69.1	+ 8.2	63.1	59.0	10.1	22.4	1.6	71	147.1	52.3	56.6	0.005	8.8	16.6
24	29.973	76.9	58.6	18.3	68.0	+ 6.8	61.6	57.1	10.9	18.7	2.8	68	131.1	49.1	57.0	0.000	6.9	16.6
25	29.975	79.5	55.6	23.9	66.5	+ 5.1	61.1	57.2	9.3	21.0	0.5	72	143.0	45.1	57.3	0.112	9.8	16.6
26	29.969	63.1	55.1	8.0	58.7	- 2.8	57.9	57.3	1.4	5.5	0.3	95	102.2	55.1	57.3	0.261	0.4	16.6
27	29.956	74.0	56.1	17.9	63.4	+ 1.8	59.7	56.9	6.5	15.0	0.7	79	126.6	49.8	57.7	0.000	6.2	16.6
28	29.874	75.7	56.2	19.5	64.0	+ 2.4	59.5	56.2	7.8	18.9	2.6	75	136.3	49.1	57.8	0.000	5.1	16.6
29	29.606	68.5	58.0	10.5	62.0	+ 0.4	59.9	58.4	3.6	8.0	0.2	87	107.0	55.0	57.8	0.120	0.0	16.6
30	29.586	70.1	57.1	13.0	62.1	+ 0.6	59.8	58.2	3.9	10.9	0.5	87	122.4	53.1	57.9	0.223	4.8	16.6
<b>Means</b>	29.818	71.4	52.7	18.7	60.7	+ 1.3	56.3	52.6	8.0	16.9	1.4	75.3	126.5	45.4	54.6	Sum 3.378	6.0	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

The results apply to the astronomical day, 0<sup>h</sup>-24<sup>h</sup> Universal Time, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the 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 Hygrometrical Tables, published by the Meteorological Office, Air Ministry. 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 29.818in., being 0.004in. lower than the average for the 65 years, 1841-1905.

**TEMPERATURE OF THE AIR**

The highest in the month was 87°·8 on June 21; the lowest in the month was 41°·4 on June 3; and the range was 46°·4.  
 The mean of all the highest daily readings in the month was 71°·4, being 0°·7 higher than the average for the 65 years, 1841-1905.  
 The mean of all the lowest daily readings in the month was 52°·7, being 2°·8 higher than the average for the 65 years, 1841-1905.  
 The mean of the daily ranges was 18°·7, being 2°·1 less than the average for the 65 years, 1841-1905.  
 The mean for the month was 60°·7, being 1°·3 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1936.	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.	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>
June 1	3.10.66	3.10.66	3.10.66	3.10.66	Calm : WSW	SW : Calm : S	2.10.05	202	c	c Frcu y	c p r. R c	c b	
2	3.10.66	3.10.66	3.10.66	3.10.66	S : SSE	S	3.10.11	246	b c r r	r c r r	r r i r c	b	
3	1.8.0.39	1.7.0.37	1.7.0.37	1.7.0.37	SSE : SSW	SW : S : WSW	2.3.0.05	215	b c r	i r R h	i r R h t l c	b c c	
4	1.7.0.36	1.5.0.33	1.5.0.33	1.5.0.33	NW : N	Calm : ENE : N	2.0.0.10	232	c m.	c Acu	c Acu	c	
5	4.7.1.00	4.7.1.00	4.7.1.00	4.7.1.00	N	N	6.3.1.07	424	c r	c b Frcu	b Frcu	b	
6	0.0.0.00	0.0.0.00	0.0.0.00	0.0.0.00	NNW : W	W : WSW	3.1.0.13	283	b w	b c Acu y	c y r.	c d. d.	
7	0.0.0.00	0.0.0.00	0.0.0.00	0.0.0.00	WSW : Calm	Calm : NW : W	0.3.0.03	200	d. r r	r r c Ast	c Ast	c b c	
8	2.9.0.64	2.8.0.63	2.8.0.63	2.8.0.63	N : Calm : NNW	WNW : NW	1.0.0.08	236	c	b bc Frcu y	c Stcu y	c so.-ha c b	
9	4.5.1.00	4.5.1.00	4.5.1.00	4.5.1.00	Calm : WNW : W	WNW : W	1.0.0.05	232	b m	b c Frcu y	c Frcu b y	b	
10	0.0.0.00	0.0.0.00	0.0.0.00	0.0.0.00	WSW : W	N : NE	0.7.0.04	235	b w c m	c Stcu	c Cunb r. p c	c	
11	0.6.0.14	0.5.0.12	0.5.0.12	0.5.0.12	NE : Calm	SW	0.3.0.02	201	c m.	c Stcu m.	c Stcu	c	
12	0.0.0.00	0.0.0.00	0.0.0.00	0.0.0.00	WSW	WSW : Calm	0.5.0.02	215	c m.	c Acu	c Nbst i r.	c r.	
13	0.0.0.00	0.0.0.00	0.0.0.00	0.0.0.00	SW : Calm	WSW	1.0.0.03	200	c r. r	r r r.	c i d. c	c r c	
14	0.0.0.00	0.0.0.00	0.0.0.00	0.0.0.00	NNW : W	WSW : SW	1.7.0.14	282	c b c	bc z. c Acu	c Acu y	c d.	
15	4.0.0.89	3.8.0.85	3.8.0.85	3.8.0.85	WSW	W : WSW	8.3.0.52	387	r r c	c Nbst p	c Acu Cu y	c	
16	3.9.0.86	3.7.0.83	3.7.0.83	3.7.0.83	SW	SW : Calm	1.9.0.20	284	c	c Ci Frcu y	c b Ci y	b	
17	2.1.0.48	1.9.0.43	1.9.0.43	1.9.0.43	Calm : SSW	SSW : SW	1.5.0.07	222	c	c b y	b y	b	
18	1.3.0.29	1.2.0.28	1.2.0.28	1.2.0.28	Calm	E : ENE	0.6.0.02	200	c R c r	c i r m.	c Acu b	b c l	
19	0.8.0.03	0.7.0.15	0.7.0.15	0.7.0.15	E : ENE	E : Var	13.5.0.06	238	c l	b c Acu	c p b Acu	b c l t q H R c	
20	3.9.0.87	3.5.0.78	3.5.0.78	3.5.0.78	E	ESE : E	2.0.0.07	230	c l c	c b Ci	b y	b c l r. t b	
21	1.7.0.39	1.1.0.24	1.1.0.24	1.1.0.24	E : Calm	S	4.0.0.07	213	b bc	bc Ci Acu y	c Ci y	c t l R	
22	0.9.0.20	0.8.0.17	0.8.0.17	0.8.0.17	S : SW	SW	2.0.0.11	241	c	c bc Ci Frcu y	bc Cu y b	b c	
23	3.9.0.87	3.8.0.85	3.8.0.85	3.8.0.85	Calm	SW : Var : Calm	0.6.0.02	164	c p c	c Cu Ci	c Cu Frcu y	c b w	
24	4.0.0.89	3.7.0.83	3.7.0.83	3.7.0.83	Calm	Calm	0.0.0.00	163	b w	b bc Frcu z.	c Stcu z.	c b	
25	0.0.0.00	0.0.0.00	0.0.0.00	0.0.0.00	Calm : N	N : ESE	0.9.0.03	198	b m w	b c Frcu z. y	c Frcu y	c r	
26	0.7.0.15	0.5.0.11	0.5.0.11	0.5.0.11	Calm : SE	Calm	0.2.0.00	149	r c r r	r r i r	c Nbst d c	c	
27	1.9.0.42	1.7.0.37	1.7.0.37	1.7.0.37	Calm	Calm : SSW	0.3.0.01	176	c m	c b c z.	c b z.	b c	
28	0.5.0.12	0.0.0.00	0.0.0.00	0.0.0.00	Calm : SSW	SSE : ESE : E	0.7.0.05	205	c w	c Stcu b c	c Frcu Ci	c	
29	2.9.0.64	2.7.0.61	2.7.0.61	2.7.0.61	ENE : NE	Calm : W : SW	3.0.0.02	213	c p t l	c i r c	c Stcu	c r d. c	
30	0.1.0.02	0.1.0.02	0.1.0.02	0.1.0.02	SW : SSW	SSW : S	2.6.0.17	278	c	c i d	c Nbst r.	c r R d	
Means	1.8.0.40	1.7.0.38	1.7.0.38	1.7.0.38	..	..	.. 0.11	232					
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 56°.3, being 1°.4 higher than the average for the 65 years, 1841-1905.  
 The mean *Temperature of the Dew Point* for the month was 52°.6, being 1°.8 higher than  
 The mean *Degree of Humidity* for the month was 75.3, being 2.1 greater than  
 The mean *Elastic Force of Vapour* for the month was 0.399in., being 0.024in. greater than

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.365. The maximum daily amount of *Sunshine* was 14.8 hours on June 17.

The highest reading of the *Solar Radiation Thermometer* was 147°.1 on June 23; and the lowest reading of the *Terrestrial Radiation Thermometer* was 31°.8 on June 3.

The *Proportions of Wind* referred to the cardinal points were N. 13, E. 13, S. 22, W. 26, calm or nearly calm conditions, 26, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 13.5 lbs. on the square foot on June 19. The mean daily *Horizontal Movement of the Air* for the month was 232 miles; the greatest daily value was 424 miles on June 5, and the least daily value was 149 miles on June 26.

*Rain* (0.005in. or over) fell on 16 days in the month, amounting to 3.378in., as measured by gauge No. 6 partly sunk below the ground; being 1.34in. greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1936.	BARO-METER. Mean of 24 Hourly Values (corrected 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.	Daily Duration of Sunshine.	Sun above Horizon.
		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.			
		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.				
July 1	29.521	73.4	56.1	17.3	62.2	+ 0.7	58.5	55.7	6.5	18.3	0.7	79	135.3	50.8	58.0	0.017	5.9	16.6
2	29.480	69.8	56.3	13.5	60.7	- 0.9	58.5	56.8	3.9	10.8	1.2	87	121.0	52.0	58.0	0.155	2.7	16.6
3	29.580	71.0	57.3	13.7	62.5	+ 0.7	58.9	56.2	6.3	8.4	1.8	80	125.4	54.1	58.0	0.022	1.8	16.5
4	29.756	76.3	58.7	17.6	65.0	+ 2.9	60.5	57.2	7.8	9.1	1.3	76	136.7	55.9	58.2	0.000	3.8	16.5
5	29.845	76.9	58.6	18.3	66.5	+ 4.2	61.5	58.0	8.5	7.6	1.0	74	135.1	50.5	58.2	0.000	6.6	16.5
6	29.805	76.2	54.7	21.5	65.1	+ 2.7	61.6	59.2	5.9	7.5	0.3	81	117.7	46.3	58.4	0.000	0.9	16.4
7	29.643	76.8	60.2	16.6	67.2	+ 4.8	63.5	61.1	6.1	12.2	1.0	81	114.0	53.6	58.7	0.007	0.9	16.4
8	29.652	74.3	54.6	19.7	62.8	+ 0.4	56.7	51.5	11.3	22.1	2.8	67	141.1	50.0	58.9	0.000	7.9	16.4
9	29.609	60.9	53.1	7.8	56.0	- 6.4	54.3	52.8	3.2	7.9	1.9	89	73.2	48.7	58.8	0.370	0.0	16.4
10	29.587	65.1	51.3	13.8	56.5	- 6.0	53.8	51.4	5.1	11.8	0.9	83	100.7	46.7	58.9	0.379	1.3	16.3
11	29.663	68.8	53.0	15.8	58.5	- 4.2	55.1	52.2	6.3	18.5	1.4	79	126.7	49.1	59.0	0.168	4.4	16.3
12	29.652	71.1	54.1	17.0	59.7	- 3.2	56.4	53.6	6.1	16.7	1.4	80	130.8	52.0	58.9	0.170	4.6	16.3
13	29.544	70.3	56.9	13.4	63.2	+ 0.1	58.0	53.8	9.4	17.9	1.8	72	130.0	51.6	58.9	0.010	6.4	16.3
14	29.628	73.3	54.6	18.7	60.6	- 2.7	56.0	52.1	8.5	18.7	1.7	73	137.3	49.3	58.9	0.025	6.1	16.2
15	29.328	66.8	52.2	14.6	58.0	- 5.4	55.1	52.6	5.4	13.9	0.6	83	115.3	52.1	58.7	0.451	2.1	16.2
16	29.715	73.1	54.4	18.7	62.4	- 1.0	57.4	53.2	9.2	16.3	2.4	72	126.8	49.1	58.9	0.000	6.4	16.2
17	29.642	77.8	56.4	21.4	67.2	+ 3.8	63.0	60.2	7.0	16.4	2.2	79	134.7	53.6	59.0	0.033	3.0	16.1
18	29.493	70.8	56.5	14.3	62.7	- 0.6	57.9	54.1	8.6	20.0	2.2	73	133.3	53.2	59.0	0.023	7.9	16.1
19	29.538	69.6	55.9	13.7	61.0	- 2.2	58.1	55.8	5.2	16.6	1.8	83	121.5	53.1	59.0	0.293	1.3	16.0
20	29.579	69.7	53.8	15.9	60.6	- 2.6	56.9	53.9	6.7	14.3	2.0	79	130.1	49.1	59.0	0.047	6.7	16.0
21	29.689	66.9	52.2	14.7	59.5	- 3.7	54.6	50.2	9.3	14.3	2.5	71	117.2	46.4	59.1	0.010	3.6	16.0
22	29.728	65.0	47.7	17.3	57.8	- 5.3	54.0	50.6	7.2	14.1	0.4	77	115.8	36.2	59.1	0.000	4.1	15.9
23	29.544	64.8	53.7	11.1	58.8	- 4.2	57.3	56.1	2.7	5.5	0.9	91	90.3	45.6	59.0	0.147	0.0	15.9
24	29.596	71.2	54.6	16.6	61.9	- 1.0	57.1	53.1	8.8	16.8	2.6	73	134.8	47.8	59.1	0.000	12.1	15.8
25	29.684	70.7	52.2	18.5	58.3	- 4.4	55.0	52.1	6.2	15.7	1.5	80	132.8	45.2	59.0	0.058	7.6	15.8
26	29.785	69.1	48.6	20.5	57.1	- 5.4	53.8	50.8	6.3	17.5	1.2	79	136.4	41.2	59.0	0.141	7.9	15.8
27	29.826	72.6	46.6	26.0	58.4	- 4.0	53.7	49.4	9.0	19.6	0.6	72	137.0	36.1	59.0	0.000	10.3	15.7
28	29.733	69.9	52.6	17.3	57.4	- 4.9	55.2	53.4	4.0	14.5	1.1	86	140.9	46.2	59.0	0.193	0.5	15.6
29	29.825	67.3	52.5	14.8	57.6	- 4.7	54.7	52.2	5.4	15.7	0.7	82	123.8	43.8	58.9	0.094	2.4	15.6
30	30.062	73.0	47.4	25.6	59.6	- 2.7	54.8	50.5	9.1	20.1	0.4	72	130.9	36.8	59.0	0.000	7.7	15.5
31	29.827	66.8	54.9	11.9	59.9	- 2.3	57.9	56.4	3.5	6.2	1.9	88	99.8	51.1	58.8	0.112	0.8	15.5
Means	29.663	70.6	53.9	16.7	60.8	- 1.9	57.1	54.1	6.7	14.4	1.4	78.7	124.1	48.3	58.8	Sum 2.925	4.4	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

The results apply to the astronomical day, 0<sup>h</sup>-24<sup>h</sup> Universal Time, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the 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 Hygrometrical Tables, published by the Meteorological Office, Air Ministry. 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 29.663in., being 0.143in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 77°.8 on July 17; the lowest in the month was 46°.6 on July 27; and the range was 31°.2.  
 The mean of all the highest daily readings in the month was 70°.6, being 3°.6 lower than the average for the 65 years, 1841-1905.  
 The mean of all the lowest daily readings in the month was 53°.9, being 0°.6 higher than the average for the 65 years, 1841-1905.  
 The mean of the daily ranges was 16°.7, being 4°.2 less than the average for the 65 years, 1841-1905.  
 The mean for the month was 60°.8, being 1°.9 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1936.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.				CLOUDS AND WEATHER.				
	POLARIS		δ URSÆ MINORIS.		OSLER'S.			Robin-son's					
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Horizontal Move-ment of the Air.	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.					
July 1	0·10·01	0·10·01	0·10·01	0·10·01	S : SW	SW : SSW	2·10·10	244	244	c r c	c r c <i>Stcu</i>	c <i>Cu</i> b y	b c
2	0·20·03	0·20·03	0·20·03	0·20·03	SSW : SW	SSW : SW	3·50·28	318	318	c i r	c i r d c	c <i>Nbst</i> d c	c b c P
3	0·50·12	0·40·09	0·40·09	0·40·09	SW : WSW	SW	2·30·12	279	279	c i r	c <i>Stcu</i>	c d r, c	c d c
4	1·80·41	1·30·30	1·30·30	1·30·30	WSW : W	SW	2·30·13	295	295	c	c b c <i>Acu</i> y	b c c	c
5	4·30·97	4·30·97	4·30·97	4·30·97	SW : WSW	WSW : SW	1·20·08	260	260	c b c	c <i>Acu</i> p.	c <i>Stcu</i> b y	b
6	1·90·42	1·80·41	1·80·41	1·80·41	Calm	SSW	0·60·02	197	197	b w c	c <i>Stcu</i> m.	c <i>Nbst</i>	c l b c
7	1·10·25	1·00·24	1·00·24	1·00·24	Calm	SSW : WSW	2·70·08	230	230	c	c <i>Ast</i>	c <i>Nbst</i> r, c	c r c
8	0·00·00	0·00·00	0·00·00	0·00·00	WSW	WSW : SW	2·30·22	323	323	c	c <i>Frcu</i> y	c r, c <i>Ci</i> <i>Frcu</i> y	c
9	0·40·08	0·30·06	0·30·06	0·30·06	Calm	W : WSW	1·50·10	233	233	c	c r, r r	r r	d, c
10	1·30·29	0·80·19	0·80·19	0·80·19	WSW : W	WSW : N : NW	1·20·07	247	247	c	c i r	r c <i>Cist</i> so.-ha t r R	c r, c
11	0·00·00	0·00·00	0·00·00	0·00·00	W	WSW	3·00·21	328	328	c	c <i>Ci</i> <i>Frcu</i> so.-ha	c i r r,	r, r, c
12	0·10·01	0·00·00	0·00·00	0·00·00	WSW : SW	SW : SSW	3·60·29	343	343	c	c <i>Stcu</i> y	c r, r d,	d, r r
13	4·00·80	3·60·71	3·60·71	3·60·71	SW : WSW	WSW	4·90·69	431	431	c p	c p c <i>Stcu</i> y	c <i>Cunb</i> p, c y	c b
14	0·00·00	0·00·00	0·00·00	0·00·00	WSW	SW	3·80·37	342	342	b c b	c <i>Stcu</i> y	c <i>Acu</i> <i>Ci</i>	c r r
15	3·30·66	3·20·64	3·20·64	3·20·64	E : SE : NNW	W : WSW	7·80·37	333	333	r r	r r R t l c	c <i>Cunb</i>	c p c
16	0·10·02	0·10·02	0·10·02	0·10·02	WSW	WSW : SW	2·10·20	307	307	b c b	c <i>Stcu</i> <i>Frcu</i>	c <i>Acu</i> <i>Frcu</i> y	b c c
17	5·01·00	5·01·00	5·01·00	5·01·00	Calm : SSE	SE : SSW	1·30·10	226	226	c i d	c <i>Stcu</i>	c <i>Ci</i> so.-ha	c b
18	0·00·00	0·00·00	0·00·00	0·00·00	SW	SW	12·12·07	481	481	b c	c <i>Nbst</i> p.	c y	c p, d i r
19	0·80·15	0·50·09	0·50·09	0·50·09	SW : WSW	WSW : SW	5·90·72	378	378	c i r	c <i>Acu</i>	c <i>Nbst</i> r r c	R c
20	0·30·06	0·20·03	0·20·03	0·20·03	SW : WSW	WSW : WNW	3·00·23	314	314	c	b c <i>Acu</i>	c r, r c	b c r c
21	0·20·03	0·20·03	0·20·03	0·20·03	WNW : WSW : W	NW : W	1·20·08	255	255	c b	c <i>Acu</i> <i>Frcu</i>	c r c	c p
22	1·80·33	1·40·26	1·40·26	1·40·26	W : Calm	Calm : SSW	0·10·00	163	163	c b m.	b c <i>Stcu</i> z.	c <i>Stcu</i> z.	c
23	2·50·46	2·40·44	2·40·44	2·40·44	Calm : SSW	SSW : SW	4·00·49	315	315	c r r	r r d d d.	d, d.	d, c b
24	5·51·00	5·51·00	5·51·00	5·51·00	SW	SW	6·40·93	385	385	b c	c <i>Frcu</i>	c <i>Frcu</i> <i>Cu</i>	b
25	6·01·00	6·01·00	6·01·00	6·01·00	SW	SSW : W : SW	4·30·25	298	298	b w	b c i r c	c p r c	b
26	6·01·00	6·01·00	6·01·00	6·01·00	SW : WSW	SW : WSW	2·00·10	273	273	b	b c <i>Frcu</i>	c r r	c r, b
27	1·20·21	0·80·13	0·80·13	0·80·13	SW : Calm	SW : WSW	1·50·04	214	214	b w	b c <i>Frcu</i> y	c <i>Cu</i> b y	b c
28	0·60·10	0·50·09	0·50·09	0·50·09	Calm : SE	Calm : NE	0·70·01	182	182	c d, c	c <i>Nbst</i>	r R t c p c	c
29	6·01·00	6·01·00	6·01·00	6·01·00	NNW : N	N	2·70·14	274	274	c r,	c r c R	r c <i>Acu</i> y	c b
30	0·10·01	0·00·00	0·00·00	0·00·00	Calm : SW : WNW	WNW : WSW	1·60·07	233	233	b w	b c <i>Ci</i> so.-ha m.	b c c <i>Frcu</i> y	c r, c
31	0·00·00	0·00·00	0·00·00	0·00·00	WSW : SW	SW	3·20·26	302	302	c	c i r	i d c	c
Means	1·80·34	1·70·31	1·70·31	1·70·31	..	..	.. 0·28	290	290				
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean *Temperature of Evaporation* for the month was 57°.1, being 0°.8 lower than  
 The mean *Temperature of the Dew Point* for the month was 54°.1, being equal to  
 The mean *Degree of Humidity* for the month was 78.7, being 5.5 greater than  
 The mean *Elastic Force of Vapour* for the month was 0.42 in., being the same as

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

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 8.4.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.276. The maximum daily amount of *Sunshine* was 12.1 hours on July 24.

The highest reading of the *Solar Radiation Thermometer* was 141°.1 on July 8; and the lowest reading of the *Terrestrial Radiation Thermometer* was 36°.1 on July 27.

The *Proportions of Wind* referred to the cardinal points were N. 6, E. 2, S. 34, W. 46, calm or nearly calm conditions, 12, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 12.1 lbs. on the square foot on July 18. The mean daily *Horizontal Movement of the Air* for the month was 290 miles; the greatest daily value was 481 miles on July 18, and the least daily value was 163 miles on July 22.

*Rain* (0.005 in. or over) fell on 22 days in the month, amounting to 2.925 in., as measured by gauge No. 6 partly sunk below the ground; being 0.526 in. greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1936.	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.	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.				
Aug. 1	29.650	68.5	54.5	14.0	61.7	- 0.5	59.3	57.6	4.1	8.6	0.9	86	120.4	46.8	58.9	0.016	0.3	15.4
2	29.552	70.1	52.1	18.0	59.3	- 2.8	57.1	55.4	3.9	13.8	0.4	87	116.1	43.7	58.8	0.084	3.1	15.4
3	29.648	69.2	55.3	13.9	60.8	- 1.3	56.0	51.9	8.9	18.1	2.0	72	124.3	48.5	58.9	0.000	3.3	15.3
4	29.847	68.0	52.2	15.8	59.0	- 3.1	54.2	49.8	9.2	16.4	2.4	71	122.7	44.8	58.9	0.016	5.8	15.3
5	29.956	68.4	52.5	15.9	59.2	- 2.9	54.9	51.1	8.1	17.3	2.5	74	118.2	44.4	58.9	0.000	2.5	15.2
6	29.867	68.0	56.0	12.0	61.0	- 1.2	59.0	57.6	3.4	9.0	1.0	88	121.8	48.5	58.9	0.014	1.0	15.2
7	29.994	59.5	55.3	4.2	57.2	- 5.0	55.7	54.5	2.7	4.2	0.9	91	66.1	53.9	58.7	0.022	0.0	15.1
8	30.061	67.9	50.4	17.5	59.1	- 3.2	56.1	53.6	5.5	13.2	0.8	82	114.8	40.7	58.8	0.000	1.7	15.0
9	29.887	73.9	48.1	25.8	60.2	- 2.1	57.3	54.9	5.3	13.9	0.0	83	134.1	39.9	58.9	0.000	4.0	15.0
10	29.756	73.9	54.1	19.8	63.1	+ 0.8	59.8	57.3	5.8	17.0	0.0	81	134.4	43.1	58.9	0.140	5.5	14.9
11	29.749	66.9	57.0	9.9	60.6	- 1.8	58.0	55.9	4.7	8.5	0.6	85	97.8	51.8	58.8	0.204	0.6	14.9
12	29.745	69.2	53.1	16.1	60.3	- 2.2	57.0	54.3	6.0	13.1	0.8	81	114.7	46.7	58.8	0.007	2.1	14.8
13	29.823	69.8	52.2	17.6	60.3	- 2.2	56.0	52.3	8.0	15.9	2.1	75	126.8	41.2	58.8	0.000	2.6	14.8
14	29.820	71.8	52.9	18.9	60.7	- 1.8	56.8	53.6	7.1	15.1	1.5	77	125.3	41.7	59.0	0.000	3.8	14.7
15	29.833	81.5	47.7	33.8	63.5	+ 1.1	58.7	54.9	8.6	21.0	0.8	74	140.8	36.3	59.1	0.000	12.6	14.7
16	29.894	82.9	52.8	30.1	66.9	+ 4.6	61.5	57.7	9.2	20.5	0.5	72	136.0	42.7	59.1	0.000	11.8	14.6
17	29.916	81.1	59.1	22.0	68.1	+ 6.0	61.8	57.3	10.8	23.6	3.4	69	136.9	49.0	59.3	0.000	11.8	14.5
18	29.923	78.6	59.7	18.9	65.8	+ 3.9	59.8	55.2	10.6	20.2	1.6	69	141.1	51.0	59.3	0.000	4.7	14.5
19	29.821	68.6	56.0	12.6	60.0	- 1.7	56.4	53.4	6.6	15.4	0.8	79	108.2	51.3	59.6	0.058	0.1	14.4
20	29.772	77.0	58.4	18.6	66.1	+ 4.6	61.8	58.9	7.2	17.1	0.6	78	135.1	47.9	59.8	0.000	5.2	14.3
21	29.875	71.5	56.1	15.4	62.7	+ 1.4	58.3	54.9	7.8	16.0	0.5	75	115.2	46.0	59.8	0.000	2.9	14.3
22	30.110	70.5	51.3	19.2	60.7	- 0.4	54.8	49.5	11.2	17.7	2.4	67	129.7	39.0	59.9	0.000	9.2	14.2
23	30.194	76.9	46.0	30.9	61.4	+ 0.5	55.5	50.3	11.1	23.0	0.8	67	129.3	34.4	60.0	0.000	12.5	14.2
24	30.196	80.6	54.1	26.5	67.1	+ 6.3	61.5	57.5	9.6	18.6	2.2	72	124.8	43.7	60.0	0.000	12.5	14.1
25	30.192	81.5	55.3	26.2	67.6	+ 6.9	62.4	58.8	8.8	19.9	0.9	74	135.4	45.3	60.0	0.000	6.3	14.0
26	30.211	70.4	54.8	15.6	63.0	+ 2.3	58.3	54.6	8.4	18.6	1.7	74	132.2	46.3	60.0	0.000	8.1	14.0
27	30.172	69.8	53.0	16.8	60.4	- 0.2	56.4	53.0	7.4	16.4	0.8	77	136.4	42.8	60.0	0.000	11.3	13.9
28	30.149	77.2	51.1	26.1	62.4	+ 2.0	57.9	54.4	8.0	22.9	0.0	75	133.7	38.7	60.1	0.000	8.9	13.8
29	30.162	84.6	47.2	37.4	63.5	+ 3.2	56.7	50.9	12.6	36.8	0.0	63	139.0	34.0	60.2	0.000	8.7	13.8
30	30.053	82.8	58.0	24.8	69.1	+ 9.0	61.9	56.7	12.4	26.5	5.1	65	137.5	44.7	60.1	0.000	6.8	13.7
31	29.996	69.8	59.9	9.9	64.6	+ 4.7	59.7	56.0	8.6	13.7	3.7	74	117.1	53.5	60.0	0.000	2.5	13.7
Means	29.930	73.2	53.7	19.5	62.4	+ 0.8	58.1	54.6	7.8	17.2	1.3	76.0	124.7	44.6	59.4	0.561	5.6	14.6
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the astronomical day, 0<sup>h</sup>-24<sup>h</sup> Universal Time, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the 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 Hygrometrical Tables, published by the Meteorological Office, Air Ministry. 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 29.930in., being 0.140in. higher than the average for the 65 years, 1841-1905.

**TEMPERATURE OF THE AIR.**

The highest in the month was 84.6 on August 29; the lowest in the month was 46.0 on August 23; and the range was 38.6. The mean of all the highest daily readings in the month was 73.2, being 0.5 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 53.7, being 0.7 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 19.5, being 0.2 less than the average for the 65 years, 1841-1905. The mean for the month was 62.4, being 0.8 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1936.	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.	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>	
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.						
Aug. 1	5.5	0.85	5.5	0.85	SW : NW : N	NNW : NW	0.2	0.04	201	c	c i d c Ast	c d c	c b	
2	3.3	0.50	2.5	0.38	SW	SW : W	5.0	0.53	343	b c	c r d.	d. c b	b c	
3	6.5	0.99	6.5	0.99	WSW	WSW : SW	5.0	0.64	402	c	c Acu y	c y	c b	
4	3.9	0.59	3.1	0.47	WSW : W	WNW : WSW	3.4	0.37	362	b c	c r c Acu	c Nbst p. c y	b	
5	1.6	0.25	1.3	0.19	WSW : W	WSW : SW	0.6	0.05	243	c	c Stcu	c Acu Frcu y	c	
6	0.0	0.00	0.0	0.00	SSW : SW	SW : W	3.1	0.20	280	c	c d p. c	c i d	c	
7	0.0	0.00	0.0	0.00	W : N	N : NNE	2.9	0.25	295	c d.	d. c Stcu	c d c	c	
8	5.9	0.85	5.9	0.85	Calm	Calm	0.0	0.00	167	c	c m.	c b	b w	
9	4.8	0.68	4.6	0.66	Calm	ESE : Calm	0.2	0.01	167	b c m	c m c Frcu	c Ci Frcu	c b c w	
10	0.0	0.00	0.0	0.00	Calm : E	E : ESE	1.0	0.05	196	c m w	c Stcu z.	c b c t l r.	r c R	
11	5.3	0.76	5.1	0.73	ENE : NNE	N : NW : WSW	0.3	0.03	209	R r r	r r c r.	c b	b c c b	
12	4.9	0.70	4.5	0.64	WSW	WNW : NNW	0.8	0.07	249	b w	c d c Nbst	r c Stcu	c b	
13	5.1	0.74	4.1	0.59	WSW	WSW : SSW	1.0	0.07	250	b c	c Ast	c Ast b c	c b	
14	6.5	0.92	6.3	0.88	SSW : SW	SSW : Calm	1.1	0.10	237	c w	c Stcu	c Stcu	c b w	
15	7.5	1.00	7.5	1.00	Calm : SW	SW : Calm	0.2	0.03	181	b w	bc Acu y	bc Acu Ci y	b	
16	7.1	0.94	6.5	0.87	Calm	WSW : Calm	0.5	0.03	192	b w	b Frcu z. y	b c y b	b	
17	4.3	0.58	3.9	0.52	Calm : WSW	SW : WSW	2.0	0.10	246	c w	c b Ci z. y	b Ci y	b c	
18	0.6	0.08	0.5	0.06	SW : WSW	W : NW : NNW	1.0	0.05	233	c d. c	c Stcu	c Stcu b y	b c	
19	1.3	0.17	0.8	0.11	Calm : WSW	SW : SSW	2.8	0.17	270	c	c so.-ha y	c r i d	c r r. d.	
20	4.6	0.61	4.2	0.56	WSW	WSW : SW	0.3	0.03	224	c	c Frcu	c Frcu Ci y	c b	
21	6.3	0.83	6.1	0.81	SW : W : NW	NNW : N	1.2	0.06	240	b w c	c Stcu	c Stcu	c b	
22	7.7	0.96	7.5	0.93	N : NNW	N : NNW	0.7	0.04	213	b w	b c Frcu y	c y	b	
23	8.0	1.00	8.0	1.00	Calm	WSW : SW	0.7	0.02	177	b w	b Cu y z.	b y z.	b w	
24	7.7	0.97	7.6	0.95	WSW	Calm : NNW	0.1	0.01	192	b w	b Cu z. y	b z. y	b	
25	3.4	0.43	2.9	0.36	Calm : N	N : ENE	0.5	0.01	171	b w	c Stcu m.	c b c y	c b	
26	..	..	..	..	ENE	E : ENE	1.9	0.20	288	b c	c b Frcu y	b Ci y	b c	
27	6.9	0.87	6.4	0.80	ENE : E	E : ENE	3.9	0.23	275	c	c b Ci y	b Ci	b	
28	8.0	1.00	8.0	1.00	Calm : ENE	ESE	0.7	0.03	199	b w o f	o f c b y	b y	b w	
29	8.5	1.00	8.5	1.00	Calm	Calm	0.0	0.00	143	b w f	b f b y	b y	b	
30	7.1	0.83	6.8	0.80	SW : WSW	W : NW	0.9	0.06	260	b b c w	c Ci Cist y	c y	c b	
31	5.1	0.60	4.5	0.53	NW : NNW	NW : NNW	1.0	0.10	259	b c	c Stcu	c Stcu	c	
Means	4.9	0.66	4.6	0.62	..	..	..	0.12	237					
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29	30	31	

The mean *Temperature of Evaporation* for the month was 58°.1, being 0°.6 higher than the mean *Temperature of the Dew Point* for the month was 54°.6, being 0°.3 higher than the mean *Degree of Humidity* for the month was 76.0, being 0.8 less than the mean *Elastic Force of Vapour* for the month was 0.429in., being 0.005in. greater than

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

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6.3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.381. The maximum daily amount of *Sunshine* was 12.6 hours on August 15.

The highest reading of the *Solar Radiation Thermometer* was 141°.1 on August 18; and the lowest reading of the *Terrestrial Radiation Thermometer* was 34°.0 on August 29.

The *Proportions of Wind* referred to the cardinal points were N. 16, E. 11, S. 17, W. 32, calm or nearly calm conditions 24, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 5.0 lbs. on the square foot on August 2 and 3. The mean daily *Horizontal Movement of the Air* for the month was 237 miles; the greatest daily value was 402 miles on August 3, and the least daily value was 143 miles on August 29.

*Rain* (0.005in. or over) fell on 9 days in the month, amounting to 0.56in., as measured by gauge No. 6 partly sunk below the ground; being 1.783in. less than the average fall for the 65 years, 1841-1905.



MONTH and DAY, 1936.	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.	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.				
Sept. 1	29.962	72.6	59.1	13.5	63.6	+ 3.8	59.4	56.3	7.3	13.0	2.6	77	115.9	51.1	60.0	0.000	1.7	13.6
2	29.786	80.2	57.3	22.9	65.4	+ 5.7	61.0	57.9	7.5	17.0	2.1	77	131.8	46.9	60.2	0.000	3.5	13.5
3	29.610	72.8	54.2	18.6	62.1	+ 2.5	59.9	58.3	3.8	9.1	0.7	87	104.4	44.5	60.0	0.104	0.2	13.5
4	29.470	69.1	55.2	13.9	61.0	+ 1.5	58.8	57.1	3.9	9.9	2.0	87	106.1	48.9	60.0	0.131	1.3	13.4
5	29.415	67.2	55.8	11.4	58.8	- 0.6	56.6	54.8	4.0	11.0	0.9	86	127.0	51.9	60.0	0.478	3.0	13.3
6	29.581	67.0	54.1	12.9	59.2	- 0.0	54.8	50.9	8.3	16.8	3.1	74	124.7	48.6	60.1	0.000	2.9	13.3
7	29.246	67.3	56.9	10.4	61.4	+ 2.4	55.9	51.1	10.3	23.2	1.0	69	124.7	51.5	60.0	0.041	7.5	13.2
8	29.486	66.1	52.9	13.2	58.5	- 0.3	54.2	50.4	8.1	12.6	3.5	74	122.9	46.8	59.8	0.043	2.1	13.1
9	29.810	69.2	52.3	16.9	59.0	+ 0.4	56.1	53.7	5.3	12.9	1.8	83	118.9	42.9	59.8	0.000	0.9	13.1
10	29.841	69.3	54.3	15.0	60.4	+ 2.0	59.3	58.5	1.9	8.2	0.5	93	102.9	46.1	59.7	0.215	1.5	13.0
11	29.866	76.9	53.6	23.3	63.8	+ 5.7	59.3	55.9	7.9	16.4	0.4	75	140.6	44.3	59.8	0.000	10.6	12.9
12	29.816	69.2	57.1	12.1	61.9	+ 3.9	59.3	57.4	4.5	10.5	2.0	85	99.1	51.4	59.6	0.087	0.4	12.9
13	29.873	72.0	55.4	16.6	63.2	+ 5.4	60.1	57.8	5.4	13.5	0.7	83	120.5	45.4	59.7	0.000	3.5	12.8
14	29.947	70.2	50.1	20.1	57.7	- 0.0	54.0	50.6	7.1	15.1	1.6	77	139.4	41.8	59.7	0.039	7.9	12.8
15	30.005	64.5	50.7	13.8	53.8	- 3.8	52.1	50.5	3.3	11.8	1.0	88	115.8	41.4	59.5	0.286	1.5	12.7
16	30.101	66.7	49.6	17.1	57.7	+ 0.2	55.1	52.9	4.8	13.7	0.4	84	127.1	40.7	59.5	0.074	4.0	12.6
17	30.015	68.9	57.2	11.7	61.3	+ 4.1	59.1	57.5	3.8	10.7	0.3	87	107.9	55.0	59.4	0.000	0.1	12.6
18	29.973	69.2	51.1	18.1	60.2	+ 3.3	57.2	54.7	5.5	13.4	1.1	82	108.0	40.7	59.3	0.000	1.1	12.5
19	30.047	63.9	47.5	16.4	55.4	- 1.1	54.1	53.0	2.4	7.5	0.5	91	111.4	37.9	59.2	0.001*	1.6	12.4
20	29.976	68.9	52.9	16.0	61.8	+ 5.6	59.3	57.5	4.3	11.5	0.3	85	122.4	45.0	59.2	1.110	4.1	12.4
21	29.954	67.8	54.7	13.1	62.1	+ 6.2	60.9	60.1	2.0	5.3	0.7	93	96.0	44.2	59.3	0.103	0.1	12.3
22	30.211	72.3	52.1	20.2	59.6	+ 4.0	57.6	56.1	3.5	13.0	0.0	88	121.1	40.3	59.3	0.000	4.3	12.2
23	30.094	67.7	52.7	15.0	58.6	+ 3.2	57.3	56.3	2.3	9.8	0.0	92	108.3	43.2	59.2	0.000	3.2	12.2
24	29.775	70.9	56.5	14.4	62.2	+ 6.9	60.2	58.8	3.4	10.6	0.3	88	114.3	49.1	59.2	0.005	0.1	12.1
25	29.686	66.2	58.2	8.0	62.6	+ 7.4	60.6	59.2	3.4	7.3	0.8	88	85.5	53.8	59.2	0.184	0.0	12.0
26	29.883	58.2	48.8	9.4	52.8	- 2.4	50.1	47.3	5.5	12.9	1.0	82	83.7	44.0	59.1	0.060	0.1	12.0
27	29.673	52.5	46.8	5.7	49.3	- 5.8	46.7	43.8	5.5	8.5	1.4	81	67.1	40.8	59.0	0.160	0.6	11.9
28	29.865	56.8	44.7	12.1	49.8	- 5.1	46.2	41.9	7.9	15.7	0.9	74	116.3	36.2	59.0	0.035	8.3	11.8
29	30.091	57.9	41.9	16.0	49.0	- 5.7	45.5	41.2	7.8	13.3	1.8	74	110.0	30.7	58.8	0.000	7.8	11.8
30	30.075	56.8	43.1	13.7	51.0	- 3.4	48.6	46.0	5.0	9.0	1.7	83	91.0	32.1	58.3	0.000	0.8	11.7
Means	29.838	67.3	52.6	14.7	58.8	+ 1.5	56.0	53.6	5.2	12.1	1.2	82.9	112.2	44.6	59.5	Sum 3.156	2.8	12.7
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the astronomical day, 0<sup>h</sup>-24<sup>h</sup> Universal Time, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the 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 Hygrometrical Tables, published by the Meteorological Office, Air Ministry. 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 29.838in., being 0.020in. higher than the average for the 65 years, 1841-1905.

\*Rainfall (Column 16) the amount entered on September 19 is derived from dew.

TEMPERATURE OF THE AIR.

The highest in the month was 80.2 on September 2; the lowest in the month was 41.9 on September 29; and the range was 38.3. The mean of all the highest daily readings in the month was 67.3, being equal to the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 52.6, being 3.5 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 14.7, being 3.5 less than the average for the 65 years, 1841-1905. The mean for the month was 58.8, being 1.5 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1936.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.								
	POLARIS.		δ URSE 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.	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>
					A.M.	P.M.	lbs.	lbs.												
Sept. 1	2.7	0.32	1.8	0.21	NW : N	Calm	0.7	0.05	204	c	c <i>Stcu</i>	c <i>Acu Cicu bc</i>	c r. <i>lu.-ha</i>							
2	7.5	0.89	7.2	0.84	Calm : WSW	WSW : Calm	0.7	0.05	214	c	c <i>Ast</i>	c <i>so-ha y</i>	c b							
3	7.4	0.87	7.0	0.82	Calm : SSW	SSW : SW	2.0	0.10	223	b c	c <i>Nbst r. r</i>	c <i>Nbst ir</i>	c b							
4	1.6	0.18	1.2	0.14	SSW : SW	SW : WSW	6.0	0.66	349	bc	c r i r. c	c i r c	c							
5	2.5	0.28	1.9	0.21	SW : WSW	W : WSW	4.2	0.25	318	c r r	c <i>Cunb t l p</i>	R t l c t p	c p							
6	0.0	0.00	0.0	0.00	W	WSW : SSW	4.2	0.55	360	c	c <i>Ci Frcu y</i>	c <i>Frcu Cunb</i>	c							
7	6.6	0.74	5.8	0.65	S : SW : WNW	W : WSW	15.6	2.74	570	c r r.	bc <i>Frcu q y</i>	bc c q y	c p							
8	2.5	0.27	1.5	0.16	WSW : W	NW : WNW	7.0	1.15	434	c b	c r i d	c <i>Frcu</i>	c b							
9	3.0	0.34	3.0	0.34	Calm	SSE : Calm	0.1	0.00	163	b c	c m. c <i>Acu</i>	c <i>Acu</i>	c b c							
10	5.9	0.65	5.0	0.61	SE : Calm	S : Calm	0.3	0.01	183	c r c	c r r d c	c d c b	b c w							
11	6.9	0.77	6.1	0.68	Calm : SE	SSE	1.8	0.10	224	c b w	b <i>Ci Cu y</i>	b <i>Ci Cu y</i>	b							
12	1.7	0.18	0.9	0.09	S : SSE	SSE : S : Calm	0.6	0.06	211	c	c <i>Nbst r.</i>	r c r	c r c							
13	9.0	0.95	8.8	0.93	Calm : W	NW : WSW	0.4	0.03	203	c	c <i>Stcu m.</i>	c <i>Frcu Ci b</i>	b w							
14	3.4	0.36	3.2	0.34	WSW	WSW : SW	4.1	0.07	250	b w	b bc <i>Frcu m.</i>	bc c <i>Cunb P c</i>	b c							
15	5.3	0.55	4.0	0.42	WSW : NNW : N	NE : ENE	3.3	0.03	197	c	c <i>Acu m.</i>	c <i>Cunb t l R b</i>	b c b							
16	0.0	0.00	0.0	0.00	NE : NNE	ENE : NNE	1.1	0.05	218	b c r c	c <i>Frcu</i>	c p c <i>Ast</i>	c r. r							
17	0.0	0.00	0.0	0.00	NNE	N : Calm	0.2	0.03	201	c	c m. c	c p c d.	c							
18	7.7	0.81	1.3	0.14	N : Calm	SW : Calm	0.1	0.00	167	c	c <i>Acu m.</i>	c <i>Acu</i>	c b m. w							
19	5.7	0.59	4.9	0.50	Calm : E	NE : E	0.2	0.02	190	b w m f	b f c m.	c m	c b							
20	0.0	0.00	0.0	0.00	NE : ENE	ENE	4.3	0.37	308	b w c	c b c <i>Acu</i>	c r R c	c t l RR							
21	4.4	0.45	0.0	0.00	SW	Calm : NNW	1.1	0.04	204	c r c	c r. c	c i r.	c b							
22	3.0	0.31	0.0	0.00	Calm	Calm	0.1	0.00	138	b FeFe	FeFe b m.	b <i>Frcu z. c</i>	c b w m.							
23	3.6	0.37	1.6	0.16	Calm	E : ESE	0.2	0.02	173	b w m f	f c m	b <i>Frcu m.</i>	c w							
24	0.2	0.02	0.2	0.02	E : ESE	SE : Calm	0.3	0.01	187	c	c <i>Acu m</i>	c <i>Ast</i>	c r.							
25	0.4	0.04	0.0	0.00	S : SW : WSW	WSW : NNE	1.5	0.10	264	c	c d c <i>Ast</i>	c <i>Ast</i>	c r							
26	0.0	0.00	0.0	0.00	NNE	NNE : N	1.5	0.15	269	c i r	c i r	c	c							
27	8.3	0.81	8.2	0.80	W	W : NNW	2.0	0.17	289	c	c r. r r	r r t bc	b c							
28	9.7	0.95	9.2	0.90	N : NNE	NE : NNE : N	6.4	0.40	341	c b	b c <i>Frcu</i>	b c r b <i>Frcu</i>	bc <i>lu.-ha</i>							
29	6.7	0.65	6.5	0.63	N : NNW	N : NNW	2.8	0.14	261	b w c	c b m. c	c b <i>Frcu c</i>	c b m.							
30	0.3	0.03	0.0	0.00	NW : N	NNW : N	1.9	0.10	255	b c m.	c <i>Acu</i>	c <i>Stcu</i>	c							
Means	3.9	0.41	3.0	0.32	..	..	..	0.25	252											
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29	30	31							

The mean *Temperature of Evaporation* for the month was 56°.0, being 1°.9 higher than the mean *Temperature of the Dew Point* for the month was 53°.6, being 2°.5 higher than the mean *Degree of Humidity* for the month was 82.9, being 3.0 greater than the mean *Elastic Force of Vapour* for the month was 0.414in., being 0.035in. greater than the average for the 65 years, 1841-1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.6.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.223. The maximum daily amount of *Sunshine* was 10.6 hours on September 11.

The highest reading of the *Solar Radiation Thermometer* was 140°.6 on September 11; and the lowest reading of the *Terrestrial Radiation Thermometer* was 30°.7 on September 29.

The *Proportions of Wind* referred to the cardinal points were N. 20, E. 15, S. 18, W. 24, calm or nearly calm conditions, 23, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 15.6 lbs. on the square foot on September 7. The mean daily *Horizontal Movement of the Air* for the month was 252 miles; the greatest daily value was 570 miles on September 7, and the least daily value was 138 miles on September 22.

*Rain* (0.005in. or over) fell on 17 days in the month, amounting to 3.156in., as measured by gauge No. 6 partly sunk below the ground; being 1.008in. greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY 1936.	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.	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.				
Oct. 1	30.070	56.0	49.1	6.9	52.6	- 1.5	49.8	46.9	5.7	8.8	3.6	81	73.3	45.2	58.0	0.000	0.0	11.6
2	30.114	58.9	42.4	16.5	51.6	- 2.1	48.4	45.0	6.6	15.3	3.5	78	98.3	31.3	57.9	0.000	1.2	11.6
3	30.096	58.4	36.1	22.3	46.4	- 6.9	42.5	37.3	9.1	24.2	2.2	70	112.1	24.5	57.7	0.000	10.0	11.5
4	29.889	62.6	34.0	28.6	46.6	- 6.4	43.1	38.6	8.0	22.3	1.1	73	117.2	22.7	57.4	0.000	9.7	11.4
5	29.872	53.6	34.5	19.1	44.7	- 8.1	41.5	37.0	7.7	18.6	0.7	74	104.7	23.4	57.0	0.012	3.0	11.4
6	29.996	52.2	39.1	13.1	44.9	- 7.6	41.6	36.9	8.0	15.1	2.8	74	105.9	29.8	56.7	0.001	3.7	11.3
7	30.049	52.1	36.7	15.4	44.6	- 7.7	41.2	36.3	8.3	14.2	1.5	73	85.2	26.3	56.3	0.000	2.4	11.3
8	29.994	52.1	40.8	11.3	45.5	- 6.5	42.5	38.5	7.0	15.8	1.4	77	105.5	32.2	56.0	0.004	2.4	11.2
9	29.963	51.9	37.0	14.9	45.2	- 6.4	42.0	37.5	7.7	14.2	2.5	75	83.9	25.0	55.7	0.006	0.7	11.1
10	30.008	52.2	41.8	10.4	46.8	- 4.5	43.5	39.3	7.5	12.9	3.4	75	77.3	34.0	55.6	0.026	1.8	11.1
11	30.111	54.0	36.1	17.9	45.7	- 5.2	42.9	39.2	6.5	15.4	1.7	78	101.6	25.1	55.1	0.000	5.0	11.0
12	30.067	57.8	36.0	21.8	48.1	- 2.5	45.1	41.3	6.8	9.2	1.2	77	78.0	25.0	55.0	0.000	0.2	10.9
13	29.926	57.8	44.9	12.9	50.8	+ 0.5	47.7	44.3	6.5	11.0	2.5	78	89.2	37.0	55.0	0.000	1.0	10.9
14	29.795	57.6	42.0	15.6	52.2	+ 2.1	50.7	49.1	3.1	5.2	1.8	90	72.4	30.9	54.8	0.049	0.2	10.8
15	29.860	67.2	49.6	17.6	56.4	+ 6.5	53.0	49.8	6.6	12.4	1.9	78	113.5	40.9	54.8	0.000	4.9	10.7
16	30.003	59.3	46.0	13.3	52.6	+ 2.8	49.4	46.0	6.6	15.2	1.2	78	96.6	37.3	54.7	0.000	3.3	10.7
17	29.845	59.8	50.1	9.7	56.1	+ 6.5	52.3	48.6	7.5	14.0	4.0	76	80.9	42.3	54.7	0.010	0.6	10.6
18	29.863	57.4	45.0	12.4	52.3	+ 3.0	46.6	39.6	12.7	19.8	3.8	62	105.4	35.3	54.7	0.000	8.0	10.6
19	29.690	56.2	42.6	13.6	49.1	0.0	45.3	40.6	8.5	17.4	5.6	73	95.1	35.0	54.5	0.038	2.4	10.5
20	29.967	51.1	42.0	9.1	47.3	- 1.5	42.4	35.4	11.9	21.6	4.9	63	94.9	34.0	54.3	0.000	6.4	10.4
21	30.028	55.8	49.9	5.9	52.8	+ 4.2	49.9	46.8	6.0	8.7	4.6	80	60.5	47.4	54.2	0.000	0.0	10.4
22	30.067	61.7	45.2	16.5	54.0	+ 5.7	51.5	49.1	4.9	9.3	1.6	83	98.1	37.5	54.1	0.000	0.9	10.3
23	29.975	59.6	51.3	8.3	53.8	+ 5.7	51.2	48.7	5.1	11.7	2.4	83	79.8	44.5	54.1	0.026	0.1	10.2
24	29.846	57.6	45.6	12.0	50.4	+ 2.5	48.3	46.0	4.4	12.6	1.0	85	102.3	37.3	54.0	0.070	4.4	10.2
25	29.485	54.4	41.0	13.4	49.4	+ 1.7	45.7	41.2	8.2	20.4	2.3	73	96.2	33.0	54.0	0.436	3.8	10.1
26	29.412	59.7	40.5	19.2	51.6	+ 4.0	49.6	47.5	4.1	9.5	1.8	86	62.7	33.0	54.0	0.242	0.0	10.0
27	29.526	55.0	41.5	13.5	48.0	+ 0.5	42.5	34.6	13.4	17.3	3.9	59	81.8	34.7	53.9	0.084	3.2	10.0
28	29.874	52.2	39.2	13.0	45.9	- 1.5	42.0	36.6	9.3	14.2	4.3	69	82.4	30.4	53.8	0.000	4.6	9.9
29	30.139	56.0	30.3	25.7	44.7	- 2.6	43.4	41.8	2.9	12.3	2.0	89	82.7	21.9	53.6	0.007	0.9	9.9
30	30.008	63.1	51.5	11.6	57.4	+ 10.2	54.8	52.6	4.8	11.5	1.3	84	92.1	43.9	53.5	0.006	2.3	9.8
31	29.880	56.2	41.5	14.7	49.7	+ 2.6	48.5	47.3	2.4	6.6	1.2	91	54.1	34.3	53.2	0.771	0.0	9.7
Means	29.917	56.8	42.0	14.7	49.6	- 0.4	46.4	42.6	7.0	14.1	2.5	76.9	89.8	33.4	55.1	1.788	2.8	10.7
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the astronomical day, 0h-24h Universal Time, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the 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 Hygrometrical Tables, published by the Meteorological Office, Air Ministry. 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 29.917in., being 0.189in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 67.2 on October 15; the lowest in the month was 30.3 on October 29; and the range was 36.9. The mean of all the highest daily readings in the month was 56.8, being 0.7 lower than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 42.0, being 1.2 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 14.7, being 0.4 greater than the average for the 65 years, 1841-1905. The mean for the month was 49.6, being 0.4 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1936.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.			
	POLARIS		δ URSÆ 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.		0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>		
hours	hours	hours	hours			lbs.	lbs.	miles.							
Oct. 1	0.0	0.00	0.0	0.00	N	N	0.9	0.11	268	c	c <i>Stcu</i>	c <i>Ast</i>	c		
2	9.7	0.95	9.5	0.93	N : NNE	E	1.4	0.07	231	c	c <i>Stcu</i>	c <i>Stcu</i>	b c		
3	10.7	1.00	10.7	1.00	Calm : SE	SE : ESE	0.6	0.05	203	c b x	b y	b y	b x		
4	10.7	1.00	10.7	1.00	Calm	Calm : SE	0.1	0.00	155	b x f	b f b y	b <i>Ci</i> y	b f x		
5	4.8	0.45	4.1	0.39	Calm : E	E : NE	5.2	0.44	267	b f x	c d c <i>Frcu</i>	c <i>Stcu</i> b y	b c r.		
6	10.4	0.97	10.4	0.97	NE	NE : N	3.7	0.15	..	c r.	c b c <i>Acu</i> <i>Ci</i>	c <i>Acu</i> p. c	b		
7	4.7	0.44	4.1	0.38	N : NE	NNE : N	1.1	0.10	..	b x c	c <i>Stcu</i>	c <i>Stcu</i>	c b w		
8	2.7	0.26	2.6	0.25	NE : Calm	E : NE	0.8	0.05	..	c	c m i d.	c b c <i>Frcu</i>	c		
9	2.0	0.18	1.7	0.16	Calm : NE	NE	1.2	0.07	..	c b x c	c m b c y	c <i>Nbst</i> d.	c b c p		
10	6.3	0.56	4.7	0.41	NE	NE : N	1.2	0.10	..	c r	c p c <i>Nbst</i>	c <i>Acu</i>	c		
11	6.2	0.55	4.7	0.41	N : NE	NNE : Calm	0.5	0.03	..	c b x	b m c <i>Frcu</i>	c <i>Acu</i>	b m x		
12	5.4	0.48	4.2	0.37	Calm	NNW : NW	0.6	0.03	..	b c m	o f	f c <i>Acu</i> m.	c b		
13	5.3	0.47	4.5	0.40	WSW : NW	NNW : NW	0.9	0.08	..	b c	c b m c <i>Acu</i>	c <i>Stcu</i> m	c m. b		
14	4.7	0.41	3.5	0.31	SW	SW : NW	1.9	0.10	..	b c	c i r. c	c <i>Nbst</i> d c	r c		
15	11.1	1.09	10.9	0.97	WSW	W : NW : WSW	2.9	0.26	..	c	c <i>Acu</i>	c <i>Stcu</i> b	b w		
16	7.1	0.63	6.5	0.58	WSW : W	W : WSW	3.6	0.20	..	b w	b m. c <i>Cicu</i>	c <i>Acu</i> b	b c		
17	4.7	0.41	3.0	0.26	WSW	SW : WSW	10.0	1.47	..	c b c	c <i>Stcu</i>	c <i>Stcu</i>	b c r.		
18	5.7	0.50	4.4	0.38	W	WNW : WSW	4.5	0.98	..	c b	b <i>Frcu</i> y	b <i>Frcu</i>	b c		
19	10.2	0.88	9.5	0.83	WSW	W : NW	14.0	1.96	..	c b c	c r. p c	c p	b		
20	0.0	0.00	0.0	0.00	NW : NNW	NNW : NW : W	4.2	0.78	..	b	b <i>Ci</i> y	bc <i>Acu</i> c m.	c m.		
21	5.3	0.46	5.1	0.44	WSW : W	W	1.6	0.18	..	c m	c <i>Ast</i> m	c <i>Ast</i> m.	c		
22	0.3	0.03	0.0	0.00	WSW	WSW : Calm	0.3	0.03	..	c b	b c <i>Stcu</i> m	c <i>Acu</i> m.	c m		
23	1.4	0.12	1.1	0.10	SSW	SW : SSW	1.0	0.07	..	c d. m.	c <i>Stcu</i>	c d. m	c r r.		
24	4.0	0.33	3.9	0.32	Calm : SW	WSW : SW	3.7	0.23	..	c r r.	c m b <i>Acu</i>	b c b	b c		
25	8.5	0.71	7.8	0.65	SSW : W	WSW	11.5	1.17	..	c r r	R r c b <i>Frcu</i> y	b c t P h c	b		
26	8.6	0.72	8.3	0.69	WSW : SSW	WSW	12.0	1.49	..	b c	c r r c	i d	i d c		
27	9.7	0.81	9.6	0.80	W : WSW	WSW : W	12.2	2.22	..	c b q	b c <i>Cist</i> so.-ha y	c so.-ha c i d	r c b		
28	11.6	0.97	11.6	0.97	W : WNW	NW	5.2	0.83	..	b	b c <i>Cist</i>	c b <i>Frcu</i> y c	b		
29	1.9	0.16	1.3	0.11	Calm : SW	SW : SSW	0.6	0.05	..	b x	b f c <i>Ci</i> <i>Acu</i>	c d d.	c d c		
30	0.9	0.08	0.4	0.03	SW : WSW	WSW : SW	2.0	0.19	..	c	c <i>Acu</i> <i>Ci</i>	c <i>Acu</i>	d. c		
31	10.0	0.80	10.0	0.80	SW : NNE	NNE : N	6.3	0.65	..	c d. r m	r r m	r r r.	r. b		
Means	6.0	0.53	5.4	0.48	..	..	..	0.46	..	..	..	..	..		
Number of Columns for Reference.	19	20	21	22	23	24	25	26	27	28	29	30	31		

The mean *Temperature of Evaporation* for the month was 46°.4, being 1°.5 lower than  
 The mean *Temperature of the Dew Point* for the month was 42°.6, being 3°.0 lower than  
 The mean *Degree of Humidity* for the month was 76.9, being 8.0 less than  
 The mean *Elastic Force of Vapour* for the month was 0.274in., being 0.034in. less than  
 } the average for the 65 years, 1841-1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6.8.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.263. The maximum daily amount of *Sunshine* was 10.0 hours on October 3.

The highest reading of the *Solar Radiation Thermometer* was 117°.2 on October 4; and the lowest reading of the *Terrestrial Radiation Thermometer* was 21°.9 on October 29.

The *Proportions of Wind* referred to the cardinal points were N. 23, E. 12, S. 16, W. 37, calm or nearly calm conditions, 12, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 14.0 lbs. on the square foot on October 19.

*Rain* (0.005in. or over) fell on 14 days in the month, amounting to 1.788in., as measured by gauge No. 6 partly sunk below the ground; being 0.994in. less than the average fall for the 65 years, 1841-1905.

MONTH and DAY 1936.	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.	Daily Duration of Sunshine.	Sun above Horizon.
		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.			
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.							Highest in Sun's Rays.	Lowest on the Grass.				
Nov. 1	30.030	48.9	34.8	14.1	42.0	- 5.0	39.9	36.9	5.1	10.0	1.7	82	63.8	25.2	53.0	0.011	2.2	9.7
2	29.861	52.6	39.6	13.0	47.8	+ 1.0	46.6	45.2	2.6	5.7	0.9	91	61.7	29.3	52.0	0.013	0.0	9.6
3	29.781	49.2	38.0	11.2	45.3	- 1.3	44.8	44.3	1.0	1.2	0.0	96	51.3	28.4	51.8	0.347	0.0	9.6
4	29.767	48.0	41.7	6.3	45.7	- 0.7	44.5	43.0	2.7	6.8	0.9	91	52.0	32.2	51.6	0.000	0.0	9.5
5	29.539	52.9	41.5	11.4	47.2	+ 1.1	45.2	42.9	4.3	9.2	2.7	85	65.8	32.6	52.4	0.050	0.0	9.5
6	29.099	53.9	36.5	17.4	46.0	+ 0.2	44.2	42.0	4.0	8.6	1.7	86	91.3	26.3	52.3	0.118	1.5	9.4
7	28.792	48.8	41.9	6.9	45.1	- 0.3	43.4	41.2	3.9	6.9	3.0	86	83.2	34.6	52.1	0.220	1.1	9.3
8	28.953	51.0	40.1	10.9	45.0	- 0.0	41.8	37.3	7.7	18.2	3.9	75	83.6	32.3	52.0	0.041	6.6	9.3
9	29.042	55.0	42.9	12.1	48.5	+ 3.9	45.6	42.1	6.4	12.3	4.5	78	82.6	35.0	52.0	0.255	3.6	9.2
10	29.415	50.7	38.2	12.5	44.7	+ 0.4	41.9	38.0	6.7	10.7	2.9	77	66.3	31.7	51.7	0.002	1.6	9.2
11	29.333	54.4	31.9	22.5	42.9	- 1.1	41.7	40.1	2.8	8.1	0.2	90	59.1	22.3	51.4	0.475	0.5	9.1
12	28.974	53.3	48.0	5.3	50.8	+ 7.1	49.3	47.8	3.0	6.2	0.6	89	63.3	44.0	51.2	0.587	0.2	9.1
13	29.688	50.1	38.7	11.4	47.1	+ 3.6	45.1	42.7	4.4	7.2	1.6	85	62.4	28.2	51.0	0.010	0.2	9.0
14	29.938	51.7	34.1	17.6	43.6	+ 0.3	41.8	39.4	4.2	8.3	0.7	85	67.6	25.3	51.0	0.139	1.8	8.9
15	29.990	52.7	37.2	15.5	45.9	+ 2.8	43.7	40.9	5.0	9.1	3.0	83	64.3	30.0	51.0	0.010	0.1	8.9
16	29.749	54.3	49.5	4.8	52.4	+ 9.6	50.3	48.3	4.1	7.2	0.4	86	59.0	47.0	50.9	0.185	0.0	8.8
17	29.633	56.1	44.9	11.2	53.7	+ 11.1	52.2	50.8	2.9	5.6	1.7	90	64.6	41.5	50.8	0.351	0.0	8.8
18	29.731	46.2	43.8	2.4	45.1	+ 2.7	42.3	38.5	6.6	7.7	3.9	78	46.1	39.8	49.7	0.068	0.0	8.7
19	30.023	45.6	43.0	2.6	44.2	+ 1.9	42.9	41.3	2.9	5.6	1.4	89	46.5	41.2	49.7	0.027	0.0	8.7
20	30.346	44.1	38.4	5.7	42.3	+ 0.1	38.9	33.7	8.6	11.7	4.2	71	52.2	31.7	50.7	0.000	0.0	8.6
21	30.334	46.2	35.7	10.5	39.6	- 2.5	38.2	36.2	3.4	7.7	0.4	87	70.0	26.8	50.5	0.000	3.3	8.6
22	30.176	45.8	36.0	9.8	38.8	- 3.3	38.1	37.1	1.7	5.4	0.0	93	45.5	27.1	50.3	0.000	0.9	8.5
23	29.985	38.1	32.9	5.2	36.5	- 5.5	35.8	34.6	1.9	2.7	0.0	93	40.4	33.2	50.1	0.000	0.0	8.5
24	29.910	37.2	35.2	2.0	36.1	- 5.9	35.2	33.5	2.6	4.3	2.8	91	40.5	33.4	49.9	0.000	0.0	8.4
25	29.980	40.4	32.2	8.2	35.8	- 6.1	35.0	33.5	2.3	3.6	1.5	92	39.5	32.0	49.8	0.018	0.0	8.4
26	29.893	44.1	37.0	7.1	40.7	- 1.1	39.8	38.5	2.2	5.4	0.4	92	53.2	28.5	49.5	0.003	0.0	8.4
27	29.903	41.9	35.0	6.9	38.5	- 3.2	37.5	35.9	2.6	4.4	0.7	91	44.7	31.0	49.3	0.000	0.0	8.4
28	30.045	41.9	35.4	6.5	39.7	- 1.8	38.1	35.9	3.8	4.9	1.0	86	44.8	28.3	49.1	0.000	0.0	8.3
29	30.015	49.8	32.4	17.4	40.1	- 1.1	39.2	37.8	2.3	8.2	0.2	92	46.1	22.0	49.0	0.088	0.0	8.3
30	29.770	54.1	44.3	9.8	50.2	+ 9.2	47.5	44.5	5.7	13.7	1.4	81	62.1	36.2	49.1	0.003	0.0	8.2
Means	29.723	48.6	38.7	9.9	44.0	+ 0.5	42.3	40.1	3.9	7.6	1.6	86.4	59.1	31.9	50.8	Sum 3.021	0.8	8.9
Number of Column for Reference.	I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the astronomical day, 0h-24h Universal Time, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the 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 Hygrometrical Tables, published by the Meteorological Office, Air Ministry. 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 29.723 in., being 0.042 in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 56°.1 on November 17; the lowest in the month was 31°.9 on November 11; and the range was 24°.2. The mean of all the highest daily readings in the month was 48°.6, being 0°.4 lower 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°.8 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 9°.9, being 1°.2 less than the average for the 65 years, 1841-1905. The mean for the month was 44°.0, being 0°.5 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1936.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.			
	POLARIS		δ URSÆ MINORIS.		OSLER'S.			Robinson's Horizontal Movement of the Air.	0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>	
	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.
hours		hours				lbs.	lbs.	miles					
Nov. 1	0.1	0.01	0.1	0.01	N : Calm	Calm : SW : SSW	0.9	0.06	221	b x f	b f	b c f	c d, d.
2	5.5	0.44	4.1	0.33	SW : Calm : NNW	N : NNE : Calm	0.8	0.06	215	d, c	o Ast m	o St m	c b f
3	1.6	0.13	0.6	0.05	SW : WSW	WSW : Calm	1.0	0.04	213	b F c f	c r r m	r r, d g f	d f c
4	2.8	0.22	0.6	0.05	Calm	Calm : SSW	0.2	0.01	172	c	c b c f	c f	c f
5	11.1	0.89	9.6	0.77	SSW	SW : SSW	1.7	0.17	287	c lu.-ha	c r r c Ast	c p, c m.	b
6	4.6	0.37	3.7	0.30	S.	S : SW	3.5	0.22	276	b x c	c Acu Frcu	c r	r r c b
7	5.0	0.38	4.1	0.32	SSW	SSW	4.3	0.53	366	b c i r	i r c p	c p r.	b c
8	5.8	0.45	5.6	0.43	WSW	WSW : SW	8.5	1.17	469	c i r	c b Frcu y	b c r	b c
9	10.3	0.79	9.1	0.70	WSW	WSW	14.5	1.62	498	r r	r r c Cist	c b	b w
10	13.0	1.00	13.0	1.00	WSW : W	W : WSW	4.0	0.48	374	b c w	c m Acu Frcu	c p, b Ci	b
11	1.6	0.12	1.1	0.09	WSW : SSW	SSE : SW	5.0	0.15	289	b x m.	b c Cist so.-ha	c r, r R	r r c
12	0.0	0.00	0.0	0.00	SW	SSW : NNE	6.1	1.17	410	c r r	R r r	r r c r	c d d, m.
13	7.4	0.57	5.7	0.44	N : NNE	N : Calm	3.0	0.30	294	d, d, m.	c Stcu	c Stcu	c m b x
14	11.9	0.91	10.0	0.77	SW	W : WSW	3.1	0.16	318	b x c	c d r R c Ast	c b	b
15	0.0	0.00	0.0	0.00	WSW	WSW	7.5	0.95	406	b x	c m, Ast	c Nbst r.	c d.
16	0.0	0.00	0.0	0.00	WSW : W	Calm : SW	4.5	0.27	281	c	c Stcu m	d d, m	d, r r
17	0.5	0.04	0.3	0.03	SW : WSW	SW : WSW : NW	4.0	0.87	405	r r c	c Nbst r	c Nbst p i r.	r, R c
18	0.0	0.00	0.0	0.00	NNW : N	N : NNE	8.4	1.86	510	c r.	c r r.	r r, c	c
19	0.0	0.00	0.0	0.00	NNE : NE	NE	2.5	0.33	353	c r, d.	c r, d, m.	o d, m, o	o d.
20	8.2	0.63	6.3	0.49	NE : ENE	ENE : NE	2.0	0.19	296	o c	c m, Stcu	c Stcu	c
21	6.7	0.50	5.3	0.40	NE : ENE	E : Calm	1.2	0.10	941	c b x	b m c b Frcu	b	b m, x c
22	0.6	0.04	0.6	0.04	Calm : ENE	E : Calm	0.6	0.02	153	c	Fe Fe	Fe b Ci m	fe fe
23	0.0	0.00	0.0	0.00	Calm	Calm	0.0	0.00	125	fe fe	Fe f o m	o St m m.	o m.
24	0.0	0.00	0.0	0.00	Calm	Calm	0.0	0.00	138	o m, d, m	o St m	o St m f	o f
25	0.0	0.00	0.0	0.00	Calm	NE	0.5	0.02	184	o f	o St f	o d, f	d, d, m
26	1.6	0.12	0.5	0.04	Calm	Calm	0.1	0.00	134	d, m f	o c Stcu f	o Stcu m	c m f
27	0.0	0.00	0.0	0.00	Calm	N : Calm	0.1	0.00	157	o f	o f	o f c Stcu m	c m
28	6.5	0.48	2.6	0.19	Calm : N	N	0.3	0.03	182	c m	b Acu f	b, c m	c
29	0.0	0.00	0.0	0.00	Calm : WSW	SW	2.0	0.17	282	c b x c f	c f m	c r, r, m	r, c m.
30	9.0	0.65	8.3	0.61	SW : WSW	WNW	5.2	0.55	418	c r, m.	c Acu m	c Ci Frcu m.	c b
Means	3.8	0.29	3.0	0.24	..	..	..	0.38	289				
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29	30	31

The mean Temperature of Evaporation for the month was 42°.3, being 0°.4 higher than the average for the 65 years, 1841-1905.  
 The mean Temperature of the Dew Point for the month was 40°.1, being 0°.4 higher than  
 The mean Degree of Humidity for the month was 86.4, being 0.2 less than  
 The mean Elastic Force of Vapour for the month was 0.248in., being 0.002in. greater than

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.9.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.089. The maximum daily amount of Sunshine was 6.6 hours on November 8.

The highest reading of the Solar Radiation Thermometer was 91°.3 on November 6; and the lowest reading of the Terrestrial Radiation Thermometer was 22°.0 on November 29.

The Proportions of Wind referred to the cardinal points were N. 16, E. 8, S. 22, W. 28, calm or nearly calm conditions, 26, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 14.5 lbs. on the square foot on November 9. The mean daily Horizontal Movement of the Air for the month was 289 miles; the greatest daily value was 510 miles on November 18, and the least daily value was 125 miles on November 23.

Rain (0.005in. or over) fell on 19 days in the month, amounting to 3.021in., as measured by gauge No. 6 partly sunk below the ground; being 0.801in. greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY 1936.	BARO-METER. Mean of 24 Hourly Values (corrected to 32° and reduced to 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.	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.				
Dec. 1	29.856	46.9	40.3	6.6	43.7	+ 2.8	39.7	33.5	10.2	13.3	6.7	68	54.2	33.4	48.8	0.000	0.4	8.2
2	29.635	54.6	41.1	13.5	49.3	+ 8.4	46.6	43.5	5.8	9.4	0.6	80	55.8	35.0	48.8	0.145	0.0	8.2
3	29.709	53.9	48.4	5.5	51.8	+10.7	48.5	45.0	6.8	9.5	2.8	77	63.7	43.5	48.8	0.000	1.5	8.1
4	29.783	51.5	39.0	12.5	46.6	+ 5.3	41.8	34.8	11.8	20.9	6.2	64	71.2	28.0	48.8	0.000	5.0	8.1
5	29.634	44.6	35.8	8.8	40.5	- 1.0	38.1	34.4	6.1	10.0	4.1	78	55.0	29.3	48.8	0.058	0.7	8.1
6	29.698	39.7	32.8	6.9	36.7	- 4.8	34.4	30.2	6.5	9.2	2.0	77	45.0	27.3	48.7	0.060	0.1	8.0
7	30.188	34.7	25.7	9.0	31.7	- 9.6	29.2	24.1	7.6	11.5	1.0	73	50.5	17.5	48.4	0.000	2.6	8.0
8	30.131	45.0	26.0	19.0	36.9	- 4.1	36.1	34.7	2.2	7.4	0.0	92	45.1	17.8	48.2	0.236	0.0	8.0
9	30.193	39.8	32.3	7.5	36.8	- 3.8	36.3	35.5	1.3	1.7	0.0	95	41.0	23.5	48.0	0.004*	0.0	7.9
10	30.139	38.2	34.9	3.3	37.3	- 3.1	36.1	34.1	3.2	6.5	0.0	89	44.5	30.2	47.7	0.000	0.0	7.9
11	29.840	41.1	26.5	14.6	33.4	- 6.8	32.3	30.3	3.1	6.1	0.3	88	51.6	18.0	47.3	0.000	0.6	7.9
12	29.647	41.9	32.5	9.4	37.6	- 2.7	36.8	35.5	2.1	3.3	0.5	92	47.8	26.1	47.2	0.069	0.0	7.9
13	29.618	45.6	28.0	17.6	37.7	- 2.8	36.2	33.9	3.8	8.4	1.3	86	64.6	18.7	47.1	0.037	5.8	7.9
14	29.047	50.2	44.0	6.2	47.8	+ 7.1	46.5	45.0	2.8	4.8	2.6	90	51.8	40.6	47.0	0.747	0.0	7.9
15	29.439	47.5	36.0	11.5	41.8	+ 1.0	39.6	36.4	5.4	11.2	3.8	81	64.4	29.3	46.8	0.008	5.7	7.9
16	29.393	51.8	42.3	9.5	45.8	+ 5.1	43.6	40.8	5.0	12.1	2.6	83	66.6	34.7	46.8	0.032	1.8	7.9
17	29.585	55.2	42.6	12.6	49.2	+ 8.8	47.9	46.5	2.7	5.6	1.5	90	55.8	35.0	46.7	0.150	0.0	7.9
18	29.696	55.1	47.7	7.4	52.0	+12.0	50.6	49.1	2.9	5.2	1.6	90	55.0	44.6	46.9	0.113	0.0	7.8
19	30.175	47.7	40.3	7.4	45.0	+ 5.5	42.8	39.8	5.2	10.5	3.6	83	59.5	33.5	46.9	0.000	3.4	7.8
20	30.148	48.7	42.6	6.1	45.4	+ 6.4	43.2	40.3	5.1	9.5	3.4	83	65.1	35.6	47.1	0.000	1.7	7.8
21	30.071	48.6	37.9	10.7	44.9	+ 6.2	43.5	41.7	3.2	5.4	0.9	88	57.1	28.8	47.1	0.000	0.0	7.8
22	30.119	51.9	37.5	14.4	45.3	+ 6.9	43.9	42.1	3.2	5.4	0.5	89	68.4	28.3	47.1	0.055	2.0	7.8
23	30.459	42.9	31.1	11.8	38.2	- 0.0	37.3	35.9	2.3	4.7	0.3	91	43.7	24.0	47.0	0.000	0.0	7.8
24	30.434	43.3	30.8	12.5	37.3	- 0.9	36.4	34.9	2.4	5.4	0.0	91	45.3	23.5	47.0	0.004*	0.0	7.8
25	30.392	46.8	37.7	9.1	42.4	+ 4.0	40.8	38.6	3.8	5.5	0.4	86	47.3	29.5	46.9	0.005	0.4	7.8
26	30.384	44.8	42.0	2.8	43.4	+ 4.8	43.1	42.7	0.7	0.9	0.0	97	46.0	38.9	46.7	0.020	0.0	7.9
27	30.223	44.9	33.0	11.9	39.8	+ 1.0	38.6	36.9	2.9	5.6	0.4	89	66.1	28.5	46.6	0.000	3.4	7.9
28	29.991	42.9	31.0	11.9	34.3	- 4.6	33.7	32.7	1.6	3.3	0.0	94	47.2	27.5	46.3	0.019	0.0	7.9
29	29.832	52.7	42.9	9.8	49.2	+10.2	47.8	46.3	2.9	6.4	0.0	90	60.2	41.1	46.5	0.020	0.2	7.9
30	30.098	49.7	40.2	9.5	44.3	+ 5.4	42.2	39.4	4.9	8.8	2.5	83	63.9	30.0	46.3	0.000	5.6	7.9
31	30.106	48.4	40.6	7.8	45.0	+ 6.3	43.2	40.8	4.2	7.5	1.2	85	58.6	33.0	46.3	0.003*	0.1	7.9
Means	29.925	46.8	36.9	9.9	42.3	+ 2.4	40.5	38.0	4.2	7.6	1.6	85.2	55.2	30.2	47.4	1.785	1.3	7.9
Number of Column for Reference.	I	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the astronomical day, 0h-24h Universal Time, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the 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 Hygrometrical Tables, published by the Meteorological Office, Air Ministry. 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 29.925 in., being 0.133 in. higher than the average for the 65 years, 1841-1905.

\*Rainfall (Column 16). The amounts entered on December 9 and 24 are derived from frost, and that on December 31 from dew.

TEMPERATURE OF THE AIR.

The highest in the month was 55°.2 on December 17; the lowest in the month was 25°.7 on December 7; and the range was 29°.5. The mean of all the highest daily readings in the month was 46°.8, being 2°.6 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 36°.9, being 1°.9 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 9°.9, being 0°.7 greater than the average for the 65 years, 1841-1905. The mean for the month was 42°.3, being 2°.4 higher than the average for the 65 years, 1841-1905.



MONTH and DAY, 1936.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.			
	POLARIS		8 URSÆ 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.		0 <sup>h</sup> to 6 <sup>h</sup>	6 <sup>h</sup> to 12 <sup>h</sup>	12 <sup>h</sup> to 18 <sup>h</sup>	18 <sup>h</sup> to 24 <sup>h</sup>		
hours.		hours.				lbs.	lbs.	miles.							
Dec. 1	5.1	0.37	3.8	0.27	WNW	WNW : W	5.3	0.78	442	b	b c m b c	c Stcu	c b		
2	1.3	0.10	0.7	0.05	W : WSW	W : WNW	4.2	0.55	411	b c d r	r c m.	c Stcu m.	c		
3	1.2	0.09	0.6	0.04	W	W : SW	4.5	0.37	376	c	c Cist bc m.	c Stcu m.	c		
4	5.5	0.40	4.7	0.34	SW : W	WNW : SW	6.0	0.98	435	c	c b Frcu y	b y	b c		
5	10.0	0.73	9.9	0.72	SSW : WSW	W : WSW	10.8	0.65	430	c	c d r. c Frcu	c q p r h b	b		
6	10.6	0.77	10.4	0.76	WSW : W	WNW : NW	8.3	1.07	484	b c r s b	c r s c r. s.	c b Frcu	b		
7	6.5	0.47	1.5	0.11	NW : NNW	NNW : WSW	3.5	0.26	294	b c b x	b x m.	b m	b x f		
8	8.7	0.63	2.6	0.19	SW : SSW	SW : N	1.4	0.12	260	b x c s.	c d m	rr m	b c m		
9	0.0	0.00	0.0	0.00	Calm : N	Calm	0.1	0.01	153	b m x	b m FF	F f	o f f		
10	4.8	0.35	4.0	0.29	Calm	NE : Calm	0.2	0.00	137	o f m	o c m m.	c Stcu m.	c s. d.		
11	4.1	0.30	4.0	0.29	Calm : S	SSW : S	0.3	0.02	189	c b x	b x c Acu m	c Cicu Ci m b	b x c		
12	3.4	0.24	2.9	0.21	Calm	Calm	0.5	0.02	146	c	c Stcu m	c f d. r.	r r. f		
13	..	..	..	..	NW : SSW	SSW	10.6	0.63	323	c b x	b m	b c r b	b c q		
14	3.7	0.27	3.1	0.22	SSW	SSW	24.0	4.25	675	c q r	q r	q r	rr R h c		
15	2.5	0.18	1.7	0.13	WSW	SW : SSW	6.5	0.34	369	c b x	b m.	b m.	b c d.		
16	8.8	0.63	6.3	0.45	SSW : SW	SW	15.0	1.53	503	c d. r.	c r. b c	c b c p	b		
17	0.0	0.00	0.0	0.00	SW : SSW	SSW	8.2	0.85	416	c	c Nbst r. r	c Nbst r. r d	rr d.		
18	3.4	0.24	3.1	0.22	SW : SSW	SW	10.5	1.65	479	d. r.	c Nbst d.	c d. r d.	d. c		
19	13.3	0.95	10.0	0.71	WSW	SW : SSW	2.5	0.22	364	c b	b m	c Acu	bc		
20	2.7	0.20	1.9	0.14	SSW	SSW	4.4	0.39	387	bc	bc Frst	c Frst	c		
21	6.7	0.48	6.1	0.44	SSW	SSW : SW	2.5	0.08	266	c d.	b c Stcu	c Stcu b	b c b		
22	7.0	0.50	7.0	0.50	SSW : SW	SW : N : Calm	2.0	0.09	275	c w	c b c Stcu	c Stcu	c dd		
23	9.5	0.68	2.5	0.18	WSW	Calm : SW	0.1	0.00	206	b x	b Cicu f	b Cu f	b f m x		
24	8.9	0.63	7.6	0.54	SW : WSW	WSW	0.2	0.02	260	m f x	b c St f	c Stcu f m	c b m		
25	0.0	0.00	0.0	0.00	WSW	Calm	0.3	0.02	203	b x	b c b Acu f	c f	c m d. d.		
26	0.0	0.00	0.0	0.00	Calm	Calm	0.0	0.00	94	d. d. f	i d. f	d. f	o f o		
27	5.2	0.37	3.6	0.26	Calm	E : ESE	0.3	0.01	187	o	c m b Frcu m.	b c Ci m.	c m. x		
28	0.0	0.00	0.0	0.00	Calm	Calm	0.0	0.00	153	o	o m	d. d. f	o		
29	2.1	0.15	1.1	0.08	S : SW	SSW	1.2	0.14	328	d d.	c Stcu	c Stcu	c r. c		
30	13.9	0.99	13.9	0.99	SSW : W	SW : SSW	1.7	0.09	306	c	c b m	b Ci m.	b		
31	0.2	0.01	0.2	0.01	SSW : SW	SW : SSW	4.6	0.36	385	b w	b c Ast Frst	c Acu Frst	c		
Means	5.0	0.36	3.8	0.27	..	..	..	0.50	321						
Number of Column for Reference.	19	20	21	22	23	24	25	26	27	28	29	30	31		

The mean *Temperature of Evaporation* for the month was 40°.5, being 2°.0 higher than  
 The mean *Temperature of the Dew Point* for the month was 38°.0, being 1°.6 higher than  
 The mean *Degree of Humidity* for the month was 85.2, being 2.3 less than  
 The mean *Elastic Force of Vapour* for the month was 0.229in., being 0.013in. greater than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6.9.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.167. The maximum daily amount of *Sunshine* was 5.8 hours on December 13.  
 The highest reading of the *Solar Radiation Thermometer* was 71°.2 on December 4; and the lowest reading of the *Terrestrial Radiation Thermometer* was 17°.5 on December 7.  
 The *Proportions of Wind* referred to the cardinal points were N. 6, E. 2, S. 35, W. 37, calm or nearly calm conditions, 20, the whole month being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 24.0 lbs. on the square foot on December 14. The mean daily *Horizontal Movement of the Air* for the month was 321 miles; the greatest daily value was 675 miles on December 14, and the least daily value was 94 miles on December 26.  
*Rain* (0.005in. or over) fell on 16 days in the month, amounting to 1.785in., as measured by gauge No. 6 partly sunk below the ground; being 0.042in. less than the average fall for the 65 years, 1841-1905.





MONTHLY RESULTS OF METEOROLOGICAL ELEMENTS for the YEAR 1936.

MONTH, 1936.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR								Mean Temperature of Evaporation.	Mean Temperature 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 .....	29.366	56.1	24.8	31.3	45.1	36.1	9.0	40.9	+2.3	39.4	37.1	87
February .....	29.546	54.3	19.4	34.9	42.7	31.7	11.0	37.2	-2.3	35.5	32.3	83
March .....	29.662	65.3	28.0	37.3	53.3	38.7	14.6	45.3	+3.4	42.7	39.3	80
April .....	29.776	63.1	28.3	34.8	52.4	37.4	14.9	44.3	-3.0	40.8	35.7	72
May .....	29.822	79.6	33.7	45.9	64.5	45.2	19.3	53.9	+0.8	49.6	45.0	73
June .....	29.818	87.8	41.4	46.4	71.4	52.7	18.7	60.7	+1.3	56.3	52.6	75
July .....	29.663	77.8	46.6	31.2	70.6	53.9	16.7	60.8	-1.9	57.1	54.1	79
August .....	29.930	84.6	46.0	38.6	73.2	53.7	19.5	62.4	+0.8	58.1	54.6	76
September .....	29.838	80.2	41.9	38.3	67.3	52.6	14.7	58.8	+1.5	56.0	53.6	83
October .....	29.917	67.2	30.3	36.9	56.8	42.0	14.7	49.6	-0.4	46.4	42.6	77
November .....	29.723	56.1	31.9	24.2	48.6	38.7	9.9	44.0	+0.5	42.3	40.1	86
December .....	29.925	55.2	25.7	29.5	46.8	36.9	9.9	42.3	+2.4	40.5	38.0	85
Means .....	29.749	Highest 87.8	Lowest 19.4	Annual Range 68.4	57.7	43.3	14.4	50.0	+0.4	47.1	43.8	79.7

MONTH, 1936.	Mean Elastic Force of Vapour.	Mean Tempera- ture of the Earth 4 feet below the surface of the soil.	Mean Amount of Cloud (0-10).	RAIN.		WIND.											Mean Daily Pressure on the Square Foot.	From Robin- son's- Anemo- meter.  Mean Daily Horizontal Move- ment of the Air.
				Number of Rainy Days (0.005 in. 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.				
						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 .....	0.221	44.1	7.7	23	3.553	17	27	30	48	135	243	101	13	130	0.38	293		
February .....	0.183	42.0	6.3	14	1.472	39	36	146	93	65	89	40	52	136	0.24	260		
March .....	0.241	43.0	8.1	12	0.797	23	57	104	66	129	124	45	29	167	0.11	239		
April .....	0.209	45.6	7.7	14	1.698	159	202	39	9	26	93	49	64	79	0.24	291		
May .....	0.300	50.1	6.8	7	0.408	158	195	154	23	21	41	20	34	98	0.20	266		
June .....	0.399	54.6	7.3	16	3.378	64	30	65	23	64	151	96	37	190	0.11	232		
July .....	0.421	58.8	8.4	22	2.925	25	5	6	14	61	367	150	29	87	0.28	290		
August .....	0.429	59.4	6.3	9	0.561	75	36	57	15	22	195	111	56	177	0.12	237		
September .....	0.414	59.5	7.6	17	3.156	94	70	50	45	47	113	95	39	167	0.25	252		
October .....	0.274	55.1	6.8	14	1.788	82	95	32	20	12	183	151	76	93	0.46	..		
November .....	0.248	50.8	7.9	19	3.021	66	77	18	5	56	205	87	22	184	0.38	289		
December .....	0.229	47.4	6.9	16	1.785	18	4	8	6	118	283	111	47	149	0.50	321		
Sums .....	..	..	..	183	24.542	820	834	709	367	756	2087	1056	498	1657	..	..		
Means .....	0.297	50.9	7.3	..	..	..	..	..	..	..	..	..	..	..	0.27	270		

The greatest recorded pressure of the wind on the square foot in the year was 24.0 lbs. on December 14.  
 The greatest recorded daily horizontal movement of the air in the year was 675 miles on December 14.  
 The least recorded daily horizontal movement of the air in the year was 94 miles on December 26.

MONTHLY MEAN READING OF THE BAROMETER AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE PHOTOGRAPHIC RECORDS.

1936.

Hour. Universal Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.	
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	
0 <sup>h</sup>	29.381	29.564	29.660	29.775	29.837	29.834	29.668	29.930	29.848	29.924	29.728	29.925	29.756	
1	29.375	29.561	29.659	29.770	29.835	29.829	29.665	29.927	29.844	29.925	29.723	29.919	29.753	
2	29.370	29.557	29.655	29.765	29.828	29.825	29.659	29.925	29.837	29.920	29.723	29.919	29.749	
3	29.369	29.549	29.650	29.762	29.826	29.818	29.656	29.925	29.830	29.915	29.723	29.917	29.745	
4	29.365	29.542	29.646	29.762	29.822	29.816	29.655	29.924	29.823	29.912	29.720	29.914	29.742	
5	29.357	29.538	29.647	29.765	29.824	29.818	29.655	29.927	29.818	29.911	29.720	29.910	29.741	
6	29.354	29.538	29.651	29.773	29.827	29.820	29.657	29.933	29.823	29.912	29.723	29.911	29.743	
7	29.355	29.539	29.655	29.781	29.834	29.824	29.660	29.940	29.829	29.920	29.729	29.914	29.748	
8	29.363	29.546	29.662	29.785	29.838	29.827	29.663	29.943	29.835	29.926	29.736	29.920	29.754	
9	29.368	29.550	29.667	29.790	29.837	29.825	29.665	29.945	29.841	29.931	29.740	29.929	29.757	
10	29.373	29.552	29.668	29.791	29.834	29.826	29.666	29.943	29.841	29.930	29.742	29.935	29.758	
11	29.374	29.553	29.668	29.786	29.829	29.823	29.667	29.938	29.841	29.925	29.740	29.935	29.757	
12	29.366	29.548	29.666	29.783	29.824	29.819	29.665	29.934	29.838	29.916	29.731	29.924	29.751	
13	29.357	29.541	29.659	29.777	29.816	29.813	29.662	29.929	29.835	29.910	29.723	29.918	29.745	
14	29.351	29.533	29.652	29.770	29.810	29.808	29.662	29.924	29.831	29.903	29.715	29.914	29.739	
15	29.355	29.530	29.650	29.766	29.803	29.802	29.660	29.919	29.828	29.898	29.712	29.918	29.737	
16	29.358	29.531	29.650	29.762	29.797	29.798	29.660	29.915	29.828	29.897	29.713	29.922	29.736	
17	29.362	29.535	29.654	29.761	29.798	29.798	29.658	29.912	29.830	29.902	29.716	29.927	29.738	
18	29.365	29.542	29.662	29.766	29.801	29.800	29.658	29.912	29.837	29.911	29.717	29.930	29.742	
19	29.368	29.547	29.672	29.774	29.807	29.807	29.662	29.919	29.845	29.917	29.716	29.935	29.747	
20	29.371	29.548	29.678	29.783	29.820	29.816	29.667	29.929	29.854	29.923	29.715	29.938	29.754	
21	29.375	29.548	29.682	29.787	29.828	29.825	29.674	29.936	29.857	29.925	29.717	29.937	29.758	
22	29.379	29.549	29.683	29.789	29.829	29.825	29.677	29.940	29.858	29.924	29.718	29.939	29.759	
23	29.383	29.552	29.684	29.791	29.829	29.827	29.675	29.942	29.856	29.924	29.718	29.938	29.760	
24	29.384	29.554	29.684	29.790	29.825	29.825	29.672	29.940	29.851	29.924	29.720	29.931	29.758	
Means	0 <sup>h</sup> -23 <sup>h</sup> .	29.366	29.546	29.662	29.776	29.822	29.818	29.663	29.930	29.838	29.917	29.723	29.925	29.749
	1 <sup>h</sup> -24 <sup>h</sup> .	29.366	29.545	29.663	29.776	29.822	29.817	29.663	29.930	29.838	29.917	29.723	29.925	29.749
No. of Days Employed	31	29	31	30	31	30	31	31	30	31	30	31	..	

MONTHLY MEAN TEMPERATURE OF THE AIR AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE PHOTOGRAPHIC RECORDS.

1936.

Hour. Universal Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.	
0 <sup>h</sup>	39.6	35.8	42.2	41.2	48.7	55.4	57.0	57.4	55.8	47.6	43.0	41.6	47.1	
1	39.4	35.4	41.7	40.5	48.0	54.9	56.6	56.5	55.2	47.0	42.5	41.3	46.6	
2	39.4	35.1	41.1	40.1	47.5	54.6	55.9	55.9	54.9	46.1	42.3	40.9	46.2	
3	39.5	35.0	41.0	39.6	46.9	53.9	55.2	55.5	54.6	45.5	41.8	40.7	45.8	
4	39.6	34.6	40.6	39.3	46.5	53.3	54.9	55.2	54.4	45.0	41.6	40.3	45.4	
5	39.7	34.8	40.8	39.2	46.7	53.7	55.2	55.2	54.3	44.9	41.6	40.3	45.5	
6	39.8	34.8	40.8	39.8	48.1	55.5	56.6	56.0	54.7	45.2	41.8	40.4	46.1	
7	39.9	34.9	41.6	41.5	49.9	57.8	58.7	57.8	55.6	45.8	42.0	40.4	47.2	
8	40.1	35.4	43.4	43.5	52.6	60.0	60.9	60.2	57.1	47.5	42.7	40.6	48.7	
9	40.5	36.6	45.7	45.6	55.2	62.2	62.2	63.0	59.2	49.5	43.7	41.3	50.4	
10	41.2	37.9	47.5	46.7	57.0	63.6	63.8	65.5	61.0	51.5	44.7	42.3	51.9	
11	42.3	39.3	48.7	47.8	58.6	65.3	65.1	67.5	62.3	53.1	45.7	43.5	53.3	
12	43.0	40.5	49.8	48.5	60.3	66.9	66.0	68.6	63.4	54.5	46.4	44.5	54.4	
13	43.4	41.2	50.9	49.2	61.8	67.6	66.9	69.9	64.0	54.9	46.8	45.1	55.1	
14	43.5	41.5	51.5	49.7	61.8	67.6	66.1	70.4	64.6	55.1	47.0	45.1	55.3	
15	43.1	41.3	51.2	49.4	62.1	67.6	66.4	70.8	64.3	54.5	46.5	44.7	55.2	
16	42.4	40.3	50.3	48.9	61.1	67.5	65.2	70.4	63.9	53.6	45.9	44.1	54.5	
17	41.8	39.3	49.0	48.1	60.2	66.7	64.1	68.9	62.5	52.4	45.3	43.5	53.5	
18	41.2	38.2	47.3	47.0	58.1	65.4	63.6	67.1	61.1	51.4	45.1	43.1	52.4	
19	41.0	37.4	45.9	45.3	55.8	63.1	62.4	64.6	59.5	50.5	44.7	42.7	51.1	
20	40.7	36.8	44.9	44.2	53.5	60.7	60.7	62.4	58.4	49.7	44.4	42.5	49.9	
21	40.2	36.1	44.1	43.4	51.8	58.8	59.2	60.9	57.4	49.0	44.2	42.2	48.9	
22	40.0	35.7	43.7	42.7	50.6	57.6	58.4	59.9	56.7	48.5	43.9	42.1	48.3	
23	39.8	35.6	43.2	41.8	49.6	56.6	57.6	58.7	56.1	47.9	43.6	41.8	47.7	
24	39.6	35.3	42.8	41.0	48.7	55.9	57.0	57.5	55.4	47.3	43.0	41.6	47.1	
Means	0 <sup>h</sup> -23 <sup>h</sup> .	40.9	37.2	45.3	44.3	53.9	60.7	60.8	62.4	58.8	49.6	44.0	42.3	50.0
	1 <sup>h</sup> -24 <sup>h</sup> .	40.9	37.2	45.3	44.3	53.9	60.7	60.8	62.4	58.8	49.6	44.0	42.3	50.0
No. of Days Employed	31	29	31	30	31	30	31	31	30	31	30	31	..	

MONTHLY MEAN TEMPERATURE OF EVAPORATION AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE PHOTOGRAPHIC RECORDS.

1936.

Hour, Universal Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.	
0 <sup>h</sup>	38.5	34.4	40.7	39.0	46.7	53.5	55.2	55.7	54.3	45.2	41.6	39.9	45.4	
1	38.3	34.1	40.3	38.9	46.1	53.2	55.0	55.2	54.0	44.7	41.1	39.7	45.1	
2	38.2	33.8	39.9	38.4	45.6	52.8	54.5	54.7	53.7	44.0	41.0	39.5	44.7	
3	38.2	33.7	39.6	38.0	45.3	52.4	54.2	54.3	53.5	43.7	40.5	39.4	44.4	
4	38.2	33.4	39.2	37.8	44.9	52.1	53.8	54.0	53.4	43.2	40.4	38.9	44.1	
5	38.3	33.7	39.5	37.8	45.2	52.4	53.9	54.0	53.3	43.1	40.5	38.9	44.2	
6	38.5	33.8	39.6	38.3	46.2	53.6	54.7	54.6	53.6	43.5	40.7	39.1	44.7	
7	38.6	34.0	40.4	39.5	47.5	54.7	56.0	55.9	54.4	43.8	40.9	39.2	45.4	
8	38.8	34.5	41.9	40.8	49.1	56.1	57.3	57.5	55.3	45.3	41.4	39.4	46.5	
9	39.2	35.5	43.4	42.0	50.6	57.4	57.8	58.9	56.5	46.7	42.3	40.0	47.5	
10	39.9	36.3	44.4	42.3	51.6	57.9	58.7	59.9	57.2	48.0	42.9	40.7	48.3	
11	40.6	37.3	45.1	42.8	52.6	58.9	59.2	60.9	57.9	48.5	43.7	41.5	49.1	
12	40.9	38.0	45.6	43.2	53.4	59.4	59.5	61.2	58.5	49.1	44.1	42.2	49.6	
13	41.1	38.2	46.1	43.3	54.2	59.7	60.1	61.5	58.7	49.3	44.3	42.5	49.9	
14	41.2	38.3	46.4	43.7	54.2	59.7	60.0	61.7	59.1	49.4	44.4	42.4	50.0	
15	40.9	38.0	46.4	43.4	54.3	59.8	60.1	61.8	58.9	49.2	44.1	42.2	49.9	
16	40.4	37.2	45.9	43.2	53.8	59.7	59.6	61.6	58.6	48.8	43.6	41.8	49.5	
17	39.9	36.6	45.1	42.6	53.2	59.3	59.2	61.0	58.0	48.3	43.2	41.5	49.0	
18	39.7	36.1	44.0	42.1	52.1	58.8	58.9	60.3	57.2	47.9	43.1	41.3	48.5	
19	39.5	35.6	43.1	41.2	50.9	57.7	58.1	59.2	56.6	47.4	42.9	40.9	47.8	
20	39.3	35.1	42.6	40.8	49.6	56.7	57.2	58.4	55.9	46.9	42.7	40.9	47.2	
21	38.9	34.7	42.2	40.5	48.6	55.7	56.6	57.9	55.4	46.4	42.5	40.6	46.7	
22	38.7	34.4	41.9	40.2	47.9	55.2	56.2	57.3	54.8	45.8	42.4	40.5	46.3	
23	38.6	34.2	41.6	39.6	47.3	54.6	55.7	56.6	54.4	45.4	42.1	40.2	45.9	
24	38.5	34.0	41.1	39.1	46.7	54.1	55.2	55.7	54.0	44.9	41.6	40.0	45.4	
Means	0 <sup>h</sup> .-23 <sup>h</sup> .	39.4	35.5	42.7	40.8	49.6	56.3	57.1	58.1	56.0	46.4	42.3	40.5	47.1
	1 <sup>h</sup> .-24 <sup>h</sup> .	39.4	35.4	42.8	40.8	49.6	56.3	57.1	58.1	56.0	46.4	42.3	40.5	47.1
No. of Days Employed	31	29	31	30	31	30	31	31	30	31	30	31	..	

MONTHLY MEAN TEMPERATURE OF THE DEW POINT AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE CORRESPONDING AIR AND EVAPORATION TEMPERATURES.

1936.

Hour, Universal Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.	
0 <sup>h</sup>	36.9	32.0	38.6	36.6	44.5	51.8	53.7	54.3	53.0	42.4	39.7	37.5	43.4	
1	36.7	31.8	38.4	36.7	43.9	51.6	53.7	54.1	53.0	42.0	39.2	37.5	43.2	
2	36.4	31.5	38.4	36.0	43.4	51.1	53.3	53.6	52.7	41.4	39.3	37.6	42.9	
3	36.3	31.4	37.7	35.7	43.4	51.0	53.1	53.3	52.6	41.4	38.8	37.7	42.7	
4	36.2	31.3	37.3	35.7	43.0	51.0	52.9	53.0	52.6	40.8	38.8	37.0	42.5	
5	36.3	31.8	37.7	35.8	43.4	51.2	52.8	53.0	52.5	40.7	39.1	37.0	42.6	
6	36.7	32.1	38.0	36.2	44.1	51.9	53.1	53.4	52.7	41.3	39.3	37.3	43.0	
7	36.8	32.5	38.8	36.6	44.9	52.0	53.8	54.3	53.4	41.3	39.5	37.5	43.5	
8	37.0	32.9	39.9	37.0	45.4	52.8	54.4	55.3	53.8	42.7	39.6	37.8	44.1	
9	37.4	33.6	40.5	37.0	45.9	53.5	54.3	55.8	54.3	43.5	40.5	38.3	44.5	
10	38.2	33.9	40.5	36.3	46.1	53.3	54.7	55.6	54.1	44.1	40.5	38.5	44.7	
11	38.2	34.2	40.6	35.8	46.8	53.9	54.6	56.1	54.5	43.4	41.2	38.8	44.8	
12	37.9	34.1	40.5	36.0	46.7	53.5	54.5	55.7	54.6	43.3	41.3	39.1	44.8	
13	37.9	33.4	40.2	35.1	47.0	53.5	54.9	55.3	54.5	43.1	41.3	39.0	44.6	
14	38.0	33.3	40.2	35.4	47.0	53.5	55.3	55.3	54.8	43.2	41.3	38.7	44.7	
15	37.7	32.8	40.6	35.1	46.9	53.7	55.3	55.2	54.6	43.4	41.2	38.8	44.6	
16	37.1	32.1	40.6	35.4	46.7	53.6	55.3	55.1	54.4	43.5	40.7	38.7	44.4	
17	37.2	32.1	40.3	34.8	46.3	53.4	55.4	55.1	54.5	43.7	40.5	38.8	44.3	
18	37.7	32.7	39.9	35.0	46.2	53.6	55.3	55.2	54.1	44.0	40.5	38.8	44.4	
19	37.5	32.7	39.5	35.2	45.8	53.3	54.8	55.0	54.2	43.9	40.5	38.4	44.2	
20	37.4	32.3	39.5	35.9	45.5	53.4	54.3	55.3	53.8	43.7	40.5	38.7	44.2	
21	37.1	32.3	39.7	36.4	45.2	53.1	54.5	55.5	53.7	43.5	40.3	38.4	44.1	
22	36.9	32.1	39.5	36.5	45.0	53.2	54.4	55.1	53.3	42.6	40.5	38.3	43.9	
23	36.9	31.7	39.4	36.4	44.8	53.0	54.1	54.9	53.0	42.5	40.1	38.0	43.7	
24	36.9	31.7	38.7	36.4	44.5	52.6	53.7	54.2	52.8	42.1	39.7	37.8	43.4	
Means	0 <sup>h</sup> .-23 <sup>h</sup> .	37.2	32.5	39.4	35.9	45.3	52.7	54.3	54.8	53.7	42.7	40.2	38.2	43.9
	1 <sup>h</sup> .-24 <sup>h</sup> .	37.2	32.5	39.4	35.9	45.3	52.8	54.3	54.8	53.7	42.7	40.2	38.2	43.9

MONTHLY MEAN DEGREE OF HUMIDITY (Saturation=100) AT EVERY HOUR OF THE DAY, AS DEDUCED FROM THE CORRESPONDING AIR AND EVAPORATION TEMPERATURES.

1936.

Hour, Universal Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.	
0 <sup>h</sup>	90	86	87	83	85	87	89	89	90	82	88	85	87	
1	90	87	88	86	85	89	90	91	92	82	88	86	88	
2	89	87	90	85	85	88	91	92	92	84	89	87	88	
3	88	87	87	86	87	90	91	92	93	86	89	88	89	
4	87	87	87	86	87	92	93	92	93	85	90	87	89	
5	87	89	88	87	88	91	91	92	93	85	90	87	89	
6	88	90	89	86	86	87	88	91	93	86	90	88	89	
7	88	91	90	83	83	81	84	88	92	84	90	89	87	
8	88	91	87	78	76	77	79	84	89	83	89	89	84	
9	88	89	82	72	71	73	75	77	84	80	88	89	81	
10	89	85	76	67	67	69	72	71	78	76	85	86	77	
11	85	82	73	63	64	67	69	67	75	70	84	84	74	
12	83	78	70	62	61	62	67	63	73	65	82	81	71	
13	81	74	67	59	58	60	65	60	71	64	81	80	68	
14	81	73	65	59	58	60	69	59	71	64	80	79	68	
15	82	71	67	58	57	61	68	57	71	66	81	80	68	
16	83	72	69	59	59	61	71	58	71	69	82	81	70	
17	83	75	72	60	60	62	74	61	75	72	83	84	72	
18	87	80	75	63	64	66	74	66	77	76	84	84	75	
19	87	83	78	68	69	71	76	71	83	78	85	84	78	
20	87	83	81	72	74	77	80	77	85	80	86	86	81	
21	88	86	85	76	78	81	85	82	88	81	86	86	83	
22	88	87	85	79	81	85	86	85	88	80	87	86	85	
23	89	86	87	81	83	87	88	87	89	81	87	86	86	
24	90	86	85	83	85	88	89	89	91	82	88	86	87	
Means	0 <sup>h</sup> .-23 <sup>h</sup> .	87	83	80	73	74	76	80	77	84	77	86	85	80
	1 <sup>h</sup> .-24 <sup>h</sup> .	87	83	80	73	74	76	80	77	84	77	86	85	80

TOTAL AMOUNT OF SUNSHINE REGISTERED IN EACH HOUR OF THE DAY IN EACH MONTH, AS DERIVED FROM THE RECORDS OF THE CAMPBELL-STOKES SELF-REGISTERING INSTRUMENT FOR THE YEAR 1936.

Month, 1936.	Registered duration of Sunshine in the Hour ending :-																Total Registered Duration of Sunshine in each Month.	Corresponding aggregate Period during which the Sun was above the Horizon.	Proportion of Sunshine	Mean Altitude of the Sun at Noon.
	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h				
January	—	—	—	—	1.6	3.9	3.4	3.6	4.4	3.9	1.8	0.2	—	—	—	—	22.8	260.1	0.088	18
February	—	—	—	0.7	4.8	8.9	8.5	9.4	9.4	9.9	8.7	4.6	0.3	—	—	—	65.2	288.5	0.226	26
March	—	—	1.3	4.8	6.5	7.1	7.7	11.1	10.4	10.6	8.4	7.0	2.6	0.5	—	—	78.0	368.5	0.212	37
April	—	0.7	5.7	10.1	9.9	9.4	9.4	9.0	8.2	9.7	8.9	9.9	8.2	6.0	1.3	—	106.4	416.1	0.256	48
May	0.5	5.0	7.7	9.6	11.1	12.6	14.0	15.4	15.1	12.7	14.5	14.2	15.1	15.0	8.2	1.2	171.9	484.2	0.355	57
June	1.3	7.7	12.5	15.6	14.8	13.1	12.9	13.9	12.6	12.8	12.1	12.6	14.3	12.0	9.4	3.5	181.1	496.5	0.365	62
July	1.0	8.1	12.7	12.8	11.5	10.9	9.9	10.8	8.1	8.7	9.4	9.5	6.8	8.8	6.5	2.2	137.7	499.4	0.276	60
August	—	3.1	9.5	9.9	10.8	13.5	13.9	14.0	15.0	14.6	16.9	15.7	14.4	14.9	5.8	0.2	172.2	451.7	0.381	52
September	—	—	1.1	3.9	6.3	9.9	10.2	8.1	9.1	8.3	9.7	8.1	7.0	2.9	0.1	—	84.7	379.6	0.223	41
October	—	—	0.3	3.6	10.1	11.2	11.2	10.8	10.3	11.1	9.0	7.0	2.5	—	—	—	87.1	331.1	0.263	30
November	—	—	—	—	2.0	2.0	3.0	4.4	3.5	4.3	3.7	0.7	—	—	—	—	23.6	266.9	0.089	20
December	—	—	—	—	—	5.4	8.0	9.8	7.0	7.6	3.2	—	—	—	—	—	41.0	245.6	0.167	16
For the Year	2.8	24.6	50.8	71.0	89.4	107.9	112.1	120.3	113.1	114.2	106.3	89.5	71.2	60.1	31.3	7.1	1171.7	4488.2	0.261	..

The hours are reckoned from " Apparent " midnight.

READINGS OF THERMOMETERS ON THE ORDINARY STAND IN THE CHRISTIE ENCLOSURE IN THE YEAR 1936.

(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending 21<sup>h</sup>.)

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



READINGS OF THERMOMETERS ON THE ORDINARY STAND IN THE CHRISTIE ENCLOSURE—continued.

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

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.														
	Maxi-mum.	Mini-mum.	9h	12h	15h	21h	9h	12h	15h	21h		Maxi-mum.	Mini-mum.	9h	12h	15h	21h	9h	12h	15h	21h											
MAY.											JULY.																					
d	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°
1	53.3	41.1	48.5	50.0	51.6	42.4	44.6	46.2	47.0	40.6	1	73.4	57.0	60.9	69.6	69.4	57.4	58.4	62.5	60.2	50.5	1	73.4	57.0	60.9	69.6	69.4	57.4	58.4	62.5	60.2	50.5
2	54.7	39.1	47.5	50.2	52.6	42.3	43.6	45.5	46.9	40.6	2	69.8	56.1	60.4	65.6	66.7	59.1	58.3	61.3	62.4	57.8	2	69.8	56.1	60.4	65.6	66.7	59.1	58.3	61.3	62.4	57.8
3	57.3	39.6	45.7	49.8	55.5	50.3	44.0	46.8	49.7	46.0	3	71.0	57.3	64.5	65.9	67.5	61.5	58.6	60.8	61.8	59.8	3	71.0	57.3	64.5	65.9	67.5	61.5	58.6	60.8	61.8	59.8
4	63.9	46.0	56.6	58.7	61.6	46.2	52.2	52.3	55.4	45.7	4	76.3	58.7	64.8	73.9	69.5	64.0	60.0	63.6	61.7	61.8	4	76.3	58.7	64.8	73.9	69.5	64.0	60.0	63.6	61.7	61.8
5	68.0	46.1	52.0	64.9	67.3	53.6	51.3	58.2	59.3	52.1	5	76.9	59.9	67.2	72.0	73.1	64.6	61.0	63.4	63.5	61.1	5	76.9	59.9	67.2	72.0	73.1	64.6	61.0	63.4	63.5	61.1
6	79.6	47.5	63.5	74.1	77.7	59.8	57.8	63.1	65.5	56.2	6	76.2	54.7	65.9	74.4	70.8	64.4	62.3	65.3	66.4	62.6	6	76.2	54.7	65.9	74.4	70.8	64.4	62.3	65.3	66.4	62.6
7	66.4	50.2	57.4	60.1	65.5	52.1	54.1	57.1	60.8	50.2	7	76.8	61.1	69.4	74.4	72.5	63.6	65.6	67.9	67.3	60.4	7	76.8	61.1	69.4	74.4	72.5	63.6	65.6	67.9	67.3	60.4
8	55.9	47.3	49.8	54.8	53.8	47.9	47.2	50.8	49.6	46.3	8	74.3	54.6	62.7	69.6	73.4	59.5	57.2	58.2	61.6	54.9	8	74.3	54.6	62.7	69.6	73.4	59.5	57.2	58.2	61.6	54.9
9	56.8	45.6	48.9	53.3	54.7	50.3	47.6	50.6	50.8	48.2	9	60.9	53.4	60.6	57.1	55.9	54.0	56.6	56.6	55.2	52.0	9	60.9	53.4	60.6	57.1	55.9	54.0	56.6	56.6	55.2	52.0
10	63.1	46.8	49.4	55.7	58.6	55.0	47.9	52.2	54.1	51.0	10	65.1	51.3	59.2	57.7	61.1	55.0	54.5	54.9	56.4	53.3	10	65.1	51.3	59.2	57.7	61.1	55.0	54.5	54.9	56.4	53.3
11	66.9	45.8	56.2	62.7	63.7	52.6	52.6	54.8	55.7	50.8	11	68.8	53.0	62.6	67.6	60.8	56.6	55.8	59.2	58.4	54.6	11	68.8	53.0	62.6	67.6	60.8	56.6	55.8	59.2	58.4	54.6
12	66.5	49.1	55.6	58.6	63.6	54.7	52.2	53.8	57.8	52.0	12	71.1	54.1	62.5	67.7	61.5	59.7	55.8	59.4	57.5	58.9	12	71.1	54.1	62.5	67.7	61.5	59.7	55.8	59.4	57.5	58.9
13	66.7	50.3	58.0	63.5	65.6	56.0	54.2	57.0	58.3	52.7	13	70.3	59.0	64.3	66.5	69.8	59.8	59.0	57.5	60.1	55.9	13	70.3	59.0	64.3	66.5	69.8	59.8	59.0	57.5	60.1	55.9
14	72.0	46.1	56.6	63.8	70.0	54.6	50.7	54.7	59.6	51.6	14	73.3	54.6	61.7	66.7	66.9	58.0	56.9	58.5	59.8	55.0	14	73.3	54.6	61.7	66.7	66.9	58.0	56.9	58.5	59.8	55.0
15	74.8	42.1	66.3	72.7	72.4	58.5	57.0	62.1	60.4	53.5	15	66.8	52.2	54.5	57.5	62.1	58.9	53.1	53.5	56.1	56.0	15	66.8	52.2	54.5	57.5	62.1	58.9	53.1	53.5	56.1	56.0
16	75.0	52.0	71.6	73.9	72.4	59.3	60.8	62.5	62.3	55.4	16	73.1	54.4	64.0	66.6	71.3	60.8	58.2	59.2	61.4	58.2	16	73.1	54.4	64.0	66.6	71.3	60.8	58.2	59.2	61.4	58.2
17	72.8	54.0	59.1	68.5	69.8	56.6	58.1	63.3	61.8	55.8	17	77.8	56.4	68.4	72.8	77.2	68.6	65.8	65.8	67.9	65.0	17	77.8	56.4	68.4	72.8	77.2	68.6	65.8	65.8	67.9	65.0
18	74.6	50.7	66.2	73.7	72.6	61.0	61.0	64.6	61.8	55.0	18	70.8	56.6	63.5	65.1	68.9	56.9	58.5	58.6	58.8	55.6	18	70.8	56.6	63.5	65.1	68.9	56.9	58.5	58.6	58.8	55.6
19	72.2	49.4	62.8	70.5	72.1	57.5	56.7	59.3	57.4	49.7	19	69.6	55.9	62.8	67.6	65.8	56.7	58.4	60.3	60.8	54.8	19	69.6	55.9	62.8	67.6	65.8	56.7	58.4	60.3	60.8	54.8
20	64.8	45.1	61.6	63.7	58.5	47.2	52.0	53.0	51.4	41.7	20	69.7	53.8	62.2	66.5	65.0	61.1	57.1	58.7	59.6	56.7	20	69.7	53.8	62.2	66.5	65.0	61.1	57.1	58.7	59.6	56.7
21	54.9	41.6	46.8	51.4	52.0	46.1	42.5	43.3	45.7	41.4	21	66.9	52.2	61.8	64.5	63.3	59.4	55.7	57.9	56.9	53.9	21	66.9	52.2	61.8	64.5	63.3	59.4	55.7	57.9	56.9	53.9
22	61.9	39.0	49.6	56.1	59.0	49.0	43.8	47.9	50.7	47.9	22	65.0	47.7	60.2	62.8	64.4	56.5	55.2	55.4	57.4	55.1	22	65.0	47.7	60.2	62.8	64.4	56.5	55.2	55.4	57.4	55.1
23	56.1	46.0	51.5	54.5	51.9	46.2	48.3	47.8	45.9	43.9	23	64.8	53.7	58.2	59.6	63.5	60.9	57.4	58.9	61.9	59.1	23	64.8	53.7	58.2	59.6	63.5	60.9	57.4	58.9	61.9	59.1
24	64.6	42.6	56.3	63.5	57.9	52.4	50.3	53.4	52.0	50.3	24	71.2	56.1	64.2	69.3	67.0	57.8	58.6	61.0	59.3	55.1	24	71.2	56.1	64.2	69.3	67.0	57.8	58.6	61.0	59.3	55.1
25	67.1	48.0	59.4	64.6	64.8	52.4	55.2	56.8	58.0	51.1	25	70.7	52.9	60.6	63.6	66.4	54.3	55.8	58.6	58.8	52.7	25	70.7	52.9	60.6	63.6	66.4	54.3	55.8	58.6	58.8	52.7
26	66.2	46.0	49.8	59.4	65.4	56.5	48.0	53.8	57.2	52.5	26	69.1	48.6	61.7	66.1	63.5	55.5	55.6	58.1	59.7	53.0	26	69.1	48.6	61.7	66.1	63.5	55.5	55.6	58.1	59.7	53.0
27	65.8	50.0	54.6	58.9	64.7	50.4	52.6	54.7	56.2	47.3	27	72.6	46.6	61.8	65.6	67.4	56.3	55.4	56.9	58.4	53.6	27	72.6	46.6	61.8	65.6	67.4	56.3	55.4	56.9	58.4	53.6
28	52.6	46.0	51.3	50.3	52.2	47.6	43.6	44.3	44.3	41.3	28	69.9	52.6	62.0	63.7	57.5	54.9	57.4	58.0	56.2	53.8	28	69.9	52.6	62.0	63.7	57.5	54.9	57.4	58.0	56.2	53.8
29	67.9	33.7	54.6	64.9	62.6	55.2	47.0	53.0	52.5	49.2	29	67.3	53.9	57.4	57.6	65.2	57.3	55.8	55.6	56.3	54.1	29	67.3	53.9	57.4	57.6	65.2	57.3	55.8	55.6	56.3	54.1
30	59.1	44.0	55.5	51.2	57.3	44.0	49.0	47.8	49.6	41.5	30	73.0	47.4	59.6	66.6	69.2	63.0	56.0	58.9	59.4	56.8	30	73.0	47.4	59.6	66.6	69.2	63.0	56.0	58.9	59.4	56.8
31	58.2	40.0	49.6	51.9	56.8	46.9	43.6	43.8	46.7	45.4	31	66.8	54.9	58.6	60.4	61.3	60.6	57.6	59.4	60.4	59.5	31	66.8	54.9	58.6	60.4	61.3	60.6	57.6	59.4	60.4	59.5
Means	64.5	45.5	55.2	60.3	62.1	51.8	50.6	53.4	54.3	48.6	Means	70.6	54.2	62.2	66.0	66.4	59.2	57.8	59.5	60.1	56.6	Means	70.6	54.2	62.2	66.0	66.4	59.2	57.8	59.5	60.1	56.6
JUNE.											AUGUST.																					
d	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°
1	66.1	43.9	54.4	60.7	54.3	45.3	48.7	49.9	49.5	44.2	1	68.5	59.0	61.8	65.9	63.2	60.0	59.8	62.5	59.8	57.3	1	68.5	59.0	61.8	65.9	63.2	60.0	59.8	62.5	59.8	57.3
2	60.8	43.1	53.2	49.8	52.7	46.7	49.4	48.0	50.5	45.3	2	70.1	52.1	58.6	59.3	68.4	61.7	56.8	58.7	64.4	58.5	2	70.1	52.1	58.6	59.3	68.4	61.7	56.8	58.7	64.4	58.5
3	58.9	41.4	49.6	52.6	49.3	48.2	48.8	49.6	48.0	46.3	3	69.2	56.8	62.7	64.4	64.5	58.5	57.4	56.5	56.0	55.1	3	69.2	56.8	62.7	64.4	64.5	58.5	57.4	56.5	56.0	55.1
4	62.9	43.1	50.8	58.4	59.3	50.5	47.8	51.5	52.0	47.7	4	68.0	52.2	57.4	64.8	63.7	58.4	54.5	57.7	55.8	52.9	4	68.0	52.2	57.4	64.8	63.7	58.4	54.5	57.7	55.8	52.9
5	62.6	47.1	51.2	57.7	62.6	52.1	49.2	52.8	55.2	48.9	5	68.4	52.5	61.2	61.7	67.8	57.8	56.5	55.5	57.8	55.7	5	68.4	52.5	61.2	61.7	67.8	57.8	56.5	55.5	57.8	55.7

READINGS OF THERMOMETERS ON THE ORDINARY STAND IN THE CHRISTIE ENCLOSURE—concluded.  
(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending 21h.)

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.					
	Maxi- mum.	Mini- mum.	9h	12h	15h	21h	9h	12h	15h		21h	Maxi- mum.	Mini- mum.	9h	12h	15h	21h	9h	12h	15h	21h
SEPTEMBER.										NOVEMBER.											
d	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°
1	72.6	59.1	64.0	66.7	69.1	61.6	59.0	60.5	62.0	59.4	1	48.9	34.8	39.5	43.4	45.1	45.9	38.1	41.6	42.5	43.4
2	80.2	57.7	66.4	72.9	74.6	62.3	61.9	64.1	65.5	60.4	2	52.6	42.8	49.6	51.9	51.4	43.5	48.8	49.9	49.3	42.2
3	72.8	54.2	67.0	65.5	67.5	59.9	62.9	63.4	63.8	58.3	3	49.2	38.0	46.5	48.0	48.9	48.2	46.2	47.8	48.5	47.9
4	69.1	55.2	59.8	65.6	64.0	61.5	59.2	61.9	61.6	58.7	4	49.3	41.7	43.9	47.6	47.1	45.0	43.3	46.5	46.2	43.4
5	67.2	57.0	62.6	57.7	57.2	57.7	59.4	54.2	55.9	55.1	5	52.9	44.1	50.3	50.7	50.8	44.7	49.0	48.9	46.8	42.9
6	67.0	54.1	59.4	65.6	63.1	59.5	53.8	56.4	56.1	56.6	6	53.9	36.5	46.4	52.6	51.6	48.4	45.4	49.8	48.1	46.9
7	67.3	58.1	62.5	65.4	64.0	58.4	55.5	54.2	53.6	53.9	7	48.8	41.9	43.6	45.8	48.3	45.0	42.8	44.8	46.6	43.0
8	66.1	52.9	56.8	61.6	63.9	58.5	53.8	57.1	57.0	55.2	8	51.0	40.1	46.6	49.7	46.7	41.5	42.3	43.4	42.6	38.7
9	69.2	52.3	58.2	63.6	65.4	55.7	55.9	58.2	59.6	54.5	9	55.0	41.0	49.1	52.6	52.6	47.6	47.0	48.8	48.1	44.6
10	69.3	54.2	60.2	66.4	67.2	58.0	60.0	64.4	65.0	57.8	10	50.7	40.0	46.4	48.6	45.6	40.2	43.1	43.8	41.9	37.5
11	76.9	53.6	65.0	73.1	73.8	61.3	61.4	63.8	62.8	58.0	11	54.4	31.9	39.7	47.0	44.7	54.4	38.2	44.6	43.9	53.9
12	69.2	57.1	63.8	67.0	63.9	59.6	59.6	63.1	62.0	58.8	12	54.4	48.0	50.5	51.6	51.6	50.4	48.9	50.1	50.5	49.9
13	72.0	57.6	62.1	68.3	70.6	61.5	61.3	63.3	63.7	56.6	13	50.9	42.2	47.7	48.4	48.8	42.7	45.9	45.4	44.9	41.8
14	70.2	50.1	58.6	67.7	66.4	54.9	56.4	60.1	57.1	52.1	14	51.7	34.1	47.4	49.9	50.6	42.9	45.9	48.9	46.0	40.8
15	64.5	51.1	54.8	58.5	53.7	52.4	52.7	54.8	51.7	51.2	15	52.1	37.2	44.6	49.5	50.9	52.0	42.6	45.8	47.6	49.6
16	66.7	49.6	58.4	63.8	64.2	58.9	56.4	57.9	59.2	57.0	16	53.7	49.5	52.5	53.1	51.9	52.1	50.7	48.9	48.4	51.8
17	68.9	57.2	60.1	65.7	68.0	59.6	58.6	61.5	61.8	58.8	17	56.1	47.0	54.6	55.1	55.2	47.4	53.5	54.4	54.2	44.7
18	69.2	55.7	60.6	62.8	68.6	56.2	56.9	58.3	61.6	54.9	18	47.4	43.8	44.7	46.0	45.2	45.6	42.8	43.0	42.4	42.3
19	63.9	47.5	55.9	57.3	63.4	56.2	55.2	55.9	59.6	55.4	19	45.8	43.0	44.9	45.1	43.7	44.1	43.9	43.9	42.9	41.8
20	68.9	52.9	63.7	68.6	67.2	63.0	60.2	62.0	61.7	62.0	20	44.2	38.4	41.6	44.0	43.9	40.9	38.5	39.9	39.4	38.5
21	67.8	59.4	62.4	64.6	66.4	59.7	60.5	62.1	63.8	58.5	21	46.2	36.0	38.4	44.7	43.4	37.9	37.0	42.0	40.9	37.5
22	72.3	52.1	56.0	61.4	70.2	58.3	55.8	62.6	62.8	57.6	22	45.8	35.7	38.2	39.4	43.9	37.0	37.8	39.0	41.4	36.8
23	67.7	52.7	58.3	67.4	67.3	57.3	58.0	59.8	62.3	56.9	23	38.1	32.9	33.8	38.0	37.7	37.6	33.7	36.9	37.3	36.8
24	70.9	56.1	61.0	67.1	69.0	62.3	59.2	62.8	64.4	61.3	24	37.9	35.2	35.8	36.7	36.6	35.9	34.9	35.5	35.3	34.8
25	66.2	59.9	63.7	62.9	65.6	60.4	61.8	60.3	61.9	58.2	25	38.9	32.2	33.1	35.6	36.7	38.9	32.8	34.5	35.8	38.4
26	60.7	49.1	50.8	53.7	54.7	51.2	49.2	50.1	49.3	47.6	26	44.1	37.0	40.8	43.9	42.7	38.9	40.6	42.3	40.9	37.9
27	52.5	46.8	49.6	51.3	52.3	48.0	46.8	48.8	49.9	46.6	27	41.9	35.0	37.3	38.7	41.6	41.3	37.0	37.9	39.4	39.7
28	56.8	44.7	52.6	56.6	55.7	47.6	48.2	50.1	49.7	44.8	28	41.9	36.6	37.7	39.7	40.6	40.5	35.3	37.9	38.8	39.3
29	57.9	41.9	49.5	56.7	55.8	48.3	46.6	50.1	49.8	45.7	29	47.5	32.4	35.6	42.5	43.1	47.5	35.5	39.4	42.2	46.8
30	56.8	43.1	52.2	56.3	55.3	52.3	49.1	51.8	51.8	50.3	30	54.1	47.0	50.2	51.0	52.9	47.4	48.9	48.4	49.1	42.6
Means	67.4	53.1	59.2	63.4	64.3	57.4	56.5	58.5	58.9	55.4	Means	48.6	39.2	43.7	46.4	46.5	44.2	42.3	44.1	44.1	42.5
OCTOBER.										DECEMBER.											
d	°	°	°	°	°	°	°	°	°	°	d	°	°	°	°	°	°	°	°	°	°
1	56.0	49.1	53.7	54.9	54.8	53.0	50.2	50.8	50.9	50.5	1	47.8	40.3	42.4	45.5	46.6	44.0	38.7	40.6	41.3	40.7
2	58.9	43.6	51.8	57.5	55.7	45.5	49.6	52.1	49.7	43.1	2	54.6	41.1	47.6	53.4	54.3	52.4	46.8	50.5	49.9	49.9
3	58.4	36.1	50.3	56.6	57.6	40.6	45.3	48.8	49.0	38.8	3	53.9	48.4	49.6	53.7	53.0	51.5	46.8	48.9	49.0	48.8
4	62.6	34.0	47.1	59.2	61.4	43.0	45.4	50.7	51.8	42.3	4	51.5	39.0	47.3	47.9	47.1	39.7	43.5	40.9	38.9	36.4
5	53.6	34.5	48.9	52.4	50.1	44.3	47.8	45.9	42.9	41.1	5	44.6	35.8	43.4	43.7	39.6	36.7	41.9	41.0	37.5	34.1
6	52.2	39.1	46.5	49.9	48.5	43.3	42.7	43.9	43.0	40.5	6	39.7	32.8	37.1	39.3	39.2	36.7	35.8	37.6	36.5	34.1
7	52.1	36.7	47.6	49.9	49.9	45.6	43.8	44.8	45.1	42.1	7	36.7	27.4	29.7	33.0	33.9	28.6	27.3	30.3	31.3	27.2
8	52.1	40.8	44.1	46.5	49.0	45.9	43.2	43.4	42.6	41.1	8	45.0	25.7	35.7	40.7	43.5	41.4	35.1	40.4	43.1	39.8
9	51.9	37.0	46.5	50.9	49.7	44.6	43.8	44.4	45.1	42.0	9	41.4	32.3	34.4	36.8	39.6	37.6	34.1	36.8	39.2	37.4
10	52.2	43.0	44.6	50.8	52.2	46.0	42.4	45.3	46.4	43.6	10	38.4	36.2	36.8	37.6	37.6	36.4	36.0	36.7	35.0	34.6
11	54.0	39.6	46.5	51.3	52.9	41.6	43.8	46.2	47.1	40.8	11	41.1	26.5	30.8	41.1	38.1	30.3	30.5	38.9	36.8	29.8
12	57.8	36.0	47.3	54.5	57.5	51.7	44.8	50.8	52.5	48.7	12	41.9	30.2	36.5	41.7	41.3	39.9	35.6	40.5	40.7	39.6
13	57.8	44.9	50.3	55.6	55.2	52.4	47.8	50.5	50.7	49.0	13	44.6	28.0	31.3	40.5	42.2	44.6	30.9	37.9	39.7	41.8
14	57.6	42.0	52.2	56.2	56.5	56.8	50.8	54.3	55.8	53.8	14	50.2	44.0	49.2	50.1	48.1	47.1	48.3	48.3	46.7	46.3
15	67.2	49.6	57.2	63.3	64.2	54.3	55.1	57.8	58.2	50.8	15	48.0	36.0	37.3	42.7	42.7	42.5	35.5	39.2	39.4	40.5
16	59.3	46.0	51.3	59.3	57.8	52.4	48.5	52.0	50.7	50.0	16	51.8	42.2	47.9	50.6	46.5	43.3	47.2	47.8	43.8	40.5
17	59.8	50.1	57.2	59.3	59.5	57.4	51.8	52.8	54.2	53.7	17	55.0	42.4	47.4	50.1	55.0	53.8	45.4	49.3	53.2	52.8
18	57.7	46.9	50.9	56.2	56.4	47.7	45.5	47.9	47.9	43.5	18	55.2	49.0	53.0	53.1	52.4	49.8	51.0	51.1	50.8	48.6
19	56.2	42.6	50.3	55.7	53.6	47.9	48.7	48.0	47.8	43.8	19	50.2	40.3	41.1	46.7	45.6	45.5	39.1	43.0	42.8	43.7
20	51.1	42.0	45.6	50.6	50.7	49.7	39.3	41.9	44.0	47.4	20	48.7	42.6	43.7	47.6	47.4	45.5	42.1	43.9	43.8	42.8
21	55.8	49.2	51.9	54.2	55.2	54.7	49.5	50.8	51.1	51.8	21	48.6	37.9	47.1	48.4	45.7	41.3	45.4	46.1	43.9	40.0
22	61.7	45.2	51.6	60.3	60.6	55.0	49.5	55.8	56.2	53.0	22	51.9	37.5	46.3	50.4	51.5	43.8	45.7	48.5	49.3	42.7
23	59.6	51.3	53.5	58.9	53.7	52.0	51.4	53.2	51.6	50.0	23	44.0	33.2	36.7	39.8	40.4	34.1	36.0	38.6	38.8	33.6
24	57.6	45.6	47.2	51.8	55.1	49.9	46.8	49.5	49.5	47.8	24	43.3	30.8	33.6	38.8	42.0	42.9	33.5	37.9	40.2	40.8
25	54.4	41.0	50.7	53.0	50.3	42.4	46.8	45.4	43.7	39.5	25	46.8	37.7	40.0	43.8	46.4	45.2	38.4	41.4	43.8	44.2
26	59.7	40.5	47.5	54.1	58.7	57.7	46.9	53.0	57.6	54.7	26	45.8	42.2								



AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1936.

Gauges partly sunk in the Ground in the Christie Enclosure.	Monthly Amount of Rain collected in each Gauge.														Height of Receiving Surface.	
	Number of Gauge.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Sums.	Above the Ground.	Above Mean Sea Level.
		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	ft. in.	ft. in.
6	3.553	1.472	0.797	1.698	0.408	3.378	2.925	0.561	3.156	1.788	3.021	1.785	24.542	0 5	149 6	
8	3.563	1.522	0.780	1.652	0.384	3.448	2.911	0.588	3.232	1.866	3.113	1.845	24.904	1 0	150 1	
Number of Rainy Days (0.005in. or over).	23	14	12	14	7	16	22	9	17	14	19	16	183	..	..	

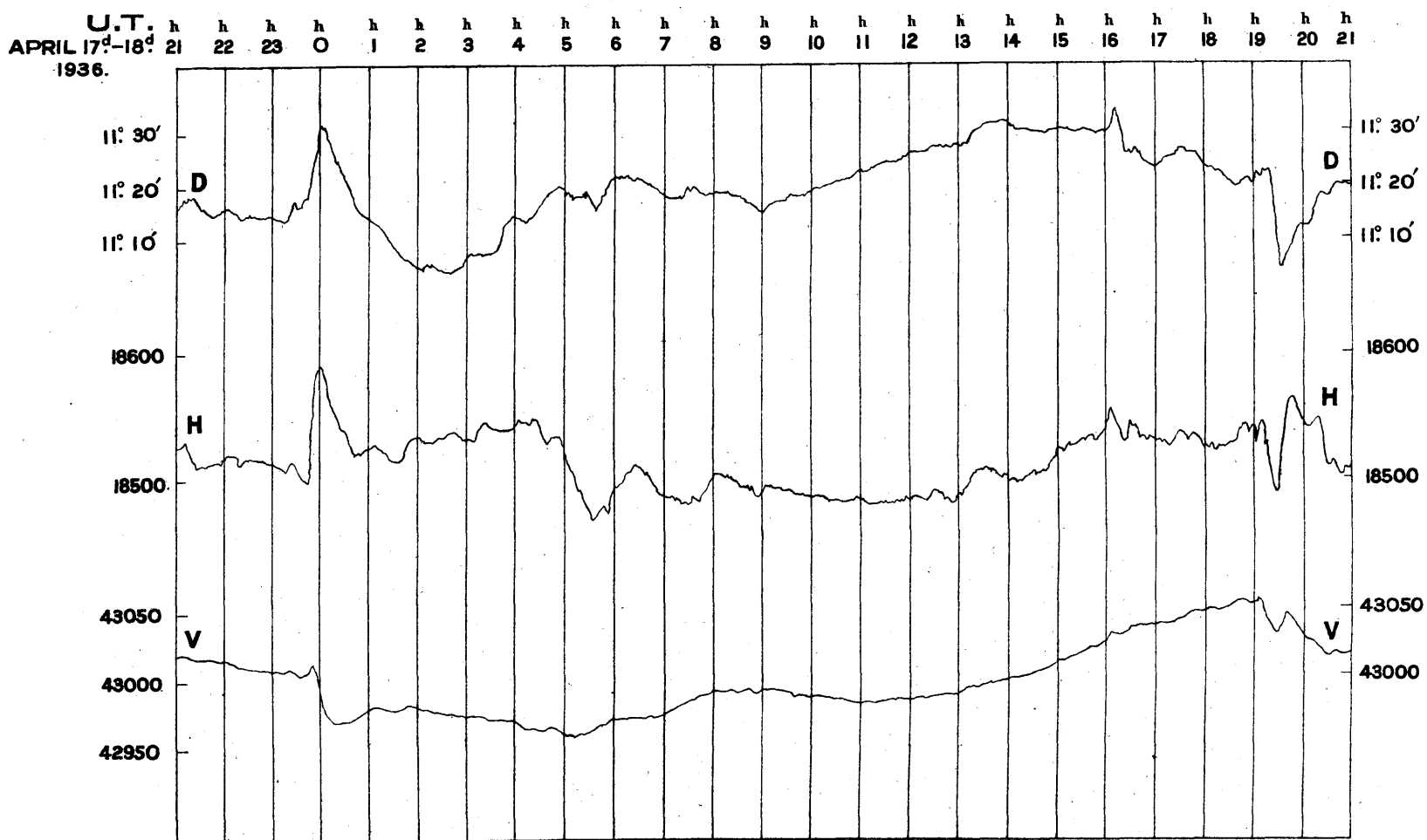
MEAN HOURLY MEASURES OF THE HORIZONTAL MOVEMENT OF THE AIR, IN EACH MONTH, AND GREATEST HOURLY MEASURES, AS DERIVED FROM THE RECORDS OF ROBINSON'S ANEMOMETER.\*

Hour Ending	1936													Mean for the Year.
	January.†	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	
1 <sup>h</sup>	11.2	10.4	9.2	11.0	10.0	8.7	10.9	9.0	9.4	..	11.8	13.5	10.5	
2	11.8	10.2	8.9	11.3	10.0	8.5	10.7	9.0	9.4	..	11.8	13.4	10.5	
3	12.2	9.9	9.0	10.5	9.8	8.1	10.5	8.7	9.3	..	11.8	12.6	10.2	
4	12.5	10.2	9.0	10.8	9.6	8.2	10.5	8.5	9.2	..	12.2	13.4	10.4	
5	11.9	10.2	9.4	11.3	10.1	8.0	11.0	8.6	9.1	..	11.8	13.8	10.5	
6	11.5	10.1	9.0	11.2	9.8	7.8	10.7	8.5	9.2	..	11.3	13.9	10.3	
7	12.0	10.0	9.3	11.2	10.0	8.6	10.9	8.5	9.9	..	11.6	13.5	10.5	
8	11.6	10.3	9.3	11.7	10.3	8.6	11.5	9.0	9.9	..	11.4	13.6	10.7	
9	11.8	10.8	9.5	12.2	10.6	9.0	12.1	9.8	11.0	..	11.8	13.8	11.1	
10	11.3	11.2	9.9	12.9	11.1	9.4	12.5	9.7	11.6	..	11.5	13.9	11.4	
11	11.7	11.8	10.4	13.0	11.4	9.8	13.3	9.9	11.7	..	11.8	14.0	11.7	
12	12.0	12.6	11.1	13.3	12.2	10.1	13.9	10.5	12.4	..	12.8	14.7	12.3	
13	11.1	11.9	10.7	13.4	12.5	10.8	14.7	10.6	11.9	..	12.5	14.3	12.2	
14	11.4	11.6	10.5	13.1	11.9	10.9	14.2	10.8	11.9	..	12.8	13.8	12.1	
15	12.8	12.0	11.4	13.6	12.7	11.3	14.0	11.2	12.0	..	12.8	13.2	12.5	
16	13.1	11.6	11.4	13.3	12.3	10.7	13.9	11.5	11.3	..	12.3	12.9	12.2	
17	13.4	11.4	11.1	13.4	12.1	11.8	14.1	11.4	11.5	..	12.1	12.5	12.3	
18	13.3	11.0	10.9	13.5	12.1	11.4	13.1	11.5	11.1	..	12.4	12.6	12.1	
19	12.9	10.7	10.3	12.7	11.8	11.3	11.6	10.9	10.5	..	12.2	13.0	11.6	
20	12.5	10.7	10.3	12.2	12.0	11.3	11.9	10.5	10.2	..	11.7	12.8	11.5	
21	13.0	10.8	10.4	11.3	11.5	10.0	11.5	10.3	10.3	..	11.8	12.7	11.2	
22	12.7	10.4	9.5	11.5	11.2	9.1	11.1	9.9	9.6	..	11.6	12.6	10.8	
23	13.0	10.1	9.4	11.2	11.0	9.4	10.9	9.8	10.0	..	12.5	12.9	10.9	
24	12.1	10.1	9.3	11.0	10.4	9.2	11.0	9.5	9.9	..	12.4	13.0	10.7	
Means	12.2	10.8	10.0	12.1	11.1	9.7	12.1	9.9	10.5	..	12.0	13.4	11.3	
Greatest Hourly Measures	33	30	20	23	22	23	26	22	32	..	28	37	..	

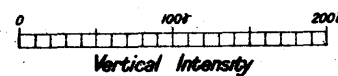
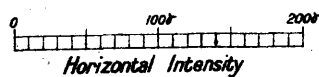
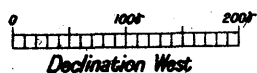
\* The measures are derived from the motion of the cups by the formula  $V = 2v + 4$ , where  $v$  is the hourly motion of the cups in miles. See Introduction. The instrument was not in use during the month of October, owing to the reconstruction of the hut on which it is erected.

† Means of 22 days.

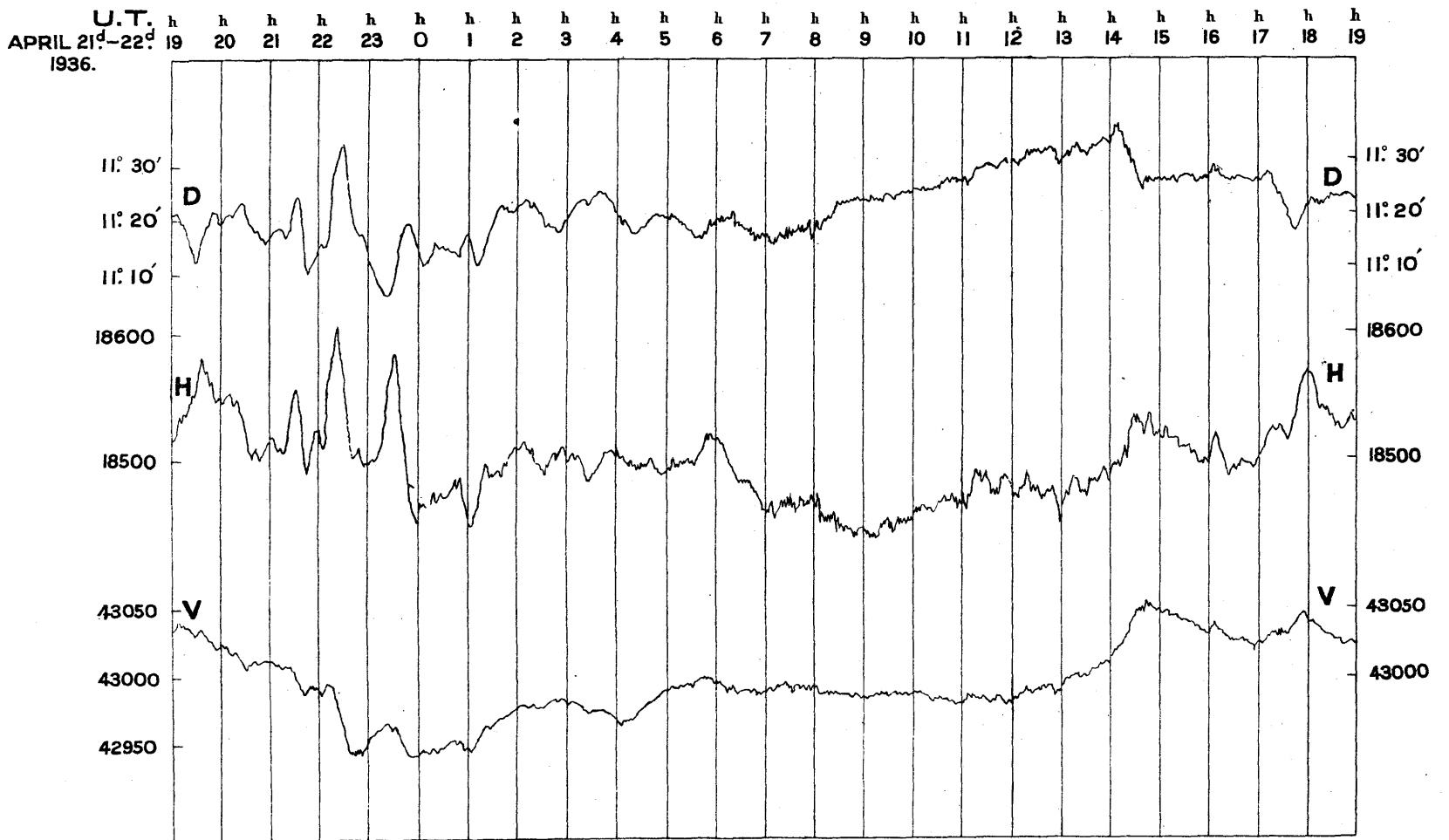
**MAGNETIC DISTURBANCES AS RECORDED AT THE  
ABINGER MAGNETIC STATION IN THE YEAR 1936.**



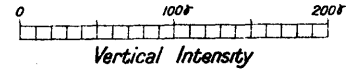
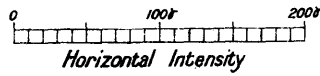
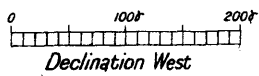
**SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.**



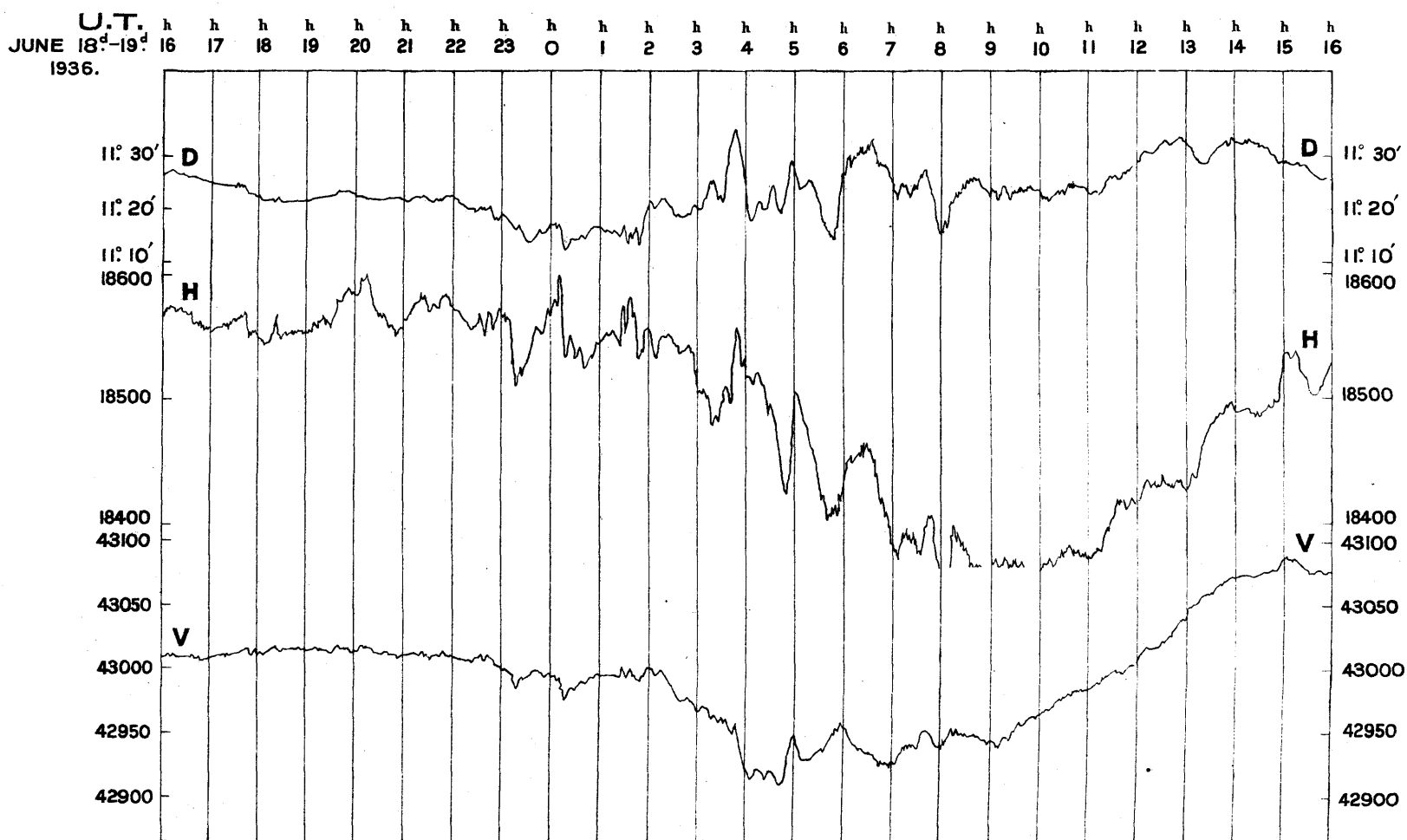
MAGNETIC DISTURBANCES AS RECORDED AT THE  
ABINGER MAGNETIC STATION IN THE YEAR 1936.



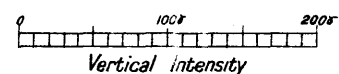
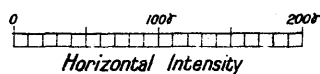
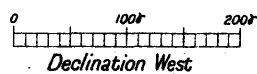
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



**MAGNETIC DISTURBANCES AS RECORDED AT THE  
ABINGER MAGNETIC STATION IN THE YEAR 1936.**

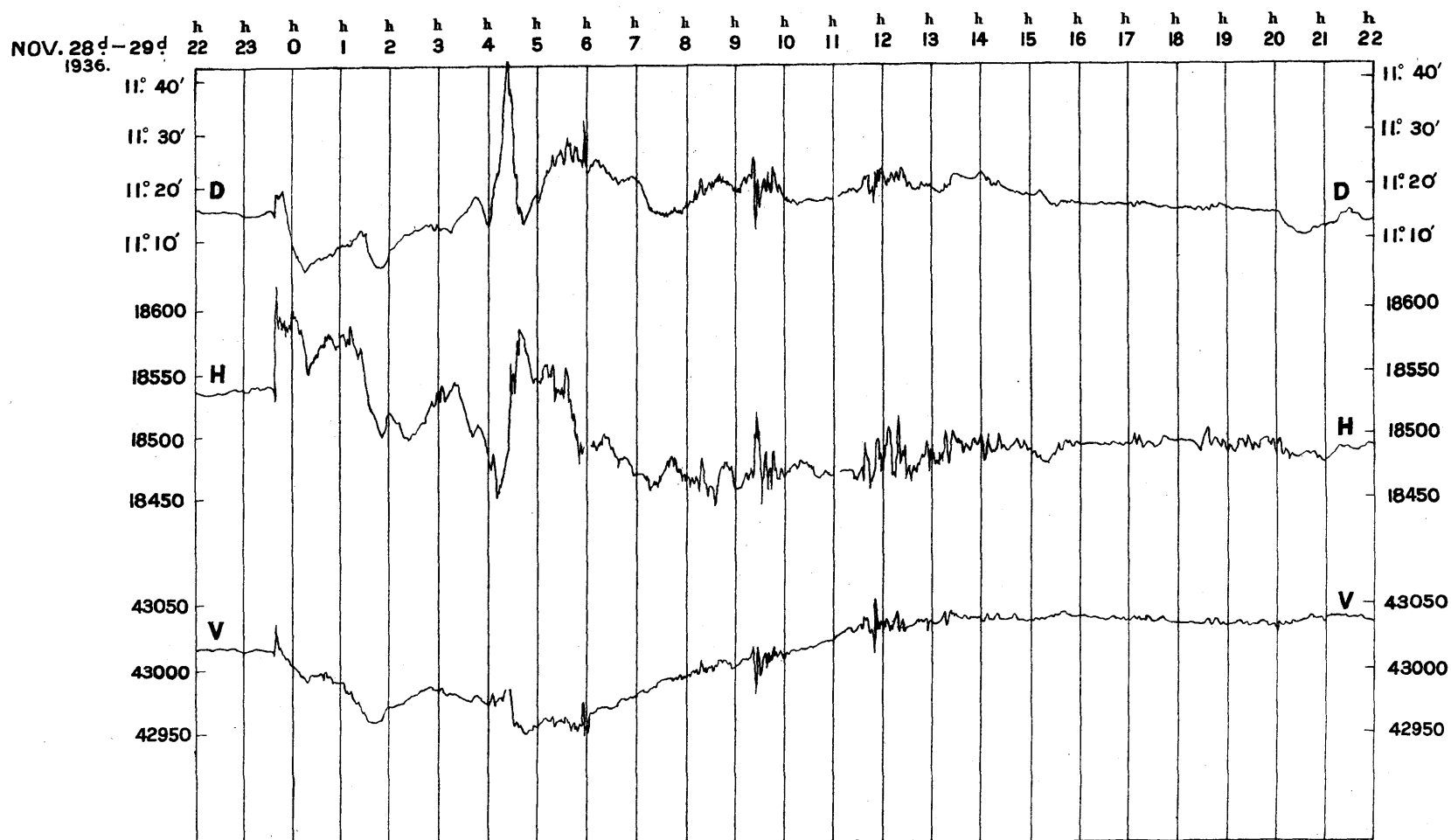


**SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.**





MAGNETIC DISTURBANCES AS RECORDED AT THE  
ABINGER MAGNETIC STATION IN THE YEAR 1936.



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

