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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

## 1934

UNDER THE DIRECTION OF

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

ASTRONOMER ROYAL

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LONDON

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

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MAGNETIC AND METEOROLOGICAL  
OBSERVATIONS, 1934.

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INTRODUCTION.

During the year 1934 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 and three computers. Computers employed during the year were :—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 Greenwich mean 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.  $90^\circ$  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 forces 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 force ; 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 1934 is based were verified in September 1933. 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  $3.59570 (1 - 4.3t \times 10^{-6})$ ,  $t$  being temperature Centigrade.

The observed value of horizontal intensity obtained with 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. 22 observations of the moment of inertia of the collimator magnet were made during the year 1934. The mean observed value of  $\log. K$  from these determinations was 2.42372. 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 204 determinations made during the year are  $+9.82$  and  $-1575$  respectively.

The values used in the reduction of the 1934 observations, however, are the mean values obtained from all the observations made during the years 1924-34. These values are:  $P = +9.89$ ,  $Q = -1524$ .

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  $F=3.59643 (1-7.9 t \times 10^{-6})$ .

The constants of the potentiometer in use during the year for the measurement of the current were determined at the National Physical Laboratory in December 1933.

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 0'.610 per mm. As the beam is not normal to the drum, however, the scale value varies from 0'.605 at the top of the sheet to 0'.615 at the bottom. Expressed as magnetic intensity the corresponding mean scale-value would be  $3.29\gamma$  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 0.012 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 March 24, 1930, by which the needle was maintained within 20' of the correct azimuth until the end of 1934.

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  $2.61\gamma$  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 0.008 to 0.010 cm. 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 1934 was 2.44 $\gamma$  per mm. 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 Greenwich Mean Time.

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 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, the time-limits of the traces being determined in consultation with the Director of Val Joyeux Observatory, University of Paris, with a view to the comparison of the results of the two stations. These dates in 1934 are February 8-9, July 3-4, 30-31, September 24-25, December 3-4, 29-30. 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.

1935 *June* 25.

ROYAL OBSERVATORY, GREENWICH.  
ABINGER MAGNETIC STATION.

# Results of Magnetic Observations

1934

GREENWICH MAGNETIC AND METEOROLOGICAL RESULTS 1934

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

	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>	Noon	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> <span style="float: right;">11° + Tabular Quantities.</span>																										
1**	46.4	46.6	46.8	46.8	47.0	46.5	46.4	45.4	46.0	47.2	47.8	48.7	48.4	50.3	49.4	47.3	48.5	40.4	52.2	47.1	45.5	40.4	42.6	44.8		
2**	46.2	46.2	47.5	47.3	49.8	47.3	45.8	45.8	44.7	46.2	48.3	49.2	50.3	49.6	46.3	46.0	47.3	45.3	39.9	43.8	44.4	44.6	45.2	45.6		
3	45.8	46.2	46.6	46.5	47.1	46.6	45.4	45.4	45.8	46.7	46.0	46.8	47.9	47.9	46.6	45.7	45.2	46.2	46.2	45.3	44.8	44.3	44.1	44.8		
4	45.5	46.2	47.5	45.2	45.6	45.4	45.8	45.5	45.3	45.6	45.9	46.3	48.0	47.7	46.4	46.7	46.4	46.4	45.9	45.6	45.0	44.4	44.2	44.7		
5*	45.6	46.0	46.4	46.3	46.5	46.5	45.5	44.6	44.5	44.8	45.5	46.4	47.8	47.8	46.6	46.5	46.3	46.0	46.0	45.0	45.2	45.0	45.2	45.5		
6*	45.9	46.4	46.6	46.6	46.5	46.2	46.1	45.7	45.6	46.2	47.2	47.5	48.8	48.8	47.4	46.8	47.2	46.8	45.0	45.8	45.4	45.6	45.3	45.1		
7	45.7	46.0	46.8	47.2	46.9	46.8	46.3	45.9	45.9	46.6	46.8	47.4	47.9	47.9	46.9	46.4	46.4	47.3	47.1	46.5	44.5	43.5	44.1	44.8		
8	45.0	45.9	46.2	47.0	46.7	45.6	46.0	45.8	45.6	46.4	47.4	48.8	50.1	49.8	48.1	47.6	47.1	48.1	46.6	45.7	45.4	45.4	44.9	43.7		
9*	44.7	45.5	46.1	46.1	46.2	46.1	45.8	45.2	45.3	46.2	47.1	48.0	48.6	48.4	47.1	46.6	46.4	46.3	46.1	46.0	45.5	43.5	44.0	45.3		
10	46.7	46.5	46.0	45.4	45.7	45.5	46.0	45.6	45.7	46.8	47.1	48.0	48.9	48.6	47.3	46.9	46.9	46.5	46.5	45.1	45.1	44.1	44.1	44.2		
11	44.3	44.5	45.1	46.1	45.7	45.8	46.0	45.4	45.0	45.8	47.7	48.5	49.1	49.1	47.9	47.1	47.1	47.0	45.5	45.1	45.1	45.1	45.0	45.7		
12*	46.1	46.2	46.2	46.2	46.2	45.5	45.9	45.6	45.4	46.0	47.3	47.3	47.9	47.9	47.3	46.6	46.4	46.4	46.1	45.7	46.3	45.6	45.2	45.1		
13*	45.3	46.6	46.5	46.3	45.9	45.7	45.7	45.5	45.2	46.0	46.8	46.9	47.3	47.6	47.2	47.2	47.4	47.0	46.6	46.1	45.7	45.5	45.3	45.6		
14**	45.8	46.8	46.8	46.4	46.2	46.0	45.9	45.8	45.5	46.4	47.4	48.0	49.7	49.8	49.1	48.2	49.2	49.5	49.0	46.6	46.9	42.6	39.0	39.0		
15	41.3	43.5	44.2	45.9	46.9	46.5	46.0	45.5	45.1	46.3	47.6	48.4	49.4	49.3	47.9	47.5	46.9	46.7	46.7	45.5	46.4	45.0	43.5	40.3		
16	43.0	43.8	44.5	44.7	44.6	46.0	46.6	45.8	45.5	45.2	47.2	48.1	49.3	50.3	48.9	47.7	46.7	46.6	45.9	45.1	43.5	44.6	42.8	44.3		
17	46.3	46.1	46.3	46.3	46.6	45.8	45.8	45.5	45.1	45.9	47.5	47.4	47.7	47.5	46.7	46.8	47.5	46.3	46.6	45.6	45.1	44.7	44.6	44.3		
18**	44.7	45.2	45.2	45.8	46.7	46.4	46.2	45.7	45.2	45.8	47.1	49.4	49.1	49.0	47.8	47.3	47.1	46.3	46.0	44.6	36.9	43.1	42.8	44.5		
19	45.9	47.9	45.4	44.9	45.9	45.4	45.1	44.9	44.8	45.3	46.3	47.1	48.5	48.5	47.7	46.5	46.1	46.0	44.9	44.5	44.8	44.8	44.7	44.8		
20	44.5	44.8	45.0	45.3	45.5	45.8	45.8	45.4	45.2	45.8	46.4	47.3	48.2	48.3	47.7	46.7	46.3	46.5	46.3	45.8	45.2	45.1	45.3	45.3		
21	45.0	45.5	45.2	46.5	45.9	45.8	45.4	45.4	45.5	45.9	47.3	48.4	49.5	49.3	47.7	48.3	46.9	48.7	46.8	45.6	45.2	45.0	44.2	44.5		
22	44.9	45.3	45.3	45.6	45.7	45.8	45.6	45.5	45.1	45.1	46.3	48.1	49.0	49.0	48.0	47.4	47.0	47.0	47.0	46.3	44.8	44.1	42.0	44.9		
23	39.0	42.9	44.9	45.4	46.5	45.4	45.6	45.3	44.8	45.0	46.8	48.9	50.0	50.1	49.2	48.5	44.2	44.8	45.7	44.5	44.5	45.1	42.9	43.7		
24	43.4	44.9	45.9	44.5	44.9	45.9	45.8	45.5	44.4	44.6	46.2	47.5	48.9	48.9	48.5	47.7	46.9	46.7	45.9	44.3	42.9	43.9	40.3	41.0		
25	43.9	45.4	44.8	45.0	45.8	45.5	45.3	45.1	44.2	44.8	45.8	46.8	47.7	48.4	47.7	46.7	46.7	44.5	45.3	45.7	44.8	44.4	44.5	44.7		
26	45.7	46.3	46.1	46.1	46.7	46.3	45.7	44.7	44.3	45.1	46.7	48.3	50.1	50.4	48.7	47.3	47.0	47.6	44.8	46.0	43.1	43.2	44.5	44.7		
27	45.2	45.0	45.8	45.8	44.8	44.6	44.7	44.6	44.1	44.7	45.7	46.8	47.9	47.9	47.1	45.9	45.9	45.9	45.5	45.3	45.1	44.9	44.5	42.9		
28	43.7	44.7	45.0	45.1	45.0	45.0	45.0	44.8	44.2	44.9	46.9	48.1	50.5	50.4	48.1	46.8	46.7	45.9	45.8	44.4	44.0	40.5	43.0	43.7		
29**	44.9	47.4	46.4	45.5	46.3	47.8	47.8	46.5	46.3	45.4	46.9	47.7	48.4	48.5	47.4	46.5	45.7	45.9	45.0	43.9	45.4	44.9	44.4	44.5		
30	44.5	45.2	45.8	46.0	46.9	46.2	45.8	44.9	43.8	43.4	45.8	47.1	48.6	49.6	48.9	47.9	46.2	46.1	45.9	45.4	42.8	43.7	44.4	42.7		
31	43.1	44.4	45.4	45.2	45.2	45.3	44.8	44.0	43.4	43.0	44.7	46.2	48.2	49.2	48.4	46.7	45.8	44.8	44.5	41.7	42.7	44.7	44.2	44.7		
Mean	44.8	45.6	45.9	45.9	46.2	46.0	45.8	45.4	45.1	45.6	46.8	47.7	48.8	48.9	47.7	47.0	46.7	46.3	46.0	45.3	44.6	44.2	43.9	44.2		
Mean*	45.5	46.1	46.4	46.3	46.3	46.0	45.8	45.3	45.2	45.8	46.8	47.2	48.1	48.1	47.1	46.7	46.7	46.5	46.0	45.7	45.6	45.0	45.0	45.3		
Mean**	45.6	46.4	46.5	46.4	47.2	46.8	46.4	45.8	45.5	46.2	47.5	48.6	49.2	49.4	48.0	47.1	47.6	45.5	46.4	45.2	43.8	43.1	42.8	43.7		
<b>February.</b> <span style="float: right;">11° + Tabular Quantities.</span>																										
1*	45.1	45.8	45.9	46.0	45.9	45.4	44.9	44.4	43.7	43.5	44.8	46.3	47.1	47.7	47.2	46.8	45.8	45.7	45.5	45.3	45.2	44.7	44.9	45.0		
2	45.3	45.6	46.1	45.7	46.1	46.1	45.9	45.1	44.0	43.5	44.5	46.5	47.9	48.7	48.6	47.8	46.9	45.9	45.9	44.9	36.3	38.9	42.4	45.0		
3	45.3	45.7	45.9	46.5	45.9	45.2	44.8	44.8	44.2	43.8	45.8	47.4	48.5	48.7	47.4	46.6	46.3	46.3	46.1	45.8	43.4	42.6	43.9	44.3		
4	44.2	46.2	44.7	44.9	44.4	45.2	45.2	44.8	44.4	44.6	45.6	47.2	47.6	48.5	48.6	47.6	44.4	45.4	46.5	39.7	41.7	43.3	42.0	40.7		
5	42.8	44.1	44.3	44.8	44.6	44.4	45.1	44.5	44.3	45.1	46.6	48.3	48.9	48.7	47.7	46.8	45.9	43.4	44.3	45.5	43.7	43.5	44.7	44.2		
6*	44.8	45.3	45.5	45.9	45.8	45.4	45.3	44.8	44.6	44.6	45.9	47.4	49.3	50.5	49.2	47.0	46.1	46.4	46.2	45.6	45.5	44.0	43.9	43.9		
7	44.3	45.1	45.1	45.2	45.0	45.2	44.7	44.2	44.2	43.8	44.7	46.7	49.2	50.1	49.3	47.7	47.0	46.2	45.0	44.7	45.2	44.3	44.5	44.5		
8	44.1	44.7	44.9	44.9	44.9	45.1	45.2	44.9	44.9	45.0	45.7	46.8	47.9	48.5	47.4	46.9	46.6	46.1	44.3	44.1	43.9	45.4	45.3	44.7		
9**	34.9	33.7	32.0	39.9	39.9	39.8	42.9	44.9	46.2	46.2	47.5	48.9	49.2	50.3	51.9	51.0	53.3	53.7	46.9	45.9	45.0	44.9	44.9	44.9		
10**	44.2	44.8	44.8	44.8	44.8	44.2	44.3	44.3	44.4	45.7	46.7	46.2	48.6	49.9	51.1	45.8	45.8	45.8	41.1	38.8	44.8	44.7	43.8	43.2		
11	44.0	44.1	43.9	47.8	43.3	43.8	44.3	44.3	44.2	44.8	45.3	45.9	47.8	48.0	47.9	46.0	46.5	45.9	42.0	43.6	44.4	43.7	43.5	42.9		
12	44.6	45.1	45.4	45.1	45.3	45.2	44.6	44.1	43.0	43.1	44.7	46.1	46.9	47.6	47.9	47.1	46.2	45.3	44.5	44.5	44.6	38.6	41.1	37.9		
13	39.0	43.5	44.0	44.2	45.0	44.3	45.0	44.3	42.1	43.1	44.6	46.4	47.6	48.1	48.4	47.6	46.4	45.2	44.6	44.1	43.7	43.3	38.9	40.1		
14*	42.6	43.7	45.2	45.0	44.3	44.3	44.0	43.5	42.1	42.1	43.9	46.1	47.7	47.6	47.2	46.3	45.3	44.7	44.4	44.5	44.5	44.5	44.3	43.0		
15	42.4	43.9	44.8	45.0	45.0	44.4	44.1	43.4	42.7	43.1	44.8	48.1	49.6	49.2	50.3	49.4	49.7	49.1	46.7	45.3	42.5	40.2	43.2	44.3		
16**	44.4	44.4	45.0	45.5	45.1	44.9	44.5	44.0	43.4	43.5	45.2	47.3	48.4	52.0	52.2	54.4	52.7	50.4	42.5	47.2	49.3	44.7	45.6	43.5		
17**	43.6	43.6	41.6	43.9	42.8	44.0	45.2	47.3	45.3	44.9	43.6	46.2	48.5	46.6	47.0	45.0	45.6									

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h		
11° + Tabular Quantities.																											
<b>March.</b>																											
1	44.4	44.7	44.9	44.9	45.0	44.3	44.1	43.3	42.5	42.6	44.6	47.0	48.9	49.6	49.2	47.7	46.0	44.7	44.6	43.2	43.9	44.7	44.1	44.1	44.1	44.1	
2	44.3	43.8	44.6	43.3	42.5	42.8	42.6	43.0	42.0	42.6	45.2	47.6	49.1	51.1	49.3	49.7	50.5	48.3	45.7	44.6	40.6	38.0	37.7	37.1	37.1	37.1	
3	42.2	41.7	43.2	44.2	44.4	44.3	43.7	42.7	42.0	41.8	43.5	46.0	49.0	48.7	47.6	46.2	44.9	44.6	44.4	43.1	43.4	43.5	43.6	43.6	43.6	43.6	
4**	43.8	44.5	44.6	44.6	44.4	43.8	43.7	43.1	42.3	42.3	44.3	46.7	48.8	49.4	50.3	48.9	50.3	46.1	39.1	37.0	31.8	28.8	37.8	41.8	41.8		
5**	40.9	42.2	44.1	42.1	43.2	43.0	43.6	45.1	53.1	50.5	47.6	46.6	47.2	46.3	46.9	45.2	42.4	41.4	43.0	44.0	43.9	44.0	38.3	37.6	37.6		
6	40.1	41.1	45.3	42.5	41.8	43.6	43.8	43.4	44.5	44.5	44.0	46.3	46.8	48.4	46.2	47.2	44.2	43.1	43.1	40.5	41.8	43.1	43.8	43.9	43.9		
7**	44.2	42.8	46.4	45.7	42.7	41.8	42.8	45.3	43.3	43.4	43.9	46.5	46.4	49.6	46.8	46.6	45.5	45.4	45.0	43.5	36.9	40.8	44.7	39.2	39.2		
8	40.4	40.4	42.0	42.9	43.9	42.3	43.1	43.4	43.0	44.0	44.8	46.6	48.5	49.1	48.2	46.9	45.8	45.3	44.2	44.2	43.9	43.9	42.2	42.8	42.8		
9	43.2	44.4	45.0	43.6	43.2	43.4	44.2	43.5	42.6	43.0	44.2	47.9	49.7	50.3	49.2	46.2	46.2	45.5	39.7	43.5	44.2	40.3	41.6	43.3	43.3		
10	43.9	42.5	44.1	42.3	42.0	43.9	42.4	42.7	42.5	43.7	45.5	48.1	49.1	50.1	47.1	46.1	45.4	44.6	44.0	40.1	42.3	43.5	43.3	43.1	43.1		
11	43.5	43.4	43.5	47.7	45.6	41.4	43.2	42.5	42.6	43.2	45.7	47.7	49.4	49.0	46.9	46.3	45.2	44.5	44.1	41.5	39.5	39.5	40.5	41.6	41.6		
12*	41.8	41.9	43.2	44.6	42.8	42.1	41.6	41.6	40.8	41.9	44.3	47.4	49.6	49.8	48.6	47.2	45.8	44.4	44.6	44.5	44.2	44.2	44.0	44.1	44.1		
13*	44.6	43.6	43.7	43.6	43.6	43.4	43.1	42.2	41.1	41.5	43.6	45.8	47.6	48.6	47.4	45.8	44.6	44.6	44.5	44.2	42.4	42.5	43.3	43.5	43.5		
14*	43.9	44.1	44.2	44.0	43.7	43.6	43.1	41.8	40.6	41.6	44.6	47.4	49.1	49.2	48.3	47.3	45.4	45.1	44.6	44.6	44.6	43.9	43.9	44.0	44.2		
15	45.6	42.3	38.9	39.9	39.6	40.6	40.5	40.5	40.2	41.0	44.0	47.0	50.3	50.7	48.8	47.6	45.8	45.0	44.6	44.2	44.1	44.1	44.1	44.1	44.2		
16	44.1	44.3	44.5	44.1	43.7	43.7	43.2	41.5	41.6	41.8	44.4	46.6	48.7	50.1	49.5	47.3	45.9	45.8	43.5	44.5	43.5	42.5	42.5	42.5	42.5		
17	43.4	41.2	42.6	42.8	42.9	43.0	43.2	42.4	42.1	42.5	44.4	46.6	48.9	48.9	47.7	46.7	44.8	44.4	44.4	43.6	43.0	43.5	43.0	42.0	42.0		
18	41.3	43.2	42.9	42.7	43.3	43.1	42.3	41.5	41.3	42.2	44.3	47.3	49.7	50.3	50.2	49.5	43.9	45.6	40.6	45.5	43.3	43.3	42.5	41.7	41.7		
19*	41.7	44.8	43.5	43.8	43.2	43.4	43.0	41.6	41.6	41.6	44.7	47.0	48.7	48.3	48.2	46.2	45.2	44.7	44.4	44.1	43.6	43.6	43.5	42.8	42.8		
20*	42.2	43.0	42.2	42.1	41.3	41.5	42.4	42.2	41.2	41.9	44.0	47.0	49.3	50.1	48.9	47.0	45.3	44.8	44.3	43.9	44.3	43.8	43.6	43.7	43.7		
21	42.7	42.9	43.0	42.9	43.1	43.0	43.4	42.4	41.0	42.2	44.2	46.4	47.9	48.2	47.3	45.5	44.5	44.3	44.7	45.2	44.8	44.4	44.0	43.7	43.7		
22	43.3	43.6	43.2	43.6	44.0	40.6	42.6	42.4	41.0	41.3	43.6	46.4	48.6	49.8	50.0	47.6	45.9	48.5	46.6	46.1	42.6	39.1	47.2	38.5	38.5		
23	38.4	40.3	41.5	41.0	41.2	42.4	44.0	42.3	42.5	43.0	44.4	45.8	47.4	48.6	48.4	47.7	46.7	46.0	40.4	37.9	40.1	40.8	41.1	42.7	42.7		
24	43.3	43.6	43.4	42.7	42.9	42.8	42.2	41.4	41.6	42.0	44.4	47.2	48.4	49.0	47.8	46.4	45.1	44.8	44.5	44.4	41.6	41.6	41.4	41.4	41.4		
25**	42.7	34.5	34.8	40.8	41.8	42.3	42.5	42.4	41.8	44.1	46.0	46.9	48.3	48.2	48.9	47.3	45.9	40.9	42.5	41.6	41.5	37.6	41.5	43.7	43.7		
26	45.8	45.0	43.2	43.1	43.0	42.8	42.3	41.4	40.6	40.8	42.1	45.0	47.1	48.2	47.9	46.5	45.1	44.6	43.5	38.6	39.7	43.6	43.6	41.6	41.6		
27	41.0	41.3	40.8	40.2	41.5	42.2	42.7	41.7	40.8	41.7	43.0	44.7	46.3	47.4	46.7	46.0	44.9	44.2	44.2	44.2	42.7	41.8	42.7	43.4	43.4		
28	43.1	42.8	42.8	42.8	42.8	42.6	42.0	40.9	40.7	42.3	44.5	46.8	48.9	48.4	47.5	46.8	44.8	44.4	44.3	43.8	38.8	32.3	37.9	37.3	37.3		
29	33.2	35.3	38.3	41.2	42.2	43.1	41.8	40.1	40.8	42.2	44.7	47.4	47.9	47.9	47.7	47.2	42.9	44.7	44.3	44.1	44.0	43.8	43.5	43.5	43.5		
30	42.7	43.0	42.7	42.3	42.9	44.5	42.9	41.4	40.7	41.7	43.7	45.9	47.7	48.2	47.5	46.1	44.9	44.5	44.0	43.9	42.9	38.5	40.7	41.9	41.9		
31**	36.8	40.6	42.6	42.6	41.0	41.6	41.6	41.2	46.4	44.6	44.8	48.6	52.6	53.0	49.6	48.6	47.0	45.6	39.5	38.1	40.2	40.8	39.5	41.2	41.2		
Mean	42.3	42.4	42.9	43.0	42.9	42.8	42.8	42.3	42.2	42.7	44.4	46.8	48.6	49.2	48.2	47.0	45.4	44.9	43.8	43.0	42.1	41.5	42.4	42.3	42.3		
Mean*	42.8	43.5	43.4	43.6	43.0	42.8	42.7	42.2	41.1	41.7	44.2	46.9	48.9	49.2	48.3	46.7	45.3	44.7	44.5	44.3	43.7	43.6	43.7	43.7	43.7		
Mean**	41.7	40.9	42.5	43.2	42.6	42.5	42.8	43.4	45.4	45.0	45.3	47.1	48.7	49.3	48.5	47.3	46.2	43.9	41.8	40.8	38.9	38.4	40.4	40.7	40.7		
<b>April.</b>																											
11° + Tabular Quantities.																											
1**	45.1	43.5	41.5	43.3	43.2	42.5	43.4	41.0	41.4	42.7	45.5	48.1	50.7	51.9	48.5	46.7	45.3	39.4	43.5	40.3	39.1	38.9	40.7	43.4	43.4		
2	45.7	44.3	42.0	43.0	43.0	42.2	41.5	39.7	39.5	40.8	44.1	48.6	52.2	52.2	48.5	46.7	44.8	43.9	42.1	40.6	40.8	41.1	41.4	43.1	43.1		
3	43.8	44.4	44.6	44.6	43.8	43.2	41.5	39.7	38.5	38.5	41.2	45.6	50.2	51.5	50.5	48.2	46.7	44.5	43.1	40.4	40.0	39.5	40.2	41.5	41.5		
4**	44.7	43.1	43.2	43.4	43.2	41.7	40.5	38.8	37.5	38.5	40.5	44.0	47.3	48.7	48.7	48.5	47.5	45.4	35.8	39.0	40.1	35.4	29.5	27.7	27.7		
5**	33.5	39.4	43.0	42.2	41.3	40.5	40.8	37.6	37.9	39.0	42.1	44.6	46.7	49.4	51.9	48.4	47.6	46.5	39.2	37.8	41.0	42.0	43.0	43.6	43.6		
6**	44.1	42.7	42.2	41.1	41.8	43.5	45.9	42.4	42.3	45.2	45.1	46.1	48.1	47.5	47.9	45.9	43.9	42.8	40.3	40.5	42.2	42.7	41.0	41.1	41.1		
7	40.8	44.4	42.6	41.3	42.5	41.5	41.0	40.6	39.6	40.6	42.5	45.2	47.2	47.6	46.6	45.9	44.6	43.6	43.1	41.7	42.8	43.0	43.2	43.2	43.2		
8	43.5	43.5	42.9	42.5	42.3	42.6	41.7	40.5	39.9	41.4	44.1	47.1	48.7	48.7	47.7	46.7	46.1	44.9	44.5	44.1	43.1	43.1	41.9	42.0	42.0		
9	42.6	42.6	42.8	41.8	43.5	42.6	41.2	40.4	40.6	41.6	43.6	46.0	48.4	48.5	47.4	45.7	44.7	43.6	41.7	42.2	42.6	43.1	43.2	43.3	43.3		
10	43.3	43.1	43.1	42.7	43.2	43.8	42.5	40.4	39.2	40.6	43.6	46.6	48.7	48.3	46.7	45.0	43.7	42.7	42.6	43.1	43.4	42.9	42.6	43.2	43.2		
11	42.6	42.6	42.4	42.1	42.2	41.3	40.2	38.8	39.4	41.3	44.5	48.2	49.7	49.7	48.2	46.8	45.7	44.4	44.1	43.8	43.7	43.5	43.5	43.5	43.5		
12	43.3	42.8	42.9	42.0	42.3	41.7	40.6	39.1	38.9	40.3	42.7	45.5	47.9	48.7	48.2	46.9	44.7	43.6	42.9	42.5	42.9	43.3	43.4	43.1	43.1		
13*	43.5	43.0	43.4	42.6	42.1	41.5	40.5	39.2	39.5	41.0	43.9	47.0	48.8	48.4	46.8	45.0	43.2	42.7	43.1	43.3	43.2	43.2	43.0	43.0	43.0		
14	43.2	42.7	43.1	43.0	42.7	42.2	41.6	40.7	39.5	40.2	43.6	47.7	51.9	52.3	50.3	47.2	44.7	43.3	42.6	43.2	41.7	40.7	41.9	41.8	41.8		
15	42.3	42.3	40.6	41.4	42.0	41.4	40.8	39.5	39.4	41.4	45.3	48.7	51.1	51.8	49.5												

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

	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>	Noon	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>		
May.																											
11° + Tabular Quantities.																											
I	42.2	42.0	44.1	42.5	41.2	40.7	40.2	39.0	39.5	40.0	42.6	46.2	48.1	48.8	48.5	46.8	45.5	44.1	43.5	42.9	42.6	42.5	41.9	41.5			
2**	41.8	42.9	43.1	41.0	39.8	40.3	39.6	39.8	40.0	40.6	43.0	47.0	48.9	49.3	48.7	48.0	47.9	47.4	42.2	42.2	41.4	38.8	40.8	40.7			
3**	35.9	34.4	33.7	36.7	40.2	42.6	42.5	40.9	39.4	40.8	43.2	45.9	47.7	48.5	48.2	46.9	46.4	45.1	43.9	43.8	43.2	43.1	42.6	39.6			
4	40.4	41.9	42.1	41.4	41.0	40.9	40.0	39.3	39.2	40.7	43.2	45.8	47.3	46.7	44.3	44.0	43.6	43.1	43.1	43.0	42.9	42.6	42.1				
5	41.8	41.8	41.3	40.9	40.3	39.8	39.6	39.5	39.7	41.3	43.9	47.2	48.6	48.4	47.3	46.5	45.4	44.8	43.8	43.7	43.6	43.4	41.7	41.8			
6	42.2	42.7	41.8	42.0	41.3	42.2	41.8	40.8	40.3	40.8	42.1	44.4	46.8	48.2	47.8	46.6	45.6	43.2	41.8	42.8	44.0	44.0	41.8	41.5			
7	40.4	40.5	41.5	41.3	40.7	40.4	40.2	40.2	40.8	42.0	44.0	46.4	48.1	47.8	47.0	46.3	45.5	44.7	44.5	43.7	42.4	43.2	43.4	42.7			
8	44.5	42.2	41.4	41.2	40.5	40.3	40.0	39.8	39.2	40.1	41.9	43.2	44.6	45.6	46.3	45.7	45.2	44.9	44.5	44.2	44.1	44.0	43.2	42.9			
9	42.5	42.1	41.7	41.6	40.5	40.2	40.2	40.2	40.8	41.7	43.7	45.4	46.9	46.1	44.9	44.2	44.6	44.4	44.3	44.0	43.6	42.9	41.5	41.8			
10	43.3	41.7	40.5	41.1	39.9	38.7	39.1	39.1	39.4	42.2	45.3	48.3	48.4	47.4	46.9	45.8	44.9	43.9	43.0	42.1	42.8	39.6	38.1	39.4			
11**	41.1	41.4	41.4	41.4	39.4	40.7	40.0	39.0	39.5	41.9	45.5	49.2	49.5	48.5	47.3	45.7	43.6	42.0	41.8	41.5	42.5	43.2	43.5	35.7			
12**	35.6	38.9	42.5	42.1	40.3	39.6	41.5	40.0	39.7	39.7	42.2	44.0	45.3	46.4	46.6	45.2	43.9	42.9	41.3	41.4	41.6	41.8	41.3	43.4			
13	42.9	40.6	39.2	39.9	39.1	39.1	37.2	36.5	38.3	39.9	42.5	44.6	47.0	46.9	47.2	46.2	44.9	44.0	42.8	41.8	40.9	41.9	42.0	42.0			
14*	42.3	42.9	42.9	41.9	41.0	40.5	39.3	38.3	38.7	40.7	43.0	46.2	48.1	48.6	47.5	45.6	44.2	43.2	42.7	42.6	42.3	42.6	42.5	42.5			
15*	42.5	42.0	41.8	41.7	40.9	39.6	38.5	38.5	39.9	41.1	43.6	46.9	48.5	48.3	46.3	44.9	43.7	42.8	42.7	42.6	41.8	42.2	41.3	41.2			
16*	42.1	42.5	42.8	42.1	40.3	38.9	38.0	38.0	38.6	40.2	42.1	44.2	45.9	45.3	44.9	43.4	42.3	41.9	41.9	42.3	42.5	42.3	42.4	42.4			
17	42.3	42.7	43.1	42.6	40.7	38.7	37.9	37.4	37.7	38.8	41.8	45.9	48.2	47.7	46.7	44.7	43.0	42.6	42.6	42.7	43.1	43.4	42.7	42.5			
18**	42.0	42.0	42.2	42.2	41.3	40.0	38.6	38.4	42.1	45.0	46.6	48.5	49.9	52.7	52.1	54.0	51.3	48.5	43.8	41.8	42.5	41.5	40.3	37.3			
19	35.4	38.7	38.6	39.7	39.5	38.1	36.6	36.4	37.6	40.0	43.2	45.9	46.9	47.2	46.4	44.6	44.0	43.6	42.7	42.3	42.2	41.9	39.6	39.9			
20	41.3	41.4	41.7	40.8	40.1	39.0	38.7	39.0	39.3	41.0	43.6	46.7	47.8	46.8	46.8	46.6	46.2	45.3	43.0	41.0	42.2	41.8	42.9	42.4			
21	42.0	43.6	42.9	40.5	39.9	39.1	38.5	38.8	40.0	41.3	43.1	45.0	46.1	46.8	48.1	47.0	45.5	44.5	42.9	42.6	43.1	42.5	42.3	41.6			
22	41.0	41.3	40.9	40.7	39.3	38.5	40.0	40.1	40.0	41.9	44.9	48.4	47.9	45.2	45.6	45.2	43.0	42.1	42.0	41.5	41.5	42.0	42.0	43.2			
23	42.2	40.7	38.9	39.7	38.4	37.4	38.3	41.1	42.0	42.7	43.4	44.0	44.7	44.9	44.8	44.2	44.0	42.9	42.0	41.6	39.9	40.8	41.0	41.1			
24	41.1	40.4	40.1	39.9	39.1	39.1	39.0	39.1	40.1	42.5	44.1	45.1	45.8	46.1	45.3	43.3	42.5	42.8	43.7	42.1	40.4	42.3	40.7	41.9			
25	41.7	41.1	41.6	40.8	40.1	39.4	39.2	39.8	40.8	41.9	43.5	45.5	47.2	46.9	46.1	44.5	43.2	43.5	43.4	42.7	43.4	43.8	41.1	42.0			
26	42.2	43.9	40.5	38.2	37.9	38.0	39.3	39.4	39.7	41.9	45.8	46.7	47.9	47.1	45.4	44.3	43.6	43.4	43.3	42.9	42.9	42.5	42.7	42.5			
27*	42.1	41.8	41.7	41.7	40.7	39.7	38.7	38.8	40.2	41.5	43.2	44.3	44.8	45.0	44.6	44.5	44.3	44.0	43.8	43.5	43.0	42.6	42.5	42.6			
28*	42.3	42.1	41.6	41.5	40.8	40.5	40.1	39.2	39.0	40.1	43.1	46.5	47.6	47.4	46.4	45.6	44.8	44.0	43.2	42.6	42.5	42.5	42.5	42.4			
29	42.4	42.1	41.9	41.5	40.2	39.3	37.6	37.6	37.8	40.0	42.3	44.9	47.2	48.2	48.3	47.0	44.6	43.0	42.2	42.2	42.3	42.4	42.5	42.3			
30	42.0	41.7	40.8	41.2	41.8	40.2	38.8	37.8	37.7	39.0	41.6	44.9	47.7	48.0	47.9	45.9	44.5	43.4	42.5	42.5	41.7	41.2	42.0	41.3			
31	41.4	41.5	41.6	41.0	40.0	39.4	38.4	37.4	37.1	38.5	41.5	46.2	48.8	49.1	48.5	46.7	45.1	42.8	41.3	41.1	41.4	41.6	41.9	41.9			
Mean	41.4	41.5	41.3	41.0	40.2	39.7	39.3	39.0	39.5	41.0	43.3	45.9	47.4	47.4	46.9	45.8	44.7	43.8	42.9	42.5	42.4	42.3	41.8	41.5			
Mean*	42.3	42.3	42.2	41.8	40.7	39.8	38.9	38.6	39.3	40.7	43.0	45.6	47.0	46.9	45.9	44.8	43.9	43.2	42.9	42.7	42.4	42.4	42.2	42.2			
Mean**	39.3	39.9	40.6	40.7	40.2	40.6	40.4	39.6	40.1	41.6	44.1	46.9	48.3	49.1	48.6	48.0	46.6	45.2	42.6	42.1	42.2	41.7	41.3	39.3			
June.																											
11° + Tabular Quantities.																											
1	41.9	41.9	41.7	41.1	40.1	38.6	38.1	37.8	38.3	40.0	43.1	46.5	49.1	49.9	49.3	47.4	45.9	44.1	43.0	42.2	41.3	41.7	41.1	41.3			
2*	41.1	40.6	40.1	39.9	39.3	38.6	37.7	37.1	37.2	38.6	41.6	44.2	45.4	45.6	45.2	44.2	43.7	43.2	43.1	42.7	42.4	42.2	41.9	41.5			
3*	41.3	40.8	40.3	39.9	39.3	38.6	38.3	37.8	37.7	39.4	42.4	45.9	47.8	47.6	46.9	45.7	44.8	44.4	44.1	43.8	43.5	43.2	41.9	40.5			
4	40.8	41.0	40.5	40.5	39.7	38.3	37.3	36.8	36.7	38.1	40.8	43.8	45.3	46.4	46.9	45.3	45.1	44.4	44.4	43.5	44.3	43.0	42.3	42.3			
5**	42.6	36.7	34.6	33.2	33.8	34.0	36.8	36.3	37.4	41.2	46.0	48.6	46.8	46.7	49.3	49.5	44.5	45.1	43.5	42.6	41.2	41.3	43.2	38.8			
6**	42.7	36.7	35.8	37.0	36.4	38.1	38.6	38.3	40.7	41.5	44.2	45.5	46.5	46.4	46.2	46.1	45.2	40.4	42.9	43.5	43.9	43.7	44.0	43.2			
7	42.1	42.6	41.4	40.3	38.7	38.1	39.0	39.3	39.7	41.0	43.6	46.0	46.6	46.4	45.2	44.0	42.7	42.0	42.0	42.0	42.7	42.7	42.6	42.6			
8	41.4	41.1	40.8	40.2	39.4	38.4	37.9	37.5	38.4	40.9	43.0	45.4	46.9	46.6	45.8	43.9	44.5	43.9	43.7	43.1	39.9	39.6	38.8	38.2			
9	39.0	39.8	41.0	44.0	40.8	38.0	37.0	36.4	36.4	38.2	42.5	45.8	46.6	46.1	45.7	44.5	43.8	43.6	42.1	40.0	40.5	41.3	41.8	41.1			
10	41.4	40.8	40.7	40.9	40.2	38.4	37.2	36.8	37.7	39.9	43.3	45.9	46.8	47.3	47.1	45.8	44.6	43.4	42.2	41.5	40.8	40.7	41.6	41.6			
11**	42.1	41.9	41.4	40.5	39.1	37.9	36.2	34.8	35.5	37.5	40.1	43.5	46.6	48.1	47.0	45.8	44.7	44.6	43.6	38.0	41.0	40.6	40.8	41.6			
12**	41.2	37.2	35.9	39.2	40.3	37.6	36.2	34.5	35.1	37.6	40.1	43.5	47.9	50.3	50.3	49.9	49.2	48.0	43.4	41.8	41.4	41.3	41.4	41.4			
13	40.0	40.4	40.4	40.4	39.4	38.5	37.6	36.5	36.3	38.6	41.3	43.9	45.4	46.2	46.5	45.3	43.7	41.8	40.8	40.8	40.8	41.1	41.3	41.4			
14	41.8	42.0	41.8	41.0	39.8	39.0	37.6	36.4	36.4	37.6	40.5	43.8	46.2	48.1	48.5	47.5	45.9	43.9	42.7	42.5	40.5	40.2	41.9	38.5			

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

	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>	Noon	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. <span style="float:right;">11° + Tabular Quantities.</span>																										
1	42.7	40.2	40.0	40.6	41.7	37.7	35.7	36.1	37.1	40.0	42.4	44.7	45.8	45.9	46.5	45.8	44.3	43.4	42.9	41.8	40.8	41.8	41.7	41.2		
2	40.4	40.1	38.1	37.0	36.5	35.6	36.7	36.9	37.8	38.9	40.4	42.9	43.7	44.1	44.9	44.5	43.0	42.0	41.6	41.0	41.3	41.1	41.0	40.6		
3**	40.2	40.1	39.7	39.2	38.2	37.3	37.3	37.4	37.4	38.6	40.3	44.0	47.5	50.0	50.3	50.2	49.0	47.5	43.2	43.0	42.3	42.0	40.2			
4**	41.5	41.0	42.2	40.0	38.6	38.2	38.2	38.0	36.8	37.2	38.0	41.4	42.4	44.7	45.9	45.5	43.5	42.5	42.1	42.0	42.0	42.2	41.9			
5	39.8	40.0	39.9	40.2	42.1	40.7	40.8	41.8	38.8	37.8	39.8	42.8	44.2	44.1	44.7	44.7	44.3	42.7	42.0	41.2	42.0	41.8	41.7			
6	41.2	41.8	40.1	38.8	39.4	40.2	38.2	37.1	36.6	37.8	40.4	44.4	46.2	45.8	44.8	44.0	43.1	41.4	40.5	41.3	41.6	41.4	41.1			
7	40.8	40.4	41.0	42.5	39.5	37.5	36.4	36.9	37.9	39.0	41.1	44.2	46.8	47.0	45.9	44.4	42.9	41.4	41.1	41.3	41.2	41.9	41.9			
8	41.4	41.2	41.1	40.1	38.7	38.0	38.1	37.7	38.1	39.7	41.4	44.1	46.9	46.9	46.3	44.2	41.2	40.2	41.1	41.3	41.7	41.8	41.8			
9	42.0	39.6	39.4	41.3	39.3	35.7	35.4	36.5	37.8	39.3	42.2	44.3	46.5	47.9	47.3	45.9	44.6	42.6	41.3	40.5	41.1	40.8	40.8			
10*	39.4	40.3	39.4	38.8	37.4	36.4	36.5	36.5	36.7	38.3	40.3	43.7	46.7	47.6	46.0	43.9	42.2	41.0	40.8	40.6	40.7	41.0	41.3			
11	41.0	40.5	40.5	39.6	38.3	36.6	36.4	36.3	36.8	38.4	40.4	43.4	45.7	46.4	46.3	45.4	44.7	43.3	41.9	41.6	41.5	41.4	41.3			
12	41.8	41.0	40.4	40.0	39.8	37.4	36.4	36.0	36.2	37.8	40.2	42.7	45.6	47.1	47.3	45.1	43.7	42.8	41.8	41.4	41.0	40.6	40.4			
13	40.4	40.4	40.0	39.6	38.7	37.8	37.8	36.5	37.0	38.4	38.7	40.4	43.2	44.5	46.0	46.5	45.0	42.3	40.5	40.9	41.4	41.5	41.5			
14	41.1	40.7	40.7	39.3	38.7	37.6	37.6	37.6	37.5	37.8	39.4	43.2	46.7	47.5	47.9	47.1	44.6	43.3	42.7	42.4	42.0	41.6	41.2			
15	41.0	38.0	37.5	37.0	36.0	36.5	35.5	34.1	35.4	37.5	40.4	42.5	45.5	47.6	48.7	47.8	46.8	44.8	42.9	42.1	41.5	41.1	40.7			
16	40.4	40.8	38.4	36.9	36.8	37.6	38.7	36.5	35.5	37.4	38.8	40.2	43.7	47.3	48.3	46.5	45.3	43.7	42.3	39.6	40.3	41.3	40.9			
17	39.7	39.7	39.7	39.8	39.2	37.5	36.5	35.0	35.2	37.5	40.7	44.4	47.8	48.9	47.7	45.5	43.8	42.0	41.0	40.0	38.5	38.3	39.5			
18*	39.8	40.1	39.5	39.0	38.4	37.1	35.5	35.2	35.4	36.5	39.4	42.0	44.4	46.4	46.6	45.8	43.7	42.2	40.8	40.6	40.9	41.1	40.5			
19*	39.5	39.4	39.4	39.3	38.6	37.9	37.4	36.4	35.4	36.6	38.4	41.4	43.5	45.4	45.9	44.7	43.4	41.4	40.8	41.0	41.2	41.4	40.6			
20	39.3	39.1	39.3	39.3	37.9	37.1	37.1	37.1	37.0	37.3	39.2	42.3	45.3	46.1	46.3	46.1	45.9	43.5	41.1	41.3	41.1	41.1	40.9			
21	40.4	39.4	39.4	39.0	38.4	37.8	37.2	36.5	36.2	37.4	39.4	42.6	45.5	46.5	45.1	43.5	42.5	42.5	42.5	42.5	42.1	40.9	39.1			
22*	40.2	39.4	38.7	38.6	37.6	36.6	36.6	36.9	37.6	39.4	42.3	45.2	46.9	47.2	46.7	45.2	43.8	42.7	41.8	41.3	40.8	41.7	41.3			
23*	40.8	40.7	40.0	39.8	38.4	37.3	36.7	35.4	35.1	36.6	39.7	42.9	43.8	44.7	45.6	44.2	42.9	42.2	41.7	40.8	40.9	40.7	40.7			
24	40.5	40.0	40.1	39.7	38.2	36.3	35.7	36.6	36.6	38.1	40.0	42.9	45.6	46.7	46.4	44.6	43.6	44.0	43.0	41.7	41.8	41.8	40.6			
25	40.4	40.2	39.0	38.6	37.7	36.1	35.4	34.7	35.3	38.2	40.5	43.3	44.8	46.2	46.3	44.3	42.6	41.6	41.8	41.7	41.6	41.6	41.4			
26	39.7	38.8	38.3	38.7	36.3	35.5	34.9	34.5	35.2	37.6	40.4	43.5	45.6	45.4	43.7	42.5	41.1	40.4	40.5	41.5	41.4	41.3	41.0			
27	40.5	40.7	39.9	39.5	37.5	36.1	35.9	36.6	36.5	37.8	41.4	44.5	46.7	47.5	46.5	44.5	42.8	41.5	40.5	40.5	40.5	40.5	40.5			
28	40.4	39.6	39.2	38.6	37.6	36.7	36.4	36.2	36.7	38.3	40.4	44.8	47.6	47.8	47.3	45.3	43.7	42.3	41.1	40.8	40.8	40.0	40.2			
29**	39.5	40.3	40.6	39.3	37.3	35.7	36.0	36.3	37.3	39.5	42.3	44.9	47.5	48.8	49.0	46.9	44.4	42.7	41.8	40.8	40.7	38.6	38.5			
30**	38.2	38.2	38.5	38.4	32.6	36.5	38.1	36.1	36.9	43.6	45.6	45.1	47.2	55.1	53.4	50.4	48.0	45.1	42.8	42.0	41.2	40.8	39.7			
31**	37.2	36.1	38.3	38.4	37.8	37.8	36.8	36.6	36.2	37.3	40.0	42.9	44.9	44.9	44.6	44.5	40.8	41.0	41.4	41.2	39.9	40.1	41.0			
Mean	40.4	39.9	39.6	39.3	38.2	37.2	36.8	36.5	36.7	38.3	40.5	43.3	45.6	46.8	46.7	45.5	43.9	42.6	41.7	41.3	41.2	41.0	40.8			
Mean*	39.9	40.0	39.4	39.1	38.1	37.1	36.5	36.1	36.0	37.5	40.0	43.0	45.1	46.3	46.2	44.8	43.2	41.9	41.2	40.9	40.9	41.2	40.9			
Mean**	39.3	39.1	39.9	39.1	36.9	37.1	37.3	36.9	36.9	39.2	41.2	43.7	45.9	48.7	48.6	47.5	45.1	43.8	42.3	41.8	41.2	40.7	40.3			
August. <span style="float:right;">11° + Tabular Quantities.</span>																										
1	39.3	43.8	42.7	38.1	38.1	37.7	35.7	35.8	35.8	37.7	40.8	44.3	45.4	44.8	44.7	43.3	42.8	42.6	41.6	40.8	40.2	39.4	40.3			
2	39.8	40.3	40.1	39.6	38.3	36.2	35.6	35.2	35.8	35.7	38.9	42.1	43.6	45.4	45.1	43.6	42.5	41.4	39.4	40.6	40.9	40.5	40.3			
3**	40.3	41.6	39.5	39.5	42.6	42.9	37.9	36.5	36.6	38.9	42.5	45.7	46.8	46.3	45.3	45.4	45.0	41.4	35.0	38.9	38.3	38.8	40.4			
4**	41.2	41.3	39.4	39.2	39.2	39.8	40.3	38.2	37.2	37.9	39.3	41.8	43.1	44.2	42.4	41.7	41.0	36.2	39.2	38.8	33.8	35.8	36.2			
5	36.3	41.1	38.6	38.3	38.1	36.1	35.3	35.1	36.8	39.1	41.1	42.8	45.9	46.0	44.0	42.1	41.2	41.5	41.7	41.1	40.5	40.1	39.3			
6	38.4	40.4	41.3	39.3	38.2	37.3	36.8	35.7	39.7	39.2	38.7	40.8	43.2	44.3	43.4	42.5	41.2	39.8	39.6	39.9	40.2	40.2	39.4			
7	38.5	38.9	39.0	38.6	37.4	36.4	35.9	36.1	36.9	39.3	42.1	44.1	45.0	44.8	44.4	43.2	41.6	40.5	40.5	40.8	39.6	40.1	39.9			
8	39.4	39.4	38.9	38.8	38.4	37.9	37.4	36.0	35.9	37.4	40.4	43.3	45.0	46.0	45.4	43.9	42.8	41.1	41.1	40.5	40.5	38.9	37.4			
9	39.0	39.5	40.4	39.0	37.6	37.9	36.4	35.4	36.0	36.9	38.6	41.0	43.0	44.4	44.4	42.7	41.3	40.6	40.3	38.6	39.5	39.8	40.1			
10*	40.0	39.4	38.1	38.1	38.8	37.4	37.5	36.7	36.7	37.5	39.5	41.9	43.8	44.4	44.9	44.1	42.9	41.1	40.4	40.2	40.4	40.4	39.7			
11	38.4	38.3	38.8	36.7	35.4	34.4	35.3	34.2	34.3	36.5	39.3	42.5	45.0	45.4	45.7	44.6	42.6	40.3	39.8	40.2	40.1	39.2	39.2			
12	39.0	38.5	38.9	38.4	38.3	37.2	36.1	35.7	36.1	38.5	42.3	45.9	48.4	49.2	48.9	46.7	44.4	44.0	42.6	37.8	39.1	39.4	36.1			
13	31.0	33.5	37.8	37.4	36.7	35.6	34.1	34.1	33.8	35.8	39.2	44.0	46.2	48.4	49.1	45.7	42.9	41.9	40.9	41.0	39.9	37.3	38.9			
14	39.2	39.0	38.3	37.6	36.9	35.9	35.3	34.9	35.9	38.7	41.7	45.1	47.9	48.8	47.5	44.6	42.6	40.6	39.8	39.9	39.1	35.3	37.6			
15	39.1	39.1	38.7	38.3	37.2	35.5	37.4	37.2	37.5	39.5	41.9	45.1	47.1	46.9	45.2	43.5	42.0	40.9	39.9	38.8	39.9	39.9	39.9			
16	37.6	37.8	38.1	38.3	37.1	35.9	35.4	35.3	36.2	37.9	40.5	44.5	46.0	46.3	45.6	43.8	42.8	41.0	39.6	39.3	39.9	39.3	39.3			
17	36.6	35.7	37.0	36.1	35.1	35.0	35.4	35.7	36.6	39.2	40.2	41.6	44.3	44.9	44.8	44.5	42.1	41.1	40.6	40.7	38.8	39.7	40.6			
18	39.4	39.5																								



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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
11° + Tabular Quantities.																										
<b>September.</b>																										
I	34.9	36.2	35.6	36.1	36.2	35.3	34.0	34.4	35.5	36.7	39.7	43.0	45.6	44.1	42.3	41.6	41.0	39.9	39.5	39.4	39.0	36.0	30.4	35.4		
2**	37.9	38.4	39.4	38.0	37.7	42.4	40.7	36.7	36.8	37.2	39.1	41.6	43.4	44.4	43.9	41.5	39.2	37.9	37.4	37.8	37.8	38.8	38.6	35.8		
3	35.5	33.2	34.9	36.8	36.7	36.6	36.8	37.8	36.8	39.3	42.3	45.4	43.9	42.9	42.3	40.6	39.3	38.2	37.0	37.2	39.1	38.6	36.6	37.2		
4	35.8	36.7	37.6	37.7	37.2	36.7	36.0	35.4	36.3	38.4	41.3	44.1	45.3	43.7	42.3	41.3	40.5	36.8	36.4	38.2	36.3	37.9	37.8	38.0		
5	38.4	38.3	38.0	38.4	38.4	37.9	36.9	35.8	35.4	36.6	39.4	42.5	43.5	43.8	42.4	40.7	39.3	39.2	39.0	38.9	38.6	38.8	38.2	38.4		
6	39.4	38.0	37.9	37.9	37.7	37.3	35.5	34.8	34.9	36.8	40.4	43.4	44.4	44.4	43.7	43.4	42.3	41.2	40.3	39.1	37.4	34.4	33.5	33.0		
7	35.3	37.0	35.0	37.6	36.9	36.6	35.5	34.9	34.9	37.1	40.0	42.3	44.1	44.6	44.0	42.1	40.1	39.1	38.6	38.1	38.5	38.3	38.2	38.6		
8	39.8	40.0	37.3	36.8	36.7	36.4	35.7	34.7	34.3	36.2	39.9	43.5	44.8	45.3	43.4	41.9	39.8	38.5	39.4	39.4	38.9	37.9	38.4	38.4		
9*	38.3	38.0	37.5	37.9	37.2	36.5	35.7	35.5	35.5	38.5	41.0	42.8	43.5	43.6	42.3	40.5	39.7	39.4	39.6	39.9	39.1	38.6	38.4	38.2		
10*	38.4	38.2	38.0	37.9	37.3	37.6	36.5	35.1	35.4	37.7	41.0	44.5	45.3	44.5	42.4	40.5	39.8	39.4	39.4	39.4	39.3	38.6	36.5	35.9		
11	36.5	37.2	37.7	37.2	36.3	35.3	35.3	34.8	35.8	39.4	42.7	44.8	45.7	44.3	42.7	40.4	39.2	39.3	39.4	39.9	38.7	39.1	37.5	36.5		
12	37.7	37.8	35.7	36.7	32.8	33.7	34.7	35.6	36.2	38.2	40.3	43.0	43.9	43.6	42.1	40.6	39.5	39.2	39.4	39.1	37.7	37.1	37.9	38.1		
13*	38.2	38.0	37.7	37.5	37.2	36.7	35.8	35.7	36.7	39.2	42.8	45.2	45.4	44.2	42.4	40.1	38.8	38.8	39.4	39.0	38.7	38.9	38.4	37.6		
14*	38.0	37.9	38.1	37.7	37.6	37.3	36.8	36.0	36.3	38.5	42.2	44.2	45.1	44.5	42.8	40.7	38.3	38.4	38.9	38.9	39.3	38.7	38.6	38.4		
15	38.3	37.8	38.3	37.4	37.2	36.9	36.4	36.0	36.3	38.3	40.4	42.2	42.4	41.8	40.7	40.2	39.7	40.0	40.6	40.4	39.8	38.9	38.6	37.7		
16	37.6	37.9	37.6	37.3	37.7	39.5	35.7	35.4	35.5	37.5	40.5	43.5	44.5	43.7	43.6	43.4	38.5	39.4	39.5	37.1	35.5	35.6	38.2	38.4		
17	35.6	31.6	31.0	34.5	35.5	35.6	35.6	35.2	35.5	39.2	43.0	47.5	46.8	45.2	44.1	40.5	40.7	39.7	38.7	38.5	36.8	37.5	38.3	38.2		
18	37.9	37.7	38.0	37.8	37.3	37.8	36.8	36.1	36.4	38.2	40.7	42.6	42.3	41.3	40.3	39.3	38.8	38.5	38.3	38.5	39.2	39.3	38.3	39.3		
19	38.8	38.7	37.6	36.6	36.9	37.0	37.2	36.8	36.7	39.1	40.8	42.0	42.2	41.8	40.7	39.9	37.7	36.6	39.4	39.4	39.2	38.4	31.9	34.7		
20	40.2	39.1	37.1	36.8	36.6	36.2	36.2	38.3	40.0	41.1	40.1	40.8	40.1	40.4	41.0	41.1	39.8	38.1	37.9	39.1	38.6	39.2	39.1	38.9		
21	38.9	38.0	38.0	37.5	38.0	37.0	36.3	36.0	37.0	39.0	41.2	42.8	43.5	42.3	40.9	39.9	38.7	38.6	39.4	38.7	34.5	35.9	33.5	33.4		
22	36.4	37.8	31.7	33.3	33.4	34.2	34.7	35.4	36.3	38.6	41.4	43.3	43.9	42.2	41.8	39.1	38.7	38.6	38.8	37.7	37.6	37.7	38.2	38.5		
23*	38.6	39.5	38.9	37.5	37.3	37.1	36.3	35.6	35.7	37.4	40.5	43.5	44.4	43.8	42.1	39.6	39.0	39.2	39.1	38.8	38.6	38.5	38.4	38.4		
24**	38.5	38.3	37.3	37.6	38.1	39.0	38.3	37.3	39.9	42.8	43.4	46.7	45.9	44.7	44.1	42.6	41.1	40.8	38.5	31.3	33.2	35.6	33.3	33.6		
25**	33.8	37.8	40.6	34.8	41.7	43.3	43.5	41.7	39.9	40.8	42.2	44.4	46.8	46.7	38.5	44.3	38.4	33.3	34.2	31.2	33.2	36.2	37.7	37.9		
26	36.7	37.6	37.3	37.5	37.4	37.2	36.8	36.5	37.1	38.8	41.3	43.2	44.6	43.3	42.6	41.1	40.6	40.0	37.7	35.6	35.4	37.6	35.7	35.2		
27**	37.4	38.7	38.7	37.8	38.7	43.1	39.1	39.0	40.0	39.6	41.7	42.6	41.3	41.7	42.2	40.4	40.0	34.2	34.6	36.2	39.0	38.4	38.6	37.7		
28	37.8	38.3	38.8	37.5	37.5	38.0	37.7	37.4	36.3	37.3	40.1	42.3	42.4	42.5	41.7	40.4	38.4	34.4	37.7	38.1	37.5	37.4	37.2			
29	37.6	37.5	37.5	37.5	37.5	36.9	36.3	35.6	35.2	36.9	39.3	41.3	43.4	43.1	42.6	38.9	40.0	40.5	39.0	37.9	36.1	35.0	37.4	37.2		
30**	34.8	35.0	36.0	33.5	34.7	36.2	36.7	37.6	37.1	37.1	39.1	42.4	42.4	43.1	42.4	41.1	40.5	38.4	30.6	32.6	34.0	34.8	33.1	36.6		
Mean	37.4	37.5	37.2	37.0	37.1	37.4	36.7	36.2	36.6	38.4	40.9	43.4	44.0	43.5	42.3	41.0	39.7	38.7	38.2	37.8	37.6	37.6	36.8	36.9		
Mean*	38.3	38.3	38.0	37.7	37.3	37.0	36.2	35.6	36.1	38.2	41.5	44.0	44.7	44.1	42.4	40.3	39.1	39.0	39.3	39.2	39.0	38.7	38.1	37.7		
Mean**	36.5	37.6	38.4	36.3	38.2	40.8	39.7	38.5	38.7	39.5	41.1	43.5	44.0	44.1	42.2	42.0	39.8	36.9	35.1	33.8	35.4	36.8	36.3	36.3		
11° + Tabular Quantities.																										
<b>October.</b>																										
1	37.6	37.5	37.7	37.1	36.7	37.5	37.6	38.0	37.0	38.0	38.6	41.6	41.6	42.1	41.6	40.5	39.0	38.6	38.6	38.2	36.9	34.4	33.1	35.0		
2	37.5	38.0	37.0	38.1	37.2	37.3	37.3	36.0	35.6	36.0	37.2	40.1	41.6	41.5	41.4	40.9	39.1	38.2	38.0	36.5	37.5	37.8	37.6	37.8		
3	37.9	37.8	37.6	37.5	37.2	37.5	37.1	36.2	35.6	36.5	37.8	39.3	39.7	40.7	40.1	40.0	39.3	38.3	38.5	38.3	38.2	38.1	38.0	38.0		
4	37.7	37.7	37.9	37.6	38.0	37.6	37.5	36.4	35.6	35.7	37.0	39.4	41.2	43.3	44.4	43.6	41.5	40.0	39.4	38.4	38.5	38.3	37.0	36.2		
5	37.3	37.3	37.6	37.8	37.7	37.6	37.3	37.2	36.7	37.6	38.2	41.3	43.1	43.1	42.1	41.0	40.1	38.3	37.6	38.5	38.3	38.0	37.9	38.0		
6	37.8	37.8	38.0	37.9	38.1	37.9	37.1	35.8	34.7	35.2	37.3	40.8	43.8	45.0	44.1	42.6	40.3	39.2	38.7	38.6	38.3	37.7	35.7	36.6		
7	35.9	36.6	37.5	37.4	37.3	37.2	37.0	36.3	35.8	36.5	38.4	40.9	42.2	42.9	42.6	41.7	41.0	41.0	39.5	38.9	37.5	35.9	36.9	37.2		
8*	37.4	37.4	37.1	37.1	37.2	36.8	36.5	35.2	34.7	35.7	38.7	42.1	42.4	42.3	41.0	39.7	38.4	38.2	37.4	37.2	37.1	37.1	37.1	36.3		
9*	36.7	37.0	37.5	37.8	37.7	37.5	36.9	35.5	34.5	35.1	37.8	40.6	42.4	43.3	42.2	40.3	38.8	38.7	38.6	38.3	38.0	37.7	37.8	37.8		
10*	38.0	38.0	38.1	38.1	38.1	37.5	36.9	35.8	34.9	35.7	37.5	40.1	43.4	44.3	43.5	41.2	39.6	39.4	39.1	38.4	38.2	37.6	37.3	37.8		
11	37.9	37.9	37.9	37.8	37.9	37.4	37.4	36.5	34.9	34.5	36.0	39.2	42.5	43.3	42.5	41.0	39.4	39.0	38.7	38.3	38.0	37.5	37.2	37.4		
12	37.2	36.8	39.1	34.1	36.1	37.0	37.0	35.8	35.2	36.0	38.2	40.7	42.7	42.2	41.0	39.7	38.4	37.7	37.1	35.4	32.9	32.6	33.3	33.9		
13	35.3	38.8	37.4	38.9	40.4	36.9	37.6	36.5	36.0	36.3	38.0	39.5	41.6	43.0	42.8	40.2	40.0	39.0	34.0	35.4	37.0	36.4	36.2	39.8		
14	37.7	37.4	37.9	37.9	37.8	38.7	39.3	37.8	37.0	37.8	38.1	38.6	40.3	40.4	40.2	38.8	38.1	37.5	37.4	37.2	36.5	35.6	36.3	36.5		
15**	37.0	37.3	37.6	38.7	37.9	37.2	36.8	35.9	35.8	35.9	37.5	39.5	41.8	43.0	43.2	40.3	41.0	40.6	38.5	38.0	33.0	30.6	34.1	37.6		
16	37.7	37.8	38.0	38.0	38.0	37.7	37.4	36.6	35.8	36.0	38.4	41.2	42.8	42.8	41.7	40.9	39.8	38.9	38.0	38.0	37.8	37.4	37.9	38.0		
17	39.2	39.5	38.2	37.7	37.4	37.6	37.8	36.3	35.4	36.4	38.9	42.1	43.1	42.8	41.4	40.0	38.9	38.8	38.5	36.6	35.2	33.4	34.8	36.7		
18	36.9	38.3	38.8	36.2	37.1	37.3	36.7	35.3	34.3	34.7	37.6	41.0	41.8	41.2	40.0	38.7	38.0	37.5	36.4	37.2	37.8	37.5	37.4			
19*	37.5	37.7	37.6	37.9	37.6	37.4	37.2	36.2	35.3	35.7	38.6	41.2	41.9	41.5												

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

	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>	Noon	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>																											
11° + Tabular Quantities.																											
1*	36.7	36.9	37.2	37.2	37.3	37.3	37.2	36.5	35.6	35.8	38.1	40.1	41.1	41.3	40.1	39.1	38.0	38.0	37.8	37.3	37.0	37.0	37.0	37.0	37.0	37.0	37.0
2	36.3	36.8	36.4	37.1	36.9	36.9	36.9	36.3	36.0	37.1	39.8	41.2	41.8	41.1	39.8	38.8	38.6	38.3	37.7	37.4	37.0	36.7	36.9	36.9	36.7	37.2	
3	37.4	37.4	37.6	37.2	37.6	37.0	36.7	35.5	34.5	35.0	37.5	40.0	41.2	40.3	39.7	39.7	39.7	39.4	38.2	36.7	32.0	35.3	36.4	36.7	36.8	36.7	
4	36.8	36.8	36.6	36.8	36.2	36.1	35.8	35.3	35.4	36.9	39.4	40.9	40.6	39.9	38.9	38.0	38.0	38.0	37.7	37.5	37.1	37.1	35.3	36.8	36.8	36.8	
5	37.1	37.4	37.2	37.1	37.2	36.9	36.2	35.7	35.2	36.8	39.1	40.2	41.2	40.5	39.0	38.2	38.5	38.4	36.0	37.2	37.1	36.4	34.4	34.9	34.9	34.9	
6	36.1	36.1	37.1	37.6	37.3	36.4	36.1	35.8	35.6	36.1	38.1	39.4	39.7	39.5	38.5	38.0	37.8	37.7	37.0	37.0	37.0	36.8	36.6	36.8	36.8	36.8	
7**	36.9	37.0	36.9	38.9	36.9	36.5	36.2	35.2	35.7	36.5	38.9	46.2	45.8	42.3	39.8	40.1	35.2	33.6	36.0	29.1	27.0	32.7	34.8	36.8	36.8	36.8	
8**	36.4	36.0	36.9	38.7	39.4	38.8	36.9	35.7	35.7	35.9	38.0	39.0	39.7	39.6	38.3	34.6	30.6	35.5	36.5	36.2	36.3	35.4	32.6	34.2	34.2	34.2	
9	36.1	38.2	39.2	38.6	41.2	39.0	37.7	37.8	35.7	36.4	35.7	37.7	39.1	39.5	39.3	38.8	37.6	37.0	36.9	36.1	33.4	34.5	33.9	34.3	34.3	34.3	
10	34.6	36.4	37.2	37.4	37.0	36.5	36.6	36.1	35.1	35.0	36.5	38.1	39.1	39.6	38.6	38.0	37.4	36.3	35.9	36.1	35.7	35.7	35.2	35.7	35.7	35.7	
11	36.1	36.8	37.0	37.3	37.2	37.1	37.4	36.2	35.3	35.3	36.4	38.3	40.4	40.5	40.7	39.7	38.6	38.4	37.1	36.7	33.9	33.5	34.3	34.6	34.6	34.6	
12	35.3	36.6	36.6	37.2	36.9	36.5	36.5	36.4	35.6	35.3	37.1	39.1	40.2	40.6	40.0	38.8	37.5	37.5	36.7	36.7	33.3	34.0	35.3	36.1	36.1	36.1	
13	36.4	36.5	36.7	36.8	36.8	36.5	36.5	36.3	35.7	36.4	37.4	39.4	41.4	41.8	41.5	40.0	39.5	38.3	36.6	34.9	33.9	30.8	33.0	34.9	34.9	34.9	
14	36.1	37.1	37.4	35.8	37.0	38.0	37.3	36.6	37.0	36.9	37.9	39.1	40.0	40.2	39.3	38.3	37.6	36.9	36.6	36.6	36.6	36.6	36.5	36.3	36.3	36.3	
15	36.5	36.6	36.9	36.8	36.5	36.1	36.1	35.8	35.6	36.1	37.9	39.6	40.0	39.1	38.6	37.6	38.6	38.4	37.6	36.7	36.6	36.1	34.6	35.7	35.7	35.7	
16	36.1	36.6	37.6	36.9	36.4	36.0	35.8	36.1	36.5	37.2	37.9	38.9	38.8	38.7	38.4	38.1	37.5	37.1	36.6	36.3	36.3	36.1	36.5	36.5	36.5	36.5	
17	36.5	37.1	36.6	36.5	35.7	35.6	35.5	35.5	35.2	36.3	38.2	39.5	40.0	39.3	38.2	37.5	37.5	37.0	36.5	36.5	36.3	36.2	36.1	36.5	36.5	36.5	
18	37.1	36.7	36.6	38.1	37.7	37.0	35.6	35.6	35.7	37.2	38.5	39.9	40.6	39.8	38.7	37.7	37.3	37.1	36.8	36.8	36.7	36.5	35.8	36.4	36.4	36.4	
19	36.7	37.9	37.7	37.6	37.3	36.9	36.1	35.6	35.7	36.8	38.6	40.2	41.6	41.0	39.4	39.3	38.1	37.5	36.6	36.4	36.2	36.2	36.5	36.6	36.6	36.6	
20*	36.5	37.0	37.1	37.1	36.7	36.5	36.0	35.5	35.0	35.5	36.7	38.9	40.2	39.9	38.4	37.9	37.5	37.2	36.4	36.4	35.9	35.6	35.5	35.5	35.5	35.5	
21*	36.3	36.6	36.3	36.4	36.4	36.3	36.2	35.3	34.9	35.5	37.3	38.6	39.7	39.3	38.2	37.4	37.2	36.6	36.6	36.3	36.0	35.9	36.1	36.2	36.2	36.2	
22*	36.3	36.8	36.9	37.2	37.1	36.5	36.3	35.6	35.5	36.3	37.3	38.9	39.8	39.3	38.1	37.3	37.3	37.1	36.7	36.5	36.3	36.2	36.2	36.2	36.2	36.2	
23	35.8	36.5	37.7	37.2	36.9	36.4	36.3	35.3	35.1	35.7	36.5	38.7	40.4	39.3	37.9	37.5	37.4	36.9	36.6	36.5	35.9	36.1	36.3	36.5	36.5	36.5	
24**	36.6	37.0	37.3	37.2	36.9	36.9	36.6	36.3	36.1	36.5	37.5	38.8	39.7	39.2	38.1	37.6	38.5	35.2	34.2	34.3	34.6	34.1	32.6	34.3	34.3	34.3	
25**	36.2	34.2	36.9	35.2	35.8	36.4	35.7	35.7	35.7	36.4	37.7	39.9	39.9	41.3	41.6	41.2	38.9	37.7	36.7	36.5	36.3	36.2	36.0	36.0	36.0	36.0	
26	35.7	38.0	36.2	36.5	36.8	36.5	36.4	35.8	35.4	35.9	37.2	38.9	40.0	39.2	38.0	37.7	37.5	37.2	36.8	36.8	36.4	36.4	36.4	36.4	36.4	36.0	
27	34.9	36.5	36.9	37.4	37.1	36.5	36.1	36.0	35.8	36.1	37.6	39.2	39.9	39.8	38.6	38.0	38.2	37.8	36.9	36.4	36.0	35.6	35.8	35.5	35.5	35.5	
28**	35.1	35.2	36.3	36.1	35.6	35.6	36.0	35.9	36.7	37.6	38.5	39.5	39.7	39.5	38.2	37.6	37.4	37.2	36.6	36.8	34.7	33.2	34.2	34.2	34.2	34.2	
29	36.3	36.3	36.8	36.3	36.3	36.2	35.7	35.5	35.7	36.6	38.0	39.3	39.9	39.1	38.4	37.4	37.9	37.2	36.9	36.3	35.4	35.0	35.7	35.8	35.8	35.8	
30*	35.7	36.4	36.8	36.6	36.3	36.1	35.9	35.4	35.4	36.5	37.6	38.6	39.1	38.7	37.4	37.3	37.2	37.1	36.6	36.3	36.2	36.2	36.2	36.2	36.2	36.2	
Mean	36.2	36.7	37.0	37.1	37.0	36.7	36.3	35.9	35.6	36.3	37.8	39.5	40.4	40.0	39.0	38.2	37.6	37.3	36.7	36.2	35.4	35.5	35.4	35.4	35.9	35.9	
Mean*	36.3	36.7	36.9	36.9	36.8	36.5	36.3	35.7	35.3	35.9	37.4	39.0	40.0	39.7	38.4	37.8	37.4	37.2	36.8	36.6	36.3	36.2	36.2	36.2	36.1	36.1	
Mean**	36.2	35.9	36.9	37.2	36.9	36.8	36.3	35.8	36.0	36.6	38.1	40.7	41.0	40.4	39.2	38.2	36.1	35.8	36.0	34.6	33.8	34.3	34.0	35.3	35.3	35.3	
<b>December.</b>																											
11° + Tabular Quantities.																											
1	36.1	36.3	36.5	36.8	36.8	36.5	36.5	36.2	36.0	36.5	38.0	38.9	38.8	39.0	39.1	40.5	39.0	38.1	34.4	35.3	34.4	31.9	34.3	35.6	35.6	35.6	
2	36.0	35.9	35.1	40.1	37.2	35.0	35.6	35.8	36.3	37.0	37.8	38.8	39.0	37.5	37.3	36.8	36.8	36.1	36.2	35.9	35.7	35.1	35.5	35.5	35.6	35.6	
3**	36.5	36.3	36.2	35.3	37.7	38.6	37.6	36.8	36.3	35.0	36.5	37.4	39.3	38.6	37.7	37.7	37.4	36.4	36.3	35.6	35.9	35.5	29.2	24.9	24.9	24.9	
4**	22.4	21.0	24.4	32.6	35.3	38.6	38.9	38.6	37.6	36.6	37.3	38.1	39.7	38.5	37.4	39.0	34.9	35.7	36.1	35.1	34.4	35.0	33.2	33.6	33.6	33.6	
5	34.6	35.9	38.0	39.7	37.6	36.1	37.0	37.4	36.9	36.8	36.8	36.8	37.3	37.6	37.2	36.8	36.2	35.2	30.9	35.2	34.8	34.8	35.3	35.9	35.9	35.9	
6	36.1	36.0	36.1	36.9	36.5	35.8	35.9	35.9	35.9	35.9	36.9	38.1	38.1	38.0	37.4	36.0	35.9	35.9	34.9	34.9	35.2	34.4	34.5	35.3	35.3	35.3	
7	36.0	36.4	36.7	36.4	36.6	37.5	37.4	37.3	35.7	36.2	37.5	38.5	39.0	39.3	38.4	38.7	38.0	37.1	33.0	31.8	33.6	35.2	35.7	36.6	36.6	36.6	
8	36.6	36.8	37.2	37.6	38.1	37.2	36.6	36.4	36.7	35.8	37.6	38.6	39.2	38.3	37.7	36.8	36.8	36.8	36.2	35.7	35.3	35.3	35.3	35.3	35.2	35.2	
9*	36.4	36.9	36.9	37.0	37.0	36.9	36.3	36.0	36.2	36.5	37.3	37.9	38.4	38.1	37.7	37.4	37.4	37.1	36.7	36.0	35.4	35.4	35.1	34.5	34.5	34.5	
10	36.2	36.8	36.9	37.0	36.8	36.6	36.3	36.2	36.3	36.3	37.2	37.9	38.6	38.6	38.2	37.6	37.2	36.2	36.8	35.7	34.7	33.5	34.9	35.4	35.4	35.4	
11	36.1	36.6	36.4	36.5	36.7	36.2	36.2	36.0	36.1	36.1	36.8	38.1	39.1	40.3	40.3	39.2	38.7	38.1	37.6	36.1	35.1	35.7	35.8	36.1	36.1	36.1	
12	36.1	36.1	36.2	36.2	36.5	36.2	36.1	36.1	36.1	36.4	37.3	38.1	38.4	38.1	38.1	38.0	38.0	37.5	36.7	36.1	36.0	36.0	34.0	35.7	36.0	36.0	
13	36.1	36.1	35.7	36.2	36.6	36.2	36.3	36.3	36.6	37.1	38.0	38.1	38.0	38.0	37.5	37.0	36.7	36.1	36.0	36.0	36.0	34.0	35.7	36.0	36.0	36.0	
14	35.9	36.2	36.2	36.6	36.6	36.2	36.6	36.1	36.1	36.0	36.9	37.7	37.8	37.6	37.0	36.8	37.0	36.8	36.4	36.4	32.2	34.7	34.8	34.9	34.9	34.	



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

	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>	Noon	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>		
18000 γ + Tabular Quantities (in γ).																											
<b>January.</b>																											
1**	536	536	537	539	541	541	541	541	541	533	530	535	533	539	534	536	535	456	457	511	516	499	516	517			
2**	515	520	524	525	517	525	532	534	525	520	503	492	511	519	505	525	514	513	524	521	519	525	526	526	517		
3	526	526	528	530	533	536	541	530	522	518	518	528	533	536	533	518	510	515	524	528	526	525	525	528			
4	529	530	537	536	536	537	538	536	533	528	526	526	533	533	533	534	531	527	529	527	528	533	536	534			
5*	533	532	533	536	538	540	538	536	532	528	528	529	531	533	536	533	533	533	534	534	536	536	536	536	536		
6*	536	536	536	539	541	543	544	544	543	540	537	534	538	543	542	536	533	530	526	527	529	536	537	534			
7	534	534	536	541	540	543	546	543	541	540	540	540	541	542	541	537	527	525	530	530	530	525	529	530			
8	530	530	533	533	541	547	545	543	540	537	538	534	532	533	538	540	540	534	537	538	538	533	532	539			
9*	530	526	528	531	536	540	542	539	537	538	537	533	532	536	538	538	539	538	541	541	542	528	530	530			
10	537	537	533	532	534	540	541	543	542	541	543	542	542	545	544	540	538	536	536	525	530	530	530	530			
11	542	533	529	530	533	536	538	539	537	534	533	530	530	533	533	536	536	534	532	533	533	536	536	538			
12*	536	536	536	534	537	543	546	546	542	540	537	526	534	542	541	540	539	538	538	536	537	538	536	535			
13*	533	536	536	536	538	539	541	546	547	546	541	537	538	538	542	540	538	539	539	538	538	538	536	536			
14**	536	537	538	542	543	547	549	546	541	535	538	534	538	543	541	533	525	516	504	495	510	500	507	507			
15	514	517	523	523	527	533	538	534	532	537	535	530	531	536	539	537	535	536	524	499	510	516	528	532			
16	518	522	522	524	535	550	548	540	539	527	515	515	534	537	535	535	532	529	529	528	534	531	536	536			
17	533	533	536	535	536	538	536	534	536	536	536	533	539	542	542	540	533	532	537	537	535	531	525	530			
18**	531	532	543	541	542	549	551	556	546	538	532	532	533	536	538	538	537	536	538	534	530	523	523	532			
19	528	534	535	533	531	536	541	540	534	527	523	525	528	533	538	539	538	536	536	538	538	537	536	536			
20	541	535	536	537	540	540	542	543	540	532	525	522	524	539	545	542	539	540	544	542	538	540	539	537			
21	536	535	534	535	539	540	542	540	530	523	526	526	530	532	533	532	524	524	527	533	532	532	535	535			
22	533	534	532	535	537	537	537	537	536	528	525	523	534	542	540	545	543	540	539	539	546	547	522	548			
23	540	530	529	528	533	538	536	540	534	522	518	521	527	529	531	531	518	519	520	534	539	531	531	547			
24	533	527	540	529	531	538	540	539	529	531	528	523	522	528	539	538	532	524	529	533	536	528	554	530			
25	524	528	538	528	531	534	539	534	526	528	528	531	537	539	535	530	530	528	528	528	528	528	528	529	531		
26	531	534	533	532	536	538	537	539	538	524	519	528	532	536	539	538	537	532	534	527	520	513	519	527			
27	531	529	524	531	534	534	533	534	534	528	528	528	528	534	539	540	536	536	534	535	537	535	531	531			
28	531	532	534	534	534	534	534	535	534	529	536	535	539	538	548	550	547	536	526	522	523	532	535	535			
29**	543	546	543	543	545	552	559	552	547	535	540	537	531	536	537	535	533	536	536	534	536	534	538	536			
30	543	540	538	538	540	547	547	545	545	540	541	540	535	536	538	541	542	543	543	540	539	533	535	541			
31	541	536	532	535	537	540	539	540	537	539	535	532	534	536	539	539	539	531	529	539	536	534	536	536			
Mean	532	532	533	534	536	540	541	540	537	532	530	529	532	536	538	537	534	529	529	530	531	529	531	533			
Mean*	534	533	534	535	538	541	542	542	540	538	536	532	535	538	540	539	537	536	536	535	536	535	535	534			
Mean**	532	534	537	538	538	543	546	546	540	532	529	526	529	535	531	533	529	511	512	519	522	516	522	524			
18000 γ + Tabular Quantities (in γ).																											
<b>February.</b>																											
1*	532	533	534	535	538	540	543	540	540	535	531	527	523	527	533	535	537	536	539	539	540	535	535	535			
2	536	539	541	541	541	545	550	549	547	537	532	533	531	538	540	538	539	541	542	540	536	529	525	536			
3	536	534	536	537	541	542	544	541	539	535	528	523	528	534	539	541	542	541	539	534	534	525	528	533			
4	536	541	544	549	537	537	539	539	537	534	533	531	527	535	542	539	511	532	529	552	539	533	551	539			
5	529	531	530	531	532	535	535	536	534	528	522	522	530	537	545	545	532	522	508	500	513	514	523	529			
6*	528	526	526	530	534	534	532	531	528	521	518	518	522	528	527	533	532	531	531	532	530	529	531	527			
7	540	535	535	536	540	542	543	540	536	534	528	522	521	526	531	538	539	540	532	535	533	532	533	538			
8	535	535	535	535	536	537	538	537	535	527	526	528	529	531	531	530	531	536	532	527	532	536	545	532			
9**	541	562	548	538	552	544	553	543	530	521	523	523	520	526	519	502	500	478	503	521	522	522	520	519			
10**	518	518	523	529	531	527	528	530	532	536	532	534	532	531	523	503	524	522	510	523	526	523	527	534			
11	533	531	526	532	537	535	535	532	536	536	531	528	526	524	522	526	532	530	538	530	527	526	536	538			
12	535	530	530	532	532	535	539	536	536	539	535	531	530	530	531	530	530	532	531	535	533	545	545	524			
13	517	521	527	528	528	532	534	536	535	535	527	523	524	526	529	526	527	527	524	525	528	532	532	531			
14*	532	531	530	531	532	532	536	535	533	527	523	522	523	521	523	531	536	539	539	539	539	538	536	534			
15	535	533	533	535	536	538	541	544	542	536	531	539	535	536	540	537	518	519	523	530	528	534	535	534			
16**	535	539	536	536	536	538	541	544	543	547	549	545	548	536	478	488	477	487	493	504	489	500	511	512			
17**	518	515	515	517	522	531	528	531	522	508	508	510	505	502	511	510	514	526	531	531	545	529	509	510			
18**	520	526	524	524	526	531	534	530	528	526	518	525	510	508	522	525	529	529	524	524	530	538	532	522			
19	526	525	526	527	523	532	535	540	534	527	516	510	510	514	522	528	524	523	531	530	524	528	527	526			
20	527	530	528	532	532	539	539	545	538	528	526	519	515	519	517	521	527	527	526	527	532	530	532	532			
21	535	531	532	531	534	536																					

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

	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>	Noon	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>																											
18000 γ + Tabular Quantities (in γ).																											
1	540	540	540	540	540	545	547	548	544	536	531	526	526	530	534	535	539	540	538	536	551	551	543	545			
2	544	542	544	542	541	540	543	540	540	536	527	499	493	512	528	529	515	520	531	536	521	515	518	513			
3	565	533	525	528	530	534	534	534	530	522	521	521	523	521	527	534	535	536	536	533	536	533	532	532			
4**	534	534	534	536	536	536	536	536	531	522	518	518	522	523	528	521	530	513	513	486	481	501	507	508			
5**	515	515	512	521	513	512	527	508	476	506	484	502	502	502	505	510	523	516	515	520	536	573	551	523			
6	526	513	524	519	532	525	529	513	518	509	498	513	519	517	517	526	517	527	527	546	533	527	529	530			
7**	532	532	534	539	544	543	544	530	532	514	505	501	505	521	505	519	517	530	535	529	527	530	532	532			
8	527	531	527	522	523	526	527	533	533	527	522	521	519	523	523	528	528	529	526	531	531	536	543	532			
9	530	527	531	530	535	532	535	535	532	527	521	518	519	528	527	525	531	529	541	538	533	547	536	532			
10	541	534	524	536	535	528	540	540	528	520	522	522	523	519	526	530	530	532	529	525	531	529	534	538			
11	533	527	527	515	540	548	546	543	535	529	528	520	520	527	526	526	525	530	538	529	529	530	523	525			
12*	526	522	522	526	529	529	530	528	527	522	516	521	530	534	534	528	526	523	529	530	533	533	532	538			
13*	536	533	534	534	534	534	534	536	532	528	525	524	532	536	536	534	534	533	534	534	536	537	537	541			
14*	538	535	535	535	535	537	537	534	527	521	518	523	532	535	537	538	536	535	535	536	536	536	536	539			
15	548	555	535	536	529	535	542	536	530	522	509	500	503	506	525	532	533	533	535	539	541	541	540	541			
16	543	542	542	541	541	540	542	536	525	523	522	518	525	535	536	530	536	534	533	533	525	530	542	559			
17	554	530	526	529	534	537	538	542	538	526	515	521	530	533	538	534	530	533	534	538	541	538	540	546			
18	546	541	533	534	537	540	540	530	530	523	512	515	520	526	536	536	529	529	523	526	523	523	556	540			
19*	530	533	535	534	536	538	537	538	530	517	514	512	521	533	533	533	536	534	538	538	538	537	538	538			
20*	541	540	541	538	540	543	544	540	536	526	525	523	520	520	521	525	533	536	538	541	542	542	546	546			
21	545	546	541	545	546	547	548	549	546	537	531	528	528	531	532	536	540	541	545	549	551	550	549	544			
22	546	543	539	543	554	579	554	546	538	530	520	523	526	528	528	522	533	537	532	528	515	516	553	528			
23	518	524	523	525	527	523	532	529	526	523	522	519	522	527	527	535	541	542	519	546	522	553	554	533			
24	535	533	535	534	536	535	530	523	522	518	516	519	519	523	525	526	532	540	543	548	531	522	536	561			
25**	537	539	512	514	524	532	529	522	515	503	487	513	512	519	513	509	494	527	522	515	511	531	524	529			
26	529	532	528	527	528	531	532	530	527	525	523	524	523	522	523	525	527	527	533	535	533	532	541	548			
27	539	533	529	532	532	533	533	536	533	528	526	526	530	536	535	536	534	529	524	524	546	557	536	539			
28	539	536	536	536	536	537	539	533	531	527	523	525	531	538	536	535	539	541	546	518	538	518	554	554			
29	536	520	523	526	519	527	528	527	531	529	523	527	524	522	529	524	522	529	535	535	535	534	537	548			
30	540	537	536	530	531	530	537	535	524	516	516	515	516	523	532	534	536	537	545	537	543	548	535	539			
31**	542	531	535	536	542	535	540	529	495	516	522	518	497	489	515	521	515	533	529	532	517	567	538	538			
Mean	537	533	531	532	534	536	537	534	528	523	518	518	520	524	527	528	529	531	532	533	531	537	538	538			
Mean*	534	533	533	533	535	536	536	535	530	523	520	521	527	532	532	532	533	532	535	536	537	537	538	540			
Mean**	532	530	525	529	532	532	535	525	510	512	503	510	508	511	513	516	516	524	523	516	514	540	537	527			
<b>April.</b>																											
18000 γ + Tabular Quantities (in γ).																											
1**	538	540	532	528	531	531	532	523	527	511	488	495	510	521	529	531	524	523	544	536	559	541	536	535			
2	546	536	533	524	533	535	531	527	523	515	507	506	515	523	540	542	538	535	533	540	536	537	535	535			
3	535	531	532	535	533	538	535	533	531	519	509	501	505	513	526	533	529	523	526	544	532	526	526	534			
4**	536	547	534	531	531	532	533	528	526	510	504	503	505	511	519	521	520	528	554	528	527	553	532	536			
5**	522	526	536	533	532	528	536	540	536	536	532	527	519	526	520	506	513	523	528	531	531	529	536	534			
6**	538	534	535	527	528	525	534	528	511	498	513	516	519	526	532	527	531	533	534	534	535	549	544	532			
7	539	536	542	531	535	540	536	523	522	515	513	510	515	520	524	534	534	539	539	541	538	538	538	536			
8	539	539	538	536	536	539	542	538	530	522	515	513	523	534	544	549	542	536	538	541	541	537	544	540			
9	534	532	534	528	532	544	544	542	536	532	528	524	525	526	530	535	536	535	537	542	541	538	539	539			
10	541	540	538	538	538	534	540	536	530	523	521	524	526	529	534	539	542	542	543	542	542	542	543	542			
11	552	545	541	540	540	542	538	530	523	518	517	518	522	529	539	547	550	549	551	551	550	549	551	549			
12	553	547	546	547	547	546	544	538	534	527	519	521	528	529	534	538	537	542	546	546	545	547	547	543			
13*	544	543	544	544	543	544	542	532	523	518	521	537	540	545	544	539	535	537	538	543	543	543	544	543			
14	547	542	542	544	548	548	544	536	531	518	513	517	526	527	531	535	542	542	547	544	546	544	551	547			
15	543	541	538	535	535	539	537	531	522	512	511	518	528	537	537	544	545	545	547	550	551	547	550	544			
16**	540	554	554	554	550	546	550	544	530	516	514	499	504	502	514	522	535	549	552	545	557	542	540	538			
17*	540	543	540	536	536	537	535	529	521	513	508	513	521	528	533	536	544	549	547	547	545	543	544	544			
18*	543	542	541	541	541	542	540	534	528	520	518	524	528	530	535	539	544	549	552	552	552	549	552	550			
19	549	548	547	547	546	544	542	540	536	526	518	515	518	522	528	537	546	542	555	552	547	553	548	549			
20	546	542	540	540	546	546	541	540	534	524	516	513	517	528	532	538	540	544	546	544	544	544	546	554			
21</																											

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h		
18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																											
May.																											
I	555	546	545	546	544	538	542	530	532	528	518	513	520	523	530	533	541	547	552	552	549	547	544	545			
2**	545	545	550	545	542	543	535	531	529	526	522	524	520	526	526	538	542	558	567	546	539	547	537	562			
3**	539	543	560	554	561	559	545	533	514	507	509	515	516	520	535	532	545	552	552	555	552	553	540	566			
4	531	531	536	537	537	535	533	526	524	512	506	515	516	516	532	540	544	550	550	547	544	542	543	556			
5	547	544	543	543	547	546	547	543	537	525	519	520	520	530	532	538	547	556	550	550	553	551	554	552			
6	550	549	541	543	540	536	537	537	529	524	513	515	519	526	532	539	547	545	552	550	548	549	551	540			
7	539	536	537	538	541	539	537	532	526	522	522	525	527	534	538	541	541	553	563	563	554	545	545	543			
8	548	543	539	538	540	539	536	530	534	534	532	530	528	529	531	533	542	550	556	558	556	553	549	546			
9	547	545	543	544	546	539	532	531	535	543	545	542	542	528	526	535	537	546	554	560	559	556	553	548			
10	546	552	541	533	541	536	529	527	525	525	531	531	535	535	536	535	537	547	550	547	551	562	559	541			
11**	541	542	536	536	541	536	542	539	537	537	536	531	525	535	537	545	540	545	547	543	558	559	563	568			
12**	543	550	553	551	540	529	516	516	533	532	524	513	511	510	509	514	525	549	550	546	542	539	541	565			
13	549	549	547	541	540	531	526	519	505	508	514	513	513	510	524	532	540	545	541	545	544	544	545	543			
14*	545	546	544	544	540	534	524	520	519	517	512	514	520	524	531	535	540	545	546	543	546	542	540	542			
15*	542	542	542	542	541	537	530	524	517	519	519	516	517	526	531	540	542	546	547	548	548	549	549	543			
16*	544	544	543	540	540	537	532	524	519	519	522	532	540	545	547	545	541	548	551	554	548	546	545	543			
17	544	545	545	545	541	538	533	530	526	524	524	530	532	534	535	538	545	547	553	551	553	548	547	545			
18**	545	548	549	553	565	561	553	543	524	533	519	517	516	514	512	525	524	534	511	520	520	512	515	518			
19	516	520	527	520	518	515	510	499	499	505	510	525	520	520	528	528	549	552	546	546	545	541	538	536			
20	535	536	534	531	531	528	521	519	518	518	515	512	512	512	522	531	546	559	550	544	533	533	537	538			
21	540	548	544	538	533	533	532	529	528	518	513	511	507	516	527	524	533	553	562	546	544	543	542	538			
22	542	540	538	537	535	530	524	524	531	537	520	506	505	517	525	525	532	546	548	546	541	537	533	528			
23	537	546	538	533	532	524	512	515	523	531	537	535	527	524	521	523	533	548	552	549	533	531	530	528			
24	529	528	530	531	528	524	523	520	519	520	524	531	535	536	536	537	545	558	557	549	549	549	544	543			
25	546	546	544	538	536	531	531	533	532	530	530	536	538	530	531	534	544	544	549	543	563	559	549	542			
26	541	541	541	541	536	529	521	520	521	525	524	532	538	538	541	544	541	539	544	546	546	538	537	536	541		
27*	540	541	538	537	533	529	525	529	536	537	541	541	538	536	535	534	544	544	546	546	548	546	545	546	546		
28*	544	544	542	541	541	540	538	537	531	525	524	531	534	536	541	544	544	547	551	554	554	552	550	551			
29	550	549	549	549	549	545	540	535	531	526	523	525	532	537	546	545	541	546	550	558	562	555	553	551			
30	548	548	545	543	550	545	540	540	535	528	529	530	529	522	533	533	540	545	555	539	555	550	553	548			
31	548	548	546	548	548	545	545	540	529	519	518	515	514	524	533	538	546	546	555	552	548	546	545	544			
Mean	542	543	542	541	541	537	532	528	526	524	522	523	524	526	531	535	541	548	550	548	548	546	544	546			
Mean*	543	543	542	541	539	535	530	527	524	523	524	527	530	534	537	540	542	546	548	549	548	547	546	545			
Mean**	543	546	550	548	550	546	538	532	527	527	522	520	518	521	524	531	535	548	545	542	542	542	539	556			
18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																											
June.																											
I	542	540	541	544	544	543	537	534	529	527	528	527	523	529	539	543	539	549	553	560	549	547	546	543			
2*	541	541	544	543	547	547	542	534	526	518	515	519	529	535	542	545	549	557	559	556	552	550	544	542			
3*	542	543	542	543	545	544	536	527	518	514	515	522	531	537	542	550	552	554	557	560	559	557	557	555			
4	552	553	552	552	554	551	544	539	536	534	531	531	529	535	541	547	562	562	564	567	562	568	564	554			
5**	560	557	546	531	532	531	529	529	526	516	494	494	504	524	527	509	528	538	542	533	534	540	537	530			
6**	552	535	534	528	534	521	529	511	514	515	518	517	521	517	521	536	533	526	539	546	549	550	555	556			
7	546	544	543	542	543	542	539	543	537	529	530	533	529	527	526	525	530	541	546	549	547	544	544	546			
8	543	541	536	536	535	535	538	536	530	521	521	536	542	539	543	538	550	551	551	569	559	549	551	545			
9	544	543	544	544	549	542	533	522	522	517	519	523	514	520	535	541	548	547	550	547	547	544	546	556			
10	548	541	538	538	538	535	530	527	523	520	520	526	532	534	533	537	537	540	543	545	546	548	543	543			
11**	547	545	542	539	539	539	539	539	532	529	528	532	538	540	541	533	529	549	561	568	556	556	551	555			
12**	548	543	560	528	553	548	542	539	534	533	530	524	523	530	540	553	564	561	538	540	542	541	543	543			
13	537	539	535	536	540	535	541	525	518	513	511	509	517	524	530	536	540	542	542	543	546	544	543	541			
14	539	540	540	539	543	546	543	530	520	515	508	506	514	524	531	542	552	556	561	556	563	545	555	544			
15	541	546	547	562	554	547	527	518	520	518	508	512	522	525	523	530	538	551	556	549	546	545	547	546			
16	546	549	541	542	544	541	535	532	530	533	529	523	525	535	547	549	557	561	556	556	550	548	548	541			
17	540	542	543	542	544	543	535	527	527	527	522	522	528	537	538	542	552	555	568	569	553	549	552	550			
18**	548	549	548	548	548	547	546	534	534	528	530	525	523	519	539	535	561	540	559	564	555	555	549	539			
19	538	543	539	538	540	538	532	525	515	514	512	514	513	521	523	531	542	548	554	551	547	543	542	541			
20	539	538	537	538	538	534	538	538	536	529	520	519	523	529	531	533	551	556	565	554	549	546	546	538			
21*	539	538	536																								

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

	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>	Noon	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>																											
18000γ + Tabular Quantities (in γ).																											
1	570	556	553	549	566	561	553	547	539	531	530	532	529	527	536	545	559	565	562	561	556	550	552	551			
2	545	549	554	545	548	548	543	535	532	524	523	522	521	531	533	545	553	554	553	553	550	550	549	547			
3**	545	546	540	544	544	544	538	530	523	518	532	542	534	511	543	536	535	552	546	551	547	547	546	544			
4**	543	535	542	540	536	542	542	531	526	526	525	525	518	523	526	531	542	544	543	553	550	550	550	546	555		
5	552	548	547	544	542	549	542	519	523	515	511	510	509	515	528	534	540	552	546	556	552	549	551	551			
6	549	548	542	544	534	532	535	529	521	515	515	523	531	533	532	535	540	555	552	552	548	547	547	544			
7	549	548	549	547	552	552	547	541	534	527	515	516	524	534	540	543	543	552	548	552	553	549	548	545			
8	543	544	547	547	545	439	539	533	531	527	521	526	528	532	538	549	548	549	548	552	551	549	555	559			
9	560	550	547	546	556	554	545	534	534	531	532	533	533	535	540	543	539	547	551	555	558	559	554	547			
10*	545	540	539	538	541	543	541	538	528	521	518	517	521	528	534	536	539	543	547	551	551	548	546	545			
11	543	541	543	543	544	546	541	535	525	518	517	522	530	539	548	558	563	559	563	551	543	551	554	554			
12	554	552	551	548	548	550	547	541	533	528	529	529	537	531	538	542	544	551	559	552	552	547	545	543			
13	547	548	547	547	548	547	544	535	522	514	511	511	521	524	529	545	554	560	554	554	548	548	548	548			
14	547	547	547	542	543	542	538	529	521	516	520	531	539	540	541	553	542	551	555	569	557	564	564	562			
15	552	545	557	548	549	543	542	536	526	513	507	509	524	536	543	547	552	553	551	552	555	551	550	548			
16	547	556	558	545	541	535	540	536	522	509	501	508	516	522	534	546	550	555	555	546	539	543	543	542			
17	540	540	541	542	542	540	531	522	516	512	507	516	529	524	530	537	542	550	559	563	560	554	545	540			
18*	540	545	546	544	549	547	542	536	528	519	515	513	517	525	525	540	544	546	554	553	550	549	545	545			
19*	542	541	542	543	545	545	542	540	530	520	521	528	532	534	534	535	540	546	549	553	553	550	547	544			
20	542	540	542	544	547	545	542	536	527	521	517	512	527	534	553	550	542	547	553	547	553	545	545	544			
21	548	544	544	542	540	539	538	537	530	522	516	512	516	532	545	548	547	549	555	556	559	555	555	553			
22*	551	549	545	547	548	546	542	534	524	519	511	511	520	528	531	537	543	542	549	554	552	551	549	548			
23*	546	545	545	545	546	543	542	538	528	516	508	516	524	528	540	541	546	550	553	554	554	554	551	550			
24	549	547	546	547	546	544	540	532	532	532	523	528	541	546	547	545	545	545	549	554	558	557	556	558			
25	557	555	554	554	555	555	554	544	528	517	521	530	541	548	544	544	546	549	557	560	561	563	564	554			
26	554	550	541	544	544	542	538	529	519	517	517	520	529	534	540	540	541	545	546	546	553	553	550	552			
27	553	558	553	549	549	545	541	537	537	531	525	526	537	541	538	539	542	542	547	550	554	554	552	552			
28	553	553	551	549	550	547	542	530	523	522	523	528	540	550	558	558	553	555	557	555	560	560	559	560			
29**	558	554	550	558	555	551	545	534	520	508	504	507	523	538	538	533	542	550	554	549	562	551	549	545			
30**	545	547	548	567	564	557	567	558	499	484	487	491	491	477	493	511	513	519	533	531	529	531	525	535			
31**	550	533	527	525	521	515	513	511	506	502	504	502	507	512	521	541	516	536	540	543	534	536	537	541			
Mean	549	547	546	546	546	545	542	534	525	519	516	519	526	529	536	542	544	548	552	552	552	551	549	549			
Mean*	545	544	543	543	546	545	542	537	528	519	515	517	523	529	533	538	542	545	550	553	552	550	548	546			
Mean**	548	543	541	547	544	542	541	533	515	508	510	513	515	512	524	530	530	540	545	545	544	543	541	544			
<b>August.</b>																											
18000γ + Tabular Quantities (in γ).																											
1	537	548	543	539	525	524	527	508	496	492	473	495	494	509	519	529	530	535	534	537	533	537	536	534			
2	532	538	535	536	532	531	529	527	511	516	509	497	506	520	523	532	529	527	533	543	539	540	535	540			
3**	540	543	538	540	528	537	530	523	522	515	522	492	481	507	523	529	527	540	550	532	532	537	548	539			
4**	541	527	530	530	529	527	515	509	512	512	506	500	497	496	516	530	543	540	537	541	545	548	530	518			
5	528	528	532	528	522	521	510	506	503	501	515	524	533	527	527	533	529	532	541	541	541	541	542	538			
6	532	532	530	529	531	532	529	523	497	513	521	522	517	519	530	535	532	535	541	540	539	538	537	536			
7	532	529	529	532	533	527	526	518	511	496	495	511	516	527	537	540	541	541	544	537	539	540	539	536			
8	536	537	536	537	538	532	529	523	512	502	505	513	520	533	527	529	531	540	542	546	550	555	545	539			
9*	536	536	536	539	536	534	528	527	522	514	509	510	515	522	527	528	535	538	541	550	544	543	543	541			
10*	545	545	545	544	536	532	539	524	520	511	512	515	521	532	541	543	543	545	549	547	546	550	551	547			
11	545	546	550	548	553	547	528	522	514	504	506	519	524	520	522	530	535	534	536	543	543	543	542	543			
12	546	544	544	543	540	537	529	522	514	512	512	518	523	531	534	545	551	562	562	556	559	552	539	549			
13	536	531	528	529	533	532	526	515	502	494	498	505	518	533	534	525	544	545	546	549	548	536	539	536			
14	535	534	533	536	536	533	528	518	511	499	486	489	511	523	533	531	541	545	545	550	546	546	536	538			
15	534	534	536	537	539	533	515	512	508	512	509	510	519	521	532	539	541	544	552	543	544	542	541	546			
16	545	533	530	531	536	533	531	523	515	516	506	507	506	515	526	529	536	535	538	541	545	540	539	538			
17	552	529	536	535	535	536	529	523	513	510	504	511	511	511	520	527	530	540	549	545	545	546	571	554			
18	555	549	549	544	546	548	546	537	528	515	518	531	541	546	550	547	546	547	556	554	557	557	567	565			
19	541	541	544	545	541	533	537	533	532	532	528	524	536	546	549	544	507	531	541	539	541	547	539	536			
20*	535	534	536	533	533	531	531	529	527	522	515	512	522	526	528	529	529	536	548	550	546	544	546	548			
21	543	543	541	541	539	539	541	545	533	518	511	507	513	513	515	522	518	528	528	544	542	543	544	543			
22	539	544	537	532	532	539	529	523	522	515																	

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

	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>	Noon	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 $\gamma$ + Tabular Quantities (in $\gamma$ ).																												
1	533	540	536	535	538	538	526	513	513	512	507	513	519	508	528	536	524	525	536	540	537	534	528	523				
2**	530	533	536	549	523	519	536	531	517	518	520	523	525	510	507	508	502	521	538	525	526	528	532	542	542			
3	561	529	520	522	523	528	516	501	508	491	481	495	505	524	521	514	523	530	531	545	539	542	539	547	547			
4	530	522	524	526	529	529	524	521	520	508	501	492	512	526	529	525	521	511	531	530	547	547	542	534	542	534		
5	532	532	531	530	530	529	530	524	516	506	500	512	524	535	535	536	536	538	538	537	535	539	536	543	543	543		
6	541	534	532	531	531	529	525	521	518	508	508	514	526	531	528	528	525	533	537	543	535	531	529	531	529	531		
7	546	538	525	528	526	530	525	522	517	514	502	513	521	529	532	534	530	529	534	540	540	539	537	539	539	539		
8	539	541	536	532	535	534	532	525	515	515	517	525	533	538	538	544	542	541	546	553	545	542	539	540	540	540		
9*	541	541	538	536	534	533	528	520	513	512	514	522	523	528	533	537	541	544	548	548	545	545	544	545	546	546		
10*	546	546	545	543	536	531	531	525	518	510	507	512	521	533	533	532	534	541	542	544	544	546	547	543	541	541		
11	537	537	538	540	541	540	536	524	512	511	517	525	530	533	533	533	536	544	547	559	544	550	554	548	548			
12	545	560	546	536	538	523	532	515	510	511	506	519	526	528	527	529	533	538	541	540	536	543	538	537	537			
13*	535	536	536	535	533	531	529	524	518	513	517	527	533	533	533	530	535	538	539	539	541	540	542	543	543			
14*	541	536	535	536	538	536	533	527	520	512	511	517	529	536	538	537	534	541	545	545	543	541	541	541	541			
15	540	538	539	540	538	537	533	529	522	517	515	521	530	536	538	543	547	548	555	553	555	550	562	554	554			
16	548	554	548	545	542	555	552	547	534	521	513	506	511	521	513	512	521	530	528	531	529	538	544	542	542			
17	552	543	533	533	533	539	539	539	523	505	487	479	492	502	494	503	519	524	527	532	529	533	534	533	531	531		
18	529	528	532	530	532	533	530	532	530	523	507	514	518	524	522	521	523	527	531	533	534	533	528	532	532			
19	532	531	532	530	531	531	532	531	528	528	524	526	528	535	533	533	516	512	515	528	535	538	561	529	529			
20	537	541	529	529	533	533	529	515	512	523	526	530	527	523	517	512	498	520	533	538	536	539	537	544	544			
21	539	533	534	534	534	531	526	520	518	519	519	524	528	529	528	524	524	533	537	538	544	537	535	539	539			
22	541	543	531	534	532	526	516	514	510	511	516	520	518	520	516	520	515	515	526	531	535	531	532	534	534			
23*	533	533	533	534	533	531	527	523	514	506	511	515	522	528	529	525	531	532	537	538	535	534	536	536	536			
24**	539	540	544	539	539	536	534	512	492	512	497	489	489	515	520	507	510	515	523	544	532	533	562	528	528			
25**	523	526	522	549	516	540	528	494	484	497	489	469	476	485	500	494	486	492	518	471	489	501	515	519	519			
26	522	517	524	521	523	526	527	527	520	508	498	498	493	516	518	523	525	530	527	522	525	548	532	526	526			
27**	518	524	523	535	532	532	537	515	502	502	490	490	492	502	493	489	492	531	513	520	538	524	536	528	528			
28	526	523	528	524	526	528	530	516	510	506	506	486	481	511	513	511	513	513	530	530	531	531	528	528	528			
29	527	526	525	528	527	528	526	522	511	500	501	509	517	514	519	516	524	522	527	526	540	524	527	526	526			
30**	525	532	544	537	532	532	527	519	525	515	512	512	497	507	511	517	520	532	532	531	498	523	535	524	524			
Mean	536	535	533	534	532	532	530	522	515	511	507	510	515	522	523	523	523	528	534	535	535	536	538	536	536			
Mean*	539	538	537	537	535	532	530	524	517	511	512	519	526	532	533	532	535	539	542	543	542	541	541	541	541			
Mean**	527	531	534	542	528	532	532	514	504	509	502	497	496	504	506	503	502	517	525	518	517	522	536	528	528			
<b>October.</b>																												
18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																												
1	527	528	527	527	529	530	532	537	533	525	514	511	503	522	531	531	527	531	535	537	535	535	534	527	527			
2	527	527	529	528	531	537	532	531	528	521	505	506	506	504	513	518	524	530	532	532	535	537	535	535	535			
3	533	533	532	535	537	535	535	535	532	527	515	511	519	521	514	520	527	532	531	532	536	537	536	537	537			
4	535	535	537	536	537	538	540	541	539	532	527	522	520	524	521	517	516	520	530	537	540	538	553	545	545			
5	543	540	540	543	544	545	542	542	533	532	521	526	526	520	522	526	527	520	535	540	543	544	544	543	543			
6	542	540	541	540	540	542	543	544	534	518	518	523	531	531	532	533	535	537	541	549	553	547	557	544	544			
7	537	535	534	538	540	544	548	547	535	528	527	527	535	543	537	535	533	520	530	537	531	536	536	536	536			
8*	537	538	538	536	537	538	538	535	525	519	522	522	525	536	535	533	533	537	538	540	542	542	540	539	539			
9*	538	535	535	535	536	537	536	530	524	520	520	520	524	531	536	537	538	539	540	539	538	538	538	538	538			
10*	538	537	537	538	539	538	536	535	532	523	515	517	523	532	538	539	539	539	543	544	543	539	539	539	539			
11	537	538	539	539	541	543	546	546	539	526	516	514	520	525	531	534	538	542	544	545	546	544	543	543	543			
12	544	540	565	550	541	545	547	544	534	516	508	513	521	531	535	536	534	534	539	526	521	522	534	539	539			
13	529	538	538	537	552	550	545	539	521	523	518	517	525	526	527	529	526	526	516	527	532	536	534	546	546			
14	537	534	534	536	539	537	539	544	532	519	511	514	521	522	525	524	524	525	531	535	535	534	535	534	534			
15**	534	536	538	540	546	548	540	533	527	524	515	509	517	521	523	508	490	493	487	500	513	517	523	529	529			
16	529	530	530	531	534	536	539	536	532	516	510	505	504	511	518	518	517	521	523	523	527	531	534	533	533			
17	536	540	531	534	536	536	535	532	525	513	507	513	523	527	529	529	531	534	535	539	539	528	523	529	529			
18	531	534	549	536	536	538	538	534	529	517	510	513	524	527	528	529	533	532	534	539	540	541	541	540	540			
19*	539	538	538	538	539	540	540	537	532	522	517	521																



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

	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>	Noon	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>		
November. <span style="float: right;">18000 γ + Tabular Quantities (in γ).</span>																											
1*	535	535	534	536	540	543	542	542	536	526	520	521	526	531	534	534	536	538	539	540	539	539	536	535	535	538	
2	531	539	534	534	536	539	539	540	537	532	529	526	530	533	534	536	540	544	543	543	536	536	538	538	539	538	
3	538	538	538	538	540	544	543	546	540	530	521	516	518	527	530	529	530	530	530	531	533	535	534	538	539	538	
4	535	533	533	535	539	535	538	533	525	518	518	522	526	532	535	536	535	539	538	538	538	538	538	540	536	538	
5	535	535	538	538	539	541	543	541	540	539	535	535	539	535	539	535	534	530	527	527	537	538	535	544	538	538	
6	548	535	534	534	537	538	539	536	533	530	529	528	527	531	530	539	530	534	535	536	538	535	537	539	539	539	
7**	536	538	539	544	552	548	551	555	554	540	525	499	504	525	522	512	463	498	500	493	518	517	535	541	541		
8**	538	523	523	522	519	527	522	520	514	488	491	471	506	517	517	504	513	509	518	524	527	530	540	525	525		
9	527	528	543	541	538	535	527	525	515	512	510	511	510	520	522	523	527	528	529	526	528	525	527	530	530		
10	524	524	526	526	529	530	527	532	525	518	514	515	518	522	518	521	523	527	532	531	529	530	534	530	530		
11	531	531	531	534	538	539	538	538	537	529	521	516	520	519	520	518	518	522	517	517	522	526	527	530	530		
12	527	530	530	533	535	538	540	540	537	528	522	517	517	518	522	527	533	535	533	530	528	532	535	535	535		
13	535	535	535	535	536	537	537	536	530	523	514	509	506	504	502	506	512	510	515	516	517	510	516	529	529		
14	531	529	532	536	531	540	542	542	540	534	527	522	521	521	524	522	535	532	531	532	528	527	534	532	532		
15	533	533	534	535	535	538	539	538	534	530	527	527	531	527	527	525	522	520	525	530	534	533	531	530	530		
16	530	528	532	532	534	537	540	540	535	535	534	533	527	528	533	530	527	530	535	538	536	535	535	535	535		
17	534	535	535	537	540	540	533	534	531	530	527	529	538	538	533	530	533	534	535	535	536	540	540	556	556		
18	547	536	536	539	543	547	548	546	540	535	533	533	531	533	536	540	541	541	543	540	534	538	534	531	531		
19	534	536	531	532	534	541	538	536	533	533	532	533	538	533	533	533	535	538	540	538	539	540	540	540	540		
20*	540	539	540	540	540	541	541	538	535	530	525	524	527	530	532	533	535	537	538	534	535	535	536	540	540		
21*	535	535	534	536	536	537	537	536	533	526	527	526	533	534	536	537	535	535	542	541	540	540	539	538	538		
22*	540	540	541	542	540	539	538	535	530	528	531	535	538	539	540	539	539	538	537	539	539	539	538	537	537		
23	536	535	539	540	542	542	540	538	531	523	521	521	530	533	536	537	538	540	540	540	540	536	538	540	540		
24**	540	539	540	543	544	547	551	547	539	533	530	531	530	533	536	541	548	546	530	501	488	514	514	514	520		
25**	527	527	536	537	538	540	538	538	524	517	512	496	504	508	510	508	513	514	527	535	537	537	538	534	534		
26	531	546	538	535	537	539	537	535	528	522	522	524	527	530	531	531	532	534	534	534	535	534	522	532	532		
27	529	529	530	534	536	540	539	536	531	526	526	526	527	531	534	535	533	534	539	539	539	538	537	533	533		
28**	534	527	528	535	539	539	540	544	536	531	526	530	536	540	540	541	542	542	540	538	552	525	521	526	526		
29	527	526	528	527	530	530	533	534	531	528	525	525	530	540	530	535	530	517	523	531	537	536	535	534	534		
30*	530	529	528	532	533	537	536	534	533	529	530	530	530	534	537	537	537	537	538	538	537	534	537	537	537		
Mean	534	533	534	535	537	539	539	538	533	527	524	521	525	528	529	529	529	530	531	531	534	532	534	535	535		
Mean*	536	536	535	537	538	539	539	537	533	528	527	527	531	534	536	536	536	537	539	538	538	537	537	537	537		
Mean**	535	531	533	536	538	540	540	541	533	522	517	505	517	525	526	522	515	519	517	516	530	525	530	529	529		
December. <span style="float: right;">18000 γ + Tabular Quantities (in γ).</span>																											
1	537	535	535	535	537	555	558	555	547	521	538	539	543	539	527	504	521	517	525	521	519	528	527	530	530		
2	530	533	532	537	540	539	536	537	539	535	532	540	542	537	535	532	534	534	534	533	532	532	533	534	534		
3**	537	542	539	537	530	534	541	535	526	523	526	524	521	516	522	516	519	526	530	534	537	539	529	592	592		
4**	535	532	477	593	521	494	492	491	503	593	498	498	485	457	487	494	503	505	511	513	520	529	533	524	524		
5	519	518	516	530	534	530	529	529	526	522	516	512	521	524	521	522	520	499	492	510	522	522	524	524	524		
6	520	520	520	521	523	527	527	527	520	522	522	523	522	523	520	515	524	524	520	524	523	524	523	525	525		
7	525	525	529	534	536	534	538	534	524	523	515	516	521	528	527	524	525	524	523	534	527	528	532	531	531		
8	527	529	533	532	535	543	542	538	537	529	531	531	535	537	532	521	531	532	532	529	531	529	529	534	534		
9*	532	529	530	532	534	536	536	534	533	527	527	526	528	536	537	531	528	534	536	533	533	533	533	537	537		
10	533	532	534	536	538	538	538	538	536	531	528	526	527	528	531	531	529	525	523	529	531	536	530	528	528		
11	528	528	528	531	533	536	537	536	533	531	536	538	544	545	539	530	521	528	527	531	529	531	531	531	531		
12	531	532	533	535	538	538	538	536	533	531	529	532	541	542	538	529	537	541	541	539	539	538	538	537	537		
13	534	533	531	537	544	546	546	544	544	540	538	538	538	537	540	539	540	541	538	537	536	531	533	534	534		
14	533	533	535	536	538	540	541	541	539	536	536	534	536	535	535	539	545	546	542	534	534	526	527	537	537		
15	536	533	529	533	536	543	536	544	539	540	534	533	533	533	532	531	528	528	528	533	534	533	533	531	531		
16*	533	531	533	534	538	540	541	538	540	538	535	534	536	534	534	534	536	537	537	537	537	537	537	537	537		
17*	534	534	535	535	536	539	541	539	538	536	535	536	537	535	534	534	535	536	536	536	536	536	533	537	537		
18	533	531	532	534	536	541	541	539	536	533	528	529	535	540	540	539	537	540	539	536	534	532	530	531	531		
19	528	546	543	541	543	557	557	551	544	535	531	530	535	531	528	533	536	535	531	533	540	543	542	539	539		
20	541	536	539	527	528	533	539	539	535	528	532	539	541	543	543	540	540	540	541	540	538	537	539	540	540		
21	540	532	532	537	536	537	540	542	537	530	526	528	520	515	530	527	511	517	527	530	531	530	529	527	527		
22	529	538	536	531																							

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

	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>	Noon	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>		
January. <span style="float: right;">42000 γ + Tabular Quantities (in γ).</span>																											
1**	949	949	949	949	949	949	949	949	948	947	946	945	946	948	950	950	951	966	996	983	969	963	964	952			
2**	955	955	954	953	949	948	950	951	951	949	946	948	952	958	962	966	962	962	963	958	957	956	956	955			
3	953	953	953	953	953	954	952	951	950	950	953	951	950	954	956	956	959	960	959	956	955	955	955	954			
4	952	951	948	948	950	952	951	951	948	948	950	948	948	953	955	953	953	953	954	953	953	952	951	949			
5*	949	949	949	951	951	952	951	951	951	949	949	947	947	953	953	952	953	953	953	953	953	953	951	949			
6*	948	947	948	948	948	950	948	948	948	948	948	946	945	951	953	951	949	951	954	953	954	953	951	950			
7	949	948	948	947	948	948	948	948	946	944	944	941	941	948	948	948	948	951	954	955	955	957	955	953			
8	949	949	948	948	948	949	948	949	948	948	948	947	946	949	951	952	952	954	954	954	954	954	953	953			
9*	949	949	949	949	949	952	952	952	953	953	953	951	948	953	955	953	953	953	953	953	953	953	953	955			
10	951	947	946	948	948	951	951	952	951	948	948	947	946	948	951	951	951	951	953	953	955	955	955	955			
11	953	946	948	948	948	951	951	951	951	951	951	951	948	953	954	953	953	953	954	955	955	955	955	955			
12*	950	950	949	948	947	949	947	947	949	947	946	947	947	950	950	950	950	950	950	950	952	952	952	952			
13*	951	950	948	947	948	950	947	947	947	945	946	949	950	951	952	953	950	950	950	950	950	950	950	952			
14**	951	950	948	947	947	946	945	945	946	946	948	950	949	954	954	953	954	958	963	970	971	972	975	970			
15	964	960	957	956	953	953	951	952	952	950	950	951	951	953	955	954	953	953	953	960	963	963	961	957			
16	957	956	956	953	954	953	949	948	951	951	949	949	949	951	954	954	956	955	955	953	953	952	951	949			
17	950	951	952	952	953	953	951	951	949	945	946	949	951	952	952	953	953	956	956	953	953	953	954	953			
18**	953	952	951	950	951	951	949	949	947	948	946	947	951	955	956	956	956	957	957	956	958	956	956	956			
19	953	951	949	951	953	956	953	953	951	949	951	951	951	953	956	956	957	958	958	957	956	955	953	953			
20	951	951	952	952	953	953	953	953	953	953	956	951	950	953	955	955	955	955	955	954	954	953	953	951			
21	952	952	952	952	952	953	953	952	952	952	954	954	956	956	958	959	959	961	962	961	959	957	957	954			
22	952	952	952	952	952	953	952	954	956	954	953	954	952	952	952	952	952	952	954	954	954	954	952	950			
23	944	944	946	947	947	950	951	951	950	947	947	947	946	947	950	954	957	959	961	959	954	954	955	951			
24	947	947	946	945	948	950	950	950	950	946	945	946	951	953	956	954	953	954	954	954	954	954	948	945			
25	948	947	947	947	947	950	950	950	951	947	947	947	945	946	947	947	950	950	952	952	953	950	954	952			
26	950	949	947	947	947	947	948	950	952	952	952	950	946	947	952	952	951	950	952	952	957	962	962	959			
27	952	950	950	949	947	950	947	949	950	947	946	942	942	947	950	950	950	950	950	950	950	950	950	952			
28	952	950	950	950	948	947	947	947	947	946	945	942	941	944	950	950	949	949	951	952	954	954	952	951			
29**	947	944	943	945	947	947	942	941	944	944	943	941	944	948	951	951	952	951	950	951	950	950	950	950			
30	949	944	945	946	945	946	945	946	948	943	937	938	940	946	950	948	948	947	946	946	946	948	948	948			
31	945	945	946	947	947	948	946	946	946	941	935	935	936	938	948	948	951	951	951	950	950	948	949	948			
Mean	951	950	949	949	949	950	949	950	950	948	948	947	947	950	953	953	953	954	956	955	955	955	955	953			
Mean*	949	949	949	949	949	951	949	949	950	948	948	948	947	951	953	952	951	951	952	952	952	952	952	951			
Mean**	951	950	949	949	949	948	947	947	947	947	946	946	948	953	955	955	955	959	966	964	961	959	960	957			
February. <span style="float: right;">42000 γ + Tabular Quantities (in γ).</span>																											
1*	950	949	950	950	949	950	949	948	947	943	943	944	947	949	952	953	952	952	951	950	949	948	948	948			
2	948	948	948	947	947	948	946	945	945	942	936	936	936	938	945	948	948	948	948	947	949	950	950	948			
3	947	947	947	947	947	948	946	946	947	944	939	942	945	949	954	951	949	949	949	949	949	948	948	949			
4	948	946	942	940	941	944	945	945	946	943	943	940	940	943	947	950	953	956	954	953	948	948	949	941			
5	945	945	946	947	948	949	948	948	947	944	940	936	938	943	947	948	950	953	958	962	964	962	960	956			
6*	951	950	950	951	951	952	951	951	954	951	948	946	945	948	952	955	955	955	956	955	955	954	954	954			
7	950	948	948	948	948	949	948	948	948	945	943	943	946	950	952	952	952	952	953	954	954	954	954	951			
8	950	948	948	948	949	950	950	951	952	951	949	948	949	952	951	954	953	954	955	956	956	956	952	951			
9**	949	929	917	920	912	917	920	924	929	932	934	939	946	949	954	961	969	980	979	968	963	961	960	958			
10**	957	955	955	954	951	951	950	951	949	946	945	949	946	947	949	954	956	956	958	961	957	956	956	954			
11	951	949	950	946	939	944	944	946	945	946	946	945	946	947	952	956	955	954	955	955	956	957	957	953			
12	950	950	951	951	950	951	950	951	951	947	945	948	950	951	954	956	956	955	955	955	954	954	949	946			
13	946	951	950	950	951	952	950	950	950	947	941	943	947	950	956	955	956	956	956	956	957	956	956	954			
14*	953	952	952	951	952	953	951	952	953	949	945	945	946	950	955	957	957	954	952	951	951	950	950	951			
15	951	950	951	951	951	952	950	950	950	949	944	939	944	949	951	958	958	961	962	961	960	958	955	953			
16**	951	951	950	950	951	952	951	949	946	942	935	932	935	944	958	971	988	996	1001	994	995	988	977	970			
17**	966	962	961	960	958	958	954	950	951	951	954	954	956	962	968	972	972	967	963	961	957	954	953	954			
18**	956	954	954	954	955	956	954	954	954	950	949	949	951	955	958	961	964	967	965	962	960	957	950	951			
19	954	953	954	955	954	954	954	954	954	950	945	946	948	948	951	957	960	960	962	959	960	960	959	957			
20	957	955	954	952	951	951	950	951	954	951	949	945	945	947	952	959	961	963	961	961	959	957	956	955			
21	954	953	952	953	953	954	953	953	953	950	9																

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

	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>	Noon	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>			
42000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																												
<b>March.</b>																												
1	952	952	951	951	950	950	948	948	948	946	942	938	941	946	948	952	954	953	952	952	951	948	948	948	948	948	948	
2	948	948	948	950	950	948	946	946	946	943	937	936	946	949	952	958	959	959	960	956	956	951	948	948	948	948	948	
3	944	938	947	949	952	952	950	950	949	946	942	939	942	944	952	954	956	954	954	954	954	952	952	951	950	950	950	
4**	951	950	952	952	952	951	950	950	948	947	944	941	942	944	949	958	966	969	978	986	984	978	959	963	963	963	963	
5**	963	959	961	952	947	948	952	947	949	947	947	949	952	956	964	971	975	973	969	966	963	947	947	947	936	936	936	
6	933	938	935	939	947	950	949	949	952	952	954	952	952	954	961	964	968	969	966	963	958	959	958	958	956	956	956	
7**	955	951	948	943	940	946	947	950	952	949	950	946	947	952	959	971	967	963	962	961	965	962	942	942	942	942	942	
8	941	940	942	942	946	947	949	953	954	952	952	949	950	951	954	957	959	959	958	959	957	956	952	952	952	952	952	
9	952	951	949	949	952	952	952	951	952	950	946	942	943	949	953	959	961	960	961	960	956	956	956	952	952	952	952	952
10	950	945	947	945	946	946	944	948	947	947	944	943	943	951	957	959	958	960	960	962	963	958	958	958	958	958	958	
11	954	954	953	949	942	941	945	946	946	946	942	936	938	944	948	954	954	954	955	956	961	958	956	956	956	956	956	
12*	956	954	954	952	951	953	954	956	956	952	949	949	949	951	955	959	961	960	960	958	958	958	958	958	958	958	958	
13*	956	956	956	955	955	955	954	955	954	951	946	943	945	952	958	958	957	953	953	954	955	954	954	954	954	954	954	
14*	954	953	954	953	952	953	952	954	954	948	944	939	941	944	950	955	956	954	954	953	953	953	954	954	954	954	954	
15	954	944	942	944	943	946	946	949	949	948	947	947	949	953	956	958	959	956	955	954	954	953	954	954	954	954	954	
16	954	953	952	952	952	952	950	949	948	946	948	946	947	950	955	957	959	956	958	959	960	961	956	949	949	949	949	
17	941	941	947	952	952	952	950	950	948	944	942	939	942	946	949	954	955	954	954	954	953	952	952	951	951	951	951	
18	947	944	947	949	951	952	952	950	948	944	940	937	938	947	952	959	964	965	963	963	964	964	956	947	947	947	947	
19*	949	952	951	953	954	954	953	954	952	948	943	942	942	944	952	954	955	955	956	955	954	953	954	954	954	954	954	
20*	952	949	947	948	949	949	949	950	949	944	939	937	942	947	954	960	962	959	957	957	956	955	955	955	955	955	955	
21	952	948	949	950	950	952	951	950	949	944	942	937	939	944	949	954	954	953	953	952	952	952	951	951	951	951	951	
22	950	949	949	949	946	939	939	944	947	943	938	938	942	946	949	954	962	962	966	967	970	971	953	943	943	943	943	
23	949	952	952	953	954	955	953	953	952	950	947	943	943	947	952	955	956	958	963	963	959	960	942	946	946	946	946	
24	949	951	952	952	952	952	954	954	953	949	947	943	943	950	955	957	960	959	956	956	958	964	961	949	949	949	949	
25**	925	918	924	941	948	949	950	951	949	947	949	949	944	952	957	966	972	976	973	972	971	967	959	958	958	958	958	
26	955	950	952	954	954	956	958	956	954	948	943	937	938	941	945	950	956	958	959	961	961	959	959	952	952	952	952	
27	953	952	953	953	953	953	953	953	952	948	947	943	940	944	949	952	958	963	964	965	962	955	952	952	952	952	952	
28	956	955	956	955	955	955	956	955	954	946	938	937	939	941	948	954	957	958	956	956	960	965	960	950	950	950	950	
29	935	939	945	949	948	946	948	948	946	941	936	936	942	944	951	956	966	965	961	958	956	956	956	956	956	956	956	
30	952	951	950	952	952	952	953	954	952	944	939	937	940	946	952	956	956	956	956	956	956	958	954	952	947	947	947	
31**	944	946	950	952	952	950	949	944	942	937	935	931	931	947	954	960	964	964	966	967	964	957	949	951	951	951	951	
Mean	949	948	949	950	950	950	950	951	950	947	944	941	943	948	953	958	960	960	960	960	960	958	954	951	951	951	951	
Mean*	953	953	952	952	952	953	952	954	953	949	944	942	944	948	954	957	958	956	956	955	955	955	955	955	954	954	954	
Mean**	948	945	947	948	948	949	950	948	948	945	945	943	943	950	957	965	969	969	970	970	969	962	951	948	948	948	948	
<b>April.</b>																												
42000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																												
1**	954	951	951	952	951	951	951	949	946	939	937	939	939	946	952	960	966	972	967	964	955	950	947	947	947	947	947	
2	937	936	944	948	950	951	954	955	953	949	942	936	938	945	955	959	960	961	960	961	958	958	954	954	954	954	954	
3	952	952	952	952	952	954	955	955	952	949	943	937	937	943	952	961	966	969	971	967	962	961	961	959	959	959	959	
4**	955	947	948	952	954	958	958	956	952	947	940	934	934	942	949	957	965	969	972	968	967	959	954	944	944	944		
5**	942	948	950	952	954	956	954	952	949	946	943	937	937	941	947	969	977	976	980	973	966	961	956	954	954	954	954	
6**	952	944	945	948	952	952	952	948	947	944	942	937	937	941	948	951	955	960	965	965	961	959	951	952	952	952	952	
7	948	943	939	944	949	952	954	956	952	948	944	939	941	946	952	955	956	959	959	959	959	958	956	956	956	956	956	
8	954	952	952	952	952	953	956	956	952	946	937	931	935	942	949	954	956	960	959	959	959	959	960	959	959	959	959	
9	954	955	955	953	953	950	951	951	950	948	945	938	937	942	949	956	959	960	961	959	957	956	956	956	956	956	956	
10	956	956	954	953	953	954	955	957	955	948	940	940	941	947	953	956	957	958	956	956	955	956	956	956	956	956	956	
11	953	951	951	952	952	955	955	955	951	943	938	936	935	941	948	951	953	953	950	950	951	952	953	953	953	953	953	
12	954	953	953	951	949	950	952	953	951	949	947	941	934	936	944	951	953	956	956	955	954	953	954	954	954	954	954	
13*	955	953	953	953	954	955	956	956	953	943	936	932	935	944	954	958	961	960	957	956	956	955	956	956	956	956	956	
14	955	954	954	955	954	954	954	956	951	947	937	928	925	932	945	955	957	957	958	957	958	956	964	952	952	952	952	
15	952	952	953	955	955	956	957	957	955	943	933	928	934	946	955	960	963	964	962	961	961	968	974	967	967	967	967	
16**	965	960	957	957	957	956	951	949	944	940	938	933	935	944	956	962	970	972	968	963	958	953	953	955	955	955	955	
17*	957	958	958	958	959	960	960	957	950	941	937	937	939	946	953	958	960	961</										



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

	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>	Noon	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>		
42000 γ + Tabular Quantities (in γ).																											
<b>May.</b>																											
1	947	946	945	944	946	947	947	944	940	933	929	929	933	934	940	946	950	951	951	949	949	949	949	949	949	949	949
2**	949	949	945	946	949	949	947	946	944	939	933	929	929	939	944	949	954	961	964	962	960	952	950	944	944	944	
3**	915	916	920	922	923	917	916	922	924	924	920	915	926	935	941	946	952	955	955	954	951	951	954	944	944	944	
4	944	948	950	951	951	951	953	953	949	944	937	937	938	941	951	954	955	957	957	956	954	952	951	951	950	950	
5	946	948	949	950	951	951	951	946	944	936	930	927	928	933	941	946	950	954	954	954	952	951	951	949	949	949	
6	949	947	947	947	950	951	951	950	947	938	925	925	928	935	942	946	950	957	959	957	955	953	952	949	949	949	
7	947	947	949	949	953	952	952	950	947	942	934	930	933	939	941	945	947	950	953	954	954	953	953	952	952	952	
8	950	946	948	949	950	950	951	948	944	941	934	929	930	934	941	947	952	953	952	951	951	951	951	951	951	951	
9	950	948	948	948	951	948	947	948	946	936	928	931	940	946	951	956	953	953	952	952	951	951	951	953	952	952	
10	951	946	946	948	948	946	946	944	940	936	928	924	927	932	936	943	951	953	956	955	953	953	945	945	945	945	
11**	948	948	950	950	951	948	941	938	935	931	927	924	928	935	941	950	955	960	959	957	955	952	954	932	932	932	
12**	945	950	950	939	942	947	947	946	945	941	940	938	943	951	956	960	963	968	969	965	961	959	958	954	954	954	
13	946	943	946	950	951	953	955	952	948	947	939	934	935	940	947	952	957	960	961	960	959	957	956	955	955	955	
14*	956	955	953	953	957	957	957	955	949	938	931	935	936	940	945	952	956	957	957	956	956	955	955	955	955	955	
15*	955	956	956	957	959	959	957	953	949	942	936	933	938	944	949	953	955	957	958	956	955	953	951	951	951	951	
16*	952	953	953	954	956	956	954	952	947	939	930	928	927	938	947	952	956	959	959	955	953	952	951	951	951	951	
17	950	950	950	950	953	953	953	949	942	935	935	928	923	928	937	944	948	953	953	950	949	948	947	947	947	947	
18**	948	948	948	948	949	950	950	946	940	932	928	935	942	954	971	987	1005	1027	1019	1000	985	976	968	956	956	956	
19	950	945	947	955	960	963	962	960	956	950	947	946	945	951	960	958	960	960	957	958	957	957	954	954	954	954	
20	955	954	956	956	958	958	953	951	951	946	941	939	936	937	944	951	956	961	967	973	964	961	958	957	957	957	
21	957	954	951	952	957	957	957	954	946	937	930	926	932	938	945	948	957	964	966	966	963	960	959	957	957	957	
22	955	953	953	954	956	957	958	956	952	938	929	935	944	950	954	958	963	969	970	970	965	963	961	958	958	958	
23	956	951	950	954	958	958	956	955	952	952	949	940	943	947	955	957	960	965	969	969	967	964	962	962	962	962	
24	960	959	959	959	961	961	961	959	954	948	944	946	946	951	956	959	959	961	960	963	966	962	961	961	961	961	
25	957	956	954	953	955	955	953	950	943	933	929	926	924	931	943	950	958	957	958	956	957	955	955	955	955	954	
26	954	953	948	948	949	948	950	949	948	945	941	938	943	948	955	959	959	960	959	958	958	958	956	956	956	956	
27*	955	955	955	955	955	955	953	948	943	942	937	931	933	944	950	950	950	950	952	953	952	952	952	952	953	953	
28*	953	953	953	953	954	953	951	950	947	946	941	936	938	943	944	948	953	955	955	954	952	950	950	950	950	950	
29	950	952	952	953	956	956	955	950	944	938	933	930	933	936	941	947	952	959	958	956	954	952	952	952	952	952	
30	952	953	953	954	956	954	954	955	951	943	938	934	939	945	951	953	956	959	960	960	957	956	954	954	954	954	
31	953	952	953	954	956	956	955	953	949	941	931	927	929	933	944	954	959	961	962	961	959	955	954	953	953	953	
Mean	950	950	950	950	952	952	951	949	946	940	934	932	935	950	947	952	957	960	961	959	957	955	954	952	952	952	
Mean	954	954	954	954	956	956	954	952	947	941	935	933	934	942	947	951	954	956	956	955	954	952	952	952	952	952	
Mean**	941	942	943	941	943	942	940	940	938	933	930	928	934	943	951	958	966	974	973	968	962	958	957	946	946	946	
<b>June.</b>																											
42000 γ + Tabular Quantities (in γ).																											
1	952	953	954	955	958	958	958	958	954	948	940	931	927	933	942	954	958	960	961	960	959	958	955	953	953	953	
2*	953	953	951	954	958	958	954	953	952	946	941	934	934	940	942	948	954	958	960	959	957	955	953	953	953	953	
3*	953	952	952	953	954	953	955	953	948	947	940	940	942	943	944	954	956	955	956	956	954	952	951	950	950	950	
4	947	947	948	950	952	952	951	944	942	940	936	930	932	936	942	942	943	945	951	952	951	952	951	950	950	950	
5**	945	939	936	937	936	935	936	941	942	934	937	940	943	951	957	960	972	977	979	979	975	969	955	951	951	951	
6**	937	935	940	944	948	948	947	949	950	944	946	938	942	949	955	961	966	974	975	969	962	958	955	954	954	954	
7	953	953	953	954	956	958	954	952	949	946	938	936	942	947	953	953	953	957	957	957	957	956	956	955	955	955	
8	953	953	952	953	954	955	954	954	950	947	941	942	944	949	953	955	960	960	961	962	961	962	957	954	954	954	
9	953	954	954	948	942	944	943	940	940	943	947	942	943	951	955	958	964	965	965	965	965	960	959	955	955	955	
10	953	953	954	956	958	958	957	953	951	944	938	938	942	949	955	959	961	961	961	960	959	959	957	957	957	957	
11**	957	955	956	957	959	960	959	959	967	949	939	937	939	943	951	953	955	957	959	964	958	954	951	946	946	946	
12**	939	943	945	943	935	930	936	936	934	930	932	935	940	940	943	947	950	950	955	957	954	953	953	952	952	952	
13	952	950	952	953	954	953	954	952	949	944	936	933	938	941	947	952	958	959	958	954	954	952	951	951	951	951	
14	952	953	954	954	955	956	956	956	949	939	935	932	933	937	943	948	957	963	966	965	958	955	955	940	940	940	
15	945	944	943	932	932	936	941	945	946	947	936	932	941	939	954	961	966	968	967	965	962	960	957	956	956	956	
16	957	956	956	960	961	961	961	959	951	945	940	939	941	941	944	953	962	967	967	967	964	961	956	956	956	956	
17	957	957	958	957	956	955	957	956	952	946	928	930	928	934	943	946	949	950	950	952	952	951	947	943	943	943	
18**	944	944	945	945	947	947	945	944	941	937	935	928	929	929	938	946	959	963	968	966	961	957	951	949	949	949	
19	948	946	947	948	953	955	956	955	955	948	936	933	936	938	944												

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

	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>	Noon	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).																										
I	944	941	945	945	941	934	935	937	940	937	935	934	937	945	950	951	955	958	960	957	955	953	951	950	948	
2	947	949	945	949	952	952	950	945	945	943	942	940	940	942	947	952	955	958	958	957	955	953	952	951	950	
3**	949	950	950	951	952	951	951	950	942	940	928	913	915	933	942	952	960	971	974	972	966	962	960	957		
4**	955	952	947	946	950	950	952	953	953	947	937	927	933	942	947	954	960	960	961	960	957	953	953	952		
5	950	945	945	943	945	942	943	945	947	949	946	940	937	942	949	953	955	957	960	958	956	954	952	952		
6	950	947	947	947	950	949	949	951	947	941	933	926	930	940	945	952	952	955	956	953	952	952	952	951		
7	950	949	949	947	947	947	945	947	947	942	937	930	930	937	947	953	956	956	955	955	955	955	952	952		
8	952	951	950	950	952	952	947	947	945	945	944	942	940	947	961	967	962	966	962	956	954	955	953	953		
9	950	947	950	951	950	949	947	950	947	944	940	936	942	947	950	957	956	957	957	957	955	952	952	952		
10*	952	950	950	952	955	955	952	952	949	947	944	940	942	944	945	951	955	960	959	957	955	953	952	952		
11	952	952	952	952	956	954	950	952	951	947	942	935	935	935	942	947	955	956	958	957	956	956	955	952		
12	951	948	951	952	955	954	950	948	945	938	936	934	935	936	941	946	953	958	958	956	953	951	950	951		
13	951	950	950	951	953	952	948	948	946	938	929	927	932	934	938	946	947	953	958	957	952	951	950	950		
14	950	950	951	952	956	956	953	952	947	943	938	930	929	931	935	938	947	953	957	958	952	952	949	948		
15	948	947	937	935	935	937	942	947	948	946	936	924	926	930	937	938	947	952	954	954	951	948	947	947		
16	947	946	938	939	946	947	947	949	952	946	938	936	935	940	945	948	951	957	960	964	960	955	952	949		
17	949	949	949	952	954	954	952	949	949	948	944	938	930	927	936	946	949	954	959	957	954	952	949	948		
18*	950	950	949	950	955	953	950	950	949	946	943	938	937	937	944	948	953	958	958	956	955	953	953	952		
19*	950	950	950	950	953	951	953	953	950	945	941	938	938	938	945	949	953	955	955	953	953	950	950	950		
20	948	948	949	950	953	950	950	950	948	943	944	943	942	948	953	953	955	959	960	956	954	953	952	950		
21	950	949	949	948	950	950	949	949	948	942	937	932	933	934	937	941	946	950	951	951	950	949	951	948		
22*	949	948	949	949	951	951	951	952	949	944	941	937	939	943	947	950	951	955	956	955	955	953	953	952		
23*	951	951	950	950	953	953	950	951	948	941	939	933	929	932	940	947	950	952	953	953	952	951	951	951		
24	951	952	950	949	953	954	951	954	951	949	944	939	940	945	954	958	961	959	956	955	954	953	952	951		
25	949	949	949	949	951	949	946	945	939	936	934	931	937	942	950	954	956	955	952	950	948	948	949	950		
26	950	948	949	949	950	951	950	951	948	942	935	929	935	941	947	950	954	957	956	954	951	951	950	950		
27	950	949	946	948	951	950	948	949	946	945	939	927	922	930	939	947	954	953	950	947	946	946	945	947		
28	947	946	946	947	949	948	948	946	946	939	929	926	931	940	946	943	947	949	948	946	946	944	943	943		
29**	943	945	946	944	946	944	946	947	943	940	939	937	942	947	945	949	952	955	958	957	953	947	946	947		
30**	947	948	948	948	948	947	936	930	923	929	934	942	951	965	977	983	980	974	967	964	962	960	958	959		
31**	956	954	956	957	960	960	959	956	955	955	951	946	943	944	948	961	968	972	966	964	963	961	959	957		
Mean	950	949	948	949	951	950	948	949	947	943	939	934	935	940	946	951	955	958	958	956	954	952	951	951		
Mean*	950	950	950	950	953	953	951	952	949	945	942	937	937	939	944	949	952	956	956	955	954	952	952	951		
Mean**	950	950	949	949	951	950	949	947	943	942	938	933	937	946	952	960	964	966	965	963	960	957	955	954		
<b>August.</b>																										
42000 γ + Tabular Quantities (in γ).																										
I	935	951	937	942	949	953	952	950	949	948	946	940	939	949	953	957	961	960	963	964	961	960	957	957		
2	957	954	951	950	955	958	958	955	953	953	951	946	940	946	953	958	962	965	965	963	963	961	960	957		
3**	954	952	949	952	949	944	947	950	948	947	939	936	946	955	959	963	963	975	983	974	969	964	959	956		
4**	950	948	952	955	958	957	957	958	960	955	953	950	950	953	960	965	969	971	975	969	964	959	954	944		
5	936	936	931	938	942	952	954	954	949	944	939	939	945	950	954	959	959	959	960	961	960	959	957	956		
6	956	953	950	949	956	956	957	955	955	947	948	942	941	942	949	955	959	962	963	960	958	958	958	958		
7	958	959	959	959	961	960	961	963	958	952	950	944	946	953	965	969	966	964	962	959	960	960	960	959		
8	960	960	959	959	961	960	959	959	956	948	943	937	938	948	956	961	959	961	963	963	960	959	956	956		
9*	959	960	960	960	963	964	964	966	964	956	952	948	945	954	962	965	969	970	967	965	961	960	959	959		
10*	960	958	957	957	957	956	956	960	957	954	949	947	947	955	958	961	959	962	962	960	958	958	956	957		
11	958	959	956	952	953	955	959	961	958	951	951	948	946	945	953	961	966	967	963	959	958	957	956	957		
12	957	957	957	958	959	958	959	962	960	952	945	937	941	951	958	961	963	960	960	962	962	959	956	944		
13	942	944	952	957	961	961	961	963	959	957	952	944	933	939	952	961	969	966	961	958	958	959	958	957		
14	955	956	957	958	961	961	965	964	961	959	952	947	947	954	964	967	966	965	961	958	958	958	952	954		
15	954	955	956	957	961	961	960	956	952	949	944	941	942	948	955	959	961	961	961	961	959	957	955	954		
16	949	949	950	953	957	958	957	952	949	944	937	935	933	939	948	957	961	961	959	957	954	954	954	954		
17	947	949	949	948	952	952	952	952	950	942	941	941	942	949	955	959	961	960	959	958	957	957	954	952		
18	952	952	950	949	950	950	949	949	944	939	932	926	930	935	942	949	954	957	959	958	957	957	954	947		
19	950	952	952	951	949	952	954	954	952	950	946	939	937	939	950	964	967	968	968	964	961	960	957	957		
20*	956	956	957	957	959	959	959	959	956	956	952	947	944	944	952	959	959	959	957	955	955	954	955	952		
21	952	952	952	952	954	953	952	948	942	942	935	936	942	947	958	964	964	964	963	961	957	955	954	954		
22	953	950	953	954	955	955	954	952	943	941	933	932	939	949	961	973	971	965	959	956	959	959	959	957		
23	956	957	956	955	957	957	957	957	955</																	

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

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
September. 42000 γ + Tabular Quantities (in γ).																									
I	948	952	954	956	959	959	960	961	958	950	945	946	944	946	954	961	966	964	966	964	963	963	959	959	959
2**	958	958	956	949	949	948	948	950	951	949	946	947	945	950	968	979	991	989	982	972	970	966	963	959	958
3	940	926	937	947	954	958	962	962	963	959	956	953	953	956	960	963	964	967	968	966	963	963	959	954	
4	952	955	956	957	960	961	962	962	960	957	953	951	955	959	964	967	968	975	980	973	968	960	961	960	
5	961	962	962	961	962	962	963	963	961	954	950	947	950	956	961	963	965	966	963	962	962	963	963	962	
6	958	958	959	959	961	961	962	962	958	951	946	947	949	952	957	963	966	965	963	962	963	965	964	962	
7	950	942	942	949	952	956	960	961	958	951	947	947	945	950	955	961	963	963	962	962	963	961	962	962	
8	960	956	956	959	961	961	961	962	958	952	945	942	948	953	956	962	963	962	958	958	958	959	960	960	
9*	960	960	960	961	960	960	961	961	960	956	951	949	951	956	957	960	960	959	958	958	958	959	960	960	
10*	960	960	959	959	960	960	960	960	953	949	944	938	941	946	952	957	959	959	958	957	957	957	957	958	
11	958	959	960	960	960	959	959	956	956	949	942	940	942	946	952	956	958	958	956	957	956	959	956	956	
12	956	952	949	951	952	952	950	949	949	942	937	943	947	951	958	961	960	959	959	960	960	958	957	956	
13*	956	957	958	958	960	959	958	957	953	949	946	945	945	951	957	960	961	958	957	958	958	957	957	956	
14*	955	956	957	958	959	959	959	959	957	949	944	940	943	950	957	962	963	963	962	961	961	960	959	958	
15	957	958	958	958	959	960	961	960	953	946	944	945	947	951	955	955	955	957	957	957	957	957	956	951	
16	954	953	954	954	956	953	953	953	948	946	940	938	941	948	956	968	975	973	973	973	971	968	963	961	
17	957	948	949	954	957	958	959	961	959	957	949	952	954	962	966	970	968	965	965	966	966	965	965	964	
18	964	963	963	961	960	960	960	962	961	959	955	954	955	954	956	958	960	961	962	962	962	963	963	963	
19	961	961	960	959	961	960	961	960	956	952	950	949	951	951	955	960	961	973	970	968	966	964	957	955	
20	952	949	952	956	958	958	959	958	957	954	952	952	953	956	958	966	970	972	969	966	963	963	962	961	
21	958	959	960	961	960	959	961	959	954	951	947	950	953	954	957	960	963	962	960	960	960	957	955	948	
22	942	927	930	939	944	948	953	956	956	950	944	942	947	957	962	967	967	966	962	962	961	960	960	960	
23*	961	961	958	960	960	959	961	958	953	949	944	946	954	959	959	962	963	959	959	958	958	959	959	959	
24**	960	960	959	958	958	953	948	943	944	942	939	943	959	960	966	971	972	972	972	971	964	961	947	931	
25**	945	946	943	938	938	933	933	939	945	946	944	946	957	967	994	1000	1008	1017	989	976	979	979	973	973	
26	972	972	968	970	968	965	965	962	960	955	950	950	952	960	961	967	965	966	967	973	969	966	945	952	
27**	956	956	957	959	959	954	954	958	960	956	954	952	956	965	970	984	989	987	981	977	962	960	960	955	
28	957	959	957	960	962	962	965	966	966	960	955	952	961	965	965	970	972	972	973	970	966	965	964	962	
29	961	961	962	962	962	962	962	962	960	955	949	950	952	955	961	968	971	968	968	968	967	966	962	961	
30**	957	952	947	945	949	952	957	961	962	959	955	951	953	960	961	964	966	966	970	965	966	966	961	960	
Mean	956	955	955	956	957	957	958	958	956	952	947	947	950	955	960	966	968	968	966	965	963	962	960	958	
Mean*	958	959	958	959	960	959	960	959	955	950	946	944	947	952	956	960	961	960	959	958	958	958	958	958	
Mean**	955	954	952	950	951	948	948	950	952	950	948	949	954	960	972	980	985	986	979	972	968	966	961	955	
October. 42000 γ + Tabular Quantities (in γ).																									
1	961	961	961	961	962	962	961	961	959	956	955	956	955	956	956	960	962	963	963	963	964	966	962	961	
2	958	959	960	961	963	963	965	966	965	962	961	959	958	962	967	968	967	968	967	966	965	965	964	964	
3	964	963	962	962	963	963	963	964	962	958	956	957	958	958	959	964	966	968	966	966	965	965	965	964	
4	964	964	963	962	963	961	961	960	957	953	948	947	948	948	953	960	965	968	967	965	964	963	961	956	
5	957	957	957	957	957	956	956	957	957	955	953	949	945	949	957	960	962	962	965	962	960	959	959	958	
6	959	959	958	957	957	957	957	956	953	952	950	947	945	948	952	956	958	958	958	957	957	956	957	953	
7	957	959	958	958	957	957	955	956	956	952	946	946	950	949	953	959	965	965	964	962	963	964	962	962	
8*	963	963	962	961	961	961	961	961	960	957	950	947	951	954	956	958	959	957	955	954	954	953	954	955	
9*	954	954	954	955	956	956	958	960	958	955	951	948	948	950	954	959	961	960	959	958	958	958	959	959	
10*	959	959	959	959	958	959	959	960	957	952	952	950	947	952	959	963	962	960	960	959	958	958	959	959	
11	959	959	960	959	959	959	957	958	957	953	951	948	950	953	957	963	964	962	962	959	958	958	958	959	
12	959	959	954	949	953	958	956	959	959	956	950	946	951	955	958	962	963	963	964	965	966	966	962	958	
13	956	954	955	957	953	953	956	958	959	956	953	953	955	958	963	967	968	968	971	973	969	966	964	959	
14	953	957	960	960	961	961	962	962	961	960	959	958	960	961	966	968	970	969	969	968	968	966	965	963	
15**	962	962	962	962	959	962	962	963	964	959	956	954	956	954	962	975	989	991	995	996	989	976	973	970	
16	969	967	967	965	965	967	966	966	963	960	954	952	958	961	964	967	969	970	970	969	969	967	966	965	
17	963	957	957	957	958	960	963	965	964	959	953	950	951	956	961	963	962	962	962	961	962	960	961	961	
18	961	959	950	952	954	958	959	963	965	961	955	952	955	958	961	963	963	963	963	963	963	961	960	960	
19*	959	959	958	958	958	958	960	961	963	959	955	954	958	960	965	968	963	961	961	961	960	960	960	960	
20**	961	960	959	959	959	959	959	959	961	959	954	953	956	961	966	964	962	964	965	969	969	960	964	964	
21	961	960	959	959	959	959	959	961	961	959	954	953	956	959	961	965	964	963	963	965	966	964	962	961	
22	962	961	961	958	956	959	959	961	960	959	954	952	955	959	964	966	966	967	970	971	969	968	965	964	
23	964	964	962	963	964	964	962	963	964	958	954	954	955	957	961	963	965	964	963	962	961	960	961	962	
24**	963	963	963	963	955	942	935	945	949	950	955	959	960	969	983	995	991	986	983	978	973	972	969	967	
25**	966																								

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

	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>	Noon	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> 42000 γ + Tabular Quantities (in γ).																											
1*	963	962	961	961	961	961	961	961	961	956	951	951	952	954	961	964	964	964	964	964	964	964	964	963	963	963	
2	963	962	959	960	960	960	961	962	962	956	953	955	961	964	966	964	963	963	962	962	962	964	964	964	964	963	963
3	962	961	961	960	960	960	960	962	962	959	955	954	956	961	965	966	966	966	966	966	966	964	964	968	966	966	
4	966	964	964	963	961	962	962	964	964	961	959	961	964	968	969	967	965	965	964	964	964	964	964	965	965	965	965
5	965	965	963	963	963	962	961	963	963	958	957	957	961	965	968	966	966	966	966	969	966	966	965	965	965	964	
6	960	959	961	961	961	963	961	961	961	959	955	954	955	959	962	965	966	965	965	964	962	962	964	965	965	964	
7**	965	964	964	963	959	960	959	957	955	951	952	957	962	967	971	974	989	997	989	989	984	974	967	955	955	955	
8**	951	958	963	965	965	968	967	969	968	965	967	970	975	975	981	979	983	982	978	975	973	973	973	968	968	968	
9	969	969	964	961	958	957	962	964	969	969	969	968	969	971	974	975	975	975	975	975	973	973	972	971	969	969	
10	970	969	969	970	970	972	971	971	971	969	967	967	969	971	976	978	978	977	976	975	974	973	971	971	971	971	
11	970	969	970	970	970	970	970	970	969	965	960	960	965	969	972	976	980	979	980	980	981	977	976	972	972	972	
12	972	970	970	971	971	972	972	970	970	969	964	965	967	970	975	975	977	976	975	975	975	975	975	972	970	970	
13	970	970	969	970	970	972	970	970	970	967	963	963	966	971	976	980	982	982	982	981	982	981	980	980	975	975	
14	970	967	965	963	964	965	965	966	969	967	965	965	965	965	972	975	975	974	974	974	974	974	972	972	971	971	
15	970	970	968	968	970	971	970	971	970	968	965	965	965	967	970	972	974	975	977	977	977	976	975	975	972	972	
16	971	969	969	968	969	971	970	970	974	973	971	970	970	971	972	972	973	974	972	972	972	972	972	972	972	972	
17	970	970	969	969	967	969	968	970	972	972	970	970	970	972	972	971	970	970	970	971	972	971	970	967	967	967	
18	963	965	967	966	965	964	964	963	964	964	964	963	968	971	973	972	968	968	968	968	969	969	971	971	971	971	
19	971	970	968	968	967	968	967	968	968	967	968	968	970	972	973	972	971	972	971	971	971	970	970	970	968	968	
20*	968	968	968	967	966	968	966	967	966	965	964	965	968	973	975	974	972	971	969	969	968	968	968	968	969	969	
21*	969	969	969	969	968	969	967	966	964	960	958	960	966	969	972	971	970	969	969	967	967	967	967	967	967	967	
22*	967	967	967	966	966	966	966	965	963	962	962	961	963	967	969	969	968	967	967	966	966	966	965	965	965	966	
23	965	965	966	964	965	966	965	965	965	965	966	963	966	969	972	970	969	968	967	966	965	965	965	965	965	965	
24**	965	965	965	966	965	965	965	963	965	965	962	962	965	969	969	969	969	969	977	987	984	980	978	974	974	974	
25**	971	967	967	965	967	967	967	967	967	967	966	966	971	975	978	978	981	983	981	978	973	972	969	969	969	969	
26	968	966	964	967	968	969	969	971	971	971	969	969	971	974	975	973	973	972	972	971	970	969	969	969	968	968	
27	966	966	967	967	968	969	968	968	968	968	966	965	968	972	973	972	972	972	972	971	970	969	969	969	969	969	
28**	968	968	968	968	968	968	968	968	968	967	968	968	969	973	973	971	971	971	971	971	970	968	972	972	972	972	
29	970	970	969	969	969	971	970	970	970	969	969	968	972	974	974	973	973	976	980	978	976	974	973	971	971	971	
30*	971	970	969	969	969	970	970	969	969	969	968	968	969	971	971	970	970	970	970	969	969	969	969	969	968	968	
Mean	967	967	966	966	966	967	966	966	967	965	963	963	966	969	972	972	972	973	972	972	971	970	970	970	968	968	
Mean*	968	967	967	966	966	967	966	966	965	962	961	961	964	967	970	970	969	968	968	967	967	966	966	966	967	967	
Mean**	964	964	965	965	965	966	965	965	965	963	963	965	968	972	974	974	978	980	979	980	977	973	971	971	968	968	
<b>December.</b> 42000 γ + Tabular Quantities (in γ).																											
1	967	967	965	965	966	965	962	962	961	960	962	961	961	961	965	969	973	974	977	976	977	975	973	970	970	970	
2	969	968	967	965	957	962	963	965	963	963	965	966	965	967	967	967	968	968	968	969	969	969	969	969	969	969	
3**	969	964	963	963	964	965	964	965	968	968	966	966	965	970	974	975	975	975	975	973	973	971	970	957	957	957	
4**	939	920	920	944	945	947	948	966	970	971	973	975	980	988	1000	991	992	990	987	983	982	979	973	973	973		
5	973	972	970	968	962	966	967	968	968	968	970	973	974	976	979	980	979	980	989	985	982	979	978	978	978		
6	976	977	975	975	975	975	975	973	974	974	973	973	975	980	982	982	980	979	978	978	977	975	977	978	978		
7	975	975	975	975	974	974	970	970	973	972	974	975	975	975	978	979	979	979	980	976	975	973	972	972	972		
8	973	973	974	974	973	974	971	970	971	972	970	970	971	973	976	978	978	977	975	975	974	974	973	972	972		
9*	971	972	972	973	973	972	972	972	970	971	970	970	972	973	976	976	977	976	974	974	974	973	972	970	970	970	
10	969	970	972	973	973	974	972	972	972	973	972	972	974	979	979	979	979	979	979	979	977	975	973	973	973		
11	973	972	972	974	974	974	973	973	972	969	967	963	965	967	973	973	977	978	979	979	979	977	974	974	974	974	
12	974	972	973	973	974	974	974	974	974	974	974	973	972	973	974	974	977	977	977	976	975	974	973	972	972		
13	969	969	969	969	969	971	969	969	968	967	967	968	969	969	971	972	972	973	973	972	972	972	973	973	972	972	
14	970	969	969	969	969	971	970	971	971	971	969	968	967	969	971	971	969	970	971	972	974	974	973	971	971	971	
15	967	968	968	968	968	967	968	969	970	969	968	968	967	968	969	970	971	974	977	978	978	975	975	974	974	974	
16*	973	972	970	970	970	970	970	970	970	970	970	970	972	973	973	973	972	972	971	971	971	971	971	971	970	970	
17*	970	970	969	968	969	970	969	969	970	969	970	972	971	973	974	973	972	972	972	972	972	972	972	971	971	971	
18	970	969	969	969	969	969	968	969	970	969	970	970	969	970	968	969	969	970	970	969	969	969	973	970	970	970	
19	970	968	963	963	963	962	961	962	964	967	970	970	969	970	973	973	972	970	969	970	969	969	968	968	968	968	
20	968	967	964	963	965	967	967	967	968	969	969	967	969	968	969	970	970	970	970	969	968	968	968	968	968	968	
21	969	967	968	967	967	969	967	967	967	965	964	963	965	971	976	978											

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
		11°+	G.M.T. h m	11°+	G.M.T. h m			18000γ+	G.M.T. h m	18000γ+	18000γ+			G.M.T. h m	γ	42000γ+	G.M.T. h m	
<b>JAN.</b>	11°+	G.M.T. h m	11°+	G.M.T. h m		18000γ+	G.M.T. h m	18000γ+	18000γ+	G.M.T. h m	γ	42000γ+	G.M.T. h m	42000γ+	42000γ+	G.M.T. h m	γ	
1**	46.6	18 24	55.0	31.3	17 37	23.7	525	22 40	566	436	17 34	130	955	18 23	1001	944	12 24	57
2**	46.4	12 37	51.3	34.9	18 4	16.4	519	7 18	541	481	11 17	60	955	15 9	971	941	10 56	30
3	46.0	12 54	49.0	43.3	22 40	5.7	527	6 33	544	505	16 52	39	954	17 7	964	949	12 20	15
4	45.9	2 11	50.0	43.4	22 54	6.6	532	2 40	542	523	10 51	19	951	14 38	958	945	12 0	13
5*	45.9	13 20	48.4	43.4	19 40	5.0	534	5 52	543	525	10 58	18	951	14 40	957	945	12 28	12
6*	46.4	13 20	49.4	43.8	18 18	5.6	537	14 1	548	520	18 18	28	950	18 40	958	943	12 20	15
7	46.3	17 58	48.7	42.8	21 15	5.9	537	7 0	547	519	18 18	28	949	21 50	960	939	12 0	21
8	46.6	13 19	50.8	42.4	23 29	8.4	537	5 48	549	527	12 59	22	950	18 40	958	942	12 20	16
9*	46.1	13 20	49.7	41.6	21 45	8.1	535	20 18	548	522	21 40	26	952	22 8	959	946	12 20	13
10	46.2	13 6	49.7	42.2	22 8	7.5	537	13 30	549	520	19 45	29	951	20 7	960	946	11 57	14
11	46.2	13 24	50.2	43.2	0 32	7.0	534	0 48	559	526	1 59	33	952	20 43	958	947	12 30	11
12*	46.3	12 40	48.7	44.5	24 0	4.2	538	6 40	551	523	11 35	28	949	22 35	955	945	10 57	10
13*	46.3	12 56	48.7	44.3	8 42	4.4	539	8 53	552	528	0 42	24	949	15 43	956	943	9 56	13
14**	46.5	18 17	51.4	32.8	21 59	18.6	529	6 46	552	483	19 29	69	955	22 10	979	944	7 10	35
15	45.9	12 43	50.3	37.7	23 7	12.6	528	6 20	545	491	19 48	54	955	20 19	966	947	9 58	19
16	45.9	13 20	51.2	41.5	20 0	9.7	531	5 44	555	509	11 1	46	952	16 42	958	946	7 30	12
17	46.2	12 55	48.7	43.0	22 28	5.7	535	13 12	546	525	17 23	21	952	17 50	961	944	9 56	17
18**	45.8	11 52	51.2	33.4	20 22	17.8	537	7 40	561	518	21 10	43	953	20 41	964	946	10 29	18
19	45.9	13 25	49.4	43.0	19 7	6.4	534	19 8	547	520	10 18	27	954	18 10	960	948	12 29	12
20	46.0	13 1	49.4	43.1	0 49	6.3	538	15 1	550	511	12 1	39	953	10 40	958	947	12 28	11
21	46.4	13 19	50.4	43.5	22 20	6.9	532	6 42	545	516	8 54	29	955	18 40	963	950	8 49	13
22	46.0	12 49	50.2	39.5	24 0	10.7	537	23 42	576	516	22 40	60	953	23 0	962	937	23 57	25
23	45.6	13 41	51.9	37.9	0 12	14.0	530	23 12	559	508	16 38	51	951	18 19	964	940	0 0	24
24	45.4	13 30	49.8	38.4	22 23	11.4	533	22 4	560	516	12 25	44	950	19 10	958	942	11 6	16
25	45.6	13 20	49.1	42.8	0 4	6.3	531	2 12	548	521	0 14	27	949	22 10	957	945	9 59	12
26	46.2	13 0	51.8	41.5	20 38	10.3	531	23 56	544	506	21 50	38	951	22 18	966	943	12 57	23
27	45.4	12 44	48.8	41.0	23 38	7.8	533	14 59	544	523	2 47	21	949	0 0	956	942	11 48	14
28	45.5	12 58	52.3	38.0	21 43	14.3	535	15 28	552	518	20 10	34	949	21 50	957	939	12 30	18
29**	46.2	5 48	50.1	42.2	19 19	7.9	540	6 5	565	525	19 17	40	947	16 40	954	939	8 44	15
30	45.7	13 50	50.1	41.0	20 25	9.1	540	0 52	561	522	21 12	39	946	23 40	952	935	11 0	17
31	45.0	13 58	49.9	39.6	19 57	10.3	536	19 23	556	523	18 46	33	946	18 9	954	933	10 40	21
Mean	46.0	—	50.2	40.7	—	9.5	534	—	552	513	—	38.7	951	—	961	943	—	18.1
Mean*	46.2	—	49.0	43.5	—	5.5	537	—	548	524	—	24.8	950	—	957	944	—	12.6
Mean**	46.3	—	51.8	34.9	—	16.9	530	—	557	489	—	68.4	953	—	974	943	—	31.0
<b>FEB.</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*	45.5	13 30	48.3	42.7	9 4	5.6	535	6 8	546	521	12 53	25	949	16 40	956	934	11 2	22
2	45.2	13 59	49.5	34.4	20 43	15.1	539	7 41	552	512	21 57	40	945	20 47	955	933	11 3	22
3	45.6	12 19	49.1	40.7	21 0	8.4	536	15 22	546	521	12 0	25	948	14 20	955	939	10 50	16
4	44.9	13 58	49.6	38.4	20 8	11.2	537	22 54	576	493	16 23	83	946	17 7	962	939	13 19	23
5	45.3	13 0	49.8	40.7	0 0	9.1	528	15 30	549	487	19 1	62	949	20 43	967	935	11 30	32
6*	46.0	13 19	51.5	42.8	21 31	8.7	528	15 49	537	515	11 36	22	952	18 11	958	944	11 59	14
7	45.7	12 58	51.1	43.0	18 35	8.1	535	0 17	551	511	11 56	40	949	18 40	957	940	11 5	17
8	45.5	13 29	49.3	41.6	19 53	7.7	533	22 25	555	521	20 54	34	951	20 12	961	946	11 59	15
9**	45.0	17 11	56.2	27.8	0 40	28.4	526	1 7	583	466	17 50	117	945	17 59	987	910	4 23	77
10**	45.1	14 29	53.2	33.4	19 1	19.8	526	14 29	554	483	15 12	71	953	18 47	968	944	12 53	24
11	44.9	3 28	49.1	40.7	18 20	8.4	531	23 45	546	515	14 49	31	950	22 12	960	939	4 12	21
12	44.5	14 4	48.9	36.7	22 59	12.2	534	21 20	573	515	23 42	58	951	21 18	960	941	22 44	19
13	44.3	14 21	49.1	35.2	22 56	13.9	528	7 57	544	508	1 8	36	952	18 16	960	939	10 24	21
14*	44.6	13 6	48.5	41.1	8 48	7.4	532	20 0	544	515	13 58	29	951	16 14	960	942	12 25	18
15	45.5	17 23	51.4	37.4	20 59	14.0	534	11 29	551	505	16 35	46	952	18 10	965	938	11 59	27
16**	46.7	14 42	56.9	36.8	18 7	20.1	521	13 0	563	435	14 15	128	962	18 36	1007	931	11 30	76
17**	43.7	7 16	50.1	30.4	21 3	19.7	519	20 18	573	491	13 21	82	959	16 12	975	946	7 50	29
18**	44.5	12 0	49.7	32.1	17 40	17.6	525	21 42	559	493	12 59	66	956	18 0	972	946	11 18	26
19	44.7	12 29	48.4	41.9	22 9	6.5	525	7 19	545	504	12 10	41	955	18 2	964	944	10 59	20
20	45.1	13 42	49.0	41.4	19 42	7.6	529	7 18	550	510	14 51	40	954	17 50	965	944	11 29	21
21	45.0	14 32	49.0	39.6	23 0	9.4	533	20 0	550	518	11 30	32	953	22 12	962	940	11 30	22
22	45.0	12 52	48.8	40.9	1 20	7.9	533	2 37	550	520	10 12	30	952	18 7	961	938	3 40	23
23*	45.2	14 23	48.6	42.3	21 40	6.3	534	8 16	548	520	16 15	28	952	22 0	959	938	12 51	21
24	45.0	14 20	49.3	33.8	21 55	15.5	533	22 4	582	509	19 34	73	953	22 0	969	944	12 54	25
25	45.3	13 51	50.5	41.9	22 6	8.6	532	22 52	551	497	12 21	54	951	22 39	959	941	11 21	18
26*	44.9	14 26	49.0	42.0	9 33	7.0	535	0 30	543	519	12 31	24	951	17 30	955	942	12 31	13
27	44.9	13 30	51.5	41.7	9 27	9.8	536	7 40	546	511	12 57	35	951	18 30	958	939	11 22	19
28	44																	



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.
		G.M.T. h m	II° +	II° +	G.M.T. h m			18000γ +	G.M.T. h m	18000γ +	18000γ +			G.M.T. h m	γ	42000γ +	G.M.T. h m	
<b>MAR.</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	45.1	13 30	50.0	40.6	19 40	9.4	539	20 32	558	523	12 21	35	949	16 8	956	936	11 54	20
2	44.4	13 14	52.5	35.4	23 30	17.1	528	2 41	554	485	12 15	69	951	21 10	965	932	11 29	33
3	44.3	13 10	50.3	38.9	0 0	11.4	532	0 35	581	507	13 53	74	949	0 5	961	935	1 9	26
4**	43.3	17 0	52.5	21.7	21 35	30.8	521	21 42	542	467	21 20	75	957	19 50	992	940	11 50	52
5**	44.3	8 25	55.6	35.7	22 38	19.9	515	21 44	599	437	8 11	162	956	16 37	980	932	23 21	48
6	43.9	13 47	49.8	38.1	19 21	11.7	522	18 59	559	484	10 24	75	953	17 9	972	930	2 55	42
7**	44.1	13 41	52.3	32.2	20 28	20.1	528	22 32	599	485	11 41	114	953	15 17	976	921	22 50	55
8	44.2	13 41	49.6	38.6	0 9	11.0	528	21 50	555	512	0 2	43	951	16 28	961	934	0 0	27
9	44.5	13 58	50.5	37.9	18 10	12.6	531	21 20	561	514	15 12	47	952	18 25	967	940	11 58	27
10	41.3	13 14	51.8	34.3	19 50	17.5	530	23 31	554	508	19 40	46	952	20 10	971	942	12 13	29
11	44.1	12 19	50.6	31.3	20 0	19.3	530	5 0	557	506	11 47	51	949	20 29	970	932	11 45	38
12*	44.4	13 0	50.4	40.8	8 23	9.6	528	23 28	543	511	11 0	32	955	16 40	964	946	12 20	18
13*	44.1	13 38	49.2	39.3	21 0	9.9	534	21 2	546	519	11 2	27	953	16 10	961	942	12 1	19
14*	44.7	13 23	50.0	40.0	8 50	10.0	534	22 14	544	515	10 16	29	951	16 41	959	936	12 1	23
15	43.9	13 18	52.1	38.0	2 30	14.1	531	1 14	567	493	13 5	74	951	16 17	964	940	1 33	24
16	44.6	13 57	51.2	39.6	8 2	11.6	535	23 31	581	513	11 20	68	953	21 0	964	942	23 57	22
17	44.1	12 56	50.5	38.8	1 20	11.7	534	24 0	571	511	10 21	60	949	15 46	958	936	1 4	22
18	44.5	13 21	51.0	39.6	0 10	11.4	531	22 39	575	504	10 49	71	852	16 53	972	934	11 44	38
19*	44.4	14 17	49.2	40.5	8 41	8.7	532	23 20	546	508	11 25	38	951	18 12	958	939	11 25	19
20*	44.2	13 27	50.5	40.4	8 43	10.1	535	19 52	550	516	13 42	34	951	16 14	964	935	11 24	29
21	44.2	14 6	49.0	40.3	8 22	8.7	542	0 56	560	525	14 32	35	949	16 42	956	936	11 55	20
22	44.4	22 16	53.8	35.5	21 31	18.3	536	5 20	587	505	20 31	82	951	22 10	981	936	22 53	45
23	43.1	13 58	49.6	34.5	19 23	15.1	530	21 49	607	504	18 33	103	952	19 0	968	939	22 42	29
24	44.3	23 57	51.7	38.5	21 1	13.2	531	23 30	574	509	21 26	65	953	21 41	966	932	24 0	34
25**	42.9	14 26	50.8	31.3	2 7	19.5	518	1 23	568	475	10 24	93	953	17 10	981	910	1 47	71
26	43.6	13 46	48.9	34.8	19 48	14.1	529	22 57	571	520	12 14	51	952	20 9	964	933	11 23	31
27	43.2	13 49	48.6	39.8	0 21	8.8	534	21 42	567	516	19 28	51	953	20 23	967	939	12 39	28
28	42.9	12 30	49.8	30.3	21 35	19.5	535	23 42	574	504	20 35	70	953	21 8	971	935	11 18	36
29	43.0	11 46	50.1	31.8	0 31	18.3	529	0 10	565	504	1 1	61	949	16 41	971	930	0 33	41
30	43.6	12 58	49.0	37.6	21 11	11.4	532	21 13	563	509	12 18	54	951	20 32	961	935	11 22	26
31**	43.7	13 4	54.9	35.3	18 38	19.6	526	21 37	584	446	13 7	138	950	19 12	973	926	12 10	47
Mean	44.0	—	50.8	36.5	—	14.3	530	—	567	501	—	65.4	952	—	968	935	—	32.9
Mean*	44.3	—	49.9	40.2	—	9.7	533	—	546	514	—	32.0	952	—	961	940	—	21.6
Mean**	43.6	—	53.2	31.2	—	22.0	522	—	578	462	—	116.4	954	—	980	926	—	54.6
<b>APRIL</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**	43.7	13 24	54.3	34.5	17 23	19.8	528	21 0	572	477	10 40	95	952	17 34	979	934	10 27	45
2	43.8	13 17	54.0	36.7	18 50	17.3	530	19 44	553	500	11 24	53	951	19 6	965	932	0 54	33
3	43.6	13 20	52.4	36.1	19 18	16.3	527	19 29	571	495	11 50	76	955	17 59	974	934	12 20	40
4**	42.4	13 28	49.6	24.0	23 28	25.6	527	21 14	587	498	10 56	89	953	18 9	976	930	12 22	46
5**	42.5	15 3	56.2	29.7	0 0	26.5	528	17 13	546	481	15 49	65	955	15 58	985	933	12 0	52
6**	43.6	12 30	49.3	38.0	18 57	11.3	528	22 0	563	484	9 10	79	950	19 4	969	934	12 35	35
7	43.1	13 29	48.4	38.8	8 19	9.6	531	19 27	546	505	12 0	41	951	19 17	961	937	11 54	24
8	43.9	12 47	49.7	38.9	8 7	10.8	536	23 0	560	512	11 19	48	952	17 29	964	929	11 44	35
9	43.5	12 39	49.1	39.9	8 11	9.2	535	6 59	546	519	12 55	27	952	18 17	965	935	11 54	30
10	43.5	12 36	49.2	38.7	8 41	10.5	536	23 59	561	519	10 44	42	953	17 6	961	938	11 54	23
11	43.8	13 0	50.4	37.3	7 30	13.1	539	0 0	561	514	9 50	47	949	7 2	958	933	12 22	25
12	43.3	13 42	49.7	38.0	8 19	11.7	540	0 20	559	514	10 32	45	950	18 1	960	933	12 59	27
13*	43.4	12 54	49.4	38.7	7 44	10.7	539	14 52	551	514	9 41	37	952	16 0	963	931	11 58	32
14	43.8	12 55	53.6	38.7	8 50	14.9	538	22 43	556	510	10 2	46	950	18 19	961	923	12 20	38
15	43.6	13 19	52.8	34.5	23 46	18.3	537	19 59	555	507	10 28	48	955	17 40	966	927	11 23	39
16**	43.4	13 11	53.0	36.1	21 0	16.9	535	20 38	572	486	11 54	86	954	16 48	975	930	11 53	45
17*	43.4	13 3	49.4	38.3	7 55	11.1	535	17 30	554	505	10 35	49	954	17 30	964	935	11 19	29
18*	44.0	13 28	49.5	38.6	7 49	10.9	539	22 32	557	513	10 19	44	954	18 10	961	936	11 30	25
19	43.8	13 50	50.6	38.8	8 40	11.8	540	18 45	565	507	11 49	58	952	18 39	969	931	12 40	38
20	43.1	12 29	48.1	37.7	8 3	10.4	538	23 30	561	508	11 40	53	953	17 40	969	935	11 54	34
21	43.5	13 12	49.8	39.5	8 22	10.3	536	18 31	552	515	9 55	37	952	18 39	963	936	12 17	27
22	44.4	13 31	52.8	39.5	9 10	13.3	541	16 28	565	498	13 52	67	949	17 8	962	929	11 57	33
23*	44.1	12 24	49.6	39.9	8 31	9.7	539	21 55	566	509	10 24	57	950	18 38	959	932	11 33	27
24	43.6	12 59	48.7	39.0	8 41	9.7	538	21 58	552	497	11 9	55	946	18 37	956	928	10 34	28
25	42.7	13 20	48.2	38.2	8 22	10.0	535	23 11	560	516	9 21	44	947	22 51	957	930	12 31	27
26	42.7	13 31	48.8	38.9	8 33	9.9	534	22 41	552	517	10 54	35	950	17 39	961	933	10 57	28
27	42.1	13 20	48.8	37.5	8 2	11.3	531	23 57	557	501	10 12	56	949	18 37	964	928		

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.
		G.M.T. h m	II° +	II° +	G.M.T. h m			II° +	18000γ +	G.M.T. h m	18000γ +			18000γ +	G.M.T. h m	γ	42000γ +	
<b>MAY</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	43.2	13 20	49.5	38.3	7 32	11.2	539	0 22	560	509	11 40	51	944	18 10	954	928	10 54	26
2**	43.1	13 59	50.2	34.8	21 41	15.4	539	23 41	626	513	12 42	113	947	18 32	971	925	12 1	46
3**	42.2	13 13	49.6	31.3	1 50	18.3	540	22 58	591	500	9 27	91	933	22 57	964	910	11 28	54
4	42.6	12 50	48.7	38.4	8 2	10.3	533	23 38	570	500	10 43	70	949	18 10	959	933	12 1	26
5	43.2	12 54	49.6	38.2	8 4	11.4	541	17 40	574	511	12 20	63	946	17 40	959	923	12 17	36
6	43.2	13 40	49.2	39.6	9 10	9.6	538	22 42	566	509	10 44	57	946	18 33	962	924	10 47	38
7	43.2	12 32	48.6	39.4	8 6	9.2	539	18 35	571	518	9 41	53	947	19 16	957	929	11 30	28
8	42.9	14 53	46.8	38.7	8 50	8.1	541	18 49	562	524	12 39	38	946	17 39	956	926	12 0	30
9	42.9	12 43	47.7	39.5	6 34	8.2	543	19 40	565	521	14 20	44	947	15 47	960	925	10 31	35
10	42.5	12 0	49.4	36.7	22 0	12.7	540	21 49	593	522	9 2	71	944	18 10	958	921	11 20	37
11**	42.7	23 1	57.1	26.8	23 42	30.3	542	23 0	620	502	23 24	118	945	17 50	965	911	23 20	54
12**	42.0	14 0	47.5	30.9	0 6	16.6	533	23 24	594	504	13 28	90	952	18 8	972	936	11 21	36
13	42.0	12 47	48.1	35.8	7 31	12.3	532	1 10	554	499	8 43	55	950	18 30	963	931	11 44	32
14*	42.9	12 53	49.4	37.7	8 4	11.7	534	18 38	552	509	10 40	43	951	17 13	959	929	10 23	30
15*	42.6	12 58	49.3	37.8	7 17	11.5	536	22 4	559	513	11 39	46	951	4 43	961	930	11 22	31
16*	42.0	12 20	46.5	37.4	6 40	9.1	540	19 30	556	514	9 13	42	949	17 50	962	923	12 14	39
17	42.5	12 36	48.9	37.0	7 51	11.9	540	21 41	561	522	10 20	39	945	17 55	956	919	12 58	37
18**	44.4	15 55	55.4	35.2	23 50	20.2	530	17 23	580	481	14 40	99	963	17 21	1036	924	10 24	112
19	41.3	13 14	48.1	34.0	0 41	14.1	526	17 49	561	494	8 4	67	955	5 39	966	938	1 50	28
20	42.8	12 41	48.6	38.1	6 33	10.5	530	17 50	567	507	13 18	60	953	19 10	977	932	13 2	45
21	42.8	14 59	48.7	38.0	6 20	10.7	533	18 7	585	496	12 4	89	951	18 10	971	922	11 51	49
22	42.4	12 10	49.7	37.5	5 41	12.2	532	17 42	555	497	11 47	58	955	18 11	973	927	10 55	46
23	41.7	14 10	45.6	36.2	5 45	9.4	532	18 7	564	505	6 50	59	956	18 6	974	938	12 0	36
24	41.9	13 49	46.4	38.2	6 47	8.2	535	16 54	569	515	9 2	54	957	20 15	970	941	10 29	29
25	42.6	13 6	48.3	38.4	6 28	9.9	540	16 45	573	522	19 13	51	948	16 44	964	920	12 21	44
26	42.5	12 49	48.7	36.7	4 4	12.0	535	2 0	549	517	7 3	32	952	15 40	961	936	11 22	25
27*	42.5	12 58	45.6	38.1	6 19	7.5	539	18 58	554	524	6 13	30	949	1 43	958	928	11 44	30
28*	42.9	12 26	48.2	38.3	7 42	9.9	542	20 5	557	520	10 34	37	949	17 40	958	934	12 21	24
29	42.5	13 28	48.8	36.9	7 11	11.9	544	19 59	569	520	10 42	49	948	17 30	960	927	11 22	33
30	42.3	12 43	48.9	37.0	7 41	11.9	541	19 33	570	518	13 20	52	952	17 40	962	932	11 40	30
31	42.3	12 59	49.7	36.4	8 8	13.3	539	18 40	559	509	12 21	50	950	18 11	964	923	11 39	41
Mean	42.6	—	48.9	36.7	—	12.2	537	—	571	510	—	60.4	948	—	966	927	—	38.3
Mean*	42.6	—	47.8	37.9	—	9.9	538	—	556	516	—	39.6	950	—	960	929	—	30.8
Mean**	42.9	—	52.0	31.8	—	20.2	537	—	602	500	—	102.2	948	—	982	921	—	60.4
<b>JUNE.</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	42.7	13 0	50.4	37.1	7 40	13.3	540	19 10	563	519	12 16	44	952	17 40	964	925	12 20	39
2*	41.6	13 17	46.2	36.2	7 43	10.0	541	17 49	564	511	10 17	53	951	19 10	962	929	11 53	33
3*	42.3	12 49	48.7	37.0	8 10	11.7	542	20 59	565	511	10 39	54	951	19 6	959	935	11 19	24
4	42.0	14 12	47.6	35.9	8 4	11.7	550	20 6	609	521	12 14	88	945	20 0	957	927	11 59	30
5**	41.4	15 4	51.5	30.4	5 1	21.1	529	0 42	572	478	15 42	94	951	18 31	985	931	9 50	54
6**	42.0	0 25	47.8	35.2	2 52	12.6	532	0 21	580	492	17 17	88	952	17 44	984	924	0 53	60
7	42.2	13 1	47.8	37.3	6 10	10.5	539	0 15	557	517	14 49	40	952	5 27	961	932	11 23	29
8	41.7	13 28	48.1	36.7	7 24	11.4	542	19 40	583	515	9 23	68	954	16 19	966	938	10 35	28
9	41.5	12 13	47.8	35.2	8 50	12.6	537	23 20	566	501	12 47	65	952	19 48	971	937	11 40	34
10	41.9	13 29	48.0	36.2	7 20	11.8	536	0 6	555	515	9 51	40	954	18 10	964	935	11 20	29
11**	41.4	13 20	49.0	33.9	7 28	15.1	543	19 33	586	515	16 14	71	954	19 29	968	934	11 20	34
12**	41.9	13 47	51.5	33.5	7 43	18.0	542	16 57	591	515	3 43	76	943	18 57	960	926	9 55	34
13	41.2	14 28	47.2	35.5	8 1	11.7	532	20 10	550	505	11 58	45	950	17 38	962	931	11 53	31
14	41.8	14 27	49.0	35.4	24 0	13.6	538	20 33	578	505	10 58	73	950	18 29	969	929	11 55	40
15	41.2	14 21	47.0	33.9	1 42	13.1	537	2 59	568	505	10 44	63	949	17 13	970	928	4 5	42
16	41.7	13 30	47.9	36.0	8 1	11.9	542	17 35	572	516	11 59	56	955	19 46	971	938	11 20	33
17	41.4	14 19	46.2	35.9	8 19	10.3	542	19 1	574	517	11 24	57	948	2 58	959	925	12 40	34
18**	42.0	16 6	50.5	36.3	22 46	14.2	543	16 50	587	505	13 21	82	947	16 50	970	923	12 6	47
19	41.3	14 51	45.8	36.3	7 47	9.5	534	18 12	558	504	12 50	54	949	18 50	959	931	11 33	28
20	41.2	14 50	47.3	36.0	8 3	11.3	539	18 43	576	513	10 54	63	953	18 43	967	935	10 22	32
21*	41.0	14 58	45.3	34.9	8 4	10.4	538	22 3	554	518	11 2	36	950	5 40	957	938	11 59	19
22*	40.7	13 23	45.2	34.2	8 34	11.0	540	20 29	556	518	9 34	38	949	6 45	957	931	11 42	26
23	41.7	13 15	46.9	37.0	8 33	9.9	545	18 10	567	519	10 45	48	950	19 42	957	932	12 8	25
24	41.0	13 58	45.7	34.7	5 55	11.0	545	1 17	558	532	10 13	26	949	18 14	956	934	11 45	22
25	41.3	14 27	48.5	35.4	6 9	13.1	542	17 30	564	519	10 34	45	946	18 10	958	924	11 41	34
26*	40.6	13 31	45.4	34.6	7 12	10.8	543	17 51	561	516	9 21	45	946	5 37	958	923	10 33	35
27	42.1	13 2	49.2	35.6	8 4	13.6	547	16 59	592	511	9 1	81	949	19 38	970	927	11 40	43

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.
		G.M.T. h m	II° +	II° +	G.M.T. h m			I8000γ +	G.M.T. h m	I8000γ +	I8000γ +			G.M.T. h m	γ	42000γ +	G.M.T. h m	
<b>JULY</b>	II° +	h m	II° +	II° +	h m		I8000γ +	h m	I8000γ +	I8000γ +	h m	γ	42000γ +	h m	42000γ +	42000γ +	h m	γ
1	41.7	14 17	47.1	35.3	7 1	11.8	549	4 45	579	518	13 1	61	945	17 55	961	929	11 20	32
2	40.4	14 24	45.7	34.3	5 44	11.4	542	17 28	561	514	12 22	47	949	18 17	962	938	12 11	24
3**	42.3	13 53	51.7	36.5	8 10	15.2	549	12 5	598	493	13 21	105	950	18 26	980	901	12 18	79
4**	41.1	14 44	46.8	35.2	8 33	11.6	538	13 24	562	510	13 52	52	950	18 36	965	924	11 59	41
5	41.6	15 32	45.4	36.9	9 29	8.5	537	0 59	565	500	12 40	65	949	18 0	963	935	12 37	28
6	41.2	12 58	46.7	35.8	8 12	10.9	538	17 35	569	511	10 20	58	947	17 43	960	924	11 51	36
7	41.4	13 27	47.7	35.7	6 39	12.0	542	19 59	562	510	11 9	52	948	17 14	961	926	12 38	35
8	41.5	12 43	47.9	37.1	7 17	10.8	542	22 19	563	515	10 44	48	952	15 24	972	936	12 18	36
9	41.3	13 54	48.6	34.5	5 57	14.1	545	0 16	569	526	10 8	43	950	15 36	962	935	11 40	27
10*	40.7	13 24	48.4	35.5	6 30	12.9	537	19 4	556	514	11 40	42	951	17 31	963	939	11 20	24
11	41.2	13 27	46.8	35.7	7 3	11.1	543	18 22	582	514	10 40	68	950	18 17	963	932	11 53	31
12	41.1	14 13	48.1	35.1	7 21	13.0	544	18 52	570	523	9 41	47	948	17 30	962	933	11 24	29
13	40.8	14 56	47.1	35.8	7 34	11.3	540	17 29	564	506	12 0	58	946	19 7	963	926	11 34	37
14	41.7	14 40	48.7	36.5	8 51	12.2	544	19 44	604	514	10 3	90	947	19 41	966	927	11 35	39
15	40.9	14 40	49.4	33.0	7 39	16.4	541	2 10	565	501	10 37	64	942	19 4	959	921	11 20	38
16	40.7	13 54	49.1	34.3	8 23	14.8	537	2 1	567	496	10 40	71	948	19 37	968	933	12 20	35
17	40.7	12 58	49.8	34.0	8 2	15.8	537	18 58	569	501	10 38	68	948	18 27	963	926	13 20	37
18*	40.5	13 58	47.8	34.9	7 36	12.9	538	18 23	558	507	11 2	51	949	18 14	962	934	12 59	28
19*	40.4	14 2	46.8	34.8	8 3	12.0	540	19 53	558	515	10 23	43	949	18 27	959	935	13 20	24
20	40.9	14 25	47.2	35.8	6 30	11.4	540	15 3	560	508	11 28	52	950	18 14	966	942	12 40	24
21	40.7	13 21	47.2	35.8	8 42	11.4	541	20 50	563	509	11 50	54	946	18 14	957	928	11 57	29
22*	41.2	13 40	48.1	36.1	7 21	12.0	539	19 20	556	505	10 34	51	949	18 13	960	934	11 17	26
23*	40.5	14 29	46.3	34.4	8 40	11.9	540	21 45	558	505	10 40	53	947	18 10	957	927	13 2	30
24	41.0	13 42	47.6	35.1	6 44	12.5	545	16 32	566	519	10 12	47	951	17 1	966	937	11 40	29
25	40.6	14 22	47.2	33.7	7 46	13.5	548	22 57	570	513	9 41	57	947	16 50	961	931	10 54	30
26	39.9	13 18	46.6	33.8	8 1	12.8	539	21 4	556	513	9 3	43	948	18 4	961	927	11 24	34
27	40.8	13 53	48.0	35.1	6 24	12.9	544	20 30	560	520	11 1	40	945	17 0	958	920	12 20	38
28	40.9	13 59	48.3	35.3	7 52	13.0	547	20 1	570	518	11 14	52	943	17 8	954	925	11 34	29
29**	41.1	13 59	50.7	35.2	5 18	15.5	541	20 35	576	498	11 28	78	947	18 19	962	934	11 34	28
30**	42.2	13 27	59.6	29.8	4 59	29.8	525	3 24	599	434	13 35	165	953	15 16	990	918	8 24	72
31**	40.0	12 52	45.9	33.6	1 20	12.2	524	0 6	571	475	16 21	96	957	16 50	979	941	12 32	38
Mean	41.0	—	48.1	35.0	—	13.1	540	—	569	507	—	62.0	948	—	964	930	—	34.4
Mean*	40.7	—	47.5	35.1	—	12.3	539	—	557	509	—	48.0	949	—	960	934	—	26.4
Mean**	41.3	—	50.9	34.1	—	16.9	535	—	581	482	—	99.2	951	—	975	924	—	51.6
<b>AUG.</b>	II° +	h m	II° +	II° +	h m		I8000γ +	h m	I8000γ +	I8000γ +	h m	γ	42000γ +	h m	42000γ +	42000γ +	h m	γ
1	40.7	1 47	46.9	33.8	7 3	13.1	522	1 39	563	464	10 20	99	952	18 39	967	937	2 19	30
2	40.0	13 49	47.0	34.3	7 54	12.7	528	19 10	549	485	11 30	64	956	17 9	970	939	12 57	31
3**	41.1	12 58	48.4	28.3	18 1	20.1	528	17 40	579	465	12 12	114	956	18 16	989	933	11 41	56
4**	39.5	13 54	45.2	28.0	21 3	17.2	524	21 11	582	489	13 32	93	958	18 39	981	940	23 54	41
5	39.9	13 9	47.3	34.1	7 7	13.2	527	0 15	554	492	9 30	62	950	18 7	964	929	2 24	35
6	39.9	13 28	45.5	34.9	7 22	10.6	529	14 57	546	488	8 10	58	954	18 11	968	938	12 32	30
7	40.1	14 28	45.9	34.8	6 50	11.1	528	14 29	556	486	10 30	70	959	15 24	973	942	11 55	31
8	40.2	13 53	46.8	34.9	8 2	11.9	531	21 39	562	495	9 30	67	956	4 40	965	936	11 40	29
9*	39.7	13 52	45.2	34.9	7 40	19.3	531	19 27	556	503	10 40	53	961	17 14	973	943	12 19	30
10*	40.1	14 30	45.6	35.0	7 5	10.6	537	21 30	563	507	9 45	56	957	0 22	964	945	12 18	19
11	39.4	13 58	46.6	33.1	8 9	13.5	533	4 30	558	494	10 1	64	956	17 9	973	944	13 24	29
12	40.4	13 18	50.1	26.0	23 8	24.1	539	19 0	583	508	10 20	75	956	16 58	971	937	12 2	34
13	39.4	13 58	50.5	29.7	0 3	20.8	529	16 30	567	488	9 20	79	955	16 31	977	931	12 59	46
14	40.1	13 4	50.0	33.3	21 20	16.7	529	21 30	578	484	10 55	94	958	15 59	972	945	12 1	27
15	40.3	12 45	48.7	34.6	5 22	14.1	531	23 28	559	502	11 10	57	955	17 10	967	941	11 52	26
16	39.9	13 59	47.2	34.4	6 0	12.8	529	24 0	558	499	12 8	59	951	17 25	967	932	12 1	35
17	39.4	15 0	45.9	34.1	5 41	11.8	532	22 6	583	499	10 34	84	952	16 39	965	939	11 53	26
18	40.7	13 6	47.4	35.0	7 4	12.4	546	22 55	589	505	9 58	84	948	18 40	968	924	11 27	44
19	40.4	13 58	48.0	36.2	6 44	11.8	537	14 40	562	497	16 35	65	954	15 49	973	936	13 24	37
20*	40.0	13 5	45.9	36.5	7 23	9.4	533	22 58	557	508	11 37	49	955	16 27	965	943	13 18	22
21	40.6	13 29	47.3	35.8	18 57	11.5	531	7 14	549	503	11 55	46	952	15 48	968	932	10 59	36
22	40.8	11 50	49.3	35.7	6 8	13.6	530	18 5	559	499	12 34	60	953	15 40	977	930	11 1	47
23	39.8	13 20	45.6	35.2	6 24	10.4	539	22 30	573	516	9 21	57	955	16 7	965	943	11 55	22
24*	39.3	12 55	46.2	34.6	7 29	11.6	535	21 14	553	511	9 51	42	953	15 38	962	934	11 40	28
25*	39.7	13 20	46.8	35.4	7 21	11.4	535	19 44	558	504	9 20	54	953	18 16	963	940	11 40	23
26	39.4	14 8	49.3	27.6	22 30	21.7	540	20 38	580	516	14 36	64	952	17 23	966	930	11 45	36
27**	38.7	4 41	47.7	26.7	22 0	21.0	525	4 54	573	489	10 56	84	952	16 12	980	923	5 30	57



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.
		G.M.T. h m	II°+	II°+	G.M.T. h m			II°+	II°+	G.M.T. h m	I8000γ+			I8000γ+	I8000γ+	γ	G.M.T. h m	
<b>SEPT.</b>	II°+	h m	II°+	II°+	h m		I8000γ+	h m	I8000γ+	I8000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
1	38.0	12 50	47.5	28.8	22 50	18.7	527	15 37	548	500	10 45	48	957	18 18	971	943	13 4	28
2**	39.3	14 9	46.6	29.0	18 5	17.6	525	23 54	578	478	16 37	100	960	16 57	1004	941	13 2	63
3	38.5	11 55	46.4	31.0	1 38	15.4	522	0 0	571	472	10 23	99	956	17 51	973	924	1 31	49
4	38.7	12 20	45.8	32.2	20 10	13.6	524	21 10	568	486	11 21	82	962	18 10	990	949	10 57	41
5	39.0	12 52	44.2	34.7	8 5	9.5	529	23 27	551	494	10 17	57	960	17 17	971	946	11 2	25
6	38.8	13 2	45.6	31.6	23 40	14.0	528	19 38	548	502	9 53	46	959	21 43	970	946	11 54	24
7	38.6	13 24	45.2	34.0	0 0	11.2	529	0 18	556	496	10 34	60	955	16 47	970	943	12 20	27
8	39.1	13 17	46.8	33.5	8 7	13.3	535	19 46	562	510	9 17	52	957	16 34	970	941	11 31	29
9*	39.1	13 0	44.3	34.8	7 23	9.5	534	18 52	558	508	9 49	50	958	7 51	966	947	11 40	19
10*	39.1	12 28	46.1	34.3	8 1	11.8	534	20 40	555	503	10 40	52	955	16 10	963	936	11 55	27
11	39.0	12 20	47.1	33.9	7 31	13.2	536	20 0	571	506	9 15	65	955	17 17	962	937	11 24	25
12	38.4	12 38	44.6	32.0	4 31	12.6	532	1 15	565	498	10 32	67	953	14 59	966	934	10 8	32
13*	39.3	12 20	46.3	34.9	7 41	11.4	533	23 0	550	510	9 40	40	955	15 46	966	943	11 58	23
14*	39.3	12 15	45.8	35.1	7 48	10.7	534	18 54	547	506	10 24	41	956	16 28	968	939	11 54	29
15	39.0	12 34	43.5	35.2	8 7	8.3	539	22 43	568	511	10 38	57	955	18 18	962	941	10 34	21
16	38.9	12 30	46.6	33.8	7 52	12.8	533	5 38	563	495	11 40	68	957	16 22	980	935	11 30	45
17	38.5	11 38	49.1	28.3	2 19	20.8	522	0 47	560	470	11 11	90	960	15 40	976	948	11 1	28
18	38.8	11 29	44.0	35.2	8 17	8.8	527	23 31	539	499	10 40	40	960	0 10	967	953	12 14	14
19	38.3	12 58	43.5	29.5	22 36	14.0	530	22 28	577	490	16 44	87	959	17 14	978	947	11 37	31
20	39.0	9 28	42.8	35.2	6 21	7.6	528	23 24	555	489	16 32	66	959	17 10	977	948	1 43	29
21	38.3	12 20	44.4	31.0	23 32	13.4	530	20 40	554	512	8 40	42	957	16 20	967	946	23 36	21
22	37.9	1 30	46.2	29.4	2 29	16.8	524	1 22	570	504	17 1	66	953	16 9	974	918	1 44	56
23*	39.1	12 20	45.1	34.9	7 24	10.2	528	18 31	541	499	10 20	42	957	16 7	967	942	11 2	25
24**	39.3	11 53	48.1	33.3	22 37	14.8	523	22 44	609	475	8 17	134	956	16 35	979	928	23 20	51
25**	39.3	13 40	49.4	11.8	17 56	37.6	503	18 3	658	456	18 25	202	963	17 58	1046	930	6 37	116
26	38.6	12 19	46.3	33.8	23 1	12.5	521	21 46	587	481	12 34	106	963	19 30	977	947	11 20	30
27**	39.2	5 37	45.2	28.9	18 4	16.3	515	17 40	564	478	16 10	86	963	16 28	998	950	5 53	48
28	38.7	14 0	44.1	30.5	18 20	13.6	518	18 30	548	469	12 39	79	964	17 39	981	950	11 31	31
29	38.0	13 48	44.7	32.0	22 50	12.7	521	20 20	562	493	10 11	69	961	15 50	977	947	10 57	30
30**	37.1	11 57	44.1	19.2	18 46	24.9	522	19 2	575	487	12 20	88	959	18 53	978	944	3 2	34
Mean	38.7	—	45.6	31.4	—	14.3	527	—	565	492	—	72.7	958	—	976	941	—	35.0
Mean*	39.2	—	45.5	34.8	—	10.7	532	—	550	505	—	45.0	956	—	966	941	—	24.6
Mean**	38.8	—	46.7	24.4	—	22.2	518	—	597	475	—	122.0	960	—	1001	939	—	62.4
<b>OCT.</b>	II°+	h m	II°+	II°+	h m		I8000γ+	h m	I8000γ+	I8000γ+	h m	γ	42000γ+	h m	42000γ+	42000γ+	h m	γ
1	38.1	11 58	42.9	31.8	23 6	11.1	528	21 44	543	497	12 34	46	960	21 40	968	951	12 18	17
2	38.1	12 53	42.9	34.6	8 6	8.3	525	21 37	541	497	13 32	44	963	17 40	971	954	12 20	17
3	38.1	13 29	41.7	34.8	8 52	6.9	529	21 10	542	506	11 42	36	963	17 12	970	953	10 59	17
4	38.7	14 12	45.7	34.9	8 40	10.8	532	22 50	574	508	15 55	66	959	17 39	969	944	11 32	25
5	38.7	12 4	44.2	35.8	18 2	8.4	535	21 50	548	507	17 40	41	957	18 11	969	943	12 59	26
6	38.7	13 20	45.9	34.0	9 2	11.9	538	22 45	572	513	10 16	59	955	22 27	960	941	12 57	19
7	38.5	13 46	44.7	34.3	21 9	10.4	535	13 8	557	515	17 6	42	957	17 10	969	942	11 20	27
8*	37.9	12 30	43.2	33.9	8 13	9.3	534	23 2	544	514	9 36	30	957	16 40	962	946	11 4	16
9*	38.3	13 11	44.3	33.8	8 43	10.5	533	17 59	544	516	8 54	28	956	16 17	964	945	11 20	19
10*	38.7	13 0	45.1	34.5	8 40	10.6	535	20 1	550	512	10 50	38	957	16 8	966	946	12 29	20
11	38.3	13 27	43.9	33.7	9 9	10.2	537	6 41	550	510	10 56	40	957	16 18	966	946	11 41	20
12	37.1	12 36	43.7	30.8	21 13	12.9	534	2 21	577	504	10 24	73	958	20 30	968	943	11 26	25
13	38.2	13 50	44.7	30.2	18 45	14.5	532	4 48	561	507	18 40	54	960	19 7	978	948	10 58	30
14	38.0	13 50	41.6	34.9	21 20	6.7	530	7 14	548	506	10 50	42	963	16 30	973	950	0 12	23
15**	37.9	13 56	45.1	28.9	21 31	16.2	521	5 21	552	475	18 50	77	969	19 9	1003	951	13 19	52
16	38.6	13 3	43.7	34.8	9 0	8.9	525	6 41	541	498	12 30	43	965	18 40	972	947	11 21	25
17	38.2	12 31	44.0	31.8	20 45	12.2	529	19 36	553	503	10 5	50	960	20 16	966	947	12 0	19
18	37.7	1 59	44.1	33.4	8 50	10.7	532	2 20	554	504	10 50	50	959	8 41	968	948	11 20	20
19*	37.9	12 21	42.7	34.2	8 41	8.5	533	22 30	543	512	10 41	31	960	15 47	970	951	11 10	19
20**	37.9	13 11	43.9	26.7	21 1	17.2	532	21 7	566	517	11 1	49	961	20 41	974	949	11 32	25
21	37.4	13 19	43.9	31.1	0 18	12.8	533	17 14	543	514	12 48	29	961	20 1	972	952	12 20	20
22	38.3	13 0	43.9	33.9	4 16	10.0	530	3 42	554	509	11 30	45	961	19 40	973	950	11 22	23
23	37.9	12 30	43.9	33.7	23 54	10.2	534	22 10	548	511	10 41	37	961	23 57	967	951	10 56	16
24**	39.0	13 40	49.1	31.1	19 0	18.0	516	6 11	580	451	15 18	129	965	15 45	1003	932	6 29	71
25**	37.2	12 37	45.2	22.2	17 20	23.0	519	22 16	556	444	17 5	112	970	17 20	1007	956	12 20	51
26**	37.5	13 20	45.5	30.0	16 24	15.5	520	19 41	569	472	13 26	97	969	16 36	991	959	3 12	32
27	37.7	12 49	42.7	33.1	22 55	9.6	524	23 0	550	491	13 0	59	968	15 50	979	957	9 57	22
28	37.8	13 44	43.3	34.0	8 40	9.3	527	5 26	548	499	15 10	49	966	15 0	978	954	11 20	24
29*	37																	

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.
	II°+	G.M.T. h m	II°+	II°+	G.M.T. h m	I8000γ+		G.M.T. h m	I8000γ+	I8000γ+	G.M.T. h m	γ	42000γ+		G.M.T. h m	42000γ+	42000γ+	G.M.T. h m	γ		
<b>NOV.</b>	II°+	G.M.T. h m	II°+	II°+	G.M.T. h m		I8000γ+	G.M.T. h m	I8000γ+	I8000γ+	G.M.T. h m	γ	42000γ+	G.M.T. h m	42000γ+	42000γ+	G.M.T. h m	γ			
1*	37.8	12 58	42.0	34.8	9 8	7.2	535	19 50	546	517	10 58	29	960	18 9	968	949	11 22	19			
2	37.9	12 30	42.6	35.4	8 29	7.2	536	18 0	547	522	11 21	25	961	22 8	967	950	10 22	17			
3	37.5	12 14	42.0	29.5	20 30	12.5	534	20 12	546	512	11 44	34	962	21 10	972	951	10 55	21			
4	37.4	11 57	41.8	34.1	22 20	7.7	533	22 10	549	514	10 20	35	964	14 7	972	957	11 18	15			
5	37.4	12 5	42.5	32.3	23 5	10.2	537	22 58	556	514	18 7	42	964	18 40	973	953	11 20	20			
6	37.3	12 59	40.4	34.7	8 20	5.7	534	0 28	556	521	10 40	35	961	16 40	969	952	10 56	17			
7**	36.9	12 10	49.3	19.1	18 55	30.2	525	7 53	563	441	16 39	122	968	17 8	1004	947	9 58	57			
8**	36.5	13 24	41.1	27.7	15 55	13.4	516	22 8	553	455	11 24	98	970	16 14	991	948	0 13	43			
9	37.2	4 53	44.6	29.1	20 38	15.5	525	3 50	548	504	12 20	44	969	16 41	979	954	5 17	25			
10	36.7	13 31	40.3	33.6	18 0	6.7	525	22 0	539	509	10 18	30	972	18 9	981	965	10 28	16			
11	37.0	14 20	41.7	32.9	21 46	8.8	527	8 6	545	511	11 21	34	972	19 30	984	957	10 46	27			
12	36.9	13 31	41.6	30.9	20 28	10.7	530	6 52	544	512	12 41	32	972	16 43	980	961	11 0	19			
13	37.0	13 11	42.5	29.4	21 20	13.1	521	23 40	538	496	14 12	42	973	18 40	987	960	10 23	27			
14	37.4	13 34	40.8	34.6	3 31	6.2	531	5 29	548	514	15 38	34	969	18 10	977	962	12 35	15			
15	37.1	12 24	41.1	33.6	22 18	7.5	531	6 20	542	516	17 35	26	971	18 50	980	962	10 57	18			
16	37.0	13 6	40.0	35.2	6 49	4.8	533	7 20	546	523	12 58	23	971	17 5	977	967	12 56	10			
17	36.9	12 51	40.6	34.4	8 40	6.2	536	23 54	572	522	10 50	50	970	15 10	976	965	24 0	11			
18	37.3	12 20	41.5	34.7	23 17	6.8	538	0 0	567	524	23 8	43	967	14 42	975	958	11 19	17			
19	37.6	13 6	43.1	34.7	7 47	8.4	536	23 50	545	523	2 32	22	970	15 14	975	964	10 50	11			
20*	36.9	13 2	40.7	34.2	8 37	6.5	535	5 58	545	520	11 33	25	968	15 12	977	962	11 6	15			
21*	36.7	12 59	40.6	34.3	8 50	6.3	535	18 51	546	522	9 57	24	967	14 38	974	954	10 59	20			
22*	37.0	12 28	40.4	34.9	8 25	5.5	538	15 6	543	523	9 0	20	966	15 0	973	958	11 25	15			
23	36.9	12 30	40.6	34.4	8 30	6.2	536	20 20	546	517	11 2	29	966	14 10	974	962	12 2	12			
24**	36.5	12 34	40.4	29.5	17 54	10.9	532	16 6	561	473	19 3	88	969	19 48	992	959	11 34	33			
25**	37.3	14 58	43.0	33.5	1 11	9.5	525	2 41	547	486	11 25	61	971	17 43	985	962	11 24	23			
26	37.0	12 38	40.6	34.8	8 24	5.8	533	1 21	551	517	10 16	34	970	14 9	978	961	1 58	17			
27	37.0	13 23	40.5	33.9	0 20	6.6	533	19 0	545	523	10 53	22	969	14 9	976	962	11 0	14			
28**	36.6	12 4	41.2	31.2	22 10	10.0	536	20 45	563	507	22 2	56	969	13 43	977	964	9 57	13			
29	36.8	12 51	40.4	34.3	21 23	6.1	530	20 30	544	510	18 3	34	972	18 30	982	965	10 57	17			
30*	36.7	12 58	39.6	34.5	0 14	5.1	534	20 10	543	526	11 41	17	969	14 42	974	964	11 22	10			
Mean	37.1	—	41.6	32.7	—	8.9	532	—	549	509	—	40.3	968	—	978	958	—	19.8			
Mean*	37.0	—	40.7	34.5	—	6.1	535	—	545	522	—	23.0	966	—	973	957	—	15.8			
Mean**	36.8	—	43.0	28.2	—	14.8	527	—	557	472	—	85.0	969	—	990	956	—	33.8			
<b>DEC.</b>	II°+	G.M.T. h m	II°+	II°+	G.M.T. h m		I8000γ+	G.M.T. h m	I8000γ+	I8000γ+	G.M.T. h m	γ	42000γ+	G.M.T. h m	42000γ+	42000γ+	G.M.T. h m	γ			
1	36.7	15 40	41.8	29.9	21 0	11.9	533	6 40	563	493	15 15	70	967	18 50	981	954	9 10	27			
2	36.6	3 41	44.2	33.6	5 50	10.6	539	4 10	549	527	1 0	22	966	21 33	972	954	4 21	18			
3**	36.0	12 31	40.3	22.1	23 0	18.2	532	23 20	615	508	22 47	107	968	16 42	978	941	24 0	37			
4**	34.8	5 59	43.1	16.1	1 32	27.0	505	0 10	564	438	13 59	126	968	14 30	1006	897	2 0	109			
5	36.3	3 44	41.5	27.3	18 14	14.2	520	4 1	544	464	17 58	80	974	18 40	995	960	4 24	35			
6	36.1	12 24	39.1	33.7	21 40	5.4	522	11 4	533	507	15 20	26	977	15 40	985	970	7 50	15			
7	36.6	13 10	40.3	27.8	18 44	12.5	527	19 0	554	505	10 56	49	975	18 58	985	967	7 30	18			
8	36.8	12 12	39.9	33.2	20 60	6.7	532	5 49	546	515	15 22	31	973	16 0	983	968	11 53	15			
9*	36.7	12 57	39.4	33.5	23 21	5.9	532	23 16	546	520	10 20	26	973	16 44	979	966	9 17	13			
10	36.6	13 24	39.4	32.4	21 30	7.0	532	21 33	544	518	18 10	26	975	18 19	984	967	0 20	17			
11	37.2	13 20	41.6	34.1	20 14	7.5	533	13 28	551	514	15 58	37	973	19 38	982	960	11 50	22			
12	36.7	15 40	40.8	34.7	22 40	6.1	536	12 21	548	523	15 11	25	974	17 30	979	968	23 46	11			
13	36.5	12 24	38.7	32.2	21 40	6.5	538	6 54	549	526	21 30	23	970	22 10	978	963	10 21	15			
14	36.2	12 54	38.3	29.8	20 36	8.5	537	23 28	549	526	22 55	23	970	23 19	978	965	12 56	13			
15	36.6	14 30	40.8	30.9	0 0	9.9	534	7 30	549	519	17 40	30	971	19 39	980	963	13 22	17			
16*	36.6	11 57	39.0	34.9	0 40	4.1	536	20 3	539	526	1 49	13	971	15 7	975	965	11 21	10			
17*	36.3	11 43	38.7	34.1	23 16	4.6	536	23 1	545	530	15 40	15	971	14 20	977	965	9 40	12			
18	36.0	12 58	38.8	27.1	21 38	11.7	535	21 40	547	525	11 37	22	969	22 19	977	966	17 52	11			
19	35.9	12 57	39.2	32.6	2 5	6.6	539	6 41	560	521	14 17	39	968	14 48	975	958	6 50	17			
20	36.3	13 10	39.3	34.2	20 14	5.1	537	2 34	550	526	2 10	24	968	18 3	973	960	2 48	13			
21	36.7	12 30	42.4	29.4	18 37	13.0	530	18 52	546	496	16 44	50	971	18 50	987	958	11 40	29			
22	36.0	12 31	39.4	32.9	22 4	6.5	533	22 10	571	517	8 33	54	970	14 49	977	958	22 55	19			
23*	35.9	12 48	39.3	33.6	2 4	5.7	534	1 50	544	520	9 26	24	969	13 34	977	964	0 17	13			
24**	36.3	16 47	42.2	30.8	23 10	11.4	531	21 59	552	480	16 43	72	970	17 44	988	959	11 31	29			
25	35.9	1 10	41.7	25.0	20 11	16.7	527	20 21	559	505	19 57	54	972	20 12	984	959	1 30	25			
26	35.5	13 15	38.3	32.3	3 2	6.0	530	4 14	554	509	11 49	45	970	16 30	977	961	9 49	16			
27*	36.1	13 0	39.3	33.7	23 44	5.6	533	14 47	539	518	16 54	21	969	17 44	977	959	11 58	18			
28	35.8	12 58	39.0	33.9	23 49	5.1	534	20 10	542	518	10 55	24	968	18 13	975	961	0 52	14			
29**																					

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

“ All ” Days.

DECLINATION WEST.

Table with columns for Month and Season, 1934, Greenwich Mean Time (0-11), Hour commencing (Noon-23), and values for Declination West.

INCLINATION.

Table with columns for Month and Season, 1934, Greenwich Mean Time (0-11), Hour commencing (Noon-23), and values for Inclination.

HORIZONTAL INTENSITY.

Table with columns for Month and Season, 1934, Greenwich Mean Time (0-11), Hour commencing (Noon-23), and values for Horizontal Intensity.

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

“ All ” Days.

NORTH COMPONENT.

Month and Season, 1934.	Greenwich Mean Time. Hour commencing—																							
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
Jan.	+ 0.2	- 1.1	- 0.1	+ 0.2	+ 2.2	+ 6.1	+ 7.8	+ 7.3	+ 4.2	- 0.8	- 4.1	- 6.3	- 4.3	- 0.6	+ 1.9	+ 2.2	- 0.7	- 5.0	- 4.5	- 2.8	- 0.8	- 2.2	- 0.2	+ 1.4
Feb.	+ 2.9	+ 2.9	+ 2.7	+ 2.8	+ 4.2	+ 6.4	+ 8.2	+ 8.5	+ 6.9	+ 2.4	- 3.0	- 7.5	- 9.3	- 8.1	- 7.8	- 6.0	- 6.4	- 4.5	- 2.7	- 0.2	+ 0.5	+ 1.4	+ 3.8	+ 1.8
Mar.	+ 8.7	+ 4.8	+ 1.9	+ 2.5	+ 5.0	+ 6.7	+ 8.1	+ 5.3	- 0.4	- 5.7	- 12.9	- 15.3	- 15.6	- 12.4	- 7.9	- 5.3	- 3.2	+ 0.1	+ 2.0	+ 3.7	+ 2.4	+ 9.1	+ 9.2	+ 9.0
Apr.	+ 7.5	+ 6.0	+ 5.1	+ 3.1	+ 4.2	+ 5.7	+ 6.2	+ 3.0	- 2.6	- 12.4	- 19.1	- 21.0	- 18.0	- 14.9	- 8.9	- 3.3	+ 0.6	+ 4.1	+ 9.1	+ 9.1	+ 9.0	+ 8.9	+ 9.4	+ 8.8
May	+ 6.7	+ 7.2	+ 6.7	+ 5.3	+ 6.2	+ 2.8	- 1.2	- 4.6	- 7.5	- 10.6	- 15.1	- 17.0	- 18.0	- 15.8	- 10.5	- 5.7	+ 1.1	+ 9.5	+ 12.7	+ 11.2	+ 10.6	+ 9.0	+ 8.2	+ 9.6
June	+ 6.7	+ 6.1	+ 4.9	+ 3.8	+ 7.0	+ 5.0	+ 1.4	- 3.2	- 7.5	- 13.1	- 18.4	- 20.2	- 19.0	- 14.5	- 8.4	- 3.7	+ 3.3	+ 8.4	+ 11.9	+ 13.3	+ 11.3	+ 9.1	+ 9.0	+ 7.7
July	+ 9.4	+ 7.9	+ 7.7	+ 7.4	+ 9.3	+ 8.9	+ 6.3	- 0.6	- 9.5	- 18.0	- 22.7	- 23.0	- 19.5	- 17.0	- 10.3	- 3.6	+ 0.3	+ 6.7	+ 10.4	+ 11.7	+ 11.0	+ 10.1	+ 9.2	+ 8.9
Aug.	+ 9.8	+ 8.5	+ 8.1	+ 8.2	+ 8.3	+ 7.1	+ 1.8	- 4.1	- 14.4	- 21.1	- 24.4	- 24.9	- 22.0	- 15.3	- 8.1	- 3.5	+ 1.1	+ 7.1	+ 13.0	+ 12.9	+ 13.8	+ 12.7	+ 14.2	+ 11.6
Sept.	+ 10.7	+ 9.5	+ 8.0	+ 8.9	+ 6.8	+ 6.8	+ 5.3	- 2.4	- 9.2	- 15.0	- 21.6	- 21.8	- 17.7	- 10.1	- 8.2	- 6.9	- 5.1	+ 1.3	+ 7.3	+ 9.0	+ 9.0	+ 10.3	+ 13.4	+ 10.7
Oct.	+ 5.6	+ 5.4	+ 6.5	+ 6.9	+ 9.3	+ 10.9	+ 10.3	+ 8.9	+ 2.9	- 7.3	- 16.0	- 18.3	- 15.7	- 13.1	- 10.6	- 9.2	- 6.0	- 2.3	- 0.5	+ 3.9	+ 6.0	+ 7.7	+ 8.6	+ 7.8
Nov.	+ 3.2	+ 1.9	+ 2.4	+ 3.7	+ 5.4	+ 7.6	+ 7.6	+ 7.4	+ 2.9	- 3.8	- 8.7	- 13.1	- 10.2	- 6.9	- 4.4	- 3.9	- 3.3	- 1.9	- 0.4	+ 0.3	+ 3.8	+ 2.3	+ 4.3	+ 4.3
Dec.	+ 2.7	+ 1.7	- 0.2	+ 0.7	+ 3.5	+ 5.6	+ 5.9	+ 5.2	+ 2.5	- 2.0	- 4.8	- 5.4	- 4.3	- 5.1	- 3.8	- 4.5	- 4.3	- 3.4	- 1.2	+ 0.8	+ 1.9	+ 1.5	+ 2.4	+ 4.5
Year	+ 6.2	+ 5.1	+ 4.5	+ 4.5	+ 6.0	+ 6.6	+ 5.6	+ 2.6	- 2.6	- 9.0	- 14.2	- 16.2	- 14.5	- 11.2	- 7.3	- 4.5	- 1.9	+ 1.7	+ 4.8	+ 6.1	+ 6.5	+ 6.7	+ 7.6	+ 7.2
Winter	+ 2.3	+ 1.4	+ 1.2	+ 1.9	+ 3.8	+ 6.4	+ 7.4	+ 7.1	+ 4.1	- 1.1	- 5.2	- 8.1	- 7.0	- 5.2	- 3.5	- 3.1	- 3.7	- 3.7	- 2.2	- 0.5	+ 1.4	+ 0.8	+ 2.6	+ 3.0
Equinox	+ 8.1	+ 6.4	+ 5.4	+ 5.4	+ 6.3	+ 7.5	+ 7.5	+ 3.7	- 2.3	- 10.1	- 17.4	- 19.1	- 16.8	- 12.6	- 8.9	- 6.2	- 3.4	+ 0.8	+ 4.5	+ 6.4	+ 6.6	+ 9.0	+ 10.2	+ 9.1
Summer	+ 8.2	+ 7.4	+ 6.9	+ 6.2	+ 7.7	+ 6.0	+ 2.1	- 3.1	- 9.7	- 15.7	- 20.2	- 21.3	- 19.6	- 15.7	- 9.3	- 4.1	+ 1.5	+ 7.9	+ 12.0	+ 12.3	+ 11.7	+ 10.2	+ 10.2	+ 9.5

WEST COMPONENT.

Jan.	- 6.8	- 2.4	- 0.7	- 0.6	+ 1.5	+ 1.1	+ 0.4	- 2.0	- 4.4	- 2.5	+ 3.3	+ 8.1	+ 14.3	+ 15.8	+ 9.9	+ 6.1	+ 3.6	+ 0.6	- 0.8	- 4.6	- 8.1	- 10.2	- 11.7	- 9.9
Feb.	- 7.8	- 5.0	- 3.9	- 0.8	- 1.7	- 2.2	- 1.4	- 2.0	- 5.1	- 5.8	- 1.2	+ 7.7	+ 13.7	+ 17.3	+ 16.3	+ 11.1	+ 7.3	+ 2.9	- 2.1	- 2.7	- 5.2	- 10.6	- 9.7	- 9.4
Mar.	- 7.3	- 8.1	- 5.7	- 4.8	- 5.0	- 5.2	- 4.7	- 8.1	- 9.9	- 8.4	- 0.4	+ 12.1	+ 22.0	+ 26.0	+ 21.6	+ 15.5	+ 7.7	+ 4.7	- 0.8	- 4.9	- 10.3	- 11.9	- 7.1	- 7.4
Apr.	- 3.5	- 2.7	- 4.6	- 5.2	- 6.0	- 7.8	- 11.0	- 18.6	- 21.2	- 15.4	- 2.6	+ 13.5	+ 22.8	+ 26.4	+ 24.2	+ 16.1	+ 9.8	+ 3.3	- 2.2	- 3.8	- 3.4	- 4.0	- 5.2	- 6.0
May	- 5.3	- 4.7	- 5.8	- 7.8	- 11.9	- 15.4	- 18.6	- 20.8	- 18.8	- 11.3	+ 0.9	+ 14.7	+ 22.5	+ 23.2	+ 21.3	+ 16.4	+ 12.0	+ 8.8	+ 4.4	+ 1.9	+ 1.2	+ 0.4	- 2.8	- 4.1
June	- 2.5	- 6.0	- 7.4	- 8.4	- 13.8	- 19.8	- 22.9	- 26.0	- 25.8	- 17.8	- 4.2	+ 10.5	+ 20.2	+ 24.7	+ 25.5	+ 21.6	+ 17.6	+ 12.9	+ 9.4	+ 5.3	+ 3.5	+ 1.9	+ 1.9	- 1.0
July	- 1.5	- 4.2	- 6.0	- 8.0	- 13.6	- 19.1	- 21.6	- 24.8	- 26.0	- 19.0	- 7.9	+ 7.7	+ 21.4	+ 28.6	+ 29.4	+ 23.9	+ 16.1	+ 10.2	+ 5.9	+ 4.1	+ 3.2	+ 2.3	+ 1.0	- 1.2
Aug.	- 6.5	- 4.0	- 2.6	- 6.3	- 8.3	- 12.1	- 17.7	- 20.5	- 19.8	- 11.9	- 0.3	+ 13.8	+ 24.9	+ 29.1	+ 26.3	+ 17.8	+ 10.4	+ 5.8	+ 2.0	+ 0.8	- 0.6	- 5.4	- 6.8	- 7.9
Sept.	- 5.0	- 4.6	- 7.0	- 7.9	- 7.9	- 6.1	- 10.4	- 14.3	- 14.0	- 5.2	+ 7.5	+ 21.0	+ 25.4	+ 24.2	+ 17.9	+ 10.8	+ 3.9	- 0.2	- 1.7	- 3.1	- 4.5	- 4.2	- 8.1	- 7.6
Oct.	- 5.2	- 1.6	- 1.2	- 1.6	- 0.5	- 0.6	- 2.2	- 8.3	- 12.9	- 12.2	- 3.3	+ 9.5	+ 19.1	+ 21.7	+ 17.5	+ 10.4	+ 4.3	- 0.1	- 2.7	- 4.0	- 5.9	- 9.6	- 8.5	- 6.0
Nov.	- 4.1	- 1.6	+ 0.2	+ 0.9	+ 0.8	- 0.4	- 2.4	- 5.0	- 7.5	- 5.3	+ 2.0	+ 10.8	+ 15.9	+ 14.5	+ 9.7	+ 5.6	+ 2.3	+ 0.6	- 2.0	- 4.5	- 8.2	- 8.4	- 8.2	- 5.5
Dec.	- 5.9	- 3.8	- 3.3	+ 1.0	+ 1.6	+ 1.1	+ 1.9	+ 0.8	- 0.6	- 0.1	+ 4.7	+ 8.5	+ 12.7	+ 10.9	+ 7.7	+ 6.2	+ 4.1	- 0.3	- 4.2	- 6.2	- 10.9	- 9.5	- 8.2	- 7.6
Year	- 5.1	- 4.1	- 4.0	- 4.1	- 5.4	- 7.2	- 9.2	- 12.5	- 13.8	- 9.6	- 0.1	+ 11.5	+ 19.9	+ 22.1	+ 18.9	+ 13.5	+ 8.3	+ 4.1	+ 0.4	- 1.8	- 4.1	- 5.8	- 6.1	- 6.1
Winter	- 6.2	- 3.2	- 1.9	+ 0.1	+ 0.6	- 0.1	- 0.4	- 2.1	- 4.4	- 3.4	+ 2.2	+ 8.8	+ 14.2	+ 14.6	+ 10.9	+ 7.3	+ 4.3	+ 1.0	- 2.3	- 4.5	- 8.1	- 9.7	- 9.5	- 8.1
Equinox	- 5.3	- 4.3	- 4.6	- 4.9	- 4.9	- 4.9	- 7.1	- 12.3	- 14.5	- 10.3	+ 0.3	+ 14.0	+ 23.3	+ 25.3	+ 20.3	+ 13.2	+ 6.4	+ 1.9	- 1.9	- 4.0	- 6.0	- 7.4	- 7.2	- 6.8
Summer	- 4.0	- 4.7	- 5.5	- 7.6	- 11.9	- 16.6	- 20.2	- 23.0	- 22.6	- 15.0	- 2.9	+ 11.7	+ 22.3	+ 26.4	+ 25.6	+ 19.9	+ 14.0	+ 9.4	+ 5.4	+ 3.0	+ 1.8	- 0.2	- 1.7	- 3.6

VERTICAL COMPONENT.

Jan.	- 0.3	- 1.5	- 1.9	- 1.9	- 1.8	- 0.8	- 1.8	- 1.6	- 1.6	- 3.1	- 3.4	- 3.9	- 3.8	- 0.7	+ 1.7	+ 1.6	+ 1.8	+ 2.9	+ 4.6	+ 4.2	+ 3.9	+ 3.4	+ 3.4	+ 1.4
Feb.	+ 0.6	- 1.1	- 2.0	- 2.4	- 2.8	- 1.7	- 2.6	- 2.6	- 2.2	- 4.5	- 7.3	- 8.1	- 6.4	- 3.5	+ 0.7	+ 3.9	+ 5.8	+ 6.9	+ 7.1	+ 6.3	+ 5.9	+ 5.1	+ 3.4	+ 1.7
Mar.	- 2.5	- 3.9	- 2.8	- 2.0	- 1.8	- 1.5	- 1.5	- 1.1	- 1.7	- 5.0	- 7.8	- 10.4	- 8.7	- 4.1	+ 1.2	+ 5.9	+ 8.5	+ 8.2	+ 8.2	+ 8.0	+ 7.9	+ 6.3	+ 2.0	- 0.7
Apr.	+ 1.5	+ 0.4	+ 0.5	+ 1.0	+ 1.5	+ 1.9	+ 2.0	+ 1.5	- 1.6	- 7.4	- 13.0	- 16.6	- 15.5	- 9.7	- 1.9	+ 3.8	+ 7.4	+ 9.2	+ 9.3	+ 7.8	+ 5.9	+ 4.9	+ 4.0	+ 2.7
May	+ 2.2	+ 1.5	+ 1.6	+ 2.2	+ 4.3	+ 4.1	+ 3.4	+ 1.4	- 2.3	- 8.2	- 14.0	- 16.2	- 13.5	- 7.6	- 0.8	+ 4.2	+ 8.5	+ 12.2	+ 12.7	+ 11.4	+ 9.2	+ 7.3	+ 6.1	+ 3.8
June	+ 0.4	+ 0.1	+ 0.4	+ 0.8	+ 1.9	+ 2.2	+ 1.8	+ 0.9	- 1.6	- 6.5	- 12.3	- 15.3	- 13.0	- 8.4	- 2.6	+ 2.2	+ 6.2	+ 8.6	+ 9.8	+ 9.2	+ 7.0	+ 5.1	+ 2.7	+ 1.3
July	+ 1.2	+ 0.3	- 0.3	+ 0.1	+ 2.3	+ 1.5	- 0.0	+ 0.2	- 1.8	- 5.3	- 9.7	- 14.5	- 13.3	- 8.5	- 2.3	+ 2.7	+ 6.3	+ 9.2	+ 9.4	+ 7.9	+ 5.7	+ 3.9	+ 2.8	+ 2.3
Aug.	- 1.6	- 1.9	- 2.7	- 2.4	+ 0.2	+ 0.2	+ 1.2	+ 1.1	- 1.7	- 5.4	- 9.7	- 12.6	- 11.6	- 5.7	+ 1.7	+ 7.4	+ 9.4	+ 9.6	+ 9.0	+ 6.6	+ 5.0	+ 3.4	+ 1.6	- 1.2
Sept.	- 1.9	- 3.5	- 3.4	- 2.2	- 0.8	- 1.1	- 0.2	- 0.0	- 1.8	- 6.3	- 10.7	- 11.2	- 8.0	- 3.2	+ 2.2	+ 7.4	+ 9.6	+ 10.2	+ 8.2	+ 6.7	+ 5.1	+ 4.2	+ 1.5	- 0.2
Oct.	- 0.3	- 0.9	- 1.7	- 1.8	- 1.8	- 1.6	- 1.7	- 0.9	- 0.6	- 3.6	- 6.8	- 8.2	- 6.3	- 3.1	+ 1.7	+ 5.5	+ 6.7	+ 6.4	+ 6.1	+ 5.1	+ 4.1	+ 2.4	+ 1.5	+ 0.2
Nov.	- 1.1	- 1.6	- 2.0	- 2.2	- 2.4	- 1.6	- 2.0	- 1.7	- 1.5	- 3.3	- 5.0	- 4.8	- 2.2	+ 0.9	+ 3.6	+ 3.7	+ 4.3	+ 4.5	+ 4.3	+ 4.0	+ 3.3	+ 2.3	+ 1.5	- 0.0
Dec.	- 2.2	- 4.0	- 4.2	- 3.7	- 3.9	- 2.8	- 3.2	- 2.2	- 1.6	- 2.0	- 1.9	- 2.2	- 1.1	+ 1.6	+ 3.9	+ 3.6	+ 3.9	+ 5.0	+ 6.1	+ 4.1	+ 3.8	+ 2.7	+ 1.3	- 0.4
Year	- 0.3	- 1.3	- 1.5	- 1.2	- 0.4	- 0.1	- 0.4	- 0.4	- 1.7	- 5.1	- 8.5	- 10.3	- 8.6	- 4.3	+ 0.8	+ 4.3	+ 6.5	+ 7.7	+ 7.9	+ 6.8	+ 5.6	+ 4.3	+ 2.7	+ 0.9
Winter	- 0.8	- 2.1	- 2.5	- 2.6	- 2.7	- 1.7	- 2.4	- 2.0	- 1.7	- 3.2	- 4.4	- 4.8	- 3.4	- 0.4	+ 2.5	+ 3.2	+ 4.0	+ 4.8	+ 5.5	+ 4.7	+ 4.2	+ 3.4	+ 2.4	+ 0.7
Equinox	- 0.8	- 2.0	- 1.9	- 1.3	- 0.7	- 0.6	- 0.4	- 0.1	- 1.4	- 5.6	- 9.6	- 11.6	- 9.6	- 5.0	+ 0.8	+ 5.7	+ 8.1	+ 8.5	+ 8.0	+ 6.9	+ 5.8	+ 4.5	+ 2.3	+ 0.5
Summer	+ 0.6	- 0.0	- 0.3	+ 0.2	+ 2.2	+ 2.0	+ 1.6	+ 0.9	- 1.9	- 6.4	- 11.4	- 14.7	- 12.9	- 7.6	- 1.0	+ 4.1	+ 7.6	+ 9.9	+ 10.2	+ 8.8	+ 6.7	+ 4.9	+ 3.3	+ 1.6

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

International Quiet Days.

DECLINATION WEST.

Table with columns for Month and Season, 1934, and Greenwich Mean Time (0-23). Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer.

INCLINATION.

Table with columns for Month and Season, 1934, and Greenwich Mean Time (0-23). Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer.

HORIZONTAL INTENSITY.

Table with columns for Month and Season, 1934, and Greenwich Mean Time (0-23). Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer.

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

International Quiet Days.

NORTH COMPONENT.

Month and Season, 1934.	Greenwich Mean Time. Hour commencing—																							
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
Jan.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Feb.	-2.3	-3.4	-3.0	-1.6	+1.2	+4.4	+5.8	+6.4	+4.5	+2.1	-1.3	-5.9	-4.2	-0.5	+2.0	+1.3	-0.3	-1.4	+0.8	-0.9	+0.4	-0.2	-0.7	-1.5
Mar.	+0.2	-0.9	-0.9	+0.4	+2.8	+4.4	+5.7	+5.9	+5.8	+0.6	-4.1	-8.3	-10.6	-9.1	-6.1	-3.3	-1.8	+0.5	+2.6	+3.5	+3.6	+2.8	+4.0	+3.4
Apr.	+3.3	+1.0	+2.0	+1.8	+3.7	+5.4	+5.6	+5.1	+1.6	-6.5	-12.5	-14.5	-10.4	-6.3	-4.7	-3.5	-0.5	-0.7	+2.1	+3.3	+5.0	+5.2	+6.5	+8.5
May	+4.2	+4.4	+3.4	+2.2	+2.5	+3.1	+2.8	-1.1	-7.7	-16.7	-22.0	-16.7	-11.7	-8.3	-3.6	-0.9	+3.0	+6.9	+8.1	+9.0	+8.3	+7.9	+10.0	+8.4
June	+5.2	+5.6	+4.2	+3.6	+3.0	+0.5	-3.9	-6.5	-9.6	-12.2	-14.6	-14.4	-13.0	-9.0	-4.8	-0.9	+2.7	+7.1	+9.8	+11.0	+10.3	+8.8	+8.2	+7.2
July	+3.2	+2.9	+3.3	+3.6	+5.8	+4.3	+0.9	-3.1	-9.5	-17.0	-18.7	-18.5	-15.3	-10.0	-3.1	+1.3	+3.1	+7.4	+11.0	+11.9	+10.9	+9.5	+8.4	+7.6
Aug.	+6.7	+5.9	+5.9	+6.3	+9.7	+9.9	+7.5	+3.6	-5.8	-15.8	-23.0	-24.0	-20.6	-16.3	-12.0	-5.6	+0.7	+5.1	+10.8	+13.7	+12.6	+10.8	+8.4	+7.4
Sept.	+6.2	+5.9	+6.6	+6.8	+5.0	+3.6	+1.3	-4.5	-10.1	-16.7	-19.9	-19.2	-17.0	-11.7	-6.7	-3.6	-0.5	+4.3	+10.3	+14.5	+11.9	+11.5	+11.8	+11.5
Oct.	+7.6	+6.8	+6.2	+6.0	+4.4	+2.4	+0.6	-4.4	-12.0	-20.3	-22.6	-19.0	-12.9	-6.3	-2.8	-1.4	+2.6	+6.8	+9.5	+10.1	+9.6	+9.2	+10.0	+10.5
Nov.	+4.5	+3.6	+3.7	+3.6	+4.9	+6.3	+5.5	+3.5	-0.3	-7.9	-14.3	-17.1	-14.7	-8.5	-4.0	-1.8	+0.1	+2.5	+5.0	+6.3	+7.1	+6.8	+6.4	+6.3
Dec.	+1.4	+0.5	+0.2	+1.9	+2.6	+4.5	+4.1	+3.1	-0.0	-6.2	-9.1	-10.3	-7.8	-4.8	-1.2	-0.3	+0.5	+1.4	+3.6	+3.5	+3.4	+2.9	+2.7	+3.0
Year	-2.5	-2.0	-1.4	-1.0	+0.9	+3.3	+3.8	+2.7	+1.6	-2.4	-3.8	-4.5	-3.1	-0.6	+0.2	-1.4	-2.2	0.0	+0.9	+2.1	+2.5	+1.6	+1.0	+2.4
Winter	+3.1	+2.5	+2.5	+2.8	+3.9	+4.3	+3.3	+0.9	-3.5	-9.9	-13.8	-14.4	-11.8	-7.6	-3.9	-1.7	+0.6	+3.3	+6.2	+7.3	+7.1	+6.4	+6.4	+6.2
Equinox	-0.8	-1.5	-1.3	-0.1	+1.9	+4.2	+4.9	+4.5	+3.0	-1.5	-4.6	-7.3	-6.4	-3.8	-1.3	-0.9	-1.0	+0.1	+2.0	+2.1	+2.5	+1.8	+1.8	+1.8
Summer	+4.9	+4.0	+3.8	+3.4	+3.9	+4.3	+3.6	+0.8	-4.6	-12.9	-17.9	-16.8	-12.4	-7.4	-3.8	-1.9	+1.3	+3.9	+6.2	+7.2	+7.5	+7.3	+8.2	+8.4
Year	+5.3	+5.1	+5.0	+5.1	+5.9	+4.6	+1.5	-2.6	-8.8	-15.4	-19.1	-19.0	-16.5	-11.8	-6.7	-2.2	+1.5	+6.0	+10.5	+12.8	+11.4	+10.2	+9.2	+8.4

WEST COMPONENT.

Jan.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Feb.	-4.2	-1.1	+0.2	+0.2	+0.6	-0.2	-1.0	-3.5	-4.6	-1.6	+2.9	+4.4	+9.5	+10.4	+5.5	+3.3	+2.9	+1.4	-1.5	-2.8	-3.1	-6.4	-6.8	-5.2
Mar.	-6.5	-3.6	-0.5	-1.0	-1.7	-3.4	-3.7	-4.7	-8.0	-9.6	-3.0	+5.1	+11.6	+15.1	+13.3	+8.1	+2.9	+3.4	+2.4	+0.8	-0.5	-5.5	-5.2	-5.2
Apr.	-7.6	-4.5	-5.0	-3.9	-6.4	-7.6	-7.7	-11.0	-17.8	-16.0	-3.2	+11.1	+22.7	+25.5	+20.7	+12.3	+5.0	+1.9	+1.2	+0.3	-2.6	-3.0	-2.3	-2.0
May	-2.6	-3.2	-4.5	-5.6	-7.1	-9.9	-14.9	-21.1	-22.5	-15.8	-2.6	+16.2	+28.2	+26.8	+19.9	+11.8	+5.1	+2.0	+1.4	+1.1	-0.8	-0.5	-1.1	-4.0
June	-0.6	-0.5	-1.4	-3.6	-9.5	-15.0	-21.0	-23.5	-20.2	-12.8	-0.7	+13.8	+21.6	+22.1	+17.6	+12.1	+7.7	+4.9	+3.7	+3.3	+1.4	+1.1	-0.1	-0.4
July	-1.1	-2.4	-4.2	-6.8	-11.6	-17.9	-23.1	-27.3	-28.1	-20.4	-6.6	+7.6	+17.6	+20.7	+20.9	+16.5	+12.1	+9.9	+10.2	+10.1	+9.1	+7.8	+5.2	+1.2
Aug.	-2.6	-2.5	-5.7	-7.3	-12.2	-17.8	-21.1	-24.5	-26.7	-20.9	-8.4	+8.0	+19.9	+27.5	+27.8	+21.4	+14.2	+7.9	+5.2	+4.0	+4.0	+5.2	+3.0	+1.7
Sept.	-2.2	-2.8	-3.0	-5.9	-8.9	-13.1	-16.7	-21.0	-20.1	-14.7	-3.7	+10.4	+22.1	+26.3	+23.7	+16.2	+9.2	+4.1	+2.6	+0.2	-1.3	-0.2	+0.1	-2.2
Oct.	-3.2	-3.2	-4.9	-6.8	-9.3	-11.3	-16.2	-20.8	-19.4	-9.3	+8.1	+22.8	+28.0	+26.0	+17.2	+5.8	+0.3	+0.7	+2.6	+2.3	+3.1	-0.9	-4.0	-5.9
Nov.	-3.7	-2.3	-1.8	-1.3	-1.8	-3.6	-5.7	-11.5	-16.2	-14.8	-2.8	+11.3	+20.2	+22.8	+16.8	+8.4	+2.2	+1.8	+0.4	-1.7	-2.6	-3.1	-3.9	-4.5
Dec.	-3.7	-1.4	-0.8	-0.3	-0.9	-1.7	-3.0	-6.9	-9.6	-7.4	+0.2	+8.9	+14.7	+13.8	+7.6	+4.2	+2.4	+1.3	-0.3	-1.8	-3.4	-4.0	-4.0	-4.2
Year	-2.8	-2.2	-1.0	-1.0	-0.2	-0.3	-1.5	-3.3	-2.6	-1.2	+3.2	+6.7	+9.0	+8.5	+4.9	+2.9	+1.8	+1.0	+0.4	-2.2	-3.9	-4.7	-5.9	-6.7
Winter	-3.4	-2.5	-2.7	-3.6	-5.8	-8.5	-11.3	-14.9	-16.3	-12.0	-1.4	+10.5	+18.8	+20.5	+16.3	+10.3	+5.5	+3.4	+2.4	+1.1	-0.1	-1.2	-2.1	-3.1
Equinox	-4.3	-2.1	-0.5	-0.5	-0.6	-1.4	-2.3	-4.6	-6.2	-5.0	+0.8	+6.3	+11.2	+12.0	+7.8	+4.6	+2.5	+1.8	+0.3	-1.5	-2.7	-5.2	-5.5	-5.3
Summer	-4.3	-3.3	-4.1	-4.4	-6.2	-8.1	-11.1	-16.1	-19.0	-14.0	-0.1	+15.4	+24.8	+25.3	+18.7	+9.6	+3.2	+1.6	+1.4	+0.5	-1.2	-1.9	-2.8	-4.1
Year	-1.6	-2.1	-3.6	-5.9	-10.6	-16.0	-20.5	-24.1	-23.8	-19.7	-4.9	+10.0	+20.3	+24.2	+22.5	+16.6	+10.8	+6.7	+5.4	+4.4	+3.6	+3.5	+2.1	+0.1

VERTICAL COMPONENT.

Jan.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Feb.	-0.8	-1.2	-1.6	-1.6	-1.6	+0.4	-1.2	-1.2	-0.6	-1.8	-1.8	-2.2	-2.8	+0.8	+2.4	+1.6	+0.8	+1.2	+1.8	+2.0	+2.2	+1.6	+2.0	+1.0
Mar.	+1.5	+0.5	+0.3	+0.1	+0.3	+1.1	-0.1	-0.3	+0.7	-2.5	-4.9	-6.7	-6.5	-3.7	+0.5	+2.9	+3.5	+3.1	+2.5	+2.1	+1.9	+1.3	+1.3	+1.5
Apr.	+1.0	+0.4	0.0	-0.2	-0.2	+0.4	0.0	+1.4	+0.6	-3.8	-8.2	-10.4	-8.6	-4.8	+1.4	+4.8	+5.8	+3.8	+3.6	+3.0	+2.8	+2.4	+2.6	+1.8
May	+3.8	+3.6	+3.6	+3.6	+4.4	+5.0	+5.0	+4.0	-0.6	-8.4	-15.2	-18.2	-16.0	-10.0	-2.0	+2.4	+5.6	+6.2	+5.4	+4.8	+4.4	+3.8	+2.8	+2.4
June	+4.4	+4.6	+4.2	+4.6	+6.4	+6.2	+4.6	+1.8	-2.8	-8.4	-14.8	-17.2	-15.4	-8.0	-2.8	+1.2	+4.2	+5.8	+6.4	+5.0	+3.8	+2.6	+2.0	+2.2
July	+2.3	+2.3	+1.7	+2.7	+5.3	+5.3	+5.1	+3.5	-0.3	-5.9	-11.7	-13.7	-11.5	-7.3	-4.1	+0.1	+2.5	+4.5	+4.7	+4.1	+3.5	+2.7	+1.5	+1.5
Aug.	+1.3	+0.7	+0.5	+1.1	+4.3	+3.5	+2.1	+2.5	-0.1	-4.5	-7.5	-11.9	-12.1	-10.3	-4.9	-0.1	+3.3	+6.9	+7.1	+5.7	+4.9	+2.9	+2.7	+2.3
Sept.	+1.0	+1.2	+1.4	+1.4	+2.8	+2.6	+3.0	+3.6	+0.6	-3.2	-8.2	-11.4	-11.6	-5.8	+0.4	+4.4	+4.8	+5.6	+4.2	+2.4	+1.0	+0.6	-0.2	-0.2
Oct.	+2.0	+2.4	+2.0	+2.8	+3.4	+3.0	+3.4	+2.6	-1.2	-6.0	-10.6	-12.8	-9.6	-4.0	0.0	+3.8	+4.8	+3.2	+2.4	+2.0	+2.0	+1.8	+2.0	+1.8
Nov.	+1.2	+1.0	+0.6	+0.6	+0.6	+1.0	+1.6	+2.4	+1.4	-1.8	-5.4	-8.2	-7.2	-3.4	+1.2	+4.6	+4.0	+2.4	+1.6	+0.6	0.4	0.0	+0.4	+0.6
Dec.	+1.6	+1.2	+0.8	+0.4	0.0	+0.8	0.0	+0.4	-1.4	-3.6	-5.4	-5.0	-2.4	+0.8	+3.8	+3.6	+2.8	+2.2	+1.8	+1.0	+0.8	+0.6	+0.4	+0.6
Year	-0.6	-0.8	-1.6	-1.4	-1.2	-0.6	-1.2	-1.0	-0.8	-1.4	-1.4	-1.8	-0.6	+2.0	+3.0	+2.4	+2.0	+2.0	+1.2	+1.0	+0.6	+0.2	-0.6	-1.4
Winter	+1.6	+1.3	+1.0	+1.2	+2.0	+2.4	+1.9	+1.6	-0.4	-4.3	-7.9	-10.0	-8.7	-4.5	-0.1	+2.6	+3.7	+3.9	+3.6	+2.8	+2.4	+1.7	+1.4	+1.2
Equinox	+0.4	-0.1	-0.5	-0.6	-0.6	+0.4	-0.6	-0.7	-0.5	-2.3	-3.4	-3.9	-3.1	-0.0	+2.4	+2.6	+2.3	+2.1	+1.8	+1.5	+1.4	+0.9	+0.8	+0.4
Summer	+2.0	+1.9	+1.6	+1.7	+2.1	+2.4	+2.5	+2.6	+0.1	-5.0	-9.9	-12.4	-10.4	-5.6	+0.2	+3.9	+5.1	+3.9	+3.3	+2.6	+2.4	+2.0	+2.0	+1.7
Year	+2.3	+2.2	+2.0	+2.5	+4.7	+4.4	+3.7	+2.9	-0.7	-5.5	-10.6	-13.6	-12.7	-7.9	-2.9	+1.4	+3.7	+5.7	+5.6	+4.3	+3.3	+2.2	+1.5	+1.5



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 (1934), Greenwich Mean 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 (1934) and values for Inclination. Rows include monthly data (Jan-Dec), Year, Winter, Equinox, and Summer.

HORIZONTAL INTENSITY.

Table with columns for Month and Season (1934) and values for Horizontal Intensity. 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, 1934.	Greenwich Mean Time. Hour commencing—																							
	0.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	Noon.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
Jan.	+2.7	+3.7	+6.4	+7.5	+6.2	+11.7	+15.7	+15.8	+10.4	+2.1	-2.9	-6.7	-4.2	+0.8	-1.2	+2.3	-2.8	-17.5	-18.2	-9.7	-5.1	-10.2	-4.1	-3.5
Feb.	+6.2	+11.9	+9.5	+6.7	+11.3	+12.1	+13.9	+11.9	+7.7	+4.0	+1.8	+1.5	-4.5	-7.4	-18.0	-21.4	-18.0	-16.4	-9.2	-1.9	-0.5	+1.6	-0.8	-1.7
Mar.	+12.3	+11.4	+4.9	+7.9	+11.0	+11.0	+14.1	+3.5	-13.6	-10.8	-20.0	-14.9	-19.4	-17.0	-13.8	-9.7	-8.7	+1.8	+3.1	-2.1	-1.8	+24.2	+18.2	+8.7
Apr.	+7.4	+11.8	+9.6	+6.2	+5.9	+4.1	+8.4	+6.8	+0.7	-12.4	-18.7	-23.9	-23.4	-19.3	-13.5	-12.7	-7.6	+1.7	+16.1	+9.1	+15.4	+17.0	+12.5	+9.4
May	+9.4	+11.6	+14.8	+12.9	+15.4	+10.8	+3.8	-1.0	-6.4	-8.4	-16.1	-21.3	-25.1	-22.7	-19.4	-11.9	-6.1	+7.7	+8.4	+5.6	+5.7	+6.1	+3.8	+22.3
June	+13.0	+11.5	+13.0	+1.6	+8.2	+4.8	+4.6	-1.0	-4.3	-10.5	-18.1	-22.9	-21.5	-18.2	-11.0	-11.1	+0.2	+1.6	+8.1	+12.5	+9.8	+11.6	+9.7	+7.9
July	+14.8	+9.9	+7.5	+13.7	+13.4	+11.0	+10.0	+2.5	-15.2	-24.8	-24.3	-24.1	-25.5	-30.9	-19.1	-11.8	-9.9	+2.0	+8.6	+8.7	+8.9	+8.1	+6.3	+10.3
Aug.	+17.4	+17.2	+16.2	+15.4	+14.9	+11.6	+2.4	-3.2	-17.8	-25.8	-29.4	-37.1	-37.3	-26.8	-12.6	-6.9	+5.6	+12.7	+18.3	+13.2	+18.2	+12.6	+16.7	+8.3
Sept.	+11.7	+14.4	+16.2	+26.4	+11.2	+11.6	+13.5	-3.0	-13.3	-9.4	-18.3	-25.9	-27.2	-19.5	-15.0	-17.9	-16.5	+1.5	+11.2	+6.1	+2.7	+6.3	+20.8	+13.1
Oct.	+10.1	+12.1	+13.4	+15.3	+19.9	+21.7	+19.4	+3.8	+6.1	-10.3	-19.1	-19.3	-14.9	-17.0	-19.4	-21.5	-17.5	-7.7	-12.7	-0.8	+2.7	+9.8	+9.8	+11.6
Nov.	+8.6	+4.9	+6.2	+8.7	+11.2	+13.0	+13.8	+14.8	+7.3	-4.7	-11.3	-25.3	-14.7	-5.6	-3.5	-5.8	-10.4	-7.0	-8.5	-8.5	+6.1	+0.6	+5.8	+4.0
Dec.	+19.6	+11.3	-1.3	+2.0	+5.8	+3.6	+2.6	+1.5	+0.2	-4.9	-9.8	-10.6	-14.9	-25.3	-13.0	-11.5	-16.4	-12.0	-5.1	+0.5	-0.5	+1.0	+6.6	+21.3
Year	+11.1	+11.0	+9.7	+10.4	+11.2	+10.6	+10.2	+5.2	-3.2	-9.7	-15.5	-19.2	-19.4	-17.4	-13.3	-11.7	-9.0	-2.6	+1.7	+2.7	+5.1	+7.4	+8.8	+9.3
Winter	+9.3	+8.0	+5.2	+6.2	+8.6	+10.1	+11.5	+11.0	+6.4	-0.9	-5.6	-10.3	-9.6	-9.4	-8.9	-9.1	-11.9	-13.2	-10.3	-4.9	0.0	-1.8	+1.9	+5.0
Equinox	+10.4	+12.4	+11.0	+14.0	+12.0	+12.1	+13.9	+5.3	-5.0	-10.7	-19.0	-21.0	-21.2	-18.2	-15.4	-15.5	-12.6	-0.7	+4.4	+3.1	+4.8	+14.3	+15.3	+10.7
Summer	+13.7	+12.6	+12.9	+10.9	+13.0	+9.6	+5.2	-0.7	-10.9	-17.4	-22.0	-26.4	-27.4	-24.7	-15.5	-10.4	-2.6	+6.0	+10.9	+10.0	+10.7	+9.6	+9.1	+12.2

WEST COMPONENT.

Jan.	-3.2	+1.7	+2.8	+2.0	+6.4	+5.4	+4.1	+0.9	-1.9	0.0	+6.1	+11.4	+15.1	+17.6	+9.3	+4.8	+6.5	-8.1	-3.1	-8.0	-14.7	-19.6	-20.1	-15.1
Feb.	-15.0	-14.7	-16.7	-5.5	-5.2	-4.9	-1.1	+2.5	+0.4	+1.4	+4.0	+12.3	+19.3	+21.2	+23.2	+15.2	+14.4	+4.9	-10.8	-4.5	-2.6	-12.4	-13.5	-11.2
Mar.	-8.2	-12.5	-5.2	-0.9	-3.2	-3.9	-1.4	-0.4	+6.8	+5.2	+5.1	+15.8	+23.6	+27.7	+23.9	+18.3	+12.4	+1.8	-9.3	-15.8	-26.7	-23.7	-14.2	-14.3
Apr.	-7.9	-2.6	-2.0	-3.0	-2.7	-4.0	-2.2	-15.8	-18.5	-13.9	-3.2	+10.4	+24.6	+33.1	+33.0	+22.1	+13.8	+1.5	-12.1	-15.8	-12.1	-14.4	-18.4	-16.5
May	-17.9	-13.9	-9.5	-9.4	-11.5	-10.1	-12.7	-18.2	-16.5	-8.9	+3.3	+17.8	+24.4	+29.4	+27.3	+25.5	+19.4	+14.3	+0.3	-2.9	-2.3	-5.3	-7.9	-14.8
June	+3.9	-14.3	-20.1	-20.7	-20.6	-24.0	-24.0	-29.7	-25.4	-14.7	+1.1	+16.0	+25.6	+30.2	+33.0	+31.5	+25.7	+17.9	+11.2	+2.1	+0.4	-2.0	-0.0	-3.2
July	-8.0	-10.0	-6.6	-9.7	-21.7	-21.1	-20.3	-24.1	-27.6	-16.9	-5.7	+7.7	+19.8	+34.0	+36.2	+31.5	+18.9	+13.8	+6.9	+4.4	+1.2	-1.6	-4.6	-6.9
Aug.	-4.7	-2.2	+2.6	+4.3	+4.0	+5.2	+7.2	-10.9	-15.5	-6.4	+2.8	+12.2	+22.8	+26.2	+24.5	+16.3	+10.2	+3.7	-8.3	-6.4	-9.6	-20.8	-22.6	-11.3
Sept.	-10.5	-3.6	+1.0	-8.2	-1.3	+13.3	+7.4	-2.7	-3.4	+1.6	+8.6	+20.4	+22.5	+25.0	+15.5	+13.5	+2.0	-10.3	-18.5	-26.4	-18.2	-10.1	-9.8	-11.1
Oct.	-9.2	+0.9	+0.5	+1.4	+7.4	+10.4	+3.8	-6.2	-7.7	-8.3	-0.7	+9.2	+24.1	+26.2	+21.0	+9.9	+2.7	-9.9	-12.3	-9.6	-15.5	-24.0	-15.1	-9.3
Nov.	-1.0	-3.8	+1.9	+4.4	+3.3	+3.2	+0.3	-2.4	-2.8	-2.0	+5.1	+16.2	+20.1	+18.8	+12.7	+6.8	-5.8	-6.6	-6.0	-13.8	-15.2	-13.3	-13.8	-7.2
Dec.	-17.4	-14.6	-11.1	+0.3	+6.2	+9.1	+10.8	+8.4	+5.8	+4.9	+10.4	+13.3	+20.1	+14.4	+10.3	+10.8	+6.9	-7.1	-9.5	-17.7	-20.6	-7.5	-18.8	-18.3
Year	-8.3	-7.5	-5.2	-4.5	-3.2	-1.8	-3.5	-8.2	-8.9	-4.8	+3.1	+13.6	+21.8	+25.3	+22.5	+17.2	+10.6	+1.3	-6.0	-9.5	-11.3	-12.9	-13.2	-11.6
Winter	-9.2	-7.8	-5.8	+0.3	+2.7	+3.2	+3.5	+2.4	+0.4	+1.1	+6.4	+13.3	+18.7	+18.0	+13.9	+9.4	+5.5	-4.2	-7.4	-11.0	-13.3	-13.2	-16.6	-13.0
Equinox	-9.0	-4.5	-1.4	-2.7	+0.1	+4.0	+1.9	-6.3	-5.7	-3.9	+2.5	+14.0	+23.7	+28.0	+23.4	+16.0	+7.7	-4.2	-13.1	-16.9	-18.1	-18.1	-14.4	-12.8
Summer	-6.7	-10.1	-8.4	-11.0	-12.5	-12.5	-16.1	-20.7	-21.3	-11.7	+0.4	+13.4	+23.2	+30.0	+30.3	+26.2	+18.6	+12.4	+2.5	-0.7	-2.6	-7.4	-8.8	-9.1

VERTICAL COMPONENT.

Jan.	-1.8	-2.8	-3.8	-4.0	-4.2	-4.6	-5.8	-5.8	-5.6	-6.0	-7.0	-6.6	-4.4	-0.2	+1.8	+2.4	+2.2	+6.0	+13.0	+10.8	+8.2	+6.6	+7.4	+3.8
Feb.	+1.1	-4.5	-7.3	-7.1	-9.3	-7.9	-8.9	-9.1	-8.9	-10.5	-11.3	-10.1	-7.9	-3.3	+2.7	+9.1	+15.1	+18.5	+18.5	+14.5	+11.7	+8.5	+4.5	+2.7
Mar.	-6.0	-8.8	-6.6	-5.6	-5.8	-4.8	-4.0	-5.2	-5.6	-8.2	-8.6	-10.4	-10.4	-3.4	+3.0	+11.6	+15.2	+15.4	+16.0	+16.8	+15.8	+8.6	-2.4	-5.6
Apr.	+0.8	-2.8	-2.6	-0.6	+0.8	+1.8	+0.4	-2.0	-5.2	-9.6	-12.8	-16.8	-16.4	-10.0	-2.4	+7.0	+13.8	+17.0	+17.6	+13.8	+8.6	+3.6	-0.6	-2.4
May	-6.9	-5.7	-5.3	-6.9	-5.1	-5.7	-7.7	-8.3	-10.3	-14.5	-18.3	-19.7	-14.3	-5.1	+2.7	+10.5	+17.9	+26.3	+25.5	+19.7	+14.5	+10.1	+8.9	-1.9
June	-4.8	-6.0	-4.8	-4.0	-4.2	-5.2	-4.6	-3.4	-2.4	-10.4	-11.4	-13.6	-10.6	-6.8	-0.4	+4.2	+11.2	+15.0	+18.0	+17.8	+12.8	+9.0	+3.8	+1.2
July	-1.3	-1.5	-1.9	-2.1	-0.1	-0.9	-2.5	-4.1	-8.1	-9.1	-13.5	-18.3	-14.5	-5.1	+0.5	+8.5	+12.7	+15.1	+13.9	+12.1	+8.9	+5.3	+3.9	+3.1
Aug.	-5.3	-7.9	-9.5	-10.3	-7.3	-10.5	-6.7	-5.1	-5.5	-6.7	-9.7	-9.3	-4.7	+1.5	+7.5	+12.3	+15.7	+17.1	+18.7	+14.5	+10.5	+4.7	+1.9	-5.5
Sept.	-5.0	-5.8	-7.8	-10.4	-9.6	-12.2	-12.2	-10.0	-7.8	-9.8	-12.6	-12.4	-6.2	+0.2	+11.6	+19.4	+25.0	+26.0	+18.6	+12.0	+8.0	+6.2	+0.6	-4.8
Oct.	-4.0	-4.4	-5.6	-5.4	-7.2	-8.6	-10.0	-7.2	-5.8	-7.2	-8.2	-8.2	-6.0	-1.4	+6.8	+13.4	+16.4	+16.4	+15.2	+13.6	+9.0	+2.8	+1.2	-0.6
Nov.	-5.4	-5.0	-4.0	-4.0	-4.6	-3.8	-4.2	-4.6	-4.8	-6.4	-6.4	-4.8	-1.0	+2.4	+5.0	+4.8	+8.8	+11.0	+9.8	+10.6	+7.4	+4.0	+1.4	-1.8
Dec.	-12.4	-17.6	-16.0	-10.6	-9.8	-9.0	-8.4	-3.6	-2.0	-2.2	-1.8	-1.6	+1.0	+7.2	+11.8	+9.4	+10.2	+15.0	+18.2	+9.6	+10.0	+7.6	+3.0	-3.4
Year	-4.3	-6.1	-6.3	-5.9	-5.5	-6.0	-6.2	-5.7	-6.0	-8.4	-10.1	-11.0	-8.0	-2.0	+4.2	+9.4	+13.7	+16.6	+16.9	+13.8	+10.5	+6.4	+2.8	-1.3
Winter	-4.6	-7.5	-7.8	-6.4	-7.0	-6.3	-6.8	-5.8	-5.3	-6.3	-6.6	-5.8	-3.1	+1.5	+5.3	+6.4	+9.1	+12.6	+14.9	+11.4	+9.3	+6.7	+4.1	+0.3
Equinox	-3.6	-5.5	-5.7	-5.5	-5.5	-6.0	-6.5	-6.1	-6.1	-8.7	-10.6	-12.0	-9.8	-3.6	+4.8	+12.9	+17.6	+18.7	+16.9	+14.1	+10.4	+5.3	-0.3	-3.4
Summer	-4.6	-5.3	-5.4	-5.8	-4.2	-5.6	-5.4	-5.2	-6.6	-10.2	-13.2	-15.2	-11.0	-3.9	+2.6	+8.9	+14.4	+18.4	+19.0	+16.0	+11.7	+7.3	+4.6	-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 Greenwich Mean Midnight, and converted into arc at the rate of  $15^\circ$  to each hour.

Month and Season.	NORTH INTENSITY.								WEST INTENSITY.								VERTICAL INTENSITY.							
	$a_1$	$b_1$	$a_2$	$b_2$	$a_3$	$b_3$	$a_4$	$b_4$	$a_1$	$b_1$	$a_2$	$b_2$	$a_3$	$b_3$	$a_4$	$b_4$	$a_1$	$b_1$	$a_2$	$b_2$	$a_3$	$b_3$	$a_4$	$b_4$
" ALL " DAYS.																								
1934.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Jan.	+ 0.5	+ 2.9	- 1.9	+ 0.2	+ 2.3	- 2.6	- 0.7	+ 0.8	- 7.7	- 0.3	+ 0.8	+ 5.4	- 2.3	- 0.8	+ 1.3	+ 1.3	+ 1.6	- 2.9	- 1.3	- 0.6	+ 0.4	- 0.6	- 0.3	+ 0.1
Feb.	+ 4.0	+ 5.0	- 2.3	- 2.6	+ 1.6	- 0.5	- 0.6	+ 0.6	- 8.2	- 3.1	+ 0.5	+ 6.2	- 1.3	- 2.2	+ 0.4	+ 1.6	+ 3.0	- 4.7	- 2.8	- 0.4	+ 1.3	- 0.2	- 0.5	+ 0.0
Mar.	+ 9.4	+ 1.7	- 3.8	- 1.9	+ 2.9	- 1.9	+ 0.5	+ 0.2	- 10.6	- 5.9	+ 3.4	+ 8.2	- 1.6	- 3.3	+ 2.0	+ 1.2	+ 2.6	- 5.4	- 4.7	- 0.6	+ 1.3	- 0.5	- 1.4	- 0.2
Apr.	+ 12.0	- 1.3	- 6.2	- 1.0	+ 2.4	- 1.3	+ 0.3	+ 1.2	- 8.2	- 9.7	+ 6.4	+ 10.1	- 4.0	- 4.5	+ 1.9	+ 1.2	+ 6.3	- 3.6	- 6.5	+ 0.1	+ 2.8	- 0.2	- 0.8	+ 0.0
May	+ 12.5	- 3.2	- 5.3	- 0.6	+ 0.2	+ 1.4	+ 0.6	- 0.3	- 7.6	- 13.3	+ 6.3	+ 6.9	- 3.7	- 1.4	+ 0.8	+ 0.1	+ 7.1	- 4.5	- 7.1	+ 0.2	+ 1.9	- 0.6	- 0.3	+ 0.3
June	+ 12.5	- 3.6	- 6.7	- 0.2	+ 0.7	- 0.2	+ 0.4	+ 0.3	- 5.6	- 18.1	+ 6.0	+ 8.6	- 2.9	- 2.1	+ 1.0	- 0.3	+ 5.8	- 3.5	- 6.3	- 0.3	+ 1.7	- 0.1	- 0.7	+ 0.4
July	+ 14.8	- 1.8	- 7.4	+ 0.9	+ 0.8	- 1.5	+ 1.0	+ 0.8	- 5.6	- 17.6	+ 6.5	+ 10.0	- 2.4	- 3.7	+ 0.2	+ 1.0	+ 5.4	- 3.5	- 5.7	- 0.2	+ 2.0	+ 0.5	- 0.5	- 0.2
Aug.	+ 16.7	- 4.2	- 6.7	+ 1.4	+ 0.4	- 2.0	+ 0.6	+ 0.4	- 9.0	- 11.8	+ 6.2	+ 9.5	- 4.5	- 2.3	+ 0.4	+ 1.4	+ 2.9	- 4.6	- 6.0	+ 0.4	+ 2.6	- 0.4	- 0.9	- 0.1
Sept.	+ 14.5	- 0.8	- 4.3	+ 0.7	+ 0.5	- 2.4	+ 0.4	+ 1.5	- 10.3	- 6.6	+ 7.0	+ 5.6	- 4.5	- 2.1	+ 2.1	+ 0.6	+ 2.4	- 5.3	- 5.2	+ 0.6	+ 2.1	- 0.8	- 0.7	+ 0.0
Oct.	+ 10.7	+ 4.3	- 5.2	- 1.9	+ 1.7	- 2.5	- 0.4	+ 1.1	- 6.8	- 3.7	+ 3.0	+ 8.4	- 3.0	- 3.6	+ 2.0	+ 2.0	+ 2.0	- 3.9	- 3.2	+ 0.3	+ 1.8	+ 0.0	- 0.8	+ 0.1
Nov.	+ 5.6	+ 3.0	- 3.7	- 1.0	+ 1.8	- 2.0	- 0.4	+ 0.8	- 6.2	- 1.1	+ 2.6	+ 5.8	- 2.7	- 1.0	+ 1.9	+ 0.7	+ 0.7	- 3.6	- 1.6	+ 0.4	+ 0.7	- 0.7	- 0.5	+ 0.4
Dec.	+ 3.3	+ 2.6	- 1.5	- 1.5	+ 0.9	- 1.6	+ 0.6	+ 0.8	- 7.5	+ 1.2	+ 0.9	+ 4.1	- 0.8	- 0.9	+ 1.2	- 0.1	- 0.5	- 4.3	- 1.2	- 0.5	+ 0.3	- 0.4	- 0.3	+ 0.1
Year	+ 9.7	+ 0.4	- 4.6	- 0.6	+ 1.3	- 1.4	+ 0.2	+ 0.7	- 7.8	- 7.5	+ 4.1	+ 7.4	- 2.8	- 2.3	+ 1.3	+ 0.9	+ 3.3	- 4.1	- 4.3	- 0.1	+ 1.6	- 0.3	- 0.6	+ 0.1
W. Eq. S.	+ 3.4	+ 3.4	- 2.4	- 1.2	+ 1.6	- 1.7	- 0.3	+ 0.8	- 7.4	- 0.8	+ 1.2	+ 5.4	- 1.8	- 1.2	+ 1.2	+ 0.9	+ 1.2	- 3.9	- 1.7	- 0.3	+ 0.7	- 0.5	- 0.4	+ 0.1
W. Eq. S.	+ 11.6	+ 1.0	- 4.9	- 1.0	+ 1.9	- 2.0	+ 0.2	+ 1.0	- 9.0	- 6.5	+ 4.9	+ 8.1	- 3.3	- 3.4	+ 2.0	+ 1.2	+ 3.3	- 4.6	- 4.9	+ 0.1	+ 2.0	- 0.4	- 0.9	- 0.0
W. Eq. S.	+ 14.1	- 3.2	- 6.6	+ 0.4	+ 0.5	- 0.6	+ 0.6	+ 0.3	- 7.0	- 15.2	+ 6.3	+ 8.8	- 3.4	- 2.4	+ 0.6	+ 0.6	+ 5.3	- 4.0	- 6.3	+ 0.0	+ 2.1	- 0.2	- 0.6	+ 0.1
QUIET DAYS.																								
Year	+ 7.9	- 1.0	- 4.5	+ 0.2	+ 0.9	- 1.4	+ 0.0	+ 1.0	- 5.0	- 8.2	+ 4.9	+ 6.5	- 3.9	- 2.3	+ 1.3	+ 1.1	+ 3.5	- 1.4	- 3.6	+ 0.6	+ 1.8	- 0.6	- 0.6	+ 0.2
W. Eq. S.	+ 2.1	+ 1.2	- 3.0	- 1.1	+ 1.2	- 1.2	- 0.3	+ 0.6	- 4.4	- 1.8	+ 1.4	+ 4.2	- 2.3	- 0.9	+ 1.0	+ 1.0	+ 0.9	- 1.8	- 1.2	+ 0.5	+ 0.9	- 0.6	- 0.4	+ 0.1
W. Eq. S.	+ 9.4	- 1.2	- 4.5	+ 1.0	+ 1.5	- 2.0	+ 0.3	+ 1.4	- 6.7	- 8.4	+ 6.4	+ 7.1	- 5.4	- 3.4	+ 2.3	+ 1.5	+ 4.1	- 1.3	- 4.1	+ 1.0	+ 2.6	- 0.8	- 1.0	+ 0.3
W. Eq. S.	+ 12.1	- 2.9	- 5.9	+ 0.7	+ 0.2	- 1.1	+ 0.2	+ 0.9	- 3.8	- 14.5	+ 6.8	+ 8.4	- 4.0	- 2.9	+ 0.8	+ 0.8	+ 5.4	- 1.0	- 5.4	+ 0.5	+ 2.0	- 0.3	- 0.4	+ 0.2
DISTURBED DAYS.																								
Year	+ 13.7	+ 3.9	- 4.6	- 1.3	+ 1.1	- 1.5	+ 0.5	+ 0.6	- 12.5	- 4.5	+ 3.3	+ 8.7	- 1.5	- 3.3	+ 1.0	+ 0.2	+ 2.1	- 10.5	- 5.8	- 0.0	+ 1.0	+ 0.4	- 0.5	+ 0.0
W. Eq. S.	+ 6.2	+ 7.4	- 1.0	- 2.1	+ 1.9	- 2.5	- 0.4	+ 1.3	- 12.2	+ 1.4	+ 1.2	+ 5.5	- 1.5	- 2.6	+ 0.9	+ 0.3	+ 0.7	- 9.0	- 3.3	- 0.7	+ 0.1	- 0.2	- 0.1	+ 0.2
W. Eq. S.	+ 16.4	+ 4.9	- 5.1	- 1.7	+ 0.4	- 2.2	+ 0.8	+ 0.5	- 13.5	+ 0.4	+ 3.8	+ 10.9	- 0.9	- 4.4	+ 1.1	+ 0.7	+ 1.8	- 11.5	- 6.9	+ 0.8	+ 1.7	+ 1.0	- 1.0	- 0.3
W. Eq. S.	+ 18.6	- 0.6	- 7.7	+ 0.1	+ 0.9	+ 0.3	+ 1.0	- 0.1	- 11.8	- 15.3	+ 4.6	+ 9.9	- 2.0	- 3.1	+ 0.9	- 0.1	+ 3.8	- 11.1	- 7.3	- 0.1	+ 1.3	+ 0.3	- 0.6	+ 0.2

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

Values of  $c_n, a_n$  in the series  $\Sigma (c_n \sin nT + a_n)$ ,  $T$  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:—

January	+2 19	April	0 4	July	+1 22	October	-3 28	Winter	+0 12
February	+3 28	May	-0 51	August	+0 59	November	-3 42	Equinox	-0 36
March	+2 12	June	+0 5	September	-1 12	December	-1 6	Summer	+0 24

Month and Season.	NORTH INTENSITY.								WEST INTENSITY.								VERTICAL INTENSITY.							
	$c_1$	$a_1$	$c_2$	$a_2$	$c_3$	$a_3$	$c_4$	$a_4$	$c_1$	$a_1$	$c_2$	$a_2$	$c_3$	$a_3$	$c_4$	$a_4$	$c_1$	$a_1$	$c_2$	$a_2$	$c_3$	$a_3$	$c_4$	$a_4$
" ALL " DAYS.																								
1934.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Jan.	3.0	9.2	2.0	277.9	3.5	139.8	1.1	322.6	7.7	268.1	5.5	9.3	2.4	251.8	1.8	45.6	3.3	152.1	1.4	245.9	0.7	150.8	0.3	287.4
Feb.	6.4	38.5	3.5	222.0	1.7	109.0	0.8	317.5	8.7	249.9	6.2	5.5	2.5	212.3	1.6	15.5	5.6	148.3	2.8	263.0	1.3	98.7	0.5	272.6
Mar.	9.6	80.0	4.2	244.2	3.4	124.6	0.6	70.1	12.1	241.4	8.8	23.4	3.7	206.2	2.3	59.1	6.0	154.6	4.8	264.0	1.4	111.9	1.4	263.1
Apr.	12.0	96.6	6.3	261.5	2.7	118.8	1.3	13.4	12.7	220.5	12.0	33.2	6.0	222.9	2.2	62.3	7.2	119.9	6.5	271.5	2.8	94.9	0.8	273.7
May	12.8	104.6	5.4	264.6	1.4	8.4	0.7	122.3	15.3	210.1	9.3	43.3	3.9	249.8	0.8	85.3	8.4	122.9	7.1	272.6	2.0	109.5	0.4	312.7
June	13.0	106.3	6.7	269.2	0.7	104.7	0.5	58.5	18.9	197.7	10.5	35.9	3.6	235.0	1.0	107.3	6.7	121.7	6.3	268.2	1.7	93.3	0.8	305.0
July	14.9	97.4	7.5	277.3	1.7	153.9	1.3	50.3	18.5	198.0	11.9	33.9	4.5	214.2	1.0	9.9	6.4	123.4	5.7	268.9	2.1	78.3	0.6	250.1
Aug.	17.2	104.5	6.9	282.2	2.0	170.9	0.7	53.3	14.9	217.8	11.4	33.7	5.1	244.2	1.4	15.7	5.5	147.8	6.0	274.3	2.6	99.6	0.9	263.9
Sept.	14.6	93.7	4.4	279.9	2.4	170.3	1.6	16.8	12.3	237.8	8.9	51.8	5.0	246.2	2.2	76.3	5.8	156.4	5.2	276.9	2.3	112.5	0.7	272.3
Oct.	11.5	68.6	5.5	251.1	3.0	148.2	1.2	343.2	7.8	241.9	8.9	20.1	4.7	220.9	2.8	45.5	4.4	153.7	3.2	275.5	1.8	90.5	0.8	280.4
Nov.	6.3	62.3	3.8	256.2	2.7	139.2	0.9	333.6	6.3	260.5	6.4	24.9	2.9	250.7	2.0	71.6	3.7	169.2	1.7	283.6	1.0	132.9	0.7	312.2
Dec.	4.2	52.1	2.1	226.6	1.8	152.8	1.0	40.2	7.6	279.1	4.2	13.3	1.2	223.6	1.2	97.5	4.3	186.7	1.3	248.1	0.5	143.6	0.3	287.2
Year	9.7	87.9	4.6	263.1	1.9	137.0	0.7	16.9	10.8	226.4	8.5	30.0	3.7	231.5	1.5	56.7	5.3	142.0	4.3	270.1	1.6	103.6	0.6	280.5
W. Eq. S.	4.8	45.2	2.6	243.7	2.3	137.1	0.8	342.6	7.4	264.1	5.5	13.4	2.2	237.2	1.4	55.3	4.1	163.3	1.8	261.6	0.8	126.0	0.4	291.2
W. Eq. S.	11.7	85.6	5.0	259.0	2.8	138.6	1.0	12.6	11.1	234.7	9.4	32.2	4.7	225.1	2.3	59.1	5.7	144.5	4.9	271.6	2.0	102.0	0.9	270.9
W. Eq. S.	14.5	103.0	6.6	273.9	0.8	138.3	0.7	66.4	16.7	205.1	10.8	36.3	4.2	235.9	0.8	48.0	6.7	127.5	6.3	271.1	2.1	95.7	0.6	280.2
QUIET DAYS.																								
Year	7.9	97.5	4.5	272.9	1.7	147.7	1.0	3.9	9.6	212.0	8.1	37.5	4.5	240.6	1.7	52.0	3.7	111.9	3.6	281.0	1.9	107.9	0.6	290.8
W. Eq. S.	2.4	61.6	3.2	250.1	1.7	135.7	0.7	335.7	4.8	248.4	4.4	19.1	2.5	250.9	1.4	47.4	2.0	153.5	1.3	292.7	1.1	126.1	0.5	289.5
W. Eq. S.	9.5	97.9	4.6	283.1	2.5	145.0	1.4	12.4	10.7	218.9	9.5	42.7	6.3	238.8	2.8	57.6	4.3	107.9	4.3	284.3	2.7	107.1	1.1	285.8
W. Eq. S.	12.5	103.9	5.9	277.4	1.2	173.1	0.9	11.8	15.0	195.0	10.8	39.8	4.9	235.4	1.1	47.2	5.5	101.1	5.4	275.8	2.1	100.1	0.4	294.5
DISTURBED DAYS.																								
Year	14.3	74.6	4.7	255.5	1.8	144.6	0.7	43.8	13.3	250.5	9.3	21.4	3.6	205.4	1.0	77.6	10.7	168.9	5.8	270.5	1			

TABLE X.—RANGE of MEAN DIURNAL INEQUALITIES for the MONTHS, YEAR and SEASONS of 1934.

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	5.00	1.01	12.5	3.10	0.68	10.4	6.64	2.88	35.0	14.1	27.5	8.5	12.3	17.2	5.2	34.0	37.7	20.0
February	5.42	1.10	14.2	4.86	0.68	12.8	8.28	2.71	31.2	17.8	27.9	15.2	16.5	24.7	10.2	35.3	39.9	29.8
March	7.68	1.17	20.2	8.14	1.11	20.8	10.90	2.08	37.2	24.8	37.9	18.9	23.0	43.3	16.2	44.2	54.4	27.2
April	9.65	1.35	27.6	9.34	1.64	31.6	10.56	1.76	34.8	30.4	50.6	25.9	32.0	50.7	24.4	40.9	51.6	34.4
May	8.41	1.22	27.9	8.42	1.46	26.0	9.80	2.30	38.2	30.7	44.0	28.9	25.6	45.6	23.6	47.4	47.6	46.0
June	9.62	1.60	33.0	8.96	2.04	34.6	11.74	1.94	32.6	33.5	51.5	25.1	30.6	49.0	19.0	35.9	62.7	31.6
July	10.32	1.93	36.1	10.22	2.20	38.4	11.82	2.51	40.6	34.7	55.4	23.9	37.7	54.5	19.2	45.7	63.8	33.4
August	9.42	2.19	37.3	8.84	2.11	34.4	10.52	3.40	50.2	39.1	49.6	22.2	34.4	47.3	17.2	55.6	48.8	29.2
September	7.79	1.74	31.0	9.16	1.93	32.2	10.30	3.72	46.0	35.2	39.7	21.4	33.1	48.8	17.6	53.6	51.4	38.6
October	6.88	1.66	26.8	7.38	1.25	21.0	10.12	3.50	42.4	29.2	34.6	14.9	24.2	39.0	12.8	43.2	50.2	26.4
November	4.93	1.12	17.9	4.70	0.68	12.8	7.18	2.38	35.4	20.7	24.3	9.5	13.9	24.3	9.2	40.1	35.3	17.4
December	4.50	0.89	9.9	3.06	0.45	6.4	8.12	3.09	38.8	11.3	23.6	10.3	8.3	15.7	4.8	46.6	40.7	35.8
Year	7.47	1.42	24.5	7.18	1.35	23.5	9.67	2.67	38.5	26.8	38.9	18.7	24.3	38.3	15.0	43.5	48.7	30.8
Winter	4.96	1.03	13.6	3.93	0.62	10.6	7.56	2.77	35.1	16.0	25.8	10.9	12.8	20.5	7.4	39.0	38.4	25.8
Equinox	8.00	1.48	26.4	8.51	1.48	26.4	10.47	2.77	40.1	29.9	40.7	20.3	28.1	45.5	17.8	45.5	51.9	31.7
Summer	9.44	1.74	33.6	9.11	1.95	33.4	10.97	2.54	40.4	34.5	50.1	25.0	32.1	49.1	19.8	46.2	55.7	35.1

TABLE XI.—NON-CYCLIC CHANGE (24<sup>h</sup>—0<sup>h</sup>).

Month, 1934.	" 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	-0.08	Y -0.1	Y -0.0	+0.36	Y -0.4	Y +0.4	-1.02	Y -7.2	Y +4.4
February	-0.01	+0.2	+0.1	+0.50	+4.8	-1.6	+0.62	-2.8	+0.8
March	-0.05	-0.1	+0.1	+0.94	+5.8	+0.6	-1.12	-6.0	-1.6
April	-0.04	+0.5	-0.2	-0.42	+2.8	-1.0	+0.66	+0.2	-5.6
May	0.00	-0.3	+0.2	+0.06	+2.0	-2.2	-0.94	-1.6	+0.6
June	+0.02	+0.7	-0.3	+0.10	+4.6	-1.4	-0.38	-4.2	+1.2
July	-0.07	-0.8	+0.4	+0.42	-0.2	+0.4	+0.14	-2.4	+2.8
August	-0.18	-0.0	-0.2	-0.26	+4.0	-0.6	-0.28	-7.0	-2.4
September	-0.09	-0.4	+0.4	-0.42	+1.4	-0.2	+0.42	+2.6	+1.4
October	-0.02	+0.4	+0.1	+0.02	+1.4	-1.0	-0.30	-1.4	+2.4
November	-0.01	0.0	+0.2	-0.06	-0.4	-1.0	-0.38	-5.0	+2.0
December	-0.02	-0.4	+0.3	-0.02	+2.4	-1.0	-0.44	-7.6	+2.6
Year 1934	—	—	—	+0.10	+2.4	-0.7	-0.25	-3.5	+0.7

TABLE XII.—MEAN MONTHLY and ANNUAL VALUES of TERRESTRIAL MAGNETIC ELEMENTS at the ABINGER MAGNETIC STATION.

Month, 1934.	Declination (West).	Inclination.	Horizontal Intensity.	North Intensity.	West Intensity.	Vertical Intensity.	Total Intensity.
January .. .. .	II 46.0	66 39.5	.18534	.18145	.03780	.42951	.46779
February .. .. .	II 45.1	66 39.7	.18531	.18143	.03774	.42951	.46778
March .. .. .	II 44.0	66 39.8	.18530	.18143	.03768	.42952	.46779
April .. .. .	II 43.3	66 39.4	.18535	.18148	.03766	.42950	.46779
May .. .. .	II 42.6	66 39.3	.18537	.18151	.03762	.42948	.46777
June .. .. .	II 41.6	66 39.1	.18540	.18155	.03758	.42950	.46780
July .. .. .	II 41.0	66 39.1	.18540	.18156	.03754	.42948	.46778
August .. .. .	II 39.9	66 39.9	.18531	.18148	.03747	.42955	.46781
September .. .. .	II 38.7	66 40.2	.18527	.18146	.03740	.42958	.46783
October .. .. .	II 38.1	66 40.1	.18530	.18149	.03737	.42962	.46788
November .. .. .	II 37.1	66 40.2	.18532	.18152	.03732	.42968	.46794
December .. .. .	II 36.1	66 40.4	.18530	.18151	.03727	.42971	.46796
Year 1934 .. .. .	II 41.1	66 39.7	.18533	.18149	.03754	.42955	.46783

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

1934 Day	January	February	March	April	May	June	July	August	September	October	November	December
	° ' /	° ' /	° ' /	° ' /	° ' /	° ' /	° ' /	° ' /	° ' /	° ' /	° ' /	° ' /
I	II. 26·4	II. 26·8	II. 26·6	II. 27·2	II. 28·5	II. 30·3	II. 30·7	II. 31·8	II. 29·5	II. 30·6	II. 28·1	II. 28·7
2	26·3	26·3	26·6	27·5	28·9	30·2	31·0	31·6	29·6	30·7	27·6	28·7
3	26·2	26·3	26·5	27·4	29·1	30·8	31·0	31·4	30·1	30·7	27·8	29·4
4	26·4	26·1	26·9	27·5	29·1	30·3	31·0	31·0	30·4	30·5	27·9	29·7
5	26·7	26·4	26·9	27·3	29·5	30·2	30·7	31·1	30·4	29·9	28·2	29·8
6	26·8	26·6	27·2	27·7	29·0	30·0	30·8	31·3	30·3	29·7	27·9	29·9
7	26·8	26·8	27·3	27·5	29·1	30·0	31·1	31·2	30·6	29·8	27·9	30·0
8	27·1	26·9	27·1	27·7	29·1	29·8	31·3	31·5	30·9	30·6	27·4	30·3
9	27·1	27·0	27·2	27·5	29·0	30·1	31·3	31·6	31·1	29·7	27·9	30·4
10	27·1	26·7	26·9	27·6	29·4	30·4	31·5	31·3	30·9	29·7	28·3	30·1
11	27·1	27·1	27·6	27·7	29·5	30·8	31·3	31·2	30·8	30·1	28·4	30·1
12	27·2	27·1	27·6	27·8	29·8	30·4	31·5	31·1	30·6	30·4	28·7	30·1
13	27·7	27·0	27·6	28·2	30·0	30·2	31·4	30·8	30·9	30·4	28·3	30·0
14	28·3	27·1	27·5	28·2	29·7	30·5	31·8	31·0	31·5	30·4	28·6	29·7
15	28·0	27·1	27·6	28·5	29·2	30·7	31·5	30·9	31·4	30·2	28·7	29·9
16	27·6	27·0	27·4	29·2	28·8	31·0	31·4	30·9	31·5	29·6	28·4	30·3
17	27·7	27·0	27·4	29·4	28·6	31·1	31·4	31·5	31·6	29·3	28·5	29·5
18	27·9	27·2	27·3	29·5	28·6	31·3	31·5	31·8	31·3	29·1	28·9	29·7
19	28·0	26·9	27·1	29·2	28·5	31·1	31·4	31·8	31·1	29·4	28·7	29·8
20	27·9	27·2	27·3	29·1	29·0	31·1	31·3	31·3	31·2	29·6	28·4	29·7
21	27·3	27·2	27·6	29·1	29·0	30·6	31·5	31·2	31·1	30·3	28·2	29·5
22	27·0	27·4	27·6	29·2	29·6	30·4	31·7	31·0	30·4	30·3	28·3	29·2
23	27·0	27·2	27·3	28·8	30·1	30·1	31·8	31·1	30·8	30·2	28·3	28·9
24	26·9	27·1	27·4	28·5	30·2	30·4	31·6	30·7	30·1	30·0	28·6	29·0
25	26·7	27·5	27·6	28·4	30·1	30·7	31·2	30·6	30·3	30·1	28·7	28·7
26	26·7	27·3	27·6	28·5	29·9	30·7	31·5	30·3	30·1	30·4	29·0	28·5
27	27·2	26·9	27·8	28·6	29·3	31·0	31·5	30·6	30·1	29·9	29·0	28·9
28	26·9	26·8	27·8	28·3	29·6	30·7	31·1	30·7	30·3	30·0	29·2	29·1
29	27·0		27·8	28·3	29·7	30·6	31·2	30·7	30·7	29·6	29·3	29·2
30	26·6		27·6	28·4	29·9	30·7	31·6	30·3	30·6	28·6	29·3	29·1
31	26·9		27·5		30·1		31·9	29·9		28·4		29·5



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—*continued.*

Greenwich Mean Time, 1934.				No. of Obs.	Observed Horizontal Intensity.	Deduced Value of Base Line.	Greenwich Mean Time, 1934.				No. of Obs.	Observed Horizontal Intensity.	Deduced Value of Base Line.	
h	m	h	m				h	m	h	m				
July	14.	9	50-10	10	18514	18750	Sept.	8.	9	6-9	23	10	18514	18750
	16.	19	27-19	6	18545	18753		10.	16	0-16	16	8	18534	18751
	17.	11	23-11	8	18515	18752		11.	9	12-9	25	8	18509	18750
	18.	10	41-11	16	18512	18751		12.	9	40-9	53	8	18511	18751
	19.	9	33-9	8	18519	18751		13.	9	41-9	56	10	18514	18751
	20.	9	45-10	8	18522	18752		14.	10	8-10	21	8	18509	18750
	21.	12	15-12	8	18515	18751		15.	9	17-9	36	8	18516	18749
	23.	18	22-18	8	18552	18751		17.	18	2-18	10	6	18523	18751
	24.	10	45-10	8	18523	18749		18.	8	21-8	31	8	18533	18750
	25.	9	25-10	8	18516	18751		19.	9	44-9	55	8	18528	18750
	26.	9	31-9	8	18518	18751		20.	9	41-9	56	10	18522	18750
	27.	14	31-15	8	18537	18751		21.	8	39-9	5	16	18517	18749
	28.	9	8-9	43	18522	18751		22.	9	14-9	42	12	18510	18751
	30.	18	24-18	34	18534	18752		24.	9	41-9	53	8	18518	18723
	31.	19	14-19	26	18543	18753		25.	10	17-10	29	8	18488	18725
Aug.	1.	9	16-9	28	18495	18750		25.	13	40-13	59	8	(18476)	(18726)
	2.	11	19-11	38	18491	18750		26.	9	14-9	31	10	18513	18724
	3.	10	51-11	3	18521	18751		27.	10	38-10	49	8	18492	18724
	3.	11	45-12	1	18472	18750		28.	9	11-9	25	8	18508	18724
	4.	10	25-10	40	18506	18750		29.	10	35-10	48	8	18502	18724
	6.	10	25-10	37	18523	18751	Oct.	1.	9	17-9	30	8	18527	18724
	7.	10	9-10	23	18492	18751		2.	11	27-11	40	8	18504	18722
	8.	9	19-10	4	18500	18750		3.	11	37-11	53	10	18507	18723
	9.	9	36-9	49	18514	18751		4.	11	50-12	3	8	18519	18723
	10.	9	10-9	24	18512	18750		5.	9	9-9	46	16	18532	18723
	11.	9	45-10	2	18497	18750		6.	9	34-9	46	8	18517	18723
	13.	10	43-10	56	18500	18751		8.	10	55-11	10	8	18518	18724
	14.	9	3-9	14	18505	18750		9.	11	20-11	34	8	18520	18699
	15.	8	45-9	9	18511	18751		10.	11	4-11	20	10	18514	18697
	16.	10	24-10	35	18506	18751		11.	11	11-11	23	8	18514	18698
	17.	11	24-11	35	18512	18751		12.	11	2-11	32	16	18510	18696
	18.	9	14-9	29	18521	18752		13.	10	1-10	14	8	18519	18697
	20.	9	29-9	40	18523	18750		15.	9	57-10	11	8	18518	18697
	21.	8	38-8	48	18531	18751		16.	11	30-11	47	10	18503	18696
	22.	9	22-9	44	18516	18750		17.	11	15-11	29	8	18513	18697
	23.	10	6-10	17	18523	18751		18.	10	11-10	43	16	18512	18697
	24.	10	12-10	45	18514	18750		19.	11	52-12	6	8	18523	18697
	25.	9	40-9	54	18511	18750		20.	9	58-10	11	8	18522	18697
	27.	9	52-10	22	18497	18751		22.	10	11-10	24	8	18520	18697
	28.	9	7-9	21	18477	18750		23.	10	7-10	43	16	18514	18696
	29.	9	54-10	8	18463	18750		24.	11	11-11	27	10	18486	18696
	30.	9	5-9	19	18488	18750		25.	10	6-10	23	8	18511	18697
	31.	10	0-10	13	18491	18750		26.	14	54-15	6	8	18504	18695
Sept.	1.	9	37-9	51	18513	18751		27.	10	7-10	20	8	18498	18697
	3.	19	51-20	5	18539	18753		29.	12	39-12	52	8	18513	18696
	4.	10	15-10	28	18505	18752		30.	11	47-11	58	8	18513	18697
	5.	11	31-11	45	18514	18752		31.	17	42-17	59	8	18527	18695
	6.	10	39-10	52	18508	18752	Nov.	1.	10	17-11	2	16	18520	18697
	7.	10	17-10	30	18500	18752								

October 8. Temperature lowered to 16°o.

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

Greenwich Mean Time, 1934.		Observed Horizontal Intensity.	Deduced Value of Base Line.	Greenwich Mean Time, 1934.		Observed Horizontal Intensity.	Deduced Value of Base Line.	Greenwich Mean Time, 1934.		Observed Horizontal Intensity.	Deduced Value of Base Line.			
h	m	h	m	h	m	h	m	h	m	h	m			
Jan. 1.	15 54-17	4	18540	18694	Mar. 14.	15 37-16	36	18538	18685	June 5.	14 54-15	52	18512	18728
2.	12 21-13	29	18523	18695	15.	14 53-16	9	18531	18684	6.	15 22-16	19	18551	18739
3.	12 21-13	22	18541	18695	16.	11 51-12	36	18525	18689	7.	14 57-15	56	18538	18739
4.	14 48-15	41	18543	18694	17.	12 41-13	33	18534	18688	8.	8 51- 9	55	18532	18737
5.	12 24-13	33	18535	18692	19.	15 41-16	39	18538	18690	9.	9 33-10	33	18531	18740
9.	14 39-15	48	18548	18696	20.	14 50-15	50	18533	18695					
11.	15 16-16	17	18544	18695	21.	14 41-15	38	18534	18687	11.	15 25-16	24	18545	18769
12.	11 1-11	53	18528	18688	22.	14 36-15	42	18529	18691	12.	9 14-10	14	18537	18758
13.	9 56-11	4	18546	18692	23.	14 46-15	36	18541	18695	13.	15 3-15	55	18554	18770
15.	14 33-15	40	18547	18695	24.	11 41-12	30	18521	18688	14.	9 1-10	3	18530	18769
16.	14 51-15	53	18542	19692	27.	11 50-13	10	18532	18689	15.	9 42-10	40	18521	18764
17.	11 10-12	2	18543	18695						18.	15 18-16	18	18559	18768
18.	10 5-11	6	18539	18696						19.	8 50- 9	57	18527	18765
19.	15 11-16	11	18544	18693	April 3.	11 2-11	55	18503	18687	20.	9 41-10	42	18536	18764
20.	11 26-12	32	18528	18696	4.	15 5-16	3	18521	18684	22.	9 22-10	32	18536	18766
22.	12 12-13	0	18547	18696	5.	10 40-11	48	18534	18691	23.	9 24-10	20	18539	18766
23.	9 37-10	25	18522	18688	6.	15 14-16	20	18531	18689	27.	14 8-15	9	18572	18764
24.	11 22-11	59	18530	18692	7.	12 24-13	26	18519	18687	28.	9 6-10	9	18551	18765
25.	11 17-12	3	18542	18693						29.	9 8-10	7	18535	18764
26.	11 17-12	3	18530	18685	9.	15 16-16	24	18537	18706	30.	8 35- 9	31	18543	18769
27.	9 37-10	23	18527	18684	10.	10 27-11	24	18522	18705					
29.	15 21-16	27	18540	18693	11.	15 29-16	31	18557	18711	July 3.	9 2-10	2	18534	18770
30.	10 36-12	1	18547	18692	12.	14 53-15	58	18541	18708	4.	9 26-10	31	18529	18757
31.	14 34-15	35	18548	18694	13.	14 56-16	21	18550	18716					
					17.	10 22-11	25	18513	18733	Sept. 24.	14 25-15	52	18526	18740
Feb. 1.	14 30-15	34	18544	18694	18.	15 2-16	1	18544	18733	25.	8 49- 9	50	18506	18738
2.	12 20-13	5	18541	18695	19.	14 46-15	51	18542	18734	26.	9 9-10	4	18514	18730
3.	10 32-11	45	18530	18692	21.	12 27-13	29	18533	18732	27.	8 57- 9	57	18509	18732
5.	14 41-15	38	18552	18691	24.	13 42-14	50	18538	18735	28.	10 12-11	2	18520	18737
6.	14 29-15	26	18541	18695	25.	14 33-15	33	18538	18736	29.	8 31- 9	27	18509	18728
7.	14 28-15	37	18546	18696	26.	15 19-16	17	18539	18734					
8.	11 11-12	4	18537	18694	30.	9 39-10	39	18535	18736	Oct. 2.	8 57-10	4	18528	18732
9.	15 11-16	9	18515	18696						3.	9 10-10	14	18534	18732
10.	11 58-12	52	18538	18690	May 1.	9 48-10	47	18520	18731	4.	9 1-10	4	18541	18733
12.	14 23-15	21	18543	18698	2.	14 7-15	12	18528	18732	5.	13 31-14	33	18535	18739
13.	14 32-15	31	18538	18695	3.	11 20-12	16	18518	18734	6.	9 13-10	2	18532	18738
14.	14 2-14	48	18525	18687	4.	14 4-15	6	18541	18737					
15.	11 10-12	5	18543	18689	7.	9 10-10	9	18524	18733	9.	14 39-15	41	18550	18711
16.	12 15-13	8	18558	18695	8.	9 6-10	3	18532	18728	10.	11 55-12	57	18540	18715
17.	12 1-12	56	18511	18692	9.	8 51- 9	50	18542	18730	11.	14 53-15	53	18548	18711
19.	15 22-16	21	18538	18696	10.	9 28-10	34	18533	18733	12.	11 58-13	5	18532	18707
21.	14 35-15	40	18549	18694	11.	9 38-10	39	18540	18732	13.	11 25-12	29	18536	18712
22.	14 27-15	27	18537	18696	14.	14 7-15	10	18536	18733	15.	14 21-15	32	18530	18706
23.	10 10-11	1	18538	18688	16.	9 20-10	20	18521	18731	16.	9 52-11	8	18521	18708
24.	11 45-12	44	18540	18695	17.	9 25-10	25	18525	18729	17.	12 11-13	4	18536	18708
26.	14 43-15	52	18538	18693	18.	9 27-10	24	18530	18732	18.	14 50-15	52	18547	18714
27.	11 10-12	22	18530	18693	22.	9 31-10	26	18534	18730	19.	14 34-15	35	18546	18713
28.	12 19-13	20	18527	18690	23.	9 41-10	29	18528	18723	20.	10 54-11	51	18534	18710
					24.	10 2-10	52	18524	18728	22.	15 22-16	23	18538	18712
Mar. 1.	9 58-11	1	18537	18692	25.	10 12-10	58	18530	18728	23.	10 18-11	23	18527	18707
2.	15 23-16	21	18529	18692	26.	8 20- 9	5	18522	18728	24.	9 42-10	36	18489	18708
3.	11 35-12	28	18520	18682	28.	9 54-10	39	18525	18730	25.	11 19-12	19	18535	18712
5.	10 1-11	1	18480	18681	29.	9 13-10	10	18527	18731	25.	12 24-13	12	18526	18698
6.	15 13-16	32	18512	18682	30.	10 0-11	0	18528	18728	26.	10 2-11	12	18492	18701
7.	11 10-12	14	18498	18683	31.	9 11-10	10	18518	18729	26.	11 24-12	20	18499	18708
8.	15 40-16	35	18535	18690						26.	12 27-13	11	18495	18699
9.	14 51-16	13	18528	18687	June 1.	9 13-10	11	18530	18731	26.	13 16-14	2	18498	18704
10.	10 34-11	29	18524	18686	2.	8 33- 9	52	18523	18733	27.	10 16-11	4	18502	18696
12.	11 21-12	4	18526	18683	4.	15 29-16	26	18554	18729	27.	11 12-12	7	18511	18696
13.	12 3-12	59	18536	18688						29.	14 28-15	32	18531	18704

April 15. Temperature raised to 16°.0

June 11. Temperature raised to 21°.0.

October 8. 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 in the TESTING HUTS at ABINGER, with the DEDUCED VALUES of the BASE-LINE of the HORIZONTAL INTENSITY MAGNETOGRAMS.—*continued.*

Greenwich Mean Time, 1934.		Observed Horizontal Intensity.	Deduced Value of Base Line.	Greenwich Mean Time, 1934.		Observed Horizontal Intensity.	Deduced Value of Base Line.	Greenwich Mean Time, 1934.		Observed Horizontal Intensity.	Deduced Value of Base Line.
h	m	h	m	h	m	h	m	h	m	h	m
		γ	γ			γ	γ			γ	γ
Nov. 1.	12 6-13 9	18543	18713	Nov. 24.	10 0-11 2	18529	18696	Dec. 4.	12 20-13 19	18482	18693
8.	14 49-16 17	18519	18710	26.	14 26-15 30	18534	18700	4.	14 17-15 6	18493	18694
10.	12 4-13 3	18533	18712	27.	10 2-11 12	18524	18695	5.	10 7-11 11	18516	18697
13.	14 14-15 7	18514	18708	28.	10 0-11 4	18529	18700	5.	14 38-15 31	18523	18698
14.	12 16-13 13	18531	18708	29.	10 20-11 25	18519	18691	5.	15 23-16 10	18524	18698
15.	14 27-15 28	18541	18711	30.	10 19-11 25	18531	18696	6.	9 26-10 32	18529	18701
16.	14 29-15 30	18544	18709	30.	11 50-12 53	18528	18694	6.	12 30-13 35	18525	18697
17.	11 12-12 6	18540	18707					6.	16 4-17 17	18533	18704
19.	14 36-15 37	18546	18711	Dec. 1.	11 34-12 42	18542	18697	7.	10 1-11 6	18523	18704
20.	14 25-15 40	18545	18710	3.	12 2-13 5	18526	18701	7.	14 29-15 36	18533	18702
21.	14 33-15 43	18539	18700	4.	9 48-10 48	18498	18695	7.	15 57-16 50	18537	18705
22.	14 31-15 35	18545	18702	4.	10 50-11 43	18495	18692	28.	14 49-16 26	18539	18695
23.	14 39-15 40	18540	18701					29.	10 12-11 14	18521	18697



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.

Greenwich Mean Time, 1934.				No. of Obs.	Observed Vertical Intensity.	Deduced value of Base Line.	Greenwich Mean Time, 1934				No. of Obs.	Observed Vertical Intensity.	Deduced value of Base Line.	Greenwich Mean Time, 1934				No. of Obs.	Observed Vertical Intensity.	Deduced value of Base Line.
h	m	h	m		γ	γ	h	m	h	m		γ	γ	h	m	h	m		γ	γ
Jan. 1.	14	51-15	15	6	42952	43147	Mar. 6.	12	43-13	5	8	42953	43146	May 10.	11	50-12	9	8	42926	43182
2.	10	36-11	1	10	42945	43147	7.	15	1-15	20	6	42969	43144	11.	11	1-11	22	8	42926	43184
3.	10	18-10	49	8	42953	43146	8.	12	26-12	54	8	42950	43146	12.	10	18-10	52	12	42936	43180
4.	10	50-11	17	8	42949	43145	9.	12	2-12	27	6	42943	43147	14.	15	52-16	19	8	42951	43180
5.	10	18-10	45	8	42949	43144	10.	11	44-13	4	6	42948	43147	15.	8	59-9	24	8	42947	43185
6.	11	31-11	48	6	42945	43144	12.	10	12-10	33	8	42948	43148	16.	15	49-16	5	6	42952	43185
8.	17	38-17	50	6	42954	43145	13.	11	6-11	34	8	42941	43148	17.	10	47-11	9	8	42933	43186
9.	11	21-11	35	6	42947	43142								18.	11	42-12	1	8	42937	43187
9.	16	34-16	50	6	42952	43144	13.	20	10-20	27	6	42953	43146	19.	9	25-9	47	8	42951	43190
10.	11	28-11	45	6	42945	43144	14.	11	49-12	13	6	42938	43146	21.	9	58-10	11	6	42935	43193
10.	15	34-15	53	6	42951	43146	15.	11	23-11	54	8	42944	43144	22.	10	33-10	49	8	42932	43192
11.	12	9-12	27	6	42948	43145	16.	10	22-10	54	9	42948	43145	23.	10	50-11	7	8	42945	43188
12.	10	50-11	13	8	42946	43143	17.	11	46-12	12	8	42944	43149	24.	8	29-8	45	8	42950	43183
13.	9	27-9	44	6	42945	43145	19.	11	47-12	24	10	42943	43149	24.	14	10-14	22	5	42952	43182
15.	12	10-12	27	6	42950	43142	20.	11	45-11	58	6	42937	43146	25.	8	34-8	53	8	42942	43186
16.	11	48-12	2	6	42949	43143	21.	12	47-13	8	8	42941	43146	26.	9	13-9	34	8	42946	43186
17.	11	26-11	43	6	42952	43146	22.	11	23-11	44	8	42938	43145	28.	10	59-11	52	8	42937	43187
18.	10	16-10	41	8	42953	43147	23.	11	41-12	0	6	42943	43147	29.	11	21-11	47	8	42927	43184
19.	11	19-11	36	6	42948	43142	24.	10	52-11	14	8	42944	43146	30.	11	38-11	58	8	42934	43185
19.	12	36-12	54	6	42949	43141	26.	9	43-10	2	8	42949	43150	31.	10	43-11	1	8	42926	43184
20.	10	6-10	23	6	42955	43142	27.	11	3-11	28	8	42943	43145							
22.	10	11-10	31	6	42948	43141	28.	11	15-11	33	6	42932	43142	June 1.	10	40-11	1	8	42934	43184
23.	11	51-12	8	6	42947	43146	29.	10	38-11	6	8	42934	43145	2.	10	37-10	59	10	42937	43184
24.	9	48-10	2	6	42946	43146	30.	11	14-11	33	8	42938	43148	4.	11	23-11	43	8	42929	43184
25.	10	57-11	15	6	42948	43145	31.	10	28-10	49	8	42937	43147	5.	9	6-9	28	8	42935	43186
26.	10	3-10	20	6	42953	43146								6.	9	30-9	54	8	42944	43184
27.	11	22-11	34	6	42941	43143	Apr. 2.	11	42-12	4	8	42935	43147	7.	10	21-10	46	8	42936	43184
29.	11	37-12	1	6	42941	43144	3.	8	54-9	20	8	42951	43146	8.	10	34-11	0	10	42940	43185
30.	13	13-13	32	6	42946	43145	4.	9	30-9	54	8	42946	43147	9.	11	8-11	34	8	42943	43187
31.	11	2-11	21	6	42937	43148	5.	12	42-13	5	8	42939	43146							
Feb. 1.	11	49-12	2	6	42944	43146	6.	11	56-12	21	8	42937	43147	11.	11	45-12	5	6	42936	43221
2.	14	58-15	24	8	42948	43148	7.	10	46-11	10	8	42940	43146	11.	17	40-17	59	6	42958	43221
3.	13	8-13	30	8	42947	43146	9.	10	31-10	56	8	42946	43148	12.	8	29-8	49	6	42938	43229
5.	16	59-17	22	8	42954	43148	10.	16	43-17	8	8	42957	43146	12.	15	51-16	10	6	42947	43228
6.	10	46-11	3	6	42947	43149	11.	10	53-11	50	8	42936	43147	13.	9	40-9	58	6	42941	43233
7.	11	44-12	1	6	42944	43151	12.	11	10-11	43	10	42942	43148	14.	10	35-11	3	10	42932	43234
8.	10	48-11	7	8	42948	43149	13.	10	29-10	52	8	42935	43146	15.	11	14-11	30	6	42932	43238
9.	11	12-11	45	8	42937	43147	14.	10	18-10	53	10	42935	43146	16.	10	21-10	41	8	42947	43239
10.	9	54-10	34	8	42943	43148								18.	13	52-14	13	8	42933	43094
12.	16	51-17	19	8	42957	43150	16.	9	36-10	3	8	42940	43176	19.	10	55-11	28	6	42936	43099
13.	11	2-11	20	6	42943	43148	16.	12	24-12	46	8	42932	43173	20.	11	23-11	50	8	42939	43099
14.	11	36-11	58	8	42944	43148	21.	10	32-10	54	8	42938	43181	21.	10	20-10	51	8	42943	43102
15.	10	45-11	7	8	42941	43149	23.	15	50-16	12	8	42952	43181	22.	10	49-11	41	8	42938	43107
16.	11	37-12	10	8	42935	43150	24.	8	21-8	42	10	42948	43182	23.	10	55-11	17	8	42936	43104
17.	11	7-11	29	8	42952	43146	24.	15	35-15	54	8	42951	43184	25.	11	20-12	2	8	42925	43104
19.	10	17-10	42	8	42945	43148	25.	9	36-9	54	8	42941	43185	25.	11	20-12	2	8	42925	43104
20.	10	1-10	24	8	42948	43148	25.	13	37-14	4	8	42940	43183	26.	8	42-9	16	8	42943	43107
							26.	14	16-15	2	10	42947	43178	27.	10	33-11	1	8	42933	43104
20.	15	21-15	42	6	42959	43143	27.	10	38-11	5	8	42930	43181	28.	11	53-12	7	6	42929	43105
21.	11	5-11	22	6	42944	43146	28.	9	47-10	11	8	42927	43181	29.	10	54-11	17	8	42936	43106
22.	12	49-13	15	8	42949	43144	30.	9	35-9	54	8	42928	43182	30.	11	39-11	59	8	42930	43108
23.	11	28-11	48	6	42940	43144	May 1.	14	25-14	43	8	42939	43180	July 2.	16	8-16	28	8	42953	43108
24.	10	50-11	14	8	42943	43141	2.	11	15-11	36	8	42927	43181	3.	10	40-11	3	8	42922	43110
26.	17	5-17	32	8	42954	43145	3.	8	34-8	53	8	42924	43183	4.	10	45-11	27	8	42929	43105
27.	10	38-11	3	8	42942	43145	4.	10	30-11	0	12	42937	43182	5.	10	20-10	40	8	42947	43111
28.	11	20-11	42	6	42936	43144	5.	10	45-11	14	12	42927	43181	6.	9	34-10	4	10	42939	43110
Mar. 1.	11	46-12	25	8	42938	43146	7.	14	5-14	26	8	42939	43183	7.	10	23-10	43	8	42934	43107
2.	16	41-17	4	8	42962	43149	8.	11	30-11	50	8	42931	43185	9.	8	49-9	16	8	42944	43107
3.	12	49-13	11	8	42943	43147	9.	10	12-10	34	8	42929	43187	10.	9	27-10	8	10	42944	43105
5.	16	58-17	40	8	42975	43149														

April 15. Temperature raised to 16°.o.



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—*continued*.

Greenwich Mean Time, 1934.				Greenwich Mean Time, 1934.				Greenwich Mean Time, 1934.						
h	m	h	m	h	m	h	m	h	m	h	m	h	m	
No. of Obs.	Observed Vertical Intensity.	Deduced value of Base Line.		No. of Obs.	Observed Vertical Intensity.	Deduced value of Base Line.		No. of Obs.	Observed Vertical Intensity.	Deduced value of Base Line.		No. of Obs.	Observed Vertical Intensity.	Deduced value of Base Line.
July II.	8	42947	43107	Sept. 6.	8	42946	43159	Nov. 2.	8	42969	43179			
12.	8	42938	43110	7.	8	42952	43158	2.	4	42969	43183			
13.	8	42938	43112	8.	12	42947	43156	3.	8	42959	43183			
14.	10	42937	43112	10.	8	42955	43155	5.	8	42956	43181			
16.	6	42967	43113	11.	8	42946	43158	6.	8	42955	43182			
17.	8	42947	43113	12.	8	42945	43159	7.	8	42958	43184			
18.	8	42941	43109	13.	10	42948	43158	8.	8	42971	43183			
19.	8	42943	43113	14.	8	42951	43158	9.	8	42976	43188			
20.	8	42945	43113	15.	8	42943	43157	10.	10	42968	43189			
21.	8	42930	43110	17.	6	42964	43160	12.	8	42972	43186			
23.	8	42949	43112	18.	8	42958	43159	13.	8	42963	43189			
24.	8	42948	43114	19.	6	42952	43161	14.	8	42966	43190			
25.	8	42935	43115	20.	10	42958	43165	15.	8	42964	43188			
26.	8	42937	43114	21.	8	42953	43167	16.	10	42971	43187			
27.	8	42923	43116	22.	8	42956	43169	17.	8	42968	43186			
28.	10	42933	43116	24.	8	42939	43172	19.	8	42967	43189			
30.	8	42973	43118	25.	8	42947	43174	20.	8	42966	43191			
30.	4	42959	43116	26.	10	42948	43174	21.	8	42957	43188			
31.	8	42957	43110	27.	8	42954	43173	22.	10	42961	43191			
				28.	8	42958	43171	23.	8	42966	43190			
				29.	8	42955	43173	24.	8	42965	43193			
								26.	8	42970	43191			
Aug. 1.	8	42949	43117					27.	8	42967	43191			
2.	8	42952	43119					28.	8	42970	43191			
3.	8	42949	43120					29.	10	42970	43190			
4.	10	42956	43123					30.	8	42966	43189			
6.	8	42950	43129											
7.	8	42953	43128											
8.	8	42942	43127	Oct. 1.	8	42954	43174							
9.	8	42957	43128	2.	8	42959	43173							
10.	8	42951	43129	3.	10	42954	43174							
11.	8	42950	43129	4.	8	42946	43175							
13.	8	42941	43135	5.	8	42955	43179							
14.	8	42961	43133	6.	8	42954	43182							
15.	8	42951	43137	8.	8	42952	43184							
16.	8	42940	43134											
17.	8	42939	43132	9.	8	42952	43166							
18.	8	42938	43130	9.	8	42962	43165							
20.	8	42956	43133	10.	10	42954	43165							
				11.	8	42951	43163							
21.	8	42959	43136	12.	8	42950	43164							
				13.	8	42952	43164							
22.	8	42941	43138	15.	8	42955	43165							
23.	8	42952	43141	16.	10	42956	43164							
24.	8	42951	43146	17.	8	42957	43167							
25.	8	42951	43147	18.	8	42952	43169							
27.	8	42944	43148	19.	8	42956	43169							
28.	8	42951	43150	20.	8	42955	43168							
29.	8	42955	43151	22.	8	42952	43167							
30.	8	42957	43153	23.	8	42953	43166							
31.	8	42949	43153	24.	10	42957	43167							
				25.	8	42962	43167							
				26.	8	42973	43165							
				27.	8	42963	43166							
Sept. 1.	8	42951	43156	29.	8	42955	43168							
3.	8	42964	43158	30.	8	42957	43171							
4.	8	42958	43159	31.	8	42958	43174							
5.	8	42957	43155											

October 8. Temperature lowered to 16°-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.

1934 Day	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	43148	43150	43152	—	43195	43191	—	43131	43167	43185	43177	43186
2	151	151	149	43147	197	190	43118	130	—	184	178	—
3	156	147	150	148	200	—	110	130	163	188	177	190
4	150	—	—	148	192	191*	120	132	160	187	—	185
5	154	151	155	146	191	191	124	—	161	192	182	187
6	146	150	153	148	—	191	121	—	170	188	184	183
7	—	152	147	149	{ 192 189*	189	124	137	165	—	{ 183 179*	187
8	154	151	151	—		192	190	—	136	166		193
9	150	149	153	151	192	198	120	136	—	174	174	—
10	151	157	153	153	183	—	121	134	163	171	176	183
11	153	—	—	151	183	232	120	135	161	171	—	189
12	149	151	142	150	188	234	110*	—	165	170	179	192
13	146	157	150	154	—	241	116	142	165	174	183	189
14	—	152	148	151	195	246	121	143	167	—	181	187
15	141	152	158	145 177	188	246	—	146	170	171	178	190
16	146	154	—	185	189	254	—	146	—	173	182	—
17	149	153	147	185	197	—	121	137	165	175	178	185
18	147	—	—	182	191	109	118	148	176	175	—	197
19	149	154	153	186	200	111	123	—	175	174	182	194
20	148	150	151	185	—	113	120	155	169	177	180	184
21	—	156	148	184	198	112	121	—	180	—	185	186
22	144	153	145	—	196	112	—	148	173	181	187	191
23	143	148	143	189	206	116	126	154	—	177	185	—
24	153	150	143	193	197	—	125	151*	188	175	183	194
25	147	—	—	191	197	117	128	151	175	176	—	—
26	150	145*	152	192	190	122	126	—	185	176	188	—
27	149	147	152	192	—	119	126	159	181	175	183	201
28	—	151	149	195	195	118	135	159	185	—	189	199
29	148	—	153	—	198	129	—	154	183	—	185	195
30	148	—	145	196	195	116	143	158	—	175	186	194
31	151	—	143	—	197	—	—	156	—	178	—	—

April 15. Temperature raised to 16°o.  
June 11. Temperature raised to 21°o.

October 8. Temperature lowered to 16°o.  
\* Inductor bearings adjusted.

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 1925-1934.

Year.	Declination West.	Horizontal Intensity.	Vertical Intensity.	Inclination.
	° /	C.G.S. Unit	C.G.S. Unit	° /
1925	I3 22·7	0·18597	0·42946	66 35·1
1926	I3 10·4	0·18581	0·42947	66 36·3
1927	I2 58·4	0·18575	0·42932	66 36·2
1928	I2 47·0	0·18564	0·42941	66 37·3
1929	I2 35·8	0·18555	0·42918	66 37·2
1930	I2 24·6	0·18542	0·42924	66 38·2
1931	I2 13·7	0·18543	0·42923	66 38·1
1932	I2 2·6	0·18536	0·42940	66 39·1
1933	II 51·7	0·18532	0·42942	66 39·4
1934	II 41·1	0·18533	0·42955	66 39·7

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 1934.

**January.**—Generally speaking, the conditions were nearly quiet throughout the month. There were, however, notable movements in all traces during the evening of January 1, beginning at 17<sup>h</sup>. These were a wave in D,  $-20'$ , a wave in H,  $-100\gamma$ , and a wave in V,  $+50\gamma$ , extending roughly from 17<sup>h</sup> to 19<sup>h</sup>. The traces remained unsteady for about twenty-four hours, and then showed only minor movements (sometimes definitely undulatory) until 14<sup>d</sup>.18<sup>h</sup>. Between 14<sup>d</sup>.18<sup>h</sup> and 16<sup>d</sup>.6<sup>h</sup> there was considerable unsteadiness in D and H but no large movements occurred. Another period of unsteadiness extended from 22<sup>d</sup>.21<sup>h</sup> to 24<sup>d</sup>.6<sup>h</sup>. Towards the end of the month slight unsteadiness became practically continuous and from 29th to 31st had the appearance of irregular oscillation.

The range in declination during the month was from  $11^{\circ}.31'.3$  to  $11^{\circ}.55'.0$ , both on 1st; in horizontal intensity, from  $\cdot 18436$  on 1st to  $\cdot 18576$  on 22nd; in vertical intensity, from  $\cdot 42933$  on 31st to  $\cdot 43001$  on 1st.

**February.**—During the first seven days the prevailing characteristic of the traces of D and H was slight continuous undulation. There were in addition a few disconnected movements of greater amplitude, the largest being one in D ( $-10'$ ) at 2<sup>d</sup>.20<sup>h</sup>. At 8<sup>d</sup>.17<sup>h</sup>.6<sup>m</sup> a sharp movement in H was followed by disturbance in all traces lasting about twenty-six hours. The most vigorous period was from 9<sup>d</sup>.0<sup>h</sup> to 4<sup>h</sup> during which there was a temporary decrease in D ( $15'$ ) and in V ( $30\gamma$ ), with fluctuation in H exceeding  $70\gamma$ . The traces are reproduced in Plate I. Short recurrences of disturbance on 10th, 12th and 15th showed diminishing intensity, but at 16<sup>d</sup>.13<sup>h</sup> the movements grew rapidly larger and became obviously oscillatory. V showed an increase of  $65\gamma$  between 16<sup>d</sup>.13<sup>h</sup> and 16<sup>d</sup>.18<sup>h</sup>, while there were several movements exceeding  $10'$  in D and  $60\gamma$  in H. Activity declined after 16<sup>d</sup>.20<sup>h</sup>, but the appearance of irregular oscillation on a general unsteadiness persisted until 23rd, and indeed was never entirely absent during the remainder of the month. Conditions were, however, practically quiet after 26<sup>d</sup>.6<sup>h</sup>.

The range in declination during the month was from  $11^{\circ}.27'.8$  on 9th to  $11^{\circ}.56'.9$  on 16th; in horizontal intensity, from  $\cdot 18435$  on 16th to  $\cdot 18583$  on 9th; in vertical intensity, from  $\cdot 42910$  on 9th to  $\cdot 43007$  on 16th.

**March.**—A short period of minor disturbance occurred between 2<sup>d</sup>.20<sup>h</sup> and 3<sup>d</sup>.2<sup>h</sup> in which the chief movement was in H ( $+60\gamma$ ). From 4<sup>d</sup>.14<sup>h</sup> to 8<sup>d</sup>.0<sup>h</sup> disturbance was frequent. Notable movements were a temporary decrease in D from 4<sup>d</sup>.17<sup>h</sup> to 5<sup>d</sup>.1<sup>h</sup> ( $15'$ ) and a wave in H at 5<sup>d</sup>.8<sup>h</sup> ( $-100\gamma$ ). Traces continued very unsteady in general until the end of 11th. The period 12<sup>d</sup> to 15<sup>d</sup> was relatively quiet. Subsequently unsteadiness recurred, in varying degree, and prevailed with little or no intermission until the end of the month. Prominent waves in D appeared at 22<sup>d</sup>.22<sup>h</sup> ( $+15'$ ), 25<sup>d</sup>.0<sup>h</sup> ( $+10'$ ), 25<sup>d</sup>.1<sup>h</sup>—3<sup>h</sup> ( $-12'$ ), 28<sup>d</sup>.20<sup>h</sup> ( $-12'$ ); in H at 22<sup>d</sup>.5<sup>h</sup> ( $+50$ ), 22<sup>d</sup>.22<sup>h</sup> ( $+60$ ), 23<sup>d</sup>.22<sup>h</sup> ( $+70$ ), 29<sup>d</sup>.0<sup>h</sup> ( $+60$ ), 31<sup>d</sup>.14<sup>h</sup> ( $-50$ ), 31<sup>d</sup>.21<sup>h</sup> ( $+60$ ); in V, at 24<sup>d</sup>.23<sup>h</sup> to 25<sup>d</sup>.4<sup>h</sup> ( $-50$ ), while at 22<sup>d</sup>.22<sup>h</sup> and 23<sup>d</sup>.22<sup>h</sup> rapid decreases of  $40\gamma$  and  $30\gamma$ , respectively, occurred.

The range in declination during the month was from  $11^{\circ}.21'.7$  on 4th to  $11^{\circ}.55'.6$  on 5th; in horizontal intensity, from  $\cdot 18437$  on 5th to  $\cdot 18607$  on 23rd; in vertical intensity, from  $\cdot 42910$  on 25th to  $\cdot 42992$  on 4th.

**April.**—Unsteadiness characterised the traces during the first six days of the month. It was most marked on 1st and 4th. From 18<sup>h</sup> on the 4th there was a temporary decrease in D which amounted to more than  $20'$  at 22<sup>h</sup>, but steadily recovered between 4<sup>d</sup>.23<sup>h</sup>. $\frac{1}{2}$  and 5<sup>d</sup>.2<sup>h</sup>. There was also a rapid increase in V ( $50\gamma$ ) between 5<sup>d</sup>.14<sup>h</sup> and 5<sup>d</sup>.16<sup>h</sup>. A nearly quiet period extended from 7<sup>d</sup>.6<sup>h</sup> to 15<sup>d</sup>.20<sup>h</sup>. During 16th there were numerous small fluctuations in all traces. These had died away by 17<sup>d</sup>.6<sup>h</sup>, when a further nearly quiet period began, lasting till 19<sup>d</sup>.12<sup>h</sup>. Slight general unsteadiness then set in and lasted till the end of the month. The oscillatory tendency referred to in previous months was apparent on several days, notably on 20th, 25th and 28th.

The range in declination during the month was from  $11^{\circ}.24'.0$  on 4th to  $11^{\circ}.56'.2$  on 5th; in horizontal intensity, from  $\cdot 18477$  on 1st to  $\cdot 18587$  on 4th; in vertical intensity, from  $\cdot 42917$  on 29th to  $\cdot 42985$  on 5th.

**May.**—A period of minor disturbance lasted from 2<sup>d</sup>.12<sup>h</sup> to 3<sup>d</sup>.6<sup>h</sup> the principal movements in which were a sharp peak in H at 2<sup>d</sup>.23<sup>h</sup>. $\frac{1}{2}$  ( $+90$ ) nearly coinciding with a rapid decrease in V ( $-40$ ). Conditions then became almost quiet until 11<sup>d</sup>, with the exception of an isolated movement in H at 3<sup>d</sup>.23<sup>h</sup> and another at 10<sup>d</sup>.22<sup>h</sup>. At 11<sup>d</sup>.20<sup>h</sup>.10<sup>m</sup> a short-lived, but moderately active disturbance began, which comprised movements ranging through  $30'$  in D,  $120\gamma$  in H and  $50\gamma$  in V. Normal conditions were restored by 12<sup>d</sup>.4<sup>h</sup> and relative quiet prevailed until the end of 17<sup>d</sup>. Signs of disturbance in all traces appeared at 18<sup>d</sup>.2<sup>h</sup>. $\frac{1}{2}$  and were intensified after an abrupt movement at 18<sup>d</sup>.4<sup>h</sup>.6<sup>m</sup>. The disturbance was least pronounced in D. In the case of V it took the form of a steady increase between 18<sup>d</sup>.12<sup>h</sup>—17<sup>h</sup>. $\frac{1}{2}$  ( $100\gamma$ ) followed by an equal decrease between 18<sup>d</sup>.18<sup>h</sup> and 19<sup>d</sup>.2<sup>h</sup>. From 19<sup>d</sup> to 31<sup>d</sup> slight general unsteadiness prevailed, diminishing towards the 28th,—which was practically a quiet day,—and afterwards increasing.

The range in declination during the month was from  $11^{\circ}.26'.8$  to  $11^{\circ}.57'.1$  both on 11th; in horizontal intensity, from  $\cdot 18481$  on 18th to  $\cdot 18626$  on 2nd; in vertical intensity from  $\cdot 42910$  on 3rd to  $\cdot 43036$  on 18th.

**June.**—No disturbance of marked intensity took place during the month. There were periods of unsteadiness extending from 4<sup>d</sup>.12<sup>h</sup> to 10<sup>d</sup>.6<sup>h</sup>, from 11<sup>d</sup>.12<sup>h</sup> to 12<sup>d</sup>.21<sup>h</sup>, from 14<sup>d</sup>.12<sup>h</sup> to 19<sup>d</sup>.0<sup>h</sup> and from 27<sup>d</sup>.14<sup>h</sup> to 29<sup>d</sup>.6<sup>h</sup>. The remainder of the month was quiet, and it is necessary to go back to January 1929 to find a month with a larger number of days to which character "O" could be assigned.

The range in declination during the month was from 11° 30' 4 on 5th to 11° 51' 5 on 5th and 12th; in horizontal intensity, from ·18478 on 5th to ·18609 on 4th; in vertical intensity, from ·42923 on 18th, 26th and 30th to ·42985 on 5th.

**July.**—A disturbance, which began rather suddenly at 3<sup>d</sup>.10<sup>h</sup>, was for the most part over by 3<sup>d</sup>.20<sup>h</sup>. The oscillation in H amounted to about 100γ; in V there was a general increase of 80γ between 12<sup>h</sup> and 18<sup>h</sup>. The traces are reproduced in Plate II. Some unsteadiness remained until the end of 9th, especially in H. A nearly quiet period followed, lasting until 14<sup>d</sup>.14<sup>h</sup>, and then unsteady conditions revived. The unsteadiness, however, was small in amount, dying away altogether on 22nd and 23rd. At 30<sup>d</sup>.3<sup>h</sup>.19<sup>m</sup>.2 a sharp movement of the "sudden commencement" type occurred in all traces. The disturbance which followed was in no way remarkable and within twelve hours had subsided into a state of moderate unsteadiness which lasted to the end of the month. The traces are reproduced in Plate III.

The range in declination during the month was from 11° 29' 8 to 11° 59' 6 both on 30th; in horizontal intensity, from ·18434 on 30th to ·18604 on 14th; in vertical intensity, from ·42901 on 3rd to ·42990 on 30th.

**August.**—Conditions throughout the month were decidedly unsteady. On 3rd and 4th, several bays in the traces of D and H exceeded 10' and 40γ respectively and on 12th and 29th there were similar prominent features; while the period from 26<sup>d</sup>.12<sup>h</sup> to 31<sup>d</sup>.3<sup>h</sup> was one of continuous minor disturbance, including, among other movements a marked temporary decrease in H (90γ) between 29<sup>d</sup>.7<sup>h</sup> and 29<sup>d</sup>.10<sup>h</sup>. The traces, generally, showed small continuous oscillation extending for days in succession. The amplitude and period of these oscillations were irregular, but averaged 5γ and 12 minutes respectively. Scarcely any day was wholly free from them.

The range in declination during the month was from 11° 26' 0 on 12th to 11° 50' 5 on 13th; in horizontal intensity, from ·18451 on 28th to ·18594 on 29th; in vertical intensity, from ·42923 on 27th to ·42994 on 28th.

**September.**—A general state of minor disturbance prevailed throughout the month excepting the periods 5<sup>d</sup>—10<sup>d</sup> and 13<sup>d</sup>—15<sup>d</sup> which were nearly quiet. On 2nd an increase of V, 70γ, occurred between 13<sup>h</sup> and 17<sup>h</sup>, and between 3<sup>d</sup>.0<sup>h</sup> and 3<sup>d</sup>.4<sup>h</sup> a wave, -40γ; related movements of about 50γ in H took place at the same times. A conspicuous wave in H and D appeared on 19th at 22<sup>h</sup>, and in D on 22nd at 1<sup>h</sup>. On 24th from 7<sup>h</sup> disturbance became rapidly more pronounced and towards the end of the day several movements approaching 10' in D and 50γ in H occurred. At 24<sup>d</sup>.23<sup>h</sup> a double wave in H showed a range of 110γ. The disturbance culminated at 25<sup>d</sup>.18<sup>h</sup> with a very steep wave in H (+200γ) and in D (-32') accompanied by an abrupt decline in V (80γ) during which the value (which had steadily increased from 25<sup>d</sup>.11<sup>h</sup>) was restored to the normal. The traces are reproduced in Plate IV. After these movements disturbance rapidly subsided, but prominent waves appeared occasionally in each trace during the following days. Among these may be mentioned:—at 26<sup>d</sup>.22<sup>h</sup> in H (+65) and in V (-30); at 27<sup>d</sup>.17<sup>h</sup> in H (+75); at 30<sup>d</sup>.19<sup>h</sup> in H (+60) and in D (-20').

The range in declination during the month was from 11° 11' 8 to 11° 49' 4, both on 25th; in horizontal intensity, from ·18456 to ·18658, both on 25th; in vertical intensity, from ·42918 on 22nd to ·43046 on 25th.

**October.**—In the earlier part of the month conditions were nearly quiet, there being however a little unsteadiness on 1st, 4th and 7th. A period of general minor disturbance began at 12<sup>d</sup>.20<sup>h</sup> and lasted until 18<sup>d</sup>.6<sup>h</sup>. The movements were of small amplitude, scarcely any amounting to 10' in D or to 40γ in H. After two days of calm, a further period of slight disturbance set in about 20<sup>d</sup>.12<sup>h</sup>. At 20<sup>d</sup>.21<sup>h</sup> there was a wave in H (+50) and in D (-10'). At 24<sup>d</sup>.0<sup>h</sup> activity rapidly increased, the principal movements being in H which decreased 100γ between 24<sup>d</sup>.6<sup>h</sup> and 24<sup>d</sup>.9<sup>h</sup> and remained below normal value for several hours, while there was also an increase in V (40γ) between 24<sup>d</sup>.13<sup>h</sup> and 24<sup>d</sup>.16<sup>h</sup>. A prominent wave in D (-16') and in H (+100) occurred at 25<sup>d</sup>.17<sup>h</sup>. Subsequent movements were of diminishing amplitude and by 27<sup>d</sup>.0<sup>h</sup> only slight irregularities were shown on the traces. Nearly calm conditions were established by 28<sup>d</sup>.18<sup>h</sup> and prevailed for the remainder of the month.

The range in declination during the month was from 11° 22' 2 on 25th to 11° 49' 1 on 24th; in horizontal intensity, from ·18444 on 25th to ·18580 on 24th; in vertical intensity, from ·42932 on 24th to ·43007 on 25th.

**November.**—The month was quiet, on the whole, with only two short periods of disturbance. The first of these began at 7<sup>d</sup>.8<sup>h</sup> and lasted until about 9<sup>d</sup>.12<sup>h</sup>. Its principal movements were: in D at 7<sup>d</sup>.17<sup>h</sup> and 7<sup>d</sup>.20<sup>h</sup> (-15'); in H at 7<sup>d</sup>.16<sup>h</sup> (-80) and 8<sup>d</sup>.11<sup>h</sup> (-60); in V at 7<sup>d</sup>.16<sup>h</sup>—23<sup>h</sup>, a rapid rise (40γ) followed by a slow fall. The second period was much shorter, beginning at 24<sup>d</sup>.17<sup>h</sup>, and after one prominent movement in H (-50) the disturbance subsided into a succession of small nearly continuous oscillations which had disappeared by 26<sup>d</sup>.0<sup>h</sup>. Other movements during the month were confined to a few isolated waves of no particular significance.

The range in declination during the month was from 11° 19' 1 to 11° 49' 3, both on 7th; in horizontal intensity, from ·18441 on 7th to ·18572 on 17th; in vertical intensity, from ·42947 to ·43004 both on 7th.

**December.**—At 1<sup>d</sup>.4<sup>h</sup>.57<sup>m</sup> there was an abrupt movement in all traces. The disturbance which followed was at first of small dimensions, being characterised mainly by a few rapid oscillations in H at irregular intervals. These had practically ceased when, at 3<sup>d</sup>.22<sup>h</sup>, a rapid development began and all traces were subject to comparatively large movements within a short space of time. There was a range of 28' in D between 4<sup>d</sup>.2<sup>h</sup> and 4<sup>d</sup>.6<sup>h</sup>, and similarly a range of 150γ in H; while between 3<sup>d</sup>.23<sup>h</sup> and 4<sup>d</sup>.2<sup>h</sup> there was a diminution of 70γ in V, which, however, was subsequently recovered by 4<sup>d</sup>.8<sup>h</sup>. The traces are reproduced in Plate V. After 4<sup>d</sup>.15<sup>h</sup> the

movements became small and oscillatory once more, nearly dying out about 5<sup>d</sup>.10<sup>h</sup>, but appearing again at intervals during the next few days. Between 10<sup>th</sup> and 14<sup>th</sup> movements were inconsiderable. Slight unsteadiness showed from 14<sup>d</sup>.20<sup>h</sup> to 16<sup>d</sup>.0<sup>h</sup> and from 18<sup>d</sup>.21<sup>h</sup> to 19<sup>d</sup>.10<sup>h</sup>. Small oscillation (chiefly in H) again developed at 20<sup>d</sup>.12<sup>h</sup> and this gradually changed to general unsteadiness during the next day, the unsteadiness further increasing on 24<sup>th</sup> (when there was a movement of  $-60\gamma$  in H), but then subsiding to quiet conditions on 26<sup>th</sup>. At 29<sup>d</sup>.12<sup>h</sup> all traces began to show considerable activity, and by 18<sup>h</sup> a state of moderate disturbance was in existence. The traces during the main stage are reproduced in Plate VI. Several prominent waves occurred, however, during the ensuing twenty-four hours, chief of which were in D, at 30<sup>d</sup>.17<sup>h</sup> and 30<sup>d</sup>.18<sup>h</sup> ( $-15'$ ), and in H at 30<sup>d</sup>.13<sup>h</sup> ( $-70$ ).

The range in declination during the month was from  $11^{\circ}.7'.1$  on 29<sup>th</sup> to  $11^{\circ}.44'.2$  on 2<sup>nd</sup>; in horizontal intensity, from  $\cdot18425$  on 29<sup>th</sup> to  $\cdot18615$  on 3<sup>rd</sup>; in vertical intensity, from  $\cdot42897$  on 4<sup>th</sup> to  $\cdot43040$  on 29<sup>th</sup>.

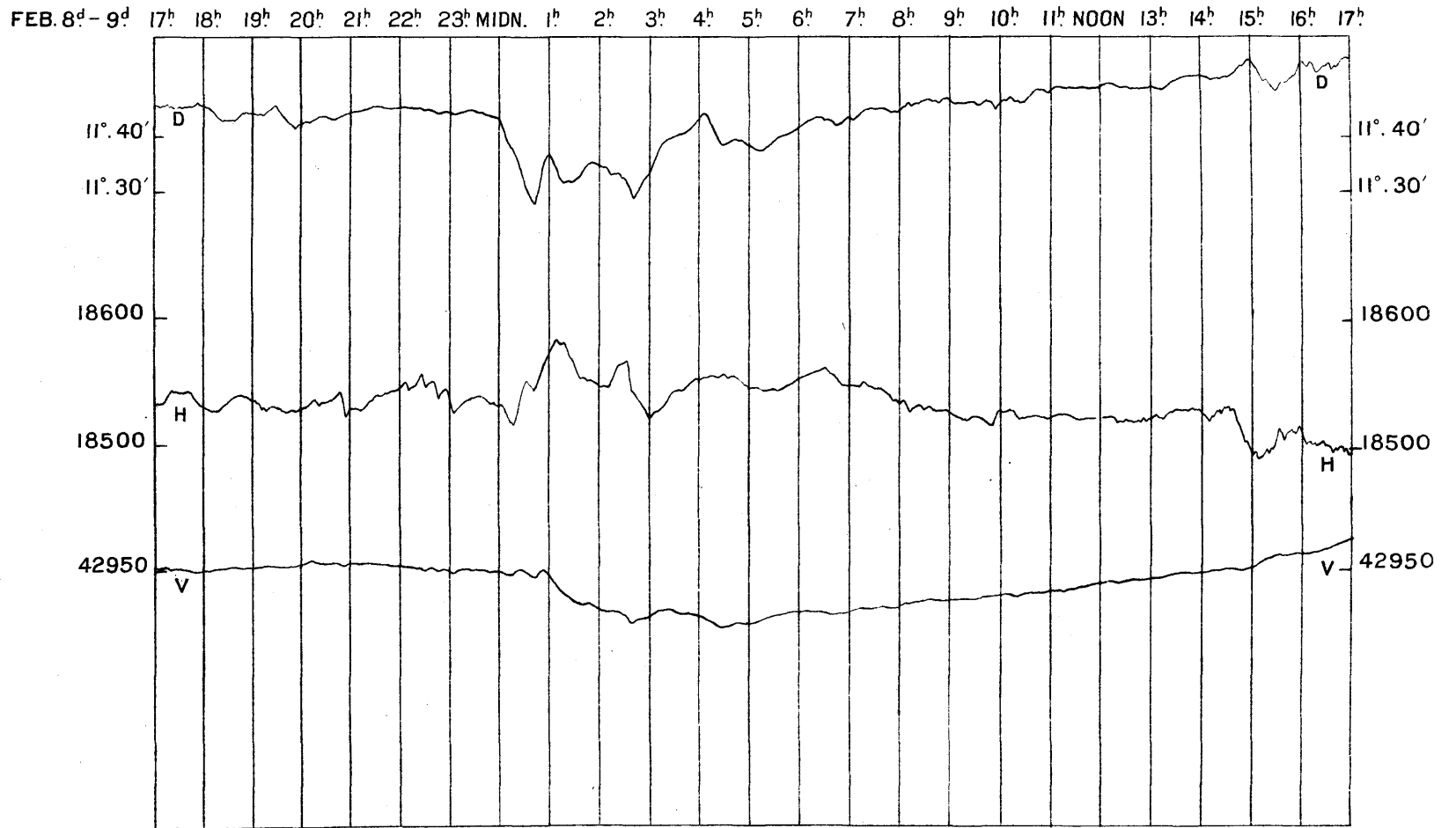
The absolute maximum and minimum values respectively of the elements recorded during the year were :

Declination,  $11^{\circ}.59'.6$  on July 30<sup>th</sup>;  $11^{\circ}.7'.1$  on December 29<sup>th</sup>.

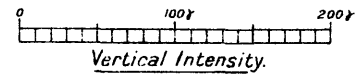
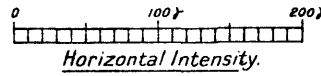
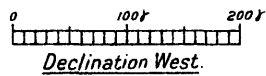
Horizontal intensity,  $\cdot18658$  on September 25<sup>th</sup>;  $\cdot18425$  on December 29<sup>th</sup>.

Vertical intensity,  $\cdot43046$  on September 25<sup>th</sup>;  $\cdot42897$  on December 4<sup>th</sup>.

MAGNETIC DISTURBANCES AS RECORDED AT THE  
ABINGER MAGNETIC STATION IN THE YEAR 1934.

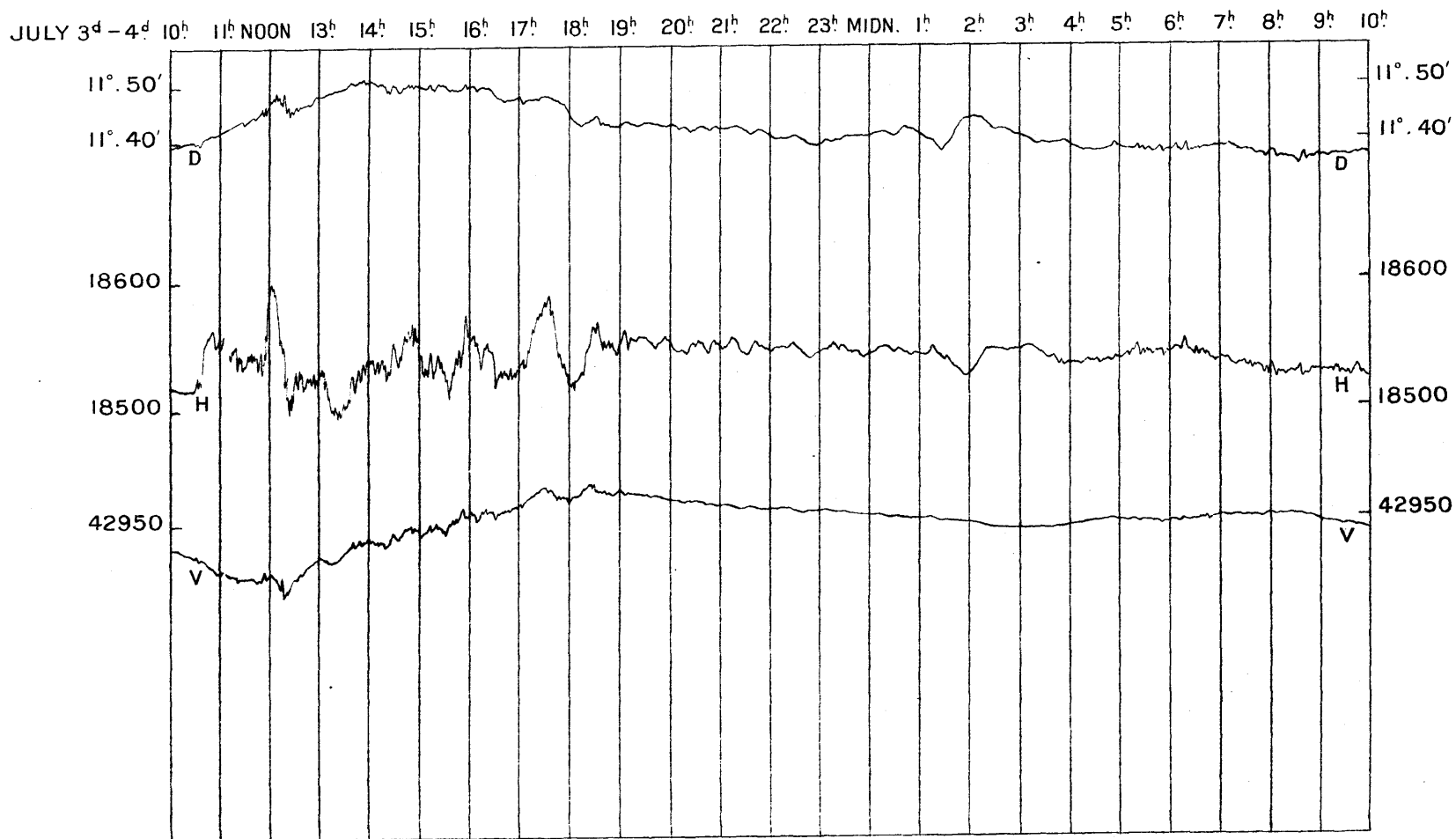


SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.

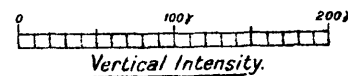
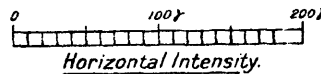
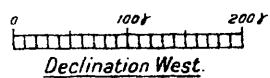




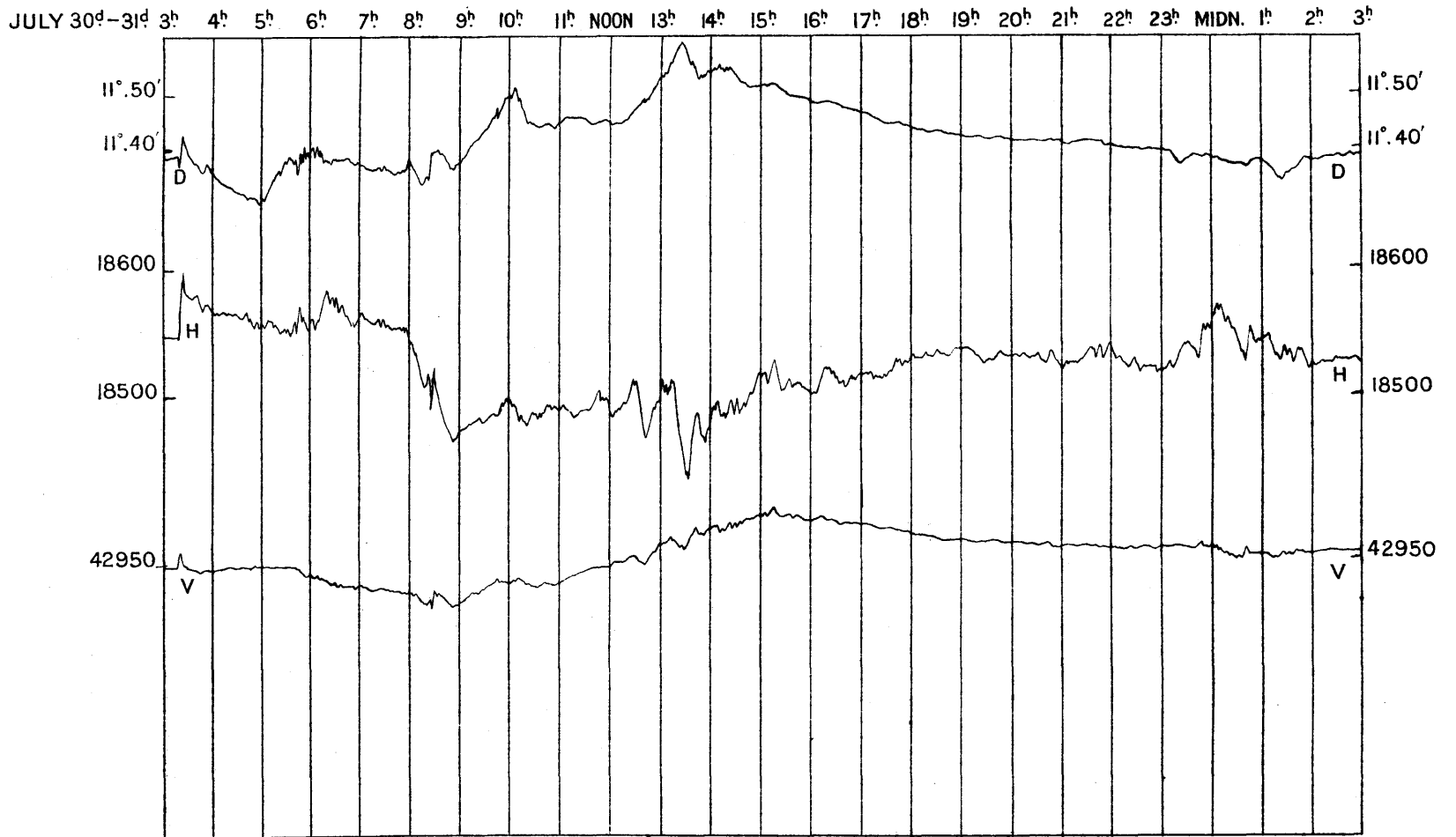
MAGNETIC DISTURBANCES AS RECORDED AT THE  
ABINGER MAGNETIC STATION IN THE YEAR 1934.



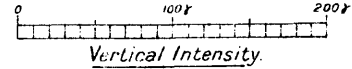
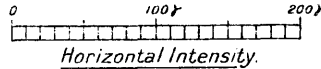
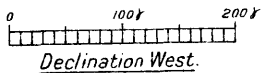
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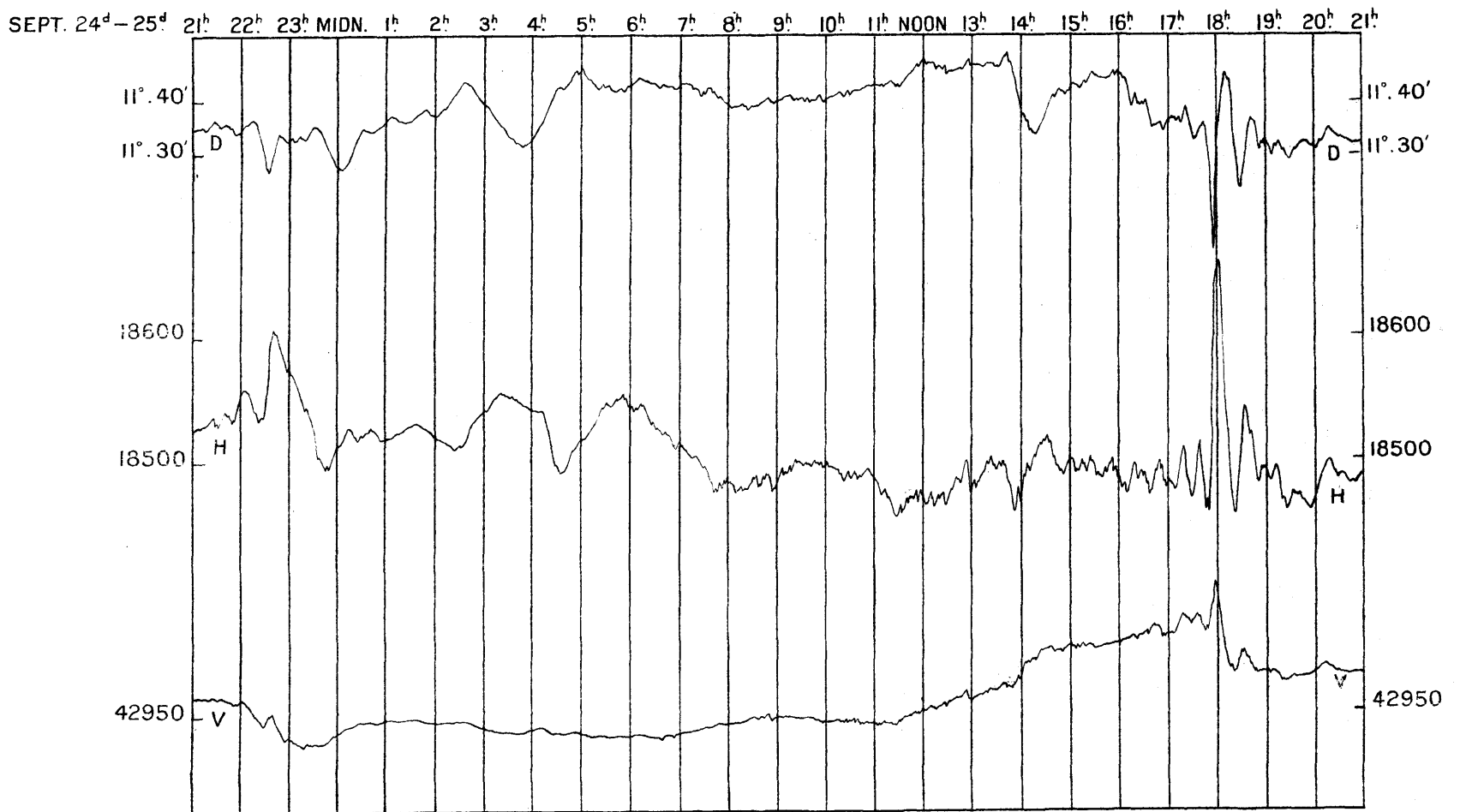
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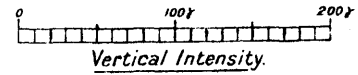
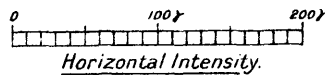
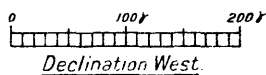
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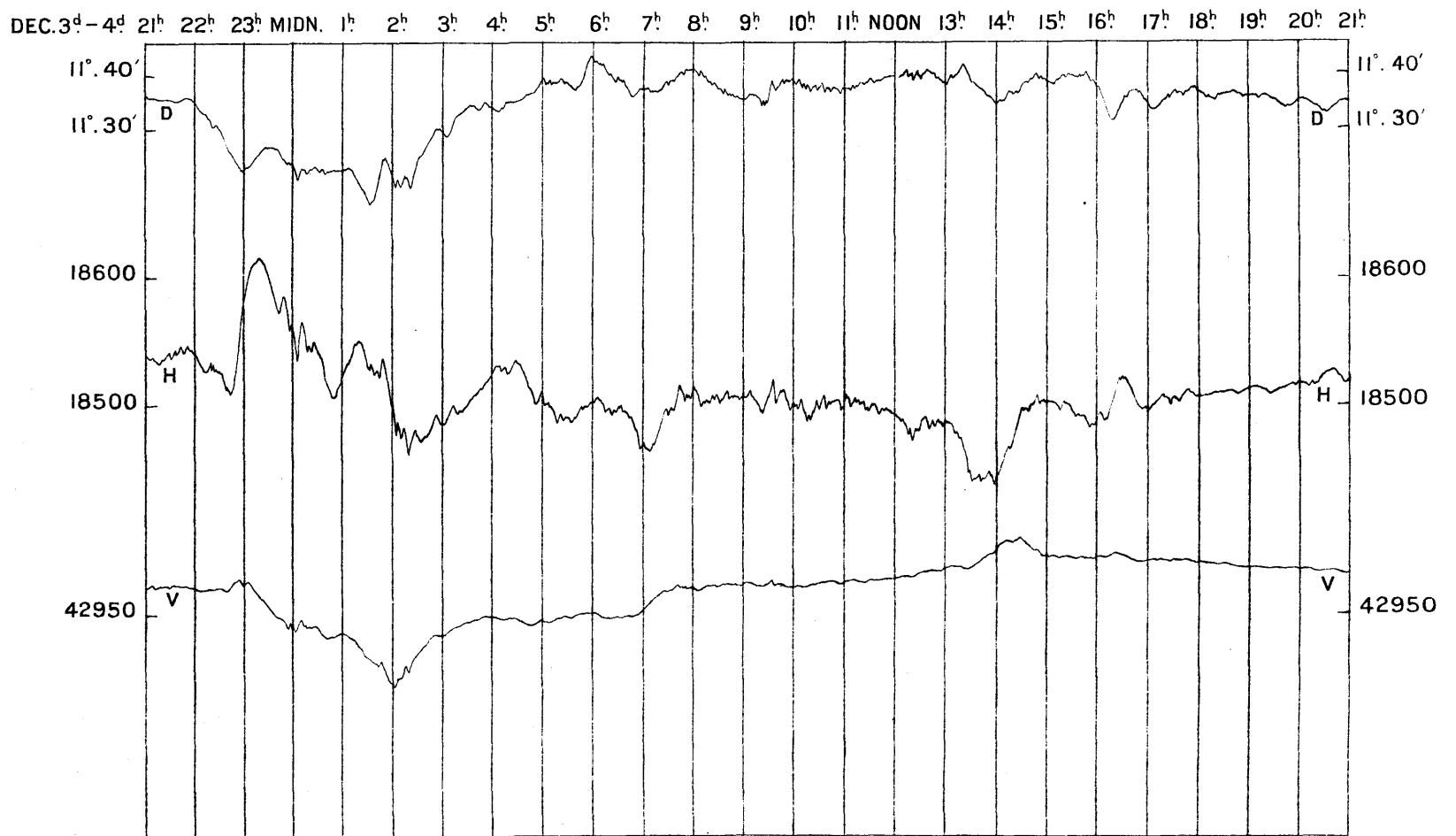
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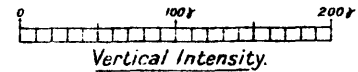
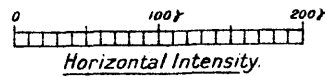
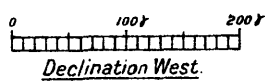
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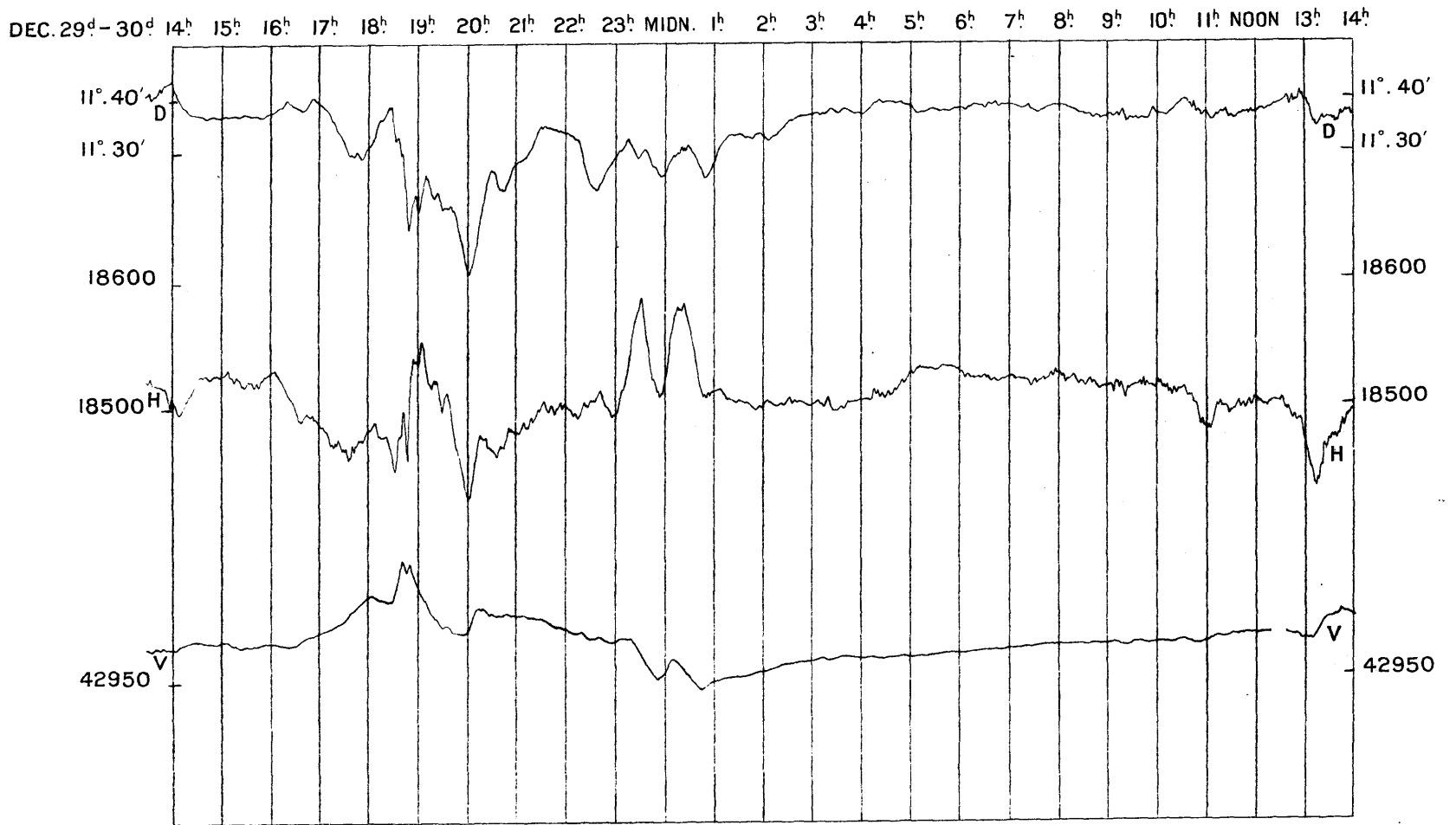
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ABINGER MAGNETIC STATION IN THE YEAR 1934.



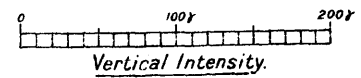
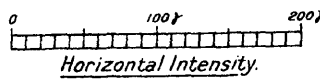
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



MAGNETIC DISTURBANCES AS RECORDED AT THE  
ABINGER MAGNETIC STATION IN THE YEAR 1934.



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



# GREENWICH METEOROLOGICAL OBSERVATIONS, 1934.

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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 in 1934 and in subsequent years 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 1934.*

The observations comprise eye observations of the ordinary meteorological instruments, including the barometer, dry- and wet-bulb thermometers, radiation and earth thermometers; continuous photographic record of the variations of the barometer, dry- and wet-bulb thermometers; 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. Registration of atmospheric potential gradient was discontinued at the end of June, 1933. Registration and measurement of the pollution of the atmosphere by suspensoids was commenced on 1934 July 1, the instrument employed being an Owens filter.

Greenwich mean time, reckoning from midnight to midnight, and counting from 0 to 24 hours, 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<sup>m</sup>.565 in diameter, and the depression of the mercury due to capillary action is 0<sup>m</sup>.002, but no correction is applied on this account. The cistern is of glass, and the graduated scale and attached rod are of brass; at its lower end the rod terminates in a point of ivory, which in observation is made just to meet the reflected image of the point as seen in the mercury. The scale is divided to 0<sup>m</sup>.05, subdivided by vernier to 0<sup>m</sup>.002. The barometer was mounted in 1840 on the southern wall of the western arm of the Upper Magnet Room at a height above mean sea level of 159 feet. 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 base-line 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 pivots to this pin, and is set at right angles to the first lever. Both levers are approximately horizontal in their mean position. On the short lever is mounted the moving mirror of the instrument 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- AND WET-BULB THERMOMETERS.—The standard dry- and wet-bulb thermometers and maximum and minimum self-registering thermometers, both dry and wet, are mounted on a revolving frame planned by Sir George Airy. This, together with details of the thermometers and the corrections applicable to them, may be found fully described in the volumes for 1912 and previous years.

Since 1899 January 4 this stand has 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 standard thermometer No. 515, kindly supplied to the Royal Observatory by the Kew Committee of the Royal Society.

The dry-bulb thermometer used throughout the year was Negretti and Zambra, No. 45354. The correction— $0^{\circ}\cdot4$  has been applied to the readings of this thermometer. The wet-bulb thermometer used throughout the year was Negretti and Zambra, No. 94737. The correction— $0^{\circ}\cdot2$  has been applied to the readings of this thermometer.

The dry- and wet-bulb thermometers are read at 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- and wet-bulb thermometers are employed to correct the indications of the photographic dry- and wet-bulb thermometers.

PHOTOGRAPHIC DRY-BULB AND WET-BULB THERMOMETERS.—The apparatus, which has been in use since 1887, was designed by Sir William Christie. 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° 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 values of wind velocity  $V$  given by the instrumental readings are three times the actual velocity  $v$  of the cups. From tests made by Mr. W. H. Dines

at Hershham in 1889, on his whirling machine, it would appear that the relation between  $V$  and  $v$  is more correctly given by

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

and that the instrument fails to record wind velocities less than 4 miles per hour. The values of the wind velocity given by the formula  $V=3v$  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.

In the present volume, however, all measures are calculated from the revised formula.

RAIN GAUGES.—During the year 1934 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. Greenwich Mean Time. 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, 1934, have been made at the Meteorological Office. These showed satisfactory agreement with the Greenwich estimations.

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 Greenwich mean midnight, except in the case of the Night-Sky Recorder, for which they relate to the period from dusk on the day named, to dawn of the following day.

All results in regard to atmospheric pressure, temperature of the air and of evaporation, with deductions therefrom, are derived from the photographic records, excepting that the maximum and minimum values of air temperature are those given by eye-observation of the ordinary maximum and minimum thermometers at 9h., 15h., and 21h., reference being made, however, to the photographic register when necessary to obtain the values corresponding to the limits from "midnight to midnight". The hourly readings for the elements mentioned are measured direct from the photographic curves, and reduced so as to be based fundamentally, both as regards scale and zero, on the readings of the standard barometer and dry- and wet-bulb thermometers.

The barometer results are not reduced to sea-level, neither are they corrected for the effect of gravity, by reduction to the latitude of  $45^{\circ}$ . 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 deduced from the observations for the sixty-five years 1841–1905. In this series the mean daily temperature from 1841 to 1847 depends usually on 12 observations daily, in 1848 on 6 observations daily, and from 1849 to 1905 on 24 hourly readings from the photographic record. The smoothed numbers are given in Table VII, *Reduction of the Greenwich Meteorological Observations*, Part IV and also in the introduction for 1910.

The daily register of rain contained in column 16 is that recorded by the gauge No. 6, whose receiving surface is 5 inches above the ground. This gauge is read at 9h., 15h., and 21h. Greenwich Mean Time. 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, 1934.

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

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 have been made in the present volume in order to bring the symbols into general accordance 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

- |                           |                           |
|---------------------------|---------------------------|
| <i>lu-ha</i> , lunar halo | <i>so-ha</i> , solar halo |
| <i>prhn</i> , parhelion   |                           |

1935, April 29.

H. SPENCER JONES,  
 ASTRONOMER ROYAL.



ROYAL OBSERVATORY, GREENWICH.

Results of  
Meteorological Observations  
1934

GREENWICH MAGNETIC AND METEOROLOGICAL RESULTS 1934.

MONTH and DAY, 1934.	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.				
Jan. 1	30.187	38.8	27.3	11.5	33.4	- 5.2	32.8	31.7	1.7	3.6	0.0	94	44.4	23.6	43.9	0.000	0.0	7.9
2	30.034	40.7	31.8	8.9	37.3	- 1.1	36.7	35.8	1.5	3.3	1.1	94	44.3	26.4	43.9	0.026	0.0	7.9
3	29.930	41.8	34.8	7.0	39.6	+ 1.3	38.6	37.1	2.5	4.6	0.8	91	46.0	27.1	43.8	0.020	0.0	8.0
4	29.744	50.4	38.1	12.3	46.3	+ 8.0	45.2	43.8	2.5	5.2	1.7	91	59.7	31.9	43.9	0.085	0.0	8.0
5	29.953	46.3	31.4	14.9	39.4	+ 1.2	37.4	34.3	5.1	9.1	1.7	82	53.2	23.5	43.8	0.000	3.5	8.0
6	30.184	46.8	30.5	16.3	40.5	+ 2.4	39.0	37.0	3.5	7.7	1.6	87	61.2	22.7	43.9	0.005*	1.7	8.0
7	30.009	47.1	42.9	4.2	45.1	+ 7.1	43.6	41.6	3.5	5.4	2.1	88	49.5	41.2	44.0	0.000	0.0	8.1
8	29.994	47.1	32.5	14.6	40.4	+ 2.5	38.9	36.9	3.5	7.1	1.3	87	52.0	24.8	43.9	0.022	0.3	8.1
9	30.152	42.2	27.8	14.4	34.1	- 3.8	33.0	31.0	3.1	8.0	0.0	89	59.1	19.9	43.8	0.003*	2.7	8.1
10	30.021	42.6	31.7	10.9	38.9	+ 1.0	37.8	36.1	2.8	6.8	0.0	90	50.3	29.2	43.9	0.005	0.0	8.1
11	29.566	49.0	37.1	11.9	42.7	+ 4.8	40.9	38.4	4.3	8.0	1.8	84	49.5	34.2	43.8	0.105	1.1	8.2
12	29.217	49.7	40.4	9.3	45.8	+ 7.9	44.1	42.0	3.8	6.6	0.9	86	54.2	34.5	43.8	0.221	0.1	8.2
13	29.485	48.9	40.6	8.3	44.4	+ 6.4	42.1	39.0	5.4	8.4	3.1	81	57.1	34.6	43.8	0.008	0.3	8.2
14	28.900	48.3	41.5	6.8	45.7	+ 7.7	43.1	39.7	6.0	11.7	3.3	80	51.4	36.9	43.8	0.248	0.0	8.3
15	29.184	45.4	37.5	7.9	40.8	+ 2.7	38.3	34.4	6.4	10.1	3.5	78	71.8	29.5	44.0	0.063	1.4	8.3
16	29.681	45.3	36.6	8.7	39.7	+ 1.4	36.6	31.3	8.4	12.2	1.7	72	64.8	29.1	44.1	0.107	4.3	8.4
17	29.532	54.4	45.3	9.1	50.2	+ 11.7	48.0	45.6	4.6	9.7	1.4	84	58.1	42.9	44.1	0.005	0.1	8.4
18	29.388	55.0	44.6	10.4	51.4	+ 12.8	48.9	46.2	5.2	8.0	3.2	82	64.1	39.3	44.1	0.203	0.0	8.4
19	29.711	46.6	36.4	10.2	41.9	+ 3.2	39.1	34.7	7.2	10.9	3.2	76	62.1	27.8	44.1	0.010	2.9	8.5
20	30.402	41.9	26.6	15.3	35.4	- 3.4	33.0	28.5	6.9	10.5	1.8	76	57.0	19.0	44.1	0.001*	0.3	8.5
21	30.525	34.8	24.0	10.8	28.9	- 9.9	27.7	24.9	4.0	6.3	0.9	84	39.8	16.0	44.0	0.001*	1.9	8.6
22	30.402	37.3	23.8	13.5	31.2	- 7.6	29.4	25.7	5.5	10.8	1.2	80	60.6	10.0	43.8	0.001*	5.1	8.6
23	30.459	40.2	25.6	14.6	31.4	- 7.5	29.8	26.6	4.8	12.6	1.3	82	75.0	16.1	43.5	0.000	6.6	8.7
24	30.356	35.3	25.0	10.3	29.1	- 9.8	28.4	26.7	2.4	3.9	0.8	90	47.4	11.1	43.0	0.004*	1.5	8.7
25	30.076	40.7	24.8	15.9	34.3	- 4.8	33.2	31.2	3.1	7.1	1.2	89	51.3	19.2	42.8	0.000	0.0	8.8
26	29.974	50.0	39.8	10.2	43.4	+ 4.1	41.9	39.9	3.5	8.2	1.9	87	79.6	33.6	42.6	0.102	1.4	8.8
27	30.069	45.9	37.2	8.7	41.3	+ 1.8	38.6	34.4	6.9	11.1	3.1	77	63.8	28.1	42.3	0.010	1.6	8.9
28	30.288	42.9	37.4	5.5	40.0	+ 0.4	36.8	31.5	8.5	10.1	4.9	71	57.9	27.6	42.1	0.001	0.0	8.9
29	30.367	40.6	31.7	8.9	37.6	- 2.1	35.2	30.9	6.7	10.7	2.2	77	46.9	20.3	42.1	0.000	0.0	9.0
30	30.375	42.1	29.3	12.8	36.7	- 3.0	35.4	33.3	3.4	6.4	1.0	87	43.5	22.0	42.1	0.074	0.0	9.0
31	30.407	43.7	37.0	6.7	41.2	+ 1.5	39.0	35.7	5.5	10.1	1.3	81	60.2	29.3	42.0	0.047	0.0	9.1
Means	29.954	44.6	33.9	10.7	39.6	+ 1.0	37.8	35.0	4.6	8.2	1.7	83.8	56.0	26.8	43.5	Sum 1.377	1.2	8.4
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of 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.

\*Rainfall (Column 16). The amounts entered on January 6, 9, 20, 21, 22 and 24 are derived from hoar frost.

The mean reading of the Barometer for the month was 29.954in., being 0.153in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 55.0 on January 18; the lowest in the month was 23.8 on January 22; and the range was 31.2. The mean of all the highest daily readings in the month was 44.6, being 1.5 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 33.9, being 0.2 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 10.7, being 1.3 greater than the average for the 65 years, 1841-1905. The mean for the month was 39.6, being 1.0 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1934.	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 Hours.		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>
Jan. 1	7:30	0.53	5:9	0.43	Calm	Calm : S	0.1	0.00	125	fe	c <i>Stcu</i> fe f	f FF	F c m x <i>lu.-ha</i>
2	0:0	0.00	0:0	0.00	Calm : SSW	SW	0.6	0.06	200	c x r	o <i>St</i> d m	o m d. d. f	o m. d
3	2:3	0.17	1:6	0.12	SW : WSW	SW	0.4	0.05	205	d r d m	o <i>St</i> m	c <i>Stcu</i> m	c m
4	5:4	0.39	5:3	0.38	SW : SSW	SW	3.5	0.91	377	c d.	c p m.	c <i>Nbst</i> i d.	c r r
5	13:7	1.00	11:0	0.80	WNW : WSW	NW : SW	1.7	0.27	289	c <i>lu.-ha</i> b x m	b m	c <i>Stcu</i> m. b f	b f x
6	0:0	0.00	0:0	0.00	SW : SSW	SW	3.6	0.80	359	b x	bc c <i>Ast</i>	c <i>Ast</i>	c
7	2:0	0.15	1:7	0.13	SW : SSW	SSW	3.5	1.02	391	c i d.	c <i>Nbst</i> i d.	c i d.	c
8	13:7	1.00	13:7	1.00	WSW	WSW	2.5	0.15	248	c r d	b bc <i>Ci</i> f	c <i>Ci so.-ha</i> b m	b m x
9	5:4	0.39	5:3	0.38	WSW : Calm	SSW : S	1.2	0.05	192	b x	bc <i>Ci</i> f	bc <i>Ci</i> b m	b x c d.
10	0:3	0.02	0:0	0.00	SSW	SSW	2.9	0.50	301	d d. c	c i d.	c i d.	c
11	0:0	0.00	0:0	0.00	SSW : S	SSW	5.5	1.59	444	c	b c <i>Nbst</i> r	r i r c <i>Stcu</i>	c r. r r.
12	12:2	0.89	10:7	0.78	SW : WSW	WSW	6.3	0.66	334	c r. r	c r r c m	c <i>Acu</i> m b m.	b
13	0:8	0.06	0:1	0.01	WSW	WSW : SSW	3.2	0.60	370	b c	c b c <i>Acu</i> m.	c <i>Acu</i>	c d d
14	6:7	0.50	5:3	0.40	SSW : SW : WSW	WSW	21.5	2.94	563	r r d	c <i>Stcu</i> q	c <i>Stcu</i>	c d
15	12:3	0.93	11:4	0.86	SW : WSW	WSW	11.0	0.89	418	c b c	c <i>Nbst</i> d r	c r b <i>Stcu</i>	b c
16	0:0	0.00	0:0	0.00	WSW : W	WSW : SW : SSW	4.6	0.85	417	b x	b <i>Ci</i> m.	b z. o <i>Ast</i>	o r r
17	2:2	0.16	0:4	0.03	SW : SSW	SW : WSW	10.0	1.97	505	i r.	i r. c <i>St</i>	c <i>Stcu</i>	c
18	8:7	0.66	7:2	0.54	SW : WSW	SW	11.9	2.23	523	c r d.	c <i>Stcu</i>	c bc <i>Ast</i>	bc p c R b
19	13:0	0.98	12:5	0.94	NW : WSW	NW : N	5.6	0.49	342	c r b	c <i>Stcu</i> m.	c <i>Stcu</i> b m.	b x m.
20	12:7	0.98	8:3	0.64	N : NNE	NNE : Calm	1.1	0.10	209	b x m.	b c <i>Stcu</i> m	c <i>Stcu</i> b m	b f x
21	8:7	0.67	7:9	0.61	Calm	Calm	0.0	0.00	137	b f x m	b f x	b x f m	b m c f x
22	12:3	0.95	12:3	0.95	Calm	Calm : SSW	0.1	0.00	146	c b m x	b f m	b c <i>Stcu</i> m	b m x
23	9:8	0.75	9:6	0.74	SSW : S	SSW : Calm	0.3	0.02	203	b x	b f b	b <i>Ci</i>	b f x
24	2:9	0.22	2:9	0.22	Calm	ESE : Calm	0.6	0.02	151	b FF x	FF	b f	b f FF x
25	0:5	0.04	0:0	0.00	Calm : SSW	SSW	2.0	0.27	269	FF x o	o c <i>Stcu</i>	c <i>Stcu</i>	c <i>lu.-ha</i> d
26	10:9	0.84	9:9	0.77	SSW	SW : WSW	2.3	0.34	318	d d.	c r c <i>Stcu</i>	c <i>Ci Cu</i> b	b c p. <i>lu.-ha</i> b
27	3:7	0.29	3:3	0.26	WSW : W	NW : NNW	3.3	0.55	359	b c	c <i>Nbst</i> r.	c b	b c m
28	0:5	0.04	0:5	0.04	N	N : NNE	1.0	0.15	254	c m	c <i>Stcu</i> m	c m. d.	c d. c m.
29	3:8	0.30	2:5	0.20	NE	NE : Calm	1.2	0.14	238	c m.	c <i>Stcu</i> m.	c <i>Stcu</i> m	b c f x
30	2:2	0.18	1:9	0.15	Calm : WSW	Calm : W	0.1	0.00	192	o F f	o <i>St</i> f	o <i>St</i> f	o d f r r
31	1:0	0.08	0:7	0.06	NE : N	N : NNW	2.6	0.33	303	r r c	c <i>St</i> m m.	c <i>Stcu</i> m.	c m.
Means	5.6	0.42	4.9	0.37	..	..	..	0.58	303				
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 37°.8, being 0°.6 higher than the average for the 65 years, 1841-1905.  
 The mean *Temperature of the Dew Point* for the month was 35°.0, being 0°.1 lower than  
 The mean *Degree of Humidity* for the month was 83.8, being 3.0 less than  
 The mean *Elastic Force of Vapour* for the month was 0.204in., being 0.001in. less than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.149. The maximum daily amount of *Sunshine* was 6.6 hours on January 23.  
 The highest reading of the *Solar Radiation Thermometer* was 79°.6 on January 26; and the lowest reading of the *Terrestrial Radiation Thermometer* was 10°.0 on January 22.  
 The *Proportions of Wind* referred to the cardinal points were N. 13, E. 3, S. 34, W. 33, calm or nearly calm conditions, 17, the whole month being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 21.5 lbs. on the square foot on January 14. The mean daily *Horizontal Movement of the Air* for the month was 303 miles; the greatest daily value was 563 miles on January 14, and the least daily value was 125 miles on January 1.  
*Rain* (0.005in. or over) fell on 18 days in the month, amounting to 1.377in., as measured by Gauge No. 6 partly sunk below the ground; being 0.504in. less than the average fall for the 65 years, 1841-1905.

MONTH and DAY 1934.	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	30.322	39.7	31.8	7.9	36.4	- 3.2	32.8	25.7	10.7	19.3	5.0	64	78.8	26.5	42.0	0.036	5.1	9.1
2	30.463	37.1	28.0	9.1	31.9	- 7.6	29.9	25.9	6.0	14.1	0.2	79	80.8	18.5	42.0	0.000	4.4	9.2
3	30.339	40.8	22.5	18.3	31.4	- 8.1	30.8	29.6	1.8	2.6	0.3	93	38.6	9.8	41.8	0.032	0.0	9.2
4	30.248	39.8	37.4	2.4	38.7	- 0.8	37.2	35.0	3.7	5.5	1.8	86	44.2	31.2	41.8	0.001	0.0	9.3
5	30.232	42.9	38.1	4.8	40.0	+ 0.4	37.9	34.7	5.3	8.6	2.0	81	45.7	34.6	41.7	0.000	0.0	9.4
6	30.197	47.9	37.2	10.7	41.5	+ 1.9	39.0	35.2	6.3	9.3	3.1	78	75.3	28.1	41.7	0.000	2.1	9.4
7	30.131	44.9	36.6	8.3	40.8	+ 1.3	38.6	35.3	5.5	10.1	2.4	80	57.3	30.0	41.6	0.000	0.0	9.5
8	30.011	48.9	36.4	12.5	43.7	+ 4.4	39.3	32.3	11.4	23.7	4.8	65	82.1	28.3	41.7	0.000	4.2	9.5
9	30.273	49.5	31.9	17.6	40.1	+ 1.0	36.7	31.1	9.0	20.5	2.5	69	89.6	26.7	41.7.	0.000	7.2	9.6
10	30.173	48.1	36.0	12.1	42.2	+ 3.3	39.8	36.2	6.0	9.5	2.6	79	65.3	29.7	41.7	0.001	0.0	9.7
11	30.361	45.3	32.2	13.1	39.2	+ 0.4	38.1	36.4	2.8	8.6	0.5	90	68.4	24.8	41.7	0.001*	2.1	9.7
12	30.527	48.7	31.0	17.7	36.7	- 2.1	35.7	33.9	2.8	5.4	0.0	90	64.5	23.3	41.7	0.004*	0.3	9.8
13	30.543	45.0	33.6	11.4	38.5	- 0.5	37.8	36.8	1.7	5.9	0.1	93	53.9	26.2	41.7	0.006*	0.0	9.8
14	30.506	43.0	30.6	12.4	35.7	- 3.6	34.0	31.0	4.7	13.6	1.3	83	79.1	18.6	41.7	0.002*	3.3	9.9
15	30.714	44.8	32.9	11.9	38.0	- 1.4	37.2	36.0	2.0	4.6	0.0	92	64.0	26.9	41.6	0.000	0.0	10.0
16	30.682	51.2	30.8	20.4	39.1	- 0.4	37.6	35.5	3.6	9.7	0.3	86	78.9	25.1	41.5	0.000	2.5	10.0
17	30.622	41.6	34.0	7.6	37.9	- 1.7	37.1	35.9	2.0	5.0	0.4	92	45.8	26.1	41.4	0.004*	0.0	10.1
18	30.541	38.0	32.4	5.6	36.2	- 3.3	34.9	32.7	3.5	5.9	2.0	87	39.5	27.0	41.3	0.001*	0.0	10.1
19	30.424	47.1	30.7	16.4	38.4	- 1.1	36.0	31.9	6.5	11.6	1.3	77	73.1	23.2	41.5	0.001*	0.2	10.2
20	30.384	48.9	31.9	17.0	40.8	+ 1.3	37.9	33.2	7.6	12.9	2.8	75	79.9	24.9	41.4	0.000	1.4	10.3
21	30.304	49.8	37.9	11.9	43.2	+ 3.6	40.4	36.4	6.8	12.1	2.7	77	77.8	31.1	41.3	0.000	0.6	10.4
22	30.236	49.7	32.3	17.4	40.0	+ 0.3	38.3	35.9	4.1	12.1	1.2	85	85.7	23.9	41.3	0.000	5.3	10.4
23	30.127	39.9	28.1	11.8	32.8	- 7.0	32.4	31.8	1.0	6.0	0.3	95	64.8	19.6	41.2	0.000	0.2	10.5
24	29.814	44.7	27.5	17.2	36.3	- 3.7	35.3	33.5	2.8	7.2	0.4	90	74.9	28.0	41.3	0.003	0.6	10.5
25	29.635	49.5	41.0	8.5	43.8	+ 3.7	42.1	39.9	3.9	7.9	1.9	86	66.0	36.5	41.4	0.064	0.0	10.6
26	29.817	41.0	29.2	11.8	35.2	- 5.0	32.0	25.7	9.5	12.6	3.6	67	88.2	22.9	41.3	0.000	3.5	10.7
27	29.566	42.0	28.1	13.9	34.7	- 5.6	31.7	25.8	8.9	16.9	3.6	71	84.6	21.9	41.3	0.000	4.6	10.8
28	29.516	37.2	33.8	3.4	35.2	- 5.1	34.1	32.2	3.0	5.9	2.2	89	45.7	32.2	41.3	0.042	0.0	10.8
Means	30.240	44.5	32.6	11.9	38.2	- 1.4	36.2	33.1	5.1	10.3	1.8	82.1	67.6	25.9	41.6	Sum 0.198	1.7	9.9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of 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.

\*Rainfall (Column 16). The amounts entered on February 11, 12, 13, 14, 17, 18 and 19 are derived from hoar frost or wet fog.

The mean reading of the Barometer for the month was 30.240in., being 0.43rin. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 51.2 on February 16; the lowest in the month was 22.5 on February 3; and the range was 28.7.

The mean of all the highest daily readings in the month was 44.5, being 0.7 lower than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 32.6, being 1.6 lower than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 11.9, being 0.9 greater than the average for the 65 years, 1841-1905.

The mean for the month was 38.2, being 1.4 lower than the average for the 65 years, 1841-1905.



MONTH and DAY 1934.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.				CLOUDS AND WEATHER.				
	POLARIS.		δ URSAE 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.					
hours.		hours.				lbs.	lbs.	miles					
Feb. 1	11-0	0-88	10-7	0-86	N : NNE : NE	NE	8-1	2-12	520	c i r	c b bc Cu y	bc Cu b y	b c b x
2	11-5	0-92	11-1	0-88	NE	NE : ENE	3-0	0-36	304	b x	b m bc Stcu y	c Stcu b	b x
3	1-3	0-11	1-0	0-08	Calm : WSW	W : NNE	1-2	0-06	207	b c x	c o d, f	o d, d, f	c
4	1-2	0-10	0-5	0-04	NE	ENE : NE	1-8	0-31	336	c d,	c Nbst d, m,	c Nbst d, m,	c d, m,
5	0-0	0-00	0-0	0-00	NE	NE : NNE : Calm	1-7	0-18	259	c d, m,	c Stcu m	c Stcu	c
6	5-0	0-40	2-7	0-22	NNW : Calm	N : NNW	0-5	0-02	197	c	c b f	b f m	b x c m
7	8-9	0-71	8-6	0-69	W	WNW : WSW	1-2	0-11	286	c	c Stcu f m,	c m, b m	b m c
8	12-5	1-00	12-5	1-00	W : NW	NNW : W	4-8	1-05	429	c b c	c r, m b Ci y	b Ci y	b
9	9-3	0-75	8-4	0-67	WSW	WSW	3-2	0-27	328	b x	b m,	b y	b
10	5-5	0-46	4-5	0-37	WSW	W : WSW	0-5	0-09	250	b c	c Stcu m	c m f g m d, r,	c b c
11	9-0	0-75	4-3	0-36	Calm : WSW	W : WSW	0-5	0-02	211	c b x	b f	b f	b f x
12	4-6	0-38	4-6	0-38	WSW : Calm	Calm : ESE	0-0	0-00	166	b f Fe x	Fe Fe	Fe b f	b f x Fe
13	8-0	0-66	7-8	0-65	Calm : ESE	ESE : E	1-6	0-12	215	FeFe	c Stcu f m,	c m,	c m b
14	0-0	0-00	0-0	0-00	Calm	Calm : N	0-8	0-03	180	b x	b f m y	b F c x f	c m
15	1-8	0-15	0-0	0-00	NNE : Calm	Calm	0-5	0-01	186	o	o F f	o f b m	F Fe x
16	5-7	0-48	0-5	0-04	Calm	N	0-6	0-02	185	FF	Fe F	F b m	b m x
17	0-0	0-00	0-0	0-00	NNW : Calm	Calm	0-1	0-00	165	b m FeFe	Fe fe	o f m	o m o
18	9-6	0-84	7-6	0-66	NE : Calm	Calm : WSW	0-1	0-00	164	o	o St m	o St m f	f b f x
19	11-5	1-00	11-5	1-00	WSW : NW	NW : WSW	1-2	0-10	263	b x	b f c b f	b f c Stcu b m,	b m,
20	8-1	0-71	6-4	0-56	WSW : NW	NW : WSW	2-6	0-19	313	b x	b f bc Frcu	c Stcu b	b c
21	7-7	0-68	6-8	0-59	WSW : NW	NW : WSW	1-7	0-15	294	c	c Stcu m	c Stcu b m,	c b m w
22	10-0	0-87	9-9	0-86	WSW	WSW : SW	0-3	0-03	221	b c w m,	c b m	b m f	b f x
23	2-0	0-18	1-9	0-17	SW	SW : Calm	0-1	0-00	177	b m x o fe	o fe F f	o f b Acu c m	b m x FF
24	0-5	0-05	0-1	0-01	Calm	SW : SSW	1-0	0-08	223	FF o f	o d, d, F f	d, f c m,	c lu.-ha
25	0-3	0-02	0-0	0-00	SSW : SW	SW : NNW	1-0	0-12	261	c d, d,	d, c Stcu	c g r d, m c	c
26	7-9	0-72	6-7	0-61	N	N	4-2	0-72	371	c	c s, c bc Frcu	c s, c y	c b
27	0-0	0-00	0-0	0-00	NNW : N	NNW : N	4-2	0-75	364	b c s,	c b c Stcu	c i s, bc	c
28	0-0	0-00	0-0	0-00	NNW	NNW	1-5	0-17	277	c	c s i s, m	c Stcu m, i rs	c rs
Means	5-5	0-46	4-6	0-38	..	..	..	0-25	263				
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 36°.2, being 1°.5 lower than  
 The mean *Temperature of the Dew Point* for the month was 33°.1, being 1°.9 lower than  
 The mean *Degree of Humidity* for the month was 82.1, being 1.5 less than  
 The mean *Elastic Force of Vapour* for the month was 0.189in., being 0.015in. less than  
 } the average for the 65 years, 1841-1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 5.6.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.171. The maximum daily amount of *Sunshine* was 7.2 hours on February 9.

The highest reading of the *Solar Radiation Thermometer* was 89°.6 on February 9; and the lowest reading of the *Terrestrial Radiation Thermometer* was 9°.8 on February 3.

The *Proportions of Wind* referred to the cardinal points were N. 28, E. 11, S. 10, W. 30, calm or nearly calm conditions, 21, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 8.1 lbs. on the square foot on February 1. The mean daily *Horizontal Movement of the Air* for the month was 263 miles; the greatest daily value was 520 miles on February 1, and the least daily value was 164 miles on February 18.

*Rain* (0.005in. or over) fell on 4 days in the month, amounting to 0.198in., as measured by gauge No. 6 partly sunk below the ground; being 1.282in. less than the average fall for the 65 years, 1841-1905.

DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY, 1934.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	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.				
Mar. 1	29.706	39.0	29.3	10.6	34.4	- 6.0	33.4	31.6	2.8	6.7	1.6	90	58.0	24.5	41.2	0.016	0.2	10.9
2	29.735	49.1	28.9	20.2	39.1	- 1.3	37.4	34.9	4.2	12.4	0.7	85	90.9	24.1	41.3	0.097	3.2	10.9
3	29.960	47.8	34.5	13.3	41.4	+ 0.9	37.9	32.4	9.0	19.6	1.0	69	85.5	29.0	41.2	0.000	5.9	11.0
4	30.086	50.6	32.7	17.9	41.4	+ 0.7	38.6	34.2	7.2	14.2	2.5	76	89.2	27.6	41.3	0.003	4.3	11.1
5	29.645	51.3	41.5	9.8	44.6	+ 3.7	42.6	40.0	4.6	13.7	2.6	84	89.4	37.8	41.3	0.106	2.3	11.1
6	29.380	48.0	36.3	11.7	41.4	+ 0.4	39.8	37.6	3.8	11.3	1.2	86	66.1	29.8	41.4	0.295	0.1	11.2
7	29.539	47.2	32.1	15.1	39.2	- 1.8	35.2	27.9	11.3	21.2	1.6	64	89.5	25.7	41.5	0.004*	7.4	11.3
8	29.729	51.5	32.2	19.3	40.1	- 1.0	36.9	31.6	8.5	19.5	2.2	71	89.1	25.7	41.5	0.000	2.0	11.3
9	29.595	52.2	30.8	21.4	40.0	- 1.0	35.8	28.2	11.8	22.9	1.9	63	105.1	22.1	41.6	0.000	7.7	11.4
10	29.323	54.8	36.7	18.1	42.8	+ 1.9	40.6	37.4	5.4	14.4	2.3	81	107.7	32.3	41.7	0.153	3.6	11.5
11	28.887	51.9	37.8	14.1	44.0	+ 3.0	42.4	40.4	3.6	8.1	1.2	87	98.1	33.5	41.7	0.153	1.1	11.5
12	28.723	46.4	37.5	8.9	41.6	+ 0.5	40.1	38.1	3.5	7.5	0.7	87	63.5	33.1	41.7	0.223	0.0	11.6
13	29.084	47.2	37.7	9.5	41.9	+ 0.6	40.2	37.8	4.1	7.7	2.3	85	62.5	33.2	41.9	0.054	0.1	11.7
14	28.987	45.1	36.9	8.2	40.9	- 0.6	39.2	36.8	4.1	11.4	1.2	85	65.7	35.7	42.1	0.426	0.1	11.7
15	28.786	51.4	37.2	14.2	42.0	+ 0.3	38.5	33.1	8.9	19.4	4.6	70	98.4	33.8	42.1	0.130	5.6	11.8
16	28.988	52.0	37.2	14.8	42.8	+ 0.9	39.8	35.4	7.4	19.2	1.8	74	103.2	32.8	42.2	0.070	6.3	11.8
17	28.673	48.7	36.9	11.8	41.7	- 0.3	38.4	33.3	8.4	17.4	3.8	72	97.2	31.0	42.2	0.000	2.8	11.9
18	29.043	50.2	37.0	13.2	41.4	- 0.6	36.9	29.1	12.3	25.3	4.3	61	101.0	28.0	42.3	0.000	6.9	12.0
19	29.175	50.0	32.5	17.5	40.7	- 1.2	39.4	37.7	3.0	8.3	0.4	88	83.0	28.7	42.3	0.088	0.5	12.1
20	29.280	47.2	38.6	8.6	42.8	+ 0.9	42.0	40.9	1.9	3.5	0.7	93	59.3	31.9	42.4	0.296	0.0	12.1
21	29.710	45.8	38.5	7.3	42.7	+ 0.8	40.5	37.3	5.4	6.4	2.0	81	56.1	34.0	42.4	0.003	0.0	12.2
22	29.802	50.8	33.0	17.8	41.2	- 0.8	37.9	32.7	8.5	18.1	1.7	71	96.1	27.6	42.5	0.000	4.1	12.2
23	29.986	48.1	32.5	15.6	39.9	- 2.3	38.3	36.1	3.8	10.6	0.9	86	66.4	25.3	42.5	0.000	0.0	12.3
24	30.025	53.5	31.5	22.0	43.3	+ 0.9	40.6	36.7	6.6	18.8	0.8	78	90.8	23.7	42.6	0.026	0.9	12.4
25	30.161	57.5	35.6	21.9	47.7	+ 5.0	44.5	40.5	7.2	23.1	0.9	76	112.3	26.2	42.6	0.005	6.8	12.5
26	30.012	56.1	30.7	25.4	43.0	- 0.0	41.2	38.6	4.4	11.0	0.1	85	98.6	21.6	42.6	0.000	5.0	12.5
27	30.027	53.1	37.2	15.9	45.8	+ 2.5	42.4	37.8	8.0	15.7	2.8	74	102.6	30.4	42.7	0.000	2.6	12.6
28	29.926	50.1	36.3	13.8	41.8	- 1.9	38.3	32.9	8.9	19.2	1.6	70	110.5	29.7	43.0	0.000	8.7	12.6
29	29.720	46.3	35.2	11.1	40.4	- 3.7	38.0	34.3	6.1	14.4	2.0	78	79.5	27.2	43.1	0.020	1.1	12.7
30	29.649	50.1	33.7	16.4	40.6	- 3.9	37.5	32.4	8.2	16.2	1.1	73	97.2	24.6	43.2	0.000	2.9	12.8
31	29.797	49.8	33.4	16.4	40.5	- 4.4	37.4	32.3	8.2	14.9	1.3	72	110.5	21.0	43.1	0.000	7.5	12.8
Means	29.521	49.8	34.9	14.9	41.6	- 0.3	39.1	35.2	6.5	14.6	1.7	77.9	87.8	28.8	42.1	Sum 2.168	3.2	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 civil day, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of 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.

\*Rainfall (Column 16). The amount entered on March 7, is derived from hoar frost.

The mean reading of the Barometer for the month was 29.521in., being 0.232in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 57.5 on March 25; the lowest in the month was 28.9 on March 2; and the range was 28.6.

The mean of all the highest daily readings in the month was 49.8, being equal to the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 34.9, being 0.2 lower than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 14.9, being 0.2 greater than the average for the 65 years, 1841-1905.

The mean for the month was 41.6, being 0.3 lower than the average for the 65 years, 1841-1905.

MONTH and DAY 1934.	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.					
hours.		hours.				lbs.	lbs.	miles					
Mar. 1	11.0	1.00	11.0	1.00	Calm	Calm : S	0.1	0.00	178	c i r s	c b f	b f	b f x
2	3.3	0.30	2.0	0.18	SSW	SSW : SW : W	2.3	0.16	278	b x	c Ci Cist	c Nbst d. d.	r r c m
3	10.5	1.00	10.5	1.00	WSW : NW	NW	2.0	0.21	302	c m b	b c Acu f	bc Frcu b y	b y
4	2.4	0.23	1.0	0.09	SW : WSW	WSW : SW	1.6	0.23	302	b w	bc Ci m	c p. c d.	c d.
5	6.8	0.65	5.3	0.51	SW : SSW	SW : WSW	3.2	0.41	338	c r	c Nbst r. r	r r. c p	b c p.
6	10.0	0.95	9.5	0.91	WSW	SW : N : WSW	1.2	0.14	264	c	c Nbst r	r r. c m	c m b
7	10.5	1.00	10.5	1.00	WSW : WNW	WNW : WSW	3.2	0.49	361	b x	b c Stcu y	c Stcu b y	b y
8	5.3	0.50	4.2	0.40	WSW	WSW : SSW	0.9	0.10	242	b x	c Ast m so.-ha y	c Ast so.-ha y	c b c
9	2.5	0.24	1.4	0.14	Calm	ESE : SSE	0.8	0.04	180	c b x	b f b y	b bc Frcu y	c
10	1.3	0.13	1.2	0.12	SE : S : SW	SSW : SSE	2.3	0.30	274	c i d.	c i d. b c Stcu y	c r h t l bc	c b c r
11	4.5	0.44	3.7	0.36	SSE : S	S : SSW	1.4	0.20	258	c d r.	c r r. c Stcu	c Nbst i d	c b c
12	0.6	0.06	0.5	0.05	ENE : E	Calm : WSW	1.1	0.10	236	c r r	c Nbst m r. c	o g i d f	o r. r
13	0.0	0.00	0.0	0.00	WSW : W	WSW : Calm	1.1	0.13	253	c	c Nbst i r m	r c i r. m	c r r
14	6.7	0.66	6.1	0.60	Calm : SW	S : SW	7.9	0.93	326	r r h r.	c Ast m	c i r r r	r r c
15	5.1	0.50	4.6	0.45	SW	SW : WSW	12.5	2.02	475	c b c p	c bc Frcu y	c t l p h	c
16	7.2	0.70	7.1	0.69	WSW : SW	SSW : SW	5.9	1.36	435	c b	b c Stcu y	c Ast r	r r c b
17	4.7	0.48	3.4	0.35	SW	SW : Calm	2.2	0.50	303	b	c i r. b c Frcu	c y	c
18	9.5	0.97	9.1	0.93	WNW : W	W : WSW	5.0	1.07	421	c	c Stcu y	c Stcu b y	b
19	4.7	0.48	2.7	0.28	SW : S	SSW : S	3.6	0.50	289	b c	c Nbst r. r r	r r c	c b
20	0.4	0.04	0.0	0.00	Calm	N	1.0	0.06	201	b c r r	r r m	r f r r. m	r r. i d.
21	6.4	0.65	4.4	0.45	NNW : N	N : NNW : WSW	1.6	0.21	275	o	c Nbst d m	c Stcu m.	c m. b
22	9.0	0.93	4.3	0.44	WSW : Calm	N	1.0	0.05	210	b c b	b f c Ci y	c Stcu y	c b
23	5.4	0.56	4.9	0.50	W : Calm	Calm	0.0	0.00	170	b x	b f	f c Acu m	c m
24	0.0	0.00	0.0	0.00	Calm : WSW	WSW	0.5	0.05	204	b x c m	c f o Ast	r. r c	c m. d
25	9.3	1.00	9.3	1.00	Calm : NE	NE : ESE : Calm	0.8	0.05	189	d m f	o m b y	b Ci y	b lu.-ha x
26	0.3	0.04	0.0	0.00	Calm : WSW	SW : NNW	1.2	0.05	199	b x	c m	b Ci z. m.	c
27	5.8	0.63	5.4	0.59	N : NNE	NE : ENE	2.4	0.45	321	c	c r. c Stcu	c Stcu bc y	b
28	2.8	0.30	1.5	0.16	NE	E : ENE	3.4	0.65	334	c	b c Frcu y	b Ci y	b w c
29	6.7	0.73	6.3	0.68	NE : E	E : ESE	1.6	0.26	281	c	c m dd c	c Stcu b	b c x
30	5.9	0.64	5.8	0.62	E : ESE	ESE	0.9	0.05	213	c x	c Stcu y	c Acu bc y	b x
31	8.5	0.97	8.5	0.97	E : ENE	ESE : E	1.7	0.25	273	b x c	c Stcu	c b Frcu	b w
Means	5.4	0.54	4.7	0.47	..	..	..	0.36	277				
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°.1, being 0°.3 lower than the average for the 65 years, 1841-1905.  
 The mean *Temperature of the Dew Point* for the month was 35°.2, being 0°.4 lower than the average for the 65 years, 1841-1905.  
 The mean *Degree of Humidity* for the month was 77.9, being 0.2 less than the average for the 65 years, 1841-1905.  
 The mean *Elastic Force of Vapour* for the month was 0.205in., being 0.004in. less than the average for the 65 years, 1841-1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.271. The maximum daily amount of *Sunshine* was 8.7 hours on March 28.

The highest reading of the *Solar Radiation Thermometer* was 112°.3 on March 25; and the lowest reading of the *Terrestrial Radiation Thermometer* was 21°.0 on March 31.

The *Proportions of Wind* referred to the cardinal points were N. 13, E. 16, S. 27, W. 29, calm or nearly calm conditions, 15, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 12.5 lbs. on the square foot on March 15. The mean daily *Horizontal Movement of the Air* for the month was 277 miles; the greatest daily value was 475 miles on March 15, and the least daily value was 170 miles on March 23.

*Rain* (0.005in. or over) fell on 16 days in the month, amounting to 2.168in., as measured by gauge No. 6 partly sunk below the ground; being 0.648in. greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1934.	BARO-METER.	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.				
April 1	29.842	48.8	33.1	15.7	40.2	- 0.1	38.2	35.2	5.0	12.3	1.9	82	94.6	25.1	43.2	0.000	0.7	12.9
2	29.813	54.3	39.8	14.5	45.5	- 0.2	42.3	37.9	7.6	15.6	2.0	75	105.0	35.4	43.2	0.000	4.0	13.0
3	29.821	49.4	37.6	11.8	42.8	- 3.2	39.9	35.7	7.1	11.8	3.5	75	86.5	33.0	43.3	0.009	0.1	13.0
4	29.660	47.3	37.9	9.4	42.3	- 3.9	40.5	38.0	4.3	5.4	1.7	84	58.4	30.0	43.3	0.215	0.0	13.1
5	29.458	58.4	32.4	26.0	45.4	- 0.9	39.9	31.2	14.2	28.3	1.4	57	114.1	24.9	43.6	0.000	10.3	13.2
6	29.487	45.1	38.1	7.0	41.4	- 4.9	38.5	33.9	7.5	10.9	4.5	75	62.6	36.8	43.5	0.000	0.0	13.2
7	29.412	47.6	33.0	14.6	39.5	- 6.8	37.4	34.1	5.4	11.9	2.2	81	87.7	23.4	43.5	0.012	0.1	13.3
8	29.359	53.0	29.3	23.7	41.2	- 4.9	37.8	32.4	8.8	18.9	0.8	70	84.2	20.6	43.7	0.000	2.0	13.4
9	29.449	46.4	36.7	9.7	42.3	- 3.7	39.3	34.7	7.6	10.9	3.2	74	75.1	32.6	43.7	0.000	0.0	13.4
10	29.542	56.2	31.3	24.9	43.7	- 2.2	40.3	35.3	8.4	20.0	1.1	72	107.6	20.9	43.7	0.014	4.4	13.5
11	29.318	66.2	45.0	21.2	54.0	+ 8.2	51.0	48.0	6.0	13.9	1.8	80	119.2	42.4	43.8	0.129	0.6	13.5
12	29.503	57.1	41.6	15.5	50.9	+ 5.0	47.1	42.7	8.2	20.2	3.0	73	102.1	37.7	43.9	0.006	3.6	13.6
13	29.860	63.7	38.9	24.8	51.6	+ 5.5	45.5	37.7	13.9	27.4	1.3	59	121.4	35.7	44.2	0.000	10.5	13.7
14	29.753	60.6	48.8	11.8	53.9	+ 7.5	50.2	46.4	7.5	14.9	2.2	75	82.3	45.1	44.4	0.001	0.0	13.7
15	29.830	77.6	48.9	28.7	61.3	+14.5	55.6	50.6	10.7	26.6	1.4	68	128.0	45.3	44.8	0.000	8.2	13.8
16	29.857	71.5	50.7	20.8	58.8	+11.6	54.4	50.5	8.3	19.5	2.6	73	124.4	46.2	45.1	0.030	5.4	13.9
17	29.650	70.3	49.4	20.9	56.7	+ 9.1	52.7	48.8	7.9	18.1	1.8	75	125.4	45.5	45.5	0.000	5.1	14.0
18	29.370	55.0	43.1	11.9	47.0	- 1.0	45.2	43.1	3.9	10.9	2.1	86	104.1	38.3	45.8	0.170	1.8	14.0
19	29.459	58.8	44.6	14.2	50.3	+ 2.0	46.5	42.0	8.3	16.1	2.6	73	117.8	39.9	46.2	0.111	6.4	14.1
20	29.770	58.9	41.9	17.0	48.9	+ 0.4	43.2	35.4	13.5	23.8	2.2	59	117.6	34.5	46.3	0.000	9.2	14.1
21	29.671	56.4	42.1	14.3	47.8	- 0.9	46.0	43.9	3.9	8.4	2.7	86	96.2	38.0	46.4	0.160	0.8	14.2
22	29.493	58.3	42.9	15.4	49.0	+ 0.3	44.0	37.5	11.5	20.1	1.1	64	106.4	31.6	46.5	0.000	2.7	14.3
23	29.407	55.3	39.0	16.3	47.1	- 1.5	42.5	36.2	10.9	19.1	3.1	66	91.6	30.1	46.6	0.020	2.8	14.3
24	29.031	55.0	39.1	15.9	44.8	- 3.8	42.3	38.9	5.9	16.3	1.1	80	108.9	34.9	46.7	0.369	2.5	14.4
25	29.208	58.3	37.1	21.2	46.7	- 1.9	43.5	39.5	7.2	20.4	2.4	75	119.8	30.0	46.7	0.097	5.1	14.4
26	29.173	55.0	42.1	12.9	47.0	- 1.6	45.4	43.5	3.5	10.6	1.2	87	106.2	38.8	46.7	0.383	3.3	14.5
27	29.477	50.2	41.8	8.4	45.6	- 3.1	44.5	43.2	2.4	6.9	0.4	91	65.5	35.6	46.7	0.279	0.0	14.6
28	29.779	60.8	41.3	19.5	48.4	- 0.4	46.4	44.2	4.2	14.3	0.0	85	118.0	33.1	46.8	0.136	1.9	14.6
29	29.917	62.2	36.6	25.6	50.1	+ 1.1	46.5	42.3	7.8	20.3	0.0	74	122.2	28.4	47.1	0.003*	8.5	14.7
30	29.914	63.2	42.5	20.7	51.4	+ 2.3	47.5	43.0	8.4	18.5	1.9	73	123.1	37.9	47.0	0.000	8.2	14.7
Means	29.576	57.4	40.2	17.1	47.9	+ 0.6	44.5	40.2	7.7	16.4	1.9	74.9	102.5	34.4	45.1	Sum 2.144	3.6	13.8
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of 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.

\* Rainfall (Column 16). The amount entered on April 29 is derived from wet fog.

The mean reading of the *Barometer* for the month was 29.576in. being 0.179in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 77.6 on April 15; the lowest in the month was 29.3 on April 8; and the range was 48.3. The mean of all the highest daily readings in the month was 57.4, being 0.2 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 40.2, being 1.2 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 17.1, being 1.1 less than the average for the 65 years, 1841-1905. The mean for the month was 47.9, being 0.6 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1934.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.			
	POLARIS.		δ URSAE MINORIS.		OSLER'S.			ROBINSON'S.						
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Horizontal Movement of the Air.					
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.		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.						
April 1	0.0	0.00	0.0	0.00	NE : ENE	NE	2.6	0.53	355	b x c	c Stcu	c	c	
2	0.5	0.06	0.2	0.02	NE	NE	2.8	0.76	387	c	c Stcu m.	c Stcu y	c	
3	0.2	0.03	0.0	0.00	NE	NNE : NE	2.1	0.29	306	c m.	c Stcu	c Nbst d c	c r c	
4	7.0	0.80	6.1	0.70	NE	NE : Calm	1.0	0.11	229	c rr	c o r. m.	c Ast m.	c b m. w	
5	1.9	0.22	1.2	0.14	Calm : E	ESE : ENE	2.2	0.26	258	b x m	b Acu y	b Ci Cicu y	b c	
6	0.0	0.00	0.0	0.00	E : NE	NE	1.7	0.21	268	o	o Ast	c Ast o	o	
7	8.3	1.00	8.3	1.00	NE	Calm : S	0.6	0.06	202	o d.	o d. d r. c	c d. c b f	b x m	
8	0.8	0.10	0.2	0.02	Calm	Calm : ESE	1.0	0.03	160	b x m	b c b f c m. y	c Ast y	c	
9	3.5	0.43	2.7	0.32	NE : NNE : N	N	1.0	0.11	233	c m	c Ast	c Ast	c b	
10	0.0	0.00	0.0	0.00	Calm	SE : E	2.2	0.15	209	c x	b c Stcu y	c b Acu y	b c r	
11	2.9	0.35	2.4	0.29	ESE : SSE	S : SSE	2.9	0.39	293	c d r	rr d. c r.	r. c i r	c r	
12	8.3	1.00	8.3	1.00	SSE : SSW : WSW	SW : SSW	6.7	1.10	377	c i r	c r. c Stcu	c Stcu y	b	
13	0.6	0.08	0.1	0.02	SSW : S	S : SE	2.7	0.45	292	b w	b c Ci so.-ha y	bc Ci y	c y	
14	3.7	0.49	3.0	0.40	S : SSW	SW : SSW	3.0	0.71	332	c	c Nbst i d	c Nbst	c b c	
15	6.0	0.80	6.0	0.80	Calm : SSW	SSW : SW	5.1	0.63	300	c	c bc Ci	bc Ci y	b	
16	1.8	0.24	1.2	0.16	SW	SSW : SW	2.0	0.21	247	c	c	c b Cicu	b c r	
17	4.4	0.58	4.1	0.55	Calm : SSW	SSW	2.4	0.17	243	c	c Stcu	c Stcu b y	c	
18	3.9	0.52	3.3	0.44	SSW : S	SW : SSW	4.7	0.81	332	b c	c Nbst rr	c r c p	c p b c	
19	6.4	0.85	5.5	0.74	SSW : SW	SW	7.5	1.32	395	c p	c R r b	c Stcu y	c b	
20	7.3	0.97	7.1	0.95	WSW : NW	W : SW	1.7	0.27	280	b c	c Stcu y	c Freu y	c b	
21	0.0	0.00	0.0	0.00	SW : SSW	SSW : WSW	3.5	0.54	318	b c d.	c Nbst rr	r c Stcu	c r. r	
22	7.0	1.00	7.0	1.00	Calm : N	N : NNW	0.8	0.07	201	c m.	c Stcu y	c y	b y	
23	0.0	0.00	0.0	0.00	NNW : NW	NW : WSW	2.8	0.39	321	b m	c Stcu y	c Stcu y	c r r	
24	6.0	0.86	5.8	0.84	SSW : NW	Var : SW	3.1	0.37	279	rr c	c Nbst p m.	c Nbst p	c p b	
25	3.8	0.54	3.6	0.52	WSW : SW	SSW : SW	3.1	0.48	308	b c	c Stcu y	c Nbst i d	c i r	
26	3.8	0.54	3.1	0.45	SSW	SW : SSW	3.0	0.26	271	c i r	c r c p r	rr c Nbst	c r r c	
27	0.0	0.00	0.0	0.00	SW : Calm	Calm : NNW	0.2	0.01	183	c	c r i r. f g	r. r. rr m	rr m c	
28	6.2	0.96	6.1	0.93	Calm	E : Calm	1.3	0.03	158	c d.	c Stcu m.	c Nbst t d. c r	c b m	
29	6.2	0.95	5.9	0.92	Calm : ENE	ENE : NE	1.2	0.14	217	b Fe	b Fe	c Stcu b y	b	
30	1.2	0.18	1.2	0.18	NE	NE	3.0	0.70	372	b w c	c Ci y	bc Ci b y	b c	
Means	3.4	0.45	3.1	0.41	..	..	..	0.39	278					
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 44°.5, being 0°.6 higher than the average for the 65 years, 1841-1905.  
 The mean Temperature of the Dew Point for the month was 40°.2, being 0°.6 higher than  
 The mean Degree of Humidity for the month was 74.9, being 0.4 greater than  
 The mean Elastic Force of Vapour for the month was 0.250in., being 0.006in. greater than

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

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.261. The maximum daily amount of Sunshine was 10.5 hours on April 13.

The highest reading of the Solar Radiation Thermometer was 128°.0 on April 15; and the lowest reading of the Terrestrial Radiation Thermometer was 20°.6 on April 8.

The Proportions of Wind referred to the cardinal points were N. 18, E. 17, S. 30, W. 18, calm or nearly calm conditions, 17, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 7.5 lbs. on the square foot on April 19. The mean daily Horizontal Movement of the Air for the month was 278 miles; the greatest daily value was 395 miles on April 19, and the least daily value was 158 miles on April 28.

Rain (0.005in. or over) fell on 16 days in the month, amounting to 2.144in., as measured by gauge No. 6 partly sunk below the ground; being 0.578in. greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY 1934.	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.				
May 1	29.756	67.7	43.1	24.6	53.3	+ 4.0	50.8	48.4	4.9	10.5	0.5	83	120.3	42.7	47.2	0.000	5.5	14.8
2	29.713	69.7	47.4	22.3	56.2	+ 6.7	52.5	48.9	7.3	19.8	0.0	77	104.5	40.1	47.5	0.000	2.1	14.9
3	29.751	67.0	47.3	19.7	55.6	+ 5.8	50.5	45.2	10.4	21.1	2.0	68	127.8	40.0	47.8	0.000	4.4	14.9
4	29.574	60.8	44.2	16.6	51.9	+ 1.9	46.3	39.3	12.6	18.0	4.4	62	77.1	38.1	47.9	0.000	0.0	15.0
5	29.618	61.7	41.0	20.7	51.0	+ 0.7	46.6	41.5	9.5	28.4	2.7	69	119.4	34.3	48.1	0.036	5.5	15.0
6	29.772	65.7	39.3	26.4	54.0	+ 3.5	48.4	42.1	11.9	18.2	2.2	64	120.8	32.5	48.3	0.091	2.5	15.1
7	29.970	62.7	40.6	22.1	51.6	+ 0.9	46.7	40.9	10.7	18.9	1.3	67	118.8	37.6	48.4	0.105	5.0	15.1
8	30.206	61.6	46.0	15.6	51.9	+ 0.9	47.6	42.7	9.2	17.7	1.0	70	103.3	39.1	48.5	0.038	0.1	15.2
9	30.205	57.6	48.8	8.8	52.0	+ 0.8	50.8	49.6	2.4	4.7	0.0	91	69.3	47.1	48.5	0.049	0.0	15.3
10	30.264	63.8	46.9	16.9	54.2	+ 2.7	50.3	46.3	7.9	15.8	0.2	75	131.0	38.2	48.9	0.001	11.0	15.3
11	30.215	74.1	44.7	29.4	59.6	+ 7.8	54.4	49.6	10.0	21.8	1.2	70	134.1	35.0	49.1	0.000	13.6	15.4
12	30.015	79.1	46.6	32.5	63.2	+ 11.1	56.6	50.9	12.3	26.7	1.2	65	137.1	35.8	49.3	0.000	9.0	15.4
13	29.885	64.9	50.5	14.4	56.5	+ 4.1	49.6	41.9	14.6	30.4	3.1	58	126.9	42.5	49.7	0.000	11.6	15.5
14	29.774	58.7	42.4	16.3	51.1	- 1.5	44.5	35.6	15.5	25.5	5.1	56	121.0	34.5	50.0	0.012	10.2	15.5
15	29.713	63.0	36.9	26.1	49.4	- 3.4	43.6	35.7	13.7	26.7	5.2	59	123.2	29.2	50.2	0.000	7.8	15.6
16	29.310	62.1	40.8	21.3	50.3	- 2.7	46.0	40.9	9.4	17.7	1.7	70	125.9	33.8	50.5	0.064	3.9	15.6
17	29.594	60.0	35.7	24.3	47.0	- 6.1	41.6	33.7	13.3	26.0	5.0	59	128.8	27.0	50.5	0.001	10.5	15.7
18	29.750	65.0	41.1	23.9	52.3	- 1.0	46.1	38.3	14.0	26.8	3.1	59	128.4	36.6	50.7	0.000	9.9	15.7
19	29.808	68.9	41.0	27.9	53.8	+ 0.3	48.4	42.3	11.5	27.7	4.3	65	127.7	33.7	50.7	0.001	4.9	15.8
20	29.965	64.4	45.2	19.2	53.4	- 0.4	48.3	42.5	10.9	20.8	4.6	67	133.9	37.8	50.8	0.000	3.2	15.8
21	30.024	72.1	49.9	22.2	60.0	+ 5.8	57.2	54.9	5.1	11.2	2.9	83	124.3	44.0	51.0	0.000	2.1	15.9
22	30.123	72.8	57.1	15.7	63.5	+ 8.9	59.0	55.6	7.9	15.7	3.5	75	130.2	52.2	51.1	0.000	5.2	15.9
23	30.146	67.2	53.0	14.2	60.1	+ 5.2	55.7	51.9	8.2	17.3	3.7	74	117.9	47.6	51.2	0.000	0.3	16.0
24	30.088	66.5	44.7	21.8	55.4	+ 0.1	49.6	43.3	12.1	26.4	2.6	64	130.4	38.0	51.6	0.000	13.1	16.0
25	29.952	70.0	40.7	29.3	54.4	- 1.1	48.6	42.1	12.3	23.4	2.1	63	139.0	28.2	51.8	0.003	6.1	16.0
26	30.135	60.2	42.1	18.1	50.3	- 5.5	44.7	37.3	13.0	25.7	3.9	61	132.2	35.3	51.9	0.000	11.7	16.1
27	30.120	67.4	41.9	25.5	54.7	- 1.3	48.6	41.7	13.0	22.4	3.1	61	128.5	35.2	52.0	0.000	12.8	16.1
28	30.064	62.2	46.6	15.6	54.1	- 2.1	49.9	45.5	8.6	13.8	4.3	73	109.5	34.2	52.1	0.000	3.8	16.2
29	30.018	72.3	44.7	27.6	57.0	+ 0.6	52.2	47.5	9.5	18.3	1.8	71	123.0	31.2	52.2	0.000	5.4	16.2
30	29.962	66.1	45.2	20.9	55.7	- 1.0	51.0	46.3	9.4	22.8	0.4	70	130.0	38.0	52.3	0.000	13.3	16.2
31	29.863	70.4	48.1	22.3	58.3	+ 1.2	53.5	49.0	9.3	16.9	0.4	71	130.6	42.2	52.3	0.000	4.2	16.3
Means	29.915	66.0	44.6	21.4	54.6	+ 1.5	49.7	44.2	10.3	20.6	2.5	68.4	121.8	37.5	50.1	0.401	6.4	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 civil day, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of 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 29.915 in., being 0.114 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 79.1 on May 12; the lowest in the month was 35.7 on May 17; and the range was 43.4. The mean of all the highest daily readings in the month was 66.0, being 2.1 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 44.6, being 0.9 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 21.4, being 1.2 greater than the average for the 65 years, 1841-1905. The mean for the month was 54.6, being 1.5 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1934.	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.	Miles						
May 1	4.7	0.72	4.5	0.70	NE : NNE	NE : Calm	0.6	0.09	212	0	m	o m b z.	b z.	b w m.	
2	4.0	0.62	3.7	0.58	Calm : WSW	Calm : E	0.6	0.02	183	b	o f	c bc Acu z.	c r. c z. y	b m.	
3	2.6	0.41	2.1	0.33	NE	NNE : N	2.0	0.26	274	b	c m.	c Acu y	c Ci so.-ha y	c b c	
4	5.5	0.85	4.8	0.73	N : NNW	WNW : WSW	1.4	0.19	264	c		c Ast y	c Ast y	c b c	
5	6.0	1.00	6.0	1.00	SSW : SW	SW : SSW	3.2	0.89	353	c	b c	c Nbst r d c	c b c Frcu y	b	
6	0.0	0.00	0.0	0.00	SSE : S	S	8.5	1.70	409	b	c	c so.-ha p. y	c Stcu y	c r r d.	
7	1.8	0.29	1.2	0.21	SSW : W	WNW : W	2.0	0.51	317	c	r d.	c Stcu y	c Stcu y	c	
8	0.0	0.00	0.0	0.00	WSW	WSW : SW	1.0	0.07	240	c	m.	c St	c y r.	r. c d r r	
9	0.0	0.00	0.0	0.00	SW : Calm	Calm	0.3	0.00	157	r	o	o St m	o St m.	o d d m.	
10	6.0	1.00	6.0	1.00	Calm : E	ENE : E	1.7	0.15	213	o	m. d	o b Cu	b Frcu y	b	
11	6.0	1.00	6.0	1.00	Calm : ENE	ESE : Calm	0.9	0.08	199	b	w z.	b	b y	b	
12	1.1	0.20	0.0	0.00	Calm	Calm : NNW	1.2	0.07	169	b	w	bc Ci so.-ha y	bc Ci c y	c l t w.	
13	3.3	0.61	3.2	0.59	NNW : NW	WNW : WSW	2.7	0.50	315	c		b y	b c y	c b c	
14	5.5	1.00	5.5	1.00	WSW : WNW	WNW : NW	7.1	1.63	424	c	b	bc Cu y	b c Cu y	c p y b	
15	0.3	0.07	0.1	0.03	SW	SW : SSW	2.6	0.60	310	b		b c Acu y	c Acu y	c	
16	2.9	0.52	2.8	0.50	SSW : SW	WNW : NW	7.5	0.95	373	c	dd	c dd b y	c Cunb p t c	c	
17	5.3	0.96	4.9	0.89	SW	SW : SSW : S	3.9	0.65	327	c	b	bc Stcu y	bc p y	b	
18	2.5	0.45	2.2	0.40	SSE : S	SSW : S	3.0	0.39	277	b	c	c Ast so.-ha y	c Cisi b y	b c	
19	0.0	0.00	0.0	0.00	SSE : S	SW : WSW	4.1	0.81	314	c		c Ast y	c Nbst p	c	
20	2.0	0.39	1.7	0.33	WSW : W	WSW : SW	2.9	0.52	305	c		c Ast so.-ha y	c Ast b	b c	
21	0.0	0.00	0.0	0.00	SW : WSW	SW : WSW	3.6	1.10	378	c		c Stcu	c Stcu b c	c	
22	2.0	0.40	1.9	0.39	WSW : W	W : WSW	2.8	0.69	342	c		c Stcu	c Stcu b	b c	
23	2.7	0.53	2.6	0.52	N : NE : Calm	SW : N : Calm	1.3	0.13	201	c		c Stcu	c Stcu	c p. c	
24	4.7	0.93	4.5	0.89	N	N : E	1.1	0.15	220	c	b	b Ci y	b Ci y	b	
25	2.9	0.59	2.5	0.51	Calm	Calm : NE	1.1	0.11	206	b		b bc c Acu y	c Nbst r.	c r.	
26	4.5	0.89	2.3	0.47	NE : NNE	NNE : SE : S	1.2	0.29	271	c	b	b c Frcu y	c Frcu b y	b c lu.-ha	
27	5.0	1.00	5.0	1.00	SW : NW	NNW	0.8	0.16	247	c	lu.-ha b	b Frcu y	b bc y	b	
28	5.0	1.00	5.0	1.00	NNW : NW	NW : N : NE	0.8	0.06	211	b	c	c Stcu	c Stcu b z.	b z.	
29	4.9	0.97	4.9	0.97	Calm	Calm : ESE	1.0	0.04	161	b	m z.	b c Stcu z.	c y	b	
30	5.0	1.00	5.0	1.00	E : ESE	ESE : E	2.0	0.39	277	b	c	b y	b y	b	
31	4.5	0.91	4.4	0.88	E : ENE	ENE : E	1.6	0.23	264	b	c m.	c Ci so.-ha	c Ci y	b	
Means	3.2	0.59	3.0	0.55	..	..	..	0.43	271						
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°.7, being 0°.7 higher than  
 The mean *Temperature of the Dew Point* for the month was 44°.2, being 0°.6 lower than  
 The mean *Degree of Humidity* for the month was 68.4, being 5.5 less than  
 The mean *Elastic Force of Vapour* for the month was 0.291in., being 0.007in. 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 6.2.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.411. The maximum daily amount of *Sunshine* was 13.6 hours on May 11.

The highest reading of the *Solar Radiation Thermometer* was 139°0. on May 25; and the lowest reading of the *Terrestrial Radiation Thermometer* was 27°0 on May 17.

The *Proportions of Wind* referred to the cardinal points were N. 19, E. 15, S. 22, W. 29, calm or nearly calm conditions, 15, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 8.5 lbs. on the square foot on May 6. The mean daily *Horizontal Movement of the Air* for the month was 271 miles; the greatest daily value was 424 miles on May 14, and the least daily value was 157 miles on May 9.

*Rain* (0.005in. or over) fell on 7 days in the month, amounting to 0.401in., as measured by gauge No. 6 partly sunk below the ground; being 1.514in. less than the average fall for the 65 years, 1841-1905.



MONTH and DAY, 1934.	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	29.886	75.7	49.2	26.5	62.1	+ 4.7	55.7	49.9	12.2	20.7	2.4	65	133.8	40.0	52.6	0.000	8.2	16.3
2	29.990	77.6	50.0	27.6	62.7	+ 4.9	55.2	48.4	14.3	28.1	4.7	59	142.2	45.5	52.8	0.000	12.3	16.3
3	30.074	67.3	46.2	21.1	56.1	- 2.0	49.5	42.2	13.9	25.9	4.4	59	134.9	41.3	53.0	0.000	13.5	16.4
4	29.924	56.4	46.3	10.1	51.9	- 6.4	48.8	45.5	6.4	8.6	3.9	78	71.5	41.6	53.1	0.000	0.0	16.4
5	29.833	64.2	49.0	15.2	54.5	- 3.9	48.8	42.4	12.1	25.1	5.0	64	129.8	45.1	53.1	0.000	6.4	16.4
6	29.750	58.1	47.3	10.8	51.5	- 6.8	48.2	44.6	6.9	11.9	1.7	77	106.2	42.0	53.2	0.096	2.6	16.4
7	29.808	66.2	47.5	18.7	54.9	- 3.3	49.9	44.7	10.2	23.5	1.8	68	126.2	39.9	53.3	0.005	5.5	16.5
8	29.953	74.1	44.1	30.0	59.0	+ 0.9	53.8	48.9	10.1	21.4	1.5	69	130.2	34.5	53.3	0.010	6.4	16.5
9	30.029	75.6	50.0	25.6	61.7	+ 3.7	55.7	50.4	11.3	19.6	2.4	67	127.4	40.0	53.6	0.000	3.9	16.5
10	29.965	77.3	48.5	28.8	62.8	+ 4.7	55.5	48.9	13.9	28.2	1.8	60	135.1	37.3	53.7	0.000	9.9	16.5
11	29.872	77.6	50.3	27.3	63.1	+ 4.9	54.9	47.2	15.9	31.5	3.7	56	139.7	40.0	53.9	0.000	7.2	16.6
12	29.925	70.2	48.5	21.7	56.0	- 2.4	50.4	44.5	11.5	21.1	3.3	65	131.3	40.3	53.8	0.000	8.0	16.6
13	29.861	78.7	42.6	36.1	62.0	+ 3.5	54.9	48.3	13.7	26.0	0.7	61	140.0	32.7	54.2	0.000	9.0	16.6
14	29.906	77.0	55.2	21.8	65.9	+ 7.2	58.9	53.2	12.7	21.9	3.8	64	124.0	49.7	54.4	0.000	3.1	16.6
15	30.051	72.6	54.3	18.3	63.3	+ 4.5	59.1	55.9	7.4	15.5	2.3	77	132.4	48.0	54.5	0.000	4.2	16.6
16	30.018	87.3	51.8	35.5	67.4	+ 8.5	60.0	54.3	13.1	25.4	1.5	63	148.4	44.2	54.9	0.000	9.6	16.6
17	29.941	90.6	53.0	37.6	71.8	+12.8	62.5	55.8	16.0	31.9	2.6	57	148.3	42.0	55.1	0.000	10.1	16.6
18	29.885	88.5	58.2	30.3	73.5	+14.3	63.5	56.4	17.1	28.2	4.3	55	147.2	49.5	55.3	0.000	10.7	16.6
19	29.625	72.9	57.0	15.9	63.3	+ 3.8	57.3	52.3	11.0	18.1	6.0	68	122.8	51.7	55.4	0.056	1.1	16.6
20	29.645	70.2	54.0	16.2	59.5	- 0.4	53.5	47.9	11.6	25.8	3.3	65	129.0	44.6	55.8	0.000	5.0	16.6
21	29.687	65.1	49.8	15.3	57.4	- 2.9	53.7	50.3	7.1	17.2	1.3	77	87.2	42.5	55.9	0.108	0.1	16.6
22	29.596	73.1	56.2	16.9	63.1	+ 2.5	54.1	45.2	17.9	33.3	1.9	52	133.7	51.3	56.1	0.000	12.5	16.6
23	29.838	68.1	53.3	14.8	59.5	- 1.4	53.0	46.7	12.8	22.8	7.3	62	138.1	47.6	56.1	0.092	4.1	16.6
24	29.712	67.2	53.2	14.0	59.6	- 1.6	58.2	57.1	2.5	5.8	0.1	92	91.2	51.2	56.1	0.246	0.0	16.6
25	29.704	78.1	56.5	21.6	63.7	+ 2.3	60.3	57.8	5.9	18.9	0.0	81	139.7	53.0	56.0	0.402	5.1	16.6
26	29.857	72.2	56.1	16.1	62.2	+ 0.7	59.1	56.7	5.5	15.7	0.2	83	130.4	53.0	56.2	0.007	1.4	16.6
27	29.865	70.0	54.0	16.0	61.4	- 0.2	58.8	56.8	4.6	8.4	0.7	85	115.4	48.9	56.2	0.109	0.3	16.6
28	29.794	66.4	48.2	18.2	57.2	- 4.4	53.9	50.9	6.3	13.4	1.9	79	126.6	41.7	56.2	0.340	5.5	16.6
29	30.016	67.6	51.0	16.6	58.2	- 3.4	53.8	49.8	8.4	14.7	0.1	73	124.9	44.6	56.3	0.000	8.0	16.6
30	30.076	77.8	52.6	25.2	64.2	+ 2.7	57.8	52.6	11.6	25.7	2.1	66	138.5	46.7	56.5	0.000	12.5	16.6
Means	29.870	72.8	51.1	21.7	61.0	+ 1.6	55.3	50.2	10.8	21.1	2.6	68.2	127.5	44.3	54.7	Sum 1.471	6.2	16.5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of 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 29.870in., being 0.048in. higher than the average for the 65 years, 1841-1905.

**TEMPERATURE OF THE AIR.**

The highest in the month was 90.6 on June 17; the lowest in the month was 42.6 on June 13; and the range was 48.0.  
 The mean of all the highest daily readings in the month was 72.8, being 2.1 higher than the average for the 65 years, 1841-1905.  
 The mean of all the lowest daily readings in the month was 51.1, being 1.2 higher than the average for the 65 years, 1841-1905.  
 The mean of the daily ranges was 21.7 being 0.9 greater than the average for the 65 years, 1841-1905.  
 The mean for the month was 61.0, being 1.6 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1934.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.			
	POLARIS.		δ URSAE MINORIS.		OSLER'S.				Robinson's.						
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.							Horizontal Movement of the Air.	
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.	Qh to 6h	6h to 12h	12h to 18h	18h to 24h			
hours.		hours.				lbs.	lbs.	miles.							
June 1	3.8	0.76	3.7	0.73	NNE	NNE : NE	1.7	0.30	280	b c	c b c r, c Acu	c Acu y	c		
2	0.5	0.10	0.3	0.07	NNE : NE	ESE : NE	4.8	0.68	352	c b c	c bc Ci y	b y	b c		
3	1.4	0.30	1.2	0.27	NE : NNE	NNE : NE	2.9	0.84	358	c b	b c b Ci y	b Ci y	b c		
4	0.0	0.00	0.0	0.00	NE : NNE	NE : NNE	2.7	0.59	327	c	c Nbst d.	c Stcu	c		
5	1.2	0.26	0.9	0.21	NNE : N	N : NNW	2.5	0.51	307	c	c Stcu y	c b Frcu c y	c		
6	0.0	0.00	0.0	0.00	N	N : NW	3.8	0.61	330	c	c Cumb p	c Nbst p r	c r r d.		
7	1.9	0.42	1.6	0.36	NNW	Calm : SW	1.4	0.14	223	c d, c	c Frcu y	c Acu y	c r, b c		
8	0.0	0.00	0.0	0.00	Calm : SE	S : SSW	1.4	0.19	208	c	c p c Frcu y	c Cist y	c		
9	..	..	..	..	SSW : Calm	Calm : E	0.5	0.05	188	c	c Stcu y	c bc so.-ha	b c b		
10	0.7	0.15	0.6	0.14	Calm : ENE	E	2.2	0.29	232	b	b Frcu y	b c Stcu y	c z, y		
11	1.1	0.25	1.0	0.24	Calm	NNE : E	2.1	0.18	193	c z	c b z, y	b Cu y	b y c		
12	4.5	1.00	4.5	1.00	NE	ESE	0.8	0.13	205	c	c b Acu y	b y	b		
13	4.1	0.92	3.7	0.81	Calm	SW	1.0	0.07	190	b	bc Ci so.-ha y	c Ast bc y	c y bc		
14	0.0	0.00	0.0	0.00	WSW : W	NW : NNW	0.8	0.15	227	b c	c Frcu y	c Stcu y	c		
15	4.4	0.97	4.3	0.95	Calm : E	E : Calm	0.7	0.08	201	c d, m.	c m, b Cu	b c Acu	b c m.		
16	4.5	1.00	4.5	1.00	Calm	SE : Calm	0.7	0.04	154	c m.	b Cu y	bc Stcu b y	b		
17	4.5	1.00	4.5	1.00	Calm	WSW	1.0	0.10	195	b m.	b Ci y	b c y	c b		
18	3.5	0.79	2.9	0.66	Calm : WSW	WSW : SW	2.0	0.30	254	b c m.	bc Acu y	c b Cu y	b c		
19	..	..	..	..	WSW : SW	SW : NW : W	4.7	1.02	367	b c p.	c Acu Cumb d.	c d, p	c b		
20	4.0	0.89	3.8	0.84	W : NW	NW : NNW	5.6	0.81	342	c	c Cumb p	c Stcu y	c b c		
21	1.3	0.29	1.1	0.25	NW : SW	SW	4.3	0.70	308	c	c p r	i r Nbst	r r d.		
22	2.5	0.55	1.9	0.43	WSW : W	W	9.2	2.79	522	c	c b Frcu y	b Cu y	b y c		
23	0.0	0.00	0.0	0.00	NE : E	E	7.0	0.95	332	c	c Stcu y	c Stcu y	c l r		
24	0.5	0.12	0.5	0.11	E	E : Calm	2.9	0.34	243	r r o	o St	o St c r.	c m.		
25	0.0	0.00	0.0	0.00	Calm	SW : N : Calm	1.2	0.06	188	c d m	r c Nbst p	p c Cumb y	c t l R r m.		
26	0.7	0.17	0.6	0.14	Calm : WSW	WSW : SW	2.0	0.19	263	o m.	o m, b c Stcu	c Acu r.	c		
27	3.7	0.82	3.7	0.82	SW	SW : WSW	2.8	0.50	305	c r r.	c r c Stcu	c Nbst r d	c b		
28	4.0	0.90	4.0	0.90	WSW : W	Var : NNW : N	2.7	0.12	230	b c	c Nbst r	c r R h t l	c b		
29	3.4	0.76	2.3	0.51	NNE	NNE	4.7	0.74	341	b c	c Stcu	c Stcu b y	b c		
30	4.5	1.00	4.5	1.00	NNE	NE	1.8	0.34	275	c m.	c b Cu y	b Ci y	b		
Means	2.2	0.48	2.0	0.44	..	..	..	0.46	271						
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 55°.3, being 0°.4 higher than  
 The mean *Temperature of the Dew Point* for the month was 50°.2, being 0°.6 lower than  
 The mean *Degree of Humidity* for the month was 68.2, being 5.0 less than  
 The mean *Elastic Force of Vapour* for the month was 0.365in., being 0.010in. 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 6.6.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.375. The maximum daily amount of *Sunshine* was 13.5 hours on June 3.

The highest reading of the *Solar Radiation Thermometer* was 148°.4 on June 16; and the lowest reading of the *Terrestrial Radiation Thermometer* was 32°.7 on June 13.

The *Proportions of Wind* referred to the cardinal points were N. 27, E. 21, S. 13, W. 21, calm or nearly calm conditions, 18, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 9.2 lbs. on the square foot on June 22. The mean daily *Horizontal Movement of the Air* for the month was 271 miles; the greatest daily value was 522 miles on June 22, and the least daily value was 154 miles on June 16.

*Rain* (0.005in. or over) fell on 11 days in the month, amounting to 1.471in., as measured by gauge No. 6 partly sunk below the ground; being 0.567in. less than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1934.	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.				
July 1	30.095	79.8	55.8	24.0	66.5	+ 5.0	60.5	56.0	10.5	23.6	2.3	69	142.3	43.2	56.5	0.000	14.9	16.6
2	30.097	80.7	55.3	25.4	65.9	+ 4.3	60.5	56.5	9.4	20.5	1.7	72	142.2	48.0	56.8	0.000	6.6	16.6
3	30.128	76.1	52.9	23.2	64.7	+ 2.9	58.1	52.8	11.9	22.9	1.5	65	123.9	43.6	57.0	0.000	7.7	16.5
4	30.059	82.2	48.8	33.4	64.8	+ 2.7	56.9	50.0	14.8	24.9	2.2	59	136.9	37.3	57.2	0.000	13.1	16.5
5	29.964	78.3	49.3	29.0	64.1	+ 1.8	56.3	49.5	14.6	28.3	4.7	59	138.6	40.1	57.3	0.000	15.3	16.5
6	30.001	78.8	51.4	27.4	65.0	+ 2.6	58.6	53.6	11.4	28.2	0.6	67	139.9	41.0	57.6	0.000	14.2	16.5
7	30.081	82.4	54.1	28.3	67.7	+ 5.3	60.2	54.5	13.2	29.1	0.7	62	142.8	43.5	57.8	0.000	13.7	16.4
8	30.101	84.0	52.0	32.0	68.1	+ 5.7	60.0	53.7	14.4	37.9	1.8	60	145.8	38.5	58.0	0.000	15.2	16.4
9	30.051	80.3	56.4	23.9	67.6	+ 5.2	58.5	51.0	16.6	35.1	1.8	55	139.4	46.6	58.1	0.000	12.6	16.4
10	29.945	81.1	50.5	30.6	66.4	+ 3.9	57.0	48.7	17.7	46.0	3.1	53	142.1	39.1	58.4	0.000	14.5	16.4
11	29.805	82.9	52.4	30.5	68.3	+ 5.6	58.9	51.1	17.2	35.8	2.8	54	141.6	39.8	58.7	0.000	13.9	16.3
12	29.646	68.2	56.3	11.9	62.3	- 0.6	59.6	57.6	4.7	9.1	1.8	85	103.4	44.4	58.5	0.072	0.3	16.3
13	29.604	79.4	60.0	19.4	64.7	+ 1.6	61.9	59.9	4.8	17.5	0.0	85	126.5	56.6	58.8	0.249	0.6	16.3
14	29.711	70.7	57.6	13.1	63.0	- 0.3	57.4	52.8	10.2	17.5	0.3	69	114.3	49.3	58.8	0.000	1.9	16.2
15	29.933	76.8	52.1	24.7	65.1	+ 1.7	56.9	49.7	15.4	27.5	6.1	58	140.4	43.0	59.0	0.000	11.4	16.2
16	30.004	76.4	57.8	18.6	67.2	+ 3.8	61.1	56.6	10.6	18.2	4.0	69	130.9	51.3	58.9	0.000	2.7	16.2
17	29.926	88.4	51.4	37.0	70.2	+ 6.8	61.2	54.4	15.8	31.0	0.9	57	145.1	42.1	59.0	0.000	14.3	16.2
18	29.676	82.6	58.8	23.8	70.4	+ 7.1	63.4	58.5	11.9	26.7	0.0	66	140.2	49.1	59.1	0.124	8.7	16.1
19	29.769	75.5	56.9	18.6	65.5	+ 2.3	57.6	50.9	14.6	26.8	6.3	59	133.3	49.2	59.1	0.000	9.4	16.1
20	29.650	85.2	51.4	33.8	66.8	+ 3.6	59.1	52.9	13.9	29.4	3.3	61	150.6	42.6	59.2	0.000	11.7	16.0
21	29.565	76.1	60.0	16.1	66.5	+ 3.3	62.1	59.1	7.4	18.8	1.5	77	136.2	53.4	59.4	0.101	3.7	16.0
22	29.632	79.7	55.7	24.0	67.5	+ 4.4	61.3	56.8	10.7	21.3	0.8	69	127.9	46.4	59.6	0.000	5.8	15.9
23	29.754	76.5	58.7	17.8	66.6	+ 3.6	57.1	48.7	17.9	28.3	4.9	53	136.4	54.9	59.6	0.000	6.9	15.9
24	29.815	73.6	54.9	18.7	60.4	- 2.5	56.3	52.8	7.6	15.6	0.2	76	141.8	46.8	59.6	0.319	4.0	15.9
25	29.902	79.1	51.7	27.4	64.5	+ 1.8	58.6	53.9	10.6	20.3	0.0	69	147.3	41.2	59.7	0.000	6.6	15.8
26	29.885	83.6	55.4	28.2	68.5	+ 6.0	61.7	56.8	11.7	19.7	3.9	66	144.0	49.6	59.7	0.000	10.0	15.8
27	29.881	74.2	56.0	18.2	63.2	+ 0.8	54.3	45.6	17.6	30.0	7.3	53	135.8	47.6	59.6	0.000	8.3	15.7
28	29.748	79.2	56.0	23.2	66.2	+ 3.9	58.5	52.2	14.0	24.3	3.8	61	137.1	49.3	59.7	0.000	6.9	15.7
29	29.696	76.8	57.6	19.2	66.8	+ 4.5	61.5	57.7	9.1	15.3	0.9	73	138.4	..	59.7	0.031	1.7	15.6
30	29.663	82.0	61.1	20.9	70.9	+ 8.6	63.2	57.9	13.0	22.5	5.3	63	139.0	56.1	59.8	0.000	13.0	15.6
31	29.525	80.7	60.0	20.7	69.6	+ 7.4	62.1	56.7	12.9	25.5	5.9	63	141.7	53.4	59.9	0.004	6.8	15.5
Means	29.849	79.1	55.1	24.0	66.3	+ 3.6	59.4	53.8	12.5	25.1	2.6	64.7	137.0	46.2	58.7	Sum 0.900	8.9	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 civil day, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of 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 29.849in., being 0.043in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 88.4 on July 17; the lowest in the month was 48.8 on July 4, and the range was 39.6.  
 The mean of all the highest daily readings in the month was 79.1, being 4.9 higher than the average for the 65 years, 1841-1905.  
 The mean of all the lowest daily readings in the month was 55.1, being 1.8 higher than the average for the 65 years, 1841-1905.  
 The mean of the daily ranges was 24.0, being 3.1 greater than the average for the 65 years, 1841-1905.  
 The mean for the month was 66.3, being 3.6 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1934.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.			
	POLARIS.		3 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.	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.						
hours.		hours.				lbs.	lbs.	miles.						
July 1	4.5	1.00	4.5	1.00	NE	E : Calm	1.1	0.09	191	b m.	b Cu y	b y	b	
2	3.3	0.73	3.0	0.67	Calm : N	N : E	0.6	0.09	200	b c	c bc Frcu y	bc Stcu y	c	
3	4.5	1.00	4.5	1.00	Calm	Calm : ESE	1.4	0.04	160	c m	c Stcu z. y	c Stcu z. y	b z.	
4	4.5	1.00	4.5	1.00	Calm	Calm : S	1.0	0.05	159	b	b Frcu z. y	b c Stcu b z. y	b	
5	4.5	1.00	4.5	1.00	Calm : SE : E	ESE	1.4	0.23	222	b	b y	b y	b	
6	4.5	1.00	4.5	1.00	Calm : E	ESE : E	2.3	0.39	244	b c	b y	b Ci y	b	
7	5.0	1.00	5.0	1.00	E : ESE	ESE : E	1.6	0.22	230	b w	b Ci y	b y	b	
8	3.0	0.60	2.9	0.57	E	ESE : E	2.2	0.40	262	b	b Ci y	b y	b	
9	5.0	1.00	5.0	1.00	ENE : E	ESE : E	2.2	0.47	287	b c	c b y	b y	b y	
10	5.0	1.00	5.0	1.00	ENE : ESE	E	1.8	0.36	256	b m	b y	b y	b	
11	3.7	0.74	3.5	0.71	Calm : ENE : E	ESE : E	3.0	0.34	245	b m.	b Cicu y	b Ci y	c l b	
12	0.3	0.06	0.1	0.02	Calm	WSW	0.7	0.03	193	b c t l r m.	c r r. m.	c Nbst r. r c	c r. c	
13	2.5	0.50	2.0	0.40	WSW	SW : WSW	1.5	0.11	244	c m.	c so.-ha	c Nbst r t l r.	c R r t c	
14	5.3	1.00	5.3	1.00	WSW : NW	NW : NNW	2.0	0.20	265	c b c m.	c Stcu	c p y	c b y	
15	2.2	0.41	1.9	0.35	NW : WSW : W	W : SW	2.3	0.26	270	b	b c Frcu y	c Acu y	c bc	
16	4.9	0.93	4.8	0.91	SW : WSW	SW : SSW	1.2	0.07	224	c	c Stcu	c Stcu y	c b	
17	3.8	0.73	3.7	0.71	SSW : SW	SSW : ESE	1.0	0.12	209	b	b Ci y	b Ci y	bc	
18	0.9	0.18	0.0	0.00	Calm : N	NNE : E : NNW	3.5	0.27	231	c z. y	c b Frcu y	b c p so.-ha y	c t l r m.	
19	4.6	0.88	3.9	0.74	NW : WNW	W : WSW	1.3	0.27	265	c	b c Stcu y	c Acu y	c b	
20	3.2	0.61	3.1	0.60	Calm	ESE : E	2.0	0.16	209	b c	c Acu y	c Stcu b y	b	
21	3.7	0.64	3.6	0.63	ENE : NE	E : Calm	1.3	0.13	220	c r. r	rr c Acu y	c r c	c b	
22	0.8	0.13	0.3	0.06	Calm	N : SW	1.0	0.04	175	b z.	b c Stcu z. y	c Stcu z. y	c t l c	
23	4.0	0.70	3.8	0.66	N : NNW	NW : NNW	1.7	0.15	249	c d.	c b Cu y	b c Cu y	c b c	
24	4.5	0.78	4.2	0.73	NNW : WSW	SW : SSW	1.5	0.11	231	c m.	c Cumb r. t	r R t l c r.	i d. c	
25	5.7	0.99	5.6	0.97	Calm : W	W : NW	1.7	0.12	228	c m	b so.-ha c Ci y	c Ast y	c b	
26	5.8	1.00	5.7	0.99	SW : WSW	W : NW	10.0	1.45	413	b c m.	c Acu y	c Acu y	c bc	
27	5.8	1.00	5.8	1.00	NW : W	NW : W	5.0	0.91	358	bc	c Stcu y	c Stcu y	c b y	
28	4.8	0.80	4.7	0.78	WSW	W : NW	8.2	1.64	430	b c	c Frcu y	bc c y	c b c	
29	0.5	0.08	0.3	0.06	W : WSW	WSW : W	6.8	1.03	387	c	c p. d.	c p	c d.	
30	3.7	0.62	3.3	0.56	WSW : SW	SSW : ESE	2.1	0.35	264	c b	b c Frcu y	bc b Ci y	b	
31	6.0	1.00	6.0	1.00	S : SW	SW	2.9	0.60	307	b c	c p c Stcu	c b Frcu y	b	
Means	3.9	0.75	3.7	0.71	..	..	..	0.35	253					
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 59°.4, being 1°.5 higher, than the average for the 65 years, 1841-1905.  
 The mean *Temperature of the Dew Point* for the month was 53°.8, being 0°.3 lower than  
 The mean *Degree of Humidity* for the month was 64.7, being 8.5 less than  
 The mean *Elastic Force of Vapour* for the month was 0.417in., being 0.004in. less than

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 5.4.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.553. The maximum daily amount of *Sunshine* was 15.3 hours on July 5.  
 The highest reading of the *Solar Radiation Thermometer* was 150°.6 on July 20; and the lowest reading of the *Terrestrial Radiation Thermometer* was 37°.3 on July 4.  
 The *Proportions of Wind* referred to the cardinal points were N. 11, E. 23, S. 15, W. 30, calm or nearly calm conditions, 21, the whole month being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 10.0 lbs. on the square foot on July 26. The mean daily *Horizontal Movement of the Air* for the month was 253 miles; the greatest daily value was 430 miles on July 28, and the least daily value was 159 miles on July 4.  
*Rain* (0.005in. or over) fell on 6 days in the month, amounting to 0.900in., as measured by gauge No. 6 partly sunk below the ground; being 1.499in. less than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1934.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	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	29.653	78.0	55.5	22.5	64.5	+ 0.3	59.0	54.7	9.8	23.6	1.9	71	137.3	48.3	60.0	0.048	7.2	15.4
2	29.368	68.1	57.7	10.4	62.4	+ 0.3	57.9	54.4	8.0	15.3	1.3	75	120.1	53.7	59.9	0.152	1.6	15.4
3	29.518	71.6	50.9	20.7	60.4	- 1.7	55.5	51.2	9.2	18.8	2.9	72	133.0	40.0	59.9	0.033	7.6	15.4
4	29.643	78.0	47.6	30.4	60.9	- 1.2	54.3	48.1	12.8	28.5	1.0	63	139.3	36.9	59.9	0.000	11.3	15.3
5	29.744	76.9	49.9	27.0	63.3	+ 1.2	56.3	50.2	13.1	24.2	2.7	62	135.1	41.0	60.0	0.000	5.8	15.2
6	29.624	70.8	58.9	11.9	64.4	+ 2.2	60.3	57.3	7.1	11.8	0.0	78	93.5	48.6	59.8	0.004	0.0	15.2
7	29.649	72.9	57.3	15.6	63.9	+ 1.7	60.1	57.3	6.6	18.6	0.0	79	107.7	47.7	59.8	0.091	0.0	15.1
8	29.775	77.8	57.1	20.7	65.1	+ 2.8	62.4	60.5	4.6	13.1	1.1	85	128.5	51.7	59.8	0.000	3.4	15.1
9	29.705	73.3	57.3	16.0	64.5	+ 2.2	59.7	56.1	8.4	20.6	1.9	74	132.2	52.0	59.9	0.053	4.4	15.0
10	29.658	68.7	55.2	13.5	61.4	- 0.9	58.2	55.7	5.7	12.8	1.9	82	104.2	50.6	59.7	0.033	0.5	15.0
11	29.688	70.3	52.5	17.8	59.0	- 3.4	54.1	49.6	9.4	17.4	2.5	71	136.1	45.7	59.7	0.000	3.4	14.9
12	29.688	66.7	52.3	14.4	57.6	- 4.9	55.4	53.6	4.0	7.6	1.1	86	119.1	46.3	59.6	0.347	1.3	14.8
13	29.704	68.5	52.0	16.5	58.2	- 4.3	54.2	50.7	7.5	14.3	2.1	76	115.1	46.1	59.5	0.010	3.6	14.8
14	29.858	67.7	50.7	17.0	58.7	- 3.8	54.6	51.0	7.7	11.9	2.2	76	124.4	42.1	59.4	0.000	2.8	14.7
15	29.915	75.4	48.9	26.5	61.4	- 1.0	55.6	50.5	10.9	21.7	1.0	68	134.4	41.1	59.3	0.000	11.2	14.7
16	29.923	78.3	52.2	26.1	65.3	+ 3.0	60.1	56.2	9.1	16.5	2.9	73	137.5	45.1	59.2	0.000	5.2	14.6
17	29.993	77.1	59.3	17.8	66.8	+ 4.7	61.8	58.3	8.5	15.5	1.9	74	127.3	52.6	59.2	0.000	1.8	14.6
18	29.968	81.6	55.7	25.9	69.0	+ 7.1	62.3	57.6	11.4	23.8	0.3	67	136.2	45.4	59.3	0.000	8.7	14.5
19	29.836	76.8	57.2	19.6	65.7	+ 4.0	58.3	52.2	13.5	28.5	4.8	62	134.8	49.8	59.3	0.000	7.4	14.4
20	29.683	72.9	50.1	22.8	61.9	+ 0.4	56.2	51.2	10.7	20.6	2.7	68	125.7	40.0	59.4	0.005	9.2	14.4
21	29.731	75.3	53.3	22.0	62.8	+ 1.5	56.5	51.1	11.7	21.0	4.5	66	131.1	48.0	59.6	0.000	11.2	14.3
22	29.625	76.7	56.1	20.6	62.3	+ 1.2	57.7	54.1	8.2	18.3	0.0	74	134.6	51.3	59.6	0.254	4.0	14.3
23	29.659	74.1	51.7	22.4	61.4	+ 0.5	56.3	52.0	9.4	20.1	0.7	71	135.0	47.1	59.6	0.000	12.1	14.2
24	29.872	70.8	48.1	22.7	60.0	- 0.8	54.1	48.7	11.3	20.7	1.1	66	128.9	38.1	59.7	0.000	9.5	14.1
25	29.972	70.2	48.1	22.1	58.9	- 1.8	52.8	46.9	12.0	25.8	0.4	64	137.1	36.0	59.6	0.000	8.2	14.1
26	30.070	72.7	45.8	26.9	58.4	- 2.3	53.1	48.0	10.4	23.4	0.7	69	136.9	30.5	59.7	0.000	12.3	14.0
27	29.882	77.2	51.9	25.3	62.4	+ 1.8	58.5	55.5	6.9	16.8	0.0	78	134.0	41.6	59.5	0.000	4.3	13.9
28	29.571	76.5	52.0	24.5	61.6	+ 1.2	58.3	55.7	5.9	18.1	0.0	81	114.5	40.4	59.5	0.350	3.1	13.9
29	29.397	66.4	48.5	17.9	56.7	- 3.6	52.8	49.0	7.7	20.0	0.1	76	127.0	42.0	59.3	0.300	8.5	13.8
30	29.563	68.3	43.7	24.6	52.4	- 7.7	49.1	45.6	6.8	19.4	0.7	78	132.8	35.6	59.3	0.015	4.5	13.8
31	29.612	69.3	42.3	27.0	54.2	- 5.7	49.4	44.2	10.0	22.8	0.4	69	131.2	32.6	59.2	0.000	9.5	13.7
Means	29.727	73.2	52.3	20.9	61.5	- 0.2	56.6	52.5	9.0	19.1	1.4	72.7	127.9	44.1	59.6	1.695	5.9	14.6
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 civil day, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of 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 29.727 in., being 0.063 in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 81.6 on August 18; the lowest in the month was 42.3 on August 31; and the range was 39.3. 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 52.3, being 0.7 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 20.9, being 1.2 greater than the average for the 65 years, 1841-1905. The mean for the month was 61.5, being 0.2 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1934.	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.						
					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.					
Aug. 1	0.0	0.00	0.0	0.00	WSW : SW	SSW : SSE	2.1	0.28	261	b	b c Cist y	c Ast so.-ha y	c r d <sub>o</sub>
2	5.3	0.87	4.9	0.82	S : SW	SW : WSW	11.5	1.77	415	c d R r	c Nbst p <sub>o</sub>	c Nbst p <sub>o</sub>	c p <sub>o</sub> b
3	6.0	1.00	6.0	1.00	SW	SW : Calm	1.3	0.15	228	b c	c Nbst d <sub>o</sub>	c Nbst r <sub>o</sub> r c	c b
4	6.3	0.96	5.9	0.90	SW : WSW	WSW : SW	1.7	0.10	235	b	b Ci z <sub>o</sub> y	c Stcu y	c b
5	0.0	0.00	0.0	0.00	SW	SSW : SE	1.5	0.12	226	b	b c Stcu v y	c Stcu v y	c v r <sub>o</sub>
6	4.7	0.72	4.5	0.70	SE : S	S : Calm	0.7	0.09	199	c r <sub>o</sub>	c Nbst r <sub>o</sub> c	c Nbst r <sub>o</sub> c	c b
7	3.4	0.52	3.4	0.52	Calm : NE	ENE : NE	4.0	0.35	271	b c m	c d r m r <sub>o</sub> c	c Nbst r <sub>o</sub> c y	c b
8	0.1	0.01	0.1	0.01	NNE : N	NNW : WSW	1.2	0.11	223	b o m <sub>o</sub>	o Ast m <sub>o</sub>	c bc z <sub>o</sub>	c m <sub>o</sub>
9	4.7	0.73	4.2	0.65	WSW	WNW : W : WSW	3.4	0.49	321	c d r m <sub>o</sub>	c Stcu y	c Stcu y	c b
10	6.0	0.92	5.9	0.91	WSW : SW	SW : WSW	6.1	1.21	383	b c	c Nbst d <sub>o</sub>	c r <sub>o</sub> c	c r b
11	5.9	0.84	5.7	0.81	WSW	WSW	2.0	0.31	313	b c	c Cumb d <sub>o</sub>	c y p <sub>o</sub> b	b
12	3.1	0.45	3.0	0.43	WSW : SW	SW : WSW	3.3	0.35	304	b c r <sub>o</sub>	c Nbst p r c	rr c R t l	c b
13	2.4	0.35	2.2	0.32	WSW : NW	NW : NNW	4.3	0.46	308	b c d	c Stcu	c Cumb t i r <sub>o</sub>	c r <sub>o</sub> c
14	4.9	0.70	4.7	0.67	NNW	N : Calm	1.9	0.23	263	c b c	c Acu	c Acu	b w
15	4.9	0.70	4.7	0.68	Calm : SW	SW	1.2	0.13	223	c b w	b c Frcu y	c Frcu b y	b
16	4.3	0.61	4.1	0.59	SSW : SW	WSW	1.0	0.12	257	b c	c Stcu	bc Acu b y	b c
17	3.4	0.49	3.4	0.49	Calm	SW	0.1	0.00	165	c	c Acu m <sub>o</sub>	c Acu	c
18	4.8	0.64	4.7	0.63	Calm : WSW	WSW : SW	1.0	0.09	178	c b w m <sub>o</sub>	c Frcu m <sub>o</sub> y	c Acu y bc	bc b
19	7.0	0.93	6.9	0.92	SW : WSW	NW : WSW	2.0	0.20	268	b c	c Cist so.-ha	c b Cu y	b c
20	7.5	1.00	7.5	1.00	SW : SSW	WSW	10.1	1.94	432	c	c d <sub>o</sub> d c	c b Frcu y	b
21	..	..	..	..	WSW : SW	SW	4.4	0.85	343	b	bc Frcu y	c b c Frcu y	bc
22	2.7	0.36	1.6	0.21	SSW : WSW	SW	3.6	0.40	288	b c p	c Stcu y	c Ast y	c d r R
23	7.5	1.00	7.5	1.00	WSW	W : WSW	3.2	0.20	284	c b m <sub>o</sub>	bc Frcu y	bc p <sub>o</sub> y	b
24	7.0	0.93	6.7	0.89	WSW	NNW : Calm : NNE	0.6	0.05	204	b w	b m <sub>o</sub> c Stcu y	c Stcu bc y	c b
25	8.0	1.00	8.0	1.00	Calm : NE	NE : ESE : ENE	1.0	0.07	205	b c m	c Cu Ci	c b Ci y	b
26	6.9	0.86	6.4	0.80	NE : ENE	ESE : E	2.5	0.16	229	b m <sub>o</sub>	b bc Cu y	bc b Cu y	b c
27	7.1	0.89	6.7	0.84	E : Calm	E : ESE : Calm	1.3	0.05	179	bc m	c Ast z <sub>o</sub> so.-ha	c Acu b z <sub>o</sub>	b
28	0.2	0.03	0.2	0.03	Calm : S	SSW : S	1.3	0.19	235	bc b w	b c Acu y	c Nbst r <sub>o</sub> c	r <sub>o</sub> rr
29	7.8	0.98	7.8	0.98	W : WSW	WSW : SW	4.2	0.60	329	rr c	c Cumb R t l	c p y	b
30	8.0	1.00	8.0	1.00	SW : WSW	WSW : SW	3.5	0.07	213	b w c	c Cist so.-ha y	c Cumb r b	b
31	8.0	1.00	8.0	1.00	SW	SW	1.1	0.07	208	b w	b bc Frcu y	bc Frcu y	b z
Means	4.9	0.68	4.8	0.66	..	..	..	0.36	264				
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°.6, being 0°.9 lower than the mean *Temperature of the Dew Point* for the month was 52°.5, being 1°.8 lower than the mean *Degree of Humidity* for the month was 72.7, being 4.1 less than the mean *Elastic Force of Vapour* for the month was 0.398in., being 0.026in. 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 6.6.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.406. The maximum daily amount of *Sunshine* was 12.3 hours on August 26.

The highest reading of the *Solar Radiation Thermometer* was 139°.3 on August 4; and the lowest reading of the *Terrestrial Radiation Thermometer* was 30°.5 on August 26.

The *Proportions of Wind* referred to the cardinal points were N. 8, E. 8, S. 29, W. 41, calm or nearly calm conditions, 14, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 11.5 lbs. on the square foot on August 2. The mean daily *Horizontal Movement of the Air* for the month was 264 miles; the greatest daily value was 432 miles on August 20, and the least daily value was 165 miles on August 17.

*Rain* (0.005in. or over) fell on 13 days in the month, amounting to 1.695in. as measured by gauge No. 6 partly sunk below the ground; being 0.649in. less than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1934.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the ground.	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	29.552	70.3	41.1	29.2	54.0	- 5.8	48.7	42.8	11.2	28.3	0.7	65	125.0	31.1	59.0	0.000	8.1	13.6
2	29.588	71.9	43.1	28.8	56.8	- 2.9	51.6	46.3	10.5	23.8	0.6	68	136.2	32.9	59.0	0.014	8.3	13.6
3	29.643	73.7	55.0	18.7	63.0	+ 3.4	59.0	56.0	7.0	22.3	0.2	77	129.4	49.6	58.8	0.596	6.1	13.5
4	29.806	70.7	52.0	18.7	61.0	+ 1.5	57.2	54.1	6.9	16.8	0.5	78	119.9	47.6	58.7	0.000	4.8	13.4
5	30.081	71.1	49.3	21.8	58.7	- 0.7	53.7	49.0	9.7	22.9	2.1	70	131.2	37.7	58.8	0.000	9.5	13.4
6	30.000	69.5	46.3	23.2	57.6	- 1.6	53.8	50.3	7.3	20.4	0.2	77	131.0	35.6	58.7	0.000	4.5	13.3
7	29.757	82.7	57.0	25.7	69.9	+ 10.9	64.5	61.0	8.9	20.5	1.5	73	136.8	51.9	58.9	0.000	9.3	13.2
8	29.671	78.8	57.9	20.9	66.9	+ 8.1	61.8	58.3	8.6	20.8	2.3	74	137.2	53.4	59.0	0.026	5.8	13.1
9	29.717	70.8	52.0	18.8	61.4	+ 2.8	56.6	52.6	8.8	20.1	0.7	73	126.2	42.1	58.9	0.013	7.8	13.1
10	29.978	73.6	43.9	29.7	58.0	- 0.4	53.4	49.1	8.9	19.8	1.2	72	128.6	31.9	59.0	0.000	9.6	13.0
11	30.096	75.7	46.9	28.8	59.3	+ 1.2	54.5	50.1	9.2	20.8	0.0	72	138.1	36.0	59.0	0.000	7.5	13.0
12	30.173	74.2	49.0	25.2	62.3	+ 4.3	56.9	52.3	10.0	21.7	1.0	70	129.8	38.6	59.0	0.000	8.0	12.9
13	30.073	80.0	57.2	22.8	66.1	+ 8.3	61.7	58.7	7.4	23.3	0.7	77	133.4	50.0	59.0	0.000	6.9	12.9
14	29.945	80.0	59.2	20.8	67.6	+ 9.9	62.4	58.8	8.8	26.6	0.3	74	130.0	49.2	59.1	0.000	10.5	12.8
15	29.751	82.4	57.3	25.1	67.6	+ 10.0	63.2	60.3	7.3	16.5	0.7	78	132.8	50.1	59.2	0.043	5.6	12.7
16	29.829	74.7	53.8	20.9	63.1	+ 5.6	58.3	54.5	8.6	25.4	1.9	74	131.3	47.8	59.1	0.000	8.8	12.7
17	29.782	74.6	56.3	18.3	63.3	+ 6.1	58.8	55.4	7.9	18.1	1.6	75	121.8	51.5	59.2	0.000	7.9	12.6
18	29.830	69.9	49.1	20.8	58.4	+ 1.5	54.0	50.0	8.4	18.4	1.7	73	119.7	42.3	59.3	0.000	1.0	12.5
19	29.679	69.1	47.0	22.1	57.3	+ 0.8	53.8	50.6	6.7	20.0	0.5	78	127.4	41.9	59.2	0.083	6.7	12.5
20	29.580	64.0	55.4	8.6	58.0	+ 1.8	54.6	51.5	6.5	15.0	0.7	79	99.8	51.3	59.1	0.000	0.4	12.4
21	29.762	66.3	43.1	23.2	55.7	- 0.2	51.1	46.5	9.2	19.6	3.1	71	124.1	34.8	59.0	0.000	1.7	12.3
22	29.680	64.6	41.9	22.7	55.4	- 0.2	53.7	52.2	3.2	6.8	1.2	89	82.1	34.0	59.0	0.191	0.0	12.3
23	29.707	62.2	46.9	15.3	54.6	- 0.8	49.1	43.0	11.6	18.7	5.9	65	114.2	40.1	58.8	0.000	7.5	12.2
24	29.580	62.5	48.0	14.5	54.9	- 0.4	52.2	49.7	5.2	7.7	2.1	82	79.8	41.2	58.6	0.163	0.0	12.1
25	29.835	66.3	44.5	21.8	53.3	- 1.9	48.6	43.4	9.9	21.4	2.9	69	122.6	38.2	58.5	0.000	9.3	12.1
26	29.733	66.9	46.0	20.9	57.4	+ 2.2	54.2	51.3	6.1	11.1	1.8	80	101.2	42.6	58.3	0.007	0.4	12.0
27	29.992	68.4	44.0	24.4	56.1	+ 1.0	51.1	45.9	10.2	22.9	1.4	69	124.8	36.2	58.2	0.000	9.1	11.9
28	29.866	81.3	56.0	25.3	67.4	+ 12.5	62.5	59.1	8.3	18.7	0.5	75	130.9	51.1	58.2	0.000	7.8	11.9
29	29.805	72.1	51.0	21.1	62.8	+ 8.1	59.7	57.4	5.4	10.7	1.5	83	106.7	45.8	58.1	0.064	2.1	11.8
30	29.971	69.0	48.4	20.6	57.2	+ 2.8	53.5	50.0	7.2	17.3	1.6	77	124.2	40.7	58.0	0.000	7.8	11.7
Means	29.818	71.9	50.0	22.0	60.2	+ 2.9	55.8	52.0	8.2	19.2	1.4	74.6	122.5	42.6	58.8	Sum 1.200	6.1	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 civil day, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of 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 29.818 in., being equal to the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 82.7 on September 7; the lowest in the month was 41.1 on September 1; and the range was 41.6.

The mean of all the highest daily readings in the month was 71.9, being 4.6 higher than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 50.0, being 0.9 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 22.0, being 3.8 greater than the average for the 65 years, 1841-1905.

The mean for the month was 60.2, being 2.9 higher than the average for the 65 years, 1841-1905.



MONTH and DAY, 1934.	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.						
					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>							
Sept. 1	8.2	0.96	8.1	0.95	SW : Calm	NW : W : WSW	2.7	0.14	218	b lu-ha w	b z c Stcu z. y	c Stcu y	c b l
2	0.0	0.00	0.0	0.00	SW	SSW : S	2.1	0.30	246	b l w	b bc Stcu y	c Ast so.-ha y	c i r
3	8.5	1.00	8.5	1.00	S : SW	SW : SSW	6.0	0.95	306	c rr	c Stcu Ci	c b Ci y	b w
4	8.1	0.95	7.7	0.90	SSW	SW	1.6	0.45	261	b c w	c Ast	c Ast	bc w
5	8.4	0.99	7.2	0.85	WSW : W	W : Calm	1.2	0.01	205	b c w	b Frcu y	bc Frcu y	c b w
6	7.0	0.82	6.2	0.73	Calm : E	E	3.0	0.38	228	b m c	c Acu y	c Acu b c y	b c m.
7	8.4	0.98	8.3	0.97	ESE : SSE : SSW	SSW : Calm	0.6	0.05	185	c w b	b bc Acu y	bc Acu y b	b m.
8	5.7	0.64	5.4	0.60	SSW : SW	SSW : SW	2.1	0.28	247	b w	b c Acu y	c Ast y	c r b
9	9.0	1.00	9.0	1.00	SSW : WSW	WSW	2.0	0.50	297	b c d.	c p y	c Frcu b y	b
10	9.0	1.00	9.0	1.00	Calm : SW	SW : SSW	1.0	0.10	212	b m. w	b c Stcu	c Stcu b y	b
11	5.1	0.57	4.0	0.45	Calm : SSW	Calm	0.2	0.03	160	b w m.	bc Stcu y	c Stcu y	c b w
12	6.6	0.73	6.5	0.72	Calm : ENE	E : NE	1.0	0.11	191	c w m	c b f b Cu	b c Stcu b y	b
13	9.0	1.00	9.0	1.00	NE : NNE	E : ENE	1.0	0.17	220	b o m	o m b	b y	b
14	8.8	0.98	7.6	0.85	ENE	E	2.0	0.19	243	b w m	b y	b y	b m.
15	2.2	0.23	1.1	0.11	Calm	SSE : SW	0.3	0.02	174	b w m.	b c Stcu	c t r bc	c r.
16	7.6	0.80	5.9	0.62	SW	SW : S	1.8	0.19	257	c bc	c b Ci y	b bc Acu y	b w c p.
17	5.5	0.58	4.2	0.44	S : SSW	SW	7.5	0.58	305	c w	c	c Acu y	c r. c b
18	9.5	0.99	9.3	0.98	SSW	SSW	0.8	0.06	229	b w c	c Ast so.-ha	c Ci so.-ha y	c b w
19	0.5	0.05	0.4	0.04	SSW : SW	SW : SSW	2.9	0.26	296	b bc w	b c p.	c Nbst r.	r. rr
20	0.0	0.00	0.0	0.00	WSW : W	WSW	1.6	0.17	282	c	c Stcu	c Nbst i r. c	c
21	7.9	0.87	7.4	0.78	SW : WSW	W : NW : Calm	2.0	0.10	245	c	c Acu y	c Acu y b	b w m.
22	8.4	0.82	8.0	0.78	Calm : S : SSW	SSW : SW : WSW	6.1	0.59	332	b c	c Nbst d. r.	c r r c r	c r b
23	3.7	0.36	2.8	0.27	W : WSW	WNW : WSW	3.2	0.50	341	b	b c Frcu y	c Frcu y	c lu.-ha
24	9.1	0.89	9.0	0.88	SSW	SSW : WNW	4.0	0.44	302	c r	c Nbst i r	c Nbst i d R c	c lu.-ha
25	9.2	0.90	8.5	0.83	WSW	WSW : SW	1.4	0.13	264	b w	b m. y	bc Cu b y	b w
26	6.7	0.66	6.6	0.64	SSW : SW	SW : WSW	8.6	1.08	368	b c	c Stcu	c Acu Ci	c d. r
27	3.0	0.30	2.1	0.21	WSW	WSW : SSW : S	0.9	0.06	224	c lu.-ha b w	bc Ci y	bc Ci c Acu y	c
28	10.3	1.00	10.3	1.00	SSE : SSW	S	3.5	0.21	237	c w	c b y	b y	b
29	8.1	0.76	7.8	0.73	S : SSW	SSW : W : SW	2.3	0.25	272	b c	c Stcu	c r. r	r d c b
30	7.5	0.70	7.0	0.65	SSW	SW : SSW	3.7	0.35	295	b w	b c Ci Frcu	c Cist bc	c b c
Means	6.7	0.72	6.2	0.67	..	..	..	0.29	255				

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 55°.8, being 1°.7 higher than  
 The mean Temperature of the Dew Point for the month was 52°.0, being 0°.9 higher than  
 The mean Degree of Humidity for the month was 74.6, being 5.3 less than  
 The mean Elastic Force of Vapour for the month was 0.390in., being 0.01in. greater than } the average for the 65 years, 1841-1905.

The mean amount of Cloud for the month (a clear sky being represented by 0 and an overcast sky by 10) was 5.7.

The mean proportion of Sunshine for the month (constant sunshine being represented by 1) was 0.480. The maximum daily amount of Sunshine was 10.5 hours on September 14.

The highest reading of the Solar Radiation Thermometer was 138°.1 on September 11; and the lowest reading of the Terrestrial Radiation Thermometer was 31°.1 on September 1.

The Proportions of Wind referred to the cardinal points were N. 4, E. 9, S. 39, W. 33, calm or nearly calm conditions, 15, the whole month being represented by 100.

The Greatest Pressure of the Wind in the month was 8.6 lbs. on the square foot on September 26. The mean daily Horizontal Movement of the Air for the month was 255 miles; the greatest daily value was 368 miles on September 26, and the least daily value was 160 miles on September 11.

Rain (0.005in. or over) fell on 10 days in the month, amounting to 1.200in., as measured by gauge No. 6 partly sunk below the ground; being 0.948in. less than the average fall for the 65 years, 1841-1905.



MONTH and DAY, 1934.	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.	Sum 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.				
Oct. 1	29.783	69.0	53.7	15.3	59.7	+ 5.6	57.0	54.8	4.9	15.1	1.5	84	110.9	48.9	58.1	0.033	0.7	11.7
2	29.600	58.3	52.1	6.2	54.5	+ 0.8	53.8	53.2	1.3	2.4	0.4	95	63.0	47.6	58.0	0.263	0.0	11.6
3	29.317	62.9	47.2	15.7	54.7	+ 1.4	53.0	51.4	3.3	9.6	0.0	89	94.9	44.3	58.0	0.045	0.2	11.5
4	29.004	60.9	49.7	11.2	53.6	+ 0.6	50.5	47.3	6.3	15.5	1.3	79	108.0	44.4	57.8	0.173	6.0	11.5
5	29.464	62.0	45.9	16.1	52.1	- 0.7	48.2	43.9	8.2	16.6	3.0	74	111.6	39.2	57.7	0.000	6.0	11.4
6	29.992	60.1	44.1	16.0	51.9	- 0.6	50.2	48.5	3.4	9.7	0.1	88	74.6	38.8	57.4	0.114	0.2	11.4
7	30.098	66.9	60.1	6.8	62.7	+ 10.4	61.1	60.0	2.7	4.1	0.5	91	88.1	58.5	57.3	0.005	0.0	11.3
8	30.177	61.7	51.2	10.5	57.6	+ 5.6	54.2	51.1	6.5	12.7	0.0	79	104.6	45.4	57.4	0.116	1.9	11.2
9	30.105	58.6	42.9	15.7	51.2	- 0.4	46.8	41.7	9.5	19.5	1.1	70	110.7	36.5	57.2	0.000	4.6	11.2
10	30.203	65.6	43.4	22.2	54.4	+ 3.1	51.6	48.9	5.5	13.4	0.2	81	115.7	35.1	57.2	0.005	3.9	11.1
11	30.211	66.0	55.1	10.9	59.5	+ 8.6	56.5	54.0	5.5	11.8	0.7	82	109.9	50.3	57.2	0.092	6.6	11.0
12	30.196	64.1	47.3	16.8	54.5	+ 3.9	51.5	48.6	5.9	12.8	0.6	80	113.0	41.9	57.0	0.000	6.5	11.0
13	30.173	64.3	52.9	11.4	57.6	+ 7.3	54.9	52.6	5.0	9.2	2.3	83	99.6	48.4	57.0	0.000	0.3	10.9
14	29.823	61.2	51.8	9.4	56.5	+ 6.4	52.6	48.8	7.7	18.0	2.6	76	78.1	44.5	57.0	0.011	0.0	10.8
15	29.553	52.5	36.0	16.5	44.8	- 5.1	41.1	35.7	9.1	17.8	2.3	70	86.0	28.3	56.8	0.000	2.8	10.8
16	29.920	52.2	39.9	12.3	45.7	- 4.1	42.4	37.9	7.8	13.8	1.2	74	96.2	31.9	56.7	0.000	4.2	10.7
17	29.833	49.5	40.4	9.1	45.6	- 4.0	44.0	42.0	3.6	8.4	1.3	87	54.4	35.2	56.3	0.085	0.0	10.7
18	29.840	57.6	45.1	12.5	52.0	+ 2.7	49.4	46.6	5.4	9.7	0.0	82	71.8	39.1	56.1	0.013	0.0	10.6
19	29.884	60.1	50.8	9.3	54.5	+ 5.4	50.6	46.7	7.8	12.9	1.5	75	99.7	43.9	56.1	0.000	1.6	10.5
20	29.881	59.0	52.3	6.7	55.4	+ 6.6	53.6	52.0	3.4	6.3	0.6	88	71.0	47.8	55.8	0.002	0.0	10.5
21	29.809	60.3	52.6	7.7	56.1	+ 7.5	52.9	49.9	6.2	11.3	3.5	80	77.0	47.3	55.8	0.000	0.1	10.4
22	29.614	62.7	49.4	13.3	56.5	+ 8.2	52.6	48.8	7.7	20.2	2.0	76	115.1	43.8	55.8	0.039	4.2	10.3
23	29.722	59.5	42.6	16.9	50.9	+ 2.8	47.2	42.9	8.0	17.1	1.7	74	106.1	34.1	55.7	0.000	5.8	10.3
24	29.780	60.7	40.2	20.5	50.2	+ 2.3	47.7	45.0	5.2	15.7	1.6	82	102.8	32.9	55.7	0.000	1.1	10.2
25	29.575	65.3	53.1	12.2	58.3	+ 10.6	55.8	53.7	4.6	10.1	1.2	85	92.4	49.6	55.6	0.073	0.3	10.1
26	29.780	59.3	47.0	12.3	53.3	+ 5.7	49.1	44.6	8.7	16.9	5.3	72	111.7	38.0	55.5	0.000	5.7	10.1
27	29.764	59.0	47.0	12.0	53.3	+ 5.8	49.4	45.3	8.0	13.1	4.4	74	95.7	41.2	55.4	0.000	1.4	10.0
28	29.727	55.6	41.6	14.0	50.4	+ 3.0	46.1	41.0	9.4	16.6	6.9	70	95.7	32.8	55.3	0.000	1.7	9.9
29	29.717	51.9	37.3	14.6	44.3	- 3.0	40.6	35.1	9.2	19.0	2.8	70	87.7	29.0	55.1	0.000	7.4	9.9
30	29.545	49.4	34.5	14.9	40.6	- 6.6	38.4	35.1	5.5	11.6	1.5	80	89.1	23.7	55.0	0.000	0.5	9.8
31	29.569	40.2	29.4	10.8	35.3	- 11.8	34.3	32.6	2.7	5.1	0.0	90	44.8	17.6	54.4	0.067	0.0	9.8
Means	29.795	59.2	46.3	12.9	52.5	+ 2.5	49.6	46.4	6.1	12.8	1.7	80.0	92.9	40.0	56.5	1.136	2.4	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 civil day, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of 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 29.795 in., being 0.067 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 69.0 on October 1; the lowest in the month was 29.4 on October 31; and the range was 39.6.  
 The mean of all the highest daily readings in the month was 59.2, being 1.7 higher than the average for the 65 years, 1841-1905.  
 The mean of all the lowest daily readings in the month was 46.3, being 3.1 higher than the average for the 65 years, 1841-1905.  
 The mean of the daily ranges was 12.9, being 1.4 less than the average for the 65 years, 1841-1905.  
 The mean for the month was 52.5 being 2.5 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1934.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.				CLOUDS AND WEATHER.				
	POLARIS.		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.					
Oct. 1	4.9	0.46	3.8	0.35	SSW	SW	3.8	0.34	291	c b o	o d c <i>Stcu</i>	c <i>Stcu</i>	c b c
2	2.0	0.19	0.8	0.07	Calm	Calm	0.3	0.01	147	c o d m	o d r m	r d. rr m	o d m
3	5.9	0.55	5.5	0.51	Calm : SW	SSW	4.0	0.45	283	c m	b c r c <i>Acu</i>	c <i>Nbst r</i>	r b c
4	8.8	0.82	8.3	0.77	SSW	SW	13.6	1.49	393	c r d	bc p. r	r b c r	c b
5	10.7	1.00	9.9	0.92	WSW	WSW	4.0	0.52	343	b	c <i>Cist so.-ha</i>	c <i>Stcu b</i>	b w
6	0.0	0.00	0.0	0.00	WSW : SW	SSW	3.1	0.26	279	b c w	c m. <i>St</i>	c r. c rr	r r. c
7	0.0	0.00	0.0	0.00	SW : SSW	SSW	2.4	0.35	301	c m.	c d. c <i>Stcu</i>	c <i>Stcu</i>	c d. dd
8	6.8	0.62	6.4	0.58	SSW : NNW : NE	NE : Calm : NW	2.0	0.05	194	dd r c m.	c m. <i>Acu</i>	c <i>Stcu</i>	c b w
9	8.2	0.75	7.3	0.66	WSW : NW	NW : WNW	3.4	0.51	316	b w m	c b <i>Acu y</i>	b <i>Cu y</i>	b m. w
10	1.2	0.11	0.7	0.06	SW : WSW	WSW	2.8	0.40	299	b m. c	c <i>Acu Ci</i>	bc c <i>Acu</i>	c r. d.
11	5.5	0.50	3.7	0.34	SW : WSW	WSW : NW	1.0	0.10	250	c d r c	bc <i>Ci</i>	bc <i>Acu c</i>	c
12	3.0	0.27	2.8	0.25	WSW : W	W : WSW	2.0	0.30	300	c b w	b <i>Frcu</i>	b c <i>Stcu</i>	c b c
13	0.0	0.00	0.0	0.00	WSW	WSW	3.3	0.10	258	c m.	c <i>Acu</i>	c r. i d.	d. c
14	4.3	0.37	3.2	0.28	WSW : W	WNW : W	6.8	1.63	473	c	c <i>Ast</i>	c y	c i r
15	9.3	0.81	8.1	0.71	WNW : NW	NW : NNW	18.0	1.55	415	b c p q	c <i>Frcu</i>	c <i>Nbst r. b</i>	b m. c
16	4.0	0.35	3.4	0.30	NNW : N	N : NNW	7.5	1.36	404	c	c p. c <i>Frcu</i>	c p b c p.	c b m. c
17	3.0	0.26	2.4	0.21	WSW : W : WNW	WNW : NNW : N	1.7	0.23	292	o dd	d. d m	i d. o m	c o m
18	2.7	0.24	1.8	0.15	SW : W	W : WSW	1.5	0.22	299	o d. d. m	o m c <i>Stcu m.</i>	c m.	c m.
19	1.7	0.15	1.1	0.10	W : NW	NW : SW : WSW	1.6	0.12	256	c m.	c bc <i>Ci Frcu</i>	c <i>Stcu</i>	c
20	3.7	0.30	2.8	0.23	WSW	WSW : SW	1.6	0.22	297	c	c d c	c d. c	c bc
21	0.3	0.02	0.0	0.00	SW : WSW	SSW	4.0	0.52	315	bc	c d c <i>Stcu</i>	c <i>Stcu</i>	c
22	4.5	0.37	3.2	0.26	SSW : WSW	WSW : SW	4.0	0.63	327	c	c d bc <i>Frcu</i>	b y c <i>Ci Frcu</i>	c lu.-ha b m.
23	10.7	0.89	5.7	0.47	SW : WSW	WSW : SW	0.7	0.05	224	b c m. w	b m.	bc <i>Cicu</i>	c b
24	3.1	0.26	1.8	0.15	SSW : SW	SSW : S	1.9	0.20	269	c lu.-ha w	c <i>Acu</i>	c <i>Stcu</i>	c
25	4.5	0.37	3.6	0.30	S	S : SSW : SW	11.3	1.52	398	c w	c <i>Acu Cicu</i>	c <i>Stcu</i>	r. r c
26	8.3	0.69	7.6	0.63	WSW : SW	SW	4.5	0.77	360	c	c bc <i>Stcu</i>	c <i>Cist r.</i>	c b
27	0.0	0.00	0.0	0.00	SW	SW : WSW	11.5	2.09	485	b c	c <i>Stcu</i>	c <i>Stcu</i>	c d.
28	12.3	0.99	12.2	0.98	WSW	W : WSW	4.0	0.81	383	c	c r. bc <i>Acu</i>	c b y	b
29	12.4	0.99	12.1	0.97	WSW : W	W : WSW	2.2	0.28	326	b c b	b m. bc <i>Cu</i>	b <i>Cu y m.</i>	b m.
30	10.0	0.74	8.5	0.68	WSW	WSW	0.3	0.03	227	bc x	c m p.	c <i>Ast m</i>	c d. b m
31	7.7	0.61	7.4	0.59	Calm : NNW	N : NNW	2.1	0.14	263	b x m	o <i>St m</i>	d. o r r. m.	i d. b
Means	5.1	0.44	4.3	0.37	..	..	..	0.56	312				
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 1°.7 higher than the mean *Temperature of the Dew Point* for the month was 46°.4, being 0°.8 higher than the mean *Degree of Humidity* for the month was 80.0, being 4.9 less than the mean *Elastic Force of Vapour* for the month was 0.317in., being 0.009in. 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 0.222. The maximum daily amount of *Sunshine* was 7.4 hours on October 29.

The highest reading of the *Solar Radiation Thermometer* was 115°.7 on October 10; and the lowest reading of the *Terrestrial Radiation Thermometer* was 17°.6 on October 31.

The *Proportions of Wind* referred to the cardinal points were N. 10, E. 0, S. 32, W. 52, calm or nearly calm conditions, 6, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 18.0 lbs. on the square foot on October 15. The mean daily *Horizontal Movement of the Air* for the month was 312 miles; the greatest daily value was 485 miles on October 27, and the least daily value was 147 miles on October 2.

*Rain* (0.005in. or over) fell on 15 days in the month, amounting to 1.136in., as measured by gauge No. 6 partly sunk below the ground; being 1.646in. less than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1934.	BAROMETER. Means 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.				
Nov. 1	29.828	44.0	28.0	16.0	36.2	-10.8	33.8	29.5	6.7	13.8	2.2	76	70.1	22.9	54.2	0.000	4.7	9.7
2	29.847	45.7	34.3	11.4	39.7	-7.1	37.2	33.2	6.5	15.6	1.8	77	74.4	28.7	53.8	0.000	2.2	9.7
3	29.856	55.9	36.9	19.0	44.7	-1.9	42.1	38.5	6.2	16.1	1.3	79	102.9	31.9	53.6	0.000	6.4	9.6
4	29.573	44.2	35.7	8.5	40.5	-5.9	38.6	35.9	4.6	12.9	0.4	83	53.0	32.0	53.1	0.091	0.0	9.5
5	29.434	46.2	36.8	9.4	41.4	-4.7	40.1	38.4	3.0	5.2	0.9	89	58.4	33.1	52.9	0.010	0.0	9.5
6	29.385	47.0	36.7	10.3	43.3	-2.5	41.0	37.7	5.6	10.9	1.8	81	56.5	33.0	52.7	0.037	0.0	9.4
7	29.602	44.8	35.7	9.1	39.3	-6.1	37.8	35.7	3.6	7.2	1.7	86	58.0	31.1	52.3	0.000	0.4	9.4
8	29.581	47.2	31.1	16.1	40.5	-4.5	39.2	37.4	3.1	10.1	1.0	88	64.7	28.4	52.1	0.182	0.0	9.3
9	29.082	51.7	44.4	7.3	47.9	+3.3	47.4	46.9	1.0	3.2	0.7	96	60.5	42.7	52.0	0.389	0.0	9.2
10	29.018	47.1	42.6	4.5	45.1	+0.8	44.0	42.7	2.4	4.7	1.1	91	53.3	37.3	51.9	1.029	0.0	9.2
11	29.382	51.1	41.7	9.4	45.5	+1.5	44.4	43.1	2.4	4.8	0.0	91	77.3	35.6	51.7	0.025	2.5	9.1
12	29.390	48.2	34.5	13.7	43.7	-0.0	41.9	39.5	4.2	7.4	0.9	85	68.7	28.6	51.3	0.000	0.3	9.1
13	29.212	47.3	32.0	15.3	39.4	-4.1	38.3	36.7	2.7	7.7	0.0	90	69.1	26.9	51.3	0.001*	3.0	9.0
14	29.387	47.6	40.6	7.0	44.5	+1.2	43.7	42.8	1.7	2.7	0.7	93	52.1	33.7	51.2	0.253	0.0	9.0
15	29.598	50.3	43.9	6.4	46.2	+3.1	44.9	43.3	2.9	7.2	0.4	90	73.3	41.0	51.1	0.099	1.1	8.9
16	29.732	46.0	43.2	2.8	44.8	+2.0	43.7	42.4	2.4	5.7	0.6	91	47.5	42.1	51.0	0.005	0.0	8.9
17	29.823	47.1	43.1	4.0	45.4	+2.8	43.5	41.1	4.3	5.9	1.7	85	50.5	37.9	51.1	0.000	0.0	8.8
18	30.074	49.8	40.6	9.2	45.5	+3.1	44.2	42.6	2.9	6.4	0.5	90	63.2	34.2	51.0	0.000	0.0	8.8
19	30.166	42.4	36.0	6.4	39.1	-3.2	38.6	37.9	1.2	1.5	0.0	95	46.5	28.3	50.8	0.000	0.0	8.7
20	30.194	48.0	34.2	13.8	39.4	-2.8	38.7	37.7	1.7	5.3	0.0	93	73.0	28.5	50.7	0.002*	0.0	8.7
21	30.295	44.2	32.0	12.2	39.0	-3.1	38.6	38.1	0.9	3.2	0.0	96	43.7	28.8	50.5	0.000	0.0	8.6
22	30.322	51.3	38.0	13.3	44.8	+2.7	42.4	39.2	5.6	12.3	1.9	80	72.4	29.0	50.4	0.000	2.4	8.6
23	30.250	50.5	38.3	12.2	44.8	+2.8	43.5	41.9	2.9	6.8	0.0	89	76.5	32.0	50.2	0.001*	2.3	8.5
24	30.357	51.1	46.9	4.2	48.4	+6.4	47.4	46.3	2.1	3.9	0.6	92	49.0	45.6	50.1	0.000	0.0	8.5
25	30.455	49.1	46.8	2.3	47.9	+6.0	46.8	45.5	2.4	5.2	0.3	91	52.0	45.5	50.0	0.000	0.0	8.4
26	30.322	52.0	46.5	5.5	49.4	+7.6	46.2	42.4	7.0	10.3	3.5	77	70.2	43.0	50.1	0.000	3.0	8.4
27	30.351	55.0	47.3	7.7	51.0	+9.3	49.0	46.8	4.2	8.5	0.6	86	64.2	43.2	50.1	0.000	0.0	8.4
28	30.349	51.0	48.3	2.7	49.7	+8.2	48.6	47.5	2.2	5.6	0.2	92	50.8	47.0	50.1	0.004	0.0	8.3
29	30.333	49.0	46.6	2.4	47.6	+6.4	47.1	46.6	1.0	1.7	0.4	96	49.3	45.1	50.1	0.006	0.0	8.3
30	30.311	47.8	38.0	9.8	45.0	+4.0	43.1	40.6	4.4	11.7	0.7	85	53.0	30.0	50.1	0.000	0.0	8.2
Means	29.850	48.4	39.4	9.1	44.0	+0.5	42.5	40.6	3.4	7.2	0.8	87.8	61.8	34.9	51.4	Sum 2.134	0.9	8.9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of 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.

\*Rainfall (Column 16). The amounts entered on November 13, 20 and 23 are derived from wet fog.

The mean reading of the Barometer for the month was 29.850 in., being 0.085 in. higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 55.9 on November 3; the lowest in the month was 28.0 on November 1; and the range was 27.9.

The mean of all the highest daily readings in the month was 48.4, being 0.6 lower than the average for the 65 years, 1841-1905.

The mean of all the lowest daily readings in the month was 39.4, being 1.5 higher than the average for the 65 years, 1841-1905.

The mean of the daily ranges was 9.1, being 2.0 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, 1934.	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.	Robinson's.						
Nov. 1	2.8	0.23	2.3	0.18	W : WSW	W : WSW	lbs.	lbs.	miles.	b x m	b Frcu m	b Frcu c m.	c d. b m.		
2	3.4	0.27	2.3	0.18	WSW : W	WNW : Calm	2.3	0.14	282	b c m.	c p. m.	c b c Acu m	c r. m		
3	7.1	0.56	6.3	0.50	S : SSW	SSW : SE : E	1.2	0.12	264	c	c b Frcu Ci y	b Frcu	b w m.		
4	1.1	0.09	0.1	0.01	E	Calm : WSW	3.9	0.35	256	b c m.	c Nbst d. r. m	dd r m	c f o m.		
5	0.0	0.00	0.0	0.00	WSW : Calm	NNE : N	1.3	0.11	217	o c m.	o c f m.	c Acu m.	c r. r. c		
6	5.1	0.40	4.3	0.34	N : NNE	NNE	2.3	0.49	330	c r. r m	r. r m. c Ast	c Ast r. c	c		
7	9.5	0.74	6.9	0.54	N	N : NNW	1.0	0.15	247	c	c St m	c Acu b c m.	c m f		
8	0.4	0.04	0.2	0.02	WSW : SW	SSW	1.8	0.14	256	b x m	c m. so.-ha r.	r. r. m.	r. r. rr		
9	1.4	0.11	1.1	0.09	SSW : S	SSE : S	2.7	0.35	286	rr	c r d r. r	rr	rr c		
10	9.2	0.71	8.2	0.63	SSE	S : ESE	3.2	0.29	270	c rr	rr i R	rr R c b	b		
11	2.0	0.15	1.7	0.13	ENE : Calm	NNE : N	0.6	0.05	217	c r b	b f c Stcu m.	c Nbst d m.	c m.		
12	7.9	0.61	3.9	0.30	NNW : NW	NNW : SW	0.4	0.05	209	c	c Stcu m	c Stcu m	c b f w		
13	5.3	0.41	5.3	0.41	Calm : E	SE : ENE	0.4	0.03	190	b c f Fe	c Fe b f c m	c b Frcu m.	b w o m		
14	0.0	0.00	0.0	0.00	ENE : NE	NE : NNE	0.5	0.04	215	o d m	o St f m	o Nbst i d. rr m	rr o m.		
15	0.0	0.00	0.0	0.00	Calm : E	E : NE	2.8	0.07	220	o d. m.	o f c Acu m m.	c Acu b c m.	c r d m.		
16	0.0	0.00	0.0	0.00	NNE : E	E : NE	1.0	0.10	236	c d d. m	c Nbst d d. m	c Stcu m	c m		
17	2.2	0.16	1.3	0.10	NE : NNE	NNE : N	1.7	0.22	299	o	o c St m.	c d. m.	d c m.		
18	0.0	0.00	0.0	0.00	NNE	NNE : Calm	0.6	0.08	205	c m.	c Acu m m.	c b c m	c m fe		
19	0.0	0.00	0.0	0.00	Calm	Calm	0.0	0.00	142	c fefe	Fe F	FF	FeFe		
20	0.0	0.00	0.0	0.00	Calm	Calm	0.0	0.00	160	FeFe	Fe so.-ha f	c Acu Ci ff	c f lu.-ha x FeFe		
21	0.0	0.00	0.0	0.00	Calm	Calm	0.0	0.00	122	FeFe	FeFe	FeFe	FeFe		
22	8.2	0.62	8.0	0.61	Calm	SW	0.2	0.01	180	Fe Fe c f	c f b c Acu m	c b m	b m x		
23	0.0	0.00	0.0	0.00	WSW	WSW	0.1	0.01	215	b c m Fe fe	c b c f m	c m f	o f m		
24	0.0	0.00	0.0	0.00	WSW : Calm	Calm	0.0	0.00	146	o m f	o Fe F	o FF m	o d. m.		
25	0.0	0.00	0.0	0.00	Calm : S	SSW : SW	0.3	0.02	177	o m	o St f m	o St m	o c		
26	2.3	0.17	1.0	0.07	WSW	WSW	2.0	0.23	323	c	c b Frcu m.	b Ci c m.	c		
27	0.0	0.00	0.0	0.00	WSW	WNW : Calm	0.3	0.02	206	bc lu.-ha w c	c Stcu f m	c Acu m m.	c m.		
28	0.0	0.00	0.0	0.00	Calm	Calm	0.0	0.00	126	c	c o m f g	o St f g d.	o f d. d. m		
29	0.0	0.00	0.0	0.00	Calm	Calm	0.0	0.00	104	o d. d. m	o St m f	o d. f m.	o d. m		
30	0.7	0.05	0.7	0.05	Calm	SE : Calm	0.1	0.01	147	o m	o St m m.	c Stcu m. b c	c		
Means	2.3	0.18	1.8	0.14	..	..	..	0.11	216						
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°.5, being 0°.6 higher than  
 The mean *Temperature of the Dew Point* for the month was 40°.6, being 0°.9 higher than  
 The mean *Degree of Humidity* for the month was 87.8, being 1.2 greater than  
 The mean *Elastic Force of Vapour* for the month was 0.253in., being 0.007in. greater than  
 } the average for the 65 years, 1841-1905.

The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 8.2.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.106. The maximum daily amount of *Sunshine* was 6.4 hours on November 3.

The highest reading of the *Solar Radiation Thermometer* was 102°.9 on November 3; and the lowest reading of the *Terrestrial Radiation Thermometer* was 22°.9 on November 1.

The *Proportions of Wind* referred to the cardinal points were N. 17, E. 14, S. 16, W. 19, calm or nearly calm conditions, 34, the whole month being represented by 100.

The *Greatest Pressure of the Wind* in the month was 3.9 lbs. on the square foot on November 4. The mean daily *Horizontal Movement of the Air* for the month was 216 miles; the greatest daily value was 330 miles on November 6, and the least daily value was 104 miles on November 29.

*Rain* (0.005in. or over) fell on 11 days in the month, amounting to 2.134in., as measured by gauge No. 6 partly sunk below the ground; being 0.086in. less than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1934.	BAROMETER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	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	30.090	47.5	43.9	3.6	45.5	+ 4.6	43.4	40.7	4.8	9.2	1.8	83	50.0	41.9	50.1	0.045	0.0	8.2
2	29.577	55.7	45.6	10.1	50.1	+ 9.2	49.0	47.9	2.2	3.9	0.8	92	54.1	44.4	50.1	0.476	0.0	8.2
3	29.546	56.1	53.1	3.0	54.7	+ 13.6	53.2	51.9	2.8	5.1	1.0	90	60.9	50.6	50.2	0.001	0.0	8.2
4	29.463	54.4	52.1	2.3	53.4	+ 12.1	52.6	51.9	1.5	3.9	0.8	95	55.8	50.0	50.3	0.278	0.0	8.1
5	29.326	53.1	45.7	7.4	50.5	+ 9.0	48.7	46.8	3.7	10.3	1.6	87	68.8	41.0	50.5	0.242	1.1	8.1
6	29.532	53.7	45.7	8.0	50.6	+ 9.1	49.8	48.9	1.7	2.9	0.0	94	56.7	41.0	50.5	0.535	0.0	8.1
7	29.584	54.5	47.3	7.2	51.3	+ 10.0	49.7	48.1	3.2	9.1	1.4	89	63.8	43.8	50.5	0.049	2.0	8.0
8	29.586	56.9	50.6	6.3	53.3	+ 12.3	51.4	49.6	3.7	5.6	1.4	87	67.6	47.6	50.7	0.092	0.5	8.0
9	29.255	53.8	44.2	9.6	51.5	+ 10.9	49.4	47.2	4.3	8.8	1.2	85	55.7	41.1	50.6	0.254	0.0	8.0
10	29.406	50.1	41.0	9.1	45.7	+ 5.3	45.1	44.3	1.4	4.0	0.0	95	61.1	32.0	50.6	0.008*	0.3	8.0
11	29.354	50.1	45.0	5.1	47.3	+ 7.1	46.0	44.5	2.8	5.5	0.1	90	61.0	40.8	50.6	0.028	0.2	7.9
12	29.003	52.7	42.2	10.5	47.9	+ 7.6	46.3	44.5	3.4	9.0	0.6	88	62.0	36.7	50.4	0.045	1.5	7.9
13	29.070	48.1	40.5	7.6	45.2	+ 4.7	44.1	42.8	2.4	4.1	0.0	91	55.9	32.7	50.3	0.197	1.9	7.9
14	28.915	48.7	40.1	8.6	45.6	+ 4.9	44.7	43.6	2.0	3.9	0.0	93	51.0	33.2	50.1	0.214	0.0	7.9
15	28.636	50.1	46.2	3.9	48.5	+ 7.7	47.4	46.2	2.3	4.8	1.2	92	55.0	44.5	50.1	0.489	0.0	7.9
16	28.971	49.4	42.1	7.3	46.8	+ 6.1	46.0	45.0	1.8	3.0	0.0	94	55.2	38.1	49.9	0.120	0.0	7.8
17	29.303	47.8	38.6	9.2	43.5	+ 3.1	42.6	41.5	2.0	3.5	0.0	92	52.3	32.0	49.8	0.005	0.0	7.8
18	29.083	53.6	45.6	8.0	49.2	+ 9.2	47.3	45.2	4.0	8.1	1.3	86	65.0	43.0	49.7	0.271	0.7	7.8
19	29.043	51.5	46.6	4.9	48.6	+ 9.1	47.5	46.4	2.2	4.7	0.6	92	59.2	44.4	49.6	0.131	0.5	7.8
20	29.456	50.9	43.0	7.9	48.2	+ 9.2	46.3	44.2	4.0	6.8	0.8	86	57.0	37.6	49.5	0.092	0.0	7.8
21	29.760	43.1	32.3	10.8	37.6	- 1.1	37.0	36.1	1.5	4.3	0.0	94	44.8	28.9	49.2	0.000	0.0	7.8
22	29.686	42.5	32.8	9.7	38.9	+ 0.5	38.2	37.2	1.7	3.8	0.0	93	48.8	30.3	49.2	0.006*	0.0	7.8
23	29.583	45.7	39.2	6.5	42.2	+ 4.0	41.7	41.1	1.1	3.1	0.0	96	54.2	35.2	49.0	0.141	0.1	7.8
24	29.710	43.2	37.1	6.1	41.2	+ 3.0	40.1	38.7	2.5	4.5	0.2	90	46.8	31.3	48.8	0.014	0.0	7.8
25	29.765	44.1	36.0	8.1	39.4	+ 1.0	38.5	37.1	2.3	3.9	0.0	92	41.7	28.9	48.7	0.015	0.0	7.8
26	29.499	51.4	44.1	7.3	48.1	+ 9.5	47.5	46.9	1.2	3.5	0.2	95	57.6	42.9	48.6	0.229	0.0	7.8
27	29.613	49.8	39.2	10.6	46.2	+ 7.4	45.3	44.2	2.0	3.0	0.2	93	54.1	36.1	48.2	0.070	0.0	7.9
28	29.490	50.7	46.0	4.7	48.4	+ 9.5	47.5	46.6	1.8	5.5	0.4	93	56.0	43.3	48.3	0.305	0.0	7.9
29	29.529	50.6	40.9	9.7	46.9	+ 7.9	45.1	43.0	3.9	7.3	1.9	86	53.2	36.6	48.2	0.049	0.0	7.9
30	29.949	53.7	40.1	13.6	48.2	+ 9.3	46.9	45.5	2.7	3.8	1.5	90	59.3	35.9	48.3	0.023	0.0	7.9
31	29.841	53.5	46.5	7.0	50.5	+ 11.8	48.7	46.8	3.7	7.4	2.1	87	62.5	42.4	48.3	0.127	2.6	7.9
Means	29.439	50.5	43.0	7.5	47.3	+ 7.3	46.0	44.7	2.6	5.4	0.7	90.6	56.4	39.0	49.6	Sum 4.551	0.4	7.9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

The results apply to the civil day, except Columns 19 to 22 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn of the following day.

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of 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.

\* Rainfall (Column 16). The amount entered on December 10 is derived from dew, and that on December 22 from wet fog.

The mean reading of the Barometer for the month was 29.439in., being 0.353in. lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 56.9 on December 8; the lowest in the month was 32.3 on December 21; and the range was 24.6. The mean of all the highest daily readings in the month was 50.5, being 6.3 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 43.0, being 8.0 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 7.5, being 1.7 less than the average for the 65 years, 1841-1905. The mean for the month was 47.3, being 7.3 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1934.	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>		
Dec. 1	0.0	0.00	0.0	0.00	SSE : Calm : SSW	SSW	1.5	0.15	248	c		c m <sub>o</sub> c	c r r		
2	1.1	0.08	0.7	0.05	SSW	SSW : SW : WSW	2.5	0.78	401	rr dd rr		rr c <i>Stcu</i> m <sub>o</sub>	c		
3	2.2	0.16	1.0	0.08	SW	SW	2.4	0.30	315	c		c <i>Nbst</i> r <sub>o</sub> d <sub>o</sub>	c d <sub>o</sub>		
4	3.1	0.22	2.2	0.16	SSW	S	1.5	0.24	292	c d <sub>o</sub>		c <i>Nbst</i> d <sub>o</sub> rr	rr d c i r <sub>o</sub>		
5	6.4	0.47	5.9	0.43	SSW : SW	SW : WSW	4.3	0.73	369	rr c		c <i>Acu</i>	c <i>Nbst</i> rr		
6	1.4	0.10	0.9	0.07	Calm : SSW	SSW : S	2.9	0.30	287	b c rr		c i r <sub>o</sub> r	r c rr		
7	4.7	0.34	3.7	0.27	SSW	SW : S	2.0	0.17	280	dd r <sub>o</sub> b		b c p	bc <i>Ci</i> <i>Frst</i>		
8	5.4	0.40	3.9	0.28	S : SSW	SSW : S	6.0	0.90	395	c rr		rr b c <i>Stcu</i>	c <i>Stcu</i>		
9	9.4	0.68	7.4	0.54	SSE	S : SSW	5.0	1.10	367	c		c i r <sub>o</sub>	c r <sub>o</sub> r R		
10	6.8	0.50	4.9	0.35	S : SSW	Calm : SSW	0.2	0.02	206	b w		bc <i>Stcu</i> m	b <i>Ci</i> c m		
11	0.0	0.00	0.0	0.00	SSW	S : SE	2.1	0.23	268	c b w		b c <i>Stcu</i>	c <i>Ast</i> <i>Frst</i>		
12	12.6	0.92	12.3	0.89	SE : S : SW	SW : SSW	3.0	0.21	263	c d <sub>o</sub> d <sub>o</sub>		dd c <i>Ci</i>	c b <i>Frcu</i>		
13	6.2	0.45	4.2	0.31	S	S	1.7	0.15	248	b c		b c i r R	b c i r c <i>lu.-ha</i>		
14	3.0	0.22	2.5	0.18	SSE	S : SSE	1.4	0.10	227	c b w c		c <i>Nbst</i> i d	c d r r <sub>o</sub>		
15	2.7	0.19	1.6	0.12	SSW	SSW	5.0	0.51	350	c i r <sub>o</sub>		c <i>Nbst</i> i r	c r r R		
16	6.7	0.48	5.0	0.36	Calm : NW	WNW : WSW	1.5	0.07	217	c i r r <sub>o</sub>		c r r <sub>o</sub> m	c r <sub>o</sub> b m		
17	2.2	0.16	1.4	0.10	Calm : WSW	SW : SSW	3.6	0.04	203	c m f		c Fe fe	b f c		
18	3.6	0.26	1.8	0.13	SSW : SW	SW : SSW	4.3	0.87	381	c i r r <sub>o</sub>		b c <i>Acu</i>	c r b		
19	0.3	0.02	0.2	0.01	SSW	SSW : WSW	2.5	0.35	329	c i r		c <i>Nbst</i> p <sub>o</sub>	c <i>Nbst</i> p r r <sub>o</sub>		
20	7.8	0.56	7.6	0.54	WNW	NW : WNW	2.5	0.25	324	c r r d <sub>o</sub>		c <i>Nbst</i> p m	c <i>Stcu</i> m <sub>o</sub>		
21	2.0	0.14	0.3	0.02	W : Calm	Calm	0.2	0.01	165	c b x		b f fe	bc <i>Acu</i> fe		
22	0.0	0.00	0.0	0.00	Calm	Calm : ESE	0.1	0.02	156	FeFe		Fe c <i>Stcu</i> m	c <i>Acu</i> m <sub>o</sub> c		
23	3.0	0.21	2.8	0.20	ESE : SE	SSE : Calm	1.0	0.08	214	c		c r r d <sub>o</sub> m <sub>o</sub>	c b m <sub>o</sub>		
24	2.6	0.19	1.1	0.08	ESE	ESE : Calm	0.7	0.06	205	c r <sub>o</sub> d <sub>o</sub> m <sub>o</sub>		c <i>Nbst</i> p <sub>o</sub> m <sub>o</sub>	c <i>St</i> m <sub>o</sub>		
25	1.0	0.07	1.0	0.07	Calm	ESE : SE	0.7	0.05	194	c w m <sub>o</sub>		o <i>St</i> m <sub>o</sub> m	o d m		
26	11.1	0.79	9.8	0.70	SSE : SSW	SSW : SW	2.4	0.20	259	o d r c		c b c <i>Acu</i> <i>Ast</i>	c <i>Ast</i> r <sub>o</sub>		
27	8.4	0.60	5.7	0.40	SW : SSW	SSW : SW	2.7	0.26	296	c b w		b c m <sub>o</sub>	c <i>Nbst</i> r r <sub>o</sub> c		
28	0.5	0.03	0.1	0.01	SSW : S	S : SE	3.1	0.19	258	c		c r r c <i>Ast</i>	c p r r		
29	10.5	0.76	9.2	0.67	SSE : SSW : WSW	W : WSW	5.2	0.70	356	c		c d <sub>o</sub> r r <sub>o</sub> m	c m		
30	1.4	0.10	0.6	0.04	WSW : SSW	SSW	3.0	0.53	341	b c		c i r <sub>o</sub> m <sub>o</sub>	c <i>Nbst</i> i r <sub>o</sub> m <sub>o</sub>		
31	3.6	0.26	2.5	0.18	SSW : WSW	WSW	2.7	0.48	380	c		c r r bc m <sub>o</sub>	bc b <i>Frcu</i> m <sub>o</sub>		
Means	4.2	0.30	3.2	0.23	..	..	..	0.32	284						
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 46°·0, being 7°·5 higher than  
 The mean *Temperature of the Dew Point* for the month was 44°·7, being 8°·3 higher than  
 The mean *Degree of Humidity* for the month was 90·6, being 3·1 greater than  
 The mean *Elastic Force of Vapour* for the month was 0·297in., being 0·081in. 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 8·5.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·046. The maximum daily amount of *Sunshine* was 2·6 hours on December 31.  
 The highest reading of the *Solar Radiation Thermometer* was 68°·8 on December 5; and the lowest reading of the *Terrestrial Radiation Thermometer* was 28°·9 on December 21 and 25.  
 The *Proportions of Wind* referred to the cardinal points were N. 1, E. 7, S. 55, W. 24, calm or nearly calm conditions, 13, the whole month being represented by 100.  
 The *Greatest Pressure of the Wind* in the month was 6·0 lbs. on the square foot on December 8. The mean daily *Horizontal Movement of the Air* for the month was 284 miles; the greatest daily value was 401 miles on December 2, and the least daily value was 156 miles on December 22.  
*Rain* (0·005in. or over) fell on 27 days in the month, amounting to 4·551in., as measured by gauge No. 6 partly sunk below the ground; being 2·724in. greater than the average fall for the 65 years, 1841-1905.

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

MAXIMA.		MINIMA.		MAXIMA.		MINIMA.		MAXIMA.		MINIMA.	
Greenwich Mean Time, 1934.	Reading	Greenwich Mean Time, 1934.	Reading.	Greenwich Mean Time, 1934.	Reading.	Greenwich Mean Time, 1934.	Reading.	Greenwich Mean Time, 1934.	Reading	Greenwich Mean Time, 1934.	Reading.
<b>January.</b>		<b>January.</b>		<b>May.</b>		<b>May.</b>		<b>September.</b>		<b>September.</b>	
d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.	d. h. m.	in.
1. 10. 0	30·215	4. 21. 5	29·626	2. 23. 0	29·796	1. 18. 40	29·661	2. 19. 30	29·632	1. 16. 20	29·531
6. 0. 55	30·240	8. 0. 20	29·839	5. 23. 30	29·858	4. 19. 0	29·506	5. 22. 20	30·131	3. 4. 0	29·490
9. 9. 0	30·191	12. 12. 20	29·141	10. 8. 20	30·294	6. 19. 35	29·678	12. 10. 5	30·206	9. 4. 40	29·631
13. 11. 0	29·551	14. 7. 0	28·738	15. 7. 20	29·825	14. 18. 5	29·746	16. 19. 35	29·894	15. 16. 10	29·690
16. 19. 10	29·845	17. 13. 40	29·386	23. 7. 0	30·211	16. 12. 0	29·235	18. 9. 25	29·875	17. 14. 15	29·717
17. 23. 30	29·557	19. 0. 0	29·250	26. 20. 50	30·176	25. 14. 10	29·892	22. 0. 0	29·890	20. 4. 0	29·511
21. 10. 0	30·555	22. 15. 0	30·357			31. 16. 0	29·830	23. 19. 45	29·773	22. 17. 30	29·507
23. 23. 15	30·502	26. 13. 30	29·931					25. 20. 50	29·884	24. 15. 40	29·385
29. 23. 30	30·418	30. 14. 10	30·341					27. 10. 50	30·050	26. 16. 40	29·663
31. 10. 35	30·496							30. 8. 50	30·024	29. 4. 5	29·756
<b>February.</b>		<b>February.</b>		<b>June.</b>		<b>June.</b>		<b>October.</b>		<b>October.</b>	
2. 9. 30	30·506	1. 3. 10	30·186	3. 2. 0	30·112	6. 17. 10	29·688	8. 9. 0	30·235	4. 14. 20	28·934
9. 9. 5	30·338	8. 6. 0	29·852	9. 8. 0	30·050	11. 16. 0	29·826	9. 7. 10	30·055	9. 7. 10	30·055
13. 3. 0	30·576	10. 14. 0	30·142	12. 10. 25	29·963	13. 17. 10	29·803	11. 23. 10	30·242	12. 15. 20	30·141
15. 11. 25	30·767	14. 1. 20	30·455	15. 22. 15	30·082	19. 16. 20	29·495	13. 10. 15	30·228	15. 8. 50	29·484
26. 10. 40	29·865	25. 8. 10	29·579	21. 0. 15	29·811	22. 2. 40	29·431	16. 18. 20	30·023	17. 15. 30	29·748
		28. 5. 45	29·467	23. 8. 15	29·885	25. 15. 35	29·679	19. 11. 20	29·917	22. 6. 15	29·558
				26. 21. 30	29·948	28. 10. 45	29·765	24. 9. 30	29·801	25. 19. 45	29·445
								26. 20. 50	29·887	28. 6. 0	29·691
								28. 22. 50	29·779	31. 3. 25	29·428
<b>March.</b>		<b>March.</b>		<b>July.</b>		<b>July.</b>		<b>November.</b>		<b>November.</b>	
4. 0. 0	30·183	6. 15. 45	29·225	3. 8. 0	30·154	5. 16. 50	29·934	2. 20. 50	29·896	6. 0. 0	29·276
8. 8. 40	29·763	12. 8. 15	28·654	8. 8. 30	30·119	13. 4. 50	29·586	8. 1. 0	29·712	10. 5. 50	28·919
14. 1. 0	29·245	14. 20. 5	28·631	16. 9. 25	30·017	18. 10. 30	29·618	11. 23. 50	29·478	13. 6. 0	29·174
16. 8. 40	29·158	17. 15. 0	28·648	19. 9. 30	29·797	21. 3. 15	29·533	22. 8. 30	30·356	23. 14. 30	30·223
19. 1. 30	29·308	19. 16. 0	29·080	26. 0. 0	29·985	26. 15. 55	29·790	25. 10. 25	30·482	26. 15. 5	30·279
25. 10. 30	30·213	26. 16. 40	29·917	27. 21. 50	29·900	28. 15. 30	29·661	27. 20. 5	30·389		
27. 20. 50	30·063	30. 4. 30	29·622	29. 1. 0	29·725	31. 2. 30	29·418				
<b>April.</b>		<b>April.</b>		<b>August.</b>		<b>August.</b>		<b>December.</b>		<b>December.</b>	
1. 9. 30	29·873	5. 15. 50	29·423	1. 8. 30	29·719	2. 9. 0	29·305	3. 10. 15	29·571	2. 14. 15	29·381
6. 10. 55	29·505	8. 15. 10	29·332	5. 8. 10	29·779	6. 4. 15	29·583	6. 10. 25	29·576	5. 1. 10	29·240
10. 8. 30	29·572	12. 4. 40	29·256	8. 9. 55	29·803	9. 10. 10	29·677	7. 17. 25	29·698	6. 21. 15	29·457
13. 7. 55	29·917	14. 4. 50	29·690	10. 0. 0	29·752	10. 10. 10	29·677	10. 23. 15	29·491	9. 14. 25	29·125
15. 7. 15	29·888	15. 16. 5	29·739	12. 0. 20	29·758	12. 16. 20	29·613	12. 23. 50	29·097	12. 8. 0	28·905
16. 8. 30	29·911	18. 14. 25	29·256	18. 0. 15	30·021	20. 11. 10	29·571	17. 17. 15	29·424	15. 7. 0	28·583
18. 21. 0	29·434	19. 4. 20	29·331	21. 3. 15	29·777	22. 23. 10	29·562	17. 17. 15	29·424	18. 22. 0	29·007
20. 14. 0	29·820	24. 5. 45	28·915	26. 11. 10	30·104	29. 3. 50	29·321	21. 10. 0	29·789	23. 14. 15	29·550
25. 10. 0	29·252	26. 6. 0	29·126	31. 9. 10	29·639			24. 23. 0	29·818	26. 13. 20	29·470
30. 7. 0	29·959							27. 9. 20	29·669	29. 5. 0	29·257
								30. 4. 0	30·008	31. 7. 0	29·750

The readings in the above table are accurate, but the times are occasionally liable to uncertainty, as the barometer will sometimes remain at its extreme reading without sensible change for a considerable interval of time. In such cases the time given is the middle of the stationary period.  
 The time is Greenwich Mean Time.  
 The height of the barometer cistern above mean sea level is 152 feet; no correction has been applied to the readings to reduce to sea level.

HIGHEST and LOWEST READINGS of the BAROMETER in each MONTH for the YEAR 1934.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Highest.....	30·555	30·767	30·213	29·959	30·294	30·112	30·154	30·104	30·206	30·242	30·482	30·008
Lowest .....	28·738	29·467	28·631	28·915	29·235	29·431	29·418	29·305	29·385	28·934	28·919	28·583
Range .....	1·817	1·300	1·582	1·044	1·059	0·681	0·736	0·799	0·821	1·308	1·563	1·425

The highest reading in the year was 30·767in. on Feb. 15. The lowest reading in the year was 28·583in. on Dec. 15. The range of reading in the year was 2·184in.



MONTHLY RESULTS OF METEOROLOGICAL ELEMENTS for the YEAR 1934.

MONTH, 1934.	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.			
	in.	°	°	°	°	°	°	°	°	°	°	
January .....	29.954	55.0	23.8	31.2	44.6	33.9	10.7	39.6	+1.0	37.8	35.0	83.8
February .....	30.240	51.2	22.5	28.7	44.5	32.6	11.9	38.2	-1.4	36.2	33.1	82.1
March .....	29.521	57.5	28.9	28.6	49.8	34.9	14.9	41.6	-0.3	39.1	35.2	77.9
April .....	29.576	77.6	29.3	48.3	57.4	40.2	17.1	47.9	+0.6	44.5	40.2	74.9
May .....	29.915	79.1	35.7	43.4	66.0	44.6	21.4	54.6	+1.5	49.7	44.2	68.4
June .....	29.870	90.6	42.6	48.0	72.8	51.1	21.7	61.0	+1.6	55.3	50.2	68.2
July .....	29.849	88.4	48.8	39.6	79.1	55.1	24.0	66.3	+3.6	59.4	53.8	64.7
August .....	29.727	81.6	42.3	39.3	73.2	52.3	20.9	61.5	-0.2	56.6	52.5	72.7
September .....	29.818	82.7	41.1	41.6	71.9	50.0	22.0	60.2	+2.9	55.8	52.0	74.6
October .....	29.795	69.0	29.4	39.6	59.2	46.3	12.9	52.5	+2.5	49.6	46.4	80.0
November .....	29.850	55.9	28.0	27.9	48.4	39.4	9.1	44.0	+0.5	42.5	40.6	87.8
December .....	29.439	56.9	32.3	24.6	50.5	43.0	7.5	47.3	+7.3	46.0	44.7	90.6
Means .....	29.796	Highest 90.6	Lowest 22.5	Annual Range 68.1	59.8	43.6	16.2	51.2	+1.6	47.7	44.0	77.1

MONTH, 1934.	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.											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.	Mean Daily Pressure on the Square Foot.			
						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.					
	in.	°			in.	h	h	h	h	h	h	h	h	h	h	h	lbs.	miles.
January .....	0.204	43.5	7.0	18	1.377	65	29	5	8	100	300	89	22	126	126	126	0.58	303
February .....	0.189	41.6	5.6	4	0.198	114	101	17	9	9	116	114	53	139	139	139	0.25	263
March .....	0.205	42.1	7.0	16	2.168	48	55	64	52	73	201	105	36	110	110	110	0.36	277
April .....	0.250	45.1	7.6	16	2.144	38	156	39	27	107	179	27	26	121	121	121	0.39	278
May .....	0.291	50.1	6.2	7	0.401	76	66	70	28	70	163	97	62	112	112	112	0.43	271
June .....	0.365	54.7	6.6	11	1.471	112	119	76	21	20	126	74	39	133	133	133	0.46	271
July .....	0.417	58.7	5.4	6	0.900	41	33	137	43	19	131	118	67	155	155	155	0.35	253
August .....	0.398	59.6	6.6	13	1.695	25	44	31	23	43	319	124	33	102	102	102	0.36	264
September .....	0.390	58.8	5.7	10	1.200	5	23	49	8	138	290	87	11	109	109	109	0.29	255
October .....	0.317	56.5	7.6	15	1.136	38	7	..	..	69	338	182	68	42	42	42	0.56	312
November .....	0.253	51.4	8.2	11	2.134	76	74	50	31	56	94	77	19	243	243	243	0.11	216
December .....	0.297	49.6	8.5	27	4.551	1	..	17	72	258	228	53	21	94	94	94	0.32	284
Sums .....	..	..	..	154	19.375	639	707	555	322	962	2485	1147	457	1486	1486	1486	..	..
Means .....	0.298	51.0	6.8	..	..	..	..	..	..	..	..	..	..	..	..	..	0.37	271

The greatest recorded pressure of the wind on the square foot in the year was 21.5 lbs. on January 14.

The greatest recorded daily horizontal movement of the air in the year was 563 miles on January 14.

The least recorded daily horizontal movement of the air in the year was 104 miles on November 29.



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

1934.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	29.953	30.259	29.524	29.589	29.928	29.877	29.867	29.738	29.822	29.804	29.849	29.451	29.805
1 <sup>h</sup>	29.947	30.254	29.526	29.580	29.924	29.873	29.864	29.734	29.818	29.803	29.845	29.444	29.801
2	29.948	30.252	29.522	29.573	29.920	29.870	29.860	29.730	29.815	29.799	29.844	29.443	29.798
3	29.947	30.243	29.518	29.566	29.915	29.867	29.856	29.726	29.812	29.794	29.839	29.439	29.793
4	29.944	30.237	29.517	29.562	29.914	29.870	29.855	29.723	29.810	29.790	29.837	29.434	29.791
5	29.940	30.237	29.518	29.564	29.916	29.872	29.859	29.724	29.811	29.790	29.836	29.431	29.791
6	29.941	30.235	29.519	29.571	29.921	29.875	29.861	29.728	29.818	29.791	29.837	29.428	29.794
7	29.945	30.241	29.526	29.576	29.925	29.880	29.863	29.732	29.825	29.796	29.843	29.430	29.799
8	29.951	30.250	29.531	29.579	29.927	29.882	29.862	29.734	29.830	29.803	29.854	29.439	29.803
9	29.960	30.255	29.535	29.581	29.927	29.882	29.860	29.734	29.834	29.807	29.860	29.445	29.807
10	29.966	30.257	29.534	29.582	29.926	29.879	29.857	29.733	29.833	29.806	29.863	29.448	29.807
11	29.966	30.256	29.533	29.583	29.924	29.877	29.853	29.730	29.827	29.805	29.859	29.446	29.805
Noon	29.958	30.248	29.528	29.579	29.917	29.872	29.848	29.726	29.819	29.795	29.851	29.439	29.798
13 <sup>h</sup>	29.948	30.234	29.521	29.576	29.912	29.864	29.840	29.722	29.813	29.787	29.845	29.434	29.791
14	29.946	30.223	29.512	29.568	29.904	29.858	29.834	29.718	29.805	29.781	29.840	29.432	29.785
15	29.948	30.218	29.505	29.562	29.898	29.853	29.830	29.715	29.799	29.778	29.841	29.433	29.782
16	29.953	30.217	29.501	29.561	29.894	29.849	29.826	29.713	29.800	29.777	29.844	29.435	29.781
17	29.958	30.220	29.502	29.563	29.892	29.848	29.825	29.713	29.805	29.781	29.850	29.437	29.783
18	29.961	30.228	29.508	29.569	29.893	29.851	29.826	29.715	29.810	29.791	29.856	29.440	29.787
19	29.964	30.232	29.515	29.579	29.898	29.858	29.831	29.721	29.818	29.797	29.860	29.443	29.793
20	29.964	30.235	29.520	29.588	29.907	29.866	29.840	29.731	29.826	29.802	29.863	29.444	29.799
21	29.964	30.238	29.524	29.590	29.918	29.879	29.848	29.737	29.829	29.805	29.864	29.446	29.803
22	29.962	30.241	29.528	29.591	29.923	29.884	29.853	29.740	29.830	29.805	29.864	29.443	29.805
23	29.960	30.239	29.531	29.594	29.927	29.885	29.854	29.739	29.832	29.804	29.864	29.443	29.806
24	29.955	30.237	29.531	29.590	29.927	29.884	29.852	29.735	29.831	29.802	29.863	29.441	29.804
Means { 0 <sup>h</sup> .-23 <sup>h</sup> .	29.954	30.240	29.521	29.576	29.915	29.870	29.849	29.727	29.818	29.795	29.850	29.439	29.796
{ 1 <sup>h</sup> .-24 <sup>h</sup> .	29.954	30.239	29.521	29.576	29.915	29.870	29.848	29.727	29.819	29.795	29.851	29.439	29.796
No. of Days Employed	31	28	31	30	31	30	31	31	30	31	30	31	..

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

1934.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	38.4	36.4	38.6	43.7	48.3	55.3	59.5	56.3	54.9	50.4	42.4	46.6	47.6
1 <sup>h</sup>	38.2	36.1	38.0	43.3	47.8	54.4	58.6	55.5	54.1	49.8	42.0	46.4	47.0
2	37.9	35.8	37.8	42.8	47.1	53.8	57.6	54.9	53.3	49.3	41.9	46.3	46.5
3	37.8	35.5	37.4	42.3	46.3	52.9	56.8	54.2	53.0	48.9	41.4	46.1	46.1
4	37.6	35.0	37.1	42.1	45.9	52.1	56.1	53.7	52.4	48.6	41.5	45.8	45.7
5	37.7	34.7	37.2	41.9	46.3	52.7	57.0	53.9	52.7	49.1	41.7	45.9	45.9
6	37.6	34.9	37.2	42.5	48.1	54.5	59.2	54.8	52.8	49.3	41.8	46.2	46.6
7	37.8	35.1	37.8	44.1	50.5	57.0	62.2	57.4	55.0	49.8	42.1	45.3	47.9
8	37.9	35.3	39.5	46.2	53.1	59.6	65.8	60.2	58.7	51.1	42.6	46.5	49.7
9	38.6	36.5	41.6	48.1	55.9	62.3	69.1	63.3	62.2	53.1	43.4	47.1	51.8
10	39.8	37.9	43.3	50.0	58.3	64.6	71.5	65.5	64.7	54.9	44.6	47.8	53.6
11	41.2	39.5	45.1	51.6	60.1	66.4	73.2	67.0	67.1	56.2	46.0	48.5	55.2
Noon	42.3	40.9	46.5	52.8	61.6	67.8	74.5	68.8	68.5	57.1	46.9	49.0	56.4
13 <sup>h</sup>	42.8	42.0	47.1	54.1	62.7	69.0	75.4	69.1	69.2	57.8	47.2	49.2	57.1
14	43.0	42.8	47.3	54.7	63.3	69.6	75.5	69.6	69.4	57.6	47.4	49.0	57.4
15	42.9	43.0	47.1	54.8	63.1	69.8	75.7	69.5	69.0	56.5	46.9	48.4	57.2
16	42.3	42.6	46.6	54.3	62.6	69.2	74.7	68.8	67.7	55.6	46.1	48.1	56.5
17	41.2	41.7	45.4	53.1	61.8	68.1	73.5	67.4	65.7	54.5	45.5	47.6	55.5
18	40.5	40.7	44.0	51.5	60.1	66.1	71.9	65.7	63.2	53.4	45.1	47.6	54.1
19	40.0	39.6	42.7	49.7	57.7	63.8	69.7	63.7	60.9	52.7	44.7	47.4	52.7
20	39.3	38.7	41.7	48.2	55.3	61.3	66.6	61.6	59.2	52.0	44.1	47.2	51.3
21	38.9	37.8	40.8	46.7	53.3	59.0	64.2	59.6	57.8	51.4	43.7	47.1	50.0
22	38.6	37.2	40.3	45.8	51.4	57.6	62.4	58.2	56.6	50.9	43.4	47.0	49.1
23	38.7	36.7	39.5	44.9	49.8	56.5	60.8	57.0	55.8	50.3	43.1	47.0	48.3
24	38.6	36.3	38.6	44.0	48.6	55.5	59.6	55.9	55.2	49.7	42.8	46.8	47.6
Means { 0 <sup>h</sup> .-23 <sup>h</sup> .	39.6	38.2	41.6	47.9	54.6	61.0	66.3	61.5	60.2	52.5	44.0	47.3	51.2
{ 1 <sup>h</sup> .-24 <sup>h</sup> .	39.6	38.2	41.6	47.9	54.6	61.0	66.3	61.5	60.2	52.5	44.0	47.3	51.2
No. of Days Employed	31	28	31	30	31	30	31	31	30	31	30	31	..

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

1934.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	36.9	35.0	37.0	41.8	46.2	52.6	56.4	54.2	53.0	48.5	41.4	45.5	45.7
1 <sup>h</sup>	36.8	34.7	36.6	41.6	45.8	52.0	55.8	53.6	52.5	48.1	41.0	45.3	45.3
2	36.4	34.5	36.3	41.1	45.3	51.4	55.0	53.1	52.1	47.8	40.8	45.1	44.9
3	36.3	34.2	36.0	40.8	44.6	50.6	54.6	52.5	51.6	47.6	40.4	44.9	44.5
4	36.2	33.8	35.8	40.5	44.2	50.2	54.2	52.1	51.2	47.1	40.4	44.7	44.2
5	36.3	33.6	35.9	40.4	44.6	50.7	54.9	52.3	51.5	47.5	40.7	45.0	44.5
6	36.3	33.8	36.0	41.0	45.8	51.8	56.4	53.2	51.7	47.7	41.0	45.3	45.0
7	36.4	33.9	36.6	42.3	47.3	53.4	58.0	54.8	53.2	48.2	41.3	45.4	45.9
8	36.5	34.1	38.0	43.9	48.9	54.9	60.2	56.6	55.7	49.1	41.7	45.6	47.1
9	37.2	35.1	39.6	45.3	50.5	56.2	61.5	58.1	57.7	50.5	42.4	46.0	48.3
10	38.0	36.0	40.5	46.5	51.7	57.2	62.0	59.0	58.7	51.5	43.2	46.5	49.2
11	39.1	37.2	41.4	47.0	52.4	58.2	62.6	59.6	59.4	52.0	44.1	46.9	50.0
Noon	39.9	38.1	42.0	47.7	53.3	59.1	63.2	60.3	60.0	52.1	44.6	47.4	50.6
13 <sup>h</sup>	40.3	38.8	42.4	48.0	54.0	59.4	63.0	60.6	60.1	52.3	44.7	47.3	50.9
14	40.3	39.4	42.6	48.3	54.6	59.6	63.3	60.4	60.1	51.9	44.8	47.2	51.0
15	40.2	39.5	42.3	48.4	54.4	59.9	63.2	60.3	59.9	51.3	44.5	46.8	50.9
16	39.7	39.3	42.1	48.1	53.9	59.2	62.9	59.8	59.2	50.9	44.0	46.7	50.5
17	39.1	38.8	41.5	47.3	53.6	58.4	62.3	59.2	58.2	50.4	43.7	46.4	49.9
18	38.5	38.2	40.9	46.5	53.0	57.6	61.5	58.2	57.4	50.0	43.4	46.5	49.3
19	38.1	37.5	40.2	45.5	51.8	56.9	60.6	57.7	56.6	49.7	43.2	46.2	48.7
20	37.6	36.9	39.5	44.6	50.7	55.7	59.8	56.9	56.1	49.4	42.8	46.1	48.0
21	37.4	36.3	39.0	44.0	49.4	54.6	58.8	56.1	55.2	49.0	42.4	46.1	47.4
22	37.2	35.8	38.7	43.4	48.4	53.9	58.1	55.3	54.4	48.7	42.2	46.0	46.8
23	37.1	35.5	37.9	42.8	47.2	53.4	57.2	54.6	53.6	48.4	41.9	45.9	46.3
24	37.0	34.9	37.0	42.1	46.3	52.8	56.4	53.8	53.2	47.8	41.7	45.7	45.7
Means { 0 <sup>h</sup> .-23 <sup>h</sup> .	37.8	36.2	39.1	44.5	49.7	55.3	59.4	56.6	55.8	49.6	42.5	46.0	47.7
{ 1 <sup>h</sup> .-24 <sup>h</sup> .	37.8	36.2	39.1	44.5	49.7	55.3	59.4	56.6	55.8	49.6	42.5	46.0	47.7
No. of Days Employed	31	28	31	30	31	30	31	31	30	31	30	31	..

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

1934.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	34.7	32.7	34.6	39.3	43.8	50.1	53.8	52.5	51.2	46.4	40.1	44.2	43.6
1 <sup>h</sup>	34.7	32.3	34.5	39.3	43.5	49.8	53.5	51.9	51.0	46.2	39.7	43.9	43.4
2	34.1	32.2	34.0	38.7	43.2	49.1	52.8	51.4	51.0	46.1	39.4	43.6	43.0
3	34.0	31.9	33.8	38.7	42.5	48.4	52.8	50.9	50.3	46.2	39.2	43.4	42.7
4	34.0	31.7	33.7	38.3	42.1	48.3	52.6	50.6	50.0	45.4	39.0	43.3	42.4
5	34.1	31.7	33.8	38.4	42.5	48.8	53.2	50.8	50.4	45.7	39.4	43.9	42.7
6	34.3	31.9	34.0	38.9	43.2	49.3	54.1	51.7	50.7	45.9	40.0	44.2	43.2
7	34.3	31.8	34.7	40.0	43.7	50.0	54.7	52.6	51.5	46.4	40.3	44.3	43.7
8	34.4	32.0	35.9	41.1	44.4	50.7	55.9	53.6	53.2	46.9	40.5	44.5	44.4
9	35.1	32.8	36.7	41.9	44.9	50.9	55.9	53.9	54.2	47.9	41.1	44.7	45.0
10	35.4	32.9	36.5	42.4	44.9	50.9	55.0	53.9	54.0	48.2	41.5	45.0	45.1
11	36.0	33.5	36.0	41.7	44.5	51.4	54.8	53.8	53.3	47.9	41.7	45.1	45.0
Noon	36.3	33.6	35.7	41.9	45.1	52.1	55.0	53.7	53.4	47.2	41.9	45.6	45.1
13 <sup>h</sup>	36.6	33.8	35.9	40.9	45.5	51.5	53.9	54.1	53.0	46.8	41.7	45.2	44.9
14	36.4	34.3	36.1	40.9	46.3	51.4	54.4	53.2	52.8	46.2	41.7	45.2	44.9
15	36.3	34.3	35.5	41.0	46.0	51.9	54.1	53.1	52.7	46.0	41.6	45.0	44.8
16	35.8	34.4	35.9	40.9	45.3	50.9	54.2	52.7	52.4	46.1	41.4	45.1	44.6
17	36.0	34.2	35.9	40.3	45.6	50.2	54.0	52.6	52.0	46.2	41.4	45.0	44.5
18	35.5	34.3	36.5	40.5	45.9	50.4	53.6	52.0	52.6	46.5	41.2	45.2	44.5
19	35.3	34.3	36.5	40.4	45.9	51.1	53.6	52.8	53.0	46.5	41.3	44.8	44.6
20	35.1	34.1	36.3	40.0	46.0	50.8	54.6	53.0	53.6	46.6	41.2	44.8	44.7
21	35.3	34.0	36.4	40.7	45.3	50.7	54.6	53.2	53.0	46.4	40.8	44.9	44.6
22	35.2	33.6	36.5	40.3	45.2	50.5	54.8	52.8	52.6	46.3	40.6	44.8	44.4
23	34.7	33.5	35.6	40.0	44.3	50.6	54.3	52.6	51.7	46.3	40.3	44.6	44.0
24	34.6	32.5	34.6	39.7	43.7	50.4	53.7	52.0	51.4	45.7	40.2	44.4	43.6
Means { 0 <sup>h</sup> .-23 <sup>h</sup> .	35.1	33.2	35.5	40.3	44.6	50.4	54.2	52.6	52.2	46.5	40.7	44.6	44.2
{ 1 <sup>h</sup> .-24 <sup>h</sup> .	35.1	33.2	35.5	40.3	44.6	50.4	54.2	52.6	52.2	46.5	40.7	44.6	44.2

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

1934.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.	
Midnight	86	86	85	85	84	83	81	87	87	87	91	91	86	
1 <sup>h</sup>	87	86	87	86	85	84	83	87	89	87	91	91	87	
2	86	87	86	85	86	84	84	88	92	89	91	91	87	
3	86	87	87	87	87	84	86	89	91	90	91	91	88	
4	87	87	88	86	87	87	88	89	91	89	90	91	88	
5	87	89	88	87	87	86	87	89	91	88	91	93	89	
6	88	89	89	87	83	82	83	89	92	88	93	93	88	
7	87	88	89	85	77	77	76	84	88	88	93	93	85	
8	87	88	86	82	72	72	71	79	82	86	92	93	83	
9	87	86	83	79	66	67	63	72	75	83	92	91	79	
10	84	82	77	75	61	61	56	66	68	78	88	90	74	
11	82	79	71	69	57	58	53	63	61	74	85	88	70	
Noon	79	75	66	66	54	57	51	59	59	70	82	88	67	
13 <sup>h</sup>	79	73	65	61	53	54	47	59	56	67	81	86	65	
14	78	71	65	60	54	53	48	56	55	66	80	87	64	
15	77	71	64	60	54	53	47	56	56	68	81	88	65	
16	78	72	66	60	53	52	49	56	58	70	84	89	66	
17	82	75	69	62	55	53	50	59	61	74	86	91	68	
18	82	78	75	66	60	57	53	61	69	78	86	91	71	
19	83	81	79	70	64	63	56	68	75	79	88	91	75	
20	85	83	81	73	71	69	65	73	81	82	89	91	79	
21	86	86	84	79	74	73	71	79	84	83	89	92	82	
22	87	87	86	81	79	77	76	83	86	84	90	92	84	
23	85	88	86	83	81	81	79	85	86	87	90	91	85	
24	85	86	85	85	83	83	81	87	87	87	91	91	86	
Means	0 <sup>h</sup> .-23 <sup>h</sup> .	84	82	79	76	70	69	67	74	76	81	88	91	78
	1 <sup>h</sup> .-24 <sup>h</sup> .	84	82	79	76	70	69	67	74	76	81	88	91	78

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 1934.

Month, 1934.	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 ...	—	—	—	—	1.4	7.7	7.6	6.1	6.0	4.8	2.9	0.3	—	—	—	—	36.8	260.7	0.149	18
February ..	—	—	—	0.2	2.5	4.4	8.2	8.4	7.7	8.6	5.7	1.9	—	—	—	—	47.6	278.5	0.171	26
March .....	—	—	0.4	6.7	8.4	9.1	11.8	13.1	12.1	10.8	10.0	8.5	6.9	1.9	—	—	99.7	367.5	0.271	37
April .....	—	0.1	4.3	6.4	7.6	9.2	8.0	8.9	10.2	11.3	11.7	11.0	10.3	7.3	1.9	—	108.2	415.1	0.261	48
May .....	0.4	10.1	12.7	12.0	14.0	16.7	14.9	15.8	15.8	14.9	17.1	17.0	14.7	13.0	9.3	0.3	198.7	483.5	0.411	57
June .....	1.1	7.4	12.4	11.8	12.2	14.0	12.1	14.1	16.9	16.3	15.9	15.7	13.8	12.1	8.6	1.8	186.2	496.2	0.375	62
July .....	3.5	14.0	16.8	20.8	19.5	21.7	22.8	21.9	21.6	18.8	19.9	18.0	17.1	18.4	15.9	5.7	276.4	500.1	0.553	60
August ....	0.1	4.1	12.6	12.8	14.3	14.4	13.9	16.4	14.6	15.1	17.6	13.5	15.1	13.1	5.9	0.1	183.6	452.6	0.406	52
September .	—	0.2	7.3	18.6	19.0	17.5	18.2	18.7	16.3	17.2	17.6	15.1	11.1	5.7	0.3	—	182.8	380.5	0.480	41
October ...	—	—	—	1.5	5.4	7.0	7.6	10.8	13.1	11.3	9.1	6.7	1.2	—	—	—	73.7	332.2	0.222	30
November ..	—	—	—	0.1	0.4	2.5	4.7	5.3	3.5	5.5	4.8	1.5	—	—	—	—	28.3	267.7	0.106	20
December ..	—	—	—	—	—	1.0	1.2	2.2	2.6	3.2	1.2	—	—	—	—	—	11.4	245.7	0.046	16
For the Year	5.1	35.9	66.5	90.9	104.7	125.2	131.0	141.7	140.4	137.8	133.5	109.2	90.2	71.5	41.9	7.9	1433.4	4480.3	0.320	..

The hours are reckoned from "apparent" midnight.

READINGS OF THERMOMETERS ON THE ORDINARY STAND IN THE CHRISTIE ENCLOSURE IN THE YEAR 1934.

(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.			
	Maxi-mum.	Mini-mum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h		Maxi-mum.	Mini-mum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
JANUARY.										MARCH.											
d										d											
1	38.8	27.3	33.4	38.5	36.5	31.1	33.0	37.2	34.8	30.7	39.9	30.9	32.6	38.3	37.6	31.5	31.9	36.6	36.0	30.8	
2	40.7	30.0	37.7	39.8	39.8	40.2	37.1	39.0	39.5	39.5	49.1	28.9	40.3	48.3	45.6	42.1	37.8	43.6	43.1	41.8	
3	41.8	35.7	41.6	41.4	39.2	37.1	40.3	39.9	38.2	36.8	47.8	34.5	39.6	45.7	46.2	41.4	38.0	40.7	38.8	36.2	
4	50.4	34.8	45.9	48.4	49.6	49.3	45.0	47.3	47.8	48.4	50.6	32.7	40.4	48.3	47.5	43.8	38.6	43.1	42.9	42.3	
5	49.5	35.0	35.9	41.4	42.1	35.2	34.8	38.2	38.6	34.0	51.3	41.5	42.7	44.1	50.6	44.6	41.5	43.4	44.8	42.7	
6	46.8	30.5	39.6	44.6	46.2	45.8	37.9	42.6	43.5	44.4	48.0	38.6	43.6	45.4	41.8	38.6	41.2	42.1	41.0	37.9	
7	46.6	42.9	44.8	44.8	43.8	45.8	43.8	43.6	42.6	43.8	47.2	32.1	37.8	43.8	44.7	40.1	34.8	38.3	37.4	35.1	
8	47.1	35.6	39.3	41.6	40.3	35.6	38.0	38.9	38.1	34.8	51.5	32.2	38.5	48.1	49.8	37.3	36.9	42.6	42.3	35.2	
9	42.2	27.8	30.4	39.9	42.2	31.8	29.9	38.5	39.5	31.6	52.2	30.8	41.2	48.4	47.9	37.8	36.7	41.4	41.1	35.0	
10	42.6	31.3	40.6	42.2	41.2	41.4	39.7	41.3	39.8	39.0	54.8	35.9	40.7	53.4	45.5	40.4	39.9	47.1	43.8	39.6	
11	49.0	37.1	38.8	41.4	45.1	48.4	37.0	39.6	43.8	46.8	51.9	40.2	44.1	50.1	47.8	40.8	43.6	47.0	45.2	39.8	
12	49.7	40.8	45.6	44.9	46.2	41.3	44.8	44.0	43.8	39.0	46.4	37.5	42.6	43.9	44.4	41.8	41.5	41.5	41.7	40.7	
13	48.9	40.4	42.1	46.4	48.5	46.6	40.0	43.4	45.0	44.9	47.2	37.7	42.6	42.7	46.8	41.4	41.1	41.3	43.4	39.9	
14	48.3	42.6	47.5	47.1	47.3	42.8	42.8	42.8	43.3	41.1	45.1	36.9	39.8	44.2	42.8	43.1	39.4	39.8	39.8	41.8	
15	45.4	37.5	41.9	44.5	42.1	38.3	40.1	40.5	39.7	35.1	51.4	37.2	45.7	49.1	42.2	40.9	41.3	41.2	38.7	38.3	
16	43.0	36.6	37.7	41.8	42.0	38.9	35.0	37.6	37.2	38.0	52.0	37.2	43.6	48.8	45.9	43.9	40.1	41.8	41.3	42.9	
17	54.4	38.6	48.9	52.6	54.3	51.1	47.6	50.7	51.7	47.1	48.7	36.9	43.1	44.7	47.2	39.3	40.1	40.8	41.0	37.1	
18	55.0	48.1	53.8	54.4	53.5	48.6	51.1	51.2	50.4	45.8	50.2	37.0	40.9	45.9	49.8	39.1	36.9	39.6	40.5	35.9	
19	49.2	38.1	40.1	44.8	44.7	38.7	38.2	40.7	40.3	36.7	50.0	32.5	41.5	41.4	48.2	41.2	39.7	40.6	46.0	40.9	
20	41.9	29.6	34.1	39.8	41.5	29.6	32.0	36.0	37.4	29.1	47.2	38.6	44.1	46.6	44.9	43.1	43.9	45.3	43.5	42.1	
21	34.8	24.0	26.4	33.8	32.6	28.6	26.0	31.5	31.6	26.6	45.8	40.0	40.1	41.8	45.4	43.7	38.8	40.8	42.8	41.3	
22	37.3	23.8	26.2	35.9	36.8	28.6	26.0	33.5	34.0	28.0	50.8	33.0	40.7	48.8	47.8	41.4	37.8	41.6	41.4	39.1	
23	40.2	25.6	28.0	39.9	39.7	28.7	27.5	36.8	36.0	28.5	48.1	32.5	36.8	40.8	47.6	41.8	36.6	39.6	42.8	40.6	
24	35.3	25.0	27.4	30.9	35.1	27.8	27.3	30.4	32.9	27.7	53.5	31.5	46.2	50.6	48.3	46.6	41.8	43.0	44.6	45.1	
25	39.8	24.8	32.6	37.1	38.9	39.6	31.8	35.3	37.3	37.5	57.5	40.8	46.6	54.2	56.6	41.1	45.8	46.1	45.8	39.0	
26	50.0	39.0	43.8	47.6	47.8	40.6	43.6	45.8	44.1	39.5	56.1	30.7	42.9	48.9	55.7	44.7	41.6	46.0	50.6	43.0	
27	45.9	37.2	41.8	44.4	45.5	40.9	39.9	41.4	41.1	37.1	53.1	41.8	44.6	49.7	51.4	42.1	42.8	44.7	44.3	39.1	
28	42.9	37.4	38.6	41.8	42.6	40.4	35.6	38.6	39.1	38.2	50.1	36.3	42.4	48.5	48.6	38.0	39.0	41.3	41.6	36.6	
29	40.7	31.7	37.8	38.9	39.3	31.7	35.1	35.5	35.6	31.1	46.3	37.2	39.9	44.5	45.2	37.3	39.0	39.7	40.5	36.2	
30	42.1	29.3	34.2	37.6	41.4	40.6	33.0	35.8	38.7	39.9	50.1	33.7	43.6	46.6	47.4	37.7	40.0	40.8	41.6	36.1	
31	43.7	37.0	39.1	42.6	43.1	40.3	38.1	39.6	39.6	37.2	49.8	33.4	40.9	44.6	49.3	37.6	38.1	40.0	43.5	35.6	
Means	44.6	34.0	38.6	42.3	42.9	38.9	37.2	39.9	40.2	37.4	49.8	35.5	41.6	46.5	47.1	40.8	39.6	42.0	42.3	39.0	
FEBRUARY.										APRIL.											
d										d											
1	40.6	31.8	36.1	38.4	36.6	31.8	32.5	33.0	31.4	28.8	48.8	33.1	39.7	47.7	44.7	41.5	37.1	42.6	43.0	40.4	
2	37.1	28.0	31.2	36.4	35.7	30.8	30.8	31.5	31.5	29.7	54.3	39.8	44.7	51.4	53.9	43.2	43.2	46.9	47.3	40.0	
3	40.8	22.5	28.3	31.5	33.6	39.8	27.8	31.3	33.5	39.0	49.4	37.6	44.2	46.8	47.6	41.4	40.8	42.8	43.8	38.7	
4	40.1	37.4	37.7	38.5	38.6	38.5	37.2	36.9	37.1	37.8	47.3	39.6	41.4	42.9	46.1	42.9	40.2	40.9	43.0	41.0	
5	42.9	38.2	40.7	41.1	41.5	38.6	39.2	38.5	38.1	36.3	58.4	32.4	45.6	57.6	57.6	44.9	41.9	46.6	46.3	40.0	
6	47.9	37.2	38.5	45.0	47.9	42.4	37.1	41.7	43.2	40.6	45.1	39.3	40.9	42.6	44.5	39.6	38.5	39.1	40.2	37.6	
7	44.9	36.6	41.4	44.1	44.6	38.9	39.2	40.7	40.9	37.8	47.6	35.8	38.5	41.1	46.4	35.8	37.0	38.6	41.9	34.8	
8	48.9	37.1	45.3	47.8	47.9	40.8	42.6	39.5	40.5	37.4	53.0	29.3	43.6	49.8	51.7	41.4	41.0	42.5	44.3	38.9	
9	49.5	31.9	37.6	47.3	48.5	39.3	35.7	41.1	42.1	37.1	46.4	40.8	43.1	44.8	44.6	40.9	40.1	40.9	40.8	38.9	
10	48.1	36.0	41.1	46.4	47.9	43.1	38.4	42.4	44.1	41.8	56.2	31.3	44.6	51.3	53.5	43.9	41.6	45.4	45.4	42.4	
11	45.3	32.2	37.2	43.3	44.5	35.6	36.9	40.8	41.6	35.4	66.2	43.8	50.9	58.4	62.9	56.4	50.1	54.8	56.2	53.1	
12	48.7	31.0	31.4	33.9	48.6	37.8	31.3	33.7	45.3	37.5	57.1	45.9	49.4	49.3	56.3	46.0	47.3	44.1	47.6	43.1	
13	45.0	33.6	36.9	43.0	43.6	39.4	36.7	41.3	41.3	39.2	63.7	38.9	55.5	61.4	61.1	51.9	48.2	51.7	50.3	45.5	
14	43.0	30.6	34.0	43.0	39.1	34.9	32.2	37.4	36.0	34.0	60.6	49.7	52.5	55.5	59.3	53.1	50.9	53.0	54.7	50.3	
15	44.8	33.5	35.8	39.6	44.7	34.7	35.7	39.2	42.5	34.6	77.6	48.8	61.6	73.3	76.6	59.4	57.5	64.8	62.9	53.8	
16	51.2	30.8	32.4	39.6	51.0	42.1	32.4	38.6	45.8	40.6	71.5	50.7	55.9	63.7	71.5	54.4	53.8	58.2	61.4	51.1	
17	42.1	34.0	35.3	39.3	40.9	39.3	35.3	38.6	39.9	37.7	70.3	50.1	58.4	63.6	63.6	54.3	55.1	57.1	55.5	50.7	
18	39.3	32.4	36.2	36.6	37.3	32.6	34.9	35.1	35.8	32.0	55.0	43.1	49.6	50.1	44.5	45.2	48.5	46.8	43.7	43.5	
19	47.1	30.7	34.5	43.8	46.5	40.6	33.0	41.6	41.9	37.2	58.8	43.9	51.5	53.8	57.5	48.0	47.5	49.3	49.4	46.1	
20	48.9	31.9	38.4	46.6	47.6	42.2	36.4	41.9	42.8	39.6	58.9	41.9	47.5	51.4	57.7	47.6	41.8	44.1	47.3	42.9	
21	49.8	38.2	41.4	46.5	49.4	41.9	39.4	42.2	44.5	39.9	56.4	42.1	49.4	50.2	53.6	45.9	47.8	49.1	51.9	44.7	
22	49.7	34.0	38.2	45.4	49.6	35.3	37.2	42.4	44.9	35.0	58.3	42.9	50.3	52.4	54.6	48.6	45.4	45.8	45.6	41.6	
23	39.9	28.1	31.7	35.4	39.6	30.0	31.5	34.9	37.8	30.0	55.3	39.0	47.9	51.6	53.6	46.8	44.5	45.8	46.0	42.3	
24	44.7	27.5	30.9	35.5	44.5	43.9	30.6	35.2	41.8	41.9	55.0	39.1	46.7	46.8	54.2	42.9	43.3	41.7	47.9	41.9	
25	49.5	41.2	45.6	47.7	42.2	41.3	43.2	45.2	41.5	39.8	58.3	37.1	50.0	54.6	52.5	47.1	45.6	46.9	46.8	45.8	
26	41.8	31.8	34.9	36.2	34.9	31.8	30.8	32.7	30.5	27.4	55.0	42.1	46.0	47.7	52.7	45.3	44.8	46.8	50.7	44.7	
27	42.0	28.1	34.6	38.7	39.5	36.0	32.4	34.7	35.4	33.9	50.2	41.8	48.1	47.6	46.3	45.0	46.4	46.1	45.5	44.4	
28	37.2	33.8	34.1	34.7																	





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 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	Noon.	15h	21h	9h	Noon.	15h		21h	Maximum.	Minimum.	9h	Noon.	15h	21h	9h	Noon.	15h	21h
SEPTEMBER.										NOVEMBER.											
d											d										
1	70.3	41.1	57.2	63.9	68.1	52.9	52.6	53.8	54.1	49.6	1	44.0	28.0	32.9	41.4	43.5	38.9	31.3	37.9	38.0	37.0
2	71.9	43.1	58.7	68.6	65.8	57.5	51.3	56.9	56.3	55.8	2	45.7	34.3	40.1	43.3	43.3	40.5	38.4	38.9	38.0	38.8
3	73.7	56.9	62.5	67.7	72.6	57.4	60.2	61.4	60.6	55.5	3	55.9	36.9	47.4	54.5	52.1	42.0	45.3	47.7	46.8	40.8
4	70.7	52.0	65.1	67.3	67.3	58.8	60.5	59.3	60.0	57.6	4	44.2	36.0	43.1	39.7	39.5	36.4	39.8	38.8	39.0	35.9
5	71.1	49.3	60.2	68.8	69.4	54.6	55.5	58.8	56.9	51.9	5	46.2	35.7	40.0	43.9	45.8	44.0	39.4	42.7	43.0	41.7
6	69.5	46.3	61.2	68.2	65.9	59.2	57.0	57.5	56.9	56.9	6	47.0	41.6	43.1	46.1	46.2	41.7	41.7	43.1	41.9	39.1
7	82.7	57.0	71.8	81.1	82.1	69.5	66.2	70.8	71.0	66.5	7	44.8	35.7	37.8	41.7	44.5	39.6	36.8	39.8	41.5	38.1
8	78.8	60.6	70.9	77.0	70.6	60.9	64.0	64.8	61.8	59.0	8	47.2	31.1	36.9	45.9	47.1	45.5	35.4	42.4	45.1	44.8
9	70.8	55.9	62.9	69.7	70.0	56.8	58.5	60.9	59.1	51.5	9	51.7	44.0	47.2	50.8	49.9	47.5	46.8	49.8	49.4	46.8
10	73.6	43.9	61.4	66.6	72.1	54.4	55.5	58.3	61.5	52.8	10	47.8	43.4	45.9	45.1	44.2	44.1	45.0	44.3	43.8	42.4
11	75.7	46.9	62.6	71.0	69.6	57.1	56.9	59.3	59.2	54.7	11	51.1	41.7	45.9	49.8	47.9	45.4	45.3	47.5	46.1	44.5
12	74.2	49.0	63.5	71.0	71.6	63.6	59.2	61.5	62.3	56.8	12	48.2	36.4	44.7	47.6	47.4	36.6	42.8	44.8	44.1	36.4
13	80.0	57.2	62.6	74.9	79.0	64.7	61.4	66.8	66.3	62.2	13	47.3	32.0	39.0	46.3	45.6	39.7	38.8	44.3	42.8	39.1
14	80.0	59.2	68.2	76.8	78.7	64.9	64.6	65.8	65.3	62.2	14	47.6	37.8	44.9	46.6	47.1	45.2	43.9	45.4	46.3	44.7
15	82.4	57.3	67.0	76.3	77.1	65.8	63.2	66.8	70.5	63.2	15	50.3	43.9	44.8	48.4	47.9	45.8	44.6	46.6	45.8	43.7
16	74.7	54.8	65.1	70.5	72.9	54.8	60.4	60.5	60.5	53.8	16	45.9	43.2	44.2	44.8	45.7	45.6	43.1	43.8	44.0	43.3
17	74.6	53.8	67.8	72.3	70.7	59.4	62.1	62.9	62.1	56.0	17	47.1	43.1	45.4	46.8	46.4	45.6	43.8	44.6	44.5	44.3
18	69.9	49.1	60.4	65.9	67.6	54.7	56.4	58.4	58.1	52.7	18	49.8	43.0	45.6	49.6	48.7	43.4	44.6	46.7	46.4	42.8
19	69.1	47.0	61.8	68.4	66.5	57.1	55.5	58.7	56.7	55.8	19	44.1	36.0	38.1	39.6	42.2	38.2	38.1	39.5	41.1	37.7
20	64.0	55.6	57.7	63.1	59.8	56.6	54.7	56.5	54.8	53.5	20	48.0	35.1	36.6	45.9	45.2	37.2	36.5	43.9	43.6	36.6
21	66.3	47.4	58.4	62.5	61.8	47.4	54.5	54.0	52.8	45.6	21	43.8	32.0	36.8	40.8	42.5	43.8	36.7	40.7	41.8	42.7
22	64.6	41.9	61.8	61.7	60.4	59.7	58.3	60.4	59.5	58.7	22	51.3	38.0	44.6	51.3	48.6	39.0	43.3	45.5	44.6	38.1
23	62.2	46.9	53.7	61.3	60.6	51.9	48.5	52.3	51.7	48.0	23	50.5	38.3	41.8	49.8	49.6	48.0	41.7	47.0	47.5	46.3
24	62.5	49.1	56.7	58.9	62.2	53.0	54.0	56.7	60.8	48.5	24	51.1	46.9	47.6	48.3	49.4	49.1	47.5	47.8	48.6	47.8
25	66.3	44.5	53.7	62.2	65.1	50.2	49.7	53.0	54.9	48.0	25	49.3	46.8	47.8	48.8	48.4	47.6	47.3	47.3	46.4	45.8
26	66.9	46.0	60.0	65.7	64.6	58.1	57.0	60.7	59.8	56.6	26	52.0	46.5	48.1	50.5	51.0	50.4	45.4	46.6	46.8	48.4
27	68.4	44.0	56.7	65.1	64.7	56.8	51.3	55.3	54.8	53.7	27	55.0	47.3	50.5	53.5	53.6	51.9	49.7	48.9	49.9	49.1
28	81.3	56.0	66.0	76.1	79.1	67.4	62.8	65.8	68.9	62.3	28	52.2	48.3	49.9	50.3	49.8	48.9	48.6	49.1	48.8	48.7
29	72.1	53.0	68.5	69.2	66.2	53.4	63.5	64.3	62.8	52.4	29	49.1	46.6	47.2	48.5	48.1	47.2	46.9	47.8	47.5	46.7
30	69.0	48.4	60.8	63.6	67.0	55.6	56.7	57.0	57.7	53.8	30	47.8	38.0	45.4	46.5	46.4	43.3	43.9	43.8	42.2	40.5
Means	71.9	50.4	62.2	68.5	69.0	57.8	57.7	60.0	59.9	55.2	Means	48.5	39.6	43.4	46.9	46.9	43.7	42.4	44.6	44.5	42.4
OCTOBER.										DECEMBER.											
d											d										
1	69.0	54.0	60.2	65.2	65.5	56.8	59.2	60.3	58.6	54.8	1	47.5	42.8	44.4	45.9	45.8	47.3	41.9	43.3	44.7	46.2
2	58.3	52.1	55.9	56.7	55.8	54.0	55.3	56.1	55.0	53.7	2	55.7	45.6	46.4	49.3	51.3	54.8	45.8	48.6	50.5	53.2
3	62.9	47.2	55.8	61.2	59.4	55.3	54.6	56.6	56.4	53.8	3	56.1	53.1	54.8	55.9	55.4	54.6	53.1	53.8	53.4	53.6
4	60.9	49.7	56.8	53.9	59.6	52.8	51.7	51.4	51.8	49.5	4	54.8	52.1	53.8	53.6	52.7	53.3	52.9	52.9	52.0	52.5
5	62.0	45.9	54.6	57.8	59.5	49.3	50.0	51.4	51.8	47.0	5	53.7	47.4	50.1	52.8	49.2	48.0	47.8	48.8	47.7	46.4
6	58.1	44.1	52.2	57.5	55.2	56.6	49.2	52.9	52.8	56.1	6	53.7	45.7	53.5	53.6	52.9	51.9	52.9	52.8	52.2	51.2
7	66.9	56.4	64.2	66.2	64.5	61.2	62.0	63.5	61.9	60.5	7	54.5	47.3	51.6	54.4	51.7	49.6	50.8	52.1	47.8	47.9
8	61.7	53.8	57.2	60.7	59.7	55.2	54.8	55.2	52.8	50.0	8	56.9	49.1	53.6	56.1	54.6	54.7	51.5	53.3	52.1	52.5
9	58.6	42.9	50.9	57.1	57.1	50.2	48.6	48.4	48.3	46.9	9	54.7	46.9	53.4	53.2	51.6	47.3	49.4	50.4	50.8	46.6
10	65.6	43.4	52.9	62.9	61.8	56.6	50.5	57.0	55.9	54.3	10	50.1	41.0	45.2	49.9	49.1	44.2	44.8	48.9	47.7	44.2
11	66.0	54.9	59.6	64.8	64.4	58.6	56.9	58.8	57.8	56.1	11	50.1	43.8	49.2	49.5	47.1	45.5	47.6	47.3	45.1	45.0
12	64.1	47.3	51.6	60.9	60.4	51.9	49.8	55.2	53.9	49.1	12	52.7	44.0	48.6	50.2	50.7	46.5	48.3	46.8	46.9	45.2
13	64.3	51.4	57.4	61.1	63.6	58.5	54.7	56.9	58.6	57.1	13	48.1	40.5	45.6	47.6	46.5	46.7	44.3	46.5	45.0	45.1
14	61.2	51.8	58.6	60.2	57.4	53.4	56.5	54.2	49.5	49.6	14	47.2	40.1	44.6	46.7	46.4	46.7	43.8	45.8	45.4	46.5
15	53.6	39.6	45.1	46.7	43.7	42.4	40.3	40.9	40.8	40.0	15	50.1	46.2	49.0	49.7	48.7	48.6	47.7	48.6	47.7	47.0
16	52.2	36.0	49.2	51.6	48.3	44.4	45.7	46.0	43.5	41.1	16	49.4	44.0	47.3	49.4	48.6	45.3	46.8	47.5	46.8	44.1
17	49.5	40.4	46.0	48.6	48.4	45.5	44.8	46.8	47.4	44.5	17	45.4	38.6	41.2	44.8	45.1	45.2	41.2	43.5	43.9	44.2
18	57.6	45.0	52.3	56.6	56.7	53.4	51.0	52.0	52.1	50.4	18	53.6	45.2	50.5	52.6	48.6	48.3	48.4	49.8	47.3	47.4
19	60.1	50.8	53.3	55.7	57.6	55.0	48.3	49.6	52.0	53.8	19	51.5	46.6	48.6	50.6	49.3	48.3	47.5	49.3	47.9	47.5
20	59.0	52.3	54.9	57.6	58.3	55.6	53.4	54.6	54.8	53.6	20	50.9	46.4	47.6	49.5	50.3	46.6	46.5	47.7	46.8	44.0
21	60.3	52.6	54.7	58.9	58.2	57.2	52.9	54.7	54.3	53.9	21	46.9	32.8	35.2	39.4	39.3	33.2	35.0	38.8	38.3	33.0
22	62.7	50.5	58.4	61.6	59.8	50.6	56.0	54.6	51.6	48.6	22	42.5	32.3	38.9	41.7	42.3	40.7	38.9	41.0	40.8	39.1
23	59.5	44.6	51.7	57.6	56.2	47.7	49.4	50.8	49.4	44.5	23	45.7	39.2	41.9	44.7	44.7	41.8	41.7	44.3	44.4	41.7
24	60.7	40.2	52.6	58.3	56.9	51.9	50.4	53.8	50.9	49.9	24	43.2	39.8	41.0	40.5	41.1	40.4	39.9	39.1	39.4	38.9
25	65.3	50.1	59.3	64.9	61.3	54.7	56.9	59.3	57.1	52.6	25	42.8	36.0	39.2	39.4	38.9	42.8	37.8	38.6		

AMOUNT OF RAIN COLLECTED IN EACH MONTH OF THE YEAR 1934.

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	1.377	0.198	2.168	2.144	0.401	1.471	0.900	1.695	1.200	1.136	2.134	4.551	19.375	0 5	149 6	
8	1.362	0.186	2.134	2.067	0.379	1.448	0.889	1.680	1.188	1.131	2.204	4.601	19.269	1 0	150 1	
Number of Rainy Days (0.005 in. or over).	..	18	4	16	16	7	11	6	13	10	15	11	27	154	..	..

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	1934.												
	January.	February	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Mean for the Year.
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
1	12.5	10.3	10.1	10.8	10.5	10.5	8.7	9.7	9.1	11.7	8.6	10.9	10.3
2	13.1	10.2	10.3	10.2	10.3	9.9	9.0	9.7	9.5	11.7	8.5	11.2	10.3
3	12.6	10.4	10.3	10.0	10.1	9.7	8.4	9.1	9.0	11.9	8.3	11.0	10.1
4	12.1	10.9	10.5	10.5	10.1	9.6	8.4	8.8	9.4	11.6	9.2	11.2	10.2
5	12.7	10.6	10.9	10.6	10.1	10.1	8.6	8.8	9.8	11.9	8.9	11.4	10.4
6	12.4	10.6	10.3	10.3	9.6	10.2	8.7	8.7	9.3	12.1	8.8	11.0	10.2
7	12.5	10.6	10.6	10.7	10.3	9.7	8.7	9.4	9.4	12.2	9.1	11.3	10.4
8	12.7	10.9	10.5	10.8	10.8	10.1	9.5	10.1	8.9	12.1	8.9	11.1	10.5
9	13.6	11.0	11.6	11.3	11.5	10.6	9.9	10.9	9.8	12.5	9.1	12.1	11.2
10	13.2	10.6	11.6	11.4	11.9	11.0	10.7	11.6	10.5	13.2	8.8	12.6	11.4
11	13.2	11.0	12.3	12.3	12.0	11.9	11.4	11.7	11.5	13.7	9.1	12.9	11.9
Noon	12.6	12.1	13.0	13.2	12.6	12.3	12.3	12.3	12.2	15.0	9.7	13.3	12.5
13 <sup>h</sup>	12.2	11.5	12.2	12.4	11.8	11.8	11.8	12.2	12.1	14.8	9.2	12.0	12.0
14	12.7	11.6	12.4	12.3	12.1	12.4	12.2	13.0	12.6	15.3	9.6	13.0	12.4
15	12.9	12.3	13.0	13.3	12.7	13.1	13.2	13.8	13.6	15.3	9.8	12.9	13.0
16	12.6	11.5	13.0	13.4	12.5	13.1	13.3	13.4	13.0	14.5	9.0	11.9	12.6
17	12.4	10.9	12.8	13.3	12.3	13.6	13.0	13.6	12.4	13.7	9.0	11.9	12.4
18	12.4	11.0	12.6	12.8	12.0	13.3	12.9	13.2	11.8	12.9	9.0	11.8	12.1
19	12.2	10.7	12.0	12.3	12.0	12.9	11.6	12.2	10.9	12.8	9.2	11.9	11.7
20	12.3	10.8	12.0	11.6	11.8	12.4	11.1	10.8	10.5	12.7	8.8	12.1	11.4
21	11.9	10.9	11.4	11.0	11.4	11.4	10.1	10.7	10.1	13.0	9.1	12.0	11.1
22	12.2	10.8	11.1	10.9	10.8	10.7	9.7	10.3	9.8	12.4	8.8	11.3	10.7
23	12.9	10.4	11.5	11.0	10.8	10.6	9.6	10.2	9.9	12.4	8.7	11.6	10.8
Midnight	12.8	10.8	11.1	11.2	11.3	10.5	9.5	9.9	9.8	12.2	8.7	11.2	10.7
Means ..	12.6	10.9	11.5	11.6	11.3	11.3	10.5	11.0	10.6	13.0	9.0	11.8	11.3
Greatest Hourly Measures	36	28	26	28	23	27	31	30	22	26	19	25	..

\* 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.







