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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

1927.

UNDER THE DIRECTION OF

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

ASTRONOMER ROYAL.

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## ERRATA

### RESULTS OF MAGNETIC OBSERVATIONS IN 1916.

PAGE E 14. TABLE III. MEAN VERTICAL MAGNETIC FORCE FOR EACH DAY.

February 28, for 287 read 207; February 29, for 363 read 217; February, Mean, for 245 read 237;  
March 26, for 284 read 294.

December. Instead of the quantities given, viz., 193, 185, etc., substitute the following:—

d	γ	d	γ	d	γ	d	γ	d	γ	d	γ	d	γ	d	γ
1	302	5	281	9	288	13	284	17	234	21	240	25	247	29	249
2	294	6	277	10	277	14	276	18	234	22	243	26	249	30	264
3	289	7	273	11	291	15	281	19	233	23	244	27	256	31	265
4	286	8	275	12	278	16	228	20	236	24	241	28	255	M	264



THE ROYAL OBSERVATORY, GREENWICH

AND

ABINGER MAGNETIC STATION, SURREY.

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MAGNETIC AND METEOROLOGICAL  
OBSERVATIONS, 1927.

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INTRODUCTION.

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

*Personal Establishment and Arrangements.*

During the year 1927 the staff employed in the Magnetic and Meteorological Department of the Royal Observatory consisted of W. M. Witchell, Superintendent, W. Stevens, G. F. Wells, H. F. Finch, and three computers. Computers employed during the year were :- D. Oliver, L. D. Melotte and Miss E. W. Clack.

In consequence of the electrification of the railways in the neighbourhood of Greenwich, magnetic observations are now carried on 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.

The general plan of working at Abinger is similar to that adopted at Greenwich for many years. It is found possible, however, to increase the number of absolute observations very considerably, and smoother base-line values are to be anticipated from this circumstance.

Mr. Stevens, resident observer and assistant-in-charge at the Abinger Magnetic Station, was assisted throughout the year by Mr. Finch.

## THE NEW MAGNETIC STATION AT ABINGER, NEAR DORKING, SURREY.

The Abinger magnetic station for observing and recording magnetic phenomena was erected in 1924 on a site on the northern slope of Leith Hill. The station is capable of being maintained in frequent contact with Greenwich, and the possibility of its being seriously affected by electric traction is small. The nearest railway track approaches to about  $2\frac{1}{2}$  miles, but electrification of the lines in the neighbourhood is not contemplated at present. The distance on a straight line from the Royal Observatory is approximately 26 miles in a direction a little south of south-west. The geographical position is Latitude  $51^{\circ} 11' \cdot 1$  N., Longitude  $0^{\circ} 23' \cdot 2$  W.; and the height above sea level is approximately 800 feet.

The buildings, equipment and general arrangement of the instruments were closely copied from those at Greenwich, except that the recording house is due east of the observing pavilion and is oriented at right angles to the direction adopted at Greenwich. The effect of this variation is that the relative orientation of the recording instruments from one another has been similarly altered, so that, for example, the horizontal force variometer is east of the declination variometer instead of north as at Greenwich; also the needles of the vertical force variometer point east-west instead of north-south.

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 pavilions.

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

The 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 force, on the south-east pier the unifilar magnetometer, and on the south-west pier the dip inductor.

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 surrounded by an outer chamber, whose walls of non-conducting material are nearly 2 feet thick. Between the walls of the two chambers is an air space of from 2 to 3 feet. The inner chamber is

electrically heated by about 50 suitably insulated low-temperature non-magnetic metallic resistance strips, each consuming 25 watts. The current used is alternating, and is therefore without effect upon the magnetic registration.

The temperature is controlled by a thermostat placed in the centre of the room, at the same level as the magnetic instruments. This actuates a relay, which switches the electric current into or out of the heating circuits. The departure from a mean temperature is not more than 0.2 C.

The centres of the three instrument piers are situated as follows: For the horizontal force 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 force 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 force instrument.

The horizontal force and declination instruments record on the south-east drum; the vertical force 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 sending 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. 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.

#### THE INSTRUMENTS AT ABINGER.

DECLINATION MAGNET FOR ABSOLUTE DETERMINATIONS.—A hollow cylindrical magnet with scale and collimating lens (by Messrs. Elliott Brothers) is used in conjunction with a telescope (by E. R. Watts & Son) mounted independently on the same pier. 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 to the stem of a large tree situated approximately 80 yards from the telescope to the north. Frequent determinations of the azimuth of this mark are made by means of observations of Polaris, and the values are found to be substantially constant.

In observing Polaris, both direct and reflected view of the star is taken during each observation. Reflection is obtained from the surface of mercury contained in a shallow copper dish, the effect of error of level of the telescope being entirely eliminated by this means.

The magnet is suspended by tungsten wire, of diameter 0.02 mm. Frequent reversals are made to eliminate the collimation error of the magnet from the results, and the position of torsional zero of the suspension wire is also frequently checked. 90° of torsion deflects the magnet about 3' of arc.

#### ABSOLUTE HORIZONTAL FORCE INSTRUMENTS.

THE SCHUSTER-SMITH COIL MAGNETOMETER.—This instrument has been loaned 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 force on 1927, February 1. In general four independent determinations are made each week-day.

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

A hollow marble cylinder of 50 cms. diameter rests, with its axis of revolution 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 in a close spiral. 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, which 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.

At the south end of the observing pavilion a storage battery of 25 cells produces the current required for the observation, the circuit passing through a "current balance" in which by means of a variable resistance and a Broca galvanometer the amount of current employed is very accurately adjusted to a specific quantity. Every precaution is taken to eliminate accidental magnetic fields in arranging the circuits.

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° 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 which 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 then 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 angles.

Throughout these operations a second observer ensures the maintenance of the current at a steady fixed value, adjusting the variable resistance, if necessary, according to the indications of the galvanometer of the balance.

The constants of the coil and of the current balance at various standard temperatures have been supplied by the National Physical Laboratory after elaborate tests, and will be checked from time to time.\*

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\* A re-determination of the value of the standard resistance employed in the balance, made in June 1928, indicated an increase of 11 parts in 100,000 since the determination of March, 1926. On the assumption of a uniform change during the elapsed period, a correction of  $-1.1\gamma$  is necessary to the mean value of H.F. for 1927 printed in this volume, with a corresponding correction of  $-2.5\gamma$  to mean V.F. The mean difference between results from the Coil and the unifilar magnetometer is increased to  $2.7\gamma$  on this assumption.

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.

A Kew-pattern unifilar magnetometer by Messrs. C. F. Casella & Co. (No. 181) is also in use to determine absolute horizontal force. Deflection observations are made at three distances, namely, 22.5 cms., 30 cms. and 40 cms.; and normally six observations are taken each week. 49 observations of the moment of inertia of the collimator magnet were made during the year 1927. The mean observed value of  $\log. K$  was 2.42480 (C.G.S. units). 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 results agree closely with those obtained by the Coil magnetometer, the mean difference for the year, as indicated by base-line determinations, being 1.6 $\gamma$  in excess. (See footnote on p. D 12.)

ABSOLUTE INCLINATION INSTRUMENT.—An Earth Inductor by The Cambridge Instrument Co., in conjunction with a Broca galvanometer, is used to determine magnetic inclination. About twelve 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 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 screw micrometers to one second of arc. The levels on the base can likewise be read to one second. A detailed description of the dip inductor will be found in the volume for 1915.

THE 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 of platinised quartz,  $2\frac{1}{2}$  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. Rough adjustment is obtained by bending the foil; and for fine adjustment recourse is made to the illuminating lamp, which has sliding attachment to a vertical wooden pillar capable of being fixed in any desired position in the room. 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.

A very fine quartz filament  $\cdot 003$  mm. in diameter was introduced in place of the phosphor-bronze originally supplied, and the displacement produced by revolving the torsion head  $360^\circ$  was thereby reduced to a fraction of a minute of arc.

The focussing lens is mounted in the side of the magnet chamber and a plane glass window admits light through the brass covering-cylinder. A base-line mirror similar to the magnet-mirror is mounted within the magnet chamber on a small brass prism resting on a shelf fixed to the back plate of the chamber in such a position that it is at the same height as the magnet-mirror and about one centimetre to the right. Adjustment is obtained by two point-ended screws passing through the back plate and forming two of the supports of a three point system. 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  $0' \cdot 610$  per mm. As the beam is not normal to the drum, however, the scale value varies from  $0' \cdot 605$  at the top of the sheet to  $0' \cdot 615$  at the bottom. Expressed as magnetic force the corresponding mean scale-value would be  $3 \cdot 30\gamma$  per mm. at the present time.

THE HORIZONTAL FORCE VARIOMETER.—In setting up this variometer the decision was taken to revert to the former Greenwich practice of recording horizontal force instead of the north component (recorded from 1915 to 1926). The general construction of the instrument is in all respects similar to that of the declination variometer. The suspension filament is of quartz  $\cdot 012$  mm. diameter. The needle is adjusted to a position at right angles to the magnetic meridian by means of the torsion head in the following manner. Orientation marks have been drawn on the western wall of the room subtending successive degrees of azimuth at the centre of the variometer pier. An ordinary magnetometer distance-bar securely held beneath the base of the variometer in a wooden frame is by this means easily set at right angles to the magnetic meridian, and upon it is placed, about 25 cms. from the variometer, the usual carrier with a magnet mounted in position. A relatively strong magnetic field is thus imposed at right angles to that of the earth, and the torsion head is adjusted until the needle of the variometer is negligibly disturbed by the removal 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 intended to cover the period 1927–1929 was made on August 24, 1927.

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 (with the same circuit and ammeter) to deflect the needle of the declination variometer. The strength of the field necessary to produce the observed deflection is then computed, the horizontal force at the time being known.

The mean scale value until August 24 was  $2.65\gamma$  per mm. After adjustment for orientation the scale value was  $2.60\gamma$  per mm.

THE QUARTZ-THREAD VERTICAL FORCE VARIOMETER.—For a detailed description of this instrument reference may be made to the *Philosophical Magazine*, vol. vii., sixth series (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 which 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. Alteration in temperature does not, by this means, give rise to a change in tension of the suspension thread, which different co-efficients of expansion would otherwise produce. 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 the reduction in sensitivity referred to below.

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, the upper surface of which is optically worked and platinised to form a plane mirror. The quartz rods are drawn out at their other ends into fibres of about 0.008 to 0.010 cm. diameter; one of these is 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 is supported in a frame above the mirror, so as to reflect the light in a horizontal direction; a single lens is placed beneath to focus the light on the recording drum. The prism frame is adjustable in azimuth in order to enable the trace to be brought to any desired part of the sheet. An adjustable

mirror beneath the quartz fibre and adjacent to the mirror of the magnet system serves to give a base line.

The sensitiveness of the instrument is varied by raising or lowering the centre of gravity of the magnet system. Coarse adjustment is obtained by means of small aluminium discs centrally pierced 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 degree of sensitivity to which the variometer was at first adjusted was rather high and seemed to be gradually increasing. It was diminished to about one-third on 1926, September 14. The scale value is obtained by electro-magnetic deflections. The radius of the coil used in these experiments is 30.15 cms. The mean of the scale values adopted in 1927 is  $2.41\gamma$  per mm. Slight deviations from this value occur when the standard temperature of the room is raised or lowered from the mean. The value is sensibly uniform over the range allowed by the photographic sheet.

#### MAGNETIC REDUCTIONS.

The time used is Greenwich Mean Time.

The 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.

In the case of declination, ten observations are made, on an average, each week-day, and four in the case of horizontal force. The base-line value for vertical force traces is computed from absolute observations of inclination combined with simultaneous values of horizontal force taken from the magnetograms. Usually two determinations are made each week-day.

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.

One day in the year 1927, namely October 12-13, is classed as a day of great disturbance and has been omitted in the formation of the tables.

Days of lesser disturbance in conformity with the list issued by the International Committee from De Bilt Observatory, Holland, are January 7-8; April 13-14; May 5; July 21-22; August 20-22; October 22-24. 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.

Commencing with the year 1926—the first full working year at the Abinger Station—some changes in the tabulation of the results were introduced, and as from 1927 the detailed description of significant movements in the traces is discontinued.

Tables I to III contain the hourly results for declination, horizontal force and vertical force 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).

From the inequalities in declination, horizontal force and vertical force, corresponding inequalities in north force, west force and inclination have been computed and appear at the same opening of the page.

The inequalities in north force, west force and vertical force (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 is given the mean diurnal range in declination, horizontal force and vertical force 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 of magnetic force collected together.

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

Reduced copies of the magnetograms for certain disturbed days have been printed in each volume since 1882. The list of these days since the year 1889 has been selected so that the two observatories of Val Joyeux (formerly of the Parc Saint Maur) and Greenwich should, in general, publish the magnetic registers for the same days of disturbance with a view to the comparison of the results. In principle the days of disturbance are now those selected by the International Committee, the limits of the trace being determined in consultation with the Director of Val Joyeux Observatory. The same procedure is continued as regards the Abinger registers.

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 force, and vertical force.

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

On p. D 58 is printed a table giving the mean annual values of Magnetic Elements determined at the Royal Observatory, Greenwich, over the whole period of observation, together with those determined at the Abinger Station since 1925.

F. W. DYSON.

ROYAL OBSERVATORY, GREENWICH.

1928, September 28.

ROYAL OBSERVATORY, GREENWICH.

# Results of Magnetic Observations

1927

GREENWICH MAGNETIC AND METEOROLOGICAL RESULTS 1927



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

	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	
<b>January.</b>																										
12° + Tabular Quantities.																										
1**	63.9	63.7	63.5	63.7	64.5	64.0	63.8	63.4	63.4	63.4	64.9	66.6	67.1	68.3	69.0	68.8	67.9	66.5	65.7	64.7	64.2	64.0	53.5	55.5		
2	59.6	58.3	63.3	64.7	63.3	64.8	64.3	64.1	63.8	64.3	64.6	66.2	67.4	68.5	66.8	64.6	64.7	64.1	64.5	64.5	63.5	62.7	63.7	63.7		
3	64.3	64.5	64.7	64.7	64.7	64.3	63.7	63.4	62.7	63.4	65.4	66.6	67.2	67.5	66.7	65.7	65.5	65.0	64.6	63.9	63.7	63.7	63.3	63.7		
4**	64.0	64.7	63.8	64.9	63.7	63.4	64.3	64.3	62.9	62.8	64.6	67.7	68.8	70.2	68.4	66.7	65.9	65.1	61.9	60.2	51.2	59.7	64.8	65.5		
5	63.7	63.6	63.8	63.8	65.1	64.0	63.9	63.4	63.2	65.6	66.6	66.3	66.6	67.2	67.1	66.7	65.9	66.1	65.2	65.8	64.7	63.6	62.4	63.4		
6	60.5	59.3	61.5	61.6	62.6	63.4	63.6	63.9	63.6	64.4	65.7	65.7	66.3	66.5	65.7	65.5	65.1	64.6	64.4	63.8	63.3	62.8	63.4	63.5		
7**	63.9	64.5	64.5	64.6	64.4	63.7	63.4	62.5	62.1	65.2	65.5	65.6	70.7	68.2	67.5	69.8	67.2	66.4	58.7	56.5	55.5	52.5	56.0	46.5		
8	44.5	52.5	63.6	63.3	63.5	63.7	64.2	63.7	62.7	62.0	62.5	62.7	64.6	65.7	65.8	65.8	65.5	65.1	64.7	63.8	63.0	62.6	63.0	63.2		
9*	63.4	63.6	63.8	64.1	64.1	63.9	63.5	63.1	62.4	62.4	62.6	64.5	66.6	66.7	65.6	65.5	64.8	64.8	64.6	64.1	63.3	63.3	62.9	62.6		
10*	62.6	63.4	63.7	63.6	63.6	63.6	62.9	63.0	63.0	63.0	63.7	65.2	67.6	67.3	66.3	65.8	65.2	64.8	64.3	63.8	63.6	63.2	63.0	62.9		
11	61.9	60.9	61.8	63.1	63.9	64.0	64.5	64.5	63.4	62.8	63.0	65.4	67.8	69.0	66.6	66.0	65.8	67.4	65.8	65.0	64.6	63.0	63.5	63.3		
12	63.1	64.9	66.2	63.1	62.1	63.7	64.2	63.1	61.3	62.6	62.9	65.1	66.3	69.3	69.5	67.1	67.6	66.3	64.7	64.9	63.2	62.3	60.0	60.5		
13	60.5	60.4	62.0	64.1	64.2	63.3	63.3	62.9	62.8	63.2	62.3	63.3	66.6	68.4	68.3	66.3	66.3	65.4	64.9	64.2	63.2	62.9	62.6	62.8		
14	62.6	62.4	63.2	63.5	62.8	63.0	62.6	62.8	62.6	62.7	62.4	64.2	66.3	67.3	66.4	66.4	65.6	65.9	63.3	63.3	64.0	63.0	57.3	60.2		
15	62.6	63.2	64.2	64.1	64.0	63.6	63.4	62.8	61.8	61.2	62.5	64.2	66.8	68.7	66.8	65.2	65.3	65.2	64.4	64.2	63.7	62.2	61.9	63.6		
16	64.1	64.0	64.6	66.1	66.1	64.8	63.5	62.1	60.7	60.3	62.1	64.4	66.6	68.6	67.9	66.3	65.1	65.1	64.4	63.1	63.0	63.2	63.1	63.6		
17	64.0	64.0	64.6	63.8	64.5	64.0	63.5	64.1	62.4	63.2	62.8	65.0	68.9	68.4	67.4	65.9	64.9	63.9	63.1	62.9	62.9	62.9	61.4	62.7		
18	62.8	65.0	66.8	64.2	63.1	64.2	63.8	63.9	64.2	62.9	62.9	65.3	66.6	68.7	67.2	64.5	64.5	64.7	64.6	64.2	63.6	63.4	62.9	61.7		
19	62.6	64.6	63.5	63.6	64.0	63.6	63.6	63.4	63.5	64.4	64.5	67.5	67.2	67.1	66.3	65.0	64.4	64.7	64.4	61.5	62.6	63.3	63.2	62.5		
20	63.4	64.1	64.3	64.3	64.3	64.0	63.2	62.6	61.7	62.2	62.2	65.2	65.7	66.7	64.6	64.6	64.4	64.1	64.0	63.0	63.0	63.1	63.2	63.5		
21*	63.9	64.0	63.9	63.6	63.5	63.8	63.3	62.9	62.5	62.7	62.8	64.5	66.5	66.8	65.8	65.0	64.2	64.0	63.8	63.8	63.3	62.9	62.7	62.7		
22*	63.1	63.5	63.6	63.6	63.8	63.6	63.3	63.1	62.7	62.6	63.6	65.6	67.4	68.0	67.0	65.6	65.6	65.3	65.1	64.4	63.6	63.4	63.1	63.4		
23*	63.3	63.5	64.1	63.8	64.0	63.5	62.8	62.5	62.5	62.7	63.4	64.0	66.5	68.1	66.9	65.2	64.8	64.5	64.1	64.0	63.5	63.2	63.0	63.1		
24**	63.1	63.5	63.5	63.7	64.0	63.5	63.0	62.5	61.8	62.5	63.2	65.2	67.8	68.2	67.8	67.1	66.6	67.7	66.6	65.2	63.0	61.6	62.2	63.1		
25**	64.2	62.7	63.6	62.7	62.7	62.8	62.7	61.9	63.8	63.5	65.2	64.8	65.7	66.9	66.6	65.5	65.2	64.9	64.1	63.7	62.5	59.9	60.7	59.9		
26	61.2	60.0	58.8	56.2	60.5	69.5	67.6	62.3	62.1	61.6	62.9	64.3	65.8	67.1	67.6	66.5	67.7	65.6	66.2	65.4	64.1	63.2	61.6	62.7		
27	62.9	62.7	63.1	63.3	63.3	62.5	62.3	61.9	61.3	61.8	62.3	63.8	65.8	66.4	65.5	65.0	64.1	63.3	64.3	64.1	63.5	63.2	63.2	63.0		
28	63.4	63.4	63.5	63.5	64.1	63.6	63.5	62.3	61.8	62.5	63.5	64.5	66.5	66.8	66.0	65.6	65.6	65.5	65.3	64.1	62.5	62.1	62.9	62.5		
29	61.8	62.3	62.9	63.2	63.1	62.6	62.3	61.9	62.6	63.1	64.4	65.7	67.4	67.4	66.8	66.1	66.6	63.8	64.6	65.9	64.7	63.7	63.4	63.4		
30	63.3	63.2	63.1	63.1	63.2	62.9	62.6	62.1	62.1	62.8	63.0	64.1	67.1	65.6	64.6	64.1	64.0	64.4	62.9	63.7	61.9	60.2	60.6	61.2		
31	62.8	62.1	62.6	62.6	62.6	62.9	62.4	62.4	61.6	62.0	62.7	63.9	65.3	65.7	65.4	65.0	64.8	64.5	64.1	64.4	63.7	63.6	62.8	62.5		
Mean	62.3	62.7	63.6	63.5	63.7	63.8	63.5	63.0	62.5	62.9	63.6	65.1	66.9	67.6	66.8	65.9	65.5	65.1	64.3	63.8	62.8	62.4	62.0	62.0		
Mean*	63.3	63.6	63.8	63.7	63.8	63.7	63.2	62.9	62.6	62.7	63.2	64.8	66.9	67.4	66.3	65.4	64.9	64.7	64.4	64.0	63.5	63.2	62.9	62.9		
Mean**	63.8	63.8	63.8	63.9	63.9	63.5	63.4	62.9	62.8	63.5	64.7	66.0	68.0	68.4	67.9	67.6	66.6	66.1	63.4	62.1	59.3	59.5	59.4	58.1		

	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	
<b>February.</b>																										
12° + Tabular Quantities.																										
1	62.5	62.8	63.0	62.9	62.5	62.5	61.9	61.4	61.5	61.5	62.5	63.7	66.3	67.6	66.4	65.4	66.3	66.4	66.8	64.6	63.0	62.4	62.3	61.1		
2	59.0	59.8	62.3	62.5	62.6	63.2	62.5	62.0	61.4	62.1	63.2	63.7	64.2	64.5	64.5	65.1	65.8	65.0	65.6	64.7	63.2	62.9	62.9	62.5		
3	62.5	62.1	62.1	62.3	62.3	62.1	62.0	61.6	62.1	63.1	63.9	64.1	64.0	65.1	65.5	65.8	66.1	65.4	65.5	66.2	66.0	62.3	57.7	56.1		
4	61.3	60.5	59.1	57.1	59.3	60.2	60.1	59.7	60.4	62.1	63.3	63.8	63.8	63.9	63.2	63.2	64.1	64.9	64.6	63.6	63.2	62.3	60.1	60.2		
5	61.2	59.3	59.4	62.2	62.1	61.7	61.6	61.9	61.9	61.8	63.5	65.2	65.7	67.1	67.1	65.2	64.7	63.7	62.2	62.2	62.7	62.2	61.8	61.9		
6*	62.0	62.3	62.5	62.8	63.0	62.8	62.4	62.2	60.9	60.8	62.3	63.3	64.3	65.3	65.5	65.1	64.7	64.7	64.1	63.6	62.8	62.4	62.5	62.2		
7*	62.5	62.9	62.6	62.4	62.4	62.5	62.1	61.6	61.2	61.8	63.4	65.4	66.3	66.9	66.4	65.8	64.7	64.3	64.2	64.0	63.2	62.6	62.5	62.4		
8	62.2	62.3	62.3	62.2	62.3	62.4	62.3	62.2	61.8	62.5	64.9	65.3	67.1	66.9	68.1	67.3	66.1	66.1	66.2	64.5	63.1	61.9	62.7	61.6		
9**	60.0	58.1	58.3	60.2	59.4	59.4	60.8	60.9	61.7	62.6	64.9	66.9	67.1	68.6	67.9	66.5	64.5	66.8	68.0	66.1	61.7	55.7	54.7	55.3		
10**	56.3	56.7	62.4	61.5	62.0	61.6	61.2	62.9	62.9	63.5	62.9	65.0	66.1	66.7	66.8	66.9	66.4	64.6	63.3	63.2	63.3	62.8	62.5	62.5		
11	62.4	62.5	62.3	62.2	62.1	61.7	61.2	61.0	60.6	61.2	62.7	64.4	65.1	65.1	65.1	64.6	64.8	64.7	63.9	63.5	63.2	60.3	57.1	60.7		
12	61.7	61.3	61.9	61.0	60.4	61.6	61.8	61.4	61.3	61.5	63.0	65.5	66.1	66.6	67.1	66.7	65.5	65.5	62.2	61.7	59.8	59.6	60.3	61.3		
13	61.1	62.7	62.8	62.5	62.4	62.1	62.1	61.8	61.2	61.8	63.4	65.7	68.3	66.9	64.9	63.7	62.4	58.0	61.4	62.8	60.4	62.6	62.5	60.5		
14	59.7	63.4	60.8	61.3	62.8	62.7	63.6	62.7	61.8	61.9	62.9	62.9	64.8	65.9	65.5	64.7	63.9	62.4	62.3	62.9	62.8	62.7	61.9	61.9		
15	62.5	62.0	62.9	62.7	62.2	62.1	62.0	62.6	62.5	62.8	63.6	64.0	65.6	65.4	66.2	64.6	63.7	64.0	63.1	62.4	62.1	62.6	62.4	62.6		
16	62.3	60.5	60.6	61.8	62.2	62.0	61.9	62.2	62.2	64.0	65.2	67.8	68.2	70.8	66.7	66.2	64.6	63.6	61.6	56.3	54.3	60.0	61.3	61.3		
17	62.4	62.4	62.4	62.9	61.4	62.8	61.2	61.8	62.1																	

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	
March.																										
12° + Tabular Quantities.																										
1																										
2*	59.3	58.9	58.3	56.3	58.0	59.2	58.3	59.5	59.5	61.3	65.3	67.3	69.3	70.2	69.3	68.9	67.3	62.0	63.1	60.6	55.3	59.4	61.2	61.5	61.5	
3	61.5	62.3	62.0	61.5	61.4	61.4	61.4	61.4	60.4	60.7	62.4	63.2	66.7	67.9	66.4	64.6	64.1	63.4	62.8	61.5	61.6	61.7	61.8	61.7	61.7	
4	61.7	61.5	61.8	61.5	60.3	60.5	60.3	60.3	59.2	60.1	62.4	65.2	68.5	67.1	66.9	65.8	63.6	63.8	63.3	60.8	59.5	60.5	60.0	60.5	60.5	
5	61.5	62.7	62.5	61.9	61.6	61.0	60.8	60.0	58.5	58.5	61.3	64.4	66.5	67.0	66.9	66.0	64.5	63.7	63.6	63.7	62.6	62.3	62.3	58.5	58.0	
6	59.8	60.6	60.6	60.5	60.6	60.5	60.2	60.0	59.5	59.6	61.7	65.0	67.6	68.8	67.6	67.0	65.1	64.7	64.7	63.9	62.2	61.6	60.5	61.7	61.7	
7	58.8	60.8	61.6	60.8	61.4	60.3	60.4	60.1	59.4	59.5	61.1	63.0	67.3	67.7	68.2	67.0	65.1	64.7	64.7	63.9	62.2	61.6	60.5	61.7	61.7	
8	57.7	59.7	60.7	61.7	63.0	62.2	61.7	61.2	59.7	59.7	61.1	64.4	67.8	67.8	67.6	66.0	64.3	62.3	60.1	60.8	60.7	57.8	59.2	59.9	59.9	
9**	60.1	60.7	60.8	61.7	61.2	60.8	60.7	60.7	60.5	60.7	62.0	64.7	67.6	68.6	68.2	66.3	64.7	64.5	63.9	63.7	63.9	61.4	59.6	56.7	56.7	
10	51.7	57.2	57.7	55.8	59.3	63.6	63.3	64.1	60.7	60.7	63.8	66.2	69.7	67.6	69.0	68.7	63.5	55.7	63.3	62.7	62.3	59.1	57.3	55.7	55.7	
11	57.7	57.5	59.7	62.6	65.5	62.1	59.9	61.2	61.0	63.6	64.6	68.2	70.0	67.6	67.1	65.6	63.6	62.5	62.4	62.6	62.5	62.0	61.6	60.9	60.9	
12	60.8	60.6	64.5	60.6	60.0	59.1	60.0	59.8	59.5	60.0	62.3	66.6	68.4	69.6	68.4	66.0	63.4	62.7	63.0	62.2	60.6	58.0	59.7	60.2	60.2	
13	61.4	62.8	62.7	61.6	61.0	61.2	64.1	61.6	59.6	59.7	63.6	66.0	67.3	67.8	67.6	66.3	64.5	63.0	62.9	62.8	62.6	61.6	61.5	61.9	61.9	
14	61.6	61.9	60.5	59.5	59.7	59.5	60.4	60.4	60.3	60.0	64.0	64.8	66.5	66.9	67.0	65.0	63.5	62.7	62.5	62.4	62.4	62.0	62.0	61.5	61.5	
15	59.5	58.7	57.6	57.4	62.3	60.5	59.5	58.9	59.4	59.4	61.1	64.0	66.3	66.8	68.8	67.1	65.5	63.4	62.8	62.7	62.6	62.3	61.8	61.8	61.8	
16**	62.6	59.2	60.1	63.2	63.8	61.9	60.6	59.2	59.2	60.9	65.2	67.6	70.8	71.1	69.1	66.1	63.5	61.5	58.3	59.2	60.0	54.3	56.5	56.1	56.1	
17**	60.5	62.0	64.0	63.8	67.0	66.6	59.4	59.4	62.0	63.0	64.0	68.6	70.0	72.2	69.4	67.0	63.0	55.6	53.5	59.8	56.5	55.3	57.0	55.2	55.2	
18	59.7	59.3	61.9	60.9	59.9	59.9	59.4	59.9	59.2	59.4	61.8	65.3	68.1	68.9	67.9	67.1	65.3	62.1	55.8	54.9	53.9	55.4	53.9	52.9	52.9	
19	57.5	57.6	60.4	59.9	60.5	60.2	59.0	58.5	58.0	58.5	61.5	65.2	68.0	67.9	67.4	64.2	61.9	59.9	58.7	58.6	59.6	60.9	60.9	62.1	62.1	
20	64.3	61.7	60.6	60.6	61.8	61.0	60.0	58.1	56.7	57.6	59.9	64.8	67.1	68.1	68.0	67.2	63.1	58.4	61.5	61.9	61.5	60.7	59.8	60.6	60.6	
21	60.3	61.3	61.6	61.2	60.6	59.4	61.8	60.2	57.2	58.0	61.7	65.9	69.3	71.7	72.8	66.7	64.4	63.6	61.1	56.1	57.5	61.1	62.2	57.7	57.7	
22*	58.3	60.7	60.9	60.9	60.4	60.5	60.4	59.4	58.1	58.5	60.5	63.7	65.6	66.6	66.2	64.8	63.0	62.2	61.6	60.9	60.7	60.1	60.6	60.9	60.9	
23*	60.9	61.0	61.1	61.0	60.8	60.7	60.7	59.3	57.2	57.3	59.8	64.3	68.4	69.6	68.8	66.7	64.0	61.7	61.9	61.8	61.0	59.9	60.8	60.9	60.9	
24*	61.1	61.1	62.4	61.8	61.4	60.4	60.0	58.0	56.6	57.1	60.7	65.2	68.8	69.6	68.4	66.3	64.0	62.9	62.2	61.7	61.1	61.0	60.8	60.9	60.9	
25*	60.9	61.1	61.1	61.0	60.8	60.1	59.4	58.0	56.8	57.3	60.1	63.5	66.1	67.3	67.0	65.6	63.7	62.6	62.0	61.6	61.5	61.5	61.5	60.9	60.9	
26	61.0	61.2	61.2	61.2	60.8	60.2	60.0	58.6	57.5	58.2	60.8	64.5	69.2	69.2	69.2	67.2	65.5	64.6	64.0	63.2	62.6	62.6	62.1	62.4	62.4	
27**	59.7	57.8	62.2	60.2	59.6	59.5	59.2	57.8	62.5	63.6	63.6	67.2	71.4	73.2	71.2	71.0	66.2	64.8	63.7	61.4	60.2	56.4	57.4	55.7	55.7	
28**	54.9	52.6	54.6	57.4	59.2	58.8	57.9	58.0	58.2	60.2	63.7	67.9	69.6	69.8	71.2	65.7	69.7	66.2	62.5	52.7	59.9	61.8	59.9	58.2	58.2	
29	56.6	63.2	62.3	56.9	58.9	63.1	62.4	62.6	61.1	63.8	67.0	70.3	72.4	67.5	67.3	66.1	63.6	62.6	61.5	61.2	62.6	63.1	63.1	62.1	62.1	
30	59.9	58.2	59.2	60.6	59.8	59.7	59.9	59.5	59.5	61.3	63.9	66.3	68.3	67.6	66.1	63.9	63.1	63.1	63.4	62.5	60.3	61.5	61.7	61.4	61.4	
31	60.5	58.1	57.3	57.6	57.7	57.8	57.1	55.6	55.6	58.1	61.7	66.4	68.3	67.9	66.1	63.5	62.4	61.9	61.7	61.6	58.0	58.3	60.0	60.8	60.8	
Mean	59.8	60.1	60.7	60.2	60.8	60.7	60.2	59.6	59.0	59.8	62.4	65.7	68.4	68.7	68.2	66.3	64.3	62.5	61.9	61.1	60.2	60.0	60.0	59.7	59.7	
Mean*	61.1	61.3	61.6	61.3	61.0	60.6	60.3	59.1	57.7	58.1	60.8	64.1	67.8	68.7	68.0	66.1	64.3	63.0	62.6	62.0	61.6	61.3	61.4	61.2	61.2	
Mean**	56.7	58.9	60.1	59.0	60.9	62.4	60.5	60.8	60.2	61.4	64.1	67.7	70.0	69.2	69.0	66.9	65.0	60.4	59.3	58.3	59.0	58.9	58.2	56.8	56.8	

	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	
April.																										
12° + Tabular Quantities.																										
1	60.5	60.7	59.9	62.4	61.6	59.0	60.8	57.4	56.0	57.9	61.0	65.4	68.0	69.8	69.0	66.4	63.9	61.2	59.8	60.2	60.6	59.6	58.2	58.0	58.0	
2	60.8	62.8	59.1	59.8	59.8	58.9	58.2	55.9	54.6	55.9	60.0	64.8	68.1	68.5	67.0	65.4	63.9	62.9	61.9	62.5	62.6	62.1	60.6	60.6	56.8	
3	55.7	58.8	59.8	59.8	60.1	59.8	57.9	56.7	55.8	57.0	60.0	64.4	67.2	67.8	67.6	65.3	63.8	61.9	61.7	61.4	61.4	60.3	59.2	60.7	60.7	
4	62.2	60.9	60.7	60.4	60.2	59.7	58.4	56.7	54.7	55.3	58.8	63.8	68.8	70.7	69.0	66.8	63.7	61.7	60.7	53.2	55.5	58.7	59.3	59.7	59.7	
5	60.1	60.0	60.5	59.5	58.2	57.8	56.8	56.0	54.5	55.6	59.8	64.8	68.9	67.9	67.5	65.9	63.9	62.5	60.5	60.6	60.0	58.7	58.6	57.8	57.8	
6	57.0	58.9	59.3	60.2	59.4	59.0	58.3	56.5	55.8	58.0	61.0	65.0	69.1	69.4	68.7	66.1	64.1	62.7	62.1	62.1	61.1	60.5	61.1	60.9	60.9	
7	61.2	60.9	60.6	60.2	59.3	59.7	58.2	56.3	55.4	56.2	59.2	63.6	68.2	71.7	72.2	71.0	66.7	63.5	62.0	59.0	59.3	58.9	58.1	58.1	58.1	
8	54.9	57.2	56.2	56.9	57.4	58.4	57.4	57.0	58.4	58.7	63.4	67.8	71.8	72.4	69.9	68.3	66.9	62.8	61.4	60.8	60.8	60.4	61.1	60.8	60.8	
9**	60.5	60.5	60.2	59.5	58.9	58.1	56.7	54.8	53.5	55.2	60.2	66.5	70.7	73.1	73.5	69.0	67.5	62.2	59.4	59.0	60.5	62.0	62.5	61.8	61.8	
10	62.5	61.1	62.1	61.1	60.5	60.4	58.6	56.7	56.2	59.4	64.4	67.8	68.7	67.1	66.4	64.8	62.7	61.4	60.9	61.7	62.1	61.7	61.5	61.4	61.4	
11**	61.0	60.7	60.8	60.8	60.6	55.7	55.4	56.2	55.4	55.9	59.3	61.7	64.3	65.6	66.5	68.3	63.3	60.7	60.2	61.7	58.5	58.9	60.3	57.1	57.1	
12**	59.7	59.9	63.2	59.7	59.1	58.2	57.9	55.0	53.2	56.5	58.4	61.9	65.8	67.0	66.8	63.4	62.2	62.2	60.2	59.8	58.7	59.2	60.7	61.2	61.2	
13	61.8	61.4	61.0	61.0	60.2	59.2	57.7	55.6	54.2	55.3	57.5	61.2	65.6	68.2	67.8	65.2	63.3	62.2	61.2	61.2	61.2	61.2	61.0	61.4	61.4	
14**	62.3	60.1	59.4	63.8	59.6	62.9	55.2	52.2	53.0	57.8	60.4	60.1	61.2	64.1	66.3	70.1	61.6	60.6	59.6	57.6	61.1	60.1	60.6	60.5	60.5	
15	63.0	61.3	60.5	61.6	61.6	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		
<b>May.</b>																											
<i>12° + Tabular Quantities.</i>																											
1	60.0	60.2	60.0	59.0	57.2	56.2	54.7	53.5	54.0	56.8	60.2	64.5	66.8	67.8	66.0	64.5	63.5	62.2	61.0	58.2	57.9	60.5	60.2	60.5			
2	60.4	60.0	59.4	59.9	56.3	54.3	54.6	52.5	51.1	53.1	57.1	60.4	63.8	66.2	65.9	63.9	62.6	62.3	61.0	61.2	61.7	61.2	60.4	60.5			
3**	60.6	60.3	60.3	60.7	61.6	57.4	54.0	51.6	51.8	54.9	58.7	64.0	68.4	71.2	71.8	69.5	70.4	60.8	59.6	59.9	59.8	60.3	57.0	52.3			
4	54.4	56.9	57.5	58.6	58.3	56.8	55.5	55.2	54.8	55.7	58.6	62.4	65.6	67.9	67.1	65.8	63.8	63.1	62.0	61.0	59.8	57.3	54.8	54.0			
5**	53.3	49.4	43.6	50.6	56.3	61.4	66.7	60.8	61.9	62.8	63.1	64.2	65.0	65.3	63.4	61.5	60.9	60.7	61.0	61.2	59.1	57.8	57.9	58.6			
6	56.9	58.0	58.8	59.3	58.8	58.5	56.5	54.2	53.4	54.2	55.9	59.8	63.1	63.7	64.5	63.1	62.5	60.8	60.3	60.2	60.0	60.0	58.1	59.4			
7**	59.9	59.9	59.2	58.7	58.9	59.1	56.4	56.0	57.1	57.2	58.2	61.2	67.3	65.4	68.9	70.3	67.6	65.3	62.3	62.0	61.6	60.2	54.4	56.3			
8	56.9	60.0	62.6	61.6	58.3	55.5	55.4	56.3	56.5	59.4	61.0	63.4	65.6	67.7	65.5	64.9	63.0	59.4	61.1	61.5	61.3	60.6	60.3	60.4			
9	62.6	59.4	57.8	57.8	57.6	57.7	57.8	56.4	56.5	56.5	58.1	61.5	63.8	64.1	63.6	61.9	57.8	58.7	58.5	57.9	60.1	61.0	61.2	61.7			
10	59.4	58.8	59.4	60.8	60.3	57.2	54.3	53.1	52.8	54.3	56.8	59.7	62.3	63.6	63.7	60.8	58.6	57.9	58.2	58.8	59.4	59.9	60.1	60.5			
11*	60.5	60.3	59.9	59.3	58.1	56.4	56.1	55.1	55.7	57.6	60.1	63.6	66.5	66.9	65.4	63.5	61.8	60.5	59.4	58.7	58.7	60.0	60.8	60.4			
12*	60.3	60.2	60.1	59.1	58.1	56.3	54.5	53.7	54.2	56.1	58.9	63.2	66.3	66.8	65.7	63.4	61.4	59.9	59.3	59.4	59.8	60.8	60.8	61.0			
13	60.7	60.4	59.4	58.8	57.7	56.8	57.3	57.0	57.0	57.9	60.2	63.2	65.6	65.3	63.7	62.3	61.5	61.0	60.6	60.5	58.6	58.9	60.2	60.4			
14	60.5	61.5	60.9	58.3	57.3	55.9	55.9	56.8	57.0	58.4	61.5	62.9	63.4	64.9	64.4	63.1	61.7	61.4	60.6	60.4	59.7	60.1	60.4	60.1			
15	60.6	59.5	60.3	62.9	55.5	55.7	52.3	51.7	52.8	59.3	60.7	62.3	65.9	66.6	64.3	63.9	63.5	61.3	60.5	60.4	60.2	60.2	60.0	59.6			
16	59.1	59.3	58.9	58.7	57.8	56.9	55.4	54.0	54.2	55.5	60.1	63.4	66.7	67.9	67.0	65.5	63.5	61.8	60.5	59.9	56.8	58.8	58.6	58.6			
17*	58.2	59.9	58.8	58.3	58.2	57.3	55.3	53.6	53.5	55.5	57.7	60.9	62.9	64.3	64.2	62.6	61.1	59.6	59.1	58.7	59.2	59.6	58.8	57.4			
18*	58.6	58.6	58.6	57.7	56.8	55.5	53.8	53.1	53.6	55.6	59.1	61.5	64.0	66.8	66.1	64.6	63.0	60.8	59.2	58.9	58.9	59.0	59.1	59.0			
19	58.4	58.6	58.5	58.3	58.1	56.5	53.6	52.9	53.6	55.6	60.1	63.6	66.6	67.2	65.8	64.8	60.7	60.6	59.0	55.9	56.6	55.9	54.8	56.6			
20**	57.2	57.6	54.4	53.6	54.0	54.6	55.9	55.2	55.3	56.7	62.5	64.6	66.2	70.3	70.7	64.7	63.9	62.6	60.6	60.1	57.1	58.7	58.8	60.5			
21	59.6	57.9	58.9	57.6	55.6	54.0	53.8	54.5	55.3	56.8	59.2	62.6	64.6	65.9	64.7	62.8	61.6	60.6	59.8	58.5	56.6	58.3	57.6	56.9			
22	53.9	56.7	59.0	57.9	56.0	54.7	53.8	53.7	54.7	56.4	59.1	61.9	63.7	64.0	63.3	61.7	59.9	59.1	59.7	59.8	58.7	58.4	59.2	59.4			
23	59.2	59.0	58.2	58.0	56.2	54.7	54.4	53.7	54.7	56.3	58.7	61.2	63.7	65.5	66.1	64.8	63.1	61.4	60.4	59.2	58.0	58.9	58.7	58.1			
24	58.2	57.7	56.9	57.3	56.7	55.4	54.6	53.9	53.7	56.0	58.0	60.4	62.9	63.1	63.8	62.2	62.2	62.0	60.7	59.6	59.2	59.8	59.3	58.9			
25	58.2	58.1	57.7	58.6	57.9	55.6	54.5	54.5	55.0	57.1	58.9	60.4	62.2	63.9	64.5	64.4	63.5	61.7	60.9	59.9	59.5	59.3	59.6	58.5			
26*	58.2	57.3	57.1	56.9	55.2	53.4	52.4	52.6	53.5	54.9	57.7	60.6	61.6	62.3	62.3	62.0	60.6	59.4	59.1	59.1	58.9	59.0	59.0	58.8			
27	58.3	57.7	57.2	57.0	55.5	52.0	51.1	52.8	54.1	57.9	58.9	60.4	63.2	63.4	62.7	61.0	60.3	60.2	60.8	60.8	59.5	59.5	59.5	57.3			
28**	58.1	58.0	58.7	56.4	55.3	52.6	50.4	50.9	52.9	55.1	57.5	61.2	64.5	67.4	66.9	65.0	64.4	60.8	55.8	54.6	55.3	54.9	57.8	58.8			
29	59.9	59.5	57.7	57.0	55.8	53.1	52.2	52.1	53.7	57.2	61.7	65.2	66.8	66.4	66.0	62.9	60.7	58.9	58.3	58.6	57.2	57.3	56.6	57.2			
30	58.7	58.6	58.1	57.2	55.8	54.2	51.9	51.5	51.6	54.2	57.2	61.5	64.4	65.5	65.4	64.3	62.1	60.1	58.5	57.5	58.6	59.0	58.9	58.5			
31	57.9	58.0	58.4	57.9	56.3	54.6	52.9	52.8	57.0	57.1	60.2	64.1	66.6	66.8	65.8	64.2	61.5	60.5	59.4	58.8	58.4	55.9	55.6	55.9			
Mean	58.7	58.6	58.3	58.2	57.1	55.8	54.8	54.1	54.6	56.5	59.2	62.3	64.8	65.9	65.4	63.9	62.3	60.8	59.9	59.4	58.9	59.1	58.7	58.6			
Mean*	59.2	59.3	58.9	58.3	57.3	55.8	54.4	53.6	54.1	55.9	58.7	62.0	64.3	65.4	64.7	63.2	61.6	60.0	59.2	59.0	59.1	59.7	59.7	59.3			
Mean**	57.8	57.0	55.2	56.0	57.2	57.0	56.7	54.9	55.8	57.3	60.0	63.0	66.3	67.9	68.3	66.2	65.4	62.0	59.9	59.6	58.6	58.4	57.2	57.3			
<b>June.</b>																											
<i>12° + Tabular Quantities.</i>																											
1	56.6	57.3	56.6	56.7	55.8	54.1	52.1	51.1	51.9	54.6	57.7	62.4	66.2	68.2	67.5	65.9	64.3	62.7	61.0	58.9	55.3	54.1	56.3	57.5			
2**	57.5	58.9	59.4	59.6	56.6	54.0	53.4	53.1	53.4	56.6	59.0	61.2	65.0	66.8	66.2	65.0	63.4	61.8	60.4	59.8	58.5	57.3	57.9	58.2			
3	57.6	57.1	57.5	59.1	58.8	59.3	56.1	55.3	55.8	57.3	59.6	62.9	64.3	65.8	66.1	64.4	62.7	61.7	60.6	59.3	59.4	59.5	59.0	58.6			
4	57.8	57.5	58.2	59.2	57.1	53.8	52.5	52.6	53.5	55.3	58.5	62.0	64.5	65.4	65.2	63.7	62.0	60.6	59.9	59.7	59.8	59.6	59.8	58.5			
5**	58.5	57.3	58.2	57.6	56.0	57.1	60.4	56.4	53.7	56.8	59.2	63.4	65.3	67.0	67.4	65.9	64.0	62.2	59.8	58.4	57.9	58.9	61.0	60.9			
6	54.9	57.4	57.9	57.9	54.7	54.0	52.7	52.5	53.9	55.1	58.9	61.7	64.1	65.2	64.7	62.7	60.6	59.6	58.8	59.0	58.4	58.4	58.0	58.4			
7	58.1	59.0	60.6	58.7	55.3	52.7	52.1	52.3	53.9	56.8	60.3	62.6	66.0	66.3	65.8	63.7	61.4	60.0	59.0	58.9	59.0	59.2	59.3	59.3			
8*	59.1	58.5	58.3	57.4	55.3	54.3	53.1	53.1	54.0	55.3	58.3	62.1	63.0	62.9	61.8	60.2	58.4	58.3	58.5	59.2	59.3	59.3	59.8	59.3			
9	59.5	58.9	58.8	58.1	58.5	57.7	54.5	53.4	54.0	56.2	58.6	61.3	61.9	62.0	61.3	59.8	59.0	59.3	59.0	59.9	60.3	60.4	60.1	59.7			
10	59.4	59.3	59.0	56.7	55.6	54.3	54.4	55.4	57.6	58.0	60.2	63.2	64.2	64.2	63.1	63.1	61.5	59.6	59.2	60.6	60.3	59.9	60.0	58.4			
11**	57.7	55.9	56.2	56.5	56.1	56.5	56.6	55.4	56.6	57.0	59.8	62.5	64.3	67.5	66.8	64.5	64.1	62.4	60.4	59.5	59.4	58.5	59.1	57.4			
12**	56.6	56.5	56.8	58.0	59.8	57.6	56.6	54.8	53.8	56.4	57.6	59.6	60.7	62.8	62.2	61.4	61.2	59.6	59.1	58.2	57.2	56.5	56.6	58.6			
13	59.3	59.1	59.0	59.7	58.6	56.8	55.3	55.4	55.7	57.4	59.3	60.8	62.8	63.7	63.9	62.7	61.1	59.9	58.7	58.5	58.3	58.5	58.3	58.1			
14	59.0	59.1	61.5	58.7	55.8	56.2	54.8	54.1	54.8	56.2	58.8	61.5	64.3	66.3	65.5	63.6	61.8	59.2	57.9	57.4	57.6	57.7	58.3	58.3			
15	58.4	59.3	59.2	58.9	57.1	55.9	53.7	52.2	50.9	53.5	57.1	62.0	66.0	67.2	67.1	64.7	62.4	59.9	58.0	57.4	57.6	57.0	56.8	57.3			
16	58.5	58.1	57.2	57.1	57.1	54.4	52.9	52.1	52.0	55.1	58.8	63.3	66.0	66.0	64.7	63.0	61.2	59.6	59.1	59.0	59.0	59.1	59.1	59.2			
17	58.8	59.0	58.1	57.7	57.0	54.5	52.8	53.0	54.4	56.6	60.0	65.0	67.0	67.0	67.0	65.1	62.0	59.7	59.1	59.3	59.0	59.0	59.1	59.1			
18	58.4	57.9	57.7	57.9	55.3	54.4	54.0	54.5	54.9	56.4	57.9																

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	
July. <span style="float: right;">12° + Tabular Quantities.</span>																										
1**	57.8	55.8	54.4	55.4	54.4	53.9	52.9	52.5	53.5	54.9	56.4	60.9	63.3	64.6	63.8	62.9	61.4	59.9	58.6	58.5	58.8	57.8	57.6	56.9	57.4	56.9
2	57.9	55.5	55.3	55.6	55.2	54.1	52.9	52.4	50.9	51.9	55.7	59.6	62.9	64.9	65.7	65.0	62.9	61.2	58.9	58.3	57.9	55.9	57.0	57.4	57.6	57.6
3*	56.9	57.1	56.8	56.8	57.3	55.0	54.1	53.5	54.0	54.8	57.5	60.0	62.4	64.0	64.8	63.0	61.5	60.2	58.8	58.0	58.0	57.7	58.0	56.9	58.2	57.6
4	57.3	57.4	57.1	57.0	55.3	53.0	51.8	50.8	50.0	50.8	53.5	57.0	61.0	63.0	63.0	62.6	61.3	59.8	59.1	58.7	58.4	56.1	56.9	58.2	57.3	57.3
5	58.9	57.3	55.1	53.2	53.5	52.0	51.8	52.0	52.9	54.0	55.2	59.8	62.9	65.9	64.8	62.8	60.8	59.6	59.1	58.7	58.3	58.0	57.6	57.6	57.3	57.3
6	57.6	58.3	58.5	56.6	54.5	53.0	54.1	54.6	53.0	53.1	55.6	59.2	61.6	62.8	64.5	63.6	61.8	61.6	60.6	57.8	58.6	59.6	59.0	57.9	57.9	57.9
7**	57.5	57.6	56.8	56.4	55.6	55.6	54.8	53.6	51.9	53.6	57.9	61.2	61.6	63.1	63.9	63.2	61.0	60.3	58.7	57.8	58.6	59.2	59.3	59.3	59.5	59.5
8	58.5	57.9	56.0	55.4	54.2	54.5	53.8	53.7	51.5	53.3	56.0	58.3	60.6	63.2	63.0	61.1	59.9	58.5	57.5	56.9	57.6	58.4	58.3	58.1	58.3	58.1
9	57.6	57.6	57.6	56.8	54.6	54.2	53.1	52.3	52.8	54.5	56.6	60.0	62.1	63.7	62.7	61.3	59.9	58.9	57.8	57.9	57.7	57.7	58.1	58.3	58.3	58.3
10*	58.7	57.9	57.8	57.0	55.4	53.9	53.4	52.4	52.8	55.3	59.0	62.2	62.8	61.9	61.1	59.9	58.1	57.9	57.9	58.4	58.1	58.9	58.8	59.1	59.1	59.1
11	58.0	57.4	57.2	56.9	55.3	54.1	53.0	53.7	55.0	55.5	56.1	58.5	60.6	61.6	60.8	60.1	59.1	59.0	58.6	58.1	58.1	59.1	59.4	58.7	58.7	58.7
12	59.2	58.9	59.2	57.2	55.7	55.9	54.9	53.9	54.4	56.4	59.2	61.7	63.1	62.2	61.9	61.2	60.0	58.2	57.3	57.3	58.3	58.9	58.9	59.0	59.0	59.0
13	58.7	58.3	57.4	56.6	55.2	53.2	53.1	52.3	52.6	54.3	56.9	59.3	61.0	62.3	62.4	61.3	59.7	58.0	57.4	58.3	58.8	58.0	57.2	57.6	57.6	57.6
14	55.5	56.5	57.3	57.3	54.3	53.2	52.3	52.3	53.4	55.4	58.5	61.3	63.1	63.1	62.1	61.3	60.2	58.7	58.0	58.1	58.0	57.3	57.3	57.5	57.5	57.5
15*	57.7	57.2	57.0	57.1	55.5	53.4	52.6	50.2	51.9	55.2	59.2	62.2	63.9	65.3	65.0	63.1	61.0	59.5	59.3	59.1	58.6	58.4	58.6	58.6	58.3	58.3
16*	58.0	58.2	57.2	56.7	54.7	53.0	52.3	52.0	52.9	56.0	59.0	60.8	62.3	63.0	62.9	61.7	61.3	60.0	59.3	58.4	58.7	58.7	58.4	58.9	58.9	58.9
17	58.8	55.9	54.9	55.6	55.1	55.2	62.6	59.8	56.5	56.8	58.9	62.5	64.9	66.2	66.7	65.4	62.9	60.9	58.9	57.9	58.0	58.4	57.9	57.5	57.5	57.5
18	56.9	56.7	56.1	56.8	54.8	52.5	51.5	50.8	51.7	53.5	57.6	61.5	63.1	63.8	63.5	62.7	61.5	59.8	58.6	57.7	57.8	57.1	56.6	56.7	56.7	56.7
19	56.7	56.3	55.7	55.6	54.9	53.7	52.7	53.2	53.2	53.7	57.0	60.7	63.4	65.6	65.6	65.7	61.9	60.9	61.0	60.1	59.2	57.7	55.0	56.1	56.1	56.1
20	56.5	56.2	55.8	55.8	56.2	54.1	53.9	52.6	52.9	54.4	57.6	60.8	63.9	64.3	63.8	63.9	61.1	60.8	58.4	55.2	57.6	58.9	58.4	58.9	58.9	58.9
21**	59.8	57.9	57.0	54.9	54.0	53.0	54.4	52.9	52.9	54.9	56.9	58.9	60.8	62.5	62.7	60.9	59.8	58.6	57.8	56.9	57.2	50.7	52.9	56.9	56.9	56.9
22**	55.2	57.0	74.0	40.0	38.7	47.0	58.5	56.9	51.0	53.8	55.0	60.5	67.0	66.4	68.2	67.3	61.0	56.3	54.0	55.8	57.0	60.0	57.6	57.2	57.2	57.2
23**	56.1	55.7	55.3	55.4	54.2	53.1	52.6	51.9	52.1	53.8	55.1	57.9	59.8	63.1	62.7	61.5	61.1	58.9	57.2	57.1	57.0	56.6	58.4	56.6	56.6	56.6
24	56.1	56.8	57.1	57.4	56.1	54.1	53.1	52.3	51.6	52.6	55.4	59.3	62.3	62.8	62.5	61.1	59.7	58.1	57.6	57.2	56.6	55.7	56.3	56.7	56.7	56.7
25	56.9	56.8	55.5	54.4	54.8	54.4	51.2	50.1	51.5	52.1	54.9	58.9	61.2	62.8	62.2	60.3	59.3	59.1	58.6	58.9	56.6	56.7	57.1	56.9	56.9	56.9
26	57.1	55.2	56.1	55.1	53.9	53.1	53.6	53.5	53.8	54.4	56.1	58.4	61.1	63.1	63.6	61.8	59.9	57.7	56.6	56.1	55.6	57.1	56.5	54.3	54.3	54.3
27	54.9	54.1	53.3	52.2	50.5	50.1	50.4	50.2	51.2	53.0	55.6	59.8	62.6	63.5	62.6	60.6	59.2	58.2	56.2	54.8	54.4	54.2	54.3	54.3	54.3	54.3
28	57.3	57.5	58.9	55.6	53.3	52.8	49.9	48.3	49.4	52.6	55.6	59.6	63.3	63.8	63.4	60.9	57.9	56.4	56.4	56.4	56.6	56.6	56.6	56.7	56.7	56.7
29*	56.7	56.9	57.1	56.7	55.5	53.7	52.2	52.4	53.8	56.5	59.5	61.9	64.5	65.4	64.5	62.7	60.0	58.1	56.8	57.1	57.1	57.1	57.3	56.1	56.1	56.1
30	56.1	56.6	57.1	58.0	58.1	54.4	55.1	54.4	54.1	55.6	59.0	60.8	62.4	62.9	62.7	60.8	59.1	57.6	56.8	55.1	55.7	56.6	56.5	56.5	56.5	56.5
31	56.6	56.2	56.1	56.1	55.0	52.9	52.6	52.8	55.0	57.6	59.1	60.6	62.6	62.9	61.6	60.8	58.8	57.5	56.6	56.1	55.7	56.6	57.3	57.6	57.6	57.6
Mean	57.3	56.9	57.1	55.7	54.4	53.4	53.4	52.7	52.7	54.3	57.0	60.1	62.5	63.7	63.5	62.3	60.4	59.0	57.9	57.5	57.6	57.4	57.4	57.4	57.4	57.4
Mean*	57.6	57.5	57.2	56.9	55.7	53.8	52.9	52.1	53.1	55.6	58.8	61.4	63.2	63.9	63.7	62.1	60.4	59.1	58.4	58.2	58.1	58.2	58.2	58.2	58.0	58.0
Mean**	57.3	56.8	59.5	53.6	51.4	52.5	54.6	53.6	52.3	54.2	56.3	59.9	62.5	63.9	64.3	63.2	60.9	58.8	57.3	57.2	57.7	56.9	57.2	57.4	57.4	57.4
August. <span style="float: right;">12° + Tabular Quantities.</span>																										
1	57.6	57.4	56.6	56.6	55.6	54.0	53.9	53.6	54.1	55.6	57.0	59.1	60.2	60.0	60.5	60.1	60.1	58.0	57.7	55.8	53.5	52.1	52.1	54.4	54.4	54.4
2	54.3	56.3	57.6	56.0	55.5	55.8	61.4	58.6	55.5	57.7	57.4	59.8	61.8	62.0	62.8	62.6	61.6	59.4	57.3	54.4	57.2	57.0	56.7	56.2	56.2	56.2
3	54.9	53.4	56.2	57.1	56.2	55.2	54.2	52.6	53.5	54.2	54.2	56.6	58.2	60.1	60.2	59.6	59.5	57.9	56.6	56.8	57.0	57.1	56.6	56.6	56.6	56.6
4	57.1	57.8	59.5	56.7	53.1	52.4	53.0	52.6	54.2	55.3	58.5	60.8	63.2	63.6	62.1	59.6	58.8	57.6	57.1	57.6	57.7	57.6	57.5	56.6	56.6	56.6
5	56	56.3	57.3	56.4	54.9	53.4	53.6	53.6	55.6	56.8	58.6	61.6	63.2	64.1	63.8	60.5	59.9	58.4	56.8	56.8	57.8	57.8	55.8	56.8	56.8	56.8
6*	56.2	56.2	56.5	56.6	57.0	54.9	53.7	53.5	54.2	55.5	57.0	58.9	60.5	60.8	60.3	59.3	57.9	57.4	57.2	57.6	57.0	57.2	57.7	57.2	57.2	57.2
7*	57.5	57.2	56.9	55.7	55.1	54.4	55.9	54.8	55.6	56.4	58.2	60.6	62.0	61.4	60.7	59.4	58.0	57.4	57.0	57.9	58.0	57.3	57.0	56.5	56.5	56.5
8	56.1	56.0	56.1	56.1	55.1	53.7	54.6	54.9	56.1	58.1	60.2	63.5	64.4	63.1	61.8	59.7	58.0	57.1	55.1	55.5	57.0	57.3	57.4	57.2	57.2	57.2
9	57.1	56.6	56.5	56.0	57.1	54.1	55.0	56.4	55.9	57.1	58.2	60.2	61.5	61.6	60.4	58.4	56.5	55.5	56.0	56.3	57.0	57.0	56.8	56.5	56.5	
10	56.1	56.0	55.3	54.9	53.5	53.0	54.0																			



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	
<b>September.</b>																										
<i>12° + Tabular Quantities.</i>																										
1	56.0	56.7	55.6	55.3	56.1	59.6	57.7	54.6	54.9	56.8	60.8	64.5	66.1	65.9	64.0	56.2	54.4	52.9	55.2	56.9	56.5	54.0	56.1	55.6		
2	55.3	55.1	55.1	53.2	53.4	52.5	51.1	50.5	52.3	55.6	59.2	62.5	63.2	62.5	61.3	58.2	56.5	56.3	56.7	57.2	57.2	57.0	56.6	56.3		
3	55.9	53.4	53.6	53.7	53.4	53.3	53.3	55.0	56.4	57.4	61.1	62.5	63.0	62.4	61.5	59.5	57.5	56.6	56.6	55.5	55.2	57.3	54.5	55.3		
4**	53.8	52.6	55.2	53.7	53.1	53.6	53.3	53.6	55.0	59.6	60.9	64.4	66.5	66.6	65.9	60.4	55.8	54.0	50.6	56.9	56.6	53.6	54.0	53.3		
5	53.0	55.8	54.9	54.6	54.6	55.6	55.2	55.2	55.9	57.0	58.0	59.6	60.5	60.6	59.7	59.4	58.8	58.4	58.2	57.7	57.4	56.6	56.6	55.8		
6**	55.4	55.2	55.2	55.1	54.6	54.6	53.6	53.2	52.6	53.0	55.6	59.8	61.6	62.6	62.0	61.5	61.1	62.5	60.8	60.3	59.4	58.3	56.7	56.6		
7**	55.9	54.4	54.1	53.7	54.5	53.4	52.6	49.5	50.1	53.8	57.5	61.5	62.0	62.8	63.5	61.1	58.7	57.3	56.0	51.7	48.8	53.3	53.7	52.9		
8	50.9	53.2	53.3	54.8	54.8	53.4	51.8	52.0	54.8	55.7	57.4	61.3	65.6	66.2	64.8	63.6	59.9	58.1	57.1	56.2	56.3	56.3	56.2	51.8		
9**	48.4	45.9	48.0	51.1	53.1	52.1	52.1	51.0	53.8	58.1	61.7	63.0	64.1	65.6	62.0	60.5	58.7	56.0	52.9	44.0	49.6	50.0	54.1	59.0		
10**	58.9	52.3	54.9	54.9	55.8	55.9	56.1	54.5	54.7	56.0	59.7	61.2	62.4	62.8	60.8	57.8	58.8	59.4	55.5	54.8	54.4	54.7	51.1	49.8		
11	55.7	54.7	52.4	53.8	53.7	53.7	54.3	52.2	51.6	53.2	56.2	60.6	62.6	64.4	61.1	59.3	56.7	53.3	51.9	54.7	55.6	52.0	51.4	52.9		
12	54.2	54.0	54.2	54.3	53.9	53.3	52.4	51.8	52.2	55.5	58.2	62.4	64.2	63.6	62.0	59.0	56.6	54.1	55.4	56.1	56.1	56.1	56.2	55.7		
13	54.1	54.1	55.6	56.0	55.9	58.8	53.1	52.6	51.5	53.8	55.9	60.9	62.8	64.0	60.7	59.0	58.0	56.3	56.6	54.0	53.0	51.7	51.5	53.3		
14	55.7	55.9	53.9	55.9	54.9	54.5	53.3	52.0	52.9	54.3	56.9	59.6	61.8	62.0	61.7	59.9	57.5	57.5	57.9	56.9	56.4	51.9	46.9	50.9		
15	52.9	57.6	55.9	53.8	52.8	54.1	52.5	51.0	50.9	52.9	55.5	58.9	61.9	64.2	62.4	59.9	56.6	56.3	57.5	56.3	55.9	53.9	54.9	54.1		
16*	54.9	55.9	54.7	54.8	54.6	54.3	53.0	51.6	51.8	53.6	55.9	59.1	63.5	62.4	61.9	59.7	57.6	56.3	56.3	55.9	53.6	54.2	54.7	54.9		
17*	54.9	54.1	53.4	53.2	54.9	53.9	53.1	52.0	50.6	50.9	52.9	55.3	57.9	59.9	60.5	58.9	58.2	56.0	52.9	55.2	55.7	55.9	54.9	54.9		
18	54.8	54.1	54.7	54.2	53.9	53.9	53.4	52.5	52.2	53.0	54.9	57.9	60.7	61.2	60.9	60.1	58.9	58.1	57.0	56.4	55.9	52.9	52.4	54.9		
19	53.4	52.0	51.0	50.9	53.8	53.7	53.0	52.7	51.7	51.9	53.9	56.8	60.4	61.2	60.7	59.7	58.3	57.1	56.5	55.8	54.9	55.2	55.8	55.0		
20	54.8	54.5	54.4	52.9	52.8	53.3	51.5	50.9	50.6	52.5	54.4	56.4	59.9	62.3	61.1	60.7	57.9	57.9	51.9	53.9	55.0	55.3	54.1	53.5		
21	54.5	54.2	54.0	54.3	54.1	53.0	52.3	56.4	54.1	53.4	56.0	58.1	60.0	60.2	59.4	58.3	57.4	56.9	56.7	56.4	55.9	54.8	53.7	55.1		
22*	54.0	54.6	54.1	54.2	53.9	53.8	53.2	52.5	52.3	53.8	56.3	59.2	60.5	60.2	59.4	58.2	57.2	56.4	56.1	54.2	53.3	54.3	55.1	55.2		
23*	55.2	55.2	55.1	54.6	54.2	53.5	52.4	51.2	50.8	52.7	56.5	59.3	59.8	59.3	58.7	57.5	56.8	56.8	56.7	56.3	56.0	55.9	53.8	54.6		
24*	55.3	55.1	54.9	53.9	54.5	55.0	53.2	52.3	52.0	53.5	56.2	59.7	61.8	61.1	60.1	58.1	56.5	55.5	55.4	55.4	55.3	55.2	55.8	55.8		
25	55.2	54.7	54.7	54.8	54.7	55.0	54.3	52.9	52.7	53.9	57.3	61.3	63.0	62.3	60.3	58.3	57.2	56.3	54.3	47.9	53.8	54.7	47.1	48.9		
26	52.2	49.2	56.1	54.5	52.7	53.3	52.9	53.2	52.8	55.2	59.2	62.2	64.6	64.3	64.2	59.4	56.9	56.8	53.2	53.2	53.5	54.8	53.8	54.8		
27	55.2	55.4	55.2	55.2	55.1	54.3	53.3	52.0	51.3	53.8	57.2	60.3	62.7	62.2	60.8	58.5	56.3	54.4	50.9	50.2	53.8	53.4	52.7	54.4		
28	54.2	55.4	54.4	55.0	54.8	56.6	54.3	51.5	52.3	54.6	58.3	63.3	64.6	63.9	62.5	60.5	58.9	56.0	52.6	53.3	53.3	53.9	53.8	52.7		
29	53.0	54.8	55.8	54.4	54.3	54.1	53.1	52.0	51.6	52.8	56.6	60.0	63.4	65.1	64.6	61.5	57.4	53.8	55.4	55.4	54.4	51.8	50.2	53.4		
30	55.5	55.0	54.9	54.6	54.1	53.9	53.2	50.7	50.5	52.4	55.9	58.3	60.7	61.8	61.7	60.5	56.0	55.5	56.6	54.1	53.5	52.7	53.3	54.5		
Mean	54.4	54.2	54.3	54.2	54.2	54.3	53.3	52.4	52.6	54.4	57.2	60.3	62.4	62.8	61.7	59.5	57.6	56.4	55.4	54.8	54.9	54.4	53.7	54.2		
Mean*	54.9	55.0	54.4	54.1	54.4	54.1	53.0	51.9	51.5	52.9	55.6	58.5	60.7	60.6	60.1	58.5	57.3	56.2	55.5	55.4	54.8	55.1	54.9	55.1		
Mean**	54.5	52.1	53.5	53.7	54.2	53.9	53.5	52.4	53.2	56.1	59.1	62.0	62.3	64.1	62.8	60.3	58.6	57.8	55.2	53.5	53.8	54.0	53.9	54.3		
<b>October.</b>																										
<i>12° + Tabular Quantities.</i>																										
1*	55.6	55.7	55.6	55.6	56.2	54.6	52.7	51.2	50.9	52.8	55.4	59.3	61.7	62.2	60.7	58.7	56.3	55.6	53.9	55.1	55.1	55.3	55.3	55.3		
2	55.4	55.8	54.8	57.3	55.1	54.8	53.8	51.9	51.0	52.8	55.4	59.1	61.2	61.9	59.7	57.8	56.8	54.3	51.5	54.4	54.3	45.6	43.5	45.9		
3	51.1	54.0	50.5	53.9	54.0	56.0	55.0	51.4	50.5	51.2	53.9	57.5	59.3	60.1	59.8	58.0	55.7	54.7	54.6	54.1	52.8	52.8	54.2	54.6		
4*	54.9	53.9	53.5	54.5	55.3	55.1	53.3	51.9	50.0	51.7	55.2	58.5	60.1	59.8	59.3	57.5	56.2	55.8	55.8	55.5	55.3	54.8	54.8	54.8		
5	54.7	54.7	54.7	54.8	54.8	54.5	53.1	51.2	50.1	51.8	55.0	59.6	61.8	62.4	61.7	60.6	60.0	59.7	58.1	57.0	48.6	50.6	51.2	45.2		
6	43.8	49.0	53.3	52.1	50.9	52.3	52.6	52.3	53.8	58.3	58.3	60.5	62.3	62.0	60.5	58.6	56.3	55.7	55.5	55.5	55.4	55.2	54.9	54.9		
7	55.3	55.1	54.6	55.6	54.7	54.3	53.6	53.6	53.1	52.8	56.6	60.3	62.7	64.7	58.1	60.7	57.2	53.8	50.7	48.9	45.7	41.7	39.1	43.7		
8	45.8	46.8	48.8	54.4	56.8	56.5	56.2	55.8	55.8	58.4	59.1	59.8	59.9	59.9	58.7	57.5	56.4	55.4	55.0	54.9	54.9	54.9	54.8	54.7		
9	54.2	54.3	54.3	54.3	54.3	54.0	53.1	51.4	49.9	50.5	53.2	56.3	58.4	59.1	59.8	59.0	59.0	59.3	58.1	55.8	56.0	56.0	52.2	52.0		
10**	52.8	53.6	54.4	54.9	54.6	54.0	53.3	51.6	50.0	54.8	56.0	58.1	62.4	62.9	64.0	62.4	57.0	56.6	53.2	52.1	49.6	50.5	50.0	52.1		
11	53.5	54.6	55.0	55.5	55.2	54.2	53.5	51.9	51.1	55.3	56.0	59.1	61.3	61.3	59.1	57.8	56.2	55.0	54.1	54.1	54.0	54.2	54.2	54.1		
12**	54.6	55.0	59.0	56.0	55.0	56.0	57.0	54.1	51.6	52.3	45.5	45.5	60.0	67.0	71.0	66.0	61.5	60.0	47.0	50.5	37.0	50.6	51.2	55.6		
13**	50.0	54.8	55.1	54.0	53.7	52.9	53.0	52.0	50.8	50.9	53.2	57.3	61.5	63.9	64.8	62.1	56.9	58.2	57.9	55.9	54.3	53.9	53.4	53.5		
14	54.0	54.4	54.2	54.3	55.3	54.7	53.8	52.6	51.0	51.2	53.8	56.8	58.4	59.7	58.7	57.2	56.1	55.5	55.6	52.2	54.7	54.7	52.7	52.2		
15	53.2	51.7	52.6	53.6	53.8	53.9	53.9	53.1	52.4	53.6	56.5	59.6	60.5	59.9	58.9	57.1	56.5	56.1	54.8	54.3	54.6	54.5	52.5	50.7		
16	52.0	53.5	53.7	53.8	53.7	53.7	53.1	52.6	51.6	51.7	54.6	57.7	59.3	59.8	59.4	58.4	56.9	55.5	53.5	54.3	54.6	53.8	53.6	54.0		
17*	54.0	53.6	53.6	53.7	54.8	53.5	52.7	51.6	50.6	52.6	55.6	59.0	61.0	61.6	59.8	57.7	56.2	55.6	54.2	54.0	54.1	54.2	54.4	54.3		
18	53.9	54.6	54.2	53.6	53.6	53.5	52.8	51.6	50.6	51.3	54.3	57.4	59.2													

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>																											
<i>12° + Tabular Quantities.</i>																											
1	52.9	53.5	54.4	53.6	53.6	53.4	53.0	52.0	51.4	51.9	54.4	56.8	57.9	57.7	57.0	56.1	55.4	54.8	54.4	54.3	53.8	53.5	53.4	53.2			
2*	53.4	53.5	53.5	54.0	53.8	53.5	53.2	52.5	51.2	51.4	53.5	55.8	57.3	57.5	56.6	55.6	54.8	54.1	53.9	53.8	53.6	53.7	53.1	53.0			
3	53.1	53.4	53.4	53.3	53.0	52.7	52.6	52.3	51.7	52.0	54.5	56.1	57.2	57.5	56.3	55.2	54.6	54.2	53.6	54.2	54.3	53.9	53.6	53.6			
4	53.6	53.5	53.5	53.3	53.6	53.1	52.8	52.6	52.2	52.3	54.7	57.1	58.5	58.2	57.3	55.7	55.0	54.9	54.4	53.9	49.6	51.3	50.7	50.7			
5	51.7	51.6	53.1	53.6	53.3	53.1	52.8	52.8	52.6	53.0	55.2	57.2	57.7	56.9	56.2	55.7	55.6	55.0	54.7	54.6	54.5	54.1	54.1	54.1			
6	54.1	54.4	54.3	54.3	54.0	53.8	53.4	53.0	52.4	52.5	54.4	56.7	57.8	57.6	57.0	56.0	55.0	54.2	54.1	53.7	53.7	53.6	53.8	54.0			
7*	53.9	53.9	53.9	53.9	53.8	53.6	52.9	52.1	51.2	51.7	54.2	56.7	58.4	58.6	57.6	56.1	55.5	54.9	54.4	54.0	53.6	53.4	53.5	53.6			
8	53.7	54.2	54.3	54.3	53.8	52.9	52.2	52.1	52.1	52.2	54.9	57.5	58.5	58.0	57.5	56.9	56.4	55.5	54.7	54.0	53.6	52.9	53.4	53.7			
9	53.7	53.3	53.6	53.7	53.2	52.5	52.2	52.2	51.7	51.9	53.5	56.4	57.4	56.9	56.2	55.3	55.1	54.7	54.1	53.8	53.2	53.1	53.1	53.2			
10	53.3	53.7	53.9	53.9	53.5	52.9	52.4	51.8	51.1	50.9	53.6	56.8	58.6	57.5	56.7	55.6	55.0	54.4	54.3	53.6	53.4	52.8	53.1	53.6			
11	54.1	54.3	54.3	54.6	54.3	53.8	52.7	52.5	51.7	51.4	53.5	56.3	57.4	57.5	56.4	55.6	55.0	54.4	53.4	53.3	52.8	52.7	52.2	49.8			
12	54.5	52.5	53.4	53.5	52.7	53.1	52.4	51.7	51.7	52.3	54.4	57.4	58.9	59.5	58.7	58.3	58.2	56.6	54.8	54.2	53.5	52.5	52.6	52.5			
13	52.0	51.6	48.3	50.0	50.5	51.7	51.7	51.9	51.6	52.1	54.2	55.5	56.6	56.6	56.4	55.6	55.4	54.6	54.3	53.6	53.6	52.8	52.6	52.9			
14*	53.0	53.2	52.7	52.8	52.9	52.6	52.2	52.0	51.6	51.7	53.5	54.6	55.7	56.2	55.8	55.6	54.8	54.7	54.1	53.9	53.7	53.3	52.9	52.9			
15	53.3	53.4	53.6	53.7	53.5	53.4	52.8	52.2	51.7	51.6	53.4	55.4	56.5	56.1	55.8	55.4	54.8	54.4	53.8	53.3	53.3	53.1	53.1	52.9			
16	52.9	53.0	53.0	53.3	53.7	53.1	52.9	52.1	51.6	52.1	54.0	55.1	56.1	56.1	56.0	55.4	55.1	54.9	54.4	54.1	53.5	53.2	53.3	52.4			
17	51.3	51.7	51.3	51.2	52.0	52.1	52.2	52.2	52.2	53.2	54.4	55.5	56.3	56.2	55.4	54.9	54.3	54.0	53.7	53.6	53.3	53.3	53.3	53.3			
18**	53.2	53.4	53.4	53.4	53.6	53.4	52.9	52.4	52.9	53.7	55.9	57.5	56.9	56.3	57.6	56.9	56.9	46.9	47.6	45.1	46.8	43.5	39.0	46.6			
19**	52.0	52.7	53.9	53.7	53.7	53.4	53.1	52.7	53.1	54.0	54.2	55.0	55.3	55.8	55.6	54.8	54.8	53.4	53.4	52.5	49.0	50.8	51.4	51.8			
20	50.4	53.9	52.1	52.7	52.8	52.8	52.4	51.9	51.9	52.0	53.9	53.4	55.8	56.0	54.0	53.9	54.9	53.9	52.5	52.2	51.3	51.6	50.8	51.6			
21**	52.3	53.3	54.9	53.2	53.2	52.9	52.3	52.1	52.2	52.6	54.0	55.2	55.9	56.1	55.7	55.7	54.7	53.6	53.1	52.3	50.2	50.1	52.1	52.2			
22*	52.7	53.2	53.3	53.3	53.2	52.6	52.3	52.1	51.7	52.3	53.9	55.3	56.3	55.9	55.2	54.4	53.9	53.5	53.1	52.8	52.3	51.8	51.9	51.9			
23	52.1	52.4	53.4	53.4	53.4	52.4	52.4	51.6	51.6	52.3	54.5	55.6	56.4	55.9	55.3	54.4	53.6	53.4	53.1	53.0	52.5	52.5	52.9	52.9			
24	51.6	52.5	52.6	52.9	53.0	52.5	52.4	52.2	51.6	52.1	53.5	55.5	57.3	58.0	57.5	56.5	54.9	54.9	54.5	53.0	51.8	51.5	48.5	50.9			
25*	52.1	53.1	53.0	53.1	52.8	52.5	52.5	52.5	51.6	51.7	53.6	55.1	56.4	56.5	55.6	54.7	53.9	53.6	53.3	52.7	52.5	52.4	52.5	52.5			
26	52.6	53.1	53.3	53.5	53.3	53.1	52.5	52.4	52.3	52.6	54.5	56.0	56.5	56.1	55.1	54.5	54.5	54.5	54.3	53.3	53.1	52.6	52.5	50.4			
27	52.2	52.5	53.3	53.4	53.5	53.3	52.6	52.5	52.0	52.4	53.6	55.0	55.6	55.5	54.6	54.6	54.4	54.4	54.4	52.4	52.6	50.5	52.1	52.6			
28	52.8	53.4	53.4	52.5	53.4	52.9	52.5	52.3	52.3	52.9	54.5	55.4	56.0	56.0	55.5	55.2	54.5	53.9	53.5	52.9	52.7	52.5	52.5	52.9			
29**	52.8	53.6	53.6	53.5	53.5	53.1	52.5	52.4	52.3	52.8	54.5	55.4	56.0	56.1	57.2	58.6	59.3	56.6	53.2	51.9	51.5	51.2	48.4	49.4			
30**	49.4	46.0	48.4	48.9	50.6	52.7	52.8	54.6	54.5	55.6	57.0	58.8	57.3	56.3	56.1	55.1	53.7	53.5	53.7	53.1	53.3	50.6	51.6	51.8			
Mean	52.6	52.9	53.1	53.2	53.2	53.0	52.6	52.3	52.0	52.4	54.3	56.0	57.0	57.0	56.3	55.6	55.1	54.2	53.7	53.1	52.6	52.2	51.9	52.2			
Mean*	53.0	53.4	53.3	53.4	53.3	53.0	52.6	52.2	51.5	51.8	53.7	55.5	56.8	56.9	56.2	55.3	54.6	54.2	53.8	53.4	53.1	52.9	52.8	52.8			
Mean**	51.9	51.8	52.8	52.5	52.9	53.5	52.7	52.8	53.0	53.7	55.1	56.4	56.3	56.9	56.4	56.1	55.9	52.8	52.2	51.0	50.2	49.2	48.5	50.4			
<b>December.</b>																											
<i>12° + Tabular Quantities.</i>																											
1	52.0	52.4	52.5	52.6	53.0	52.5	52.3	52.5	52.5	52.9	54.5	56.5	58.8	57.5	56.6	55.1	54.5	54.1	53.5	53.5	52.1	51.5	51.6	50.6			
2	47.1	48.6	49.7	49.7	49.5	50.8	51.7	52.1	52.5	52.6	54.2	55.9	57.2	55.6	56.9	54.9	54.0	53.7	52.3	48.6	52.7	52.7	51.5	51.4			
3	51.4	52.3	53.3	53.1	53.1	52.6	52.2	52.2	52.0	52.7	54.0	54.8	54.7	54.2	53.9	52.7	53.3	53.2	53.0	52.8	52.3	52.3	52.6	52.6			
4*	52.5	52.7	52.9	53.2	53.0	52.5	52.6	52.3	52.2	52.7	53.8	55.0	55.4	55.5	55.8	54.9	54.4	54.1	53.6	53.5	53.0	52.9	52.8	52.7			
5	52.7	52.1	52.2	52.1	52.1	52.2	52.3	51.8	51.8	51.7	52.4	53.5	55.5	55.8	54.9	55.7	54.1	53.6	52.8	50.3	50.9	51.6	52.4	52.4			
6	52.8	53.0	53.5	53.4	53.4	53.0	52.9	52.7	52.6	53.8	53.9	54.3	54.2	55.3	56.2	52.6	51.9	54.1	53.9	51.0	51.9	52.0	52.0	51.8			
7	52.0	52.0	51.0	52.2	53.0	52.0	52.5	53.0	52.6	53.1	53.2	55.0	55.2	54.2	54.8	54.8	53.7	51.3	52.8	52.6	52.1	52.1	51.6	52.1			
8	52.6	52.9	53.1	53.2	53.7	53.2	52.3	52.2	51.7	53.1	54.7	55.2	56.0	55.7	54.8	54.3	53.2	53.2	49.9	50.7	50.7	49.2	48.2	49.7			
9	50.9	52.0	52.1	53.0	53.2	53.7	53.7	52.2	51.7	51.5	53.1	54.9	54.8	56.3	55.4	55.3	53.6	53.7	50.3	51.8	52.0	50.3	49.8	51.3			
10	52.4	52.5	53.3	53.2	54.4	53.8	53.1	52.8	52.5	53.1	53.5	54.5	56.5	55.8	56.7	55.4	54.4	53.5	53.3	51.6	51.0	51.6	51.6	52.3			
11	52.0	52.8	54.3	53.5	53.3	52.7	52.7	52.6	52.1	52.7	53.9	55.2	56.7	56.4	55.2	54.3	53.6	53.5	53.3	53.1	52.7	52.5	51.6	51.5			
12	52.4	53.3	53.4	53.5	53.8	53.2	52.8	52.6	52.2	53.1	54.1	54.6	54.8	55.0	55.1	54.2	53.7	53.4	53.1	53.0	52.9	52.4	51.9	51.5			
13**	51.8	52.1	52.8	53.1	53.4	53.4	52.9	52.7	52.3	52.5	54.0	56.7	59.6	61.3	63.6	56.0	51.6	50.6	50.1	49.0	46.5	44.2	47.6	39.8			
14**	41.9	45.0	51.8	49.8	51.0	54.5	53.3	54.5	53.9	53.5	53.5	54.2	56.0	55.4	54.9	54.0	53.4	52.9	53.4	53.3	52.4	52.3	52.4	52.3			
15	52.3	52.5	52.3	52.7	52.6	52.8	54.3	56.4	54.3	53.4	52.7	53.5	55.8	56.2	54.1	54.5	53.1	50.6	42.9	50.9	50.1	51.1	51.2	51.1			
16	51.5	52.0	53.7	52.0	51.8	52.0																					

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

	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 $\gamma$ ).																											
January.																											
1**	583	585	586	581	580	582	583	585	586	591	588	593	588	585	592	583	581	591	593	593	595	591	576	583			
2	578	575	575	579	587	573	577	580	577	572	566	561	564	567	564	567	577	579	582	581	577	580	585	585	586		
3	586	586	587	587	587	587	587	585	583	580	579	577	578	578	580	585	588	591	591	588	588	588	585	583	585		
4**	587	591	587	588	597	592	588	585	580	570	561	556	557	565	568	575	577	584	557	594	604	548	567	572	572		
5	572	574	569	576	581	588	588	588	585	584	586	586	575	567	583	588	590	586	583	588	585	583	582	580			
6	580	582	573	581	578	577	580	580	581	582	590	583	585	580	572	580	584	588	588	587	588	585	587	584			
7**	584	587	588	589	591	592	592	592	585	567	566	527	516	516	546	540	508	500	489	470	518	500	539	536			
8	527	530	535	543	542	547	546	551	559	548	543	540	540	543	545	552	556	561	504	568	567	567	565	565			
9*	564	565	567	570	570	572	574	574	574	568	564	561	558	558	562	564	565	568	573	574	573	573	572	572			
10*	578	574	574	573	572	577	581	580	578	576	574	572	569	569	570	571	576	579	582	585	590	587	585	581			
11	588	586	582	583	583	585	590	586	586	584	582	577	565	559	554	568	569	552	551	562	567	573	576	577			
12	577	581	588	575	580	578	584	586	577	568	581	581	573	567	559	544	559	565	570	574	575	582	584	570			
13	568	566	568	569	570	574	577	581	576	567	577	577	574	569	552	566	576	580	581	582	582	581	576	572			
14	574	578	577	577	578	576	577	579	580	580	577	572	570	572	572	572	579	574	566	577	580	582	569	581			
15	576	579	580	580	584	587	588	588	585	583	579	563	559	564	553	564	572	577	577	577	572	570	574	578			
16	580	581	580	580	588	585	582	581	579	568	561	561	566	574	574	580	581	581	572	576	580	585	587	586			
17	588	588	590	589	588	593	594	590	591	586	578	575	565	561	571	573	574	568	572	573	577	578	582	582			
18	580	584	588	593	592	590	594	580	576	566	557	555	553	553	500	564	577	581	585	586	585	582	570	580			
19	581	588	593	585	586	590	592	586	580	561	562	558	543	555	563	568	568	565	568	576	585	582	582	584			
20	582	583	584	587	589	590	590	588	583	574	568	569	564	567	572	579	582	582	583	583	583	585	585	584			
21*	586	583	584	586	588	588	593	591	585	579	567	566	569	573	576	577	578	580	582	585	586	587	586	586			
22*	587	588	588	590	591	593	593	594	591	584	576	572	574	578	584	585	585	585	588	588	590	590	590	588			
23*	586	585	588	586	586	591	590	590	587	578	574	570	573	577	581	582	584	586	589	590	589	590	589	589			
24**	590	590	590	593	602	609	613	617	604	597	589	580	584	591	598	598	598	593	585	577	582	578	581	593			
25**	602	590	598	601	602	604	610	605	596	587	576	574	572	566	572	585	585	583	586	586	578	566	569	574			
26	577	582	585	580	577	604	584	563	555	552	543	541	548	563	577	580	570	556	567	573	577	581	582	574			
27	568	574	569	574	574	579	580	582	580	574	569	564	566	571	573	576	571	568	576	582	584	585	583	581			
28	582	582	582	582	580	585	588	585	585	585	581	576	577	577	577	575	575	579	580	584	586	577	582	588			
29	581	578	580	580	583	584	584	584	582	580	574	569	573	578	579	577	579	570	580	582	582	588	587	585			
30	584	583	583	583	585	586	588	590	588	580	576	577	583	582	581	577	578	580	571	579	580	580	590	581			
31	582	582	585	582	580	584	594	601	596	591	580	575	577	580	579	579	581	585	586	583	582	580	579	580			
Mean	579	580	581	581	583	585	586	585	582	576	572	568	566	568	571	573	575	575	575	575	577	580	579	579			
Mean*	580	579	580	581	581	584	586	586	583	577	571	568	569	571	575	576	578	580	583	585	586	585	584	583			
Mean**	589	589	590	590	594	596	597	597	590	582	576	566	563	565	575	576	570	570	562	563	575	557	566	572			
18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																											
February.																											
1	584	587	590	592	595	594	591	594	597	597	591	583	573	567	567	573	578	573	561	557	564	572	581	581			
2	579	582	581	584	586	586	586	583	586	584	583	578	575	575	571	570	573	571	570	578	584	587	587	584			
3	581	586	589	590	590	588	586	586	587	589	589	597	590	592	589	586	594	599	605	591	570	556	544	554			
4	566	564	578	578	578	586	589	583	577	577	572	569	575	582	580	577	578	581	587	588	580	580	584	572			
5	579	582	575	580	583	588	589	591	592	580	577	573	573	578	579	578	577	574	578	581	584	583	583	581			
6*	583	584	584	586	586	587	588	587	587	584	577	573	574	576	581	582	580	588	590	592	591	590	589	590			
7*	590	589	589	589	588	588	589	588	583	578	578	578	575	578	583	587	589	592	595	597	599	599	598	596			
8	595	594	594	596	597	598	597	595	591	581	576	575	586	593	597	595	596	595	587	586	595	583	589	583			
9**	602	581	576	574	588	586	584	583	575	571	570	562	562	573	579	576	582	607	583	597	546	536	546	535			
10**	526	538	555	552	551	554	555	570	581	570	551	547	546	543	546	554	557	562	578	578	580	579	578	578			
11	575	575	577	577	577	579	581	579	575	571	565	558	560	562	565	567	567	563	565	574	578	576	580	562			
12	570	573	573	574	573	574	586	587	583	580	575	570	569	567	567	561	563	565	568	544	536	562	577	571			
13	577	575	579	578	580	583	584	586	583	580	573	543	543	551	553	550	544	573	554	570	588	582	578	585			
14	593	584	573	572	572	578	584	582	584	591	573	573	580	574	571	567	565	561	573	579	582	581	580	579			
15	586	583	583	589	588	586	585	581	587	586	580	573	578	580	581	573	568	578	583	586	586	589	588	588			
16	590	591	585	585	586	589	589	590	581	570	570	576	562	560	549	573	574	578	575	557	569	581	583	580			
17	581	586	579	579	585	578	578	568	578	578	573	572	569	552	565	573	575	567	575	583	594	583	583	587			
18	588	586	582	582	586	588	588	590	588	583	571	572	573	557	562	567	574	568	583	576	591	583	587	587			
19	588	587	587	585	589	590	591	591	593	586	577	583	585	573	558	571	568	568	575	583	583	591	587	586			
20	587	586	588	589	590	587	589	589	583	579	577	575	576	570	573	575	578	580	583	580	583	571	578	583			
21*	582	585	585	58																							

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE 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	
<b>March.</b>																										
18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1	606	580	572	582	562	580	584	567	567	565	570	559	562	545	556	556	562	564	573	572	604	600	580	578		
2*	579	580	581	580	580	580	583	583	584	581	570	568	568	565	558	565	570	578	582	583	583	585	587	587		
3	585	585	585	585	585	583	581	588	582	574	577	576	585	581	581	576	576	579	575	574	597	581	581	582		
4	583	585	584	585	585	585	584	582	574	564	561	562	564	566	560	574	578	584	586	585	582	585	583	582		
5	586	586	587	587	588	589	589	587	581	574	570	571	576	586	590	597	592	597	593	587	584	568	566	577		
6	583	583	582	582	583	587	582	583	579	567	566	567	572	571	575	584	574	579	583	574	576	583	583	596		
7	586	583	580	581	580	587	588	583	578	570	560	558	562	572	581	586	586	584	588	590	570	559	570	576		
8	578	584	584	582	584	586	588	589	585	575	565	560	562	573	583	585	589	593	596	592	591	578	569	580		
9**	568	570	586	592	582	583	596	586	583	581	579	561	565	565	589	578	533	548	551	570	569	562	581	597		
10	566	571	584	579	583	573	563	564	565	540	517	525	517	564	572	568	564	568	576	579	579	579	579	581		
11	576	574	584	572	572	579	577	577	576	564	547	531	540	544	560	573	573	577	573	578	572	576	603	584		
12	577	578	579	581	583	584	585	583	578	566	557	547	551	562	569	578	581	576	586	588	589	586	590	586		
13	585	596	599	588	596	589	589	580	559	532	532	542	559	562	568	562	567	572	578	580	581	580	579	580		
14	583	571	589	580	575	578	577	574	569	565	561	567	564	565	575	556	559	569	577	587	585	587	589	593		
15	600	605	573	576	577	583	581	581	570	555	564	570	579	577	567	562	572	572	564	573	584	593	572	563		
16**	571	572	573	572	582	559	553	563	572	543	538	554	551	546	548	551	546	551	564	536	538	537	526	554		
17**	559	572	568	572	556	564	556	543	536	536	528	538	545	553	569	567	566	560	552	583	530	524	538	554		
18	559	555	553	557	558	558	560	556	547	539	541	529	545	547	553	558	561	566	560	571	566	587	568	581		
19	594	569	569	567	569	578	570	565	559	550	550	555	555	551	570	574	566	582	574	573	579	590	597	590		
20	584	584	584	586	583	576	571	573	558	545	521	523	541	561	552	546	568	560	561	584	574	575	592	594		
21	571	566	571	574	575	576	579	580	576	567	558	559	560	565	572	573	572	572	575	580	579	581	581	582		
22*	583	580	578	580	582	584	585	588	584	574	563	557	560	562	570	573	574	570	575	581	583	590	586	586		
23*	586	584	587	589	591	591	590	587	582	571	561	553	551	559	565	562	575	586	588	589	588	588	582	586		
24*	584	584	584	585	584	585	586	585	574	567	561	561	564	570	576	580	582	583	586	587	588	591	591	592		
25*	590	586	589	589	591	592	594	594	588	581	578	583	589	586	587	588	596	601	602	604	601	599	598	597		
26	597	581	587	590	583	586	586	583	572	562	565	573	554	552	563	559	565	562	559	549	571	578	566	578		
27**	570	564	565	553	556	561	564	562	558	560	558	549	541	556	564	559	558	561	575	623	574	564	567	593		
28**	540	562	571	601	573	580	532	568	553	540	527	535	549	553	566	562	560	561	572	576	575	576	578	575		
29	584	570	574	572	571	580	575	566	562	558	556	561	568	568	570	576	579	577	581	588	596	585	582	584		
30	594	590	581	581	586	587	577	568	560	561	559	566	560	560	574	578	580	583	590	587	581	577	582	585		
31	600	582	582	582	585	590	593	582	571	558	549	558	564	562	571	578	581	584	587	585	594	590	606	605		
Mean	581	578	580	580	579	580	578	576	570	561	555	555	559	563	570	570	571	574	577	581	580	578	579	583		
Mean*	584	583	584	585	586	586	588	587	582	575	567	564	566	568	571	574	579	584	587	589	589	591	589	590		
Mean**	562	568	573	578	570	569	560	564	560	552	546	547	550	555	567	563	553	556	563	578	557	553	558	575		
<b>April.</b>																										
18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1	592	586	585	588	588	574	580	570	556	542	537	539	540	553	567	566	573	578	583	587	588	587	584	577		
2	581	590	580	580	582	580	577	571	553	537	529	530	541	553	569	582	582	589	588	593	593	596	593	588		
3	580	578	579	580	583	582	579	575	562	553	545	548	555	567	584	586	585	586	591	591	590	589	589	587		
4	598	587	590	590	590	590	588	580	572	564	553	555	561	564	577	584	591	603	588	580	590	580	581	583		
5	585	585	584	596	582	583	582	577	572	561	553	545	540	559	572	571	583	592	582	596	592	590	588	583		
6	590	580	578	585	585	585	588	591	580	564	551	545	548	553	569	577	589	591	588	592	588	588	588	588		
7	591	592	590	588	590	591	591	587	580	569	557	557	558	593	569	587	583	581	568	565	574	598	572	577		
8	572	576	577	578	569	572	587	572	562	543	538	524	529	529	527	537	548	555	577	582	581	585	592	592		
9**	590	592	590	585	582	583	588	583	569	556	543	532	524	541	560	613	571	551	540	555	563	567	569	574		
10	577	574	571	565	566	566	572	568	564	537	517	529	533	548	556	558	564	571	583	592	583	591	596	595		
11**	592	588	585	580	579	605	604	591	577	553	527	528	535	536	561	558	597	570	564	568	570	575	572	590		
12**	574	579	597	562	569	572	566	564	559	536	525	537	549	554	556	565	580	582	592	587	588	600	585	584		
13	585	582	583	579	584	581	580	580	573	558	545	538	542	550	566	577	583	587	591	596	595	595	589	596		
14**	618	610	614	622	631	624	627	603	597	531	454	457	451	469	474	504	543	544	541	536	553	552	548	548		
15	553	544	558	552	550	556	538	524	518	501	507	507	526	520	549	562	565	573	572	572	573	572	575	571		
16	571	573	571	569	572	570	567	555	539	530	526	527	530	546	554	560	565	571	573	578	577	578	575	575		
17*	575	576	576	576	575	575	571	563	550	535	525	528	541	555	565	569	583	588	590	588	587	587	585	583		
18*	585	584	586	585	585	587	586	576	561	543	535	539	555	569	571	582	584	586	589	590	590	594	587	587		
19	589	589	589	586	589	589	589	579	572	554	553	557	559	562	569	575	586	591	594	594	596	594	595	583		
20*	578	582	585	586	589	591	591	586	573	558	546	544	548	557	571	582	586	594	594	597	596	597	593	593		
21*	591	592	591	597	599	599	596	594	584	572	564	557	557	565	573	582	589	591	592	591	593	591	589	588		
22*	589	58																								



TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE 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	
<b>May.</b>																										
18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1	591	594	595	596	587	586	580	572	563	555	550	559	567	578	583	595	599	600	599	596	592	594	592	592		
2	591	588	587	591	586	577	574	572	567	562	555	549	555	570	580	585	594	596	591	594	600	598	596	601		
3**	598	599	595	591	595	588	580	575	569	559	548	554	559	572	578	583	620	607	586	575	568	570	557	562		
4	564	569	570	570	571	566	559	555	554	551	548	542	540	553	568	584	590	602	593	592	582	566	558	571		
5**	574	590	601	616	601	538	546	489	466	480	498	500	508	517	527	540	552	569	588	585	575	588	580	575		
6	566	558	561	565	569	571	572	567	558	548	537	534	525	514	540	554	574	579	577	581	582	581	577	577		
7**	576	577	578	582	588	590	597	595	571	573	574	562	561	509	561	569	569	561	569	565	569	564	563	565		
8	562	559	562	545	571	565	567	562	546	535	523	535	549	561	557	575	580	592	594	591	590	588	585	587		
9	595	578	574	577	582	577	573	565	555	552	543	543	553	562	583	599	636	598	589	593	569	570	576	588		
10	582	572	576	581	585	585	580	577	563	554	542	537	545	558	575	587	591	595	593	590	590	591	590	589		
11*	587	583	580	581	583	584	579	572	565	556	548	551	554	562	566	571	578	584	593	588	590	588	592	588		
12*	586	584	583	582	582	582	578	575	569	562	559	562	567	576	585	585	591	592	600	593	590	588	592	594		
13	591	594	588	587	587	585	582	578	574	572	569	573	581	584	583	591	596	595	598	596	602	588	591	589		
14	588	594	600	587	588	588	591	584	578	572	562	569	590	595	599	601	599	598	596	597	595	596	596	597		
15	596	601	601	599	602	601	592	577	556	520	555	572	564	551	572	582	597	583	598	601	590	591	592	591		
16	588	592	590	589	588	587	586	580	568	538	545	552	557	548	558	582	579	595	598	592	588	591	588	591		
17*	593	587	591	595	595	587	582	575	565	556	550	552	546	567	578	585	593	598	596	595	594	594	594	596		
18*	591	587	588	583	585	583	575	566	561	549	556	570	578	584	578	584	589	599	599	599	599	598	598	600		
19	598	596	596	601	603	599	592	569	553	556	563	563	568	564	570	592	617	589	596	590	583	585	584	578		
20**	582	588	602	598	586	569	567	565	559	552	544	553	578	593	567	560	599	612	586	588	588	580	576	591		
21	587	594	570	570	576	578	571	562	556	561	564	562	567	572	578	582	592	599	605	608	604	596	588	597		
22	572	580	583	588	586	588	571	567	556	554	554	556	559	564	575	588	592	594	600	599	593	591	586	586		
23	585	585	586	587	586	584	585	582	578	575	572	571	578	583	593	596	607	608	598	607	601	596	591	587		
24	585	584	588	597	587	587	583	577	575	572	580	592	593	581	591	590	591	591	598	600	596	600	599	599		
25	596	593	593	591	595	595	589	584	576	580	580	583	576	574	572	580	592	598	603	609	610	601	601	604		
26*	602	594	592	592	593	591	585	578	570	563	556	563	569	571	573	583	585	595	605	609	609	604	601	602		
27	598	595	593	591	598	606	601	605	598	580	582	580	582	583	584	597	606	617	631	629	612	615	620	611		
28**	612	607	606	601	600	596	584	567	556	552	555	573	579	587	570	576	604	615	595	605	587	567	565	581		
29	579	572	574	572	564	565	564	556	550	545	554	554	553	564	572	580	589	595	595	602	597	598	593	585		
30	585	581	582	581	587	585	580	570	555	549	550	559	559	560	575	591	601	603	602	596	592	591	593	588		
31	587	588	593	592	590	586	579	570	562	558	557	558	564	576	593	604	605	608	608	606	606	600	597	596		
Mean	587	586	586	586	584	583	579	571	561	555	554	558	562	566	574	583	594	596	596	596	592	589	587	589		
Mean*	592	587	587	587	588	585	580	573	566	557	554	560	563	572	576	582	587	594	599	597	596	594	595	596		
Mean**	588	592	596	598	594	576	575	558	544	543	544	548	557	556	561	566	589	593	585	584	577	574	568	575		
<b>June.</b>																										
18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1	592	594	596	592	591	587	579	570	562	554	562	567	574	581	596	599	609	622	628	617	624	599	585	592	590	
2**	590	593	602	596	593	593	586	581	569	554	559	564	574	580	583	592	595	598	611	611	608	598	591	594		
3	598	596	593	596	598	602	596	584	569	561	556	560	560	585	599	605	610	604	605	600	599	594	593	595		
4	595	593	595	598	598	595	591	584	574	569	563	559	568	573	581	593	597	605	617	620	616	612	615	608		
5**	616	611	605	608	609	589	593	605	593	564	566	546	553	558	569	580	592	600	594	600	602	603	600	592	580	
6	575	576	574	582	576	574	568	562	558	552	555	565	562	565	575	582	592	600	603	602	600	595	592	590		
7	590	587	587	588	591	588	581	566	558	555	554	560	575	573	574	581	598	610	606	601	601	600	598	594		
8*	591	591	591	592	591	588	578	568	555	550	545	566	572	575	584	595	597	598	600	600	598	599	598	597		
9	597	593	594	590	592	597	586	574	566	567	577	580	587	590	589	595	599	598	607	606	600	596	596	601		
10	599	599	595	594	593	590	585	578	577	592	595	589	575	569	565	603	590	613	602	608	607	605	605	613		
11**	613	603	594	595	599	591	590	582	581	578	582	576	563	583	563	578	602	589	597	610	604	599	600	601		
12**	605	590	591	585	578	586	584	569	549	538	574	583	575	583	576	586	578	589	597	602	604	601	587	590		
13	591	596	593	591	586	585	584	578	569	562	562	570	581	581	586	590	589	588	594	597	597	597	598	597		
14	597	596	602	601	594	595	594	589	574	564	557	560	567	574	579	594	592	596	602	602	597	592	592	594		
15	589	592	593	599	592	592	579	577	571	558	556	556	562	574	591	600	597	596	597	599	599	596	596	589		
16	590	592	594	589	595	591	585	580	573	561	556	560	576	585	588	589	598	602	605	606	605	602	598	600		
17	595	596	596	599	603	594	580	570	571	566	565	570	558	579	595	605	602	609	602	609	612	606	597	593		
18	592	593	596	596	595	593	588	584	576	563	558	561	566	578	584	596	603	606	608	606	606	598	595	591		
19*	588	587	588	594	591	589	584	574	566	560	563	566	566	575	580	595	595	598	603	602	597	593	592	590		
20*	591	590	591	593	595	595	590	579	566	555	553	563	575	576	590	595	595	597	600	600	600	599	598	594		
21*	589	588	590	589	589	588	584	579	573	566	566	566	571	576	584	596	602	611	611	604	603	603	606	598	580	
22																										

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE 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	
July. 18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1**	602	590	589	592	597	596	585	569	564	559	559	570	576	551	561	599	603	609	607	608	604	603	599	604		
2	606	601	591	595	597	597	585	574	567	557	553	554	555	567	584	607	601	603	618	615	615	606	587	587		
3*	587	588	589	589	594	591	580	569	559	550	551	551	556	562	577	589	599	604	606	607	597	594	593	591		
4	591	593	595	599	602	596	585	581	569	563	561	561	565	564	587	599	608	609	605	609	612	599	597	595		
5	599	612	604	597	601	598	587	576	564	555	554	565	581	591	585	607	606	605	604	602	598	597	595	595		
6	592	593	600	605	606	604	594	583	574	562	562	559	561	573	575	585	592	599	612	626	607	599	600	601		
7**	600	591	589	593	594	601	596	590	579	559	567	553	564	557	576	588	592	596	599	599	598	594	594	598	594	586
8	596	596	589	597	596	588	555	570	567	563	557	561	565	561	562	583	586	593	597	596	596	588	588	586		586
9	586	586	586	586	585	581	582	581	569	557	554	560	565	571	580	586	592	604	604	601	595	599	589	586		
10*	587	585	583	583	582	580	578	575	564	562	573	575	573	578	585	588	595	605	602	598	596	594	595	597		
11	593	590	589	590	593	590	585	577	566	566	567	566	566	569	587	585	593	599	600	600	603	605	600	598		
12	598	597	603	597	596	591	590	593	592	585	582	583	579	576	583	591	594	595	593	597	602	600	598	595		
13	596	592	590	592	590	591	590	583	577	572	570	572	574	581	590	597	599	601	606	601	606	597	600	603		
14	607	590	595	598	588	585	578	566	556	558	563	580	587	595	600	604	606	600	601	595	595	595	596	597		
15*	597	597	596	596	595	589	579	577	566	560	561	579	592	600	597	597	589	597	597	597	594	597	595	596		
16*	592	590	589	589	590	587	605	594	588	586	567	577	588	599	606	610	610	604	601	597	598	600	600	607		
17	613	607	602	606	609	584	580	588	577	575	559	565	575	571	579	568	581	597	598	597	597	594	592	592		
18	592	592	592	594	597	597	589	581	570	557	553	557	558	572	588	598	599	601	602	598	597	594	592	589		
19	587	591	590	590	594	594	589	580	570	568	564	563	571	586	589	625	611	598	602	607	599	601	593	586		589
20	585	585	588	590	592	587	592	575	569	559	555	558	573	564	572	596	596	610	605	613	598	599	596	600		
21**	595	587	590	589	586	572	575	575	570	562	558	569	567	569	570	578	592	601	606	601	596	707	644	612		
22**	588	578	535	604	585	485	498	503	501	507	511	(519)	(514)	—	—	(560)	(559)	573	585	551	550	560	556	545		
23**	543	544	546	551	552	548	548	546	540	532	494	519	543	544	540	549	567	567	584	583	585	576	575	566		
24	562	560	562	555	564	556	545	530	524	528	539	539	539	549	563	566	576	591	583	591	579	575	569	569		
25	569	569	569	569	568	555	559	554	547	543	551	557	557	567	570	570	571	574	586	591	590	581	579	585		
26	579	577	566	568	566	563	558	553	550	555	561	561	560	576	579	576	582	585	589	585	592	(595)	(598)	625		
27	590	577	579	569	569	567	558	552	545	532	535	557	557	573	569	590	589	603	592	594	581	577	575	573		
28	578	578	584	580	569	563	566	563	559	550	545	547	553	559	567	573	577	582	584	588	586	583	581	582		
29*	582	579	580	579	578	574	568	565	559	555	569	573	579	587	592	592	589	586	585	589	589	592	588	587		
30	582	582	585	587	594	586	582	569	564	553	559	563	576	579	574	575	587	596	600	598	592	583	579	579		
31	577	577	578	580	581	582	580	577	554	555	555	559	566	568	565	569	579	586	579	583	576	575	581	579		
Mean	589	586	585	587	587	580	576	570	562	556	555	560	566	572	578	587	591	596	598	597	594	595	591	590		
Mean*	589	588	587	587	588	584	582	576	567	563	564	571	578	585	591	595	596	599	598	597	595	594	594	595		
Mean**	585	578	579	581	582	579	576	570	563	553	545	553	563	555	562	579	589	593	599	598	595	620	604	594		
August. 18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1	582	585	580	582	584	582	577	572	565	562	562	567	569	571	583	597	598	571	592	587	582	571	574	571		
2	565	571	584	578	576	580	567	577	552	551	553	566	567	565	566	559	563	576	585	596	590	592	595	592		
3	606	594	587	585	578	574	566	558	555	540	548	547	548	562	561	568	579	582	587	590	592	590	587	585		
4	582	585	590	592	582	577	571	569	563	554	547	542	553	566	579	589	593	595	590	590	588	586	592	603		
5	589	579	579	578	576	581	579	573	562	550	554	551	552	570	570	560	571	596	594	593	582	584	591	584		
6*	577	580	580	580	580	581	569	566	564	567	574	572	570	565	569	580	581	577	585	590	591	590	590	583		
7*	583	583	580	577	575	578	573	575	563	564	561	568	572	570	569	576	581	583	589	589	589	588	588	585		
8	584	584	585	585	581	575	574	563	559	558	569	569	570	573	577	569	577	577	588	585	586	586	585	585		
9	585	584	589	588	596	590	569	581	579	581	576	575	578	569	570	576	582	583	592	593	592	590	590	588		
10	586	585	585	585	581	574	575	572	571	567	564	565	567	575	579	567	575	588	590	596	592	591	590	588		
11	584	597	588	577	580	580	574	572	569	569	569	570	567	560	555	561	572	588	594	580	590	590	590	590		
12	590	594	590	588	587	592	584	577	572	556	543	545	546	555	565	575	575	581	588	593	595	590	585	586		
13*	585	584	585	583	583	582	577	568	561	559	560	564	573	573	578	579	583	589	590	590	590	587	593	589		
14	588	588	589	584	580	582	575	566	561	559	561	562	567	570	573	582	588	596	604	598	600	594	598	609		
15	589	590	598	606	594	591	585	564	551	543	542	555	567	572	579	583	587	593	603	601	598	598	601	621		
16	592	594	595	595	5																					

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE 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	
<b>September.</b>																										
18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1	569	575	569	571	567	566	570	554	546	535	536	537	559	550	561	574	565	576	564	574	574	575	584	574	574	574
2	572	571	571	566	571	570	563	558	543	537	527	520	539	550	559	556	558	568	583	574	585	585	582	579	576	576
3	576	581	576	577	575	570	565	551	553	553	550	540	550	556	558	550	563	584	588	580	582	580	579	587	587	587
4**	587	584	569	584	576	577	566	537	511	514	522	534	540	544	545	537	550	571	580	563	571	584	584	584	584	584
5	589	579	572	580	576	576	554	543	539	550	547	538	539	543	548	558	573	581	583	583	587	582	577	576	576	576
6**	580	575	573	573	572	572	575	570	571	566	559	563	557	562	571	588	594	608	606	611	609	606	606	593	592	592
7**	593	606	596	598	581	577	579	570	550	559	550	541	557	564	559	539	550	572	573	576	606	570	575	575	575	575
8	586	583	574	571	575	576	563	542	545	549	563	560	571	552	566	577	562	577	584	587	595	596	597	609	609	609
9**	642	603	567	563	572	577	566	560	551	533	548	551	563	546	543	561	551	572	573	591	561	561	574	579	579	579
10**	596	578	573	578	567	578	560	539	547	559	562	566	565	573	551	557	575	575	606	583	578	614	583	554	554	554
11	583	576	566	566	568	564	555	557	551	546	545	548	558	566	571	583	581	581	597	579	577	592	597	573	573	573
12	574	578	576	571	571	568	567	566	558	545	535	540	545	565	576	573	576	588	587	581	582	581	585	586	586	586
13	581	579	576	587	594	579	576	564	537	540	541	548	559	559	574	581	586	571	586	598	589	582	585	572	572	572
14	579	577	572	571	586	569	561	553	546	540	535	535	542	559	571	579	584	585	590	587	585	618	607	559	559	559
15	575	582	577	585	584	569	575	561	548	546	519	542	555	568	566	581	580	585	584	583	581	585	581	582	582	582
16*	578	580	580	580	583	580	578	573	562	551	547	554	564	560	575	580	580	580	586	589	582	586	581	580	580	580
17*	589	582	580	580	575	578	579	576	569	562	554	551	553	558	561	560	567	576	589	581	580	580	578	578	578	578
18	578	576	580	584	575	576	578	576	570	565	559	560	562	567	570	575	575	575	580	586	584	589	580	580	581	581
19	591	586	586	572	570	577	583	578	573	565	557	552	554	550	562	570	577	583	584	585	580	580	579	578	578	578
20	577	577	578	576	578	580	586	584	574	561	556	555	557	566	573	580	567	572	565	580	575	581	579	575	575	575
21	575	578	572	575	572	573	574	576	573	569	560	558	559	562	566	570	573	578	582	583	585	584	576	588	588	588
22*	585	582	583	582	583	581	580	576	574	568	562	569	572	575	576	575	576	575	582	587	582	578	582	583	583	583
23*	583	583	582	582	581	579	573	565	561	560	566	571	574	575	581	584	583	577	581	583	586	585	588	581	581	581
24*	584	584	587	588	586	586	583	572	560	558	554	556	559	563	564	568	572	571	574	581	579	580	582	585	585	585
25	591	586	582	581	581	581	586	580	569	558	558	558	551	560	560	564	575	579	584	594	579	581	608	597	597	
26	583	590	589	581	592	582	578	563	552	542	534	526	550	558	563	559	574	579	571	581	572	574	583	576	576	576
27	574	574	574	576	578	576	575	568	555	548	543	546	552	559	567	573	571	574	574	576	574	577	580	603	603	603
28	573	584	574	572	566	573	573	560	545	524	526	539	550	558	558	560	555	560	583	573	578	578	583	580	580	580
29	578	584	598	584	587	588	589	588	567	534	532	541	535	541	547	538	554	563	573	566	568	575	584	577	577	577
30	576	585	580	587	580	576	574	561	563	549	543	549	558	560	573	576	560	552	552	547	555	567	567	571	571	571
Mean	583	582	578	578	577	576	573	564	555	550	546	548	555	559	564	568	570	577	581	582	580	583	584	580	580	580
Mean*	584	582	582	582	582	581	579	572	565	560	557	560	564	566	571	573	576	576	582	584	582	582	582	582	582	582
Mean**	600	589	576	579	574	576	569	555	546	546	548	551	556	558	554	556	564	580	588	585	585	587	582	577	577	577
<b>October.</b>																										
18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1*	576	577	576	578	576	572	568	563	551	539	535	541	548	558	565	569	571	573	575	583	584	585	585	584	584	584
2	582	586	587	582	584	587	586	581	565	550	542	550	558	563	566	573	576	573	576	583	588	576	573	573	564	564
3	567	610	591	568	577	578	576	570	562	552	547	550	553	557	560	563	568	576	576	581	580	578	577	578	578	578
4*	583	586	583	582	580	585	578	574	558	548	544	542	549	556	563	570	575	578	581	581	582	583	581	581	581	581
5	582	582	584	585	585	586	587	582	575	563	550	552	557	560	568	578	585	583	587	589	586	602	581	598	598	598
6	594	574	574	588	571	580	587	578	564	554	555	563	568	566	568	570	572	576	579	583	584	584	581	581	581	581
7	578	578	581	578	582	583	590	584	576	550	531	542	532	539	546	547	552	558	551	537	525	525	514	506	506	506
8	548	550	577	596	586	563	552	538	521	510	519	524	528	521	539	547	554	563	573	576	577	584	581	582	582	582
9	581	577	576	574	573	573	576	571	560	552	545	542	545	552	564	569	568	566	563	575	593	599	584	574	574	574
10**	569	568	565	567	568	573	574	568	566	516	523	530	512	543	538	552	573	571	572	581	574	578	611	560	560	560
11	560	561	560	561	565	569	570	564	546	499	520	523	532	547	548	552	555	562	567	568	569	569	570	570	570	570
12**	576	576	576	578	571	565	563	563	541	522	474	508	617	—	—	454	473	534	542	545	502	512	522	522	522	522
13**	499	504	512	511	511	511	507	524	517	504	498	491	481	504	506	545	554	529	534	538	541	540	541	545	545	545
14	547	546	546	542	546	550	555	546	533	519	513	519	532	541	547	550	551	554	559	560	554	565	566	552	552	552
15	554	559	552	558	560	559	558	552	543	532	530	533	545	554	560	560										

TABLE II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE 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	
<b>November.</b>																										
18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
I	571	573	576	577	581	582	579	571	560	550	547	547	554	562	568	571	576	579	580	582	582	581	580	578	578	578
2*	578	576	577	580	583	583	584	580	571	560	552	549	552	561	566	570	575	578	579	582	584	583	580	577	577	577
3	577	577	580	582	582	585	586	587	577	566	565	565	570	574	574	576	576	576	576	581	582	585	582	581	581	581
4	580	580	578	578	580	581	582	579	571	566	561	562	565	565	565	571	579	582	584	584	575	563	565	562	562	562
5	572	571	572	574	574	577	578	578	573	568	568	571	571	573	576	580	581	583	585	586	586	586	586	586	584	584
6	581	581	581	581	584	585	584	583	573	561	558	558	561	561	567	571	576	581	584	584	585	586	586	586	586	587
7*	586	586	585	584	585	586	584	579	571	563	555	551	559	567	572	576	579	582	584	584	585	585	584	584	582	582
8	583	583	583	585	586	595	595	586	573	570	565	563	563	563	565	570	575	578	578	580	578	578	580	579	579	579
9	578	577	576	577	578	581	582	580	573	565	560	563	569	573	576	574	581	582	581	584	586	584	586	586	586	586
10	585	584	584	586	584	585	580	578	571	555	550	554	558	558	564	567	572	575	576	573	574	575	576	577	577	577
11	579	582	583	585	584	584	584	581	576	566	564	560	562	567	568	570	570	573	575	578	580	579	579	579	579	576
12	576	577	581	581	586	581	581	578	569	560	558	556	556	561	564	563	564	564	575	573	571	576	579	579	579	578
13	581	580	585	577	576	574	573	575	567	561	556	550	556	564	566	564	568	574	576	577	576	574	575	575	575	575
14*	577	582	580	578	581	583	582	580	571	565	562	557	561	567	572	573	577	581	583	583	582	582	580	580	580	580
15	581	579	581	581	583	582	584	581	573	563	561	559	558	563	563	566	569	573	579	582	583	583	581	582	582	580
16	579	576	577	579	582	586	588	587	584	576	568	566	570	575	575	574	576	577	584	588	592	592	584	579	579	576
17	583	577	576	576	581	584	582	581	576	571	566	565	567	571	575	577	581	585	587	587	587	587	587	587	587	585
18**	584	583	583	584	588	597	599	606	602	589	577	581	573	572	552	567	560	535	527	517	533	534	538	541	541	541
19**	557	557	550	557	557	561	564	562	554	553	549	554	554	555	557	558	560	560	567	566	579	571	575	574	574	572
20	578	572	564	559	564	570	572	572	573	557	543	553	554	549	549	553	552	546	554	559	564	577	577	577	577	572
21**	569	569	572	571	573	577	576	577	574	569	564	558	558	555	550	559	561	561	556	553	576	566	572	572	572	572
22*	573	572	573	574	574	575	574	573	571	567	563	560	563	564	563	562	565	567	567	565	567	568	574	576	576	576
23	578	576	576	576	576	577	576	577	573	563	556	556	563	567	568	568	571	573	574	574	576	578	579	579	580	580
24	583	583	581	582	583	583	581	577	576	568	555	559	570	572	560	563	564	563	565	570	574	572	579	579	579	573
25*	575	578	578	579	580	582	580	581	577	569	567	566	569	570	573	575	579	580	581	582	582	582	582	582	582	583
26	582	583	583	584	584	584	584	581	579	574	571	574	574	581	583	583	586	589	582	586	587	586	579	580	580	580
27	578	580	584	585	587	587	589	586	582	574	572	576	579	582	579	580	584	585	587	588	584	583	580	579	579	576
28	574	575	576	578	580	582	581	580	579	573	569	568	570	574	577	580	584	587	588	584	584	583	580	579	579	579
29**	579	580	576	587	585	587	588	585	582	576	572	566	569	571	566	556	553	547	550	558	558	554	551	551	551	551
30**	564	558	554	565	558	583	582	570	566	562	544	539	546	557	557	565	572	574	572	577	580	553	570	572	572	572
Mean	577	577	577	578	579	582	582	580	574	566	561	560	563	566	567	570	572	573	574	574	577	576	577	577	576	576
Mean*	578	579	579	579	581	582	581	579	572	565	560	557	561	566	569	571	575	578	579	579	580	580	580	580	580	580
Mean**	571	569	569	573	572	581	582	580	576	570	561	560	560	562	556	561	561	557	554	553	565	556	562	564	564	564
<b>December.</b>																										
18000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
I	571	573	575	577	578	580	575	576	575	572	554	528	532	556	564	567	572	572	572	566	558	566	567	566	566	566
2	551	563	562	563	573	575	570	579	581	575	572	569	562	567	554	566	573	577	567	578	577	573	573	571	571	571
3	579	571	572	573	577	577	577	574	571	564	557	558	564	568	564	566	576	577	578	578	577	577	576	576	576	576
4*	577	576	576	576	577	581	581	580	577	573	572	570	571	572	572	572	574	579	581	579	581	579	578	575	575	575
5	583	577	577	577	580	584	586	587	581	577	580	576	572	580	551	566	572	570	564	570	580	572	577	577	577	577
6	577	577	577	577	580	586	592	593	586	576	567	567	567	567	559	534	562	567	567	570	583	567	570	574	574	574
7	588	580	581	575	571	577	570	562	573	572	566	566	564	563	558	562	564	571	572	577	577	579	581	581	581	
8	578	579	579	581	579	583	581	580	572	571	569	568	573	572	571	570	571	577	577	562	557	559	557	564	564	
9	570	571	570	571	573	581	575	579	580	570	564	559	555	558	556	567	575	575	555	562	563	586	577	574	574	
10	574	575	576	576	579	584	581	575	574	564	555	563	560	559	563	569	575	577	576	568	572	574	576	579	579	
11	576	575	579	583	582	585	583	576	569	567	562	559	562	563	566	573	575	579	580	580	578	576	578	575	575	
12	577	577	577	579	583	583	580	580	579	577	573	575	576	575	575	576	577	580	579	583	586	586	583	580	580	
13**	581	581	581	582	586	591	593	596	598	589	573	561	574	575	514	516	522	519	489	498	511	552	543	545	545	
14**	533	532	545	545	542	582	571	566	554	545	554	554	561	553	562	558	558	562	563	568	568	571	569	571	571	
15	573	573	568	572	578	582	576	567	567	555	547	550	548	539	547	554	558	546	560	554	559	563	564</			



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

	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	
<b>January.</b>																										
42000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1**	940	939	938	936	936	936	936	936	935	931	932	933	930	934	938	941	941	942	939	938	939	938	939	938	939	941
2	937	934	933	927	925	930	935	936	936	934	936	936	934	939	943	946	943	940	939	939	939	938	938	938	938	939
3	938	937	937	936	936	936	936	936	933	928	927	927	927	934	940	940	939	937	936	936	936	936	936	936	936	936
4**	938	937	937	937	934	934	933	934	935	935	935	934	933	938	943	944	945	944	946	947	935	944	951	954	954	954
5	948	944	942	940	937	937	934	933	928	926	930	932	935	941	944	942	942	941	941	941	941	941	941	941	941	941
6	942	941	938	937	937	937	937	937	932	925	922	923	926	932	937	940	941	941	939	939	937	935	935	935	933	933
7**	934	935	935	935	936	937	936	935	932	930	928	929	940	959	961	963	978	994	995	985	950	935	940	925	925	925
8	924	926	923	926	940	947	949	951	949	945	945	942	938	944	949	951	950	950	950	949	948	947	944	944	944	944
9*	944	943	943	943	944	944	944	943	942	942	938	932	937	945	948	950	950	948	948	947	945	945	943	943	943	943
10*	941	940	940	941	942	943	943	942	941	939	937	932	932	938	940	941	942	942	943	942	942	941	939	938	937	937
11	936	933	933	933	935	937	938	938	936	936	938	934	936	941	940	943	946	950	957	960	957	954	950	947	947	947
12	943	941	927	933	936	938	938	940	940	937	938	938	933	938	947	950	952	950	952	951	950	950	950	945	945	945
13	946	946	944	942	942	942	942	942	941	939	939	937	937	943	945	944	944	943	943	943	943	943	943	943	943	943
14	943	942	939	939	937	939	939	939	936	936	937	933	930	937	939	938	942	940	944	944	944	944	944	946	946	946
15	942	940	938	937	937	937	935	936	937	938	937	936	936	942	944	946	944	942	942	941	940	942	942	942	942	940
16	937	937	936	934	933	932	934	934	934	932	927	927	930	932	939	939	938	937	937	940	940	938	936	936	936	936
17	934	934	934	932	933	934	932	932	929	928	929	927	929	934	937	939	940	941	943	943	939	939	937	936	936	936
18	935	935	932	931	931	933	931	929	931	931	928	926	933	943	944	944	944	942	940	938	936	935	935	935	935	935
19	935	933	931	933	933	935	935	933	931	929	928	928	928	933	943	944	943	943	943	943	943	938	935	935	934	934
20	934	934	934	934	934	934	934	933	933	930	926	925	925	931	936	936	937	935	935	933	933	932	931	931	931	931
21*	932	931	932	932	934	934	933	931	929	929	929	927	926	932	937	937	936	935	936	934	934	932	932	931	931	931
22*	930	930	930	931	930	932	930	928	926	924	924	920	919	917	924	929	929	929	929	929	929	929	927	927	927	927
23*	927	927	927	927	929	929	929	927	929	930	929	927	924	928	929	928	929	931	930	930	929	929	927	927	927	927
24**	927	927	927	927	927	926	925	924	926	924	922	916	915	920	929	929	924	927	932	936	938	936	936	933	933	933
25**	927	926	926	924	926	925	925	924	922	920	921	922	921	922	932	932	931	932	934	934	934	938	939	936	936	936
26	933	928	922	918	916	915	911	921	927	933	930	926	924	929	933	933	933	940	946	945	944	940	940	937	937	937
27	935	933	933	933	933	935	935	935	935	935	933	930	927	928	932	933	937	937	937	937	937	935	935	933	933	933
28	933	932	931	930	930	930	930	930	929	928	928	927	924	925	927	928	930	933	934	935	935	935	935	935	933	933
29	933	933	933	931	930	931	931	930	929	928	927	925	923	927	927	928	930	933	935	935	935	935	935	933	933	933
30	931	930	929	928	928	927	927	927	925	926	927	920	921	927	933	933	933	933	935	935	935	933	932	931	931	931
31	932	932	932	930	930	930	929	929	926	923	919	919	917	921	924	927	929	930	931	931	931	933	934	934	934	934
Mean	936	935	933	933	933	934	934	934	933	931	931	929	928	934	938	939	940	941	942	941	939	938	938	937	937	937
Mean*	935	934	934	935	936	936	936	934	933	933	931	928	928	932	936	937	937	937	937	936	936	935	933	933	933	933
Mean**	933	933	933	932	932	932	931	931	930	928	928	927	928	935	941	942	944	948	949	948	939	938	941	938	938	938
<b>February.</b>																										
42000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1	934	933	931	930	929	929	926	924	924	924	922	922	922	924	930	931	932	936	938	943	943	943	940	938	938	938
2	936	934	933	932	931	929	929	927	927	924	922	923	928	929	929	929	931	934	935	936	934	931	931	931	931	931
3	931	931	931	929	929	928	927	924	919	916	917	917	916	917	919	922	924	925	926	926	934	942	950	949	949	949
4	942	940	932	929	929	929	926	923	918	917	921	924	923	926	931	931	931	931	932	931	931	931	932	934	934	934
5	931	926	929	930	929	931	929	926	920	917	915	914	912	914	917	923	929	931	935	935	932	929	928	927	927	927
6*	929	929	930	929	929	929	929	926	926	926	923	915	913	915	916	920	923	925	928	930	930	929	927	927	927	927
7*	925	924	925	927	927	928	927	926	926	922	916	908	908	912	916	920	925	927	929	928	927	926	925	924	924	924
8	925	923	923	924	923	925	925	925	923	922	918	917	916	917	918	921	922	925	930	937	943	942	942	942	942	942
9**	918	918	920	924	920	923	924	925	925	923	920	918	918	918	922	925	927	929	930	937	944	956	947	925	925	925
10**	916	926	928	930	933	935	935	933	923	920	926	930	932	930	930	932	935	938	937	935	933	932	932	930	930	930
11	931	930	928	929	930	929	929	930	931	931	928	928	926	926	925	928	931	932	932	934	933	933	931	932	932	932
12	931	930	928	926	927	928	927	926	926	924	921	920	924	924	926	928	931	933	936	942	952	944	931	928	928	928
13	927	926	926	924	925	924	924	925	924	923	919	921	926	932	940	950	950	952	944	941	938	930	931	931	931	931
14	926	918	917	924	926	927	925	924	924	921	914	919	920	921	923	928	932	935	935	932	931	931	930	931	931	931
15	931	928	928	927	926	926	924	923	924	920	919	922	923	920	926	933	933	932	932	929	929	927	926	926	926	926
16	927	927	927	926	926	927	925	924	922	922	921	919	920	925	933	937	933	933	934	937	941	936	927	927	927	927
17	929	927	924	925	925	925	922	922	922	920	922	925	927	931	934	937	939	937	937	937	936	929	928	928	928	928
18	927	924	925	927	929	929	927	925	923	920	919	918	918	920	929	935	935	939	940	936	933	929	928	927	927	927
19	927	927	927	926	925	925	925	924	922	920	913	912	913	917	922	929	932	936	939	935	934					

TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE 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	
<b>March.</b>																										
42000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1	932	912	919	918	920	921	916	916	917	918	913	911	918	930	940	938	945	947	943	941	941	928	926	930	930	
2*	932	932	932	931	930	930	928	928	928	925	922	923	923	926	936	942	937	935	934	933	932	932	931	931	931	931
3	931	930	930	930	929	929	926	925	925	923	920	919	921	923	927	932	936	934	934	936	934	930	932	932	931	931
4	930	930	930	930	930	930	929	929	929	928	921	911	909	913	919	918	931	930	930	931	932	934	932	932	932	932
5	931	930	929	929	929	929	927	926	924	920	913	909	909	913	916	923	925	927	927	930	935	936	935	935	934	934
6	930	928	928	929	930	929	928	929	927	923	921	918	918	918	924	930	935	938	940	942	942	938	937	925	925	925
7	919	919	923	925	927	928	928	928	927	923	918	914	913	917	923	929	931	933	936	934	934	939	937	933	933	933
8	931	930	928	927	927	927	925	925	921	919	918	914	912	915	920	926	931	929	929	929	929	933	938	933	933	933
9**	927	926	924	915	914	902	896	897	904	904	903	903	910	923	928	933	957	971	956	947	942	943	933	911	911	911
10	900	909	908	902	889	892	909	921	925	922	923	919	924	938	937	942	938	935	935	933	932	932	931	930	930	930
11	927	927	919	918	923	924	925	928	925	920	913	911	916	923	929	935	937	935	935	935	935	936	927	919	919	919
12	923	923	923	924	925	924	924	925	924	923	916	911	916	920	924	930	931	931	931	930	929	928	928	927	927	927
13	925	923	914	911	909	909	911	917	915	913	913	912	913	917	924	928	930	928	928	927	927	927	927	927	927	927
14	925	925	923	917	915	916	918	923	922	919	913	909	906	913	922	935	935	934	930	928	925	925	925	925	923	923
15	918	906	909	912	911	911	913	917	917	912	904	897	899	906	913	920	932	935	932	932	929	924	916	916	916	916
16**	919	921	919	906	902	888	897	899	897	895	895	904	915	934	952	968	979	984	967	953	950	949	937	928	928	928
17**	915	911	902	901	913	921	925	930	927	925	918	916	917	922	930	935	948	966	976	952	945	942	948	928	928	928
18	888	914	927	930	930	932	933	933	930	925	917	921	925	926	936	941	944	943	939	937	934	925	923	925	925	925
19	916	915	922	925	925	923	924	928	927	922	914	905	903	904	911	922	934	944	938	933	930	928	924	919	919	919
20	922	923	923	922	922	921	921	918	916	911	909	905	910	922	937	948	949	942	941	940	933	930	922	912	912	912
21	917	921	924	926	926	926	926	928	927	924	917	907	903	907	914	921	925	926	928	929	926	926	925	924	924	924
22*	924	923	923	925	926	925	924	925	924	918	909	899	898	905	917	926	933	932	930	929	927	926	923	922	922	922
23*	922	922	923	922	920	921	922	924	920	912	904	900	898	901	907	916	921	922	921	921	921	921	920	920	920	920
24*	921	921	922	922	923	923	923	925	921	915	908	900	899	900	905	912	918	920	923	923	921	920	920	920	920	920
25*	920	919	920	920	920	920	920	920	915	906	894	886	884	890	896	906	915	917	918	918	918	919	919	919	919	919
26	922	920	920	914	916	919	920	921	918	910	905	905	903	912	926	940	962	969	966	962	952	933	926	922	922	922
27**	915	908	909	917	925	929	931	929	922	912	904	903	906	915	927	960	952	948	947	943	927	929	929	908	908	908
28**	903	903	890	882	890	892	896	907	910	909	905	911	917	926	937	946	952	947	946	945	942	939	937	935	935	935
29	933	931	930	929	929	927	925	927	925	922	919	917	918	923	928	931	931	929	929	930	929	928	928	930	930	930
30	925	921	923	925	925	926	930	933	930	924	919	918	920	926	931	934	939	939	937	937	938	936	934	933	933	933
31	928	926	928	928	926	922	924	925	920	917	915	913	912	915	921	926	930	931	931	932	931	929	929	921	921	921
Mean	922	921	921	920	920	920	921	923	921	917	912	909	911	917	924	932	938	939	937	935	933	931	929	925	925	925
Mean*	924	923	924	924	924	924	923	924	922	915	907	902	900	904	912	920	925	925	925	925	924	924	923	923	923	923
Mean**	916	914	909	904	909	906	909	912	912	909	905	907	913	924	935	948	958	963	958	948	941	940	937	922	922	922
<b>April.</b>																										
42000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1	921	924	925	924	918	920	922	922	919	919	915	912	915	920	927	928	930	932	933	932	931	932	932	932	929	929
2	920	923	926	928	929	930	933	934	929	922	913	907	910	914	920	927	928	933	933	931	928	928	928	928	928	928
3	927	927	929	929	930	928	930	929	922	915	908	906	904	913	921	928	934	935	932	930	930	930	929	927	927	927
4	924	926	929	930	931	930	931	933	926	917	908	905	905	918	928	932	933	940	942	944	937	934	934	932	932	932
5	933	930	928	919	923	931	933	934	928	921	914	911	916	924	929	934	937	943	944	944	940	939	937	936	936	936
6	932	931	933	935	934	935	938	938	934	925	916	911	913	921	929	936	942	943	942	941	940	938	936	935	935	935
7	934	933	934	934	935	935	937	939	933	924	917	909	911	921	929	946	955	964	968	970	967	951	943	943	943	943
8	941	939	935	933	935	939	938	936	929	923	920	917	927	940	950	951	954	957	956	952	949	948	946	945	945	945
9**	943	942	941	942	942	943	946	943	937	929	917	915	919	942	961	993	996	1000	988	976	966	958	953	950	950	950
10	949	942	939	944	947	950	950	952	948	939	937	933	936	942	948	951	954	955	954	952	950	949	948	946	946	946
11**	946	946	946	945	940	928	923	925	929	932	933	935	932	935	948	965	993	1011	989	970	967	963	958	941	941	
12**	941	946	934	935	948	952	956	959	959	951	945	935	936	943	950	959	962	959	958	955	953	949	940	947	947	947
13	949	949	949	949	949	949	951	951	947	940	937	937	937	938	949	960	961	958	956	954	952	951	951	952	952	952
14**	948	947	945	944	941	941	939	932	927	920	924	946	975	1010	1027	1025	1037	1007	980	972	971	966	964	965	965	965
15	905	950	951	952	950	953	959	903	959	952	947	950	959	964	970	978	970	966	961	961	961	961	961	961	961	961
16	962	961	960	959	959	962	964	965	963	952	943	944	950	955	958	961	963	965	965	964	963	962	961	961	961	961
17*	961	962	963	962	963	965	970	968	964	954	946	940	943	956	967	970	972	969	968	965	963	961	961	961	961	961
18*	963	964	964	963	964	966	968	965	958	950	946	941	940	947	959	966	969	968	968	967	966	965	965	964	964	964
19	966	966	966	966	966	966	967	965	960	945	926	911	915	924	934	937	940	940	941	940	939	938	937	935	935	935
20*	936	938	938	938	939	940	943	942	936	928	919	914	914	921</												



TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE 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		
<b>July.</b>																											
42000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																											
1**	920	918	918	922	924	923	922	917	908	896	890	892	897	902	913	922	924	926	925	924	924	923	921	919			
2	918	913	915	921	925	926	928	926	924	920	913	908	911	920	929	937	941	942	944	938	933	927	925	923			
3*	924	924	924	925	926	920	919	921	922	925	918	912	915	919	923	927	932	932	931	931	926	923	924	923			
4	923	924	925	926	928	930	926	921	918	914	909	902	903	905	913	921	930	936	934	929	929	928	926	924			
5	924	919	916	920	927	927	923	923	920	915	909	906	909	914	917	924	930	933	931	928	926	925	925	924			
6	925	925	925	922	926	927	927	927	922	917	911	908	909	914	922	925	929	932	939	941	936	931	928	926			
7**	924	920	922	924	925	925	922	923	920	915	915	909	917	922	929	936	939	941	942	940	934	930	929	927			
8	927	926	925	927	928	925	923	925	925	921	904	906	912	919	924	931	936	938	936	936	933	930	929	927			
9	928	927	926	925	927	927	927	925	925	922	920	918	917	920	924	928	934	932	933	933	931	931	928	928			
10*	927	927	927	928	929	930	928	926	915	905	896	893	902	916	924	929	933	935	932	928	928	928	928	928			
11	928	927	927	929	931	931	929	927	924	922	918	915	914	917	921	931	940	940	934	934	932	931	929	928			
12	928	928	926	925	928	927	922	920	914	906	906	911	915	919	931	936	943	945	939	938	936	933	931	930			
13	931	930	930	931	934	933	930	927	923	917	918	917	923	928	931	933	933	933	931	930	931	929	930	930			
14	926	924	925	925	925	928	929	930	930	927	922	920	921	927	930	932	930	934	935	932	929	928	928	928			
15*	929	929	929	930	934	931	925	922	919	910	902	900	907	914	927	936	937	936	934	929	929	927	926	925			
16*	927	927	927	930	933	932	930	925	921	918	915	911	912	912	919	931	936	932	931	931	928	926	926	926			
17	924	917	920	923	927	927	922	915	917	909	898	905	905	909	927	936	944	948	948	941	933	927	926	926			
18	927	927	927	928	930	930	928	928	921	911	910	909	911	919	927	931	935	936	934	933	930	927	927	926			
19	926	925	925	928	930	929	928	925	920	923	920	916	908	911	915	922	933	942	942	935	930	929	924	923			
20	924	924	924	924	925	921	921	919	912	906	899	891	895	903	913	925	934	940	939	940	934	930	926	924			
21**	914	916	919	921	926	927	926	928	926	911	901	901	905	912	916	924	933	937	935	933	931	923	911	910			
22**	910	912	807	740	831	857	818	837	876	898	900	899	913	947	966	988	977	971	978	967	956	942	937	938			
23**	939	940	940	940	941	940	938	941	942	936	922	931	935	937	937	939	949	954	954	949	947	944	935	930			
24	933	934	931	930	931	931	936	936	932	926	920	920	922	931	940	943	943	945	940	943	943	943	939	936			
25	936	933	932	930	930	931	932	933	927	918	913	914	919	921	929	932	935	939	940	939	939	937	937	934			
26	929	928	931	932	933	936	936	933	926	911	900	899	913	915	922	931	939	937	939	940	940	941	936	922			
27	916	920	925	926	932	935	934	934	926	908	902	894	900	913	923	932	935	941	946	949	947	940	935	933			
28	933	933	930	927	931	931	929	931	933	926	942	916	917	922	930	936	939	941	937	934	934	932	932	932			
29*	933	933	935	934	936	937	933	929	923	916	909	901	899	910	921	931	931	935	936	934	931	930	930	931			
30	932	932	933	932	934	934	934	911	932	925	924	919	920	923	933	941	943	945	942	941	938	935	934	933			
31	934	934	934	936	940	936	932	930	924	923	920	916	914	922	930	941	946	950	949	948	943	940	936	934			
Mean	926	926	923	921	927	927	924	923	922	916	911	908	912	918	926	933	938	940	939	937	934	931	929	927			
Mean*	928	928	928	929	932	930	927	925	920	915	908	903	907	914	923	931	934	934	933	931	928	927	927	927			
Mean**	921	921	901	889	909	914	905	909	914	911	906	906	913	924	932	942	944	946	947	943	938	932	927	925			
<b>August.</b>																											
42000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																											
1	936	936	935	937	940	940	938	938	937	928	928	926	924	925	934	944	956	960	960	956	951	943	932	927			
2	930	933	933	929	940	941	937	931	930	930	926	921	922	924	929	936	946	953	953	950	943	939	936	936			
3	930	921	920	915	920	925	929	936	934	930	929	913	919	923	928	936	943	945	945	945	942	939	938	938			
4	935	934	925	923	929	931	936	936	934	932	926	920	924	931	938	943	950	955	950	944	940	938	938	930			
5	925	927	932	934	939	938	937	934	932	929	927	921	922	932	938	948	956	962	966	953	942	941	936	929			
6*	929	929	932	933	935	935	936	936	933	933	926	920	923	926	932	936	937	936	939	939	939	936	935	935			
7*	935	933	933	935	939	940	939	939	936	927	918	916	924	928	932	936	938	940	940	937	936	936	936	936			
8	937	937	936	936	939	939	938	939	939	934	928	927	930	931	938	943	947	951	951	947	944	940	940	938			
9	939	938	938	936	935	932	932	930	927	924	917	915	923	930	939	946	947	944	940	937	937	936	937	938			
10	939	939	938	939	940	940	940	940	941	931	924	919	926	934	943	950	951	951	948	944	941	939	938	938			
11	938	930	929	932	937	939	937	932	930	930	930	925	925	929	931	935	938	942	943	945	945	942	938	938			
12	937	934	932	932	934	933	932	929	931	931	927	920	923	932	937	944	946	944	942	937	935	935	935	935			
13*	936	936	936	936	937	937	934	932	931	926	922	919	920	924	931	936	938	939	938	936	934	933	931	931			
14	932	932	932	932	936	937	937	937	931	927	920	915	916	922	926	931	938	940	940	940	937	934	934	927			
15	929	932	932	925	932	934	932	930	926	918	912	905	906	912	923	933	936	938	933	931	930	929	929	923			
16	918	924	924	927	931	933	930	926	921	915	911	903	903	910	919	928	932	934	933	932	931	929	929	929			
17	929	922	923	926	931	934	936	935	927	916	908	897	899	905	918	928	931	934	935	935	932	928	925	925			
18	924	924	924	925	929	930	931	926	922	914	900	897	906	916	922	928	932	928	929	930	930	929	929	927			
19**	926	926	926	926	928	931	934	933	926	916	909	901	885	905	915	926	928	928	928	928	926	926	924	925	920		
20**	922	922	922	918	917	917	919	924	915	916	917	917	935	945	945	943	958	971	974	969	949	915	907	867			
21**	865	823	838	876	923	937	946	946	918	938	938	943	936	939	946	950	955	983	982	967	955	943	934	934			
22	932	9																									



TABLE III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE 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	
<b>September.</b>																										
42000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1	941	939	937	939	941	937	938	941	940	933	932	924	931	938	956	977	975	973	958	950	948	944	938	932		
2	935	939	940	940	945	945	945	945	941	934	926	926	933	939	946	957	960	956	951	947	944	942	942	941		
3	942	940	940	941	942	943	943	942	938	934	924	919	925	929	940	945	945	946	947	947	947	945	941	938		
4**	936	930	926	925	931	934	934	932	931	930	930	931	937	948	959	969	982	987	984	959	955	951	942	941		
5	938	933	937	940	942	941	940	938	937	937	931	931	930	929	933	940	943	944	944	943	944	944	944	944		
6**	942	942	942	942	942	943	944	942	938	930	928	920	923	930	938	942	942	935	935	937	940	939	941	942		
7**	942	937	933	930	925	930	935	935	937	931	927	921	929	931	940	941	943	948	948	952	952	946	945	941		
8	934	928	932	935	938	939	942	943	937	929	926	920	924	933	940	944	942	944	941	940	940	940	940	940		
9**	927	911	918	924	932	936	939	937	932	927	924	922	927	931	936	946	946	948	954	954	944	941	936	933		
10**	917	921	927	923	925	931	935	936	935	928	923	923	931	944	952	961	957	949	951	947	949	940	911	925		
11	932	925	933	937	937	937	937	934	926	925	925	925	927	937	946	951	956	956	956	947	944	940	932	930		
12	936	936	935	938	938	938	941	940	932	924	920	915	919	929	938	943	943	947	943	938	938	936	936	931		
13	932	934	934	935	929	927	927	929	927	920	910	909	916	923	935	939	944	944	941	939	934	934	928	927		
14	926	923	928	930	930	928	934	935	928	921	918	920	923	930	933	938	940	935	933	933	933	932	918	918		
15	922	922	915	919	922	924	929	927	924	919	917	919	919	922	926	941	941	939	934	934	934	931	930	930		
16*	930	929	930	930	931	931	932	933	929	921	913	913	916	916	918	925	934	933	932	932	933	932	930	930		
17*	929	924	926	928	929	929	931	930	927	921	914	914	919	926	931	936	941	941	942	942	944	942	933	933		
18	932	932	932	927	927	929	930	931	928	924	934	929	932	933	936	941	942	942	944	944	946	946	945	946		
19	938	937	934	933	937	940	943	943	939	934	927	922	921	924	931	938	940	943	944	945	946	945	945	945		
20	944	944	943	942	942	941	941	942	939	934	933	928	927	929	933	939	946	931	954	951	948	948	946	946		
21	943	940	941	940	941	941	943	938	932	923	914	915	921	927	930	934	936	937	939	941	942	941	943	941		
22*	939	939	939	938	939	938	938	938	936	927	915	912	915	920	928	933	937	936	938	939	941	941	941	940		
23*	939	939	939	938	939	938	940	934	927	919	914	918	921	927	928	929	928	926	927	928	929	929	929	928		
24*	927	927	927	928	931	930	931	930	929	926	923	922	924	929	932	936	939	939	940	939	939	938	937	937		
25	936	934	934	934	935	936	936	933	930	923	916	920	923	930	939	944	941	940	941	943	938	937	935	925		
26	927	923	919	912	925	926	932	932	931	922	915	917	925	930	939	944	952	949	948	944	943	940	939	937		
27	937	937	937	938	938	938	940	940	935	931	926	927	930	935	936	940	942	944	945	945	945	940	939	929		
28	925	926	928	932	932	933	933	934	930	925	918	916	924	935	941	948	951	951	949	945	945	945	940	938		
29	932	933	923	925	928	929	932	933	930	924	922	924	925	932	946	956	958	959	953	949	946	945	935	928		
30	926	927	932	933	934	936	939	937	932	922	915	915	918	922	930	939	948	954	951	950	951	946	944	940		
Mean	934	932	932	933	934	935	937	936	933	927	922	921	925	930	937	944	946	946	946	943	942	940	937	935		
Mean*	933	932	932	932	934	933	934	933	930	923	916	916	919	924	927	932	936	935	936	935	936	935	934	934		
Mean**	933	928	929	929	931	935	937	936	935	929	926	923	929	937	945	952	954	953	954	950	948	943	935	936		
<b>October.</b>																										
42000 $\gamma$ + Tabular Quantities (in $\gamma$ ).																										
1*	939	937	937	935	935	937	940	939	933	927	918	917	920	925	930	935	939	939	938	938	935	934	934	932		
2	932	932	932	930	929	931	935	937	935	928	923	920	925	932	939	942	942	944	947	943	940	937	925	923		
3	925	913	903	918	927	930	931	937	935	929	922	920	923	923	930	938	941	940	939	939	938	937	935	934		
4*	934	933	931	932	931	933	936	939	939	930	921	919	922	927	932	937	940	937	936	936	936	936	936	933		
5	933	933	933	932	931	933	935	936	934	926	920	919	920	922	926	931	936	934	936	940	943	936	931	925		
6	918	917	917	904	916	925	928	932	934	931	927	924	925	930	934	937	939	934	934	935	935	935	936	935		
7	935	934	934	932	931	932	934	937	934	932	933	931	931	938	965	961	953	954	958	957	950	941	925	915		
8	909	877	889	886	884	901	914	929	935	940	940	945	955	960	961	958	954	948	944	943	942	940	940	940		
9	940	939	938	936	937	936	938	941	940	935	931	933	933	933	935	938	944	946	945	945	945	943	945	942		
10**	941	941	941	939	939	939	937	939	933	928	928	929	936	951	951	961	971	965	959	954	949	946	931	928		
11	937	940	942	942	942	942	942	943	937	935	933	929	933	940	942	946	950	950	947	945	942	942	941	942		
12**	943	943	940	934	937	939	941	943	941	937	924	945	980	1012	1037	1071	1070	1110	1046	990	994	987	953	916		
13**	927	949	947	954	960	961	959	961	963	963	958	961	958	970	976	992	992	984	973	964	960	957	957	955		
14	955	953	953	953	950	950	951	954	955	950	940	938	941	945	950	953	954	953	953	953	952	950	945	945		
15	948	946	948	949	949	950	949	953	951	948	940	936	938	941	949	954	954	953	951	949	948	946	946	939		
16	940	939	942	945	946	945	947	952	952	950	942	942	942	944	948	950	952	952	952	950	949	947	945	945		
17*	945	945	946	946	944	944	946	948	946	942	938	936	936	943	947	950	950	949	949	948	948	947	946	944		
18	945	944	940	941	942	944	946	949	948	944	942	940	942	944	947	949	947	945	944	944	944	944	942	942		
19	943	941	940	939	938	940	941	944	943	936	931	928	930	935	939	943	942	943	943	943	943	943	943	943		
20	943	942	942	941	940	941	940	940	937	939	922	925	932	937	942	946	950	946	947	948	946	943	942	942		
21*	943	942	940	940	939	940	938	938	934	930	928	930	933	934	938	941	942	941	941	941	940	940	940	940		
22**	940	939	938	937	937	939	939	929	918	912	917	933	948	951	962	958	954	952	951	952	950	949	946	942		
23**	932	903	885	871	874	889	888	920	936	945	951	957	957	966	975	976	974	962	958	952	952	938	935	940		
24	935	926	924	922	922	926	936	944	945	943	941	944	947	953	958	963	958	953	955	956	954	947	943	943		
25	947	947	947	947	945																					











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

Date.	DECLINATION WEST.						HORIZONTAL FORCE.						VERTICAL FORCE.					
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
JULY	12° +	G.M.T. h m	12° +	12° +	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	57.8	13 30	65.6	50.4	7 8	15.2	587	17 6	627	517	13 56	110	915	17 0	931	888	10 8	43
2	57.7	14 19	65.9	50.3	8 40	15.6	588	18 53	632	548	10 55	84	925	18 50	945	906	11 43	39
3	58.2	14 9	65.6	53.0	7 50	12.6	582	18 53	612	546	10 58	66	924	17 22	934	909	11 49	25
4	57.0	14 43	63.5	49.6	8 37	13.9	589	20 24	617	557	11 20	60	922	18 11	938	900	13 1	38
5	57.6	13 25	66.8	51.1	6 23	15.7	591	0 57	628	551	9 53	77	921	17 25	936	906	11 56	30
6	58.2	14 44	65.1	52.1	8 50	13.0	590	18 14	634	557	10 39	77	925	19 0	945	904	11 56	41
7	58.3	14 39	64.6	50.9	8 35	13.7	586	17 6	612	541	13 34	71	926	17 53	945	907	11 37	38
8	57.3	14 0	63.8	51.1	8 22	12.7	581	18 15	608	542	6 22	66	926	17 0	941	901	11 0	40
9	57.7	13 29	64.1	51.6	7 24	12.5	583	17 52	608	551	10 34	57	927	16 48	936	916	12 20	20
10	57.9	11 53	63.2	52.1	7 45	11.1	585	17 48	612	559	9 0	53	923	17 46	938	892	11 21	46
11	57.7	13 36	62.1	52.6	6 33	9.5	587	18 20	611	562	11 39	49	927	17 16	943	912	13 4	31
12	58.5	12 16	63.4	53.4	7 54	10.0	592	20 48	609	571	13 48	38	927	17 15	946	902	9 45	44
13	57.5	14 20	63.0	51.9	7 33	11.1	590	18 50	615	568	10 44	47	928	5 0	936	915	9 20	21
14	57.6	13 6	63.6	51.6	6 9	12.0	589	0 14	615	551	8 40	64	928	18 12	937	918	12 0	19
15	58.3	13 49	65.9	49.2	7 50	16.7	589	13 46	604	557	8 58	47	924	16 26	940	899	10 36	41
16	58.1	14 19	63.0	51.3	7 3	11.7	595	23 39	616	557	9 20	59	925	16 11	938	911	13 20	27
17	59.5	14 9	67.2	53.4	5 17	13.8	588	0 39	618	550	10 43	68	924	18 4	951	900	10 40	51
18	57.5	13 23	64.3	49.6	7 14	14.7	586	18 13	608	552	10 52	56	926	17 7	938	906	11 58	32
19	58.2	12 54	66.9	52.0	7 1	14.9	589	15 39	642	559	11 1	83	925	18 28	944	907	13 1	37
20	58.0	14 42	65.0	51.4	7 36	13.6	586	19 23	628	552	9 54	76	921	19 16	945	890	12 0	55
21	56.9	14 33	63.2	44.0	21 54	19.2	590	21 26	729	551	10 23	178	920	21 4	956	897	10 58	59
22	57.6	2 46	87.3	28.0	3 45	59.3	—	3 1	634	420	5 51	214	907	15 51	1026	692	3 9	334
23	56.8	14 12	63.7	50.7	8 0	13.0	552	20 10	595	464	10 56	131	940	18 10	959	921	10 52	38
24	57.0	13 9	63.8	50.6	8 1	13.2	558	17 44	606	520	8 30	86	935	17 43	948	918	10 54	30
25	56.7	13 46	63.5	49.3	7 34	14.2	568	20 23	596	540	9 20	56	930	19 47	942	910	10 43	32
26	56.8	14 23	64.1	52.6	5 36	11.5	575	23 23	640	547	7 47	93	928	21 7	945	898	11 34	47
27	55.5	13 44	64.2	49.7	5 1	14.5	571	17 31	610	527	10 0	83	927	19 20	953	889	11 47	64
28	56.5	14 0	63.8	47.8	7 42	16.0	571	19 7	591	543	11 0	48	931	16 54	942	915	11 55	27
29	57.9	13 36	65.7	51.4	6 50	14.3	580	14 48	595	555	9 42	40	927	17 54	939	898	12 34	41
30	57.6	13 46	64.1	53.2	19 36	10.9	580	18 58	606	550	9 52	56	932	17 34	947	918	12 59	29
31	57.3	13 15	63.2	51.8	5 50	11.4	573	17 42	596	542	8 42	54	934	17 40	954	911	11 56	43
Mean	57.6	—	65.1	50.2	—	14.9	581	—	618	542	—	76	926	—	946	899	—	47
No. of Days used.	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31
AUG.	12° +	h m	12° +	12° +	h m		18000γ +	h m	18000γ +	18000γ +	h m	γ	42000γ +	h m	42000γ +	42000γ +	h m	γ
1	56.5	15 9	61.3	50.3	22 32	11.0	578	15 10	612	560	10 34	52	939	17 20	963	922	13 24	41
2	58.1	16 9	63.3	52.5	19 33	10.8	574	19 49	607	542	8 26	65	935	18 29	955	919	12 3	36
3	56.4	14 0	60.9	51.0	0 43	9.9	574	0 47	612	534	9 55	78	931	17 51	949	910	11 40	39
4	57.5	13 7	63.9	51.4	7 22	12.5	578	16 12	616	537	11 24	79	935	17 19	958	918	11 22	40
5	57.7	14 0	65.1	52.3	5 51	12.8	576	19 49	613	544	9 16	69	937	17 52	968	920	12 0	48
6	57.1	13 5	61.1	52.8	7 51	8.3	578	20 20	597	563	8 22	34	933	20 3	942	918	11 51	24
7	57.5	12 35	62.7	53.9	7 10	8.8	577	18 59	593	557	8 36	36	934	5 30	943	916	10 59	27
8	57.7	12 48	65.1	53.1	18 33	12.0	576	18 39	598	556	10 36	42	939	18 9	953	925	11 0	28
9	57.2	13 15	61.9	53.1	5 34	8.8	583	4 38	598	563	6 32	35	934	16 47	948	915	11 48	33
10	56.4	14 5	62.4	52.0	5 16	10.4	580	19 30	598	562	12 9	36	939	16 34	954	919	11 38	35
11	56.7	14 0	62.0	52.1	6 17	9.9	578	18 39	601	551	14 38	50	935	19 49	949	922	12 19	27
12	56.8	13 40	64.1	50.6	8 16	13.5	577	19 40	598	540	11 0	58	934	16 0	948	919	11 56	29
13	57.1	13 20	64.4	51.1	7 46	13.3	579	22 28	598	557	8 53	41	932	17 16	943	919	12 0	24
14	57.4	13 16	65.2	51.6	7 24	13.6	582	23 3	626	556	8 29	70	931	18 8	942	913	12 0	29
15	57.8	14 0	65.9	47.7	6 10	18.2	584	23 26	633	535	9 58	98	926	17 15	939	905	12 56	34
16	56.7	13 14	63.8	48.8	7 27	15.0	581	0 0	609	537	8 8	72	924	5 24	936	900	17 0	36
17	57.5	13 6	65.7	52.0	8 10	13.7	581	0 59	605	540	9 44	65	924	6 58	938	895	11 33	43
18	56.9	13 16	62.7	51.0	9 24	11.7	581	21 4	599	541	9 27	58	923	16 47	933	896	11 29	37
19	58.0	12 40	70.7	50.0	23 26	20.7	584	22 46	630	501	12 13	129	922	6 58	937	879	12 12	58
20	57.8	13 23	67.0	39.3	24 0	27.7	565	20 28	676	444	7 14	232	929	18 16	981	855	23 47	126
21	53.3	15 56	63.8	27.5	7 56	36.3	527	17 58	673	355	8 30	318	930	17 54	1012	808	1 46	204
22	56.8	13 0	64.4	50.8	8 30	13.6	552	19 29	604	505	9 24	99	938	16 29	961	924	11 2	37
23	56.9	12 53	64.2	51.2	7 17	13.0	560	22 9	599	527	9 45	72	936	16 47	956	925	11 56	31
24	56.0	13 0	63.5	49.3	7 40	14.2	—	—	—	506	9 24	—	—	—	—	—	—	—
25	56.6	12 18	63.8	50.2	7 43	13.6	(569)8	20 55	588	540	9 40	48	—	—	—	—	—	—
26	56.9	13 24	64.1	50.9	8 26	13.2	571	0 55	593	541	9 42	52	928	17 40	936	907	10 30	29
27	57.0	12 50	67.5	49.6	8 9	17.9	576	22 12	599	544	10 16	55	927	17 27	936	901	11 40	35
28	57.0	13 9	64.6	51.3	7 20	13.3	573	20 30	592	543	10 12	49	929	16 12	940	911	11 23	29
29	57.2	12 50	71.1	48.3	4 49	22.8	571	0 9	632	521	13 8	111	936	18 29	986	905	11 41	81
30	58.0	7 56	65.3	52.2	22 44	13.1	539	3 52	584	458	11 5	126	948	17 28	997	921	9 31	76
31	55.7	13 0	62.0	50.5	20 21	11.5	558	18 9	592	507	10 6	85	937	17 37	966	920	9 42	46
Mean	57.0	—	64.3	49.9	—	14.4	572	—	609	528	—	80	933	—	954	907	—	47
No. of Days used.	31	—	31	31	—	31	30	—	30	31	—	30	29	—	29	29	—	29

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

Date.	DECLINATION WEST.						HORIZONTAL FORCE.						VERTICAL FORCE.							
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.		
SEPT.	12° +	G.M.T. h m		12° +	12° +	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	57.6	13 0	67.9	46.4	16 52	21.5	564	17 0	623	526	11 52	97	944	17 0	988	921	11 51	67		
2	56.5	12 44	63.7	49.9	7 26	13.8	562	19 55	587	517	11 25	70	942	16 8	964	923	11 0	41		
3	56.8	13 3	63.8	52.1	20 3	11.7	568	23 30	596	531	11 18	65	939	20 10	951	917	11 18	34		
4	56.8	12 20	67.6	43.1	18 36	24.5	559	18 44	621	506	8 24	115	945	17 0	995	923	3 20	72		
5	57.0	13 16	61.1	51.6	0 8	9.5	565	0 40	600	522	8 4	78	939	17 8	947	928	13 40	19		
6	57.6	13 41	63.1	51.7	8 13	11.4	581	16 47	658	537	10 45	121	937	16 40	959	915	11 49	44		
7	55.5	14 30	64.4	42.2	20 1	22.2	571	20 10	621	518	11 37	103	937	20 5	960	916	11 23	44		
8	56.9	12 51	68.4	49.2	0 12	19.2	573	23 35	631	529	13 39	102	936	17 13	953	917	12 0	36		
9	54.8	13 44	66.5	39.0	19 4	27.5	567	0 34	662	515	14 7	147	934	19 8	962	911	1 40	51		
10	56.5	13 38	64.1	45.8	21 40	18.3	572	21 49	755	508	21 27	247	935	15 31	965	891	22 2	74		
11	55.3	13 26	65.4	47.5	17 54	17.9	570	22 12	619	543	10 1	76	937	18 7	961	921	8 57	40		
12	56.3	13 3	64.5	51.3	7 50	13.2	570	22 55	597	531	10 51	66	935	17 30	950	914	11 50	36		
13	56.0	13 20	65.3	50.1	22 21	15.2	573	19 40	608	533	8 40	75	930	16 47	949	908	11 30	41		
14	55.9	14 0	62.9	44.7	22 2	18.2	570	21 40	652	530	11 1	122	929	16 28	942	911	22 53	31		
15	55.9	13 45	64.9	49.7	7 34	15.2	571	4 10	597	511	10 27	86	927	15 44	947	912	2 13	35		
16	56.0	12 40	64.9	50.4	7 41	14.5	575	21 36	597	541	9 40	56	927	21 24	937	913	12 0	24		
17	55.0	14 17	61.1	50.0	8 47	11.1	572	0 55	600	548	11 13	52	930	18 22	944	914	11 30	30		
18	55.8	13 10	61.9	51.9	8 30	10.0	575	21 30	593	557	10 28	36	936	21 28	949	929	11 18	20		
19	55.2	13 6	62.0	49.1	3 1	12.9	574	0 20	596	544	13 34	52	937	21 0	946	917	12 0	29		
20	55.1	13 48	62.7	49.8	8 16	12.9	573	19 10	589	550	9 56	39	940	18 56	958	927	12 42	31		
21	55.8	13 25	60.6	50.7	6 20	9.9	573	20 40	599	556	11 2	43	935	23 8	946	911	11 0	35		
22	55.5	12 35	60.9	52.2	8 0	8.7	578	19 30	589	557	10 24	32	934	21 44	942	909	11 36	33		
23	55.5	12 4	60.1	50.7	8 20	9.4	578	22 12	590	569	7 0	21	930	23 26	929	913	10 39	16		
24	55.9	12 20	62.3	51.5	8 10	10.8	574	2 52	592	548	10 47	44	932	19 0	940	921	11 0	19		
25	55.2	12 5	64.1	42.3	22 50	21.8	577	22 41	640	545	12 22	95	933	19 11	947	914	10 29	33		
26	56.0	12 0	65.4	47.5	2 7	17.9	569	4 56	607	511	11 24	96	932	16 25	954	907	3 14	47		
27	55.4	12 43	63.2	47.3	19 12	15.9	569	23 13	622	541	10 43	81	937	19 30	948	924	24 0	24		
28	56.3	12 45	64.8	50.6	7 32	14.2	564	1 7	591	520	9 17	71	935	17 52	954	915	11 38	39		
29	55.8	13 49	66.4	47.4	22 40	19.0	566	2 1	614	523	10 17	91	936	15 53	965	920	10 18	45		
30	55.4	13 28	63.0	50.0	8 16	13.0	565	1 9	592	541	20 7	51	935	17 23	957	915	11 0	42		
Mean	56.0	—	63.9	48.5	—	15.4	570	—	615	534	—	81	935	—	954	916	—	38		
No. of Days used.	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30		
OCT.	12° +	h m		12° +	12° +	h m	18000γ +	h m		18000γ +	18000γ +	h m	γ	42000γ +	h m		42000γ +	42000γ +	h m	γ
1	55.9	13 19	62.4	50.6	8 14	11.8	568	20 0	587	534	10 20	53	933	9 9	941	915	11 40	26		
2	54.3	13 29	62.4	42.2	22 36	20.2	573	20 46	593	541	10 24	52	933	18 16	948	918	22 33	30		
3	54.6	13 43	60.2	47.6	0 0	12.6	571	1 54	616	545	10 44	71	930	16 48	942	900	2 33	42		
4	55.3	13 21	60.6	49.5	8 43	11.1	572	1 41	589	538	11 19	51	933	16 6	941	918	11 23	23		
5	55.2	13 8	62.9	38.8	22 46	24.1	579	20 58	628	545	10 36	83	931	20 55	949	918	10 54	31		
6	55.2	12 45	63.0	41.5	0 4	21.5	575	0 11	610	549	10 10	61	928	16 11	940	900	3 25	40		
7	53.6	13 24	66.4	37.4	22 47	29.0	554	6 17	593	487	23 44	106	940	14 53	974	905	23 44	69		
8	55.5	12 3	60.4	38.2	0 34	22.2	555	3 26	604	506	9 23	98	931	14 30	962	864	1 40	98		
9	55.2	17 52	60.8	49.3	8 43	11.5	569	20 36	643	541	11 41	102	939	20 36	958	931	12 20	27		
10	55.0	15 0	65.6	43.7	8 26	21.9	561	22 18	623	478	12 40	145	943	16 29	981	912	9 11	69		
11	55.4	13 6	62.8	49.5	8 36	13.3	558	0 52	574	488	9 17	86	941	17 0	951	928	11 20	23		
12	55.0	12 12	82.0	26.3	20 9	55.7	—	12 15	731	[382]*	11 6	[349]*	976	16 58	1137	899	23 53	238		
13	55.6	14 8	71.9	45.0	9 6	26.9	519	15 59	594	456	12 40	138	963	15 55	1008	902	0 0	106		
14	54.7	13 40	60.3	49.0	19 9	11.3	546	22 29	573	508	10 43	65	950	0 31	958	936	11 12	22		
15	54.9	12 20	60.8	48.6	22 43	12.2	556	22 55	607	528	10 22	79	947	16 10	956	935	11 52	21		
16	54.8	13 10	60.6	50.6	8 10	10.0	560	21 13	582	536	10 12	46	947	18 0	954	938	0 0	16		
17	55.1	13 3	62.7	50.1	8 13	12.6	562	4 49	578	530	10 29	48	945	15 44	953	934	12 2	19		
18	54.6	13 44	60.6	50.3	8 43	10.3	565	21 41	593	535	10 42	58	944	8 12	951	939	11 42	12		
19	54.9	13 40	61.6	49.0	19 44	12.6	567	20 32	592	540	10 49	52	940	20 16	957	926	12 2	31		
20	55.0	12 28	61.2	46.5	20 14	14.7	567	20 21	608	544	11 35	64	941	20 18	951	918	10 6	33		
21	55.0	12 21	59.3	51.3	8 37	8.0	572	23 17	582	552	12 57	30	938	16 7	943	928	11 0	15		
22	56.4	7 26	85.7	42.6	8 52	43.1	547	7 26	691	402	7 30	289	941	14 28	969	870	7 28	99		
23	58.7	6 7	89.8	41.5	18 11	48.3	528	1 45	623	424	7 21	199	935	15 4	980	866	4 1	114		
24	53.6	12 45	60.7	45.8	20 51	14.9	542	5 17	571	512	9 45	59	943	15 13	965	919	4 20	46		
25	53.3	11 46	59.4	42.6	22 13	16.8	550	5 32	567	531	9 13	36	947	17 49	958	936	22 57	22		
26	55.1	3 41	62.4	46.2	19 20	16.2	559	23 29	599	519	13 3	80	945	13 48	962	930	4 30	32		
27	54.1	12 30	59.2	50.8	21 14	8.4	561	20 39	586	534	10 7	52	947	20 30	956	933	10 5	23		
28	54.0	12 38	58.0	51.1	21 4	6.9	566	22 17	579	550	15 24	29	948	15 50	957	937	10 40	20		
29	53.9	12 54	58.4	41.3	21 22	17.1	570	20 0	589	545	21 54	44	944	21 59	954	930	11 15	24		
30	53.8	13 50	59.6	45.7	22 1	13.9	568	2 12	604	540	11 13	64	949	17 0	961	932	2 45	29		
31	54.5	13 0	58.6	51.6	22 12	7.0	571	22 3	584	546	10 38	38	950	8 0	955	940	10 2	15		
Mean	54.9	—	63.9	45.6	—	18.3	560	—	603	515	—	88	943	—	964	918	—	46		
No. of Days used.	31	—	31	31	—	31	30	—	31	31	—	31	31	—	31	31	—	31		

\* Not certain. Illumination failed between 13h 20m and 16h 20m

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

Date.	DECLINATION WEST.						HORIZONTAL FORCE.						VERTICAL FORCE.					
	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.	Mean Value for the Day.	Maximum.		Minimum.		Range.
NOV.	12° +	G.M.T. h m	12° +	12° +	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	54.3	13 0	57.9	51.2	8 35	6.7	571	5 25	584	546	10 55	38	948	8 0	955	941	11 0	14
2	54.0	13 0	57.5	50.5	8 54	7.0	573	20 34	585	547	11 18	38	947	16 30	952	937	10 52	15
3	54.0	13 30	57.6	51.6	8 40	6.0	578	7 6	590	562	11 25	28	947	18 11	953	939	10 45	14
4	53.9	13 20	58.7	47.0	20 13	11.7	573	19 30	588	559	23 16	29	948.5	22 43	955	932	11 36	23
5	54.3	12 30	57.7	50.8	1 11	6.9	577	22 10	587	565	9 52	22	947	0 10	954	945	10 20	9
6	54.5	12 33	58.3	52.1	8 33	6.2	577	20 31	587	554	11 30	33	942	15 5	948	934	11 50	14
7	54.4	12 59	58.7	50.7	8 40	8.0	577	0 7	589	550	11 20	39	937	0 8	943	923	10 54	20
8	54.6	12 35	59.0	51.4	7 51	7.6	577	5 31	605	558	10 59	47	934	16 0	941	916	10 52	25
9	53.9	13 0	57.7	51.5	8 53	6.2	577	19 40	591	553	10 52	38	935	14 8	939	925	10 20	14
10	54.0	12 37	59.2	50.3	8 36	8.9	573	3 16	588	543	10 22	45	928	18 35	933	907	11 0	26
11	53.9	13 19	58.0	49.2	23 14	8.8	575	4 9	587	557	12 15	30	926	16 37	934	916	11 19	18
12	54.6	13 48	60.2	50.8	0 1	9.4	571	4 26	586	552	11 56	34	927	17 50	938	914	10 19	24
13	53.2	13 0	57.0	46.6	2 24	10.4	571	2 6	597	549	11 41	48	926	15 36	931	917	2 24	14
14	53.6	13 40	56.6	50.7	8 54	5.9	576	20 20	585	555	11 37	30	924	18 30	929	917	10 25	12
15	53.8	12 40	56.8	50.9	9 12	5.9	575	6 23	585	555	11 56	30	925	16 51	931	917	11 35	14
16	53.8	13 38	56.4	51.1	8 39	5.3	580	20 54	595	562	10 56	33	925	18 12	929	918	10 5	11
17	53.4	12 54	57.3	50.3	2 53	7.0	579	0 8	592	561	10 46	31	924	14 10	928	919	9 56	9
18	52.0	14 1	65.2	36.3	22 34	28.9	568	7 28	610	508	19 18	102	928	19 37	947	913	9 19	34
19	53.4	5 27	57.3	47.8	0 4	9.5	567.0	20 21	592	541	0 1	51	929	16 12	937	913	1 0	24
20	52.9	13 10	57.0	48.5	21 59	8.5	562	21 34	591	539	10 30	52	930	15 10	940	918	2 0	22
21	53.3	13 20	56.9	48.2	20 19	8.7	566	20 47	606	546	13 59	60	931.0	20 32	944	920	12 3	24
22	53.3	12 43	57.2	51.3	21 13	5.9	569	5 8	577	558	11 43	19	931	16 30	936	922	10 45	14
23	53.4	12 42	56.9	51.4	7 22	5.5	572	23 58	586	550	10 53	36	931	14 49	937	924	10 20	13
24	53.4	13 7	58.2	46.5	22 20	11.7	573	0 17	590	552	10 40	38	930	17 3	938	920	11 13	18
25	53.3	13 40	56.7	51.3	9 33	5.4	577	19 31	583	564	11 17	19	930	14 30	935	922	10 24	13
26	53.6	12 40	56.7	48.5	23 9	8.2	582	17 30	592	571	10 29	21	927	16 0	930	918	11 1	12
27	53.3	12 18	56.0	49.7	21 24	6.3	579	18 18	590	544	19 48	46	927	20 0	939	917	11 56	22
28	53.6	12 39	56.5	51.7	7 20	4.8	579	18 9	590	565	12 5	25	928	14 20	933	922	11 0	11
29	53.7	16 24	60.5	47.4	22 31	13.1	569	3 23	591	545	18 18	46	932	19 37	950	920	10 44	30
30	53.1	11 47	59.8	44.5	1 51	15.3	564	5 33	589	531	10 53	58	932	22 0	943	921	10 20	22
Mean	53.7	—	58.0	49.3	—	8.7	573	—	590	551	—	39	932	—	940	922	—	18
No. of Days used.	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30	30	—	30
DEC.	12° +	h m	12° +	12° +	h m		18000γ +	h m	18000γ +	18000γ +	h m	γ	42000γ +	h m	42000γ +	42000γ +	h m	γ
1	53.6	12 50	59.6	49.0	23 58	10.6	566	5 11	582	518	12 7	64	934	21 2	942	927	10 19	15
2	52.3	12 10	58.2	44.9	19 24	13.3	570	7 55	587	545	14 36	42	931	18 52	941	924	10 30	17
3	53.0	13 0	55.2	49.6	0 13	5.6	572	0 22	596	555	11 44	41	932	15 50	938	926	12 56	12
4	53.4	14 0	55.9	51.4	23 59	4.5	576	18 42	584	567	11 56	17	928	15 3	931	919	10 56	12
5	52.8	13 39	56.8	46.3	19 52	10.5	578.6	20 0	588	541	14 11	47	929	18 58	939	921	12 42	18
6	53.2	15 5	56.9	46.2	15 56	10.7	573	20 38	606	510	15 37	96	931	16 0	946	917	10 29	29
7	52.9	12 6	55.8	49.0	17 5	6.8	572	1 0	596	551	14 37	45	931	17 24	940	923	9 43	17
8	52.6	13 0	56.2	45.4	18 41	10.8	572	18 56	599	549	19 46	50	931	22 0	938	921	10 5	17
9	52.8	13 51	57.1	47.7	22 22	9.4	569	21 48	615	545	14 8	70	935	19 18	942	927	22 18	15
10	53.4	14 29	57.4	50.1	20 36	7.3	572	5 43	588	546	13 7	42	934	16 6	941	928	12 55	13
11	53.4	12 54	57.2	50.7	23 33	6.5	574	5 54	586	554	11 0	32	933	16 5	939	923	10 55	16
12	53.3	14 25	55.1	50.9	23 20	4.2	579	19 55	597	570	10 38	27	932	17 0	936	923	8 58	13
13	52.6	14 21	65.7	34.8	21 12	30.9	557	8 3	602	452	18 26	150	941	16 16	990	919	9 16	71
14	52.5	5 8	60.5	38.5	0 0	22.0	558	5 49	608	521	0 40	87	934	17 7	944	912	2 29	32
15	52.6	7 53	57.7	37.5	18 13	20.2	561	5 1	589	523	18 0	66	940	18 25	956	930	7 30	26
16	52.6	13 43	55.9	48.8	16 31	7.1	564.3	3 20	582	532	11 40	50	938	16 46	948	927	4 43	21
17	53.3	13 33	59.7	39.3	19 12	20.4	563	6 8	588	501	13 43	87	940	14 22	968	928	8 58	40
18	50.8	13 0	59.0	32.7	20 32	26.3	545	5 8	588	496	20 20	92	940	17 42	960	916	24 0	44
19	52.2	6 50	62.5	39.5	0 16	23.0	563	3 32	597	547	13 16	50	922	14 4	943	884	4 34	59
20	52.7	12 8	56.6	50.2	3 24	6.4	569	23 34	576	558	2 5	18	931	13 30	937	925	11 18	12
21	52.8	12 50	55.1	51.2	28 16	3.9	572	22 41	578	561	10 56	17	929	13 12	935	926	5 0	9
22	52.6	12 54	56.1	48.4	23 19	7.7	579	7 8	588	567	23 52	21	926	14 10	931	922	11 30	9
23	52.4	13 24	56.1	49.0	4 30	7.1	577	5 31	600	558	11 24	42	927	14 11	934	920	5 40	14
24	52.8	13 2	55.8	49.7	21 5	6.1	579	21 12	592	566	11 29	26	927	16 0	931	922	11 30	9
25	52.9	12 50	55.6	50.8	22 40	4.8	584	23 17	595	575	10 51	20	925	16 30	929	920	8 48	9
26	53.4	12 54	56.4	51.5	12 22	4.9	577	6 0	588	555	16 30	33	927	16 44	935	921	12 18	14
27	53.3	12 45	55.5	51.9	8 0	3.6	581	6 0	587	574	9 6	13	926	14 10	929	918	9 5	11
28	53.5	16 41	61.2	35.5	20 10	25.7	578.4	17 30	589	531	22 30	58	929	20 27	952	920	10 29	32
29	52.4	13 19	56.0	47.3	1 20	8.7	565	21 19	575	542	0 25	33	932	0 11	940	924	12 20	16
30	52.6	12 59	55.6	50.7	5 1	4.9	573	18 22	581	562	11 18	19	925	18 16	927	919	12 37	8
31	52.9	13 11	56.2	50.7	23 17	5.5	580	5 23	598	554	10 48	44	923	18 40	928	916	12 23	12
Mean	52.8	—	57.4	46.4	—	11.0	571	—	591	543	—	48	931	—	942	921	—	21
No. of Days used.	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31



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

“All Days.”

DECLINATION WEST.

Month and Season, 1927.	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.	-1.7	-1.3	-0.4	-0.5	-0.3	-0.2	-0.5	-1.0	-1.5	-1.1	-0.4	+1.1	+2.9	+3.6	+2.8	+1.9	+1.5	+1.1	+0.3	-0.2	-1.2	-1.6	-2.0	-2.0
Feb.	-1.7	-1.5	-1.3	-1.1	-1.2	-1.3	-1.3	-1.3	-1.4	-0.8	+0.5	+2.0	+3.3	+4.1	+3.6	+2.7	+2.1	+1.2	+0.7	-0.3	-1.2	-1.5	-2.2	-2.2
Mar.	-2.3	-2.0	-1.4	-1.9	-1.3	-1.4	-1.9	-2.5	-3.1	-2.3	+0.3	+3.6	+6.3	+6.6	+6.1	+4.2	+2.2	+0.4	-0.2	-1.0	-1.9	-2.1	-2.1	-2.4
April	-1.0	-0.9	-0.8	-1.1	-1.5	-2.1	-3.6	-5.4	-6.2	-4.5	-1.1	+2.7	+6.1	+7.3	+6.8	+4.9	+2.8	+1.0	0.0	-0.4	-0.6	-0.6	-0.9	-1.3
May	-0.7	-0.8	-1.1	-1.2	-2.3	-3.6	-4.6	-5.3	-4.8	-2.9	-0.2	+2.9	+5.4	+6.5	+6.0	+4.5	+2.9	+1.4	+0.5	0.0	-0.5	-0.3	-0.7	-0.8
June	-0.9	-1.0	-1.0	-1.3	-2.5	-3.9	-5.0	-5.4	-5.0	-3.1	-0.3	+2.9	+5.2	+6.3	+6.0	+4.6	+2.7	+1.7	+0.6	+0.2	-0.1	-0.5	-0.5	-0.6
July	-0.3	-0.7	-0.5	-1.9	-3.2	-4.2	-4.2	-4.9	-4.9	-3.3	-0.6	+2.5	+4.9	+6.1	+5.9	+4.7	+2.8	+1.4	+0.3	-0.1	0.0	-0.2	-0.2	-0.2
Aug.	-1.2	-1.4	-1.4	-1.8	-2.7	-3.5	-3.5	-3.7	-3.3	-1.4	+1.0	+3.6	+6.1	+6.3	+5.1	+3.3	+1.7	+0.3	-0.5	-0.6	-0.5	-0.6	-0.9	-0.9
Sept.	-1.6	-1.8	-1.7	-1.8	-1.7	-2.7	-2.7	-3.6	-3.4	-1.6	+1.2	+4.3	+6.4	+6.8	+5.7	+3.5	+1.6	+0.4	-0.6	-1.3	-1.1	-1.6	-2.3	-1.8
Oct.	-1.5	-0.9	-0.7	0.0	-0.1	-0.2	-0.7	-1.9	-2.8	-1.7	+0.5	+3.4	+5.3	+5.5	+4.4	+2.8	+1.1	+0.5	-1.0	-1.2	-2.5	-2.9	-3.0	-2.3
Nov.	-1.1	-0.8	-0.6	-0.5	-0.5	-0.7	-1.1	-1.4	-1.7	-1.3	+0.6	+2.3	+3.3	+3.3	+2.6	+1.9	+1.4	+0.5	0.0	-0.6	-1.1	-1.5	-1.8	-1.5
Dec.	-1.7	-1.1	-0.5	-0.6	-0.3	-0.2	+0.1	0.0	-0.4	+0.2	+1.1	+2.1	+3.1	+3.0	+2.3	+1.4	+0.6	+0.4	-0.8	-1.3	-1.8	-1.6	-1.6	-1.8
Year	-1.31	-1.18	-0.95	-1.14	-1.48	-1.92	-2.42	-3.03	-3.21	-1.98	+0.22	+2.78	+4.86	+5.45	+4.78	+3.37	+1.95	+0.86	-0.06	-0.56	-1.04	-1.25	-1.52	-1.48
Winter	-1.55	-1.18	-0.70	-0.68	-0.58	-0.60	-0.70	-0.93	-1.25	-0.75	+0.45	+1.88	+3.15	+3.50	+2.83	+1.98	+1.40	+0.80	+0.05	-0.60	-1.33	-1.55	-1.90	-1.88
Equinox	-1.60	-1.40	-1.15	-1.20	-1.18	-1.35	-2.23	-3.35	-3.88	-2.53	+0.23	+3.50	+6.03	+6.55	+5.75	+3.85	+1.93	+0.58	-0.45	-0.95	-1.53	-1.80	-2.08	-1.95
Summer	-0.78	-0.98	-1.00	-1.55	-2.68	-3.80	-4.33	-4.83	-4.50	-2.68	-0.03	+2.98	+5.40	+6.30	+5.75	+4.28	+2.53	+1.20	+0.23	-0.13	-0.28	-0.40	-0.58	-0.63

INCLINATION.

Jan.	-0.1	-0.2	-0.3	-0.3	-0.5	-0.6	-0.6	-0.6	-0.4	-0.1	+0.2	+0.4	+0.5	+0.6	+0.5	+0.4	+0.3	+0.3	+0.2	-0.1	+0.1	0.0	-0.1	-0.1
Feb.	-0.2	-0.2	-0.0	-0.3	-0.5	-0.4	-0.5	-0.4	-0.3	-0.1	+0.2	+0.5	+0.4	+0.5	+0.5	+0.3	+0.4	+0.3	+0.1	+0.1	+0.2	+0.1	0.0	0.0
Mar.	-0.6	-0.4	-0.6	-0.6	-0.5	-0.6	-0.4	-0.2	+0.1	+0.6	+0.9	+0.8	+0.6	+0.5	+0.2	+0.4	+0.5	+0.4	+0.1	-0.2	-0.2	-0.1	-0.3	-0.6
April	-0.8	-0.7	-0.7	-0.6	-0.7	-0.6	-0.6	-0.1	+0.5	+1.3	+1.8	+1.6	+1.3	+1.1	+0.6	+0.2	0.0	-0.2	-0.3	-0.5	-0.6	-0.8	-0.7	-0.7
May	-0.4	-0.4	-0.4	-0.4	-0.3	-0.2	+0.1	+0.6	+1.1	+1.4	+1.3	+0.9	+0.7	+0.6	+0.4	0.0	-0.6	-0.6	-0.7	-0.7	-0.5	-0.4	-0.4	-0.5
June	-0.3	-0.3	-0.2	-0.3	-0.2	+0.1	+0.4	+0.8	+1.1	+1.3	+1.1	+0.9	+0.7	+0.3	+0.2	-0.1	-0.3	-0.6	-0.8	-0.9	-0.9	-0.7	-0.6	-0.4
July	-0.5	-0.3	-0.4	-0.6	-0.4	+0.1	+0.3	+0.7	+1.2	+1.4	+1.3	+0.9	+0.6	+0.4	+0.2	-0.2	-0.3	-0.6	-0.8	-0.8	-0.7	-0.8	-0.6	-0.6
Aug.	-0.8	-0.7	-0.8	-0.6	-0.3	-0.2	+0.3	+0.9	+1.4	+1.6	+1.3	+0.9	+0.7	+0.6	+0.4	+0.3	-0.2	-0.3	-0.6	-0.7	-1.0	-0.9	-0.9	-0.8
Sept.	-0.9	-0.9	-0.6	-0.6	-0.5	-0.4	-0.1	+0.4	+1.0	+1.1	+1.2	+1.1	+0.7	+0.6	+0.5	+0.4	+0.3	-0.2	-0.4	-0.6	-0.5	-0.7	-0.9	-0.7
Oct.	-0.7	-0.8	-0.8	-0.8	-0.8	-0.7	-0.5	+0.0	+0.4	+1.2	+1.4	+1.3	+1.2	+0.8	+0.6	+0.5	+0.3	+0.0	-0.2	-0.4	-0.5	-0.7	-0.6	-0.7
Nov.	-0.2	-0.3	-0.3	-0.3	-0.4	-0.6	-0.6	-0.5	-0.1	+0.4	+0.6	+0.7	+0.6	+0.5	+0.5	+0.3	+0.2	+0.2	+0.1	+0.1	-0.2	-0.1	-0.2	-0.2
Dec.	-0.1	-0.1	-0.3	-0.4	-0.5	-0.8	-0.7	-0.6	-0.3	+0.1	+0.4	+0.5	+0.3	+0.4	+0.6	+0.5	+0.4	+0.2	+0.4	+0.4	+0.3	+0.1	+0.0	0.0
Year	-0.47	-0.44	-0.45	-0.48	-0.47	-0.41	-0.24	+0.08	+0.48	+0.85	+0.98	+0.88	+0.69	+0.58	+0.43	+0.25	+0.08	-0.09	-0.23	-0.33	-0.39	-0.41	-0.43	-0.44
Winter	-0.15	-0.20	-0.23	-0.33	-0.48	-0.60	-0.60	-0.53	-0.28	+0.08	+0.35	+0.53	+0.45	+0.50	+0.53	+0.38	+0.33	+0.25	+0.23	+0.20	+0.05	+0.05	-0.05	-0.08
Equinox	-0.75	-0.70	-0.68	-0.65	-0.63	-0.58	-0.40	+0.03	+0.50	+1.05	+1.33	+1.20	+0.95	+0.75	+0.48	+0.38	+0.28	0.00	-0.20	-0.43	-0.45	-0.58	-0.63	-0.68
Summer	-0.50	-0.43	-0.45	-0.48	-0.30	-0.05	+0.28	+0.75	+1.20	+1.43	+1.25	+0.90	+0.68	+0.48	+0.30	0.00	-0.35	-0.53	-0.73	-0.78	-0.78	-0.70	-0.63	-0.58

HORIZONTAL FORCE.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	+2	+3	+4	+4	+6	+8	+9	+8	+5	-1	-5	-9	-11	-9	-6	-4	-2	-2	0	+3	+3	+2	+2	+2
Feb.	+3	+3	0	+4	+6	+6	+6	+5	+3	-1	-7	-11	-10	-10	-8	-4	-4	-2	+1	+1	+1	+1	+2	+1
Mar.	+8	+5	+7	+7	+6	+7	+5	+3	-3	-12	-18	-18	-14	-10	-3	-3	-2	+1	+4	+8	+7	+5	+6	+10
April	+12	+10	+10	+9	+10	+10	+9	+2	-8	-23	-33	-33	-27	-19	-8	+1	+6	+9	+10	+12	+12	+14	+12	+11
May	+7	+6	+6	+6	+4	+3	-1	-9	-19	-25	-26	-22	-18	-14	-6	+3	+14	+16	+16	+12	+12	+9	+7	+9
June	+6	+5	+4	+5	+4	+1	-4	-11	-18	-24	-23	-21	-17	-10	-5	+3	+8	+14	+17	+18	+16	+12	+10	+7
July	+8	+5	+4	+6	+6	-1	-5	-11	-19	-25	-26	-21	-15	-9	-3	+6	+10	+15	+17	+16	+13	+14	+10	+9
Aug.	+10	+8	+9	+6	+5	+4	-4	-13	-22	-27	-25	-20	-16	-11	-6	+1	+8	+11	+15	+15	+17	+14	+13	+11
Sept.	+13	+12	+8	+8	+7	+6	+3	-6	-15	-20	-24	-22	-15	-11	-6	-2	0	+7	+11	+12	+10	+13	+14	+10
Oct.	+8	+9	+9	+9	+8	+8	+6	-1	-7	-20	-25	-23	-19	-11	-6	-2	+2	+5	+7	+8	+9	+11	+9	+8
Nov.	+4	+4	+4	+5	+6	+9	+9	+7	+1	-7	-12	-13	-10	-7	-6	-3	-1	0	+1	+1	+4	+3	+4	+3
Dec.	+1	+1	+3	+5	+6	+10	+9	+7	+3	-3	-7	-8	-6	-5	-7	-5	-3	-1	-3	-3	-2	0	0	0
Year	+6.8	+5.9	+5.7	+6.2	+6.2	+5.9	+3.5	-1.6	-8.3	-15.7	-19.3	-18.2	-14.8	-10.5	-5.8	-0.9	+3.0	+6.1	+7.8	+8.7	+8.5	+8.0	+7.4	+6.8
Winter	+2.5	+2.8	+2.8	+4.5	+6.0	+8.3	+8.3	+6.8	+3.0	-3.0	-7.8	-10.3	-9.3	-7.8	-6.8	-4.0	-2.5	-1.3	-0.8	-0.3	+1.5	+1.0	+2.0	+1.5
Equinox	+10.3	+9.0	+8.5	+8.3	+7.8	+7.8	+5.8	-0.5	-8.3	-18.8	-25.0	-24.0	-18.8	-12.8	-5.8	-1.5	+1.5	+5.5	+8.0	+10.0	+9.5	+10.8	+10.3	+9.8
Summer	+7.8	+6.0	+5.8	+5.8	+4.8	+1.8	-3.5	-11.0	-19.5	-25.3	-25.0	-21.0	-16.5	-11.0	-5.0	+2.8	+10.0	+14.0	+16.3	+16.3	+14.5	+12.3	+10.0	+9.0

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

"All Days."

NORTH COMPONENT.

Month and Season, 1927.	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.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	+4	+5	+4	+5	+6	+8	+9	+9	+7	0	-4	-10	-14	-13	-9	-6	-4	-3	-2	+0	+4	+2	+4	+4
Mar.	+5	+5	+2	+5	+7	+8	+8	+7	+5	0	-7	-13	-14	-15	-12	-7	-6	-4	+0	+1	+3	+3	+5	+4
Apr.	+11	+7	+9	+9	+8	+9	+7	+6	+1	-9	-18	-22	-21	-18	-10	-8	-5	+1	+4	+9	+9	+7	+8	+13
May	+13	+11	+11	+10	+12	+12	+13	+9	0	-17	-31	-36	-34	-27	-16	-5	+3	+8	+10	+12	+14	+13	+12	+12
June	+8	+7	+7	+7	+7	+7	+5	-2	-13	-21	-25	-25	-24	-22	-13	-3	+10	+14	+15	+16	+12	+9	+8	+10
July	+7	+6	+5	+7	+7	+6	+2	-4	-12	-20	-22	-24	-23	-17	-12	-3	+5	+12	+16	+17	+16	+12	+10	+8
Aug.	+8	+6	+5	+8	+10	+4	0	-5	-13	-20	-25	-24	-21	-16	-10	0	+6	+13	+16	+16	+13	+14	+10	+9
Sept.	+11	+10	+11	+8	+8	+8	0	-8	-18	-25	-26	-24	-23	-18	-12	-5	+6	+10	+15	+15	+17	+14	+14	+12
Oct.	+15	+14	+10	+10	+9	+8	+6	-2	-11	-18	-25	-27	-22	-19	-13	-6	-2	+6	+11	+13	+11	+15	+17	+12
Nov.	+10	+10	+10	+9	+8	+8	+7	+1	-3	-17	-25	-27	-25	-17	-11	-5	+1	+4	+8	+9	+12	+14	+12	+11
Dec.	+5	+5	+5	+6	+7	+10	+10	+9	+3	-5	-12	-16	-14	-11	-9	-5	-3	-1	+1	+2	+5	+5	+6	+5
Year	+3	+2	+4	+6	+6	+10	+9	+7	+3	-3	-8	-10	-10	-9	-10	-7	-4	-2	-2	-1	0	+2	+2	+2
Winter	+8.3	+7.3	+6.9	+7.5	+7.9	+8.2	+6.3	+2.3	-4.3	-12.9	-19.0	-21.5	-20.4	-16.8	-11.4	-5.0	+0.6	+4.8	+7.7	+9.1	+9.5	+9.3	+9.1	+8.5
Equinox	+4.3	+4.3	+3.8	+5.5	+6.5	+9.0	+9.0	+8.0	+4.5	-2.0	-7.8	-12.3	-13.0	-12.0	-10.0	-6.3	-4.3	-2.5	-0.8	+0.5	+3.0	+3.0	+4.3	+3.8
Summer	+12.3	+10.5	+10.0	+9.5	+9.3	+9.3	+8.3	+3.5	-3.3	-15.3	-24.8	-28.0	-25.5	-20.3	-12.5	-6.0	-0.8	+4.8	+8.3	+10.8	+11.0	+12.5	+12.5	+12.0
Year	+8.5	+7.3	+7.0	+7.5	+8.0	+6.3	+1.8	-4.8	-14.0	-21.5	-24.5	-24.3	-22.8	-18.3	-11.8	-2.8	+6.8	+12.3	+15.5	+16.0	+14.5	+12.3	+10.5	+9.8

WEST COMPONENT.

Month and Season, 1927.	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.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	-9	-6	-1	-2	-0	+1	-1	-4	-7	-6	-3	+4	+13	+17	+14	+9	+7	+5	+1	-1	-6	-8	-10	-10
Mar.	-8	-7	-7	-5	-5	-6	-6	-6	-7	-4	+1	+8	+15	+19	+17	+13	+10	+6	+4	+1	-6	-8	-11	-11
Apr.	-10	-9	-6	-8	-6	-6	-9	-13	-17	-15	-2	+15	+30	+33	+32	+21	+11	+2	0	-4	-8	-10	-10	-11
May	-3	-3	-2	-4	-6	-9	-17	-28	-35	-29	-13	+7	+26	+34	+34	+26	+16	+7	+2	+1	-1	0	-2	-4
June	-2	-3	-5	-5	-11	-18	-25	-30	-30	-21	-7	+10	+25	+31	+30	+24	+18	+11	+6	+6	0	0	-2	-2
July	-3	-4	-4	-6	-12	-20	-27	-31	-30	-22	-7	+11	+24	+31	+31	+25	+16	+12	+7	+5	+3	0	0	-2
Aug.	0	-3	-2	-9	-16	-22	-23	-28	-30	-23	0	+9	+22	+30	+30	+26	+17	+11	+5	+3	+3	+2	+1	+1
Sept.	-4	-6	-5	-8	-13	-18	-19	-22	-22	-14	0	+15	+29	+31	+26	+17	+11	+4	+1	0	+1	0	-2	-2
Oct.	-6	-7	-7	-8	-8	-8	-14	-20	-21	-13	+1	+18	+30	+33	+29	+18	+8	+4	-1	-4	-4	-6	-9	-7
Nov.	-6	-3	-2	+2	+1	+1	+2	-10	-16	-14	-3	+13	+24	+27	+22	+14	+6	+4	-4	-5	-11	-13	-14	-10
Dec.	-5	-3	-2	-2	-1	-2	-4	-6	-9	-9	+1	+9	+15	+16	+12	+9	+7	+3	0	-3	-5	-7	-9	-7
Year	-9	-6	-2	-2	0	+1	+3	+2	-1	0	+4	+9	+15	+15	+11	+6	+3	+2	-5	-8	-10	-8	-8	-10
Winter	-5.4	-5.0	-3.8	-4.8	-6.4	-8.8	-12.0	-16.3	-18.8	-14.2	-3.1	+10.7	+22.3	+26.4	+24.0	+17.3	+10.8	+5.9	+1.3	-1.1	-3.7	-4.8	-6.3	-6.3
Equinox	-7.8	-5.5	-3.0	-2.8	-1.5	-1.5	-2.0	-3.5	-6.0	-4.8	+0.8	+7.5	+14.5	+16.8	+13.5	+9.3	+6.8	+4.0	0.0	-3.3	-6.8	-7.8	-9.5	-9.5
Summer	-6.3	-5.5	-4.3	-4.5	-4.8	-5.5	-10.5	-17.8	-22.3	-17.8	-4.3	+13.3	+27.5	+31.8	+29.3	+19.8	+10.3	+4.3	-0.8	-3.0	-6.0	-7.3	-8.8	-8.0
Year	-2.3	-4.0	-4.0	-7.0	-13.0	-19.5	-23.5	-27.8	-28.0	-20.0	-5.8	+11.3	+25.0	+30.8	+29.3	+23.0	+15.5	+9.5	+4.8	+3.0	+1.8	+0.5	-0.8	-1.3

VERTICAL COMPONENT.

Month and Season, 1927.	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.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	+1	0	-2	-2	-2	-1	-1	-1	-2	-4	-4	-6	-7	-8	-1	+3	+4	+5	+6	+7	+6	+4	+3	+3
Mar.	0	-1	-1	-1	-2	-1	-2	-3	-4	-6	-9	-9	-8	-6	-2	+2	+4	+6	+7	+7	+8	+7	+5	+3
Apr.	-2	-3	-3	-4	-4	-4	-3	-1	-3	-7	-12	-15	-13	-7	0	+8	+14	+15	+13	+11	+9	+7	+5	+1
May	+1	0	0	0	0	+1	+2	+2	-2	-10	-16	-20	-17	-8	+2	-9	+13	+15	+12	+10	+8	+5	+4	+2
June	+2	0	-1	-1	0	+1	0	-2	-6	-11	-17	-21	-18	-11	-1	+7	+12	+15	+14	+12	+10	+7	+4	+3
July	+2	+1	+2	+2	+4	+4	+3	+1	-5	-11	-16	-19	-16	-12	-5	+2	+7	+11	+12	+11	+8	+5	+3	+2
Aug.	0	0	-3	-5	+1	+1	-2	-3	-4	-10	-15	-18	-14	-8	0	+7	+12	+14	+13	+11	+8	+5	+3	+1
Sept.	-4	-6	-6	-5	0	+1	+2	+1	-3	-8	-12	-16	-13	-6	0	+7	+12	+15	+13	+10	+6	+3	+1	-3
Oct.	-1	-3	-3	-2	-1	0	+2	+1	-2	-8	-13	-14	-10	-5	+2	+9	+11	+11	+11	+8	+7	+5	+2	0
Nov.	-4	-7	-8	-8	-8	-6	-4	-1	-1	-5	-9	-8	-4	+2	+8	+12	+13	+12	+9	+6	+5	+2	-1	-4
Dec.	+1	0	-1	0	0	0	-1	-1	-1	-1	-3	-6	-4	0	+3	+4	+5	+5	+4	+4	+3	+2	+2	+1
Year	-1	-2	-3	-3	-3	-3	-3	-3	-4	-4	-4	-6	-2	+1	+4	+5	+6	+5	+5	+5	+4	+3	+1	0
Winter	-0.4	-1.8	-2.4	-2.4	-1.3	-0.6	-0.6	-0.8	-3.1	-7.3	-11.1	-12.9	-10.5	-5.1	+1.2	+6.3	+9.5	+10.8	+10.0	+8.4	+6.7	+4.5	+2.7	+0.7
Equinox	+0.3	-0.8	-1.8	-1.5	-1.8	-1.3	-1.8	-2.0	-2.8	-4.3	-5.8	-6.0	-5.3	-1.5	+2.0	+3.8	+5.0	+5.5	+5.8	+5.5	+4.8	+3.8	+2.8	+1.5
Summer	-1.5	-3.3	-3.5	-3.5	-3.3	-2.3	-0.8	+0.3	-2.0	-7.5	-12.5	-14.3	-11.0	-4.5	+3.0	+9.5	+12.8	+13.8	+11.3	+8.8	+7.3	+4.8	+2.5	-0.3
Year	0.0	-1.3	-2.0	-2.3	+1.3	+1.8	+0.9	-0.8	-4.5	-10.0	-15.0	-18.5	-15.3	-9.3	-1.5	+5.8	+10.8	+13.8	+13.0	+11.0	+8.0	+5.0	+2.8	+0.8

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

International Quiet Days.

DECLINATION WEST.

Month and Season, 1927.	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.	-0.8	-0.5	-0.3	-0.4	-0.3	-0.4	-0.9	-1.2	-1.5	-1.4	-0.9	+0.7	+2.8	+3.3	+2.2	+1.3	+0.8	+0.6	+0.3	-0.1	-0.6	-0.9	-1.2	-1.2
Feb.	-0.9	-0.7	-0.7	-0.9	-0.9	-0.9	-1.3	-1.8	-2.4	-2.2	-0.6	+1.1	+2.5	+3.4	+3.0	+1.8	+1.2	+1.0	+0.7	+0.3	-0.3	-0.7	-0.8	-0.8
Mar.	-1.2	-1.0	-0.7	-1.0	-1.3	-1.7	-2.0	-3.2	-4.6	-4.2	-1.5	+1.8	+5.5	+6.4	+5.7	+3.8	+2.0	+0.7	+0.3	-0.3	-0.7	-1.0	-0.9	-1.1
April	-0.4	-0.4	-0.4	-0.3	-0.5	-1.4	-3.6	-5.9	-7.4	-6.5	-2.9	+1.6	+6.0	+7.7	+6.5	+4.3	+2.3	+0.9	+0.5	+0.4	+0.2	+0.3	+0.1	-0.2
May	0.0	+0.1	-0.3	-0.9	-1.9	-3.4	-4.8	-5.6	-5.1	-3.3	-0.5	+2.8	+5.1	+6.2	+5.5	+4.0	+2.4	+0.8	0.0	-0.2	-0.1	+0.5	+0.5	+0.1
June	-0.2	-0.3	-0.8	-1.3	-2.9	-4.0	-5.0	-4.8	-4.3	-2.6	+0.1	+2.8	+4.4	+5.0	+4.7	+3.7	+2.5	+1.5	+0.8	+0.6	+0.6	+0.5	+0.3	-0.1
July	-0.5	-0.6	-0.9	-1.2	-2.4	-4.3	-5.2	-6.0	-5.0	-2.5	+0.7	+3.3	+5.1	+5.8	+5.6	+4.0	+2.3	+1.0	+0.3	+0.1	0.0	+0.1	+0.1	-0.1
Aug.	-0.2	-0.4	-0.6	-1.3	-1.9	-3.1	-3.7	-4.5	-3.8	-1.9	+0.7	+3.2	+5.3	+5.6	+4.4	+2.7	+1.1	+0.1	-0.2	+0.1	+0.1	-0.4	-0.3	-0.3
Sept.	-0.6	-0.5	-1.1	-1.4	-1.1	-1.4	-2.5	-3.6	-4.0	-2.6	+0.1	+3.0	+5.2	+5.1	+4.6	+3.0	+1.8	+0.7	0.0	-0.1	-0.7	-0.4	-0.6	-0.4
Oct.	-0.8	-0.9	-0.9	-0.9	-0.5	-1.2	-2.3	-3.2	-4.1	-2.5	+0.1	+3.0	+4.8	+4.7	+3.8	+2.3	+0.9	+0.5	-0.3	-0.3	-0.6	-0.8	-0.9	-0.9
Nov.	-0.7	-0.3	-0.4	-0.3	-0.4	-0.7	-1.1	-1.5	-2.2	-1.9	0.0	+1.8	+3.1	+3.2	+2.5	+1.6	+0.9	+0.5	+0.1	-0.3	-0.6	-0.8	-0.9	-0.9
Dec.	-0.9	-0.6	-0.4	-0.5	-0.2	-0.5	-0.7	-1.0	-1.0	-0.3	+0.6	+1.7	+2.4	+2.2	+1.3	+0.8	+0.5	+0.1	-0.1	-0.4	-0.7	-1.0	-0.7	-0.7
Year	-0.60	-0.51	-0.63	-0.87	-1.19	-1.92	-2.76	-3.53	-3.78	-2.66	-0.34	+2.23	+4.35	+4.88	+4.15	+2.78	+1.56	+0.70	+0.18	-0.02	-0.28	-0.38	-0.42	-0.55
Winter	-0.83	-0.53	-0.45	-0.53	-0.45	-0.63	-1.00	-1.38	-1.78	-1.45	-0.23	+1.33	+2.70	+3.03	+2.28	+1.38	+0.85	+0.55	+0.25	-0.13	-0.55	-0.85	-0.90	-0.90
Equinox	-0.75	-0.70	-0.83	-0.90	-0.85	-1.43	-2.60	-3.98	-5.03	-3.95	-1.05	+2.35	+5.38	+5.98	+5.15	+3.35	+1.75	+0.70	+0.13	-0.08	-0.45	-0.48	-0.58	-0.65
Summer	-0.23	-0.30	-0.65	-1.18	-2.28	-3.70	-4.68	-5.23	-4.55	-2.58	+0.25	+3.03	+4.98	+5.65	+5.05	+3.60	+2.08	+0.85	+0.23	+0.15	+0.15	+0.18	+0.15	-0.10

INCLINATION.

Jan.	+0.0	+0.1	0.0	-0.0	-0.0	-0.2	-0.3	-0.4	-0.2	+0.2	+0.5	+0.6	+0.6	+0.6	+0.4	+0.4	+0.2	+0.1	-0.1	-0.3	-0.3	+0.3	+0.3	-0.2
Feb.	-0.1	-0.2	-0.2	-0.2	-0.2	-0.3	-0.2	-0.1	+0.4	+0.6	+0.8	+0.9	+0.7	+0.6	+0.4	+0.0	-0.0	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4
Mar.	-0.1	0.0	-0.1	-0.2	-0.2	-0.2	-0.4	-0.3	0.0	+0.3	+0.6	+0.6	+0.4	+0.4	+0.5	+0.3	-0.1	-0.3	-0.4	-0.4	-0.4	-0.6	-0.5	-0.5
April	-0.3	-0.3	-0.3	-0.5	-0.5	0.0	-0.4	+0.1	+0.7	+1.4	+1.9	+1.8	+1.2	+0.6	+0.3	-0.0	-0.3	-0.6	-0.7	-0.8	-0.8	-0.8	-0.7	-0.7
May	-0.6	-0.3	-0.3	-0.2	-0.2	0.0	+0.3	+0.7	+1.0	+1.4	+1.5	+0.9	+0.7	+0.3	+0.2	0.0	-0.2	-0.6	-0.9	-0.8	-0.7	-0.7	-0.8	-0.9
June	-0.2	-0.2	-0.2	-0.3	-0.3	-0.1	+0.2	+0.7	+1.1	+1.4	+1.3	+0.8	+0.7	+0.6	+0.1	-0.3	-0.5	-0.8	-0.8	-0.8	-0.8	-0.8	-0.8	-0.6
July	-0.1	-0.0	+0.0	+0.1	+0.1	+0.3	+0.3	+0.7	+1.1	+1.3	+1.0	+0.4	+0.0	-0.3	-0.4	-0.4	-0.4	-0.6	-0.6	-0.6	-0.5	-0.5	-0.5	-0.6
Aug.	-0.4	-0.5	-0.3	-0.2	+0.1	+0.1	+0.5	+0.9	+1.3	+1.2	+0.7	+0.3	+0.2	+0.2	+0.4	+0.2	-0.1	-0.2	-0.5	-0.7	-0.7	-0.7	-0.8	-0.6
Sept.	-0.6	-0.4	-0.4	-0.4	-0.4	-0.3	-0.2	+0.3	+0.6	+0.8	+0.8	+0.6	+0.4	+0.4	+0.2	+0.2	+0.1	+0.1	-0.3	-0.5	-0.3	-0.4	-0.4	-0.4
Oct.	-0.3	-0.4	-0.4	-0.5	-0.5	-0.3	+0.0	+0.7	+1.2	+1.4	+1.3	+1.0	+1.0	+0.6	+0.3	+0.2	+0.0	-0.2	-0.4	-0.6	-0.6	-0.6	-0.6	-0.6
Nov.	-0.2	-0.3	-0.3	-0.3	-0.5	-0.5	-0.5	-0.4	+0.1	+0.5	+0.7	+1.0	+0.7	+0.5	+0.4	+0.3	+0.0	-0.2	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4
Dec.	+0.2	+0.2	+0.0	0.0	-0.1	-0.2	-0.2	+0.0	+0.3	+0.3	+0.3	+0.3	+0.2	+0.1	+0.0	+0.1	-0.0	-0.2	-0.3	-0.2	-0.2	-0.3	-0.1	-0.1
Year	-0.23	-0.19	-0.21	-0.23	-0.23	-0.21	-0.10	+0.17	+0.57	+0.88	+0.96	+0.79	+0.57	+0.38	+0.23	+0.10	-0.08	-0.30	-0.47	-0.53	-0.51	-0.54	-0.53	-0.50
Winter	-0.03	-0.05	-0.13	-0.13	-0.20	-0.30	-0.30	-0.28	+0.08	+0.40	+0.58	+0.70	+0.55	+0.45	+0.30	+0.20	+0.05	-0.15	-0.28	-0.30	-0.33	-0.35	-0.30	-0.28
Equinox	-0.33	-0.28	-0.30	-0.40	-0.40	-0.40	-0.33	+0.03	+0.50	+0.93	+1.18	+1.08	+0.75	+0.50	+0.30	+0.23	+0.03	-0.20	-0.43	-0.58	-0.53	-0.60	-0.55	-0.55
Summer	-0.33	-0.25	-0.20	-0.15	-0.08	+0.08	+0.33	+0.75	+1.13	+1.33	+1.13	+0.60	+0.40	+0.20	+0.08	-0.13	-0.30	-0.55	-0.70	-0.73	-0.68	-0.68	-0.73	-0.68

HORIZONTAL FORCE.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	0	-1	0	+1	+1	+4	+6	+6	+3	-3	-9	-12	-11	-9	-5	-4	-2	0	+3	+5	+6	+5	+4	+3
Feb.	+3	+4	+4	+4	+4	+5	+4	+2	-4	-10	-15	-17	-15	-12	-7	-1	+1	+5	+7	+7	+7	+7	+6	+6
Mar.	+2	+2	+3	+4	+5	+5	+7	+6	+1	-6	-14	-17	-15	-13	-10	-7	-2	+3	+6	+8	+8	+10	+8	+9
April	+5	+6	+6	+8	+9	+10	+9	+2	-10	-24	-34	-35	-27	-14	-6	+2	+8	+12	+13	+14	+14	+13	+11	+11
May	+10	+5	+5	+5	+6	+3	-2	-9	-16	-25	-28	-22	-19	-10	-6	0	+5	+12	+17	+15	+14	+12	+13	+14
June	+3	+3	+3	+6	+6	+4	-2	-10	-18	-24	-25	-19	-15	-12	-4	+4	+9	+15	+16	+15	+14	+13	+13	+10
July	+3	+2	+1	+1	+2	-2	-4	-10	-19	-23	-22	-15	-8	-1	+5	+9	+10	+13	+12	+11	+9	+8	+8	+9
Aug.	+7	+7	+5	+3	+1	+1	-5	-12	-19	-21	-17	-11	-7	-7	-7	-1	+4	+5	+10	+12	+12	+11	+12	+10
Sept.	+9	+7	+7	+7	+7	+6	+4	-3	-10	-15	-18	-15	-11	-9	-4	-2	+1	+1	+7	+9	+7	+7	+7	+7
Oct.	+5	+6	+6	+8	+8	+8	+6	+1	-10	-20	-25	-23	-18	-11	-5	-1	+2	+4	+7	+10	+10	+10	+9	+9
Nov.	+4	+5	+5	+5	+7	+8	+7	+5	-2	-9	-14	-17	-13	-8	-5	-3	+1	+4	+5	+5	+6	+6	+6	+6
Dec.	-2	-2	0	0	+1	+3	+3	+2	-1	-5	-5	-6	-3	0	+1	0	+1	+3	+5	+3	+3	+4	+2	+1
Year	+4.1	+3.7	+3.8	+4.3	+4.8	+4.6	+2.8	-1.7	-8.8	-15.4	-18.8	-17.3	-13.5	-8.8	-4.4	-0.3	+3.2	+6.4	+9.0	+9.5	+9.2	+8.8	+8.3	+7.9
Winter	+1.0	+1.5	+2.3	+2.5	+3.3	+5.0	+5.0	+3.8	-1.0	-6.8	-10.8	-13.0	-10.5	-7.3	-4.0	-2.0	+0.3	+3.0	+5.0	+5.0	+5.5	+5.5	+4.8	+4.0
Equinox	+5.5	+5.3	+5.5	+6.8	+7.3	+7.3	+6.5	+1.5	-7.3	-16.3	-22.8	-22.5	-17.8	-11.8	-6.3	-2.0	+2.3	+5.0	+8.3	+10.8	+9.8	+10.0	+8.8	+9.0
Summer	+5.8	+4.3	+3.5	+3.8	+3.8	+1.5	-3.3	-10.3	-18.0	-23.8	-23.0	-16.8	-12.3	-7.5	-3.0	+3.0	+7.0	+11.3	+13.8	+13.3	+12.3	+11.0	+11.5	+10.8

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

International Quiet Days.

NORTH COMPONENT.

Month and Season, 1927.	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.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	+1	-0	+0	+2	+1	+4	+7	+7	+5	-1	-8	-13	-14	-13	-8	-3	-1	+3	+5	+7	+6	+5	+4	+4
Mar.	+3	+5	+5	+5	+5	+6	+6	+4	-1	-7	-14	-18	-18	-16	-10	-3	-1	+4	+6	+6	+7	+8	+8	+7
Apr.	+4	+3	+4	+5	+7	+7	+9	+10	+7	-1	-12	-19	-21	-21	-17	-11	-4	+2	+6	+8	+9	+11	+9	+10
May	+5	+6	+6	+8	+9	+12	+13	+9	-1	-16	-30	-36	-34	-23	-14	-3	+5	+11	+12	+13	+14	+12	+11	+11
June	+10	+5	+5	+6	+8	+7	+4	-2	-9	-20	-27	-25	-25	-17	-13	-5	+2	+11	+17	+15	+14	+11	+12	+14
July	+3	+3	+4	+8	+9	+9	+4	-4	-12	-20	-25	-22	-20	-18	-10	-1	+6	+13	+15	+14	+13	+12	+12	+10
Aug.	+4	+3	+2	+3	+5	+3	+2	-3	-12	-19	-22	-19	-14	-8	-2	+4	+7	+12	+11	+11	+9	+8	+8	+9
Sept.	+7	+7	+6	+5	+3	+5	-0	-6	-14	-18	-17	-15	-13	-14	-12	-4	+3	+5	+10	+12	+12	+11	+12	+10
Oct.	+10	+7	+8	+9	+8	+8	+7	+2	-5	-11	-18	-18	-17	-15	-10	-6	-1	+0	+7	+9	+8	+7	+8	+7
Nov.	+6	+7	+7	+9	+8	+9	+9	+5	-5	-17	-25	-26	-23	-16	-10	-4	+1	+3	+7	+10	+11	+11	+10	+10
Dec.	+5	+5	+5	+5	+7	+9	+8	+7	+1	-7	-14	-19	-17	-12	-8	-5	-0	+3	+5	+5	+7	+7	+7	+7
Year	-1	-1	+1	+1	+1	+4	+4	+3	+0	-5	-6	-8	-6	-3	-1	-1	+0	+3	+5	+3	+4	+5	+3	+2
Year	+4.8	+4.2	+4.4	+5.5	+5.9	+6.9	+6.1	+2.7	-3.8	-11.8	-18.2	-19.8	-18.5	-14.7	-9.6	-3.8	+1.3	+5.5	+8.7	+9.3	+9.6	+9.1	+8.8	+8.4
Winter	+2.0	+2.3	+2.8	+3.3	+3.5	+5.8	+6.3	+5.3	+1.3	-5.0	-10.5	-14.5	-13.8	-11.0	-6.8	-3.8	-1.0	+2.3	+4.8	+4.8	+6.3	+6.5	+5.8	+5.0
Equinox	+6.3	+5.8	+6.3	+7.8	+8.0	+9.0	+9.5	+6.5	-1.0	-11.3	-21.3	-24.8	-23.8	-18.8	-12.8	-6.0	+0.3	+4.0	+8.0	+10.0	+10.5	+10.3	+9.5	+9.5
Summer	+6.0	+4.5	+4.3	+5.5	+6.3	+6.0	+2.5	-3.8	-11.8	-19.3	-22.8	-20.3	-18.0	-14.3	-9.3	-1.5	+4.5	+10.3	+13.3	+13.0	+12.0	+10.5	+11.0	+10.8

WEST COMPONENT.

Jan.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	-4	-3	-2	-2	-1	-1	-3	-5	-7	-8	-7	+1	+12	+15	+11	+6	+4	+3	+2	+1	-2	-4	-5	-6
Mar.	-4	-3	-3	-4	-4	-4	-6	-9	-14	-14	-7	+2	+10	+15	+14	+9	+7	+6	+5	+3	+0	-2	-3	-3
Apr.	-6	-5	-3	-4	-6	-8	-9	-16	-24	-23	-11	+6	+26	+31	+28	+18	+10	+4	+3	+0	-2	-3	-3	-4
May	-1	-1	-1	+0	-1	-5	-17	-31	-41	-40	-23	+1	+26	+38	+33	+23	+14	+7	+6	+5	+4	+5	+3	+1
June	+2	+2	-1	-4	-9	-17	-26	-32	-31	-23	-9	+10	+23	+31	+28	+21	+14	+7	+4	+2	+3	+5	+6	+4
July	-0	-1	-4	-6	-14	-20	-27	-28	-27	-19	-5	+11	+20	+24	+24	+20	+15	+11	+8	+7	+6	+6	+5	+2
Aug.	-2	-3	-5	-6	-12	-23	-28	-34	-31	-18	-1	+14	+25	+30	+31	+23	+14	+8	+4	+3	+2	+2	+2	+2
Sept.	+1	-1	-2	-6	-10	-16	-21	-26	-24	-15	-0	+14	+26	+28	+22	+14	+7	+2	+1	+3	+3	+0	+1	+1
Oct.	-1	-1	-4	-6	-4	-6	-12	-20	-23	-17	-4	+12	+25	+25	+23	+15	+10	+4	+2	+2	-1	-2	-1	-1
Nov.	-3	-3	-3	-3	-1	-5	-11	-17	-24	-18	-5	+11	+21	+22	+19	+12	+5	+4	+0	+1	-1	-2	-3	-3
Dec.	-3	-1	-1	-1	-1	-2	-4	-7	-12	-12	-3	+6	+13	+15	+12	+8	+5	+4	+2	-1	-2	-3	-3	-3
Year	-5	-4	-2	-3	-1	-2	-3	-5	-6	-3	+2	+8	+12	+12	+7	+4	+3	+1	+1	-1	-3	-4	-3	-4
Year	-2.2	-2.0	-2.6	-3.8	-5.3	-9.1	-13.9	-19.2	-22.0	-17.5	-6.1	+8.0	+19.9	+23.8	+21.0	+14.4	+9.0	+5.1	+3.2	+2.1	+0.5	-0.1	-0.4	-1.2
Winter	-4.0	-2.8	-2.0	-2.5	-1.8	-2.3	-4.0	-6.5	-9.8	-9.3	-3.8	+4.3	+11.8	+14.3	+11.0	+6.8	+4.8	+3.5	+2.5	+0.5	-1.8	-3.3	-3.5	-4.0
Equinox	-2.8	-2.5	-2.8	-3.3	-3.0	-6.0	-12.3	-21.0	-28.0	-24.5	-10.8	+7.5	+24.5	+29.0	+25.8	+17.0	+9.8	+4.8	+2.8	+2.0	-0.3	-0.3	-1.3	-1.8
Summer	+0.3	-0.8	-3.0	-5.5	-11.3	-19.0	-25.5	-30.0	-28.3	-18.8	-3.8	+12.3	+23.5	+28.3	+26.3	+19.5	+12.5	+7.0	+4.3	+3.8	+3.5	+3.3	+3.5	+2.3

VERTICAL COMPONENT.

Jan.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	+1	0	0	+1	+2	+2	+2	0	-1	-1	-3	-6	-6	-2	+2	+3	+3	+3	+2	+2	+1	-1	-1	-1
Mar.	+2	+1	+2	+2	+2	+3	+2	+2	+3	-1	-7	-10	-10	-7	-4	-1	+1	+2	+3	+3	+2	+1	+1	0
Apr.	+4	+3	+4	+4	+4	+4	+3	+4	+2	-5	-13	-18	-20	-16	-8	0	+5	+5	+5	+4	+4	+3	+3	+3
May	+2	+3	+3	+3	+3	+4	+7	+6	+2	-8	-15	-21	-21	-13	-3	+3	+7	+8	+6	+5	+4	+3	+3	+2
June	+3	+2	+3	+4	+6	+8	+7	+3	-3	-9	-15	-21	-19	-13	-6	0	+5	+7	+8	+7	+7	+5	+4	+3
July	+1	+1	+1	+2	+4	+5	+3	+2	-3	-9	-13	-15	-10	-8	-5	-1	+4	+8	+9	+8	+6	+4	+2	+2
Aug.	+3	+3	+3	+4	+7	+5	+2	0	-5	-10	-17	-22	-18	-11	-2	+6	+9	+9	+8	+6	+3	+2	+2	+2
Sept.	+1	-1	0	+1	+4	+4	+4	+3	0	-6	-14	-15	-11	-8	-2	+3	+5	+6	+6	+4	+3	+2	+1	+1
Oct.	+2	+1	+1	+1	+3	+2	+3	+2	-1	-8	-15	-15	-12	-7	-4	+1	+5	+4	+5	+4	+5	+4	+3	+3
Nov.	+2	+1	0	0	+3	+2	+3	+2	+3	+1	-5	-10	-8	-4	0	+3	+5	+3	+3	+3	+2	+1	+1	0
Dec.	+1	+1	0	0	0	0	-1	-1	-1	-4	-8	-7	-5	-1	+2	+3	+3	+3	+2	+1	+1	0	0	0
Year	+2	+1	+1	0	0	-1	-1	-1	-2	-2	-2	-2	0	+3	+3	+2	+1	+1	+1	0	0	0	0	-1
Year	+2.0	+1.3	+1.5	+1.8	+2.9	+3.1	+2.8	+1.9	-0.7	-5.7	-11.0	-13.5	-11.7	-7.3	-2.3	+1.8	+4.4	+4.9	+4.9	+4.0	+3.3	+2.3	+1.6	+1.1
Winter	+1.5	+0.8	+0.8	+0.8	+1.0	+1.0	+0.5	0.0	-0.3	-2.0	-5.0	-6.3	-5.3	-1.8	+0.8	+1.8	+2.0	+2.3	+2.3	+1.5	+1.5	+0.8	0.0	-0.5
Equinox	+2.5	+2.0	+2.0	+2.0	+2.5	+2.8	+3.8	+3.8	+1.0	-6.5	-13.3	-16.0	-15.3	-10.0	-3.8	+1.8	+5.5	+5.0	+4.8	+4.3	+3.8	+3.0	+2.5	+1.8
Summer	+2.0	+1.3	+1.8	+2.8	+5.3	+5.5	+4.0	+2.0	-2.8	-8.5	-14.8	-18.3	-14.5	-10.0	-3.8	+2.0	+5.8	+7.5	+7.8	+6.3	+4.8	+3.3	+2.3	+2.0

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

International Disturbed Days.

DECLINATION WEST.

Table with columns for Month and Season (1927), Greenwich Mean Time (0-23), and Declination West values for each month and season.

INCLINATION.

Table with columns for Month and Season (1927) and Inclination values for each month and season.

HORIZONTAL FORCE.

Table with columns for Month and Season (1927) and Horizontal Force values for each month and season.

TABLE VII.—continued—MEAN DIURNAL INEQUALITIES OF THE GEOGRAPHICAL COMPONENTS OF MAGNETIC FORCE.

International Disturbed Days.

NORTH COMPONENT.

Month and Season, 1927.	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.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	+11	+11	+12	+12	+16	+18	+19	+20	+13	+4	-3	-14	-20	-18	-13	-7	-11	-11	-15	-13	+3	-15	-6	+1
Mar.	+7	+6	+8	+8	+10	+6	+9	+11	+6	+2	-6	-17	-18	-18	-13	-7	-5	-2	+0	+7	-1	-3	+1	-2
Apr.	+6	+9	+13	+19	+9	+6	-0	+3	-0	-9	-18	-22	-22	-16	-4	-5	-13	-4	+4	+20	-2	-5	+1	+19
May	+26	+25	+27	+22	+25	+29	+30	+23	+14	-16	-44	-50	-50	-44	-34	-15	+2	-3	-1	+1	+8	+14	+7	+11
June	+18	+23	+29	+30	+25	+7	+7	-8	-22	-25	-28	-27	-23	-25	-21	-14	+10	+18	+13	+12	+6	+4	-1	+6
July	+17	+11	+9	+8	+8	+5	+2	+1	-5	-19	-14	-25	-25	-17	-21	-8	-1	+6	+11	+18	+17	+16	+6	+1
Aug.	+5	-1	-3	+6	+9	+5	-0	-5	-10	-22	-33	-29	-23	-32	-26	-8	+5	+11	+19	+18	+14	+40	+24	+14
Sept.	+21	+15	+21	+11	+19	+18	+5	-14	-33	-38	-41	-45	-27	-17	-8	+8	+16	+23	+20	+36	+26	+18	+10	+10
Oct.	+31	+24	+9	+12	+6	+9	+2	-10	-20	-23	-25	-26	-22	-21	-24	-19	-9	+8	+19	+18	+18	+19	+15	+9
Nov.	+23	+22	+9	+9	+0	-5	-6	-22	+8	-17	-32	-41	-43	-22	-21	-8	+7	+7	+20	+18	+19	+28	+25	+20
Dec.	+6	+5	+3	+8	+6	+14	+16	+14	+10	+3	-7	-10	-10	-9	-14	-9	-8	-8	-11	-10	+3	-5	+2	+1
Year	+15.2	+13.3	+12.3	+13.2	+12.3	+11.3	+8.8	+2.5	-2.4	-13.4	-21.4	-25.7	-25.5	-21.6	-18.3	-10.2	-2.3	+2.4	+5.5	+7.9	+9.2	+9.8	+7.5	+7.7
Winter	+8.8	+8.0	+8.5	+10.3	+11.5	+15.5	+16.3	+15.5	+9.8	+2.0	-5.5	-11.8	-13.3	-13.8	-13.0	-9.3	-9.0	-7.5	-10.5	-7.5	-1.5	-6.3	-1.3	+0.5
Equinox	+21.5	+20.0	+14.5	+15.5	+10.0	+9.8	+6.5	-1.5	+0.5	-16.3	-29.8	-34.8	-34.3	-25.8	-20.8	-11.8	-3.3	+2.0	+10.5	+14.3	+10.8	+14.0	+12.0	+14.8
Summer	+15.3	+12.0	+14.0	+13.8	+15.3	+8.8	+3.5	-6.5	-17.5	-26.0	-29.0	-30.5	-29.0	-25.3	-21.3	-9.5	+5.5	+12.8	+16.5	+17.0	+18.3	+21.5	+11.8	+7.8

WEST COMPONENT.

Jan.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Feb.	+3	+3	+3	+3	+4	+2	+2	-0	-3	-1	+4	+9	+19	+21	+21	+20	+13	+10	-6	-12	-24	-27	-26	-31
Mar.	-13	-13	-8	-3	-9	-14	-9	-7	-4	+1	+3	+12	+19	+27	+26	+25	+19	+21	+12	-3	-10	-13	-28	-29
Apr.	-27	-14	-7	-11	-3	+5	-7	-5	-9	-4	+9	+28	+41	+37	+39	+27	+15	-9	-13	-15	-16	-17	-20	-24
May	+1	-2	+1	-3	-4	+1	-11	-21	-32	-26	-16	-1	+17	+30	+36	+36	+20	+5	-4	-6	-8	-5	-4	-6
June	-7	-10	-19	-14	-9	-14	-16	-29	-27	-20	-5	+12	+31	+39	+42	+32	+33	+16	+3	+2	-5	-7	-15	-13
July	-5	-9	-7	-7	-11	-17	-18	-28	-31	-22	-7	+9	+23	+37	+35	+27	+22	+15	+8	+5	+0	-9	-10	-5
Aug.	0	-4	+10	-20	-32	-27	-16	-23	-31	-24	-14	+7	+23	+28	+32	+30	+20	+10	+3	+2	+5	+6	+4	+3
Sept.	-17	-25	-19	-18	-19	-15	-19	-17	-15	-5	+8	+16	+35	+36	+29	+20	+22	+10	-2	+2	+6	-1	-6	-10
Oct.	-2	-17	-13	-11	-10	-11	-14	-23	-21	-6	+10	+26	+34	+39	+31	+19	+11	+11	-1	-11	-9	-8	-9	-8
Nov.	-4	+10	+14	+16	+8	+10	+16	-4	-9	-16	-15	-2	+21	+34	+31	+20	+1	+3	-23	-15	-36	-22	-19	-12
Dec.	-5	-8	-1	-2	+0	+6	+2	-2	+2	+4	+9	+16	+16	+19	+15	+15	+14	-4	-7	-14	-16	-23	-25	-15
Year	-7.3	-7.9	-3.6	-5.6	-6.7	-5.1	-6.4	-12.3	-14.4	-9.2	0.0	+12.5	+25.3	+30.8	+29.5	+23.4	+16.3	+7.6	-3.5	-7.7	-12.6	-12.6	-15.2	-14.8
Winter	-6.5	-6.0	-0.8	+0.3	0.0	+1.8	+2.0	+0.8	+0.5	+3.3	+7.5	+13.8	+19.5	+22.5	+19.8	+17.5	+13.0	+7.5	-3.3	-14.0	-22.0	-22.0	-25.8	-25.8
Equinox	-8.0	-5.8	-1.3	-2.3	-2.3	+1.3	-4.0	-13.3	-17.8	-13.0	-3.0	+12.8	+28.3	+35.0	+34.3	+25.5	+11.8	+2.5	-10.3	-11.8	-17.3	-13.0	-13.0	-12.5
Summer	-7.3	-12.0	-8.8	-14.8	-17.8	-18.3	-17.3	-24.3	-26.0	-17.8	-4.5	+11.0	+28.0	+35.0	+34.5	+27.3	+24.3	+12.8	+3.0	+2.8	+1.5	-2.8	-6.8	-6.3

VERTICAL COMPONENT.

Jan.	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	
Feb.	-3	-3	-3	-4	-4	-4	-5	-5	-6	-8	-8	-9	-8	-9	-8	+5	+6	+8	+12	+13	+12	+3	+2	+5	+2
Mar.	-5	-4	-4	-5	-7	-4	-3	-4	-6	-9	-9	-10	-9	-8	-4	+1	+6	+9	+11	+14	+15	+16	+13	+6	+6
Apr.	-9	-11	-16	-21	-16	-19	-16	-13	-13	-16	-20	-18	-12	-1	+10	+23	+33	+38	+33	+23	+16	+15	+12	-3	-3
May	-10	-9	-12	-11	-10	-13	-14	-14	-15	-19	-22	-21	-15	+2	+16	+30	+40	+48	+25	+16	+12	+3	0	-4	-4
June	-3	-5	-10	-13	-15	-14	-15	-14	-17	-17	-20	-20	-17	-6	+10	+23	+29	+29	+27	+22	+18	+13	+6	+2	+2
July	0	-2	-1	0	+1	+1	+1	-1	-10	-16	-21	-21	-18	-11	-3	+7	+14	+17	+17	+15	+12	+6	+3	0	0
Aug.	-1	-1	-21	-33	-13	-8	-17	-13	-8	-11	-16	-16	-9	+2	+10	+20	+22	+24	+25	+21	+16	+10	+5	+3	+3
Sept.	-17	-26	-23	-18	-8	-4	-3	-1	-10	-10	-11	-12	-19	+3	+10	+16	+22	+34	+35	+25	+15	+3	-2	-13	-13
Oct.	-5	-10	-9	-9	-7	-3	-1	-2	-3	-9	-12	-15	-9	-1	+7	+14	+16	+15	+16	+12	+10	+5	-3	-2	-2
Nov.	-15	-17	-22	-25	-23	-19	-19	-14	-14	-15	-16	-7	+4	+18	+28	+40	+40	+43	+25	+10	+9	+3	-8	-16	-16
Dec.	-2	-5	-5	-4	-4	-3	-5	-5	-6	-8	-8	-6	-4	0	+3	+4	+7	+9	+9	+10	+10	+7	+5	+3	+3
Year	-6.3	-8.4	-11.3	-12.6	-9.4	-8.2	-8.8	-7.8	-9.7	-12.2	-13.9	-13.3	-9.9	-0.1	+8.3	+16.3	+20.8	+24.0	+20.8	+16.2	+12.3	+7.4	+3.1	-2.1	-2.1
Winter	-4.0	-5.0	-5.5	-5.3	-5.5	-4.8	-5.5	-5.5	-6.5	-8.3	-7.3	-7.5	-6.0	-1.8	+3.0	+5.5	+8.5	+10.0	+11.5	+12.5	+10.0	+7.8	+6.0	+2.0	+2.0
Equinox	-9.8	-11.8	-14.8	-16.5	-14.0	-13.5	-12.5	-10.8	-11.3	-14.8	-17.5	-15.3	-8.0	+4.5	+15.3	+26.8	+32.3	+36.0	+24.8	+15.3	+11.5	+6.5	+0.3	-6.3	-6.3
Summer	-5.3	-8.5	-13.8	-16.0	-8.8	-6.3	-8.5	-7.3	-11.3	-13.5	-17.0	-17.3	-5.8	-3.0	+6.8	+16.5	+21.8	+26.0	+26.0	+20.8	+15.3	+8.0	+3.0	-2.0	-2.0

TABLE VIII.—HARMONIC COMPONENTS of the DIURNAL INEQUALITY of MAGNETIC FORCE.

Values of a\_n, b\_n in the series Σ (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° to each hour.

Table with columns for Month and Season, North Force (a1-b4), West Force (a1-b4), and Vertical Force (a1-b4). Rows include 1927, Year, W. Eq. S., and sub-sections for ALL DAYS, QUIET DAYS, and DISTURBED DAYS.

TABLE IX.—HARMONIC COMPONENTS of the DIURNAL INEQUALITY of MAGNETIC FORCE.

Values of c\_n, a\_n in the series Σ (c\_n sin T + a\_n), T being reckoned in hours from Midnight, Abinger Local Mean Time, and converted into arc at the rate of 15° to each hour.

New phase-angles expressing the inequalities relative to apparent local time may be obtained from the tabulated angles by applying corrections a, 2a, 3a, 4a, to a\_1, a\_2, a\_3, a\_4, respectively, where a has the following values:—

Table showing phase-angle corrections for months: January (+2 19), February (+3 28), March (+2 12), April (+0 4), May (-0 51), June (+0 5), July (+1 22), August (+0 59), September (-1 12), October (-3 28), November (-3 42), December (-1 6), Winter (+0 12), Equinox (-0 36), Summer (+0 24).

Table with columns for Month and Season, North Force (c1-a4), West Force (c1-a4), and Vertical Force (c1-a4). Rows include 1927, Year, W. Eq. S., and sub-sections for ALL DAYS, QUIET DAYS, and DISTURBED DAYS.



TABLE X.—RANGE of MEAN DIURNAL INEQUALITIES for the MONTHS, YEAR and SEASONS of 1927.

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 ...	5.6	1.2	7	4.8	1.0	18	10.3	2.9	40	7	7	7	7	7	7	7	7	7
February ...	6.3	1.0	17	5.8	1.3	24	10.8	1.6	23	23	30	17	26	29	13	29	56	26
March ...	9.1	1.5	28	11.0	1.2	27	13.3	3.3	32	35	50	30	32	55	25	42	68	58
April ...	13.5	2.6	47	15.1	2.7	49	14.3	5.0	77	50	69	35	50	79	29	80	68	70
May ...	11.8	2.1	42	11.8	2.4	45	13.4	3.6	55	41	61	36	44	63	29	58	71	49
June ...	11.7	2.2	42	10.0	2.2	41	12.8	2.1	41	41	62	31	40	52	24	43	68	38
July ...	11.0	2.2	43	11.8	1.9	36	12.9	4.3	75	41	60	32	34	65	31	73	64	58
August ...	10.0	2.6	44	10.1	2.1	33	13.4	4.1	74	43	53	31	30	54	21	81	61	61
September ...	10.4	2.1	38	9.2	1.4	27	12.0	3.7	54	44	54	25	28	48	20	57	62	26
October ...	8.5	2.2	36	8.9	2.0	35	14.3	4.7	64	41	43	22	37	46	15	71	70	68
November ...	5.1	1.3	22	5.4	1.5	25	8.4	2.4	29	26	25	11	28	27	11	30	44	18
December ...	4.9	1.4	18	3.4	0.6	10	10.9	3.8	46	20	25	10	13	18	5	41	62	24
Year ...	8.66	1.46	28.0	8.66	1.50	28.3	9.51	2.25	35.4	31.0	45.2	23.7	29.4	45.8	18.4	40.9	46.0	37.9
Winter ...	5.40	1.13	18.6	4.81	1.05	18.5	9.33	2.35	24.8	22.0	26.3	11.8	21.0	24.1	8.6	30.1	48.3	20.8
Equinox ...	10.43	2.08	35.8	11.01	1.78	33.1	10.98	3.23	50.1	40.5	54.1	27.6	35.3	57.0	21.5	56.3	52.8	53.5
Summer ...	11.13	2.21	41.6	10.88	2.06	37.1	11.46	2.78	49.6	40.5	58.8	32.3	36.1	58.3	26.1	52.0	61.0	43.3

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

Month. 1927.	" All " Days.			Quiet Days.			Disturbed Days.		
	Declination West.	Horizontal Force.	Vertical Force.	Declination West.	Horizontal Force.	Vertical Force.	Declination West.	Horizontal Force.	Vertical Force.
January ...	-0.39	0.0	-0.1	-0.30	+5.0	-2.4	-5.22	-16.4	+2.8
February ...	-0.23	+0.1	+0.2	+0.16	+5.2	-1.6	-1.26	-8.2	+5.0
March ...	+0.16	+0.5	-0.6	-0.02	+4.2	-0.6	+1.02	+0.8	-3.8
April ...	-0.03	-0.3	+0.5	+0.36	+5.8	+1.4	+0.36	-15.8	+3.6
May ...	-0.12	+0.1	-0.4	+0.18	+1.8	-0.4	-0.26	-15.2	+3.0
June ...	+0.05	+0.2	-0.2	+0.06	+5.6	+0.8	-0.10	-14.0	-2.4
July ...	-0.01	-0.6	+0.1	+0.22	+5.4	-1.2	-0.44	-7.2	+2.8
August ...	-0.05	-0.4	+0.2	+0.02	+2.8	0.0	+0.08	-12.0	+1.6
September ...	-0.03	+0.2	0.0	+0.26	-0.2	0.0	-0.48	-10.8	-1.4
October ...	-0.08	0.0	+0.3	+0.16	+4.4	-2.6	-0.28	-13.6	+0.2
November ...	-0.03	0.0	-0.4	+0.06	+2.6	-1.6	-0.54	-2.6	+3.0
December ...	+0.01	+0.1	-0.3	+0.18	+3.8	-2.6	-2.52	-11.6	+1.2
Year 1927 ...	-0.06	-0.0	-0.1	+0.11	+3.9	-0.9	-0.80	-10.6	+1.3

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

Month. 1927.	Declination (West).	Inclination.	Horizontal Force.	North Force.	West Force.	Vertical Force.
January ...	13 4.0	66 36.2	18577	18096	04200	42935
February ...	13 2.9	66 35.9	18578	18098	04194	42928
March ...	13 2.1	66 36.1	18573	18094	04189	42924
April ...	13 1.0	66 36.5	18574	18097	04183	42940
May ...	12 59.4	66 35.8	18580	18105	04176	42931
June ...	12 58.9	66 35.0	18588	18113	04176	42921
July ...	12 57.6	66 35.6	18581	18107	04167	42926
August ...	12 57.0	66 36.5	18572	18100	04162	42933
September ...	12 56.0	66 36.7	18570	18099	04156	42935
October ...	12 54.9	66 37.6	18560	18090	04148	42943
November ...	12 53.7	66 36.4	18573	18105	04145	42932
December ...	12 52.8	66 36.5	18571	18104	04140	42931
Year 1927 ...	12 58.4	66 36.2	18575	18101	04170	42932

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

1927. Day.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	12. 54·5	12. 54·2	12. 55·4	12. 55·9	12. 54·3	12. 56·3	12. 56·9	12. 36·6	12. 37·0	12. 35·5	12. 36·4	12. 34·7
2	54·7	54·1	55·7	55·9	54·4	56·8	57·0	36·2	37·4	35·9	36·6	34·5
3	54·9	53·9	55·7	55·6	54·8	56·6	57·1	36·1	37·5	36·2	36·6	34·2
4	54·7	54·2	55·5	55·7	55·2	56·4	57·5	36·5	37·7	35·8	36·8	33·9
5	54·4	54·4	55·8	55·9	55·6	56·3	<u>57·0</u> 35·7	36·9	37·6	35·7	36·7	33·8
6	54·4	54·4	55·8	56·0	56·1	56·3	35·6	37·0	37·6	35·4	36·3	34·0
7	54·5	54·1	55·8	56·4	56·3	56·2	35·5	36·9	37·4	35·6	35·5	34·2
8	54·7	54·3	55·7	56·5	56·4	56·3	35·5	37·1	37·2	36·0	34·9	34·2
9	54·8	53·7	55·5	56·4	57·0	56·5	35·6	37·1	37·1	36·1	34·8	34·2
10	54·8	53·3	55·6	56·4	56·9	56·5	36·0	37·3	36·8	35·9	33·5	34·6
11	55·1	53·0	55·4	56·2	56·7	56·8	36·1	37·1	36·7	36·0	32·2	34·8
12	55·3	53·0	55·7	56·2	55·9	56·7	36·3	36·8	36·1	36·3	32·6	33·9
13	55·3	52·9	55·5	56·2	55·6	56·8	36·4	36·9	35·9	35·9	32·7	33·6
14	55·3	52·9	55·3	56·1	55·2	56·7	36·4	36·9	35·8	35·6	32·7	33·2
15	55·1	53·0	55·0	56·2	55·1	57·0	36·0	36·9	35·9	35·5	32·8	33·2
16	55·0	53·4	55·0	56·6	55·6	<u>57·3</u> 58·2	36·0	36·7	36·1	35·6	33·2	32·9
17	54·7	53·5	54·8	56·1	55·7	58·0	35·9	36·7	36·0	35·8	33·5	32·4
18	54·8	53·7	55·0	56·5	55·5	57·8	35·7	36·6	35·8	35·6	33·4	32·0
19	54·5	53·9	55·2	<u>56·3</u> 56·1	55·7	57·6	35·7	36·6	35·7	35·3	33·9	31·3
20	54·0	53·9	55·3	56·4	55·5	57·2	35·8	36·7	35·7	35·5	34·1	31·1
21	53·8	54·1	55·7	56·2	55·7	57·3	36·1	37·0	36·2	35·0	34·1	—
22	53·3	54·5	55·9	56·6	55·8	56·8	36·1	36·9	36·3	35·1	34·6	31·4
23	53·6	54·7	56·2	56·5	55·7	56·9	36·2	36·8	35·7	35·5	34·5	32·2
24	53·6	55·1	56·0	56·2	55·6	56·6	35·9	36·4	35·4	34·8	34·5	32·9
25	53·9	54·6	56·2	55·9	56·3	56·9	36·2	36·4	35·2	35·1	34·7	33·1
26	54·2	54·9	56·4	55·8	56·1	56·8	36·3	36·2	35·1	35·4	34·6	33·3
27	54·3	55·3	56·2	54·9	55·9	56·7	36·2	36·2	35·2	35·7	34·5	33·0
28	54·7	55·2	56·2	54·6	56·0	56·4	36·5	36·3	35·3	36·1	34·4	32·5
29	54·7		55·9	54·7	55·6	56·6	36·6	36·3	35·4	36·2	34·5	32·0
30	54·6		56·2	54·8	55·4	56·9	36·6	36·4	35·5	36·2	34·6	31·5
31	54·7		56·1		55·8		36·7	36·5		36·4		31·1

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

Greenwich Mean Time, 1927.	In C.G.S. Units.		Greenwich Mean Time, 1927.	In C.G.S. Units.		Greenwich Mean Time, 1927.	In C.G.S. Units.	
	Observed Horizontal Force.	Deduced Value of Base Line.		Observed Horizontal Force.	Deduced Value of Base Line.		Observed Horizontal Force.	Deduced Value of Base Line.
Jan. 1. 9 43-10 19	γ 18597	γ 18634	Mar. 18. 9 55-10 36	γ 18544	γ 18642	June 9. 9 26-10 10	γ 18576	γ 18670
4. 15 41-16 27	18581	18629	19. 9 55-10 38	18545	18636	10. 8 54- 9 36	18593	18667
5. 16 16-17 6	18596	18630	21. 9 39-10 19	18567	18643	11. 9 15-10 4	18581	18665
6. 12 20-13 6	18583	18623	22. 9 49-10 32	18571	18644	13. 9 46-10 22	18567	18670
7. 10 0-10 53	18560	18620	23. 9 55-10 48	18558	18636	14. 10 23-11 10	18564	18670
8. 10 20-11 2	18541	18623	25. 11 1-11 39	18580	18638	15. 9 2- 9 52	18569	18661
10. 12 25-13 10	18571	18627	26. 10 2-10 54	18566	18642	16. 9 12- 9 49	18566	18669
11. 12 1-12 44	18567	18625	28. 10 4-10 43	18527	18638	18. 8 57- 9 36	18564	18690
12. 9 57-10 49	18582	18622	30. 10 0-10 44	18556	18636	20. 14 39-15 21	18606	18702
13. 11 43-12 25	18573	18619	31. 11 23-12 1	18558	18637	21. 10 22-11 0	18568	18695
15. 10 8-10 48	18577	18621	April 1. 10 4-10 47	18540	18641	22. 8 56- 9 31	18567	18694
17. 15 12-16 8	18579	18652	2. 9 32-10 11	18530	18636	23. 9 22-10 2	18568	18698
18. 11 34-12 15	18564	18655	4. 9 9-10 2	18561	18637	24. 11 6-12 3	18588	18700
19. 10 54-11 37	18560	18647	5. 11 15-11 45	18549	18640	25. 8 34- 9 13	18580	18697
20. 10 45-11 22	18567	18644	6. 11 18-11 58	18549	18641	28. 8 49- 9 42	18562	18704
21. 11 46-12 28	18565	18642	7. 11 52-12 33	18557	18638	29. 10 26-11 8	18572	18706
22. 12 3-12 49	18572	18643	8. 9 56-10 34	18538	18639	July 1. 11 9-11 49	18586	18703
24. 11 36-12 27	18582	18647	9. 10 6-10 50	18542	18636	2. 10 16-10 56	18558	18698
25. 10 7-11 5	18570	18640	11. 14 22-15 4	18575	18641	4. 13 42-14 21	18580	18698
26. 12 19-13 9	18551	18646	12. 9 9- 9 53	18536	18639	6. 8 59-10 0	18566	18672
27. 10 24-11 10	18561	18641	13. 11 12-12 1	18538	18637	7. 8 45- 9 27	18572	18671
28. 12 29-13 11	18579	18648	14. 9 4- 9 48	18526	18632	8. 10 35-11 13	18565	18675
29. 9 36-10 13	18575	18644	20. 9 14- 9 55	18556	18662	9. 8 53- 9 47	18568	18675
31. 14 59-15 39	18584	18651	21. 8 55- 9 37	18578	18667	11. 11 24-12 3	18568	18671
Feb. 1. 10 4-10 45	18590	18646	22. 8 56- 9 51	18563	18658	12. 8 54- 9 40	18587	18669
2. 11 35-12 14	18578	18650	23. 8 56- 9 37	18586	18665	13. 9 3- 9 43	18569	18661
3. 10 8-10 48	18587	18646	25. 8 50- 9 37	18561	18670	14. 8 50- 9 51	18556	18665
4. 9 55-10 56	18572	18646	26. 10 20-10 59	18556	18674	15. 9 30-10 20	18566	18671
5. 10 18-10 59	18572	18643	27. 8 37- 9 18	18566	18667	15. 10 50-11 45	18588	18679
7. 10 14-10 58	18576	18645	28. 8 49- 9 32	18564	18670	16. 10 33-11 12	18578	18673
8. 15 1-15 44	18589	18641	29. 8 59- 9 40	18572	18672	18. 11 9-12 1	18563	18671
9. 12 22-13 2	18566	18649	May 2. 9 40-10 23	18566	18677	18. 14 2-14 56	18594	18671
10. 10 22-11 12	18549	18649	3. 8 56- 9 39	18566	18672	19. 10 45-11 43	18568	18671
11. 9 53-10 34	18572	18652	4. 8 39- 9 30	18561	18675	20. 9 34-10 36	18558	18667
12. 9 53-10 39	18577	18646	5. 9 1- 9 43	18482	18672	20. 13 31-14 22	18572	18667
14. 10 56-11 38	18573	18652	6. 8 38- 9 23	18550	18665	21. 9 38-10 23	18563	18669
15. 10 6-10 56	18582	18651	7. 8 47- 9 28	18577	18673	22. 9 1-10 1	18518	18672
16. 14 10-14 53	18549	18647	9. 8 44- 9 25	18558	18668	23. 8 42- 9 30	18537	18667
17. 9 51-10 48	18571	18645	10. 10 39-11 24	18537	18665	25. 13 41-14 21	18585	18686
18. 9 45-10 29	18576	18648	11. 8 34- 9 25	18560	18663	26. 8 57- 9 38	18559	18676
19. 9 47-10 31	18582	18650	12. 8 56- 9 33	18561	18662	27. 9 6-10 1	18536	18676
21. 9 47-10 36	18575	18652	13. 8 57- 9 34	18574	18666	28. 8 42- 9 30	18553	18672
22. 9 50-10 32	18559	18646	16. 9 55-10 48	18545	18667	29. 10 48-11 43	18582	18681
23. 10 8-10 44	18560	18642	17. 8 51- 9 28	18558	18664	30. 10 46-11 26	18565	18675
24. 9 58-10 41	18585	18644	18. 9 11- 9 46	18550	18667	Aug. 2. 10 26-11 11	18560	18675
25. 9 54-10 38	18558	18648	19. 8 59- 9 40	18558	18668	3. 10 34-11 17	18547	18670
26. 9 38-10 20	18557	18639	20. 9 18- 9 58	18555	18669	4. 9 17-10 1	18555	18674
28. 11 8-11 48	18558	18641	21. 10 12-11 1	18570	18671	5. 8 45- 9 38	18557	18675
Mar. 1. 9 42-10 42	18565	18640	23. 8 52- 9 34	18574	18663	6. 8 51- 9 38	18569	18673
2. 12 27-13 9	18575	18651	24. 10 2-10 40	18579	18665	9. 9 14- 9 55	18577	18667
3. 9 40-10 19	18574	18643	26. 10 26-11 18	18559	18665	10. 8 40- 9 19	18573	18674
4. 9 49-10 32	18564	18646	27. 9 35-10 16	18575	18662	11. 9 9-10 0	18575	18676
5. 11 58-12 50	18578	18645	28. 9 11-10 2	18560	18673	12. 9 16-10 1	18553	18672
7. 10 17-11 5	18557	18640	30. 13 58-14 46	18587	18679	13. 8 32- 9 14	18660	18670
8. 12 1-12 41	18563	18643	31. 9 44-10 32	18558	18665	16. 8 46- 9 26	18559	18676
9. 9 53-10 36	18580	18643	June 1. 9 34-10 34	18559	18668	17. 8 23- 9 8	18546	18671
10. 10 19-10 55	18511	18638	2. 9 30-10 12	18559	18669	18. 8 49- 9 47	18556	18674
11. 11 19-11 59	18533	18642	3. 9 50-10 27	18561	18668	19. 8 30- 9 7	18565	18671
12. 9 55-10 35	18565	18645	4. 9 15- 9 54	18569	18666	20. 8 26- 9 15	18543	18679
14. 15 4-15 46	18556	18639	7. 10 13-10 57	18564	18675	23. 8 53- 9 40	18538	18678
15. 9 45-10 20	18557	18637	8. 9 21-10 2	18551	18666	24. 8 44- 9 37	18518	18676
17. 9 36-10 15	18535	18644						

April 19. Temperature raised to 15° C.

June 16. Temperature raised to 20° C.

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

Greenwich Mean Time 1927.	In C.G.S. Units.		Greenwich Mean Time, 1927.	In C.G.S. Units.		Greenwich Mean Time, 1927.	In C.G.S. Units.				
	Observed Horizontal Force.	Deduced Value of Base Line.		Observed Horizontal Force.	Deduced Value of Base Line.		Observed Horizontal Force.	Deduced Value of Base Line.			
Aug. 26.	h m h m	$\gamma$	$\gamma$	Oct. 3.	h m h m	$\gamma$	$\gamma$	Nov. 18.	h m h m	$\gamma$	$\gamma$
27.	9 27-10 8	18543	18700	4.	15 24-16 2	18570	18677	19.	9 58-10 35	18577	18647
31.	8 55- 9 40	18553	18703	5.	11 24-12 9	18547	18676	21.	11 19-12 8	18552	18646
Sept. 1.	14 36-15 13	18579	18716	6.	9 40-10 23	18555	18671	22.	14 30-15 41	18559	18651
2.	10 26-11 3	18547	18701	7.	10 8-10 48	18559	18676	23.	14 55-15 38	18565	18648
3.	9 8-10 10	18537	18698	11.	9 38-10 36	18521	18664	25.	10 56-11 52	18557	18647
5.	10 5-10 48	18558	18704	14.	15 40-16 27	18556	18675	26.	11 54-12 34	18566	18643
6.	10 39-11 25	18545	18701	15.	11 31-12 17	18527	18677	29.	11 2-11 45	18573	18643
7.	9 25-10 8	18572	18705	18.	12 1-12 44	18545	18675	30.	11 31-12 25	18570	18648
8.	9 1- 9 44	18562	18699	19.	12 3-12 58	18550	18679	Dec. 2.	10 58-11 54	18540	18647
9.	9 24-10 18	18555	18695	20.	12 22-13 7	18557	18675	3.	11 19-12 16	18564	18641
10.	10 49-11 33	18557	18708	21.	9 50-10 39	18556	18674	5.	11 16-11 53	18560	18647
13.	8 40- 9 27	18556	18702	25.	9 37-10 31	18562	18674	6.	15 4-15 44	18572	18651
14.	8 59-10 6	18536	18697	26.	11 36-12 17	18543	18674	7.	14 40-15 22	18562	18649
15.	9 2- 9 39	18542	18702	27.	14 44-15 43	18568	18677	8.	14 40-15 22	18562	18649
16.	8 49- 9 40	18545	18696	28.	10 52-11 50	18547	18674	9.	11 10-11 54	18569	18648
17.	10 42-11 20	18553	18701	31.	10 35-11 29	18553	18673	12.	11 11-12 10	18572	18647
20.	8 51- 9 32	18566	18701	Nov. 1.	14 47-15 29	18567	18671	13.	10 48-11 34	18568	18653
21.	9 8-10 1	18562	18702	3.	11 12-11 56	18548	18673	14.	10 42-11 32	18578	18648
22.	13 9-13 43	18562	18700	4.	15 0-15 47	18580	18676	15.	12 5-12 54	18573	18644
24.	9 56-10 34	18561	18678	5.	10 29-11 18	18564	18675	16.	11 25-12 11	18554	18648
26.	10 45-11 26	18521	18672	7.	10 2-10 46	18565	18671	19.	12 0-12 56	18552	18650
27.	9 9- 9 55	18547	18672	9.	14 48-15 38	18571	18670	20.	12 5-13 3	18555	18640
28.	9 20-10 7	18520	18668	11.	11 59-12 39	18567	18671	23.	15 11-15 53	18569	18650
30.	8 43- 9 44	18556	18676	12.	14 22-14 58	18572	18655	29.	11 46-12 29	18570	18652
Oct. 1.	8 57- 9 46	18536	18669	14.	11 56-12 32	18552	18648	30.	10 46-11 48	18568	18655
				15.	11 48-15 44	18569	18655	31.	11 41-12 26	18563	18646
				17.	11 6-11 48	18559	18649		11 4-11 45	18563	18648
					10 27-11 17	18561	18646		11 23-12 25	18583	18654

Sept. 23. Temperature lowered to 15° C.

Nov. 10. Temperature lowered to 10° C.

TABLE XIV (B).—RESULTS OF DETERMINATIONS of the ABSOLUTE VALUE of HORIZONTAL FORCE 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 FORCE MAGNETOGRAMS—*continued*.

Greenwich Mean Time, 1927.	No. of Obs.	In C.G.S. Units.		Greenwich Mean Time, 1927.	No. of Obs.	In C.G.S. Units.		Greenwich Mean Time, 1927.	No. of Obs.	In C.G.S. Units.	
		Observed Horizontal Force.	Deduced Base Line.			Observed Horizontal Force.	Deduced Base Line.			Observed Horizontal Force.	Deduced Base Line.
Jan. 29. 11 48-11 55	4	18569	18645	April 8. 11 57-12 3	4	18527	18638	June 11. 11 8-11 15	4	18590	18663
31. 11 9-11 24	7	18580	18647	9. 12 52-12 58	4	18540	18639	13. 13 10-13 19	4	18578	18662
Feb. 1. 13 8-13 18	6	18571	18647	11. 11 17-11 25	4	18524	18637	14. 14 9-14 23	4	18575	18662
2. 15 9-15 19	6	18570	18647	12. 11 24-11 30	4	18541	18639	15. 14 29-14 36	4	18598	18665
3. 15 59-16 8	6	18592	18646	13. 9 38- 9 47	4	18554	18636	16. 11 21-11 26	4	18559	18663
4. 12 54-13 2	4	18581	18647	14. 12 6-12 12	4	18439	(18629)	17. 14 51-15 2	6	18607	18693
4. 16 3-16 9	3	18577	18646	16. 11 21-11 27	4	18534	18638	18. 9 52-10 4	4	18557	18690
5. 11 45-11 52	4	18575	18646	18. 8 56- 9 7	6	18553	18635	20. 15 32-15 47	4	18599	18692
7. 15 40-15 52	6	18590	18646	19. 7 58- 8 8	4	18573	18635	21. 9 6- 9 13	4	18571	18694
8. 11 53-12 5	6	18581	18647	19. 10 43-10 51	4	18553	18661	22. 10 14-10 23	6	18568	18693
9. 16 5-16 13	4	18574	18647	20. 8 56- 9 7	4	18566	18663	23. 14 37-14 41	2	18582	18693
10. 12 49-12 59	4	18548	18648	20. 13 33-13 40	4	18561	18663	24. 9 41- 9 46	4	18587	18695
11. 12 29-12 38	4	18563	18648	21. 11 20-11 30	4	18559	18662	25. 11 40-11 48	4	18580	18695
12. 11 44-11 57	6	18570	18647	22. 14 7-14 21	4	18587	18663	26. 15 53-16 2	6	18594	18695
15. 11 50-11 57	4	18585	18649	23. 11 18-11 25	4	18571	18664	26. 18 43-18 53	5	18628	18695
16. 13 8-13 15	4	18577	18647	25. 14 10-14 15	4	18560	18666	27. 9 1- 9 11	5	18555	18696
17. 12 53-13 0	4	18551	18645	26. 9 51-10 0	6	18546	18665	27. 15 28-15 40	6	18565	18695
18. 11 36-11 44	6	18571	18646	27. 13 19-13 27	4	18579	18668	27. 19 32-19 37	3	18592	18693
19. 11 16-11 24	4	18589	18647	28. 13 8-13 15	4	18574	18669	28. 4 21- 4 24	2	18577	18693
21. 10 58-11 5	4	18567	18646	29. 14 11-14 24	6	18601	18669	28. 5 10- 5 21	4	18577	18695
22. 16 54-17 0	4	18586	18645	30. 9 34- 9 46	6	18558	18669	28. 6 12- 6 16	3	18568	18695
23. 18 29-18 37	4	18596	18649	May 2. 14 48-14 55	4	18584	18668	28. 7 15- 7 20	3	18562	18694
24. 15 46-15 56	6	18558	18645	3. 14 36-14 47	4	18563	18668	29. 4 28- 5 0	7	18589	18695
25. 12 11-12 17	4	18560	18648	4. 14 38-14 47	4	18558	18668	29. 5 0- 5 58	6	18586	18695
26. 11 1-11 11	4	18560	18645	5. 10 58-11 3	4	18484	18669	30. 4 11- 5 0	12	18589	18695
28. 15 51-15 58	4	18572	18642	6. 14 1-14 16	4	18537	18664	July 1. 10 36-10 46	5	18558	(18692)
Mar. 1. 15 46-15 54	4	18564	18642	7. 11 13-11 19	4	18567	18664	2. 11 4-11 14	5	18556	18693
2. 12 16-12 24	4	18570	18643	9. 14 43-14 55	4	18595	18664	4. 19 46-19 57	6	18608	18692
3. 15 21-15 28	4	18578	18644	10. 9 12- 9 19	4	18558	18663	5. 10 8-10 14	4	18553	18693
4. 12 58-13 5	4	18566	18642	11. 11 47-11 53	4	18553	18664	5. 11 9-11 14	4	18560	18668
5. 12 53-13 0	4	18580	18643	12. 11 25-11 31	4	18565	18666	5. 13 58-14 12	4	18584	18668
7. 15 24-15 31	4	18588	18642	13. 14 9-14 14	4	18586	18664	6. 14 46-15 8	4	18594	18669
8. 11 48-11 55	4	18563	18642	14. 10 4-10 9	4	18567	18668	7. 11 58-12 3	4	18549	18668
9. 12 45-12 52	4	18574	18641	16. 13 26-13 43	4	18552	18666	8. 14 2-14 7	4	18564	18669
10. 11 50-11 56	4	18536	18642	17. 11 11-11 16	4	18557	18666	9. 11 41-11 47	4	18564	18669
11. 10 52-10 58	4	18526	18639	18. 11 2-11 8	4	18571	18664	11. 14 34-14 39	4	18588	18667
12. 12 33-12 38	4	18556	18644	19. 14 53-15 1	4	18573	18664	12. 10 51-10 56	4	18583	18666
14. 15 50-15 59	4	18550	18641	20. 11 40-11 47	4	18570	18668	13. 11 58-12 6	4	18572	18665
15. 12 53-13 0	4	18573	18642	21. 9 51- 9 56	4	18564	18664	14. 15 34-15 40	4	18605	18667
16. 11 35-11 40	4	18561	18641	23. 10 13-10 21	4	18577	18666	15. 9 3- 9 8	4	18561	18665
17. 12 46-12 52	4	18550	18640	24. 9 50- 9 57	4	18577	18666	16. 9 34- 9 39	4	18563	18666
18. 12 49-12 58	6	18555	18642	25. 10 38-10 49	4	18583	18664	18. 9 55-10 4	6	18555	18667
19. 12 0-12 7	4	18555	18641	25. 11 27-11 35	4	18583	18664	23. 12 45-12 56	4	18549	18665
21. 11 44-11 52	4	18561	18641	26. 10 8-10 20	6	18554	18663	24. 9 16- 9 53	4	18529	18664
22. 12 48-12 54	4	18567	18642	26. 15 45-15 53	4	18578	18662	24. 10 38-10 42	4	18534	18672
24. 12 30-12 39	6	18568	18638	27. 9 17- 9 30	6	15588	18662	25. 8 27- 8 37	6	18549	18672
24. 15 44-15 50	4	18584	18639	28. 10 27-10 33	4	18560	18664	26. 8 35- 8 43	4	18554	18673
25. 12 3-12 16	6	18587	18637	30. 11 50-11 55	4	18563	18666	27. 13 40-13 47	4	18578	18673
26. 12 42-12 52	4	18553	18639	31. 9 31- 9 38	4	18559	18665	28. 14 37-14 51	4	18569	18671
28. 12 51-12 58	4	18533	18636	June 1. 15 9-15 15	4	18600	18667	29. 15 22-15 28	4	18598	18674
29. 11 15-11 21	4	18564	18640	2. 8 57- 9 3	4	18562	18666	30. 9 23- 9 29	4	18556	18673
30. 15 33-15 39	4	18578	18636	3. 9 0- 9 9	4	18565	18664	Aug. 1. 9 50- 9 58	5	18564	18672
31. 15 16-15 32	4	18578	18637	4. 10 12-10 22	6	18564	18663	2. 9 5- 9 13	4	18557	18672
April 1. 15 48-15 54	4	18570	18638	6. 9 27- 9 35	4	18549	18664	3. 13 2-13 8	4	18561	(18666)
2. 11 50-11 58	4	18539	18640	7. 10 1-10 9	4	18556	18663	4. 13 43-13 49	4	18570	18673
4. 16 16-16 23	4	18594	18639	8. 11 8-11 18	4	18565	18663	5. 11 4-11 12	4	18555	18671
5. 10 49-10 56	4	18539	18631	9. 14 45-14 53	4	18594	18664				
6. 11 1-11 8	4	18548	18639	10. 15 35-15 41	4	18619	18663				
7. 11 3-11 13	6	18563	18640								

April 19. Temperature raised to 15° C.

June 16. Temperature raised to 20° C.

TABLE XIV (B).—RESULTS OF DETERMINATIONS of the ABSOLUTE VALUE of HORIZONTAL FORCE 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 FORCE MAGNETOGRAMS—*continued.*

Greenwich Mean Time, 1927.	No. of Obs.	In C.G.S. Units.		Greenwich Mean Time, 1927.	No. of Obs.	In C.G.S. Units.		Greenwich Mean Time, 1927.	No. of Obs.	In C.G.S. Units.	
		Observed Horizontal Force.	Deduced Base Line.			Observed Horizontal Force.	Deduced Base Line.			Observed Horizontal Force.	Deduced Base Line.
Aug. 6. 11 4-11 11	4	γ 18574	γ 18672	Sept. 24. 9 44- 9 51	4	γ 18560	γ 18673	Nov. 12. 11 23-11 34	4	γ 18559	γ 18650
8. 14 32-14 39	4	18577	18669	24. 11 1-11 10	4	18557	18674	12. 12 52-12 59	4	18562	18653
9. 11 48-11 54	4	18578	18670	25. 9 33- 9 45	4	18557	18672	14. 16 21-16 33	4	18579	18649
10. 14 25-14 31	4	18583	18670	26. 14 51-15 5	4	18565	18672	15. 12 44-12 55	4	18560	18649
11. 11 31-11 39	4	18571	18670	27. 8 50- 9 3	4	18554	18672	16. 12 19-12 26	4	18571	18649
12. 11 37-11 45	4	18547	18669	28. 14 7-14 12	4	18561	18674	17. 12 55-13 0	4	18577	18649
13. 11 0-11 8	4	18566	18671	29. 14 41-14 57	6	18555	18675	18. 11 23-11 42	5	18584	(18649)
15. 11 45-11 51	4	18562	18671	30. 14 43-14 50	4	18576	18672	18. 15 22-15 35	4	18565	(18648)
16. 11 53-12 0	4	18578	18670	Oct. 3. 16 33-16 40	4	18567	18671	19. 11 3-11 15	4	18558	18648
17. 11 40-11 47	4	18567	18670	4. 10 24-10 30	4	18544	18670	21. 12 40-12 54	4	18562	18647
18. 11 29-11 37	4	18568	18672	5. 12 53-12 59	4	18561	18673	22. 15 49-16 4	4	18562	18645
19. 10 19-10 29	4	18552	18671	6. 12 45-12 54	4	18569	18673	23. 16 33-16 44	4	18571	18644
20. 10 25-10 33	4	18518	(18673)	7. 15 11-15 17	4	18563	18672	24. 15 28-15 35	4	18566	18645
22. 14 34-14 54	5	18568	18675	8. 12 23-12 31	4	18532	18671	25. 15 12-15 21	4	18576	18644
23. 11 39-11 44	4	18547	18675	11. 12 43-12 51	4	18536	18671	26. 12 57-13 5	4	18578	18643
25. 9 37- 9 45	4	18541	18698	13. 15 20-15 29	4	18537	(18675)	28. 15 59-16 6	4	18585	18645
25. 14 30-14 33	2	18570	18704	14. 11 7-11 17	4	18519	18673	29. 15 16-15 24	4	18561	18646
26. 11 11-11 18	4	18556	18699	15. 10 30-10 37	4	18534	18673	30. 15 54-16 3	4	18568	18644
27. 10 51-10 58	4	18557	18701	17. 15 24-15 34	4	18563	18672	Dec. 1. 15 30-15 42	4	18569	18645
29. 13 46-13 54	4	18567	18698	18. 10 53-11 1	4	18538	18673	2. 12 40-12 50	4	18565	18646
30. 15 25-15 32	4	18534	18697	19. 16 11-16 18	4	18576	18674	3. 12 46-12 54	4	18572	18646
31. 9 12- 9 21	4	18529	18697	20. 16 36-16 44	4	18568	18673	5. 16 16-16 26	4	18577	18648
Sept. 1. 10 10-10 16	4	18537	18696	21. 14 39-14 49	4	18574	18675	6. 13 1-13 10	4	18574	18647
2. 15 51-16 0	4	18556	18696	24. 16 32-16 40	4	18545	18673	7. 15 40-15 55	4	18566	18644
3. 9 48- 9 55	4	18555	18697	25. 11 24-11 32	4	18545	18674	8. 15 41-15 51	4	18572	18645
5. 15 3-15 9	4	18556	18697	26. 12 41-12 51	4	18529	18674	9. 14 49-14 57	4	18569	18647
6. 9 13- 9 21	5	18571	18698	27. 16 56-17 3	3	18566	18673	10. 11 13-11 24	4	18563	18644
7. 15 8-15 14	4	18541	(18694)	28. 16 33-16 41	1	18570	18674	12. 10 20-10 33	4	18577	18645
8. 13 5-13 12	4	18570	(18701)	29. 12 52-13 2	4	18556	18670	13. 15 23-15 31	4	18515	(18647)
9. 10 31-10 38	4	18546	18696	31. 12 59-13 8	4	18563	18674	14. 12 47-12 55	4	18560	18646
10. 10 53-11 1	4	18564	18699	Nov. 1. 10 52-11 2	5	18548	18671	15. 14 54-15 1	4	18553	18646
12. 11 31-11 38	4	18546	18704	2. 16 28-16 37	4	18575	18669	16. 15 57-16 6	4	18555	18643
13. 13 39-13 46	4	18566	18704	3. 11 34-11 44	4	18564	18669	17. 12 11-12 22	5	18549	18649
14. 11 23-11 30	4	18536	18701	4. 12 41-12 54	4	18565	18669	19. 12 17-12 28	6	18564	18649
15. 13 50-13 59	4	18574	18702	5. 12 47-12 54	4	18570	18670	20. 10 28-10 41	6	18566	18650
16. 9 40- 9 48	4	18551	18699	7. 16 14-16 29	4	18583	18674	23. 15 4-15 18	7	18579	18651
17. 10 30-10 35	4	18554	18698	8. 11 44-11 50	4	18568	18674	24. 11 0-11 10	4	18572	18649
19. 14 21-14 46	8	18565	18700	9. 15 26-15 38	4	18577	18672	27. 12 2-12 11	4	18583	18648
20. 15 39-15 46	4	18580	18700	II. 11 46-11 53	2	18566	18652	29. 11 12-11 24	6	18567	18648
21. 10 40-10 48	4	18560	18699	II. 15 5-15 15	4	18572	18651	30. 16 20-16 29	4	18579	18649
22. 14 54-15 5	4	18577	18699					31. 15 57-16 11	4	18587	18649

Sept. 23. Temperature lowered to 15° C.

Nov. 10. Temperature lowered to 10° C.

TABLE XV.—DAILY VALUE of the BASE-LINE of the VERTICAL FORCE MAGNETOGRAMS at ABINGER MAGNETIC STATION, deduced from OBSERVATIONS of MAGNETIC DIP made with the DIP INDUCTOR.

1927 Day.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	43202	43209	43224	43136	43204	43216	43163	43223	43(208)	43124	43134	43113
2	—	223	222	134	179	214	138	199	244	129	151	093
3	217	248	232	162	199	186	157	203	247	107	150	114
4	211	231	251	155	204	229	169	229	—	132	120	—
5	194	247	227	145	203	—	156	220	251	103	142	099
6	206	229	245	166	209	247	161	197	281	068	—	104
7	229	226	228	149	213	210	149	224	254	132	112	103
8	213	252	224	145	212	192	153	229	276	087	119	120
9	—	238	225	157	204	240	171	209	278	—	125	118
10	212	237	259	—	207	209	169	236	284	—	—	128
11	219	254	209	168	223	235	175	217	—	135	124	152
12	196	233	204	176	228	216	191	225	282	—	104	127
13	211	240	197	174	195	207	193	233	269	089	110	—
14	225	225	230	168	180	226	186	233	267	110	(158)	117
15	204	233	237	137	184	228	177	234	273	097	085	143
16	—	215	238	161	209	224	147	211	292	—	101	—
17	228	224	240 117	146	223	260	—	240	266	128	111	125
18	234	238	134	184	217	287	182	236	102	152	(073)	—
19	231	237	137	186	231	260 149	182	235	123	107	097	131
20	220	—	136	187	194	147	194	241	126	121	—	120
21	226	206	128	194	227	131	183	—	111	117	117	—
22	224	236	152	192	224	140	—	227	136	099	146	—
23	230	235	119	208	209	166	169	239	—	—	100	119
24	213	229	128	203	219	161	—	230	108	123	103	095
25	234	224	129	191	250	162	189	245	117	116	077	104
26	230	216	144	169	190	119	193	257	093	111	127	152
27	221	—	115	194	243	124	178	254	100	137	—	—
28	216	232	140	207	203	174	210	233	079	164	114	108
29	240	—	144	214	178	145	203	(279)	081	121	093	078
30	—	—	133	225	203	164	181	264	105	—	103	134
31	230	—	149	—	213	—	—	261	—	132	—	127

April 19. Temperature raised to 15° C.  
September 23. Temperature lowered to 15° C.

June 16. Temperature raised to 20° C.  
November 10. Temperature lowered to 10° C.

MEAN ANNUAL VALUES OF MAGNETIC ELEMENTS DETERMINED AT THE ROYAL OBSERVATORY, GREENWICH, FOR THE YEARS 1841-1925.									
Year.	Declination West.	Horizontal Force.	Vertical Force.	Dip.	Year.	Declination West.	Horizontal Force.	Vertical Force.	Dip.
1841	23 16.2	C.G.S. Unit.	C.G.S. Unit.	°	1883	18 15.0	C.G.S. Unit.	C.G.S. Unit.	°
1842	23 14.6	...	...	...	1884	18 7.6	0.1812	0.4381	67 31.7
1843	23 11.7	...	...	69 0.6	1885	18 1.7	0.1814	0.4379	67 29.7
1844	23 15.3	...	...	69 0.3	1886	17 54.5	0.1817	0.4380	67 28.0
1845	22 56.7	...	...	68 57.5	1887	17 49.1	0.1818	0.4377	67 27.1
1846	22 49.6	0.1731	...	68 58.1	1888	17 40.4	0.1819	0.4380	67 26.6
1847	22 51.3	0.1736	...	68 59.0	1889	17 34.9	0.1822	0.4383	67 25.6
1848	22 51.8	0.1731	...	68 54.7	1890	17 28.6	0.1823	0.4380	67 24.3
1849	22 37.8	0.1733	...	68 51.3	1891	17 23.4	0.1825	0.4381	67 23.0
1850	22 23.5	0.1738	...	68 46.9	1892	17 17.4	0.1827	0.4380	67 21.5
1851	22 18.3	0.1744	...	68 40.4	1893	17 17.4	0.1829	0.4379	67 20.0
1852	22 17.9	0.1745	...	68 42.7	1894	17 11.4	0.1831	0.4373	67 17.9
1853	22 10.1	0.1748	...	68 44.6	1895	17 4.6	0.1831	0.4374	67 17.4
1854	22 0.8	0.1749	...	68 47.7	1896	16 57.4	0.1834	0.4378	67 16.1
1855	21 48.4	0.1756	...	68 44.6	1897	16 51.7	0.1835	0.4382	67 15.1
1856	21 43.5	0.1759	...	68 43.5	1898	16 45.8	0.1838	0.4377	67 13.5
1857	21 35.4	0.1769	...	68 31.1	1899	16 39.2	0.1840	0.4377	67 12.1
1858	21 30.3	0.1762	...	68 28.3	1900	16 34.2	0.1843	0.4380	67 10.5
1859	21 23.5	0.1761	...	68 26.9	1901	16 29.0	0.1846	0.4380	67 8.8
1860	21 14.3	...	...	68 30.1	1902	16 26.0	0.1850	0.4381	67 6.4
1861	21 5.5	0.1773	...	68 24.6	1903	16 22.8	0.1852	0.4377	67 3.8
1862	20 52.6	0.1759	...	68 15.8	1904	16 19.1	0.1852	0.4368	67 1.2
1863	20 45.9	0.1763	0.4403	68 9.6	1905	16 15.0	0.1854	0.4359	66 57.6
1864	...	0.1764	0.4396	68 7.0	1906	16 9.9	0.1854	0.4355	66 56.3
1865	20 33.9	0.1767	0.4393	68 4.1	1907	16 3.6	0.1854	0.4353	66 55.6
1866	20 28.0	0.1767	0.4388	68 2.7	1908	15 59.8	0.1855	0.4357	66 56.2
1867	20 20.5	0.1773	0.4397	68 1.3	1909	15 53.5	0.1854	0.4356	66 56.3
1868	20 13.1	0.1777	0.4392	67 57.2	1910	15 47.6	0.1854	0.4348	66 54.1
1869	20 4.1	0.1779	0.4395	67 56.5	1911	15 41.2	0.1855	0.4345	66 52.8
1870	19 53.0	0.1782	0.4396	67 54.8	1912	15 33.0	0.1855	0.4342	66 52.1
1871	19 41.9	0.1784	0.4392	67 52.5	1913	15 24.3	0.1855	0.4340	66 51.8
1872	19 36.8	0.1786	0.4389	67 50.3	1914	15 15.2	0.1853	0.4333	66 50.5
1873	19 33.4	0.1789	0.4383	67 47.8	1915	15 6.3	0.1853	0.4333	66 50.8
1874	19 28.9	0.1793	0.4386	67 45.8	1916	14 56.5	0.1851	0.4331	66 51.6
1875	19 21.2	0.1797	0.4387	67 43.6	1917	14 46.9	0.1848	0.4326	66 52.2
1876	19 8.3	0.1797	0.4383	67 42.4	1918	14 37.1	0.1848	0.4330*	66 53.0
1877	18 57.2	0.1799	0.4383	67 41.0	1919	14 27.8	0.1846	0.4325	66 52.8
1878	18 49.3	0.1800	0.4381	67 39.7	1920	14 18.2	0.1845	0.4324	66 53.3
1879	18 40.5	0.1802	0.4382	67 38.2	1921	14 8.6	0.1845	0.4325	66 53.6
1880	18 32.6	0.1805	0.4382	67 37.0	1922	13 57.6	0.1845	0.4322	66 53.0
1881	18 27.1	0.1805	0.4380	67 35.7	1923	13 46.7	0.1844	0.4318	66 52.3
1882	18 22.3	0.1807	0.4379	67 34.7	1924	13 35.1	0.1843	0.4314	66 51.9
		0.1806	0.4375	67 34.2	1925	13 22.8	0.1843	0.4311	66 51.6
						13 9.9	0.1841	0.4308	66 51.4
MAGNETIC ELEMENTS OBSERVED AT THE ABINGER MAGNETIC STATION.									
1925	13 22.7	0.18597	0.42946	66 35.1	1927	12 58.4	0.18575	0.42932	66 36.2
1926	13 10.4	0.18581	0.42947	66 36.3					

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

N.B In the above table the values of Vertical Force were, for the years 1862-1913 inclusive, computed from the corresponding values of Horizontal Force 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 Force.

\*Mean of ten months, March to December.

# MAGNETIC DISTURBANCES.

The following notes briefly summarise, month by month, the salient features of magnetic conditions as shown by the traces of Declination, Horizontal Force and Vertical Force recorded at the Abinger Magnetic Station in the year 1927.

**January.**—The month was comparatively free from magnetic disturbance. On 1<sup>d</sup> 22 $\frac{1}{2}$ <sup>h</sup> to 23 $\frac{3}{4}$ <sup>h</sup> a remarkable bay occurred in the declination trace alone, having an amplitude of 26'. The associated movements in H.F. and V.F. were quite small. A short-lived disturbance occurred between 18<sup>h</sup> and 23<sup>h</sup> on the 4th, during which ranges of 140 $\gamma$  in H.F. and 23' in declination were recorded within an hour.

On 24th at 23<sup>h</sup>.40<sup>m</sup> a "sudden commencement" showed on the H.F. in declination traces. So sharp was this in horizontal force that the downward movement failed to register. The upward movement of 80 $\gamma$  was followed by a rapid subsidence and no marked disturbance subsequently manifested itself other than an irregular movement of the declination trace through 10' on each side of the mean position between 2<sup>h</sup> and 8<sup>h</sup> on 26th.

The range in declination during the month was from 12°.37'.5 (on 8th) to 13°.13'.5 (on 7th); in horizontal force from .18454 (on 7th) to .18666 (on 4th); in vertical force from .42908 (on 26th) to .43001 (on 7th).

**February.**—There were no days of considerable disturbance in this month. On the 9th, between 19 $\frac{3}{4}$ <sup>h</sup> and 20 $\frac{1}{2}$ <sup>h</sup> a sharp diminution occurred in H.F. (125 $\gamma$ ), followed for six hours, after a partial recovery, by a number of minor oscillations. The declination trace was similar in appearance, the diminution (25') occurring about half an hour later than that in H.F. The V.F. increased rather rapidly from 20 $\frac{1}{2}$ <sup>h</sup> to 21<sup>h</sup> and then decreased steadily (50 $\gamma$ ) till 24<sup>h</sup>.

Declination and H.F. traces were affected by nearly continuous minor disturbance from 12th to 19th. A second period started rather suddenly at 11<sup>h</sup> on 24th and lasted for the remainder of the month. On 24th between 17<sup>h</sup> and 23<sup>h</sup> the declination decreased 25', half of which however was soon recovered.

The range in declination during the month was from 12°.46'.6 to 13°.15'.2 (both on 24th); in horizontal force from .18495 (on 9th) to .18630 (on 26th); in vertical force from .42906 (on 7th, 10th and 25th) to .42959 (on 24th and 28th).

**March.**—On the great majority of days there was disturbance of the traces in greater or less degree, but not, on the whole, more than is normally exhibited during March.

The chief disturbances occurred on the 9th, 16th and 27th.

On the 1st from 0 $\frac{1}{4}$ <sup>h</sup> to 1 $\frac{1}{2}$ <sup>h</sup> a steep wave showed a temporary increase in H.F. of 90 $\gamma$ . This was accompanied by a rapid decrease in V.F. of 40 $\gamma$ . The traces remained moderately disturbed till 23<sup>h</sup>. Excluding isolated bays in the declination trace, the next period of disturbance began on 5th at 20<sup>h</sup> with a rapid decrease of declination (10'). Irregular in character, the disturbance culminated during the evening of 9th when a fluctuation of over -15' in declination occurred between 16<sup>h</sup> and 18<sup>h</sup>, and one of 80 $\gamma$  in H.F. between 23<sup>h</sup> and 24<sup>h</sup>. During the same evening the V.F. decreased 90 $\gamma$  in the six hours preceding midnight, and it continued to fluctuate for the major part of the next day.

A further period of increased activity began in the early hours of 15th. On the 16th at 16<sup>h</sup> a rapid oscillatory decrease in declination was shown which lasted till 18<sup>h</sup> and amounted to 25'. A great part of this decrease was recovered by 19<sup>h</sup>. A marked increase of vertical force (80 $\gamma$ ) preceded and accompanied this movement. During the evening of the 17th the traces became highly oscillatory. The earlier movements were the largest. One in declination, a wave of -20' at 19<sup>h</sup>, was accompanied by a complementary in H.F. (+90 $\gamma$ ). Between 16<sup>h</sup> and 20<sup>h</sup> there was a wave in V.F. (+50 $\gamma$ ); and a second wave (-50 $\gamma$ ) took place between 23<sup>h</sup> and 2<sup>h</sup> on the following day. The disturbance steadily declined, though showing signs of recrudescence on the morning of the 20th, and had practically ceased at midnight of that day. Thereafter ensued the quietest period of the month, and the next movement of any consequence took place early on the 26th. Disturbance gradually increased until, after a quiescent period during the first half of 27th, the traces experienced considerable disturbance for about 24 hours. Details are reproduced in Plate II. Disturbance ceased soon after noon on 29th.

The range in declination during the month was from 12°.41'.9 (on 17th) to 13°.14'.7 (on 26th and 28th); in horizontal force from .18504 (on 17th) to .18663 (on 27th); in vertical force from .42873 on 28th. to .42992 (on 16th).

**April.**—A minor disturbance, chiefly in H.F. and lasting about six hours, occurred on the afternoon of the 9th. During this disturbance H.F. increased 100 $\gamma$  between 13 $\frac{1}{2}$ <sup>h</sup> and 15 $\frac{1}{2}$ <sup>h</sup>, then immediately diminished and reached normal by 18<sup>h</sup>. V.F. increased 100 $\gamma$  between 12 $\frac{1}{4}$ <sup>h</sup> and 15 $\frac{1}{2}$ <sup>h</sup>, but the diminution to normal proceeded very gradually.

Conditions were moderately disturbed, in general, throughout 11th, 23rd and 24th. On 11th a noteworthy wave in H.F. (+80 $\gamma$ ) occurred between 15 $\frac{1}{2}$ <sup>h</sup> and 18<sup>h</sup> with a counterpart in V.F. from 15 $\frac{1}{2}$ <sup>h</sup> to 19<sup>h</sup> on a rather smaller scale (+50 $\gamma$ ). The most considerable disturbance of the month began with a "sudden commencement" at 23<sup>h</sup>.49<sup>m</sup> on the 13th. The traces of this disturbance are reproduced in Plate III.

The range in declination during the month was from 12°.46'.8 (on 14th) to 13°.15'.5 (on 9th); in horizontal force from .18420 to .18650 (both on 14th); in vertical force from .42884 (on 14th) to .430~~7~~ (on 14th).



**May.**—Slight disturbance in H.F. was shown between 11<sup>h</sup> and 19<sup>h</sup> on 3rd, accompanied by a general rise in V.F. amounting to 80γ. Considerable disturbance in all traces developed early on 5th, lasting about twelve hours. This is reproduced in Plate IV. On 7th, between 12½<sup>h</sup> and 13½<sup>h</sup> a rapid decrease in H.F. occurred amounting to 110γ, which recovered by 15<sup>h</sup> and was succeeded by continuous irregular oscillation for more than twenty-four hours. The declination trace moved somewhat irregularly during the same period, and the V.F. trace showed a flattened wave (+80γ) extending from 13<sup>h</sup> to 19<sup>h</sup>. From 0<sup>h</sup> on 10th a comparatively quiet period set in lasting till 15<sup>d</sup> 6<sup>h</sup>. A decrease of 100γ in H.F. between 6<sup>h</sup> and 10<sup>h</sup> on 15th was accompanied by an increase of 15' in declination, but, apart from a few slight movements occurring irregularly, no further disturbance of note took place until 20th. A minor disturbance, chiefly in H.F., lasted from 10<sup>h</sup> to 20<sup>h</sup> on this day, during which a range in H.F. of 80γ in one and a half hours was shown, and then relatively quiet conditions supervened until 27th, when a sharp displacement of the traces at 4<sup>h</sup>.35<sup>m</sup> (not, however, a typical " sudden commencement ") was followed for six hours by slight but continuous agitation.

From 28<sup>d</sup> 13<sup>h</sup> to 24<sup>h</sup> there was a minor disturbance in H.F. culminating with a relatively large oscillation of ±60γ between 17½<sup>h</sup> and 19<sup>h</sup>.

The range in declination during the month was from 12°.42'·3 (on 5th) to 13°.16'·2 (on 3rd); in horizontal force from ·18481 (on 7th) to ·18675 (on 28th); in vertical force from ·42861 (on 5th) to ·43004 (on 3rd).  
20 7/16

**June.**—No disturbance of considerable magnitude occurred during the month. Minor disturbances took place on 1st between 17<sup>h</sup> and 23<sup>h</sup>, on 5th between 4<sup>h</sup> and 11<sup>h</sup> and again between 22<sup>h</sup> and 24<sup>h</sup>, and on 26th between 10<sup>h</sup> and 24<sup>h</sup>. In each case the H.F. trace was chiefly affected, and on the last named day the movements were oscillatory in character. There were also movements in H.F. amounting to more than 50γ in one hour on 10th between 15<sup>h</sup> and 17<sup>h</sup>, and on 12th between 14<sup>h</sup> and 17<sup>h</sup>. All traces were affected continuously by small irregular movements from 10th to 13th.

To record possible magnetic movements during the solar eclipse on June 29, which was total over a narrow strip of country in North Wales, Lancashire and Yorkshire, the cylinders were run at the comparatively large time scale of 3 millimetres to the minute for about four hours centred at the period of mid-eclipse, the same being done on the day before and the day after. The day of the eclipse proved to be quiet magnetically, and there were no movements shown which were in any way abnormal.

The range in declination during the month was from 12°.47'·3 (on 5th) to 13°.10'·2 (on 26th); in horizontal force from ·18524 (on 12th) to ·18648 (on 1st and 26th); in vertical force from ·42884 (on 30th) to ·42952 (on 26th).

**July.**—Slightly unsteady conditions prevailed through the first three days, after a bay in H.F. (−70γ) between 13<sup>h</sup> and 15<sup>h</sup> on 1st. On the 5th at 0<sup>h</sup>.52<sup>m</sup> a sharp movement, similar to that of a " sudden commencement," occurred in H.F. but no disturbance developed though both Dec. and H.F. traces were affected with unsteadiness until the evening of the 8th. Slight unsteadiness was again apparent from noon on 11th (chiefly in H.F.) and persisted till midnight of 14th. A wave in the Decl. trace (+10') at 5½<sup>h</sup> on 17th was followed by a period of unsteadiness in H.F. lasting till midnight. A rapid increase in H.F. (+70γ) took place between 14<sup>h</sup> and 16<sup>h</sup> on 19th and small irregular movements in the trace persisted till midnight on 20th. Between 10<sup>h</sup> and 12<sup>h</sup> on 23rd there was a wave (−80γ) in H.F. and also between 23<sup>h</sup> and 24<sup>h</sup> on 26th (+50γ), following which were a few irregular movements till about midnight of 27th.

The largest disturbance of the month began suddenly at 21<sup>h</sup> 2<sup>m</sup> on 21st. The traces are reproduced in Plate V.

The range in declination during the month was from 12°.28'·0 to 13°.27'·3; in horizontal force from ·18420 to ·18729, in vertical force from ·42692 to ·43026. In each case the range occurred during the disturbance of 21st–22nd.

**August.**—Moderately unsteady conditions supervened until the end of 5th, though the declination was not much affected on 3rd and 4th. Isolated waves occasionally showed during the next fourteen days, during which period, however, there was no disturbance worthy of remark. From noon on 19th conditions became increasingly unsteady and by 6<sup>h</sup> on 20th a considerable disturbance—the largest of the month—was in progress. The details are reproduced in Plate VI. This concluded with a remarkable double wave in H.F. showing a range of 180γ within 20 minutes. Slightly disturbed conditions persisted for another twenty-four hours, and then a quiet period set in until 0<sup>h</sup> on 29th when, somewhat suddenly, at 0<sup>h</sup>.3<sup>m</sup> the second noteworthy disturbance of the month began. The main portion covered a period of 43 hours till 19<sup>h</sup> on 30th. Movements were quite irregular in general, but at 6<sup>h</sup> on 30th a rapid diminution in H.F. was shown, amounting to 90γ, which after four hours recovered gradually in a series of oscillations. The recovery was accompanied by a steady increase in V.F. of about the same amount. Slightly disturbed conditions continued into the next month.

The range in declination during the month was from 12°.27'·5 (on 21st) to 13°.11'·1 (on 29th); in horizontal force from ·18355 (on 21st) to ·18676 (on 20th); in vertical force from ·42808 to ·43012 (both on 21st).

**September.**—Minor disturbance was general throughout the month and there were few days on which no irregular movement took place in at least one trace. Only the more important disturbances will be mentioned. On 6th at 16<sup>h</sup>.40<sup>m</sup> all traces were affected by a very rapid oscillatory movement lasting nearly twenty minutes, and in the case of H.F. practically destroying the record. The amplitude was quite small, except in H.F. (where it attained to 70γ) and the phenomenon was of a most unusual character. On 10th at 21<sup>h</sup>.20<sup>m</sup> a singular movement occurred in the H.F. trace which at first descended 90γ and then in one steady sweep, lasting 20 minutes, increased 255γ, returning to normal position and character during the next 15 min. No special marked change in declination accompanied this movement, but a fluctuation in V.F. amounting to 70γ was shown about the same time. Other considerable movements in H.F. took place on 9th from 0<sup>h</sup> to 3<sup>h</sup> (a wave of +100γ), on 14th

(a double wave  $\pm 50\gamma$ ) from 21<sup>h</sup> to 24<sup>h</sup>, and on 29th between 7<sup>h</sup> and 9<sup>h</sup>. Noteworthy movements in declination during the month were shown on 7th, 19<sup>h</sup> to 21<sup>h</sup> (a wave of  $-15'$ ), on 9th, 19<sup>h</sup> to 24<sup>h</sup>, on 14th, 21<sup>h</sup> to 24<sup>h</sup>; while three prominent waves occurred at nearly equal intervals between 18<sup>h</sup> on 25th and 4<sup>h</sup> on 26th.

The range in declination during the month was from  $12^{\circ}.39'.0$  (on 9th) to  $13^{\circ}.8'.4$  (on 8th); in horizontal force from  $.18506$  (on 4th) to  $.18755$  (on 10th); in vertical force from  $.42891$  (on 10th) to  $.42995$  (on 4th).

**October** was a month of considerable magnetic disturbance. During the evenings of 2nd and 5th fluctuations occurred amounting to  $15'$  in Decl., and on the 7th from about 9<sup>h</sup> both Decl. and H.F. traces were affected by a series of irregular movements for approximately 20 hours. Declination diminished  $25'$  between noon and midnight on the last named day, and between 0<sup>h</sup> and 4<sup>h</sup> on 8th H.F. increased  $100\gamma$ , while a wave of  $-80\gamma$  occurred in the V.F. trace. A period of continuous slight agitation set in about 18<sup>h</sup> on 9th which suddenly developed at 8<sup>h</sup>.20<sup>m</sup> on 10th into a state of great agitation, without, however, great departures from mean values. The condition died away in about 10 hours, and the disturbance ended with a series of irregular oscillations concluding at 10<sup>d</sup> 23<sup>h</sup>. The largest disturbance of the month commenced abruptly at 10<sup>h</sup>.26<sup>m</sup> on 12th. It lasted (with an intervening period of comparative quiescence between 3<sup>h</sup> and 7<sup>h</sup> on 13th) until 17<sup>h</sup> on 13th. Details are reproduced in Plate VII of the major portion. The short recrudescence which occurred between 12<sup>h</sup> and 17<sup>h</sup> on 13th was mainly apparent in H.F., the trace of which showed several large fluctuations covering an extreme range of  $140\gamma$ . The following seven days were not remarkable for general disturbance but isolated waves appeared in the traces once or twice each day. The 21st was practically quiet. At 6<sup>h</sup>.42<sup>m</sup> on 22nd the second large disturbance began with a sudden movement of all traces. The true storm, however, delayed for about 20 minutes. The traces then became strongly agitated for two hours, with large ranges of H.F., and gradually subsided to quietude until 16<sup>h</sup>. At midnight renewed disturbance of quite different character commenced, the traces being subject to movements of a pronounced oscillatory kind.

The details of this double disturbance are reproduced in Plates VIII and IX. For the remainder of the month the traces were still subject in greater or less degree to irregular movement, especially on 25th. On 29th at 20<sup>h</sup> to 22<sup>h</sup> a conspicuous wave affected the declination trace by  $-15'$ , while by 31st quiet conditions were definitely setting in.

The range in declination during the month was from  $12^{\circ}.26'.3$  (on 12th) to  $13^{\circ}.29'.8$  (on 23rd); in horizontal force from  $.18382$  to  $.18731$  (both on 12th). The latter figure is not certain owing to a failure of illumination in the variometer during the disturbance. In vertical force the range was from  $.42864$  (on 8th) to  $.43137$  (on 12th).

**November.**—The first seven days were very quiet magnetically. On 8th at 5<sup>h</sup>.29<sup>m</sup> a small abrupt movement of the H.F. trace was followed for several days by nearly continuous oscillation very small in amplitude. This finally died out after a small wave in both declination and H.F. about 4<sup>h</sup> on 13th. Quiet conditions prevailed, with inconsiderable exceptions, until 4<sup>h</sup>.40<sup>m</sup> on 18th, when, commencing with a distinct displacement of the H.F. trace, small irregularities developed, to become of considerable amplitude by 14<sup>h</sup>. A temporary oscillatory decrease in declination finally recovered with a movement amounting to  $20'$  in two hours, and normal conditions were regained soon after midnight.

A few isolated movements occurred during the next ten days, a wave of  $+50\gamma$  at 21<sup>h</sup> on 21st being the most conspicuous, but generally quiet conditions persisted until the afternoon of 29th. A series of small movements, roughly oscillatory in character then began (chiefly in H.F.) which lasted to the end of the month.

The range in declination during the month was from  $12^{\circ}.36'.3$  to  $13^{\circ}.5'.2$  both on 18th; in horizontal force from  $.18508$  to  $.18610$ , both on 18th; in vertical force from  $.42907$  (on 10th) to  $.42955$  (on 1st and 4th).

**December.**—Slightly disturbed conditions prevailed during the first two days, and were resumed on 5th, a wave of  $-10'$  in Decl. and  $-50\gamma$  in H.F. occurring at 16<sup>h</sup> on 6th. A short quiet period lasted from 11th until noon on 13th, when the most considerable disturbance of the month rapidly developed. Horizontal Force diminished by  $100\gamma$  in two hours. A series of irregular oscillations then followed, the two most prominent being at 18<sup>h</sup>. $\frac{1}{2}$  ( $-60\gamma$ ) and 21<sup>h</sup>. $\frac{1}{2}$  ( $+70\gamma$ ). Similar movements,  $-15'$  in amplitude, occurred at these times in Declination, which remained below normal value from 13<sup>d</sup> 22<sup>h</sup> to 14<sup>d</sup> 2<sup>h</sup>. The Vertical Force increased rapidly by  $60\gamma$  during the early stages of the disturbance and then subsided irregularly to normal value which was attained by 14<sup>d</sup> 6<sup>h</sup>. Soon after this active disturbance died out with a final wave in H.F. ( $+70\gamma$ ). The traces were affected with small irregularities during the next five days, and several rather prominent waves appeared from time to time. One of  $-15'$  in Decl. at 15<sup>d</sup> 18<sup>h</sup> and another of the same amplitude at 17<sup>d</sup> 19<sup>h</sup> may be mentioned. The latter was preceded for four hours by a steady increase in H.F. amounting to  $80\gamma$ , and accompanied by an irregular wave ( $-60\gamma$ ). The disturbed period concluded with a long series of fairly regular oscillations in both Decl. and H.F. which began at 14<sup>h</sup> on 18th and lasted for about eighteen hours. The oscillations were of no great amplitude, the largest being about  $6'$  in Decl. and  $30\gamma$  in H.F., but during the first six hours declination decreased by  $25'$ . The decrease was recovered rather rapidly at the end of the series. A parallel change amounting to  $-40\gamma$  was shown in the V.F. trace. From 19th to 28th generally quiet conditions prevailed. At 20<sup>h</sup> on 28th a large wave in Decl. ( $-20'$ ) occurred, but no movement was shown on the other traces, though H.F. had increased rather suddenly about four hours earlier, and remained temporarily above the normal. Steady conditions were resumed for another two days, until 31<sup>d</sup> 5<sup>h</sup>. $\frac{1}{2}$ , when the traces became slightly disturbed after a small abrupt movement in each.

The range in declination during the month was from  $12^{\circ}.32'.7$  (on 18th) to  $13^{\circ}.5'.7$  (on 13th); in horizontal force from  $.18452$  (on 13th) to  $.18615$  (on 9th); in vertical force from  $.42884$  (on 19th) to  $.42990$  (on 13th).

#### EXPLANATION OF THE PLATES.

The magnetic changes figured on the Plates are those for days of disturbance selected by the International Committee :—January 7<sup>d</sup> 6<sup>h</sup>–8<sup>d</sup> 6<sup>h</sup>; March 27<sup>d</sup> 14<sup>h</sup>–28<sup>d</sup> 14<sup>h</sup>; April 13<sup>d</sup> 23<sup>h</sup>–14<sup>d</sup> 23<sup>h</sup>; May 5<sup>d</sup> 0<sup>h</sup>–6<sup>d</sup> 0<sup>h</sup>; July 21<sup>d</sup> 20<sup>h</sup>–22<sup>d</sup> 20<sup>h</sup>; August 20<sup>d</sup> 20<sup>h</sup>–21<sup>d</sup> 20<sup>h</sup>; October 12<sup>d</sup> 9<sup>h</sup>–13<sup>d</sup> 9<sup>h</sup>; October 22<sup>d</sup> 6<sup>h</sup>–23<sup>d</sup> 6<sup>h</sup>; October 23<sup>d</sup> 6<sup>h</sup>–24<sup>d</sup> 6<sup>h</sup>; December 13<sup>d</sup> 12<sup>h</sup>–14<sup>d</sup> 12<sup>h</sup>.

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

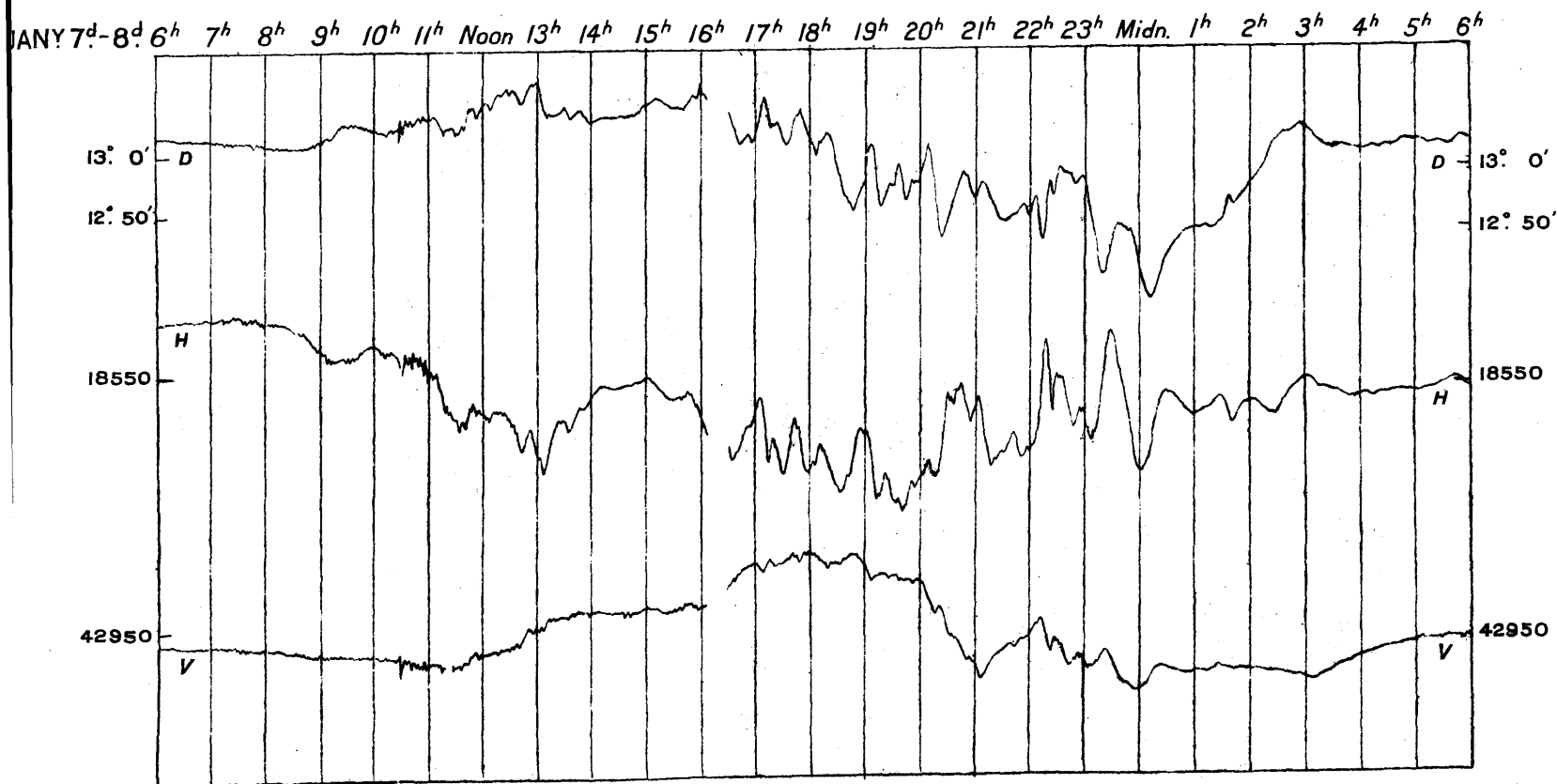
Magnetic declination, horizontal force and vertical force are indicated by the letters D, H, V respectively.

Scales for reading the traces in units of  $\gamma$  ( $\cdot 00001$  C.G.S.) are given at the foot of each page, and a datum line is marked for each trace at the sides of the diagram.

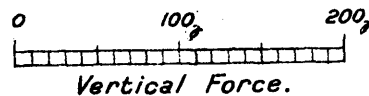
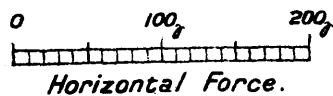
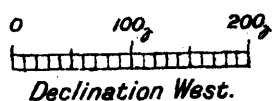
Declination may be read in arc by the scale at the side of the diagram.

Upward motion indicates increase of declination west, and increase of force in all cases.

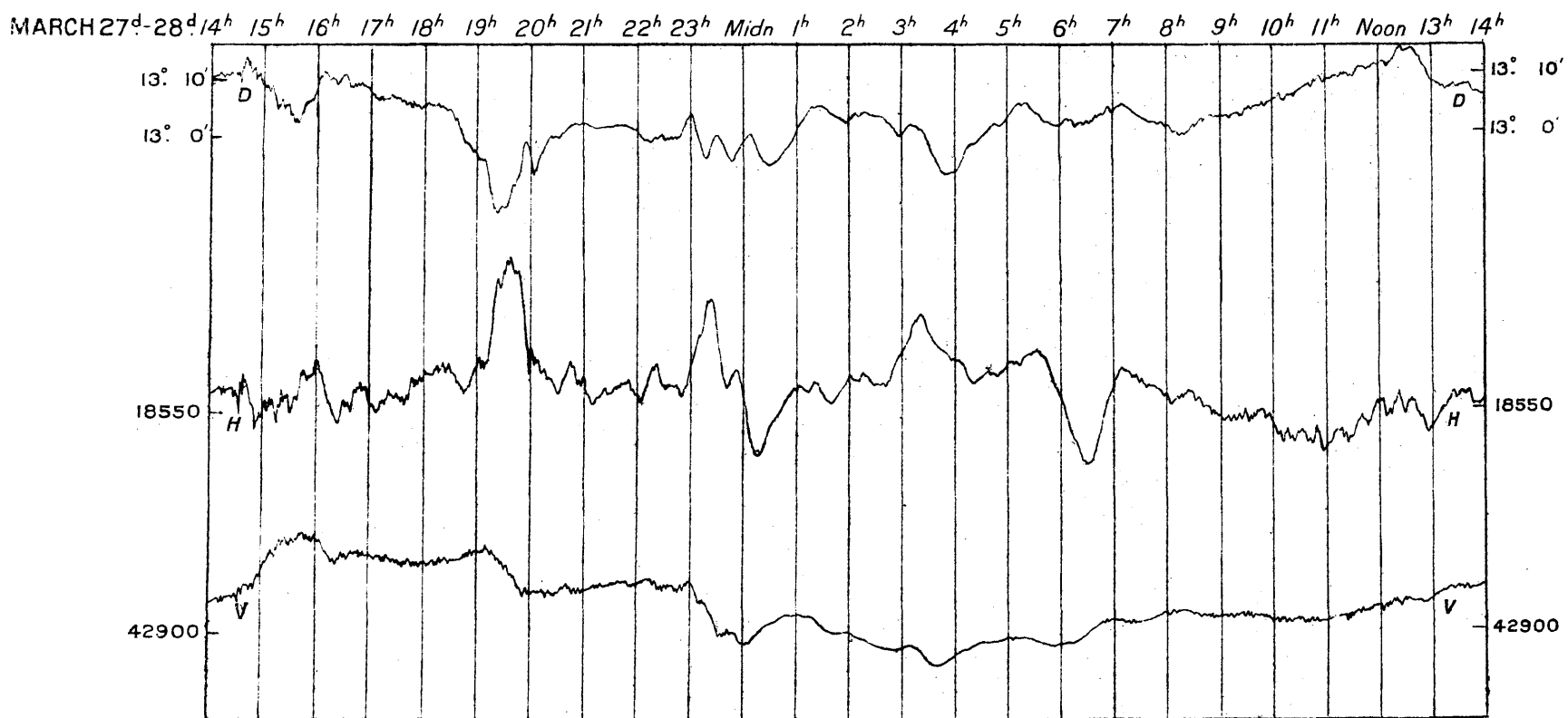
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)  
MAGNETIC STATION IN THE YEAR 1927.



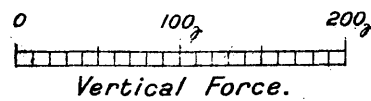
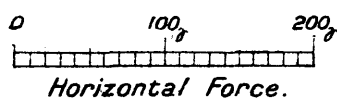
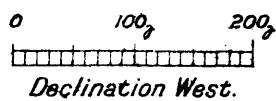
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



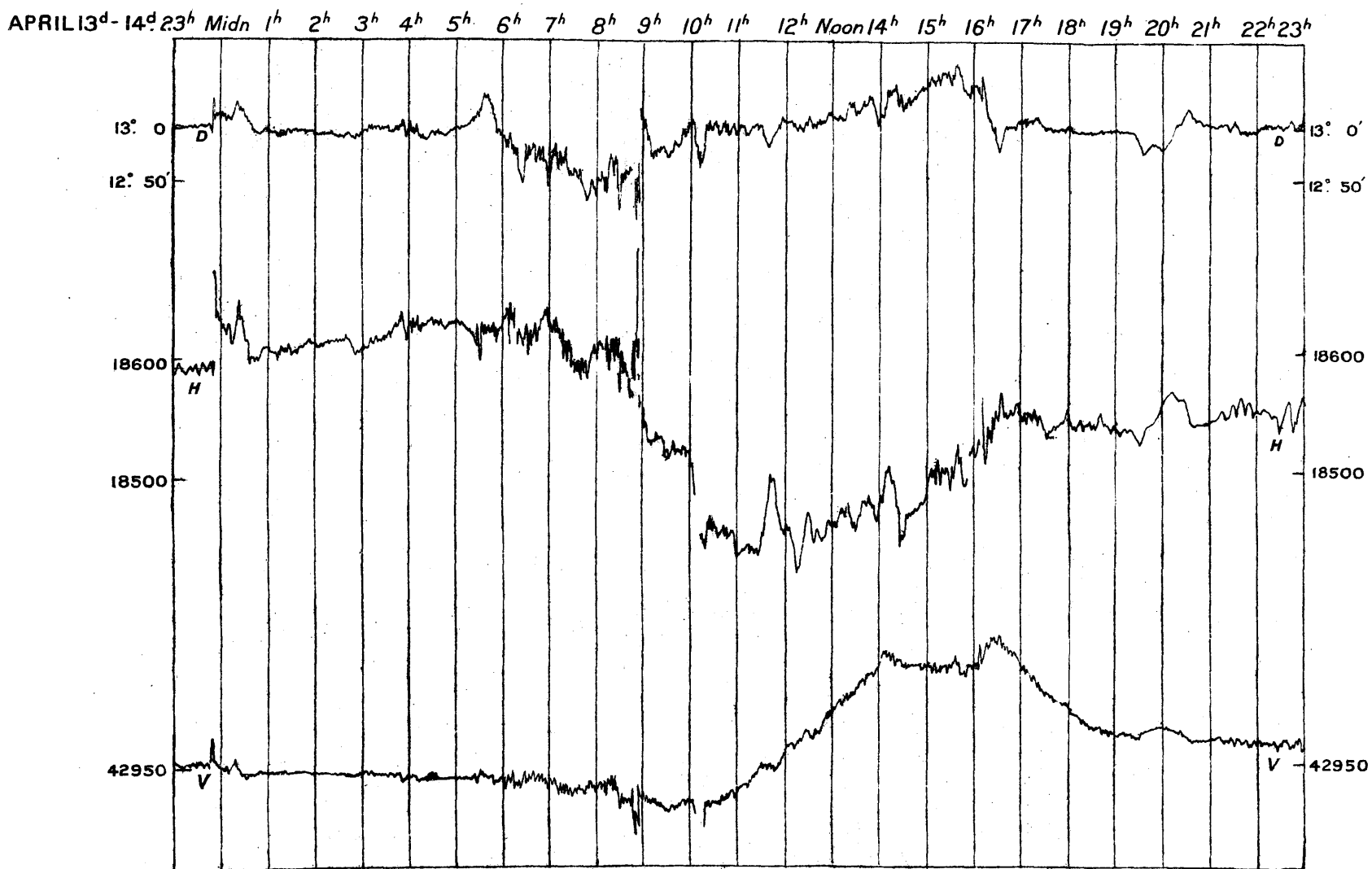
**MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)  
MAGNETIC STATION IN THE YEAR 1927.**



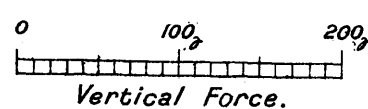
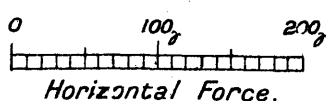
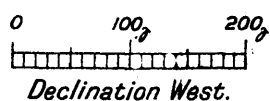
**SCALES FOR MAGNETIC ELEMENTS IN C. G. S. UNITS:**



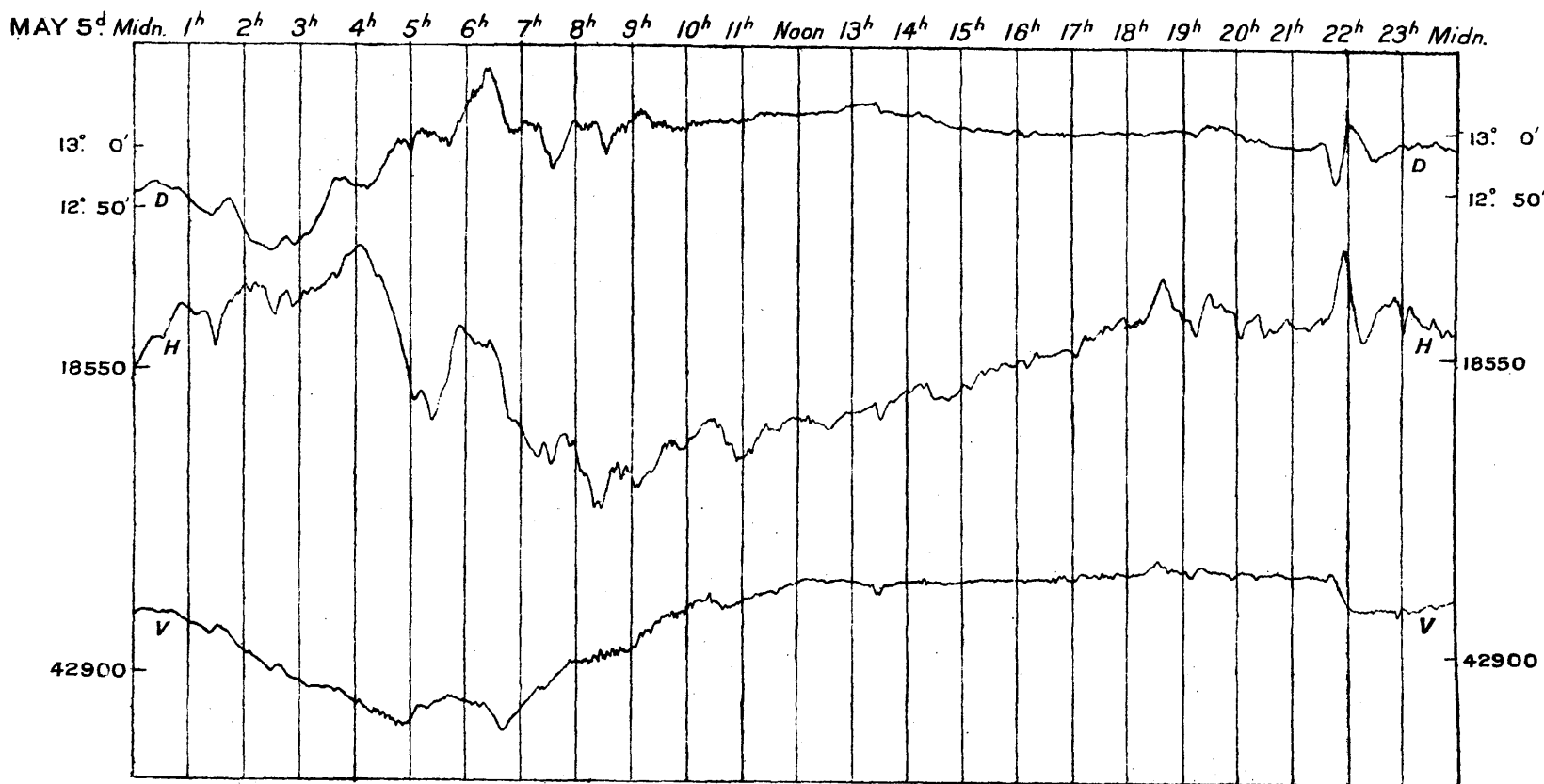
**MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)  
MAGNETIC STATION IN THE YEAR 1927.**



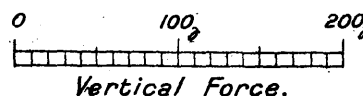
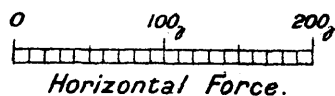
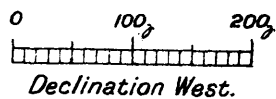
**SCALES FOR MAGNETIC ELEMENTS IN C. G. S. UNITS.**



MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)  
MAGNETIC STATION IN THE YEAR 1927.

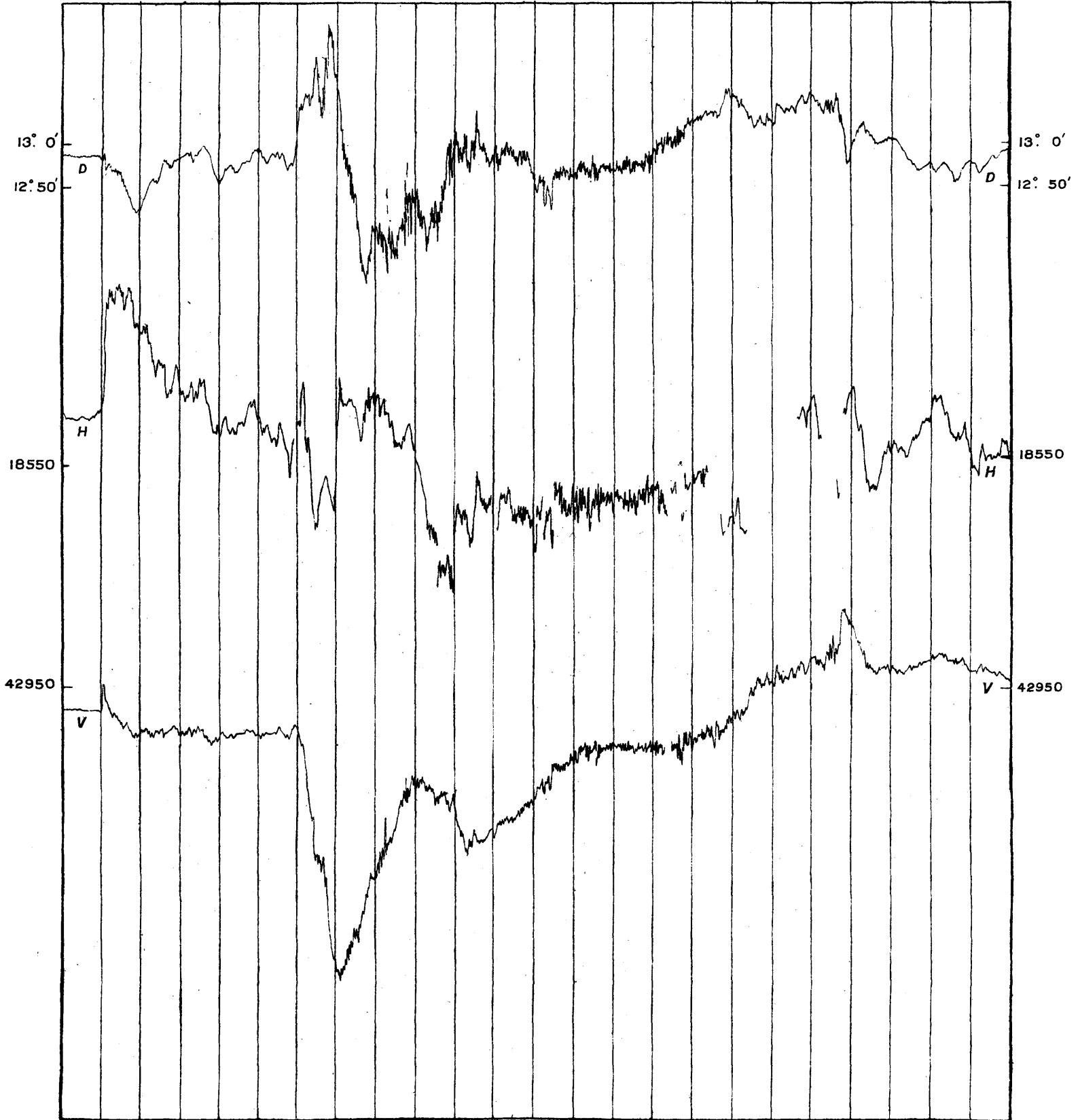


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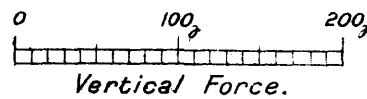
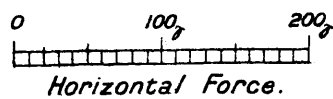
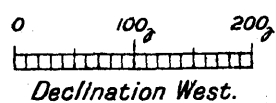


MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)  
MAGNETIC STATION IN THE YEAR 1927.

JULY. 21<sup>d</sup> - 22<sup>d</sup> 20<sup>h</sup> 21<sup>h</sup> 22<sup>h</sup> 23<sup>h</sup> Midn 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>

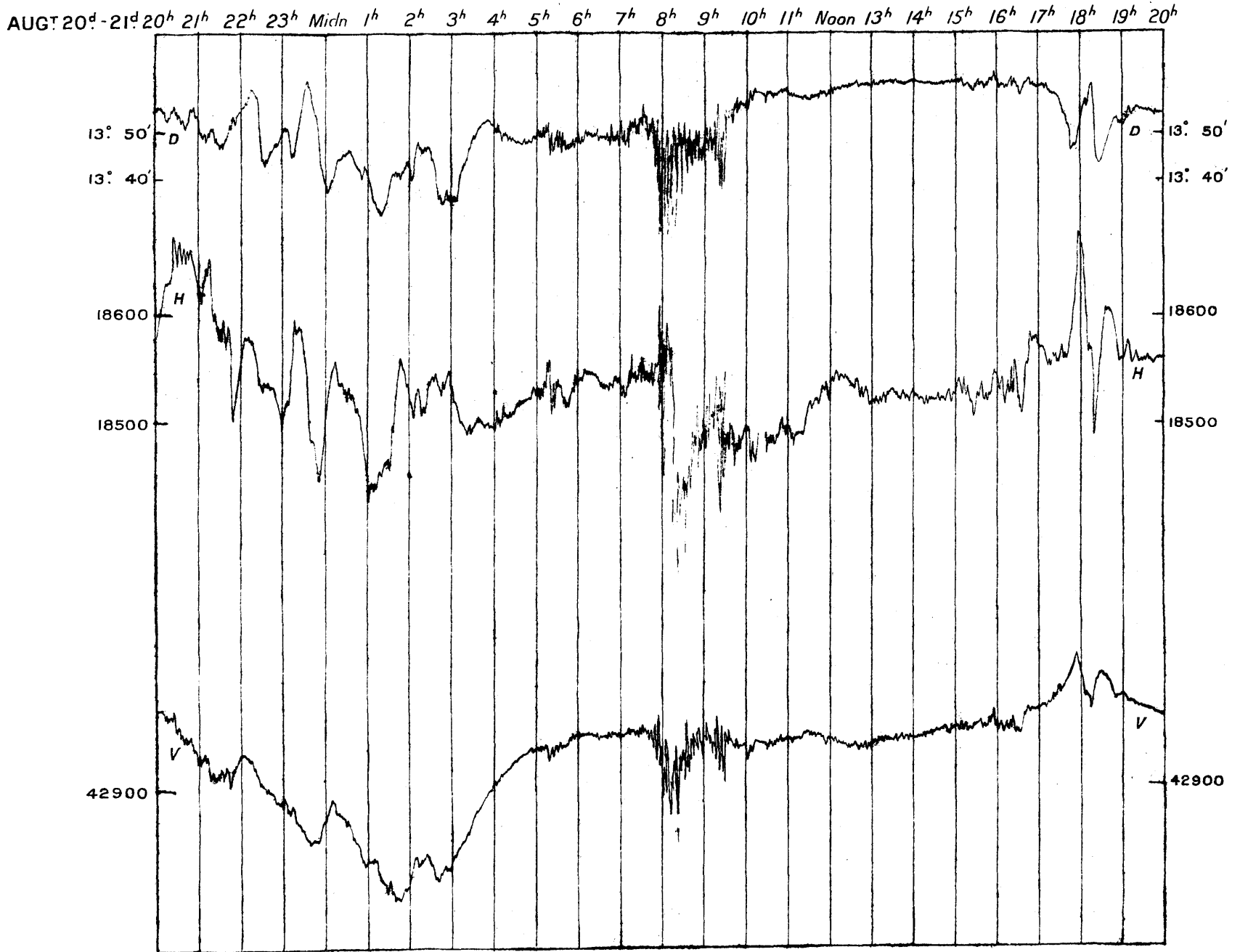


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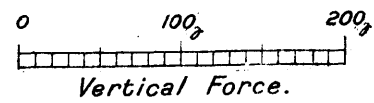
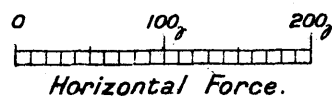
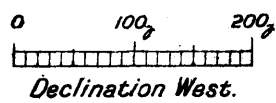




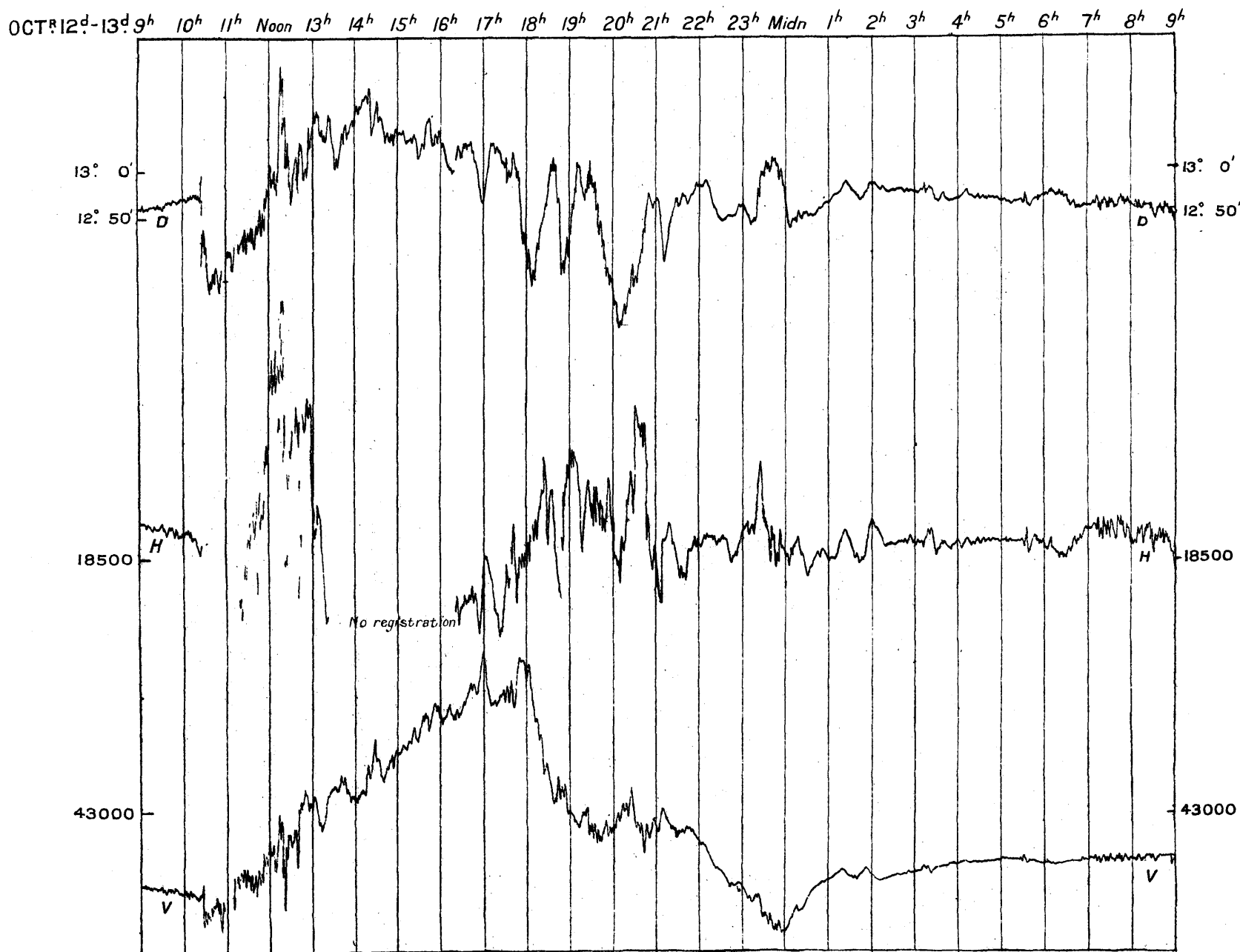
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MAGNETIC STATION IN THE YEAR 1927.**



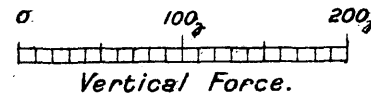
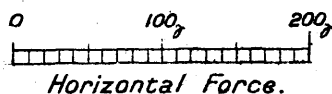
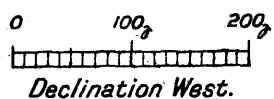
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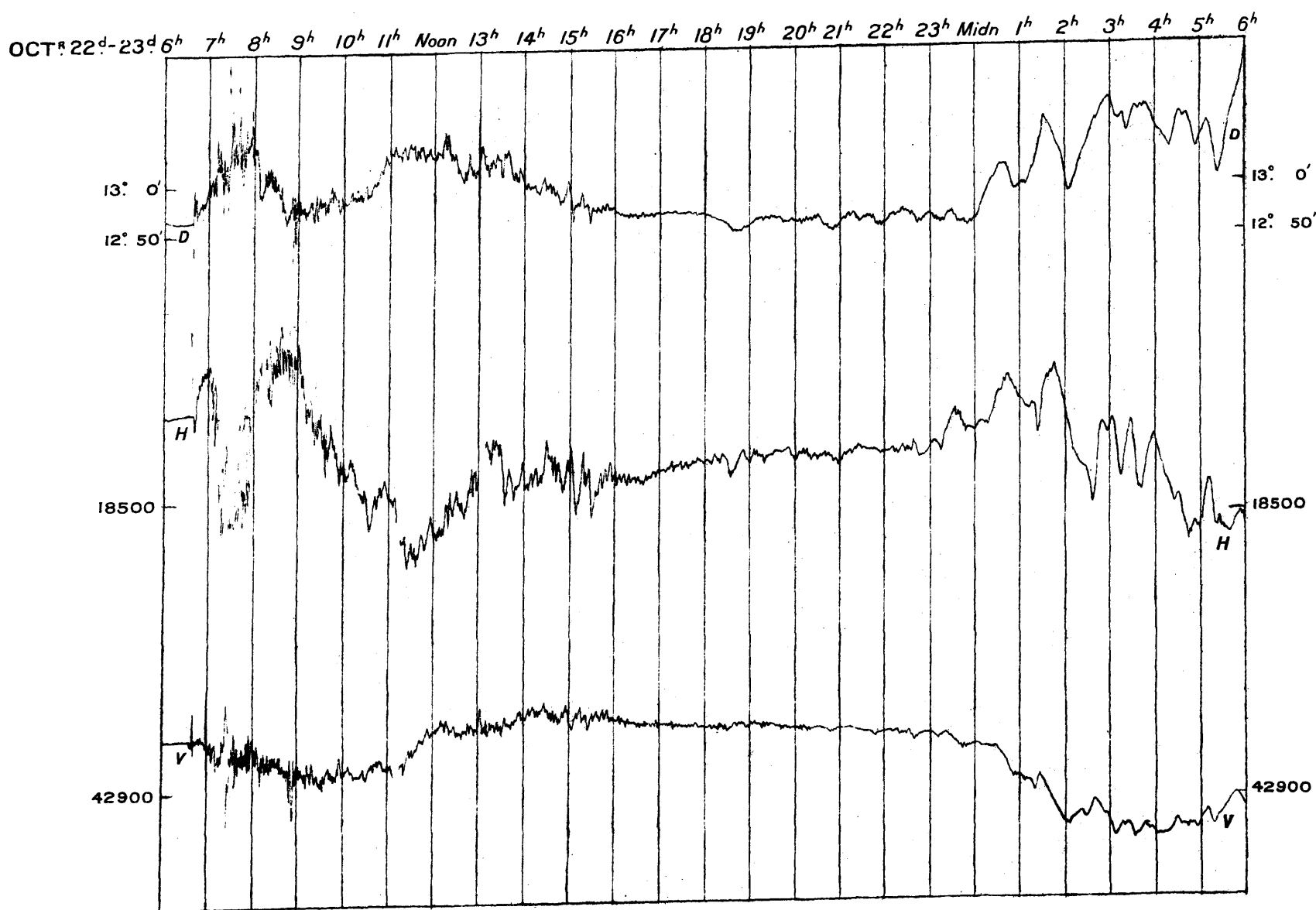
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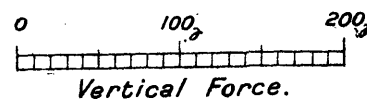
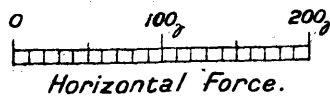
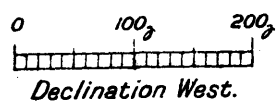
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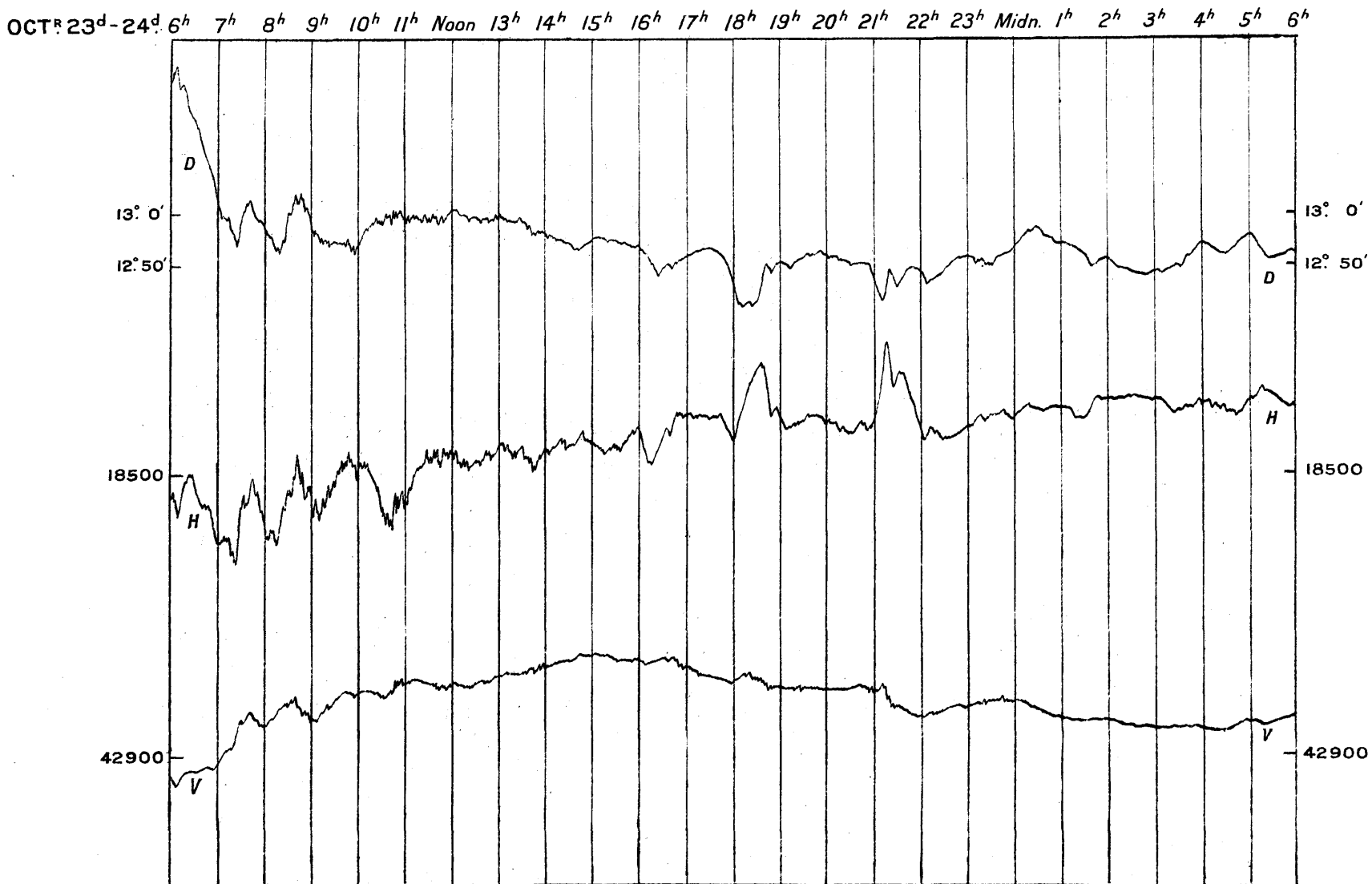
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MAGNETIC STATION IN THE YEAR 1927.



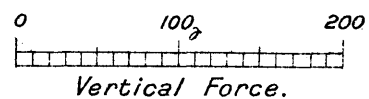
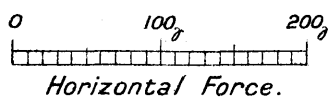
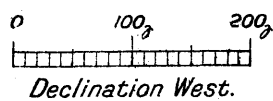
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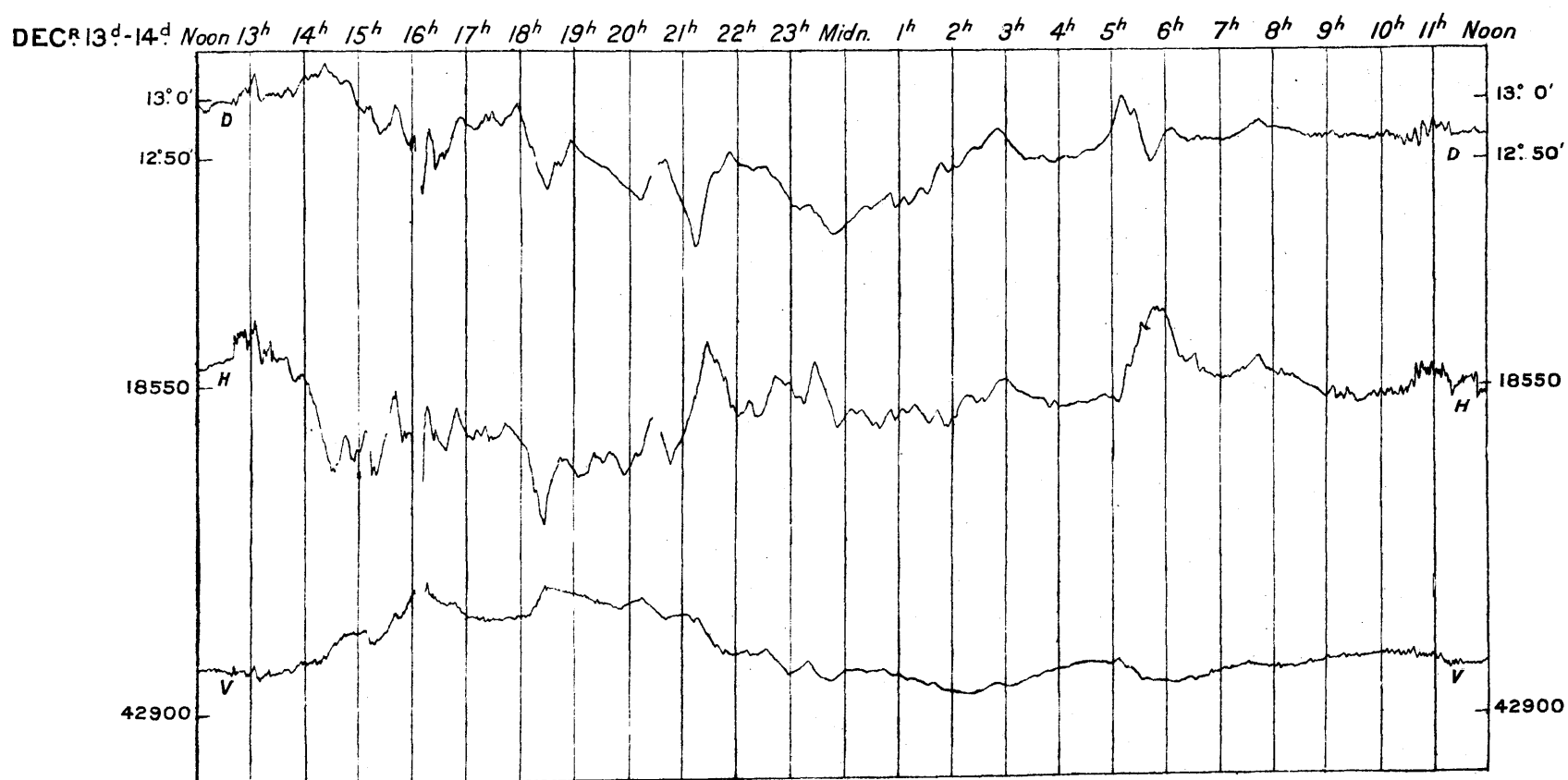
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MAGNETIC STATION IN THE YEAR 1927.



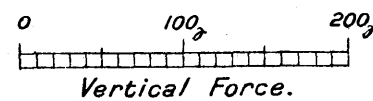
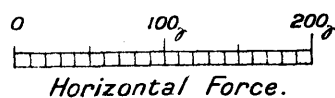
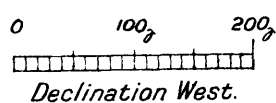
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)  
MAGNETIC STATION IN THE YEAR 1927.



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



GREENWICH  
METEOROLOGICAL OBSERVATIONS,  
1927.

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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 there are two sets of thermometers used for ordinary eye observations, the photographic wet-bulb and dry-bulb thermometers, thermometers for solar and terrestrial radiation, two earth thermometers, and two rain-gauges.

The anemometers, 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 1927.*

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, and atmospheric potential gradient; continuous automatic record of the direction, pressure and velocity of the wind, and of the amount of rain; registration of the duration of sunshine, 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, special cloud observations in connection with the International Balloon-ascents, and occasional phenomena.

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  $0^{\text{in}} \cdot 565$  in diameter, and the depression of the mercury due to capillary action is  $0^{\text{in}} \cdot 002$ , 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  $0^{\text{in}} \cdot 05$ , subdivided by vernier to  $0^{\text{in}} \cdot 002$ . The barometer was mounted in 1840 on the southern wall of the western arm of the Upper Magnet Room at a height above mean sea level of 159 feet. It was transferred to the New Magnetograph House on 1917 April 3, where the height above mean sea level is 152 feet. (See also p. E 9).

The barometer is read at 9<sup>h</sup>, 12<sup>h</sup> (noon), 15<sup>h</sup>, 21<sup>h</sup> 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. Readings of the latter are taken four times daily, and the corresponding base-line values are plotted graphically on a chart. The adopted value at any time is read from a smooth curve drawn through the plottings.

The photographic sheets being 240mm. wide, a range of 80mm. 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 stood in an open position in the Magnetic Pavilion enclosure.

The corrections to be applied to the thermometers in ordinary use are determined, usually once each year for the whole extent of scale actually employed, by observations at 32° in pounded ice and by comparison with the standard thermometer No. 515, kindly supplied to the Royal Observatory by the Kew Committee of the Royal Society.

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

The dry- and wet-bulb thermometers are read at 9<sup>h</sup>, 12<sup>h</sup> (noon), 15<sup>h</sup>, 21<sup>h</sup> every day. Readings of the maximum and minimum thermometers are taken at 9<sup>h</sup>, 15<sup>h</sup>, and 21<sup>h</sup> 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 approximately the same position in the Observatory grounds, to the north of the "New Observatory." It was transferred to the Magnetic Pavilion Enclosure on 1917 February 21. It is placed in a shed 8 feet square, standing upon posts about 8 feet high, and open to the north. The apparatus is screened from the direct rays of the sun, without impeding the circulation of the air. The recording mechanism is similar in general plan to that described in connection with the magnetometers. The traces consist of broad bands, due to the free passage of light to the drum (above the mercury column in the dry-bulb, and through an air bubble in that of the wet-bulb), crossed by fine lines caused by the shadows of the graduations 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 the Magnetic Pavilion enclosure, in an open position about 50 feet south-west of the building. 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 was a self-registering spirit minimum thermometer, Negretti and Zambra, No. D11197. The thermometers are laid on short grass and freely exposed to the sky; they require no correction for index error.

EARTH THERMOMETERS.—There are two thermometers now in use, the bulbs of which are sunk to depths of 4 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 recording sheet is changed daily at noon. The time scale, ordinarily 15mm. to the hour can be increased 24-fold by altering the gearing.

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

ROBINSON'S ANEMOMETER.—This instrument, for registration of the horizontal movement of the air, is mounted above the roof of the Octagon Room. It was brought into use in 1866, and is of smaller size than that now usual, the four hemispherical cups being 5 inches in diameter, the centre of each cup being 15 inches distant from the vertical axis of rotation. The cups are 21 feet above the roof of the Octagon Room, 56 feet above the adjacent ground, and 211 feet above the mean level of the sea. A motion of the recording pencil through 1 inch corresponds to horizontal motion of the air through 100 miles. The time scale is the same as for the Osler Anemometer and the sheet is changed daily at noon.

The values of wind velocity  $V$  given in the tables are three times the actual velocity  $v$  of the cups. From some tests of the Browning instrument, made by

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

$$V = 4.0 + 2.0 v,$$

and that the instrument fails to record wind velocities less than 4 miles per hour. The values of the wind velocity given by the formula  $V = 3v$  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; therefore, for the sake of continuity and simplicity, the formula  $V = 3v$  is continued in use. In this volume, however, the greatest hourly measures (p. E 46) are given according to both formulæ, and the least hourly measures omitted.

RAIN GAUGES.—During the year 1927 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 in the Magnetic Pavilion enclosure, about 10 feet north-west of the thermometer stand. 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 9<sup>h</sup>, 15<sup>h</sup>, and 21<sup>h</sup> Greenwich Mean Time. No. 8 is used as a check on the readings of No. 6 and is read at 9<sup>h</sup> only as a rule.

The present height of the Standard Gauge above mean sea-level is 5 feet 9 inches less than in its old position in the Observatory Grounds, before its removal to the Pavilion Enclosure.

The gauges are also read at midnight on the last day of each calendar month.

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

ELECTROMETER.—The electric potential of the atmosphere is measured by means of a Thomson self-recording quadrant electrometer, made by White, of Glasgow. It is situated in a small hut in the Magnetic Enclosure and has the usual arrangements for photographic registration. The time scale is the same as for the anemometer registers, the hourly break of trace being made by the driving-clock itself. The needle of the electrometer is connected by a fine wire directly with a small radium collector, carried on an insulated support, at a height of about 7 feet. One pair of quadrants is connected to the positive terminal, and the other pair to the negative terminal of a battery of 50 Leclanché cells, the centre point of which is earthed, as is also the case of the instrument.

The suspension filament is fine copper fuse-wire, with which both a steady zero and suitable sensitivity are obtained.

Determination of the scale of the variations recorded by the electrometer is made by comparison of the ordinates of the trace with simultaneous eye-observation of the readings of a multi-cellular voltmeter connected to a smoke-fuse collector, the latter being set up approximately at the height of the collector of the electrometer, but removed to a distance of at least 15 feet from any object standing above the ground surface.

The atmospheric potential-gradient is computed from these data and is expressed in terms of volts per metre.

1 mm. on the sheet was found, in the mean, to correspond to a potential gradient of 44 volts per metre, but accordance between independent determinations was not good.

SUNSHINE RECORDER.—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. The hourly results relate to *apparent* time.

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

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

The lens is 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 of Polaris and of  $\delta$  Ursæ Minoris are those selected for measurement. 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. When the sky is not clear at commencement, the last difference so obtained is used, due allowance being made for the daily acceleration of sidereal time over mean time. Variations in the error of orientation are found seldom to exceed two or three minutes of time, and are unimportant to the records.

#### § 8. *Meteorological Reductions.*

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

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

The barometer results are not reduced to sea-level, neither are they corrected for the effect of gravity, by reduction to the latitude of 45°. The 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 65 years, given in the "Daily Results of the Meteorological Observations," is found by comparing the numbers contained in column 6 with a table of average daily temperatures found by smoothing the accidental irregularities of the daily means deduced from the observations for the sixty-five years 1841–1905. In this series the mean daily temperature from 1841 to 1847 depends usually on 12 observations daily, in 1848 on 6 observations daily, and from 1849 to 1905 on 24 hourly readings from the photographic record. The smoothed numbers are given in Table VII, *Reduction of the Greenwich Meteorological Observations*, Part IV and also in the Introduction for 1910.



## E 10 INTRODUCTION TO GREENWICH METEOROLOGICAL OBSERVATIONS, 1927.

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

The indications of atmospheric electricity are derived from Thomson's Electrometer. In addition to the general character of these indications described in column 17 of the daily register, a table is given on page E 46 of monthly mean values of the potential gradient for every hour of the day. The values are expressed in volts per metre above the ground surface.

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

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

For understanding the divisions of time under the headings "Clouds and Weather" and "Electricity," the following remarks are necessary:—In regard to Clouds and Weather, the day is divided by columns into two parts (from midnight to noon, and from noon to midnight), and each of these parts is subdivided into two or three parts by colons (:). Thus, when there is a single colon in the first column, it denotes that the indications before it apply (roughly) to the interval from midnight to 6<sup>h</sup>, and those following it to the interval from 6<sup>h</sup> to noon. When there are two colons in the first column, it is to be understood that the twelve hours are divided into three nearly equal parts of four hours each. And similarly for the second column. In regard to Electricity, the results are included in one column; in this case the colons divide the whole period of 24 hours (midnight to midnight).

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

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

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

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

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

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

The following is the notation employed for electricity :—

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

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

F. W. DYSON.

ROYAL OBSERVATORY, GREENWICH.  
1928 September 28.



ROYAL OBSERVATORY, GREENWICH.

Results of  
Meteorological Observations

1927

GREENWICH MAGNETIC AND METEOROLOGICAL RESULTS 1927

MONTH and DAY, 1927.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.								
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
Jan. 1	30.077	45.3	37.0	8.3	41.9	+ 3.3	40.5	38.5	3.4	6.4	1.6	88	57.2	29.1	44.6	0.000	wP, mP	1.1	7.9
2	30.012	47.4	42.8	4.6	45.2	+ 6.8	43.3	40.9	4.3	6.9	2.6	85	50.0	36.2	44.8	0.000	wP : mP, wP : wP	0.0	7.9
3	29.688	49.4	36.5	12.9	43.5	+ 5.2	42.0	40.0	3.5	7.2	1.7	87	66.4	29.0	44.8	0.071	wP : wP, mN : mP	0.4	7.9
4	29.750	41.0	32.8	8.2	36.5	- 1.8	34.1	29.9	6.6	9.4	2.8	86	49.3	26.0	44.6	0.002	mP, wP : mP : mP, wP	2.3	7.9
5	29.898	46.1	34.3	11.8	39.6	+ 1.4	38.3	36.3	3.3	9.8	0.6	88	51.0	27.1	44.6	0.038	wP : wP : mP	0.0	7.9
6	29.706	52.1	38.5	13.6	45.5	+ 7.4	43.7	41.4	4.1	7.3	1.5	86	58.9	30.2	44.7	0.017	wP : wP : mP, wP	0.0	7.9
7	29.599	45.3	37.4	7.9	42.3	+ 4.3	40.1	36.8	5.5	9.2	1.6	81	55.1	29.3	44.6	0.022	wP : wP, mP : v, mP	2.5	8.0
8	30.002	50.6	34.4	16.2	42.1	+ 4.2	40.7	38.7	3.4	8.1	0.8	88	59.3	26.2	44.5	0.017	wP, mP : mP : wP	1.0	8.0
9	30.170	52.9	45.4	7.5	49.5	+ 11.6	46.8	43.7	5.8	8.8	2.2	80	63.2	33.0	44.6	0.003	wP	0.0	8.0
10	29.285	49.6	40.8	8.8	47.0	+ 9.1	44.9	42.4	4.6	7.8	1.5	84	55.2	29.6	44.8	0.000	wP : mP : mP	0.0	8.1
11	30.144	49.5	40.7	8.8	45.7	+ 7.8	43.8	41.4	4.3	6.2	1.7	85	72.6	31.0	44.9	0.000	wP	0.2	8.1
12	29.747	50.0	44.8	5.2	47.6	+ 9.7	46.0	44.1	3.5	6.9	1.8	88	60.3	37.1	44.9	0.018	wP : mP, wP : wP	0.0	8.2
13	29.140	46.5	35.1	11.4	39.4	+ 1.4	36.5	31.7	7.7	10.5	2.6	84	73.0	27.0	44.8	0.045	wP	5.6	8.2
14	28.957	43.8	36.8	7.0	40.8	+ 2.8	39.6	37.9	2.9	4.7	1.6	89	49.0	34.2	44.9	0.186	wP : wP, v : v, wP	0.0	8.2
15	29.077	45.9	29.9	16.0	37.1	- 1.0	35.9	34.0	3.1	7.9	0.0	89	67.4	20.1	44.8	0.002*	wP : mP : mP	2.7	8.2
16	29.285	44.0	30.4	13.6	36.3	- 2.0	35.1	32.9	3.4	8.0	0.0	88	70.0	20.6	44.7	0.002*	wP : wP, mP	4.8	8.3
17	29.246	39.8	27.0	12.8	33.4	- 5.1	32.7	31.6	1.8	3.3	0.0	93	59.6	17.5	44.5	0.098	wP, mP : mP, wP : v, mP	0.1	8.3
18	29.512	41.4	34.0	7.4	37.3	- 1.3	36.2	34.4	2.9	7.4	1.1	90	66.2	31.1	44.4	0.271	vv, mP : mP	1.6	8.4
19	29.814	40.4	30.6	9.8	36.1	- 2.6	34.5	31.8	4.3	7.7	2.2	84	54.0	23.1	44.1	0.002*	wP, mP : mP : mP	0.1	8.4
20	29.701	39.5	24.0	15.5	30.9	- 7.9	29.4	26.8	4.1	13.0	0.0	83	69.0	14.8	44.0	0.000	mP, wP	3.6	8.5
21	29.473	38.2	30.4	7.8	33.2	- 5.6	32.1	30.0	3.2	7.1	0.8	88	47.6	22.0	43.9	0.218	wP : v, mP : mP	0.7	8.5
22	29.444	38.6	28.8	9.8	33.7	- 5.1	32.9	31.6	2.1	7.2	0.8	92	43.5	24.2	43.5	0.108	wP, mP : mP, vN : mP	0.0	8.6
23	29.570	42.9	31.5	11.4	37.3	- 1.6	36.7	35.7	1.6	3.4	0.0	94	55.4	28.4	43.3	0.006*	wP : wP, mP : mP	1.3	8.6
24	29.752	48.6	30.1	18.5	40.7	+ 1.8	39.4	37.5	3.2	7.6	0.0	88	58.2	30.0	43.1	0.006*	mP : mP, wP : wP	0.9	8.6
25	29.742	52.1	42.8	9.3	47.9	+ 8.8	45.4	42.5	5.4	9.5	1.5	81	63.0	30.9	43.1	0.000	wP	0.0	8.7
26	29.734	50.3	41.3	9.0	45.8	+ 6.5	44.0	41.7	4.1	9.7	1.5	86	62.0	30.8	43.0	0.054	wP : wP, wN : wP, mP	0.0	8.8
27	29.844	50.8	40.1	10.7	44.7	+ 5.2	41.1	35.8	8.9	19.2	3.5	71	82.9	30.5	43.1	0.056	wP : v, mP : mP, wP	3.7	8.8
28	29.741	50.2	40.0	10.2	46.1	+ 6.5	42.9	38.6	7.5	10.9	4.2	75	58.6	31.0	43.2	0.002	wP	0.0	8.8
29	29.225	49.9	38.1	11.8	43.9	+ 4.2	40.3	35.0	8.9	18.0	3.7	71	85.9	30.8	43.2	0.202	... : wP, mP	1.3	8.9
30	29.219	46.7	36.4	10.3	39.9	+ 0.2	37.7	34.4	5.5	9.7	2.4	80	76.1	29.0	43.3	0.053	wP : wP, v : wP	0.6	8.9
31	29.232	46.9	36.0	10.9	39.8	+ 0.1	37.2	35.9	3.9	12.1	3.1	77	82.3	28.9	43.4	0.001*	wP : mP, v : mP	4.9	9.0
Means	29.638	46.3	35.8	10.5	41.0	+ 2.4	39.2	36.6	4.4	8.7	1.6	84.8	62.0	28.0	44.2	1.500	...	1.3	8.3
Number of Columns for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometric Tables issued by the 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 15, 16, 19, 23, 24, and 31 are wholly or partly derived from fog, frost or dew.

The mean reading of the Barometer for the month was 29<sup>in</sup>.638, being 0<sup>in</sup>.163 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 52°·9 on January 9; the lowest in the month was 24°·0, on January 20; and the range was 28°·9. The mean of all the highest daily readings in the month was 46°·3, being 3°·2 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 35°·8, being 2°·1 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 10°·5, being 1°·1 greater than the average for the 65 years, 1841-1905. The mean for the month was 41°·0, being 2°·4 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1927.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.				
	POLARIS.		δ URSAE MINORIS.		OSLER'S.				ROBINSON'S.						
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.						Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.
					A.M.	P.M.	lbs.	lbs.	miles.						
Jan. 1	3.0	0.22	2.8	0.20	WSW : SW	WSW : SW	1.2	0.08	307	2, slt.-ho.-fr: p.-cl	: 8, th.-cl	9	: 9	: 5, h	
2	0.0	0.00	0.0	0.00	SW	SW	1.1	0.13	336	10	: 10, slt.-sh	9, s, n	: 10	: 10	
3	11.2	0.81	10.7	0.78	SW	SW : WSW	2.8	0.22	369	10, slt.-shs	: 9	10, m.-r, r	: 10	: 0, h	
4	5.6	0.41	5.3	0.39	SW	W : NW	4.5	0.31	441	0, ho.-fr	: 0, ho.-fr	: 1, cu, h	8, n, cu, w, slt.-shs	: v.-cl, h, w	: 1, slt.-ho.-fr
5	4.8	0.35	3.5	0.25	W : SW : S	SW : W : SSW	2.1	0.12	320	10	: 10, m.-r, r	10, oc.-m.-r	: 1	: 0, d	
6	5.5	0.41	4.6	0.33	SSW	WSW : SW	2.0	0.16	342	10, r	: 10, slt.-sh	9, ci.-s	: 8	: v.-cl, d	
7	1.1	0.08	0.0	0.00	SW	W : WSW : NNW	1.4	0.09	297	8, d	: 2	: 1, s, h	8	: 10, fq.-m.-r	: 10, slt.-m.-r, sh
8	4.2	0.31	4.1	0.31	NNW: Calm: SSW	SW : WSW	1.5	0.10	262	9	: 8	: 1, m, h, ho.-fr	9, m	: 10, slt.-r	: 9
9	3.7	0.27	3.0	0.22	WNW : WSW	WSW : SW	1.8	0.18	355	8	: p.-cl	: 10, slt.-sh, m	9, s, n, th.-cl, m:	4, h	: 8, ci.-s, ci.-cu, d
10	6.7	0.50	6.6	0.49	SW : W : WSW	WSW : SW	2.8	0.17	358	10	: 10, th.-cl	10	: 2		
11	1.7	0.12	1.7	0.12	SW	SW	3.0	0.33	422	8	: 9	: 10, n	9, s, n	: 10	: 10
12	3.9	0.29	3.1	0.23	SW	SSW : S	5.8	0.55	436	10, d	: 5, d	: 10, th.-cl, ci.-s	10, th.-cl	: 10, oc.-m.-r, w	: 10, m.-r, w
13	2.0	0.15	2.0	0.15	SW	SW : SSW : S	4.0	0.45	452	9, w	: p.-cl, w	: 2, w	p.-cl, sn.-sh	: 5	: 10, r
14	4.4	0.32	3.3	0.24	SW	SW	1.7	0.10	343	9	: 10	: 10, r, fq.-slt.-r	10, fq.-slt.-r	: 10, r	: 9, oc.-slt.-r
15	10.1	0.76	9.9	0.75	SW : SSW	SSW	0.5	0.01	170	10	: 3, ho.-fr, m:	th.-cl, ci.-s, ci	7, cu, cu.-s:	1, f	: 1, f, ho.-fr
16	10.8	0.82	10.3	0.78	SSW : SW	SSW	0.6	0.03	196	8, m.-r.-sh	: 2	: p.-cl, ci.-s	p.-cl, th.-cl, ci, cu:	8	: 8, m, lu.-ha, ho.-fr
17	0.8	0.06	0.4	0.03	Calm	ESE : ENE	0.5	0.02	152	0, ho.-fr	: 6, ho.-fr, f:	10, f, slt.-sh	10, slt.-sh	: 10, r	: 10, r
18	5.5	0.42	3.1	0.24	NE : NNE	NNE : NNW	1.4	0.17	315	10, r	: 10, sh, fq.-r:	6, fq.-r, sl, hl	8, n, cu, slt.-sh:	10	: 10
19	8.9	0.67	8.7	0.65	NNW : WNW	NW : WNW	1.0	0.10	275	v.-cl, ho.-fr	: 8 ho.-fr.	: 9, m	10, slt.-r	: 10	: 6
20	5.5	0.42	4.3	0.32	SW : Calm	Calm : SSE	0.1	0.00	150	0, ho.-fr	: 0, ho.-fr	: 0, m, ho.-fr, h	1, ci.-s, slt.-f, p.-so.-ha	: p.-cl, th.-cl, f, ho.-fr:	6, ho.-fr
21	9.6	0.72	8.0	0.60	SE : S : SW	WSW	1.1	0.05	256	9, sn.-sh	: 10, sl	: 10, sn	8, th.-cl	: 0	: v.-cl, th.-cl
22	1.0	0.08	0.6	0.05	WSW : SW	S : SW	0.3	0.04	239	3	: 1	: 10, slt.-sn, sl	10, r, oc.-sl:	10, sh	: 10
23	0.0	0.00	0.0	0.00	SW : Calm	Calm	0.1	0.00	170	10	: 6, d	: 1, th.-cl, h, m	9, f	: 10, f, d	: 10, tk.-f, d
24	0.8	0.06	0.8	0.06	Calm : S	S : SSW	3.4	0.22	279	10, f, d	: 10, f, m, d	: 10, oc.-m.-r	9, th.-cl.	: 7	: 10, w
25	6.1	0.48	6.1	0.48	SSW	SSW	6.5	0.96	491	10, w	: 10, w	: 10, n, cu.-s, fq.-m.-r, w	9, oc.-m.-r, w	: 1	: 1, d
26	10.6	0.83	10.6	0.83	SSW : S	S : SW	6.2	0.84	453	5	: 10	: 10, fq.-slt.-r, w	10, slt.-r, w:	3, w	: 0, w
27	12.6	0.99	12.6	0.99	SSW : SW	SW	8.4	1.41	592	3, w	: 8, sh, w	: v.-cl, fq.-shs, w	v.-cl, n, cu.-s, w, g:	1, st.-w, w	: 0
28	0.0	0.00	0.0	0.00	SW : SSW	SW : SSW	14.0	2.03	687	1	: 2, w	: 10, n, w, st.-w	10, slt.-sh, g, st.-w	: 10, st.-w, w, sh	
29	12.0	0.96	11.9	0.95	SSW : SW	SW	16.1	1.69	692	10, r, st.-w, g	: 9, n, cu.-s, th.-cl, st.-w	7, th.-cl, ci.-s, n, w, slt.-sh	: 2, w	: 1, slt.-sh	
30	12.5	1.00	12.5	1.00	SSW	SSW : SW	3.2	0.54	446	0	: 7, slt.-sh	: 10, s, n, m.-r, w	10, n, ci.-s, r, w:	p.-cl, d	: 0, w, d
31	2.6	0.21	2.6	0.21	SW	WSW : SW	2.0	0.27	344	0, d, slt.-ho.-fr	: 1, slt.-ho.-fr	: 1, cu, h	p.-cl, sh	: 1	: 9
Means	5.4	0.41	4.9	0.38	...	...	...	0.37	353						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29				30	

The mean *Temperature of Evaporation* for the month was 39°.2, being 2°.0 higher than the average for the 65 years, 1841-1905.  
 The mean *Temperature of the Dew Point* for the month was 36°.6, being 1°.5 higher than  
 The mean *Degree of Humidity* for the month was 84.8, being 2.0 less than  
 The mean *Elastic Force of Vapour* for the month was 0.1218, being 0.013 greater than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.3.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.152. The maximum daily amount of *Sunshine* was 5.6 hours on January 13.  
 The highest reading of the *Solar Radiation Thermometer* was 85°.9 on January 29; and the lowest reading of the *Terrestrial Radiation Thermometer* was 14°.8 on January 20.  
 The *Proportions of Wind* referred to the cardinal points were N.1, E.0, S.15, W.13. Two days were calm.  
 The *Greatest Pressure of the Wind* in the month was 16.1 lbs. on the square foot on January 29. The mean daily *Horizontal Movement of the Air* for the month was 353 miles; the greatest daily value was 692 miles on January 29, and the least daily value was 150 miles on January 20.  
*Rain* (0.1005 or over) fell on 18 days in the month, amounting to 1.1500, as measured by gauge No. 6 partly sunk below the ground; being 0.1381 less than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1927.	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 6 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evapo-ration.	Of the Dew Point.	Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.								
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deduced Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.					
Feb. 1	29.456	45.8	32.9	12.9	39.4	-0.2	37.4	34.4	5.0	10.4	1.1	82	73.6	29.7	43.4	0.507	v, mP : mP : mP, vv	4.0	9.1
2	29.795	43.9	27.7	16.2	36.3	-3.2	34.7	32.0	4.3	9.3	0.0	82	76.0	20.5	43.2	0.337	v, mP : mP : mP	5.7	9.1
3	30.166	44.8	27.4	17.4	38.2	-1.3	36.2	32.9	5.3	7.6	0.0	81	68.1	19.8	43.1	0.000	wP, mP : mP : mP, wP	0.4	9.2
4	30.221	50.3	35.3	15.0	43.6	+4.1	40.5	36.0	7.6	16.3	3.2	74	83.0	34.8	43.0	0.000	wP : mP : mP	3.9	9.2
5	30.203	47.5	28.1	19.4	39.2	-0.4	37.4	34.7	4.5	10.4	0.8	84	83.6	18.5	43.0	0.115	mP : mP, wP : wP	2.3	9.3
6	30.194	47.0	38.9	8.1	43.4	+3.8	40.4	36.1	7.3	11.3	4.2	75	62.9	32.2	43.0	0.000	mP, wP : wP, mP : mP	0.1	9.4
7	30.296	38.9	33.1	5.8	36.7	-2.8	36.1	35.1	1.6	3.9	0.0	94	41.0	28.0	42.8	0.320	mP, wP : v, wP	0.0	9.4
8	30.301	36.0	32.7	3.3	34.4	-4.9	31.8	27.0	7.4	12.4	1.8	72	48.3	27.9	42.6	0.000	wP : wP : wP, mP	0.1	9.5
9	30.290	35.0	32.2	2.8	33.4	-5.7	31.4	27.4	6.0	10.3	1.1	81	46.0	28.6	42.6	0.000	mP, wP : wP : wP	0.0	9.5
10	30.337	40.4	25.7	14.7	33.0	-5.9	31.3	28.2	4.8	10.5	0.0	84	74.1	13.9	42.5	0.000	wP, mP : mP : mP	4.7	9.6
11	30.264	32.8	25.0	7.8	29.6	-9.2	29.5	29.3	0.3	1.6	0.0	98	32.0	16.5	42.5	0.000	wP : wP : mP	0.0	9.6
12	30.174	37.5	28.0	9.5	32.0	-6.8	31.5	31.0	1.0	5.1	0.4	94	48.6	28.9	42.2	0.000	mP : mP, wP : mP, wP	0.0	9.7
13	30.224	38.7	28.9	9.8	31.9	-7.1	31.8	31.6	0.3	4.8	0.0	99	56.8	22.1	42.0	0.000	wP, mP : wP, mP : mP, wP	0.0	9.8
14	30.363	46.5	29.1	17.4	35.6	-3.7	34.8	33.3	2.3	5.5	0.0	92	59.6	29.7	42.0	0.000	mP, wP : wP, mP : mP	0.6	9.8
15	30.365	40.7	35.6	5.1	38.2	-1.2	37.9	37.4	0.8	2.7	0.5	97	52.0	36.0	41.9	0.002	wP, mP	0.0	9.9
16	30.247	45.3	37.0	8.3	41.2	+1.7	40.6	39.7	1.5	2.2	1.1	95	49.3	36.4	41.9	0.003	wP : mP	0.0	10.0
17	30.137	52.8	44.0	8.8	46.9	+7.3	45.5	43.9	3.0	5.5	1.6	89	55.9	39.6	42.0	0.000	mP, wP : mP : mP	0.0	10.0
18	30.043	47.6	41.0	6.6	43.6	+4.1	41.3	38.0	5.6	9.9	3.4	81	79.6	35.5	42.0	0.000	mP : mP : mP, wP	0.1	10.1
19	30.114	47.1	34.0	13.1	39.8	+0.3	37.7	34.5	5.3	12.4	1.6	81	94.7	26.8	42.0	0.000	wP : wP, mP : wP	0.8	10.1
20	29.742	48.3	38.3	10.0	43.7	+4.2	42.7	41.5	2.2	7.2	0.9	92	51.2	34.3	42.1	0.197	wP, wN : wP, wN : wP	0.0	10.2
21	29.437	56.3	44.0	12.3	48.0	+8.4	46.0	43.8	4.2	12.5	1.5	85	95.0	41.1	42.4	0.108	wP, wN : wP, mP : wP, v	2.5	10.3
22	29.148	56.0	42.9	13.1	48.0	+8.3	45.6	42.9	5.1	11.5	2.0	82	95.9	38.1	42.6	0.090	wN, wP : wP : wP	1.5	10.3
23	29.107	50.4	38.7	11.7	43.9	+4.1	41.4	37.9	6.0	11.5	4.1	79	105.0	33.0	42.7	0.086	wP : wP, mP	4.7	10.4
24	29.108	48.9	33.1	15.8	41.4	+1.4	40.3	38.8	2.6	6.4	1.9	90	65.8	27.3	42.9	0.387	... : ... : mP	0.0	10.5
25	29.221	47.5	33.0	14.5	41.6	+1.5	40.8	39.7	1.9	3.6	1.2	93	58.0	27.2	43.0	0.355	mP : wP, v : wP	0.0	10.5
26	29.314	54.1	39.6	14.5	47.0	+6.8	45.1	42.9	4.1	7.8	1.3	85	97.9	30.8	43.0	0.261	wP : wP : wN, wP	2.7	10.6
27	29.203	52.6	42.0	10.6	48.0	+7.7	44.9	41.1	6.9	13.2	4.3	77	73.5	34.1	43.1	0.054	wP : wP : mP, wP	0.1	10.7
28	29.230	54.9	41.8	13.1	48.5	+8.2	46.7	44.7	3.8	11.0	1.6	86	105.0	33.9	43.2	0.575	wP : wP, wN : wP	1.0	10.7
Means	29.882	46.0	34.6	11.3	40.2	+0.7	38.6	36.3	4.0	8.5	1.4	85.9	69.1	29.5	42.6	3.397	...	1.3	9.9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn 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 Hygrometric Tables issued by the 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<sup>in</sup>.882, being 0<sup>in</sup>.073 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 56°3 on February 21; the lowest in the month was 25°0 on February 11; and the range was 31°3. The mean of all the highest daily readings in the month was 46°0, being 0°8 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 34°6, being 0°4 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 11°3, being 0°3 greater than the average for the 65 years, 1841-1905. The mean for the month was 40°2, being 0°7 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1927	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.			
	POLARIS.		δURSÆ 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.			
	hours.		hours.			lbs.	lbs.	miles.	A.M.	P.M.			
Feb. 1	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	WSW	1 2 0 08	259	10, slt.-sh, sh	: 8, d	: 1, ci.-s	9, th.-cl, cu.-n, p.-so.-ha	: 10, r, sl, sn	
2	6 3 0 50	0 0 0 0	0 0 0 0	0 0 0 0	NE : NNE	2 1 0 15	286	10, sn	: 9	: 0	1, cu, m	: 1, m, slt.-f	: 0, slt.-f, ho.-fr
3	2 3 0 18	0 8 0 06	0 8 0 06	0 8 0 06	SSW	1 9 0 18	319	8, f	: 9	: 10	8, cu.-s, ci	: 2, d	: 10, d
4	11 5 0 92	7 0 0 56	7 0 0 56	7 0 0 56	SSW : SW : W	1 3 0 15	299	9	: 9, m.-r.-sh	: 7, cu, h	2, cu, h	: 1, h, th.-f	: 0, ho.-fr
5	6 0 0 49	5 3 0 43	5 3 0 43	5 3 0 43	SW : SSW	2 0 0 18	288	0, ho.-fr	: 2, th.-cl, ho.-fr	: 7, ci.-s, ci.-cu, h	9, slt.-r	: 10, r	: 7, slt.-r
6	5 5 0 45	4 5 0 36	4 5 0 36	4 5 0 36	W : NW : NNW	4 0 0 42	412	3	: 9	: 9, cu	10	: 10	: 6
7	1 8 0 15	1 7 0 14	1 7 0 14	1 7 0 14	Calm : WSW	1 0 0 02	156	p.-cl	: 10, f	: 10, f, r	10, f, r, glm	: 10, r, glm	: 10
8	0 0 0 00	0 0 0 00	0 0 0 00	0 0 0 00	E : ENE	2 7 0 30	349	8, th.-cl	: 10	: 10, cu.-s, n	9, n	: 10	: 10
9	3 6 0 30	3 5 0 29	3 5 0 29	3 5 0 29	NNE : NE	1 9 0 21	289	10		: 10, n, slt.-sn.-sh	10		: 10
10	10 5 0 86	8 5 0 69	8 5 0 69	8 5 0 69	Calm	0 0 0 00	122	9, ho.-fr	: 2	: 1, h	0, h		: 0, th.-f, f, ho.-fr
11	0 0 0 00	0 0 0 00	0 0 0 00	0 0 0 00	Calm	0 0 0 00	64	0, f		: 10, f, ho.-fr	10, f, ho.-fr		: 10, f, ho.-fr
12	0 0 0 00	0 0 0 00	0 0 0 00	0 0 0 00	Calm	0 2 0 00	112	10, slt.-f, ho.-fr	: 10, m, ho.-fr	: 10, m, ho.-fr	10, m, slt.-f		: 10, f
13	0 0 0 00	0 0 0 00	0 0 0 00	0 0 0 00	Calm	0 0 0 00	39	10, f		: 10, f, slt.-ho.-fr	f, slt.-f	: f	: 10, f, ho.-fr
14	0 0 0 00	0 0 0 00	0 0 0 00	0 0 0 00	Calm	0 2 0 00	124	10, f, slt.-f	: 10, f	: tk.-f, f	0, slt.-f	: 10, f, tk.-f	: 10, f
15	0 0 0 00	0 0 0 00	0 0 0 00	0 0 0 00	Calm	0 0 0 00	91	10, f, slt.-f		: 10, f, d, slt.-f	10, m, slt.-m	: 10, slt.-m	: 10, slt.-m.-r
16	0 0 0 00	0 0 0 00	0 0 0 00	0 0 0 00	Calm : SW	0 0 0 00	143	10	: 10, m	: 10, slt.-f, slt.-sh	10, m		: 10, m, slt.-f
17	0 0 0 00	0 0 0 00	0 0 0 00	0 0 0 00	Calm : SW	1 0 0 03	191	10, f	: 10, m	: 10, m	10, m	: 10	: 10
18	2 7 0 23	1 3 0 11	1 3 0 11	1 3 0 11	NNW	0 8 0 07	232	10	: 10	: 10, cu.-s	10		: 10
19	0 0 0 00	0 0 0 00	0 0 0 00	0 0 0 00	N : Calm	0 5 0 03	146	9	: 9, m	: 10, th.-cl, m	7, th.-cl	: 10	: 10
20	0 0 0 00	0 0 0 00	0 0 0 00	0 0 0 00	SSW	1 7 0 13	288	10, slt.-sh	: 10, r, slt.-r	: 10, r, slt.-sh	10, m.-r	: 10, slt.-r	: 10, shs
21	0 0 0 00	0 0 0 00	0 0 0 00	0 0 0 00	NW : WSW : SW	0 5 0 05	241	10	: 10, r, m.-r	: 7	6	: 10, slt.-r	: 10, m.-r
22	2 3 0 21	1 7 0 16	1 7 0 16	1 7 0 16	S	2 0 0 22	332	10, m.-r, r	: 10, m.-r	: 10, th.-cl, oc.-m.-r	9, th.-cl, slt.-sh, so.-ha	: 9, r	
23	1 8 0 16	0 7 0 06	0 7 0 06	0 7 0 06	S	4 5 0 44	387	9	: 7	: 7, cu.-n, r, sh	9, cu.-n, ci.-s, slt.-sh	: 8, sh	: v.-cl, sh
24	7 3 0 64	5 4 0 48	5 4 0 48	5 4 0 48	SSE : ESE	3 3 0 20	290	10, r	: 10, r	: 10, r, sh	10, r, glm	: 10, r	: 2
25	8 8 0 79	7 7 0 68	7 7 0 68	7 7 0 68	S : SSE	1 3 0 04	213	2, sh	: 10	: 10, n, r	10, r, hy.-r, slt.-r	: 8	
26	2 7 0 25	2 7 0 25	2 7 0 25	2 7 0 25	SSW	7 6 0 43	385	0	: 5, sh	: 7	10, sh	: 10, r, hy.-r, w	: 8, w
27	5 3 0 50	4 9 0 46	4 9 0 46	4 9 0 46	SSW : SW	9 0 1 31	592	7, sh	: 9, slt.-sh, w	: 10, n, s, r, w	10, st.-w, slt.-sh	: 9, st.-w, w	: 0
28	3 2 0 29	2 8 0 26	2 8 0 26	2 8 0 26	SSE : S : SSW	11 8 1 47	552	10, r, hy.-r	: 10, r, hy.-r	: 9, r, w	8, r, w	: 10, fq.-r, m.-r, st.-w	: 9, st.-w, w
Means	2 9 0 25	2 1 0 18	2 1 0 18	2 1 0 18	...	...	0 22	257					
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29	30		

The mean *Temperature of Evaporation* for the month was 38°·6, being 0°·9 higher than the average for the 65 years, 1841-1905.

The mean *Temperature of the Dew Point* for the month was 36°·3, being 1°·3 higher than the average for the 65 years, 1841-1905.

The mean *Degree of Humidity* for the month was 85·9, being 2·3 greater than the average for the 65 years, 1841-1905.

The mean *Elastic Force of Vapour* for the month was 0·1215, being 0·011 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 8·3.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·127. The maximum daily amount of *Sunshine* was 5·7 hours on February 2.

The highest reading of the *Solar Radiation Thermometer* was 105°·0 on February 23 and 28; and the lowest reading of the *Terrestrial Radiation Thermometer* was 13°·9 on February 10.

The *Proportions of Wind* referred to the cardinal points were N. 3, E. 3, S. 10, W. 5. Seven days were calm.

The *Greatest Pressure of the Wind* in the month was 11·8 lbs. on the square foot on February 28. The mean daily *Horizontal Movement of the Air* for the month was 257 miles; the greatest daily value was 592 miles on February 27; and the least daily value was 39 miles on February 13.

*Rain* (0·005 or over) fell on 13 days in the month, amounting to 3·1397 as measured by gauge No. 6 partly sunk below the ground; being 1·1917 greater than the average fall for the 65 years, 1841-1905.



DAILY RESULTS OF THE METEOROLOGICAL OBSERVATIONS

MONTH and DAY, 1927.	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 8 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evapo-ration.	Of the Dew Point.	Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.								
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.			Mean of 24 Hourly Values.	Deducted Mean Daily Value.			Mean.	Greatest.	Least.				
Mar. 1	29.276	54.6	44.8	9.8	48.1	+ 7.7	45.6	42.8	5.3	11.5	1.8	81	108.0	38.7	43.3	0.000	wP	5.5	10.8
2	29.496	55.8	41.7	14.1	47.4	+ 7.0	44.9	41.9	5.5	17.8	1.9	81	113.9	36.1	43.5	0.045	wP	5.7	10.9
3	29.632	53.0	41.9	11.1	46.5	+ 6.0	42.0	35.7	10.8	17.9	3.3	66	101.2	32.9	43.6	0.013	... : mP, wP	4.8	10.9
4	29.401	53.1	44.9	8.2	48.4	+ 7.7	46.1	43.5	4.9	9.0	2.1	83	77.2	39.1	43.8	0.006	wP	0.1	11.0
5	29.114	50.0	42.0	8.0	45.2	+ 4.3	43.3	40.9	4.3	8.6	1.5	85	72.7	35.0	43.9	0.247	wP : wP : v, wP	0.1	11.1
6	29.212	51.0	41.8	9.2	45.5	+ 4.5	41.6	35.9	9.6	13.3	3.3	69	85.9	37.2	44.0	0.007	wP	2.6	11.1
7	29.101	49.0	39.5	9.5	43.8	+ 2.8	42.4	40.7	3.1	6.2	1.2	88	63.0	31.5	44.0	0.247	wP, wN : wP, mP : v, mP	0.0	11.2
8	29.183	53.1	38.0	15.1	44.2	+ 3.1	40.9	36.1	8.1	19.4	2.4	73	104.4	30.1	44.1	0.135	wP : mP, v : vv, mP	7.8	11.2
9	29.363	53.8	33.1	20.7	42.4	+ 1.4	39.0	33.9	8.5	19.1	2.7	71	106.1	25.0	44.1	0.000	wP : mP, wP : mP	3.5	11.3
10	29.464	50.9	36.0	14.9	41.6	+ 0.7	39.5	36.3	5.3	9.2	1.3	82	94.9	26.2	44.1	0.010	wP : mP, v : wP	0.5	11.4
11	29.725	48.5	34.7	13.8	40.3	- 0.7	37.8	34.0	6.3	17.4	0.5	78	89.5	27.0	44.0	0.000	wP : mP : mP, wP	1.5	11.4
12	29.954	46.7	35.4	11.3	40.2	- 0.9	37.9	34.4	5.8	14.8	1.3	79	97.2	27.9	44.0	0.031	wP : wP, mP : v, mP	1.9	11.5
13	29.880	46.1	36.8	9.3	40.3	- 1.0	37.9	34.2	6.1	11.0	2.7	78	76.9	28.7	43.9	0.018	v, wP : wP : wP	0.7	11.6
14	29.964	41.9	37.6	4.3	39.4	- 2.1	36.0	30.4	9.0	12.6	7.2	69	51.7	35.0	43.9	0.000	wP, mP : mP : mP, wP	0.0	11.6
15	30.169	50.0	33.8	16.2	41.7	- 0.0	38.4	33.2	8.5	14.2	2.2	72	92.3	21.1	43.9	0.000	wP	2.8	11.7
16	30.127	56.1	29.9	26.2	42.3	+ 0.4	39.0	34.0	8.3	25.0	0.0	72	111.3	18.3	43.9	0.000	wP	7.7	11.8
17	29.945	61.2	35.9	25.3	47.2	+ 5.2	43.3	38.1	9.1	21.2	1.6	71	117.4	22.3	43.9	0.000	wP	9.8	11.9
18	30.094	58.9	43.0	15.9	49.4	+ 7.4	47.3	44.9	4.5	11.3	0.8	85	120.3	29.0	43.8	0.000	wP : wP : mP, wP	1.1	11.9
19	30.222	62.2	46.2	16.0	51.3	+ 9.4	48.9	46.3	5.0	12.0	2.5	83	111.9	39.8	43.9	0.000	wP	2.1	12.0
20	30.180	63.4	40.5	22.9	51.0	+ 9.1	47.6	43.7	7.3	15.6	0.8	77	122.6	25.7	44.0	0.000	wP	9.0	12.0
21	29.894	68.1	40.0	28.1	53.7	+ 11.8	48.4	42.4	11.3	29.7	0.8	65	128.7	25.0	44.1	0.000	wP	7.6	12.1
22	29.695	59.4	48.0	11.4	53.1	+ 11.1	50.0	46.7	6.4	11.2	1.8	79	101.8	43.1	44.2	0.088	wP : wP : wP, ...	2.4	12.2
23	29.217	55.6	40.9	14.7	49.3	+ 7.1	47.2	44.9	4.4	9.3	2.3	85	71.5	33.1	44.3	0.182	... : ... : wP	0.1	12.3
24	29.084	53.8	39.9	13.9	44.3	+ 1.9	41.9	38.6	5.7	11.9	3.1	80	112.2	31.6	44.7	0.098	wP : wN, wP	1.4	12.3
25	28.804	53.0	38.7	14.3	43.9	+ 1.2	41.5	38.1	5.8	19.1	2.7	80	112.0	31.6	44.9	0.510	wP : mP, v : v, wP	3.4	12.4
26	28.961	55.0	42.8	12.2	45.8	+ 2.8	42.3	37.4	8.4	18.5	3.9	73	108.6	35.5	44.9	0.128	wP : v, wP	5.7	12.4
27	29.278	59.4	40.1	19.3	47.2	+ 3.9	43.5	38.7	8.5	18.3	2.9	72	124.5	29.4	45.1	0.000	wP : wP, mP	8.7	12.5
28	29.569	60.2	34.9	25.3	46.4	+ 2.7	42.0	35.8	10.6	21.9	0.3	66	121.6	22.5	45.0	0.000	wP : mP, wP : mP, wP	9.8	12.6
29	29.482	49.0	38.2	10.8	43.7	- 0.4	42.7	41.4	2.3	5.7	1.2	92	70.0	27.6	45.0	0.108	wP : mN, wP : wP	0.0	12.7
30	29.502	54.2	41.0	13.2	46.9	+ 2.4	43.6	39.4	7.5	19.8	1.0	75	104.6	30.9	45.0	0.112	wP : mP, v : v, mP	4.1	12.7
31	29.625	53.1	38.2	14.9	43.8	- 1.1	40.8	36.5	7.3	19.9	1.4	75	104.5	29.9	45.0	0.079	mP, wP : wP : sN, wP	3.7	12.8
Means	29.568	54.2	39.4	14.8	45.6	+ 3.7	42.7	38.7	6.9	15.7	2.1	76.9	99.3	30.5	44.2	2.064	...	3.7	11.8
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk on the civil day named, to dawn 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 Hygrometric Tables issued by the 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<sup>m</sup>.568, being 0<sup>m</sup>.185 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 68.1 on March 21; the lowest in the month was 29.9 on March 16; and the range was 38.2. The mean of all the highest daily readings in the month was 54.2, being 4.4 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 39.4, being 4.3 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 14.8, being 0.1 greater than the average for the 65 years, 1841-1905. The mean for the month was 45.6, being 3.7 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1927.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.					
	POLARIS.		8 URSÆ MINORIS.		OSLER'S.			Robinson's.							
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.								
					A.M.	P.M.		Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.					
								A.M.		P.M.					
Mar. 1	4.50	0.42	3.40	0.31	SSW : S : SW	SW : WSW	5.10	0.64	419	8, w	: v.-cl	: 8, cu, n	6, slt.-sh	: 7	: 8, d
2	8.80	0.82	8.60	0.81	WSW : SW	SW : SSW : WSW	6.40	0.51	484	2	: 6	: 5, cu, n	9, ci.-s, n, p.-so.-ha, w	: 9, slt.-r, w	: p.-cl, w, st.-w
3	0.80	0.07	0.30	0.02	WSW	W : WSW : SSW	8.51	0.20	599	1, st.-w	: 1, w	: 2, ci.-s, w, st.-w	9, s, n, st.-w, w	: 7	: 10, sh
4	4.70	0.44	4.50	0.42	SSW	SSW	4.10	0.65	429	10, slt.-sh	: 10	: 10, oc.-slt.-r, w	9, w	: 10	: 9
5	1.10	0.11	0.50	0.05	SSW	SSW : SW	6.00	0.74	477	v.-cl	: 10, w	: 10, n, m.-r, w	10, m.-r, w	: 10, shs	: 10, slt.-sh, sh
6	1.10	0.10	0.40	0.04	WSW : W	WSW : SW : SSW	2.00	0.19	391	10, sh	: 9, sh	: 8, n, s, cu.-s	9, slt.-sh	: 9	: 8
7	8.60	0.84	8.50	0.83	W : Calm : WSW	W : WNW : SW	5.70	0.06	254	10, r	: 10, r, slt.-r	: 10, m.-r	9, slt.-sh	: v.-cl, sh	: 1
8	9.10	0.89	9.00	0.88	SW : WSW	WSW : NW : W	4.70	0.38	443	1	: 0	: p.-cl, w	6, cu, cu.-n, sh, w	: 8, sh, hl	: 1
9	1.50	0.15	1.30	0.13	WSW : SW	SSW : SW : WSW	1.00	0.03	217	c	: 1	: 6, cu.-s, n	8	: 9 th.-cl, d	: 10, d, slt.-sh
10	2.20	0.22	0.00	0.00	WSW : SW	VAR : Calm	0.40	0.01	158	9, sh	: 9	: 8, cu, cu.-s	9, cu.-s, n, sh	: p.-cl, h	: 9
11	2.60	0.26	2.50	0.25	Calm : N	N : NNE	0.50	0.03	179	10	: 10, m, f, d	: 6, cu, m, h	9, cu.-s	: 9	: 9
12	3.60	0.36	3.00	0.30	N : NNE	NNE : ENE	2.70	0.09	253	8	: 10	: 8, cu, n	9	: 9, hy.-sh, hl	: p.-cl
13	0.00	0.00	0.00	0.00	NNE : NE	ENE : NE	5.00	0.56	454	10, r	: 8	: 10, w	8, cu, n, w	: 8, w	: 10
14	0.00	0.00	0.00	0.00	NNE	NNE : Calm	1.40	0.10	255	10	: 10, n, s		10, n, s	: 10	
15	10.00	1.00	10.00	1.00	Calm : SSE	SSE : Calm	0.60	0.03	143	10	: 10	: 9, cu.-s, cu	10, cu.-s, cu	: p.-cl	: 0, ho.-fr
16	10.00	1.00	10.00	1.00	Calm : ESE	ESE : ENE	2.90	0.25	250	1, ho.-fr	: 1, th.-cl, d	: th.-cl, ci.-s	3, th.-cl	: 5, th.-cl, h	: 1, d, slt.-h
17	3.00	0.30	2.50	0.25	ESE : SE	S : SSW	1.20	0.08	209	1, ho.-fr	: 1, m	: 2, th.-cl, ci.-s	p.-cl, th.-cl	: 8, th.-cl	: 10, slt.-shs
18	3.30	0.33	3.00	0.30	SSW	SSW	0.80	0.05	197	9, lu.-ha, slt.-sh	: 10, m.-r.-sh		10	: 9	: 6
19	2.90	0.30	2.70	0.28	SSW : SW	SW	1.40	0.10	276	10, slt.-sh	: 7	: 10, s, cu	9, th.-cl	: th.-cl	: 8, lu.-ha, d
20	9.50	0.95	9.50	0.95	SW : SSW	SSW : S : Calm	1.50	0.08	210	10, d	: p.-cl, d	: 3	p.-cl	: 5, d	
21	1.10	0.11	0.20	0.02	Calm : SSE	SSE	2.20	0.09	235	2	: 6, m	: 7, th.-cl	p.-cl, th.-cl, so.-ha	: 10	: 10
22	0.60	0.06	0.50	0.05	S : SSW	SW : S	3.10	0.42	396	10	: 10	: 8	9, slt.-shs, w	: 9, r, w	: 10, r
23	8.20	0.86	7.70	0.81	S	SSW : SW	5.00	0.83	514	10, r, w	: 9, r, l	: 10, n, slt.-r, w	10, slt.-r, w	: 9, h	: 1, h, d, w
24	0.40	0.04	0.00	0.00	SSW	SSW : S	3.50	0.49	417	2, sh	: 10, r	: 9, sh	10, n, oc.-slt.-r	: 10, m.-r	: 10, m.-r
25	1.60	0.17	1.20	0.13	SSE : SW	SW : SSW	6.60	0.55	431	10, m.-r	: 10	: 9, r, hy.-r, hl	7, cu.-n, cu, shs, t, l	: v.-cl, shs, hl	: 10, r, w
26	8.80	0.98	8.80	0.98	SW	SW	10.00	1.55	646	10, r, w	: 6, w	: 6, cu.-n, shs, w, st.-w	7, shs, t, hl, w, st.-w	: 5, w	: 0, w
27	8.80	0.98	8.60	0.96	SSW : SW	SW	2.80	0.22	304	1	: 6	: 7, cu	7, cu, s	: 3	: 2, d
28	7.90	0.88	6.60	0.73	SW : WSW	WSW	1.80	0.06	228	0, slt.-ho.-fr	: 0	: p.-cl, cu	6, cu, s.-cu	: p.-cl	: 1, cu.-s, d
29	2.60	0.29	2.50	0.28	SSW	S : Calm	0.60	0.03	169	2, th.-cl	: 10	: 10, r, slt.-r	10, n, s, r, slt.-r	: 10, slt.-r	: 9, m.-r
30	7.70	0.85	7.40	0.83	S : SW : WSW	WNW : W	7.00	0.58	497	3	: 10, r	: 7, cu, n, s, w, sh	7, shs	: v.-cl, sh, hl	: 3, w
31	1.30	0.14	1.00	0.11	WSW : SW	SSW : SSE	3.30	0.19	326	1	: 1	: 5, th.-cl, so.-ha	10, n, slt.-r	: 10, fq.-r	: 9, sh
Means	4.40	0.45	4.00	0.41	...	...	...	0.35	337						
Number of Columns for Reference.	20	21	22	23	24	25	26	27	28	29					30

The mean *Temperature of Evaporation* for the month was 42°.7, being 3°.3 higher than  
 The mean *Temperature of the Dew Point* for the month was 38°.7, being 3°.1 higher than  
 The mean *Degree of Humidity* for the month was 76.9, being 1.2 less than  
 The mean *Elastic Force of Vapour* for the month was 0m.236, being 0m.027 greater than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.5.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.312. The maximum daily amount of *Sunshine* was 9.8 hours on March 17 and 28.  
 The highest reading of the *Solar Radiation Thermometer* was 128°.7 on March 21; and the lowest reading of the *Terrestrial Radiation Thermometer* was 18°.3 on March 16.  
 The *Proportions of Wind* referred to the cardinal points were N. 2, E. 2, S. 14, W. 10. Three days were calm.  
 The *Greatest Pressure of the Wind* in the month was 10.0 lbs. on the square foot on March 26. The mean daily *Horizontal Movement of the Air* for the month was 337 miles; the greatest daily value was 646 miles on March 26; and the least daily value was 143 miles on March 15.  
*Rain* (0m.005 or over) fell on 18 days in the month, amounting to 2m.064, as measured by gauge No. 6 partly sunk below the ground; being 0m.544 greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1927.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE. Of the Air.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE. Of Radiation.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Of Evaporation. Mean of 24 Hourly Values.	Of the Dew Point. Deducted Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.	Of the Earth 4 ft. below the Surface of the Soil.				
Apr. 1	29.590	50.1	37.5	12.6	43.0	-2.3	40.9	37.7	5.3	13.7	1.9	83	98.2	28.3	45.0	0.115	wP, vN : mP, v : mP	1.5	12.8
2	29.858	54.0	29.4	24.6	41.0	-4.7	38.5	34.7	6.3	20.2	0.4	78	104.0	20.4	45.1	0.100	mP, wP : wP : vvN	4.2	12.9
3	29.733	54.0	36.3	17.7	45.4	-0.6	41.5	35.8	9.6	19.8	1.5	69	108.6	23.2	45.0	0.002	wP	6.9	13.0
4	29.724	53.0	33.9	19.1	44.7	-1.5	43.0	40.8	3.9	8.1	1.8	86	86.2	24.9	45.1	0.017	wP	0.0	13.0
5	29.547	61.0	45.5	15.5	50.9	+4.6	47.5	43.7	7.2	18.7	1.5	76	124.4	37.1	45.1	0.031	wP : wP : wP, mP	1.9	13.1
6	29.472	59.1	43.7	15.4	50.3	+4.0	46.4	41.8	8.5	19.9	0.6	73	117.0	34.5	45.1	0.458	v, wP : mP : mP, wP	4.0	13.2
7	29.327	45.9	38.3	7.6	42.1	-4.2	40.8	39.0	3.1	7.9	1.2	89	63.0	31.3	45.1	0.579	wP, vN : vv : v, wP	0.0	13.2
8	29.361	57.9	37.2	20.7	45.3	-0.8	41.5	35.9	9.4	21.2	1.1	70	127.1	29.6	45.3	0.020	wP : wP : wP, v	9.4	13.3
9	29.287	50.0	40.0	10.0	43.0	-3.0	41.9	40.4	2.6	7.5	0.8	91	100.6	37.1	45.4	0.398	vvN : vv : mP	1.2	13.4
10	29.485	51.1	40.5	10.6	44.2	-1.7	42.1	39.3	4.9	11.3	2.1	83	84.3	34.8	45.4	0.001	wP	0.4	13.4
11	29.824	50.7	41.5	9.2	45.0	-0.8	42.2	38.2	6.8	18.3	2.1	77	96.0	35.3	45.5	0.006	wP, mP : mP : mP, wP	2.2	13.5
12	30.136	54.4	34.7	19.7	45.7	-0.2	41.1	34.4	11.3	19.1	2.2	65	107.6	24.2	45.5	0.000	mP	3.2	13.5
13	30.088	62.4	44.4	18.0	51.8	+5.7	47.1	41.8	10.0	17.5	4.1	68	112.0	37.4	45.6	0.000	wP, mP : mP, wP : mP, wP	2.9	13.6
14	29.670	64.6	48.6	16.0	54.0	+7.6	50.9	47.8	6.2	11.6	1.4	79	119.8	44.8	45.7	0.042	wP : wP, mP	0.8	13.7
15	29.704	54.3	44.2	10.1	48.9	+2.1	44.3	38.3	10.6	15.6	2.2	67	83.6	33.1	45.8	0.007	... : wP, mP	1.3	13.8
16	30.037	57.6	41.0	16.6	48.1	+0.9	43.5	37.2	10.9	21.0	3.4	66	110.0	29.3	46.0	0.000	wP, mP : mP, wP	1.9	13.8
17	30.102	62.7	35.2	27.5	49.2	+1.6	44.1	37.3	11.9	21.3	1.1	64	123.4	22.2	46.1	0.000	wP : wP : ...	10.8	13.9
18	30.145	65.8	40.9	24.9	53.3	+5.3	49.0	44.3	9.0	14.8	2.6	71	105.3	28.5	46.2	0.000	... : mP, wP	3.2	13.9
19	30.112	65.4	40.7	24.7	52.2	+3.9	48.4	44.2	8.0	17.2	1.0	74	130.1	29.0	46.3	0.000	wP : mP	10.7	14.0
20	30.080	67.0	39.1	27.9	52.9	+4.4	47.1	40.1	12.8	23.5	1.8	62	135.7	26.0	46.5	0.000	wP : mP, wP : mP, wP	9.6	14.0
21	29.980	72.4	48.2	24.2	59.3	+10.6	52.0	44.4	14.9	24.6	6.4	58	132.2	38.9	46.7	0.000	wP	5.5	14.1
22	29.823	63.0	48.7	14.3	53.0	+4.3	48.7	44.0	9.0	18.1	4.2	71	133.2	41.3	46.8	0.000	wP	5.8	14.2
23	29.671	58.1	44.5	13.6	50.5	+1.9	44.4	36.1	14.4	22.3	4.5	58	106.2	36.0	47.0	0.000	wP, mP : mP : mP	6.7	14.2
24	29.548	52.1	41.8	10.3	46.9	-1.7	43.0	37.8	9.1	13.3	5.1	70	83.7	32.9	47.0	0.050	wP : v, wP	0.1	14.3
25	29.315	55.1	43.9	11.2	49.7	+1.1	45.7	40.9	8.8	14.9	2.8	72	98.1	34.9	47.1	0.000	wP : wP : ...	0.7	14.4
26	29.647	54.5	37.0	17.5	44.5	-4.1	38.1	27.1	17.4	27.7	7.3	49	121.5	19.1	47.1	0.000	... : mP : mP	9.2	14.4
27	29.879	57.8	28.1	29.7	43.8	-4.9	37.8	27.7	16.1	27.9	1.3	52	130.3	12.0	47.1	0.000	wP, mP : mP : mP, wP	6.4	14.5
28	29.915	60.6	33.2	27.4	46.3	-2.5	40.5	31.6	14.7	25.2	4.6	56	141.5	18.9	47.1	0.004	wP, mP : mP, wP : wP	7.5	14.6
29	29.826	62.4	40.2	22.2	49.7	+0.7	43.7	35.4	14.3	28.8	1.9	59	129.0	29.8	47.1	0.005	wP : mP : mP	6.6	14.6
30	29.954	54.8	33.1	21.7	44.0	-5.1	36.4	22.2	21.8	37.7	6.8	40	129.3	18.2	47.1	0.000	mP : wP	13.0	14.7
Means	29.761	57.7	39.7	18.0	48.0	+0.7	43.7	38.0	10.0	19.0	2.7	69.2	111.4	29.8	46.0	1.826	...	4.6	13.8
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometric Tables issued by the 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<sup>in</sup>.761, being 0<sup>in</sup>.006 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 72°4 on April 21; the lowest in the month was 28°1 on April 27; and the range was 44°3.  
 The mean of all the highest daily readings in the month was 57°7, 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 39°7, being 0°7 higher than the average for the 65 years, 1841-1905.  
 The mean of the daily ranges was 18°0, being 0°2 less than the average for the 65 years, 1841-1905.  
 The mean for the month was 48°0, being 0°7 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1927.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.				
	POLARIS.		8URSÆ MINORIS.		OSLER'S.				Robinson's.		A.M.		P.M.		
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Greatest.	Mean of 24 Hourly Measures.	Horizontal movement of the Air.	A.M.		P.M.	
					A.M.	P.M.									
Apr. 1	8·70·97	8·60·96	NE : N : NNW	NNW	6·40·56	390	IO, sh	: IO, r, w	: IO, r, w	9, shs	: 8, slt.-sh	: 2, ho.-fr			
2	0·00·00	0·00·00	NW : SW	SSW : SSE	4·20·08	199	0, ho.-fr	: 0, m	: 5, th.-cl, so.-ha	10, so.-ha, slt.-r	: IO, r	: IO, r			
3	6·90·81	6·00·71	S : W : NW	NW : Calm	2·00·13	257	IO, sh	: 7	: 7, cu, h, p.-so.-ha	8, h	: 3, h	: 0, h, m			
4	2·20·26	1·70·20	SSE : S	SSW	2·60·12	288	7	: 9	: IO, slt.-r	10, n, oc.-slt.-m.-r	: IO, fq.-m.-r	: IO, m.-r			
5	0·00·00	0·00·00	SW	SW : SSW	3·60·35	414	6	: p.-cl	: 9, cu, n	9, cu.-s, n, shs	: 8	: IO, slt.-r			
6	4·90·57	2·60·31	SW : WSW : WNW	W : WSW : SW	2·90·24	380	IO, r, hy.-r	: IO	: 9, n, cu.-n, shs	9, cu.-n, ci.-s, p.-so.-has, w	: 7, th.-cl, p.-lu.-ha				
7	7·20·84	7·00·82	Calm : NNW	NNW : NW : WSW	3·30·06	249	8	: IO, r	: IO, n, r	IO, r	: 9, sh	: 3, sh			
8	0·50·06	0·50·06	SW	SSW : Calm	2·20·14	302	2	: I	: p.-cl, cu, h, p.-so.-ha	6, cu	: p.-cl, lu.-ha	: IO, d, sh, r			
9	0·00·00	0·00·00	Calm	Calm	1·10·02	108	IO, r	: 9, sh, fq.-r, hl		10, r, t, hl.-sh	: IO, sh	: 10, m, slt.-sh			
10	2·60·32	2·30·29	WNW : NNW	NNW	1·00·05	198	IO	: 10, n, slt.-shs		9, slt.-shs	: 9	: 8			
11	1·90·24	1·80·22	NNW	NW : W : WNW	2·40·24	347	IO, slt.-sh	: IO	: 9, th.-cl, so.-ha	10, th.-cl, slt.-r	: IO, slt.-r	: IO, m.-r			
12	1·00·12	1·00·12	NNW : WSW	NW : W : WSW	3·10·17	296	7	: 5	: 9, cu	9, cu	: 8	: 9			
13	0·30·04	0·10·01	WSW : NW	SW	3·00·17	347	IO	: 9	: 8, s, h	9, s, ci.-s, th.-cl	: 7	: IO			
14	3·30·41	2·50·32	SW	SW : WSW	4·00·65	522	IO, w	: 10, r, m.-r, w	: IO, m.-r	IO	: IO	: IO, slt.-r, r			
15	7·90·99	7·90·99	W : WNW : NNW	NNW : NW	1·80·33	362	9, sh	: 8	: 9, slt.-r	IO	: 9	: I			
16	7·20·95	7·20·95	NW	NNW	0·60·09	219	I	: 8	: 8, cu.-s, h	9, cu.-n, h	: 9, h	: 2, h			
17	7·51·00	7·51·00	Calm	W : WSW	0·80·05	173	I, h	: I, h, m	: I, cu.-s, h	I, h	: I, h				
18	6·50·87	3·60·48	SW : Calm	Calm : SSW	0·20·00	136	I	: 3, m	: 9, slt.-m, h	9, slt.-m, h	: 9	: 8			
19	7·51·00	7·51·00	Calm : SW	W : WSW	1·30·14	281	8	: 2	: 3	2, cu.-s, h	: 0				
20	4·20·55	3·40·46	WSW : SW	WSW	3·90·34	393	I	: I, ci.-cu, ci, th.-cl		8, th.-cl, ci.-cu	: 9				
21	4·80·64	3·90·51	WSW	WSW : SW	4·00·33	442	8	: 7	: 8, th.-cl, w	9, th.-cl, ci.-cu, s, w	: I				
22	3·80·50	3·30·44	SW : WSW	WSW : SW	4·50·65	556	9, w	: IO, w	: 8, cu, w	6, cu, s, w	: p.-cl	: 3, w			
23	3·00·43	1·70·25	SW : W : WNW	NW : WNW	6·70·68	556	9, slt.-sh, w	: 8, w	: 6, cu, n, w	9, w	: 7, th.-cl	: 8, th.-cl, h			
24	5·60·79	5·10·72	WSW	W : WSW	4·80·48	497	6	: IO, w	: 10, slt.-r, r	10, shs, r, w	: 9, sh, w	: 8, w			
25	4·60·66	4·50·64	WSW	W : WSW	11·31·21	637	2	: 8, w	: 9, n, w, oc.-m.-r	10, w, st.-w	: 10, g, st.-w, slt.-r	: 2, slt.-r, w			
26	7·01·00	7·01·00	WNW : NW	NW : W	4·00·40	416	2, slt.-sh, w	: I, w	: 5, cu.-s, cu.-n, w	8, cu.-s, cu.-n, w	: 7	: 0, ho.-fr			
27	7·01·00	6·90·99	SSW : SW : W	W : WSW : SW	1·70·10	267	I, ho.-fr	: 3	: 3, cu, h	6, ci.-s, cu.-n, p.-so.-ha	: p.-cl	: I			
28	0·00·00	0·00·00	SW : Calm	SW : SSW	1·50·04	174	0	: 0	: 8, cu, h	6, cu	: 8	: 10, slt.-sh, sh			
29	4·70·67	3·10·44	Calm	NW : NNW	1·90·13	206	10, sh, slt.-sh	: IO	: p.-cl, h	p.-cl, h	: v.-cl	: 9			
30	6·51·00	6·51·00	NNW : N	NE : ESE	1·80·18	253	I	: I, h	: I, ci.-s	0, h	: 0, h	: 0, ho.-fr			
Means	4·20·56	3·80·50	...	...	...	0·27	329								
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29	30				

The mean *Temperature of Evaporation* for the month was 43°·7, being 0°·2 lower than the average for the 65 years, 1841-1905.  
 The mean *Temperature of the Dew Point* for the Month was 38°·0, being 1°·6 lower than  
 The mean *Degree of Humidity* for the month was 69·2, being 5·3 lower than  
 The mean *Elastic Force of Vapour* for the month was 0·230, being 0·014 less than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·3.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·333. The maximum daily amount of *Sunshine* was 13·0 hours on April 30.  
 The highest reading of the *Solar Radiation Thermometer* was 141°·5 on April 28; and the lowest reading of the *Terrestrial Radiation Thermometer* was 12°·0 on April 27.  
 The *Proportions of Wind* referred to the cardinal points were N. 6, E. 0, S. 7, W. 13. Four days were calm.  
 The *Greatest Pressure of the Wind* in the month was 11·3 lbs. on the square foot on April 25. The mean daily *Horizontal Movement of the Air* for the month was 329 miles; the greatest daily value was 637 miles on April 25; and the least daily value was 108 miles on April 9.  
*Rain* (0·005 or over) fell on 13 days in the month, amounting to 1·826, as measured by gauge No. 6 partly sunk below the ground; being 0·260 greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1927.	BARO-METER. Mean of 21 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.					
May 1	30.003	56.1	29.9	26.2	42.6	-6.7	37.4	28.8	13.8	25.3	1.9	57	130.2	13.7	47.2	0.000	wP : wP : ...	10.7	14.7
2	29.768	67.9	38.3	29.6	52.4	+2.9	47.2	41.1	11.3	22.2	1.9	65	132.5	25.7	47.2	0.000	... : wP : wP	7.5	14.8
3	29.709	70.0	48.1	21.9	57.1	+7.3	51.9	46.6	10.5	21.0	2.0	69	142.1	32.2	47.2	0.000	wP, mP : wP : mP, wP	10.6	14.9
4	29.609	75.1	47.3	27.8	61.2	+11.2	55.2	49.8	11.4	27.0	1.2	66	133.1	32.4	47.3	0.020	wP : wP, v : mP, wP	5.9	14.9
5	29.691	74.2	51.0	23.2	59.7	+9.4	55.5	51.9	7.8	14.9	2.4	75	137.2	38.4	47.7	0.000	v, wP : wP, mP : mP, wP	3.6	15.0
6	29.938	75.1	49.2	25.9	58.9	+8.4	55.4	52.5	6.4	18.3	1.0	79	141.1	44.3	47.8	0.301	wP, v : v, wP : wP	6.8	15.0
7	30.042	73.8	49.1	24.7	61.2	+10.5	54.1	47.3	13.9	27.9	1.0	60	143.2	40.5	48.1	0.000	wP	13.3	15.1
8	29.944	70.5	50.2	20.3	59.5	+8.5	54.0	49.0	10.5	19.9	1.8	68	138.3	40.5	48.4	0.000	wP	13.2	15.2
9	29.916	72.1	46.0	26.1	57.7	+6.5	51.6	45.4	12.3	28.4	2.3	63	142.8	35.0	48.6	0.000	wP	12.8	15.2
10	30.092	57.4	42.4	15.0	49.2	-2.3	44.5	38.4	10.8	16.2	6.0	66	115.0	36.0	48.9	0.000	wP, mP : mP : mP, wP	1.1	15.2
11	30.221	58.3	37.0	21.3	46.5	-5.3	40.5	31.3	15.2	26.2	3.5	55	142.0	21.4	49.0	0.000	wP, mP : mP, wP : wP	9.6	15.3
12	30.021	60.6	36.2	24.4	47.8	-4.3	42.8	35.7	12.1	20.9	2.9	63	122.6	21.0	49.1	0.000	wP, mP : mP, wP	6.6	15.3
13	30.046	54.3	41.1	13.2	46.4	-6.0	40.7	32.0	14.4	23.6	5.5	57	112.9	28.3	49.1	0.001	wP, mP : mP : mP, wP	4.4	15.4
14	29.883	65.6	43.1	22.5	53.2	+0.6	47.8	41.5	11.7	19.6	4.6	65	130.8	31.2	49.1	0.002	wP	3.4	15.5
15	29.713	67.0	50.0	17.0	55.7	+2.9	52.8	50.1	5.6	11.1	1.6	81	116.6	44.2	49.1	0.045	... : wP	0.7	15.5
16	29.669	65.3	51.1	14.2	56.3	+3.3	52.2	48.2	8.1	16.4	2.4	75	121.2	41.5	49.2	0.002	wP	0.7	15.5
17	29.812	65.3	45.2	20.1	55.7	+2.6	51.1	46.4	9.3	24.0	1.4	71	129.2	36.9	49.3	0.258	wP, mP : mP : mP, wP	6.6	15.6
18	30.049	67.4	40.3	27.1	52.9	-0.4	47.1	40.1	12.8	23.1	0.8	62	145.9	27.3	49.7	0.000	wP	10.8	15.7
19	30.029	67.9	38.1	29.8	52.7	-0.8	47.4	41.2	11.5	23.4	1.1	65	135.3	25.1	49.8	0.000	wP, mP : sP, mP : mP, wP	5.8	15.7
20	29.945	71.1	40.3	30.8	55.6	+1.8	49.3	42.3	13.3	24.2	1.0	61	149.4	26.7	49.8	0.000	wP	9.4	15.7
21	29.643	62.2	47.8	14.4	53.7	-0.5	48.7	43.2	10.5	20.0	5.1	68	129.5	38.5	49.8	0.071	wP : v, mP : mP	4.6	15.8
22	29.852	58.5	39.2	19.3	49.0	-5.6	45.3	40.8	8.2	14.8	0.5	73	128.6	29.0	49.9	0.098	wP : v, mP : mP	3.5	15.8
23	30.121	67.7	35.2	32.5	53.3	-1.6	47.1	42.1	11.2	28.1	0.0	66	136.6	26.3	50.0	0.000	wP, mP : mP : mP	10.6	15.9
24	30.093	76.5	50.4	26.1	62.6	+7.3	56.1	50.3	12.3	21.7	3.7	65	142.1	43.9	50.1	0.000	wP, mP : mP : mP, wP	8.2	15.9
25	30.004	67.1	49.7	17.4	56.6	+1.1	52.5	48.5	8.1	12.1	0.6	74	134.8	36.7	50.1	0.000	wP, mP : mP, wP : wP	0.4	16.0
26	29.974	66.1	47.7	18.4	55.9	+0.1	49.4	42.2	13.7	27.0	1.8	60	144.1	41.4	50.2	0.000	wP : mP : wP	9.8	16.0
27	29.894	48.7	39.9	8.8	46.2	-9.8	45.0	43.5	2.7	6.5	0.0	91	60.0	36.9	50.1	0.402	wP : v, wP : wP	0.0	16.0
28	29.783	57.8	33.0	24.8	46.0	-10.2	42.1	36.6	9.4	21.5	0.0	69	127.3	25.0	50.4	0.000	wP, mP : mP : mP, wP	5.1	16.1
29	29.716	64.6	35.3	29.3	50.5	-5.9	44.8	37.1	13.4	24.5	0.0	61	141.1	24.1	50.8	0.000	wP	8.9	16.1
30	29.626	69.9	44.1	25.8	57.3	+10.6	51.1	44.6	12.7	22.1	3.1	63	147.1	29.8	50.6	0.000	wP	7.7	16.1
31	29.497	67.1	51.1	16.0	58.5	+1.4	55.2	52.4	6.1	11.0	1.8	80	137.3	42.1	50.5	0.008	wP, mP : mP, wP : wP	1.4	16.2
Means	29.881	65.8	43.5	22.4	53.9	+0.9	48.9	43.3	10.7	20.7	2.0	67.5	131.9	32.8	49.2	1.208	...	6.6	15.5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometric Tables issued by the 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<sup>in</sup>.881, being 0<sup>in</sup>.080 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 76°5 on May 24; the lowest in the month was 29°9 on May 1; and the range was 46°6. The mean of all the highest daily readings in the month was 65°8, being 1°9 higher than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 43°5, being 0°2 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 22°4, being 2°2 greater than the average for the 65 years, 1841-1905. The mean for the month was 53°9, being 0°9 higher than the average for the 65 years, 1841-1905.

MONTH and DAY, 1927.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.				CLOUDS AND WEATHER.						
	POLARIS.		8 URSÆ MINORIS.		OSLER'S.				ROBINSON'S.						
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Greatest.	Mean of 24 Hourly Measures.	Horizontal Movement of the Air.	A.M.		P.M.	
					A.M.	P.M.	A.M.	P.M.							
May 1	6.40.99	6.40.99	6.40.99	6.40.99	Calm : E	E : ENE	2.10.20	235	1, ho.-fr	: 2, th.-cl	: 9, th.-cl, so.-ha	9, th.-cl, so.-ha	: 6	: I, S	
2	4.30.67	4.00.62	4.00.62	4.00.62	ENE : E : ESE	S : SSW	2.10.13	246	I	: p.-cl, th.-cl, so.-ha		8, cu, cu.-s	: I		
3	6.51.00	6.51.00	6.51.00	6.51.00	SSW	SSW : Calm	1.20.13	242	v.-cl	: v.-cl	: 7, cu.-n	p.-cl, cu, ci.-s	: 0	: I, d	
4	3.00.46	2.40.37	2.40.37	2.40.37	ENE : ESE	ESE : NNE	1.60.05	176	I, d	: 2	: 6, th.-cl, cu.-n	8, th.-cl, cu.-n, p.-so.-ha, sh	: 10	: 10, l, t	
5	1.40.21	0.00.00	0.00.00	0.00.00	Calm : N	N : NNE	1.00.07	222	9, slt.-sh	: 9, sh	: p.-cl, sh	7, p.-so.-ha	: 8	: 6, l	
6	6.51.00	6.51.00	6.51.00	6.51.00	NNE : NE	NE : E : ENE	1.30.10	242	10	: 10, t.-sm, hy.-r	: 6, r	I, ci	: 2	: 6, th.-cl, d	
7	5.50.92	5.30.89	5.30.89	5.30.89	ENE : NE	ENE : NE	3.90.40	345	I	: 0		0, w	: 0		
8	6.01.00	6.01.00	6.01.00	6.01.00	NNE : NE : ENE	E : ENE	2.00.24	286	0, m	: 0	: 1, ci.-s, slt.-h	0	: 0		
9	4.20.70	3.90.65	3.90.65	3.90.65	NE : ENE	E : ENE	1.10.09	218	0	: 0, slt.-h		0	: I		
10	1.70.28	0.90.15	0.90.15	0.90.15	NNE	NE	3.20.30	383	8	: 8	: 9, cu.-s	10, n	: 10	: 9	
11	6.01.00	6.01.00	6.01.00	6.01.00	NE	NE : E : Calm	1.50.10	253	9	: 6, s.-cu		p.-cl, s.-cu	: I, th.-cl, slt.-ho.-fr		
12	0.00.00	0.00.00	0.00.00	0.00.00	WSW : NW	NNW : NNE	1.70.12	277	0, slt.-ho.-fr	: 0, m	: 7, cu, h	8, cu, h	: 10	: 10, m.-r.-sh	
13	0.00.00	0.00.00	0.00.00	0.00.00	NNE : N	N : ENE : SE	1.20.06	196	10, sh	: 8	: 9, s.-cu, ci.-s	9	: 7	: 9, lu.-ha	
14	1.60.28	0.40.08	0.40.08	0.40.08	SSW : SW	SW : SSW	1.90.19	302	10	: 9	: 8, cu.-n, s.-cu	9	: 9, p.-so.-ha	: 10, sh	
15	1.80.33	1.50.28	1.50.28	1.50.28	SW	SW	1.90.21	311	9, slt.-sh	: 10, r, fq.-m.-r	: 10, n, fq.-slt.-r	9, cu, cu.-n	: 10, sh	: 8, oc.-m.-r	
16	2.00.36	1.70.31	1.70.31	1.70.31	SSW	SW : SSW	5.10.35	359	9, m	: 10	: 10, s, n, fq.-slt.-r	10, oc.-m.-r, w	: 7	: 7	
17	5.51.00	5.51.00	5.51.00	5.51.00	SW : NNW	N : E	0.90.07	192	10, r	: 10, m.-r.-sh, sh	: 6, cu	7, cu	: 7	: I, d	
18	5.51.00	5.51.00	5.51.00	5.51.00	Calm	E : Calm	1.30.05	153	I	: I	: 5, cu.-s	I, cu, h	: I, slt.-h		
19	3.30.61	3.00.54	3.00.54	3.00.54	Calm : N	N : E	1.00.05	156	2	: 8	: 6, h	p.-cl, cu.-s	: p.-cl	: 8	
20	1.10.20	0.80.15	0.80.15	0.80.15	Calm : SW	SSW : SW	2.20.12	254	7	: 2	: p.-cl, ci.-s	p.-cl, ci.-s, cu, p.-so.-ha	: 8	: 10	
21	2.10.41	1.90.38	1.90.38	1.90.38	SW : W	WSW : W	7.30.47	449	9	: 10	: v.-cl, shs	v.-cl, hy.-shs	: 3		
22	4.50.90	4.10.82	4.10.82	4.10.82	W : NW	NNW : Calm	5.30.48	381	9, m	: 9	: 9, fq.-shs, hl, t	9, sh, r	: 6	: I	
23	2.40.47	2.00.40	2.00.40	2.00.40	Calm : NW : WNW	W : WSW	1.80.15	279	3, m	: 0	: I	2, so.-ha	: 9	: 5, th.-cl	
24	3.70.73	3.60.71	3.60.71	3.60.71	WSW	NW : NNW : NNE	1.30.10	254	9	: 8	: p.-cl, th.-cl	p.-cl, cu, ci.-s	: 5	: I	
25	0.00.00	0.00.00	0.00.00	0.00.00	Calm : ENE	E	1.40.08	183	2, m	: p.-cl	: 10, s, n, cu	10, cu.-s, th.-cl	: 10	: 10	
26	0.70.14	0.50.10	0.50.10	0.50.10	E : NE	Calm : E : SE	0.80.08	181	10	: 8	: 5, cu	I, cu	: 9	: 9	
27	4.00.80	3.20.63	3.20.63	3.20.63	Calm : SE	ENE : Calm	0.90.03	137	9, m.-r.-sh	: 10, r	: 10, n, r	10, r, m.-r, r, m	: 10, r, m.-r	: 9, m	
28	5.01.00	5.01.00	5.01.00	5.01.00	Calm : NNW	NNW : ENE : SSE	0.60.03	147	I, m, f	: p.-cl	: 7, cu, cu.-n	8	: 2	: 0, m	
29	0.50.10	0.20.04	0.20.04	0.20.04	Calm : SE	SE : Calm	0.60.02	119	I, m, d	: 0	: p.-cl, cu.-s	8, cu.-s	: 7	: 10	
30	1.20.24	1.10.23	1.10.23	1.10.23	Calm : SE	E : NE	1.90.12	187	9, m	: p.-cl	: 6	2	: 10	: 9	
31	0.00.00	0.00.00	0.00.00	0.00.00	NNE : ENE	E	1.20.06	196	8	: 10	: 10, cu.-s, n, r	10, cu.-s, s, h	: 7	: 10	
Means	3.10.54	2.80.49	...	...	...	...	...	0.15	244	...	...	...	...	...	
Number of Columns for Reference.	20	21	22	23	24	25	26	27	28	29	30	...	...	...	

The mean *Temperature of Evaporation* for the month was 48°·9, being 0°·1 lower than the average for the 65 years, 1841-1905.

The mean *Temperature of the Dew Point* for the month was 43°·3, being 1°·5 lower than the average for the 65 years, 1841-1905.

The mean *Degree of Humidity* for the month was 67·5, being 6·4 less than the average for the 65 years, 1841-1905.

The mean *Elastic Force of Vapour* for the month was 0·1281, being 0·017 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 6·1.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·423. The maximum daily amount of *Sunshine* was 13·3 hours on May 7.

The highest reading of the *Solar Radiation Thermometer* was 149°·4 on May 20; and the lowest reading of the *Terrestrial Radiation Thermometer* was 13°·7 on May 1.

The *Proportions of Wind* referred to the cardinal points were N. 8, E. 8, S. 5, W. 5. Five days were calm.

The *Greatest Pressure of the Wind* in the month was 7·3 lbs. on the square foot on May 21. The mean daily *Horizontal Movement of the Air* for the month was 244 miles; the greatest daily value was 449 miles on May 21; and the least daily value was 119 miles on May 29.

*Rain* (0·1005 or over) fell on 8 days in the month, amounting to 1·208, as measured by gauge No. 6 partly sunk below the ground; being 0·1707 less than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1927.	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. 8, whose receiving surface is 8 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.				Of Evaporation.	Of the Dew Point.	Mean.	Greatest.	Least.	Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.						
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.				Deducted Mean Daily Value.			Highest in Sun's Rays.	Lowest on the Grass.				
June 1	29.507	65.0	52.0	13.0	56.4	-1.0	55.0	53.9	2.5	7.8	0.0	91	94.2	40.6	50.6	0.000	wP	0.0	16.2
2	29.694	68.6	49.4	19.2	58.2	+0.4	55.5	53.2	5.0	13.8	0.0	84	125.8	35.7	50.9	0.000	wP, mP : mP, wP : wP	1.4	16.2
3	29.868	69.5	48.1	21.4	58.1	-0.0	50.5	42.1	16.0	24.2	0.8	55	137.3	39.0	50.9	0.001	wP, mP : mP : v, mP	3.6	16.3
4	29.888	67.3	42.2	25.1	53.3	-5.0	47.4	40.4	12.9	26.0	1.0	61	129.2	29.2	51.0	0.007	wP : wP, mP : mP	6.6	16.3
5	29.736	69.0	43.1	25.9	54.6	-3.8	50.0	45.1	9.5	22.2	1.0	70	137.6	30.9	51.0	0.028	mP : wP	5.8	16.3
6	29.728	60.0	48.2	11.8	52.7	-5.6	49.5	46.1	6.6	13.4	1.6	78	103.3	44.6	51.1	0.132	wP : v, wP	2.1	16.3
7	29.731	63.2	46.2	17.0	54.4	-3.8	50.7	46.9	7.5	14.5	0.8	76	108.1	36.9	51.1	0.011	wP : wP : wP, wN	1.2	16.4
8	29.775	67.2	48.1	19.1	55.0	-3.1	50.5	45.8	9.2	19.0	1.2	71	151.9	37.4	51.2	0.020	wP, mP : mP, wP : wP, mP	2.8	16.4
9	29.903	68.3	44.1	24.2	55.7	-2.3	49.3	42.1	13.6	23.9	0.4	61	146.6	30.1	51.3	0.000	wP, mP : mP : mP	9.4	16.4
10	29.807	67.1	49.1	18.0	56.5	-1.6	50.1	43.2	13.3	22.4	7.3	61	138.3	39.0	51.4	0.000	wP, mP : mP, wP : wP	1.9	16.4
11	29.771	65.5	50.1	15.4	55.8	-2.4	49.9	43.5	12.3	24.8	4.9	63	139.4	45.3	51.5	0.000	wP	1.9	16.5
12	29.806	68.2	47.1	21.1	55.7	-2.7	51.1	46.4	9.3	19.5	2.0	71	144.0	35.0	51.7	0.000	wP	5.2	16.5
13	29.855	72.2	41.8	30.4	56.9	-1.6	50.3	43.2	13.7	32.8	0.0	60	144.0	25.3	51.7	0.000	wP : mP : wP	10.5	16.5
14	29.851	68.9	45.7	23.2	56.7	-2.0	52.4	48.3	8.4	16.5	2.5	73	137.9	31.1	51.8	0.000	wP : mP, wP : wP	1.3	16.5
15	30.012	64.0	50.2	13.8	55.3	-3.5	50.4	45.3	10.0	19.6	4.3	69	142.7	46.1	51.9	0.000	wP	7.4	16.5
16	29.841	84.9	53.5	31.4	68.3	+9.4	61.0	55.6	12.7	25.5	2.3	64	157.2	52.4	52.0	0.000	wP	9.3	16.5
17	29.580	67.8	52.0	15.8	60.8	+1.8	57.5	54.8	6.0	13.3	1.2	81	123.3	43.7	52.0	0.207	wP : wP : v, wP	0.8	16.5
18	29.618	69.1	49.1	20.0	57.3	-1.9	53.5	49.9	7.4	15.4	0.7	77	140.3	38.6	52.1	0.271	wP	4.9	16.6
19	29.511	67.9	52.8	15.1	58.6	-0.9	53.3	48.2	10.4	18.9	1.3	69	134.1	45.6	52.4	0.063	wP : wP, v : wP	8.1	16.6
20	29.913	70.3	50.1	20.2	60.2	+0.3	54.1	48.5	11.7	23.1	1.8	65	141.6	42.3	52.6	0.000	wP : mP : wP	11.8	16.6
21	29.918	67.0	51.6	15.4	57.2	-3.1	53.4	49.8	7.4	15.0	2.8	77	106.0	44.4	52.6	0.040	wP	1.3	16.6
22	30.018	69.8	47.4	22.4	58.1	-2.5	51.3	44.1	14.0	25.3	1.3	60	146.6	38.7	52.9	0.000	wP, mP : mP, wP : wP	14.0	16.6
23	29.852	68.0	51.6	16.4	57.0	-3.9	51.4	45.6	11.4	23.0	1.3	66	142.3	40.1	52.8	0.104	wP, v : wP : wP	7.7	16.6
24	29.620	68.4	51.1	17.3	56.5	-4.7	52.8	49.3	7.2	20.4	1.8	77	139.1	43.4	52.9	0.339	wP : v, wP : wP, wN	4.5	16.6
25	29.675	65.1	46.1	19.0	55.2	-6.2	51.1	47.0	8.2	15.6	0.7	74	131.0	36.9	53.0	0.073	wP	5.8	16.6
26	29.355	60.2	45.0	15.2	51.6	-9.9	48.5	45.1	6.5	15.1	1.0	78	126.1	36.9	52.9	0.068	wP : v, wP	2.1	16.6
27	29.582	66.2	43.1	23.1	51.7	-9.9	49.5	47.1	4.6	15.4	0.4	85	136.0	34.2	53.0	0.123	wP : v, wP	1.7	16.5
28	29.699	67.3	49.7	17.6	54.4	-7.2	52.0	49.8	4.6	15.6	1.4	84	145.0	46.1	53.0	0.150	wP : wP, v : wP	1.0	16.5
29	29.580	66.6	50.1	16.5	56.3	-5.3	54.1	52.3	4.0	10.4	0.4	86	116.9	46.0	53.0	0.116	wP	1.3	16.5
30	29.419	73.4	51.2	22.2	60.9	-0.6	57.3	54.4	6.5	17.8	0.2	79	144.1	42.9	53.0	0.270	wP, v : wP : wP, mP	5.9	16.5
Means	29.737	67.9	48.3	19.5	56.6	-2.8	52.1	47.6	9.1	19.0	1.5	72.2	133.7	39.3	52.0	2.023	...	4.7	16.5
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometric Tables issued by the 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<sup>in</sup>.737, being 0<sup>in</sup>.085 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 84°9 on June 6; the lowest in the month was 41°8 on June 13; and the range was 43°1.  
 The mean of all the highest daily readings in the month was 67°9, being 2°8 lower than the average for the 65 years, 1841-1905.  
 The mean of all the lowest daily readings in the month was 48°3, being 1°6 lower than the average for the 65 years, 1841-1905.  
 The mean of the daily ranges was 19°5, being 1°3 less than the average for the 65 years, 1841-1905.  
 The mean for the month was 56°6, being 2°8 lower than the average for the 65 years, 1841-1905.



MONTH and DAY, 1927.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.					
	POLARIS.		SURSÆ 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.			
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.							
June 1	4.4	0.88	2.2	0.44	ENE : NE : NNW	NW : Calm	0.5	0.01	145	10, f, m	10, m	10, n, fq.-m.-r	10, fq.-m.-r : p.-cl, p.-so.-ha	9, m, d	
2	1.1	0.23	0.0	0.00	Calm : NE	ESE : SE	0.2	0.01	127	8, f, d	7, m, h	7, h	9, h, m : 10	10	
3	5.0	1.00	5.0	1.00	NNW : NW	W : WNW	2.0	0.15	269	8	8	9, th.-cl, ci.-s, s.-cu	8, sh	1	
4	3.3	0.74	3.2	0.72	WSW : WNW	NW : WSW	1.5	0.08	222	1	2	6, cu	9, cu, cu.-n : 9, sh	6	
5	0.3	0.06	0.1	0.03	WSW	SW : SSW	3.8	0.14	289	3	2	7	8, slt.-sh, r : 10, slt.-r, r	9, slt.-r	
6	2.3	0.52	2.1	0.47	WSW : NW	WNW : WSW	8.2	0.41	369	9		9, slt.-sh	9, shs	9, fq.-shs : 6	
7	0.0	0.00	0.0	0.00	SW	Calm : SW : WSW	0.6	0.05	212	p.-cl	p.-cl	10, slt.-sh, oc.-m.-r	10, cu.-s, n : 10, r	10, r, oc.-m.-r	
8	3.9	0.88	3.4	0.76	WNW : WSW	SW	1.1	0.07	254	10, sh	10	9, n, cu.-s	9, cu.-s, cu.-n : 8	p.-cl	
9	0.0	0.00	0.0	0.00	WSW : W	NNW : Calm	1.5	0.05	207	1	1	7, cu, ci.-cu	7, cu, ci.-s, cu.-n : 7	10, th.-cl	
10	0.0	0.00	0.0	0.00	NE : E	ESE : E : ENE	0.8	0.05	188	9, m	9	10, cu.-n, s	10, s, n, cu.-n : 10	10, m.-r	
11	0.7	0.17	0.7	0.17	ENE	ENE : NNE	4.2	0.32	354	10, m	6	8, fr.-cu, h	9	9	
12	4.5	1.00	4.5	1.00	NNE : NE	ENE : ESE	0.9	0.06	217	8	10	9, s, n, cu.-s	8, cu.-s	0, d	
13	4.5	1.00	4.4	0.98	Calm : NNE	NNE : SSW	1.0	0.03	139	1, m	5, h	0, h	0, h	1, th.-cl, s.-cu	7, th.-cl
14	0.8	0.19	0.7	0.16	Calm : NE	E : NE	0.8	0.07	200	3, m	8, th.-cl, h	v.-cl, th.-cl, h	10, cu.-s	9	10
15	0.3	0.07	0.3	0.06	NE : ENE	ENE : E	3.1	0.32	356	10	10	6	p.-cl, th.-cl : 9	10	
16	3.1	0.69	2.9	0.65	E : SE	SSW	1.8	0.09	196	9, m	8	2, th.-cl	3, th.-cl : 5, th.-cl	6	
17	4.5	1.00	4.5	1.00	SSW	SSW : SW	3.6	0.25	316	3	8	10, r	10	9, shs	3
18	0.8	0.19	0.7	0.15	SW	SW : S	5.0	0.57	412	0		p.-cl	v.-cl, shs	9, fq.-shs : 10, r	10, r, w
19	4.4	0.99	4.2	0.94	SW : WSW	WSW	7.9	0.29	632	9, w	8, w	9, s.-cu, n, w	9, shs, hy.-sh, st.-w, w : 7, w	2, sh	
20	1.2	0.28	0.9	0.20	WSW	W : SW : SSW	2.2	0.30	379	2	3	5, cu	p.-cl, cu.-s	9	
21	4.3	0.94	3.9	0.88	SSW : SW	SW : WSW	4.0	0.56	418	9	7	9, sh, r	10, n, r : 10	6	
22	3.8	0.85	3.7	0.81	WSW : WNW	WSW : SW	1.7	0.21	336	0, h	2	p.-cl, cu.-s	3, cu.-s : p.-cl, cu	7, th.-cl	
23	1.9	0.43	1.7	0.39	SW : W	WSW : SW	5.6	0.90	506	8	9, r, sh	7, cu, n, w	8, cu, n, w : 8, w	p.-cl	
24	1.4	0.30	1.0	0.23	SW	WSW : NNW	11.0	0.85	472	10, m.-r.-sh	10, r, w	10, r, w	7, cu, st.-w : 8, slt.-sh	10, sh, r	
25	0.0	0.00	0.0	0.00	NNW : W : SW	SW	3.2	0.36	342	p.-cl	2	p.-cl, cu	10	10, slt.-sh : 10, r	
26	4.5	1.00	4.5	1.00	WSW : WNW	NW : NNW : SW	6.7	0.56	432	10, r	10, w	10, sh, r, w	9, sh	9, sh, t : 3	
27	0.0	0.00	0.0	0.00	SW : WSW	SW : WSW	1.7	0.08	273	p.-cl	8, shs	8, cu, cu.-n	9, shs, r : 10, r	10, sh	
28	0.5	0.12	0.2	0.04	WSW : NW	SW : SSW	1.3	0.08	244	10	10, m.-r	9, cu.-s, shs	10, shs, hl, t, l : 9	9	
29	3.8	0.85	3.2	0.71	S : SSE : SSW	S	2.1	0.17	259	10, r		9, cu.-s, n	10, r, m.-r : 10, slt.-r, m.-r	8	
30	3.2	0.71	2.5	0.55	ENE : ESE	S : Calm	1.3	0.07	167	8	10, r, hy.-r	9, cu.-s, hy.-r, so.-ha	9, s, n, so.-ha : v.-cl	9	
Means	2.3	0.50	2.0	0.44	...	...	...	0.27	298						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29				30	

The mean *Temperature of Evaporation* for the month was 52°·1, being 2°·8 lower than  
 The mean *Temperature of the Dew Point* for the month was 47°·6, being 3°·2 lower than  
 The mean *Degree of Humidity* for the month was 72·2, being 1·0 less than  
 The mean *Elastic Force of Vapour* for the month was 0in·332, being 0in·043 less than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7·9.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·286. The maximum daily amount of *Sunshine* was 14·0 hours on June 22.  
 The highest reading of the *Solar Radiation Thermometer* was 157°·2 on June 16; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°·3 on June 13.  
 The *Proportions of Wind* referred to the cardinal points were N. 4, E. 4, S. 8, W. 11. Three days were calm.  
 The *Greatest Pressure of the Wind* in the month was 11·0 lbs. on the square foot on June 24. The mean daily *Horizontal Movement of the Air* for the month was 298 miles; the greatest daily value was 632 miles on June 19; and the least daily value was 127 miles on June 2.  
*Rain* (0in·005 or over) fell on 17 days in the month, amounting to 2in·023, as measured by gauge No. 6 partly sunk below the ground; being 0in·015 less than the average fall for the 65 years, 1841-1905.

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



MONTH and DAY, 1927.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Mean.	Greatest.	Least.		Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.				
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.					
July 1	29.204	65.8	52.5	13.3	57.1	-4.4	55.5	54.3	2.8	10.4	0.3	90	138.3	42.9	53.0	0.717	wP, v : wP : wP, mP	1.2	16.5
2	29.430	63.1	54.1	9.0	57.8	-3.8	55.6	53.8	4.0	6.8	1.6	86	88.6	50.7	53.1	0.001	wP, mP : mP, wP : wP	0.3	16.5
3	29.642	70.1	56.1	14.0	61.3	-0.5	57.1	53.8	7.5	14.3	2.4	76	138.1	47.8	53.4	0.000	wP	3.8	16.5
4	29.604	75.6	56.6	19.0	65.0	+2.9	60.5	57.2	7.8	18.7	0.8	76	150.1	44.2	53.6	0.009	wP	5.0	16.4
5	29.574	79.2	53.8	25.4	63.5	+1.2	59.2	56.0	7.5	20.4	0.0	76	151.1	43.0	53.9	0.059	wP, v : wP : wP	5.9	16.4
6	29.727	71.8	51.2	20.6	60.6	-1.8	56.8	53.7	6.9	17.7	1.3	78	134.0	40.8	53.9	0.398	wP : wP : wP, v	4.6	16.4
7	29.587	71.0	53.0	18.0	60.7	-1.7	57.3	54.5	6.2	14.5	0.3	80	137.6	41.5	54.0	0.387	v, wP : vN, wP : wP	7.6	16.4
8	29.638	75.8	53.2	22.6	64.2	+1.8	58.9	54.7	9.5	21.2	0.0	72	152.7	42.0	54.4	0.000	wP	8.6	16.4
9	29.449	70.9	54.8	16.1	60.2	-2.2	57.9	56.1	4.1	8.8	0.8	87	115.3	51.2	54.4	0.041	wP, mP : v, wP : wP	1.4	16.3
10	29.645	80.9	55.4	25.5	67.1	+4.6	61.4	57.2	9.9	20.9	2.4	71	157.0	50.0	54.9	0.000	wP : wP : wP, mP	10.3	16.3
11	29.820	81.2	56.1	25.1	66.2	+3.5	61.9	58.9	7.3	20.0	0.9	78	148.6	45.7	55.0	0.102	wP, mP : vv, wP	8.3	16.3
12	29.835	65.1	58.1	7.0	61.0	-1.9	59.5	58.4	2.6	5.7	0.4	91	97.2	51.8	55.0	0.000	wP	0.0	16.2
13	29.877	62.8	56.1	6.7	58.6	-4.5	57.1	55.9	2.7	6.2	0.8	91	82.1	56.1	55.1	0.004	v, wP : wP : wP	0.0	16.2
14	29.946	59.1	53.6	5.5	56.0	-7.3	54.9	54.0	2.0	3.4	0.6	93	76.6	52.7	55.2	0.426	wP : wN, wP : wP	0.0	16.2
15	30.030	69.2	53.1	16.1	58.4	-5.0	55.5	53.1	5.3	11.4	1.2	83	124.8	51.6	55.2	0.030	wP, v : wP : wP	1.3	16.1
16	30.035	64.8	52.6	12.2	56.9	-6.5	54.7	52.9	4.0	5.8	1.2	86	92.7	48.7	55.3	0.003	wP	0.1	16.1
17	29.927	61.2	51.8	9.4	55.5	-7.9	53.0	50.7	4.8	7.1	2.6	84	91.2	44.5	55.3	0.000	wP	0.0	16.1
18	29.973	68.6	48.6	20.0	59.2	-4.1	55.1	51.5	7.7	15.0	2.0	76	138.1	39.6	55.4	0.000	wP	8.0	16.0
19	30.053	69.0	50.9	18.1	58.7	-4.5	54.5	50.7	8.0	13.8	3.0	75	144.1	41.2	55.4	0.000	wP	8.3	16.0
20	29.977	65.4	47.1	18.3	58.0	-5.2	56.1	54.5	3.5	5.9	0.2	89	105.2	36.1	55.2	0.089	wP	0.1	16.0
21	29.733	69.3	56.6	12.7	61.4	-1.8	59.6	58.3	3.1	7.8	0.6	90	106.1	49.7	55.5	0.080	wP	0.2	15.9
22	29.532	73.9	55.8	18.1	62.2	-0.9	57.3	53.3	8.9	18.5	1.3	73	151.0	50.1	55.5	0.000	wP	4.1	15.9
23	29.637	72.0	53.6	18.4	60.2	-2.8	56.0	52.4	7.8	14.1	1.0	75	142.8	49.0	55.5	0.165	wP : mP, wP : wP	4.6	15.8
24	29.847	70.8	50.6	20.2	60.0	-2.9	56.1	52.8	7.2	14.2	1.6	77	126.1	40.1	55.7	0.000	wP	3.4	15.8
25	29.883	77.6	56.2	21.4	65.5	+2.8	60.2	56.2	9.3	18.7	0.8	72	156.0	46.1	55.8	0.000	wP	13.9	15.7
26	29.769	74.6	56.2	18.4	64.6	+2.1	59.7	56.0	8.6	15.6	2.0	74	146.3	47.7	55.9	0.000	wP	3.6	15.7
27	29.490	72.6	54.3	18.3	61.5	-0.9	58.3	55.8	5.7	12.3	1.3	82	148.1	44.4	56.0	0.229	wP	6.6	15.6
28	29.478	73.3	55.3	18.0	61.9	-0.4	57.7	54.4	7.5	15.2	1.6	76	143.7	47.1	56.1	0.040	wP	5.9	15.6
29	29.679	71.9	52.2	19.7	62.6	+0.3	59.0	56.3	6.3	10.9	1.0	80	128.8	44.0	56.2	0.000	wP	4.9	15.5
30	29.738	72.9	56.0	16.9	63.7	+1.4	60.9	58.8	4.9	10.2	1.7	85	122.1	46.5	56.4	0.000	wP	2.4	15.5
31	29.811	74.8	53.6	21.2	62.9	+0.7	59.1	56.2	6.7	14.8	0.5	78	149.6	43.1	56.5	0.007	... : wP	7.9	15.5
Means	29.728	70.8	53.8	16.9	61.0	-1.6	57.6	54.9	6.1	12.9	1.2	80.6	128.5	46.1	55.0	2.787	...	4.3	16.1
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

The results apply to the civil day, except Columns 20 to 23 (Record of the Night Sky), which relate to the period extending from dusk 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 Hygrometric Tables issued by the 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 29.728, being 0.078 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 81.2 on July 11; the lowest in the month was 47.1 on July 20; and the range was 34.1.  
 The mean of all the highest daily readings in the month was 70.8, being 3.4 lower than the average for the 65 years, 1841-1905.  
 The mean of all the lowest daily readings in the month was 53.8, being 0.5 higher than the average for the 65 years, 1841-1905.  
 The mean of the daily ranges was 16.9, being 4.0 less than the average for the 65 years, 1841-1905.  
 The mean for the month was 61.0, being 1.6 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1927.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.				CLOUDS AND WEATHER.						
	POLARIS.		δURSÆ 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.			
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.							
July 1	0·0	0·00	0·0	0·00	N : ENE : ESE	ESE : ENE : NE	4·1	0·43	321	7	: 10, r, hy.-r, m	: 10, hy.-sh, r	10, shs	: 10, r, shs	: 10, slt.-sh, sh
2	0·5	0·10	0·5	0·10	NE : N : NNW	NNW : W : SSW	2·3	0·18	261	10, m	: 10	: 10, slt.-sh	10	: 10	: 9, m
3	0·6	0·12	0·2	0·04	SSW : SW	SSW : S	1·8	0·18	286	10	: 9	: 7	8	: 9	: 9, slt.-shs
4	4·7	0·98	4·7	0·98	S : SSW	SSW : S	4·6	0·45	324	9, slt.-sh, sh	: 10	: 9, cu.-n, ci.-s	9, cu.-s, n	: 1	
5	4·0	0·84	3·9	0·82	SE : S	SSW : S	5·3	0·45	316	2	: 8, r, t	: p.-cl, s.-cu, ci.-s	9, sh	: 9	: 1
6	0·0	0·00	0·0	0·00	SSE : S	SSE : Calm	0·9	0·05	180	5	: 1	: 9, s, n	9, cu.-s, n	: 10, fq.-slt.-r	: 10, r, hy.-r, t, l
7	4·6	0·96	4·4	0·92	NW : WSW : SW	S : SSE	2·0	0·08	215	10, r, hy.-r	: 9	: 9, cu.-n, shs, hy.-sh	8, cu.-n, ci, sh	: 3	: 1
8	0·0	0·00	0·0	0·00	Calm : NE	ESE : ENE : NNE	3·0	0·20	253	6, m	: 9	: p.-cl, cu, cu.-s	p.-cl, ci.-cu, s.-cu	: 8	: 10
9	1·3	0·27	1·3	0·25	N	N	3·1	0·60	404	10, m	: 10, m, r	: 10, r, sh, fq.-slt.-r	10, m.-r	: 5	: 6
10	4·9	0·99	4·9	0·99	N : NNW	NNE : NE : Calm	1·2	0·13	222	8	: 9	: 1, ci, h	p.-cl, cu, th.-cl	: 7, th.-cl, l	
11	1·9	0·37	1·3	0·26	Calm	SE : Calm : ENE	1·0	0·02	117	1, h	: 7, th.-cl, ci.-s, so.-ha		9, slt.-t.-sm, r	: 8	: 9
12	0·0	0·00	0·0	0·00	ENE	Calm : E	0·2	0·03	139	10	: 10, n		10, n	: 10, slt.-sh	
13	0·0	0·00	0·0	0·00	Calm : ENE	Calm : ENE : E	0·3	0·01	149	10, m.-r	: 10	: 10, sh	10	: 10	
14	0·0	0·00	0·0	0·00	ENE : NNE	NNE	0·8	0·04	180	10	: 10, n, r		10, n, r	: 10, r	
15	0·0	0·00	0·0	0·00	N : NNE	N : NNE	1·0	0·10	214	10, sh	: 10, n, r, oc.-slt.-shs		9, cu, n	: 10	
16	0·5	0·09	0·2	0·03	NNE	NNE	1·2	0·08	202	10, slt.-sh, m	: 10	: 10, n	10, slt.-sh, m.-r	: 10	
17	2·3	0·42	2·3	0·42	NNE : NNW	NNW	1·3	0·10	215	9	: 10, slt.-sh		10, slt.-sh	: 10	: 9
18	0·0	0·00	0·0	0·00	NNW	N : NE : ENE	1·2	0·00	176	p.-cl	: 0	: 4, cu	8, cu	: 9	: 10
19	5·5	0·99	5·5	0·99	Calm : ENE	ENE : E	1·0	0·05	166	10	: 9, cu.-s		5, cu, fr.-s	: 3	: 3, w
20	1·4	0·26	0·6	0·12	Calm	Calm : S	0·3	0·01	106	3	: 9	: 10, sh, fq.-r	10, n, r	: 10, n	: 10, n, slt.-shs
21	3·5	0·61	3·2	0·58	S	SSW : SW	1·9	0·22	268	9, r	: 10, n, oc.-m.-r		10, n, s, oc.-slt.-m.-r	: p.-cl	
22	1·8	0·33	1·7	0·30	SW : WSW	WSW	4·5	0·50	382	9	: 9	: 9, s.-cu, n	9, w	: 8, w	: 8
23	4·0	0·70	4·0	0·70	WSW : W	W : WNW : WSW	2·4	0·28	357	9, r, hy.-r	: 8, cu, cu.-s		8, sh	: 10	: 6
24	2·2	0·39	2·0	0·34	SW : WSW	SW	2·2	0·25	322	1	: 8	: 7, s, cu.-n	10	: 10, sh	: 9
25	0·9	0·15	0·9	0·15	WSW : SW	SW : SSW	1·8	0·13	257	9	: p.-cl	: p.-cl, cu	p.-cl, cu	: 1	: 8
26	4·9	0·86	4·9	0·86	SSW	SSW	2·3	0·18	251	10	: 10	: 9, cu.-s, n	9	: 8	: 2
27	1·2	0·21	1·2	0·21	SSE : SSW	SSW	6·0	0·51	341	6	: 10, r, hy.-r	: 8, fq.-r, oc.-shs	6, slt.-t.-sm, hl, hy.-r, w	: 8, oc.-m.-r	: 9, m.-r, sh
28	3·1	0·55	3·1	0·55	SW	SW : SSW	2·6	0·38	354	9, sh	: 8	: 8, cu, cu.-n	7, sh	: 7	: p.-cl
29	0·9	0·15	0·4	0·07	SSW	SSW	0·7	0·06	196	7	: p.-cl	: 9, cu, n	10, cu, n, slt.-sh	: 10	: 9
30	4·8	0·77	4·7	0·76	SSW : S	SSW : SW	2·3	0·23	273	9	: 9	: 9, cu, n, s, oc.-m.-r	10, oc.-slt.-m.-r	: 5, th.-cl	
31	0·0	0·00	0·0	0·00	SSW	SSW	1·7	0·16	247	2	: 7	: 8, shs	7	: 7	: 10
Means	1·9	0·36	1·8	0·34	...	...	...	0·20	248						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29			30		

The mean *Temperature of Evaporation* for the month was 57°·6, being 0°·3 lower than  
 The mean *Temperature of the Dew Point* for the month was 54°·9, being 0°·8 higher than  
 The mean *Degree of Humidity* for the month was 80·6, being 7·4 greater than  
 The mean *Elastic Force of Vapour* for the month was 0·11435, being 0·014 greater than  
 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 0·266. The maximum daily amount of *Sunshine* was 13·9 hours on July 25.  
 The highest reading of the *Solar Radiation Thermometer* was 157°·0 on July 10; and the lowest reading of the *Terrestrial Radiation Thermometer* was 36°·1 on July 20.  
 The *Proportions of Wind* referred to the cardinal points were N. 6, E. 5, S. 10, W. 6. Four days were calm.  
 The *Greatest Pressure of the Wind* in the month was 6·0 lbs. on the square foot on July 27. The mean daily *Horizontal Movement of the Air* for the month was 248 miles; the greatest daily value was 404 miles on July 9; and the least daily value was 106 miles on July 20.  
*Rain* (0·1 or over) fell on 15 days in the month, amounting to 2·1787, as measured by gauge No. 6 partly sunk below the ground; being 0·1388 greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1927.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of 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.	De-duced Mean Daily Value.					Highest in Sun's Rays.	Lowest on the Grass.					
Aug. 1	29.764	61.9	52.6	9.3	58.0	-4.2	56.5	55.2	2.8	6.4	0.8	91	82.0	49.1	56.7	0.300	wP, mP : mP, wN : wP	0.0	15.4
2	29.971	74.1	51.1	23.0	61.7	-0.4	56.5	52.1	9.6	20.5	0.4	71	139.1	42.1	56.8	0.000	wP, mP : mP : mP, wP	11.0	15.3
3	30.143	78.0	49.0	29.0	63.8	+1.7	57.3	52.0	11.8	22.5	0.6	65	154.1	38.2	56.9	0.000	wP, mP : mP, wP : wP	12.8	15.3
4	30.046	75.5	52.9	22.6	64.0	+1.9	58.7	54.5	9.5	21.8	1.3	71	145.0	41.8	56.9	0.000	... : wP : wP	9.4	15.3
5	29.797	76.2	55.2	21.0	64.8	+2.7	62.0	60.0	4.8	12.8	0.7	85	138.9	46.2	57.0	0.012	wP : wP : wP, v	1.2	15.2
6	29.557	77.2	61.9	15.3	66.4	+4.2	63.9	62.3	4.1	12.2	0.7	87	143.7	57.5	57.0	0.410	v : wP : wP	5.9	15.1
7	29.515	75.5	59.8	15.7	65.2	+3.0	61.5	58.9	6.3	16.4	1.7	80	150.5	52.2	57.0	0.035	wP	8.0	15.1
8	29.500	74.7	56.4	18.3	64.0	+1.7	60.9	58.6	5.4	16.6	0.7	83	140.3	48.2	57.0	0.415	wP, v : wN, wP : wP	6.7	15.0
9	29.523	72.2	56.3	15.9	63.3	+1.0	59.4	56.5	6.8	12.3	2.0	78	139.2	48.1	57.2	0.072	wP	10.2	15.0
10	29.635	73.3	56.8	16.5	62.8	+0.5	58.9	56.0	6.8	12.2	1.7	78	140.3	49.3	57.4	0.131	... : wP	7.9	14.9
11	29.683	70.7	54.8	15.9	61.0	-1.4	56.2	52.2	8.8	11.4	2.2	73	137.2	47.7	57.7	0.000	wP	5.6	14.8
12	29.642	71.6	53.2	18.4	61.3	-1.2	57.5	54.5	6.8	9.8	1.2	78	134.4	44.9	57.7	0.107	wP : wP : v, wP	5.9	14.8
13	29.685	71.3	57.2	14.1	61.8	-0.7	59.5	57.8	4.0	8.9	1.7	86	134.9	54.1	57.8	0.104	wP	3.4	14.8
14	29.522	73.8	57.2	16.6	63.4	+0.9	59.9	57.2	6.2	9.7	1.8	81	142.3	52.0	57.9	0.008	wP	6.5	14.7
15	29.413	68.8	54.5	14.3	58.8	-3.6	55.9	53.6	5.2	9.3	0.8	83	128.4	50.6	57.9	0.376	wP	1.7	14.6
16	29.540	65.4	51.4	14.0	57.7	-4.6	55.3	53.3	4.4	12.6	1.1	85	116.7	43.5	57.9	0.074	wP : mP, wP	1.6	14.6
17	29.678	72.3	49.1	23.2	59.1	-3.0	54.2	49.7	9.4	25.6	0.6	71	144.1	40.1	57.9	0.003	wP	10.5	14.5
18	29.409	70.3	52.8	17.5	59.4	-2.5	56.0	53.2	6.2	19.9	1.3	80	140.1	42.1	57.9	0.620	mN, wP : wP : mP, v	6.7	14.5
19	29.559	65.8	52.8	13.0	57.1	-4.6	54.7	52.7	4.4	12.3	0.6	85	108.7	44.4	57.8	0.084	v, mP : mP, wP : wP	3.7	14.4
20	29.612	66.3	53.0	13.3	58.1	-3.4	56.6	55.3	2.8	5.2	1.4	91	91.6	47.9	57.8	0.425	wP : ... : wP	0.2	14.3
21	29.373	72.5	57.0	15.5	61.4	+0.1	58.0	55.3	6.1	17.7	1.8	81	140.4	50.5	57.8	0.109	wP : wP, v : wP	8.0	14.3
22	29.330	69.2	56.8	12.4	61.2	+0.1	57.1	53.8	7.4	14.3	3.2	76	135.5	49.9	57.8	0.038	wP	7.5	14.2
23	29.600	71.8	53.4	18.4	61.2	+0.3	56.6	52.8	8.4	20.0	2.7	74	144.1	42.9	57.8	0.000	wP	9.2	14.2
24	29.727	71.1	48.0	23.1	55.7	-5.1	52.8	50.1	5.6	20.5	0.8	81	142.0	35.7	57.8	0.225	wP, ... : vv, mP	7.1	14.1
25	29.867	67.2	47.1	20.1	54.8	-5.9	52.4	50.2	4.6	14.8	0.4	84	124.9	37.8	57.7	0.024	wP : wP, v : wP	3.1	14.0
26	30.036	66.2	46.9	19.3	56.5	-4.2	53.3	50.3	6.2	14.1	0.2	80	108.0	35.3	57.7	0.000	wP : mP, wP : wP	3.0	13.9
27	29.925	73.0	54.0	19.0	60.6	-0.0	56.0	52.1	8.5	18.6	2.7	73	142.3	46.0	57.7	0.000	wP	9.8	13.9
28	29.901	70.3	49.8	20.5	59.5	-0.9	55.5	52.1	7.4	16.7	0.8	77	140.5	39.3	57.6	0.000	wP	5.7	13.8
29	29.945	77.2	48.3	28.9	62.8	+2.5	57.9	54.0	8.8	19.1	0.4	73	138.3	38.0	57.4	0.000	wP : wP, mP : mP, wP	10.2	13.8
30	30.106	71.9	58.1	13.8	63.3	+3.2	60.7	58.8	4.5	9.8	1.5	86	130.5	53.6	57.3	0.002	wP	1.0	13.7
31	30.019	77.1	58.3	18.8	65.2	+5.3	62.7	61.1	4.1	14.6	0.4	86	145.1	47.0	57.4	0.000	wP	5.1	13.6
Means	29.710	71.7	53.7	18.0	61.1	-0.5	57.6	54.7	6.4	14.8	1.2	79.8	133.6	45.7	57.5	0.574	...	6.1	14.6
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometric Tables issued by the 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<sup>in</sup>.710, being 0<sup>in</sup>.080 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 78°0 on August 3; the lowest in the month was 46°9 on August 26; and the range was 31°1.  
 The mean of all the highest daily readings in the month was 71°7, being 1°0 lower than the average for the 65 years, 1841-1905.  
 The mean of all the lowest daily readings in the month was 53°7, being 0°7 higher than the average for the 65 years, 1841-1905.  
 The mean of the daily ranges was 18°0, being 1°7 less than the average for the 65 years, 1841-1905.  
 The mean for the month was 61°1, being 0°5 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1927.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.					CLOUDS AND WEATHER.					
	POLARIS.		δURSÆ MINORIS.		OSLER'S.			Pressure on the Square Foot.	Robinson's.	A.M.		P.M.			
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Greatest.			Mean of 24 Hourly Measures.	Horizontal Movement of the Air.				
					A.M.	P.M.									
Aug. 1	5.2	0.83	4.3	0.70	Calm	NNW : WNW:SW	0.5	0.02	143	10, r	: 10	: 10, s, n, r	10, s, n, r	: 10, r	: 6
2	6.2	1.00	6.2	1.00	SW : WSW	WNW : WSW:SW	0.8	0.06	195	I	: 0	: 3, cu	7, cu.-s	: 7	: 2, d
3	6.2	1.00	6.2	1.00	Calm	ESE : Calm	0.6	0.03	119	0, d	: 0, h.	: 2, cu, h	2, cu, h	: 0	: 0, d
4	4.2	0.67	4.2	0.67	E	E : ENE	2.5	0.26	251	0	: p.-cl, th.-cl : 8, th.-cl, oc.-so.-ha	th.-cl, ci, ci.-s, fq.-so.-ha	: 0, slt.-h		
5	0.3	0.05	0.3	0.05	Calm	ESE : ENE	0.4	0.03	143	7, f	: 10, m	: 9, cu.-s, th.-cl	10, s, n, slt.-shs	: 10, cu.-n	: 10, t, l, r
6	0.0	0.00	0.0	0.00	ENE : Calm : SE	SSW : S	1.0	0.08	194	10, sh, l	: 10, hy.-r, t.-sm, m	: 6, s.-cu, n	9	: 10, slt.-m.-r.-sh	: 10
7	0.8	0.12	0.8	0.12	S : SSW	SSW : SE	2.3	0.26	269	10, m.-r	: 10, r	: 8, m.-r.-sh, sh	7, cu, cu.-n	: 6, sh	: 6, l
8	5.7	0.85	5.6	0.83	Calm	SW : SSW : S	3.1	0.10	194	10	: 10, r	: 10, r, slt.-r	7, n, cu.-n, slt.-sh	: 3	: 6
9	5.8	0.86	5.8	0.86	S : SSW	SSW	3.2	0.51	365	8	: 8, slt.-sh, sh	: 6, cu, ci.-s, sh	6, cu, cu.-n	: 1, th.-cl	: 1, d
10	6.4	0.94	6.4	0.94	SSW	SW	4.0	0.30	321	7	: 10, r	: 8, cu.-s, ci	p.-cl, hy.-sh	: 2	: 1, s.-cu, d
11	6.3	0.94	6.3	0.94	SW	SW : SSW	2.0	0.25	318	I	: 6	: 9, cu, n	9	: 8	: I
12	0.0	0.00	0.0	0.00	SSW : SW	SW	4.6	0.42	366	I	: 8, slt.-sh	: 8, cu.-s, cu.-n, shs	8, cu.-n, cu, w, oc.-shs		: 10, r, sh, fq.-slt.-r
13	0.9	0.12	0.8	0.11	SW	SSW	1.9	0.16	273	10, sh	: 8, fr.-cu		10, r	: 10, slt.-sh	
14	4.5	0.62	4.5	0.62	SSW : SW	SW	3.9	0.33	355	9, slt.-sh	: 9		9, sh, slt.-shs	: 9, fq.-shs, m.-r	: 1
15	0.0	0.00	0.0	0.00	SW	SW	5.0	0.50	448	9	: 10	: 10, n	10, sh, c.-r	: 10, c.-r	
16	5.7	0.79	5.6	0.77	WSW : NNW : NW	WSW	2.6	0.15	279	10, sh	: 10, sh	: 9, n, s	10	: 10, r	: v.-cl
17	0.0	0.00	0.0	0.00	SW	SSW : SSE : ESE	1.6	0.09	184	7, th.-cl, hy.-d	: 6, th.-cl	: 1, cu	p.-cl, cu.-n, ci.-s	: 9, th.-cl, p.-so.-ha	: 10, s.-cu, d
18	0.6	0.08	0.6	0.08	E : ESE : S	SSW : SSE	3.2	0.25	258	10, r	: 10, r, slt.-r	: 9, cu.-n, r	5, cu, cu.-n	: 6, th.-cl	: 9, fq.-r
19	4.2	0.57	4.0	0.55	Calm : NW	W : WSW	2.3	0.14	265	10, sh	: 8, m	: 10, s.-cu, n, slt.-r	10, s.-cu, cu.-n, sh	: 2	: 2
20	0.0	0.00	0.0	0.00	SW : SSW : S	SSW : SW	3.1	0.36	339	10	: 10, r		10, r	: 10, m.-r	: 10, slt.-sh, sh
21	4.4	0.57	4.0	0.52	SSW : SW	SW : SSW	3.7	0.54	374	10	: 9	: 6	8, sh	: 7, sh	: p.-cl, slt.-sh
22	2.7	0.34	1.8	0.23	SSW	SW	10.4	1.53	532	8, slt.-sh	: 9, shs, w	: 9, w	7, sh, w, st.-w	: 8, w, st.-w	: 5, th.-cl
23	7.3	0.94	7.3	0.94	SW : WSW	WSW : SW	3.4	0.37	362	9	: 9	: 5, s.-cu	p.-cl	: 1, d	
24	3.0	0.39	2.4	0.32	SW	SW : Var : Calm	8.8	0.13	199	0, d	: 1	: 1, fr.-cu	9, t.-sm, r	: 10, sh, t, l, m.-r	: 10, m
25	7.7	1.00	7.7	1.00	Calm : NNW	N : NNW	3.7	0.11	200	7	: 10, slt.-sh, m	: 9, n, slt.-r	9, t, l, sh	: 6	: 0, d
26	4.3	0.55	3.4	0.44	SW : W	W : SW : WSW	1.9	0.14	269	0, d	: 2, d, m	: 9, s.-cu, m	10	: 10	: 9
27	7.3	0.89	6.5	0.79	SW	SW : SSW	3.3	0.62	388	8	: 8	: 6, cu, s.-cu	p.-cl, ci, ci.-cu	: p.-cl	: 0, d
28	7.7	0.94	7.2	0.88	SSW : SW	SSW : Calm	3.3	0.34	288	5, d	: 7	: 8, s.-cu, ci.-s	8, th.-cl	: 9	: 2, th.-cl, d
29	0.9	0.11	0.0	0.00	SSE : Calm : W	WSW : N : NE	0.6	0.04	165	0, d	: 7, m	: 2, th.-cl, s.-cu, ci.-s, h	2, th.-cl, h	: 2, h	: 8, h
30	0.6	0.07	0.5	0.06	ENE : E	E : ENE	1.3	0.18	252	10, sh	: 9, s.-cu		9	: 10	
31	6.5	0.79	6.3	0.76	ENE	E : Calm	0.6	0.08	200	10	: 10, m	: 10, s, m	p.-cl, fr.-cu	: 2	: 0, m
Means	3.7	0.52	3.5	0.49	...	...	...	0.27	274						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29			30		

The mean *Temperature of Evaporation* for the month was 57°.6, being 0°.1 higher than  
 The mean *Temperature of the Dew Point* for the month was 54°.7, being 0°.4 higher than  
 The mean *Degree of Humidity* for the month was 79.8, being 3.0 greater than  
 The mean *Elastic Force of Vapour* for the month was 0.431, being 0.007 greater than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.0.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.417. The maximum daily amount of *Sunshine* was 12.8 hours on August 3.  
 The highest reading of the *Solar Radiation Thermometer* was 154°.1 on August 3; and the lowest reading of the *Terrestrial Radiation Thermometer* was 35°.3 on August 26.  
 The *Proportions of Wind* referred to the cardinal points were N. 2, E. 4, S. 12, W. 9. Four days were calm.  
 The *Greatest Pressure of the Wind* in the month was 10.4 lbs. on the square foot on August 22. The mean daily *Horizontal Movement of the Air* for the month was 274 miles; the greatest daily value was 532 miles on August 22; and the least daily value was 119 miles on August 3.  
*Rain* (0.1005 or over) fell on 19 days in the month, amounting to 3.574, as measured by gauge No. 6 partly sunk below the ground; being 1.230 greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1927.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE. Of the Air.						Of Evaporation. Mean of 24 Hourly Values.	Of the Dew Point. De-duced Mean Daily Value.	Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE. Of Radiation.			Of the Earth 4 ft. below the Surface of the Soil.	Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean.			Greatest.	Least.	Highest in Sun's Rays.		Lowest on the Grass.	Of the Earth 4 ft. below the Surface of the Soil.						
		in.	°	°	°	°	°			°	°	°		°	°	°					
Sept. 1	29.964	70.3	56.7	13.6	62.5	+ 2.7	60.9	59.7	2.8	5.6	0.0	91	96.3	46.1	57.7	0.000	wP	0.0	13.6		
2	30.041	75.8	51.3	24.5	63.2	+ 3.5	59.5	56.7	6.5	13.6	0.0	79	124.3	40.1	57.8	0.000	wP : wP, mP : mP, wP	4.7	13.5		
3	30.034	66.5	56.7	9.8	60.8	+ 1.2	58.4	56.5	4.3	8.0	0.0	86	96.0	44.0	57.7	0.000	wP : ...	0.1	13.5		
4	29.876	65.6	56.4	9.2	60.4	+ 0.9	58.2	56.5	3.9	6.0	1.7	87	108.0	55.9	57.6	0.000	...	0.0	13.4		
5	29.762	68.9	57.7	11.2	61.7	+ 2.3	59.3	57.5	4.2	7.7	1.5	86	101.6	51.0	57.8	0.000	... : ... : wP	0.0	13.3		
6	29.724	66.4	56.4	10.0	60.4	+ 1.2	58.8	57.6	2.8	8.2	0.0	90	91.0	46.6	57.8	0.057	wP	0.0	13.3		
7	29.853	71.4	52.5	18.9	60.6	+ 1.6	56.3	52.7	7.9	19.8	0.2	75	137.7	41.7	57.8	0.000	wP : mP, wP	7.9	13.2		
8	29.862	68.8	43.7	25.1	57.0	- 1.8	54.6	52.6	4.4	11.9	1.0	85	122.3	30.8	57.8	0.000	wP : wP : ...	4.5	13.1		
9	29.642	70.7	53.9	16.8	62.2	+ 3.6	57.4	53.5	8.7	16.4	2.4	73	138.7	47.0	57.8	0.002	... : wP, mP : wP	3.9	13.1		
10	29.520	61.4	49.3	12.1	54.9	- 3.5	53.5	52.3	2.6	8.3	0.4	91	121.3	43.1	57.5	0.462	wP : wP, mP : v, mP	1.3	13.0		
11	29.587	58.9	46.2	12.7	52.1	- 6.0	48.8	45.2	6.9	12.5	0.4	78	105.2	37.2	57.5	0.000	wP, mP	4.5	12.9		
12	29.862	61.4	46.7	14.7	52.8	- 5.2	48.1	42.9	9.9	18.2	3.7	69	114.1	33.6	57.3	0.000	wP, mP : mP : mP	8.0	12.9		
13	29.821	60.8	48.0	12.8	53.5	- 4.3	51.3	49.2	4.3	12.6	0.7	85	94.6	39.0	57.2	0.128	wP	0.2	12.8		
14	29.621	62.9	49.1	13.8	54.5	- 3.2	53.3	52.3	2.2	8.7	0.4	92	97.5	43.0	57.1	0.639	wP : wP, wN : ...	0.4	12.7		
15	29.412	66.6	54.4	12.2	58.2	+ 0.6	56.9	55.8	2.4	8.8	0.0	92	123.2	47.0	57.0	0.692	...	1.6	12.7		
16	29.428	60.6	51.6	9.0	56.3	- 1.2	55.4	54.6	1.7	4.4	0.0	95	80.0	46.4	57.0	0.241	wP	0.3	12.6		
17	29.450	62.6	47.4	15.2	53.9	- 3.3	50.7	47.5	6.4	17.1	0.6	79	119.2	36.5	56.9	0.371	wP : mP	5.9	12.6		
18	29.521	61.4	47.4	14.0	53.0	- 3.9	50.5	48.0	5.0	12.4	2.8	83	118.2	41.1	56.9	0.036	wP	4.6	12.5		
19	29.515	65.7	53.2	12.5	59.1	+ 2.6	55.9	53.3	5.8	12.6	0.2	81	98.1	48.3	56.8	0.030	wP : wP : ...	0.2	12.4		
20	29.672	68.0	54.6	13.4	59.3	+ 3.1	56.8	54.7	4.6	10.3	2.0	85	111.7	48.1	56.8	0.008	...	0.3	12.3		
21	29.506	69.0	59.7	9.3	62.1	+ 6.2	59.7	57.9	4.2	8.5	0.6	86	114.3	57.0	56.6	0.005	wP : ...	1.4	12.3		
22	29.219	65.2	51.6	13.6	58.1	+ 2.5	56.7	55.9	2.2	6.0	0.2	92	96.2	45.3	56.7	0.311	... : ... : wP	1.5	12.2		
23	29.028	58.0	44.9	13.1	51.8	- 3.6	49.2	46.3	5.5	13.7	0.6	82	106.2	40.1	56.7	0.673	wP : vN, wP	4.3	12.2		
24	28.943	60.6	42.8	17.8	49.9	- 5.4	46.3	42.0	7.9	14.9	1.8	74	120.3	37.2	56.4	0.000	wP, ... : wP, v : mP	10.4	12.1		
25	29.132	62.8	41.2	21.6	50.1	- 5.1	47.6	44.9	5.2	15.7	1.0	82	128.8	32.1	56.6	0.018	wP : wP, v : v, wP	7.9	12.0		
26	29.459	59.3	38.7	20.6	47.9	- 7.3	44.7	40.7	7.2	19.1	0.5	76	121.2	28.2	56.1	0.001	wP : wP, v : mP	9.3	12.0		
27	29.788	59.3	34.7	24.6	46.1	- 9.0	44.5	42.5	3.6	11.3	0.0	89	105.9	25.0	56.0	0.000	mP, wP : mP : mP' wP	1.5	11.9		
28	30.024	63.7	37.8	25.9	49.2	- 5.7	46.5	43.4	5.8	14.0	0.0	80	115.0	29.0	56.0	0.000	wP : wP, mP : mP, wP	6.3	11.8		
29	29.683	55.8	43.8	12.0	51.2	- 3.5	49.3	47.2	4.0	7.5	0.0	87	72.0	35.0	55.6	0.389	wP	0.0	11.8		
30	29.811	61.8	40.3	21.5	50.5	- 3.9	47.2	43.4	7.1	17.6	0.0	77	124.5	31.9	55.4	0.003*	wP : wP : mP, wP	8.7	11.7		
Means	29.625	64.3	49.0	15.4	55.8	- 1.5	53.2	50.8	5.0	11.7	0.8	83.6	110.1	40.9	57.0	4.066	...	3.3	12.6		
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		

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

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometric Tables issued by the 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 September 30 is derived from dew.

The mean reading of the Barometer for the month was 29<sup>m</sup>.625, being 0<sup>m</sup>.193 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 75°·8 on September 2; the lowest in the month was 34°·7 on September 27; and the range was 41°·1. The mean of all the highest daily readings in the month was 64°·3, being 3°·0 lower than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 49°·0, being 0°·1 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 15°·4, being 2°·8 less than the average for the 65 years, 1841-1905. The mean for the month was 55°·8, being 1°·5 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1927.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.				
	POLARIS.		δ URSE MINORIS.		OSLER'S.				ROBINSON'S.						
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Horizontal Movement of the Air.	A.M.		P.M.			
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.							
hours.		hours.				lbs.	lbs.	miles.							
Sept. 1	7.5	0.91	7.5	0.91	SW : Calm	SW : Calm	0.5	0.03	175	9	10, m	10, n, slt.-m.-r	10	10	1, th.-cl, d
2	3.1	0.37	3.1	0.37	Calm	Calm : E	0.1	0.01	121	p.-cl, d	1, m, h	p.-cl, h	6, h	10	p.-cl, slt.-sh
3	0.0	0.00	0.0	0.00	E : ENE	ENE	1.2	0.13	274	9	10, f, m.-r	10, n, slt.-sh	10	10	
4	0.0	0.00	0.0	0.00	NNE	N	0.8	0.10	241	10	10, m	10, n, slt.-m.-r	10, n, s	10	
5	0.0	0.00	0.0	0.00	N : Calm	WSW : Calm	0.1	0.00	118	10	10, th.-cl, cu, h		10, fq.-th.-cl, cu, h	10	10, fq.-th.-cl
6	2.6	0.30	2.1	0.25	Calm	ESE : E : S	1.4	0.03	124	10	10, fq.-th.-cl	10, n, s	10, n, fq.-r, slt.-r	9	7, r, m.-r
7	7.7	0.91	7.3	0.86	SW : W	WSW	2.4	0.20	331	10	10	8, cu.-s, n	p.-cl, s.-cu	1	p.-cl, d
8	1.4	0.17	1.1	0.13	SW : SSW	SSW	2.6	0.26	293	0, d	1, th.-cl, ci	7, cu.-n, s.-cu	10, th.-cl, cu.-n, so.-ha, slt.-sh	10, slt.-shs	10
9	3.7	0.44	3.5	0.41	SW : WSW	WSW	3.9	0.53	437	9	9	7, s.-cu, fr.-cu	10, oc.-slt.-r	10, slt.-r, slt.-sh	2, ci.-s, s, d
10	2.4	0.27	2.4	0.27	SW : Calm : NE	N : S : SW	1.1	0.05	160	9, slt.-sh	10, c.-r	10, n, m.-r	9	9, sh, t	9
11	3.9	0.42	3.8	0.41	SW : NNW	NNW : NW	2.7	0.20	258	8	7	9, cu, ci.-s	9, cu.-n, s, slt.-sh	9	8, fr.-cu, h, d
12	2.1	0.21	2.1	0.20	NW : NNW	NW : WSW	1.6	0.19	250	9	6, th.-cl	p.-cl, cu, h	8, s.-cu, cu.-n	3	10
13	1.8	0.18	1.7	0.17	WSW	SW : SSW : SW	1.3	0.17	277	9, fq.-th.-cl	10, fq.-th.-cl	10, fr.-s, n, r	10, s, n, slt.-r, r	10, fq.-th.-cl, r	10, fq.-th.-cl
14	0.0	0.00	0.0	0.00	WSW	Calm : ENE	1.9	0.09	221	9, d	9, th.-cl	9, s, cu.-n, slt.-r	10, cu.-n, s, slt.-r, c.-r	10, c.-r	
15	0.6	0.07	0.6	0.07	E	ESE : Calm	1.8	0.16	214	10, c.-r	10, c.-r	10, n, s.-cu, slt.-r	9, cu.-n, s, slt.-sh	9, fq.-th.-cl	10, fr.-cu, oc.-th.-cl, d
16	0.3	0.03	0.3	0.03	Calm	NNW : WSW	0.3	0.01	142	10, slt.-sh, f, m	10, m	10, n, r, hy.-r	10, n	9	10, oc.-th.-cl, d
17	1.8	0.18	1.8	0.18	SW : W : NNW	NNW : NW : Calm	1.8	0.19	271	10	10, r, hy.-r, m	8, n, cu, r	p.-cl, cu	p.-cl	v.-cl
18	1.2	0.12	1.2	0.12	SW : WSW	WSW : SW	1.5	0.16	283	10	9, r, slt.-r	6, ci.-cu	7, n, fr.-cu	p.-cl	9, d
19	4.8	0.49	4.3	0.44	SSW : SW : WSW	WSW	6.0	0.93	488	10, slt.-sh, r	10, r	10, oc.-th.-cl, so.-ha, w	10, fq.-th.-cl, p.-so.-ha, w	10, w	p.-cl
20	0.2	0.02	0.2	0.02	SW : WSW	SW : SSW	2.0	0.21	318	9	10, slt.-sh	9, s, n, cu	10, slt.-r	9	10, d
21	0.0	0.00	0.0	0.00	SW : SSW	SW	3.7	0.70	416	10	10	10, s.-cu, n, oc.-m.-r	10, s.-cu, n, w	10	10, fq.-m.-r, r
22	6.4	0.66	6.2	0.63	SSW	WSW : SW	6.0	0.50	407	10, r	10, r, oc.-slt.-m.-r	10, n, m.-r, w	10, r, hy.-r	2, h	1
23	3.9	0.40	3.5	0.36	WSW	SSW : ESE : S	4.5	0.48	357	8	1	5, th.-cl, s, cu, so.-ha	10, r, hy.-r	10, hy.-r, r	8, sh, oc.-l, w
24	9.0	0.88	8.9	0.87	NW : WSW	WSW : SW	4.9	0.53	446	8, w	1	2, cu	5, sh	8	2, d
25	7.5	0.73	7.1	0.69	SW	SW : WSW	2.0	0.10	254	0, d	1	p.-cl, ci.-s, cu.-n	9, cu.-n, r	9, shs	p.-cl
26	10.3	1.00	10.3	1.00	WSW	WSW : SSW	2.6	0.18	303	0, d	7	1, cu	5, cu.-n, ci.-cu, shs	6, th.-cl	0, hy.-d
27	7.0	0.68	7.0	0.68	Calm	N : Calm	0.6	0.02	120	0, hy.-d	0, m, h	0, m, h	10, ci.-s, s.-cu	9	1, d
28	3.7	0.36	3.6	0.35	Calm : SW	SSW	1.5	0.10	196	0, f, tk.-f, d	0, f	2, th.-cl, slt.-f	8, ci.-s, cu, cu.-n	7	6, slt.-h
29	10.3	1.00	10.3	1.00	SSW	SSW : W : WSW	6.9	0.52	384	9	9	10, s, n, slt.-sh, slt.-r, w	10, n, sc, slt.-r, w, r	p.-cl, slt.-m	0, m, d
30	3.2	0.31	2.7	0.26	SW : WSW	WSW : SSW	2.5	0.14	301	0, hy.-d	0	2, ci.-s	p.-cl, s.-cu, cu.-n	10, sh	10
Means	3.5	0.37	3.4	0.36	...	...	...	0.23	273						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29					30

The mean *Temperature of Evaporation* for the month was 53°.2, being 0°.9 lower than  
 The mean *Temperature of the Dew Point* for the month was 50°.8, being 0°.3 lower than  
 The mean *Degree of Humidity* for the month was 83.6, being 3.7 greater than  
 The mean *Elastic Force of Vapour* for the month was 0.01375 being 0.0004 less than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 7.6.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0.263. The maximum daily amount of *Sunshine* was 10.4 hours on September 24.  
 The highest reading of the *Solar Radiation Thermometer* was 138°.7 on September 9; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°.0 on September 27.  
 The *Proportions of Wind* referred to the cardinal points were N. 4, E. 2, S. 8, W. 11. Five days were calm.  
 The *Greatest Pressure of the Wind* in the month was 6.9 lbs. on the square foot on September 29. The mean daily *Horizontal Movement of the Air* for the month was 273 miles; the greatest daily value was 488 miles on September 19; and the least daily value was 118 miles on September 5.  
*Rain* (0.01 or over) fell on 15 days in the month, amounting to 4.066, as measured by gauge No. 6 partly sunk below the ground; being 1.018 greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1927.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of 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	29.708	59.8	48.1	11.7	54.2	+ 0.1	52.6	51.0	3.2	5.4	0.6	89	70.6	41.6	55.1	0.054	wP	0.0	11.6
2	29.653	65.2	47.4	17.8	58.7	+ 5.0	56.4	54.4	4.3	8.6	2.2	86	97.0	38.9	55.0	0.047	wP : wP : wP, mP	0.8	11.6
3	30.104	59.9	36.5	23.4	47.4	- 5.9	44.2	40.2	7.2	21.2	0.0	76	103.1	26.1	55.0	0.000	wP, mP : mP, sP : mP, wP	8.2	11.5
4	30.207	56.9	33.9	23.0	43.7	- 9.3	42.4	40.8	2.9	7.9	0.0	89	102.4	25.4	54.9	0.000	wP : wP, mP : wP	2.3	11.5
5	30.282	56.6	35.8	20.8	44.0	- 8.8	42.4	40.4	3.6	12.6	0.0	87	99.1	27.4	54.7	0.000	wP, mP, sP : sP, mP : wP	5.1	11.4
6	30.274	62.7	35.2	27.5	47.7	- 4.8	45.9	43.8	3.9	10.8	0.0	86	96.7	26.1	54.3	0.000	wP, mP : mP, wP	3.8	11.3
7	30.204	62.4	39.4	23.0	49.1	- 3.2	48.2	47.3	1.8	8.3	0.0	93	77.1	31.2	54.1	0.000	wP : wP, mP : mP, wP	1.1	11.2
8	30.232	62.7	46.6	16.1	53.5	+ 1.5	51.6	49.8	3.7	9.4	0.2	87	110.5	35.2	54.0	0.001*	wP	6.3	11.2
9	30.260	60.2	44.0	16.2	52.3	+ 0.7	50.0	47.6	4.7	16.4	0.0	84	113.9	34.5	53.9	0.000	wP	7.9	11.1
10	30.210	61.7	37.9	23.8	48.1	- 3.2	46.3	44.3	3.8	10.8	0.0	86	105.4	28.0	53.6	0.001*	wP, mP	5.7	11.0
11	30.194	57.2	37.9	19.3	48.0	- 2.9	46.3	44.3	3.7	9.1	0.0	87	104.1	28.9	53.4	0.001*	wP : wP, mP : mP, wP	3.0	11.0
12	30.215	53.7	47.2	6.5	50.0	- 0.6	48.1	45.9	4.1	5.8	1.8	87	62.9	44.1	53.4	0.002	wP, mP : mP : mP	0.0	10.9
13	29.990	52.9	42.7	10.2	47.4	- 2.9	45.9	44.1	3.3	7.6	0.4	88	58.8	32.7	53.2	0.011	wP, mP : mP : mP, wP	0.0	10.9
14	29.798	57.6	43.5	14.1	50.0	- 0.1	48.4	46.5	3.5	9.6	0.4	88	89.8	39.8	53.1	0.007	mP	0.9	10.8
15	29.850	60.6	48.7	11.9	52.3	+ 2.4	50.1	47.9	4.4	12.0	1.2	85	117.3	42.3	53.1	0.000	wP, mP : mP : mP, wP	2.1	10.7
16	29.786	57.0	45.3	11.7	50.9	+ 1.1	48.5	45.8	5.1	10.0	1.3	83	78.2	36.7	53.1	0.000	wP, mP : mP : mP	0.1	10.7
17	29.639	60.4	47.0	13.4	53.7	+ 4.1	50.6	47.4	6.3	13.6	3.3	79	92.2	38.0	53.1	0.000	wP : wP, mP : mP	2.0	10.6
18	29.725	55.8	40.0	15.8	47.4	+ 1.9	44.3	40.5	6.9	14.5	1.1	76	88.9	30.1	53.0	0.000	wP : mP : mP	1.8	10.5
19	29.677	58.9	42.0	16.9	50.1	+ 1.0	47.8	45.2	4.9	11.0	2.0	84	105.5	29.7	53.0	0.009	wP : mP, v : mP, wP	1.0	10.5
20	29.870	53.1	38.4	14.7	45.3	- 3.5	42.7	39.1	6.2	16.5	0.2	80	82.5	29.2	52.9	0.000	wP : mP, sP : sP, wP	0.2	10.4
21	29.860	54.1	38.2	15.9	45.8	- 2.8	44.7	43.4	2.4	6.2	0.0	91	89.8	30.1	52.8	0.017	wP : wP : ...	0.7	10.3
22	29.245	52.2	43.2	9.0	49.6	+ 1.3	48.7	47.8	1.8	2.9	0.6	93	56.9	37.4	52.6	0.290	...	0.0	10.3
23	29.218	52.4	41.2	11.2	47.1	- 1.0	45.3	43.2	3.9	7.9	0.7	86	64.0	34.3	52.6	0.015	...	0.0	10.2
24	29.740	59.4	33.7	25.7	47.0	- 0.9	44.9	42.5	4.5	12.5	0.0	84	95.2	25.3	52.3	0.001*	... : mP, wP : wP	4.2	10.2
25	29.742	66.2	53.7	12.5	59.1	+ 11.4	57.2	55.7	3.4	6.2	1.4	89	91.2	50.0	52.2	0.000	wP	0.5	10.1
26	29.704	61.0	56.9	4.1	58.8	+ 11.2	57.1	55.8	3.0	7.0	2.0	89	70.1	53.5	52.2	0.017	wP	0.0	10.0
27	29.667	62.8	55.9	6.9	60.0	+ 12.5	58.4	57.2	2.8	7.8	0.8	90	72.5	53.5	52.2	0.350	wP	0.7	10.0
28	29.638	62.8	54.8	8.0	58.8	+ 11.4	56.8	55.2	3.6	12.8	1.0	88	78.9	49.4	52.4	0.015	wP	0.2	9.9
29	29.829	61.5	50.2	11.3	54.5	+ 7.2	49.4	43.9	10.6	15.6	3.2	67	108.5	43.0	52.4	0.000	wP : wP, mP : mP	5.4	9.9
30	29.734	67.0	52.4	14.6	58.2	+ 11.0	56.1	54.4	3.8	10.3	1.8	87	84.6	46.6	52.6	0.001	wP	0.6	9.8
31	29.762	61.2	41.4	19.8	55.6	+ 8.5	54.2	53.0	2.6	6.8	0.2	91	90.9	31.4	52.6	0.419	wP : wP, v : mP	1.7	9.7
Means	29.872	59.2	43.8	15.4	51.2	+ 1.2	49.2	47.0	4.2	10.2	0.9	85.6	89.0	36.1	53.3	1.258	...	2.1	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	19

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

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometric Tables issued by the 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 October 8, 10, 11 and 24 are derived from fog or dew.

The mean reading of the Barometer for the month was 29.872, being 0.144 higher than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 67.0 on October 30; the lowest in the month was 33.7 on October 24; and the range was 33.3. 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 43.8, being 0.6 higher than the average for the 65 years, 1841-1905. The mean of the daily ranges was 15.4, being 1.1 greater than the average for the 65 years, 1841-1905. The mean for the month was 51.2, being 1.2 higher than the average for the 65 years, 1841-1905.



MONTH and DAY, 1927.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.				CLOUDS AND WEATHER.						
	POLARIS.		δURSÆ 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.			
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.							
Oct. 1	0·30	0·03	0·10	0·01	SSW	SSW : SW	5·40	0·65	406	9	: 10, oc.-m.-r	: 10, s, n, fq.-m.-r	10, n, sh, oc.-m.-r	: 10, m.-r	: 10, m.-r
2	10·60	0·99	10·60	0·99	SSW : SW	SW : WNW	6·80	0·88	469	9	: 10	: 10, n, w	10, n, w	: 10, sh, w	: 0
3	9·70	0·90	9·60	0·89	WSW : N	Calm : SSE	0·70	0·03	164	0, d	: 0, slt.-h		0, h	: 0, h, m, ho.-fr, d	
4	1·70	0·16	0·00	0·00	Calm	Calm	0·00	0·00	56	0, d, slt.-f	: 0, slt.-f, d	: 2, th.-cl, ci, h, slt.-f	0, h, slt.-f	: 0, f, tk.-f, ho.-fr	: 5, f
5	8·70	0·81	8·60	0·80	Calm	Calm : SE	0·10	0·00	88	10, f	: f	: 0, f, m, h	1, cu, h	: 1, slt.-f	: 0, m
6	7·00	0·65	0·00	0·00	Calm : SW	SW : Calm	0·20	0·00	131	0	: 6, f	: 0, f, m, h	0, m, h	: 2, m, f	: 0, f
7	3·80	0·35	3·80	0·35	Calm	NE : Calm	0·10	0·00	105	0, f	: 0, f	: 1, s.-cu, f, h	1, s.-cu, f, h	: 1, f	: 2, f
8	5·60	0·50	5·30	0·47	Calm : NNE	NE : ENE	0·60	0·04	160	10, f	: 10, f	: 0, slt.-f	7	: 2	: 10
9	8·10	0·72	8·10	0·72	NE : ENE	ENE	1·10	0·07	229	p.-cl	: 9	: 3	0	: 0, d, m	
10	5·40	0·48	5·40	0·48	Calm	ENE : Calm	0·20	0·01	124	0, f	: 10, f	: f, m, slt.-h	0, m, slt.-h	: 0, slt.-f	: 0, f
11	2·20	0·19	2·20	0·19	Calm : NNE : N	NNE : NE	0·90	0·05	189	10, f	: 10, f	: 10, slt.-f	7, cu, ci	: 1, d	: 10, d
12	0·00	0·00	0·00	0·00	NNE	NNE	0·60	0·07	212	10	: 10, n		10, n	: 10, n, slt.-m.-r	
13	0·00	0·00	0·00	0·00	NNW	Calm	0·20	0·00	130	10, m.-r	: 10, n, oc.-m.-r		10, oc.-th.-cl	: 9, th.-f	: 10, f
14	0·00	0·00	0·00	0·00	Calm : NNE	NNE : N	0·90	0·06	196	10, f, sh	: 10, f	: 10, m	10, n, cu	: 10	: 10
15	0·30	0·03	0·30	0·03	N : NNE	NE : Calm	0·60	0·04	174	10	: 9	: 7, n, s.-cu	7, s.-cu, cu.-n	: 10, slt.-sh	: 9
16	1·50	0·13	1·40	0·12	Calm : W	WNW : SW	0·20	0·02	177	10	: 9, d	: 10, cu, n	8, n, cu	: 9	: 9
17	9·60	0·82	9·60	0·82	SW : WSW : W	WSW : WNW : W	3·80	0·30	431	10	: 10	: 9, cu, s, n, w	9, cu, n, s, w	: 8	: 0
18	5·10	0·43	4·20	0·36	SW : WSW	WSW : SW	0·70	0·04	248	0, d	: 1	: 8, s.-cu	8, s.-cu	: 8	: p.-cl
19	5·70	0·49	5·50	0·47	SW	SW	2·00	0·10	310	7, d	: 9, slt.-sh	: 8, s.-cu, n, slt.-sh	9, n, s, cu, slt.-shs, slt.-r	: 9, slt.-sh	
20	3·10	0·27	1·00	0·09	SW : Calm : NNW	Calm	0·10	0·00	135	3, d	: 6, m	: 9, th.-cl, ci, p.-so.-ha	9, th.-cl, ci.-s, p.-so.-ha	: 10, th.-cl, f	: 8, th.-cl, f
21	4·20	0·36	3·40	0·29	Calm : E	E : Calm : SE	0·20	0·00	131	10	: 7	: 9, s.-cu, slt.-r	9, sh	: 10	: 5, slt.-sh
22	7·30	0·61	7·20	0·60	SSE : SE : ESE	ESE : SSW	1·30	0·15	276	10, r, slt.-r	: 10, r	: 10, s, fq.-slt.-r	10, n, s, r, slt.-r	: 10, r	: 1
23	6·50	0·54	6·50	0·54	SW : W : NNW	NW	3·40	0·45	417	3	: 9, oc.-m.-r	: 10, s.-cu, oc.-m.-r, w	10, s.-cu, n, oc.-m.-r, sh, w	: 10, w	: 6
24	3·90	0·32	3·50	0·29	Calm : SW	S : SSW	0·80	0·03	202	0, d	: 1, m	: p.-cl, h, th.-s.-cu, ci.-s	8, th.-cl, ci.-s, s.-cu	: 0	: 10, slt.-sh
25	0·90	0·08	0·70	0·06	SSW : SW	SSW : SW	4·90	0·72	483	10	: 10, oc.-m.-r	: 10, n, cu, w	10, n, s.-cu, w	: 10, w	: 10, w
26	0·00	0·00	0·00	0·00	SSW : SW	SSW : SW	6·00	0·01	536	10, slt.-sh, w	: 10, w, slt.-sh, oc.-m.-r	: 10, n, w	10, n, oc.-m.-r, w	: 10, m.-r, r, w	: 10, w
27	0·80	0·07	0·40	0·04	SSW : SW	SW	11·80	1·38	560	10, slt.-sh, m.-r, w	: 10, w	: 10, n, St.-w	10, n, m.-r, w	: 10, r, w	: 10, r
28	8·80	0·73	7·90	0·66	SW : SSW	SSW : SW	16·60	1·28	511	9	: 10, slt.-r	: 10, n, fq.-m.-r	9, ci.-s, fr.-cu, w	: 9, th.-cl, oc.-slt.-m.-r, w, st.-w	: v.-cl,
29	4·10	0·32	2·90	0·23	SW	SW : SSW : S	10·00	1·00	477	p.-cl, st.-w	: 0, w	: p.-cl, th.-cl, ci.-s, w	9, th.-cl, so.-ha	: 10, th.-cl, s, n, sh	: 10 [st.-w, g
30	0·80	0·07	0·50	0·04	SSE : S : SSW	S	1·70	0·20	296	7	: 6	: 9, s.-cu, n, fq.-th.-cl, slt.-sh	9, s, n, ci.-s, s.-cu, fq.-th.-cl	: 10	: 10
31	12·30	0·99	11·90	0·95	SSW	SW : NNW : Calm	3·70	0·09	229	10, r	: 10, r	: 10, fq.-slt.-r, r, s.-cu, n	8, cu.-n, s.-cu, hy.-sh, r, slt.-m	: 0, slt.-m	
Means	4·50	0·39	3·90	0·34	...	...	...	0·28	266						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29					30

The mean *Temperature of Evaporation* for the month was 49°·2, being 1°·3 higher than  
 The mean *Temperature of the Dew Point* for the month was 47°·0, being 1°·4 higher than  
 The mean *Degree of Humidity* for the month was 85·6, being 0·7 greater than  
 The mean *Elastic Force of Vapour* for the month was 0·12324, being 0·016 greater than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 6·9.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·200. The maximum daily amount of *Sunshine* was 8·2 hours on October 3.  
 The highest reading of the *Solar Radiation Thermometer* was 117°·3 on October 15; and the lowest reading of the *Terrestrial Radiation Thermometer* was 25°·3 on October 24.  
 The *Proportions of Wind* referred to the cardinal points were N. 6, E. 3, S. 8, W. 7. Seven days were calm.  
 The *Greatest Pressure of the Wind* in the month was 16·6 lbs. on the square foot on October 28. The mean daily *Horizontal Movement of the Air* for the month was 266 miles; the greatest daily value was 560 miles on October 27; and the least daily value was 56 miles on October 4.  
*Rain* (0·1005 or over) fell on 12 days in the month, amounting to 1·258, as measured by gauge No. 6 partly sunk below the ground; being 1·524 less than the average fall for the 65 years, 1841-1905.



MONTH and DAY 1927.	BARO-METER. Mean of 24 Hourly Values (corrected and reduced to 32° Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the Ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of 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.					
Nov. 1	30.076	60.1	38.1	22.0	49.3	+ 2.3	47.6	45.6	3.7	8.1	0.0	87	78.2	29.2	52.6	0.242	mP : wP : wP, ...	1.4	9.7
2	30.064	63.2	54.5	8.7	59.0	+12.2	57.8	56.8	2.2	4.0	0.2	93	76.8	52.7	52.8	0.103	...	0.1	9.6
3	30.045	65.1	54.3	10.8	57.4	+10.8	54.5	52.0	5.4	13.6	2.4	82	93.2	48.9	52.7	0.008	wP : mP, wP	0.8	9.6
4	29.956	60.0	51.0	9.0	54.5	+ 8.1	51.7	49.1	5.4	11.6	1.6	81	99.9	42.5	52.8	0.000	wP : mP, wP	4.0	9.5
5	29.694	52.1	44.2	7.9	49.0	+ 2.9	46.1	42.7	6.3	13.2	3.0	79	84.7	37.1	52.7	0.023	wP : wP : wP, wN	2.0	9.4
6	29.113	49.5	37.5	12.0	44.2	- 1.6	41.7	38.2	6.0	13.0	1.9	80	81.5	28.9	52.7	0.000	wP : wP : mP	2.5	9.4
7	29.110	43.2	34.0	9.2	39.1	- 6.3	37.9	36.0	3.1	5.3	0.3	89	47.2	27.3	52.5	0.004	wP : mP : mP, wP	0.0	9.3
8	29.435	40.0	29.2	10.8	34.8	-10.2	34.4	33.7	1.1	4.2	0.0	96	40.8	24.0	52.3	0.000	mP	0.0	9.2
9	29.337	43.3	34.0	9.3	39.7	- 4.9	36.5	31.3	8.4	15.8	2.8	71	73.7	26.8	52.1	0.000	wP, mP : mP : mP	2.0	9.2
10	29.361	40.9	30.0	10.9	36.4	- 7.9	33.5	28.4	8.0	12.2	3.9	71	51.1	22.1	51.9	0.000	mP	0.1	9.2
11	29.551	41.1	32.3	8.8	36.1	- 7.9	33.1	27.6	8.5	13.2	6.9	70	66.3	25.1	51.4	0.000	wP, mP : mP : mP	4.3	9.1
12	29.813	45.7	31.0	14.7	37.2	- 6.5	35.6	32.9	4.3	10.2	2.6	85	71.0	23.9	51.0	0.008	wP, mP : mP, v : mP	4.1	9.0
13	30.105	42.9	32.4	10.5	36.4	- 7.1	34.5	31.3	5.1	12.0	0.9	81	67.1	21.2	50.7	0.001	mP	1.7	9.0
14	30.031	46.2	35.6	10.6	41.9	- 1.4	40.1	37.4	4.5	7.7	1.1	84	59.1	30.0	50.4	0.009	wP, mP : mP : mP	0.1	8.9
15	29.983	52.0	40.5	11.5	45.4	+ 2.3	43.4	40.9	4.5	8.6	1.6	84	63.1	33.3	50.1	0.013	wP, mP : mP : mP	0.1	8.9
16	30.013	53.0	40.5	12.5	46.6	+ 3.8	45.0	43.1	3.5	6.6	0.6	87	64.0	28.2	50.0	0.000	wP, mP : mP : mP	1.2	8.8
17	29.891	49.1	37.5	11.6	43.0	+ 0.4	41.7	39.9	3.1	8.5	0.3	89	70.8	26.5	49.8	0.000	wP, mP : mP : mP, wP	1.5	8.8
18	29.552	50.0	39.4	10.6	45.1	+ 2.7	42.9	39.9	5.2	9.3	2.4	83	69.7	36.4	49.5	0.001	wP	0.3	8.7
19	29.400	48.0	44.5	3.5	46.0	+ 3.7	45.3	44.4	1.6	3.5	1.1	95	49.1	39.6	49.4	0.092	wP, wN : wN, wP : v, wP	0.0	8.7
20	29.372	47.1	41.1	6.0	44.3	+ 2.1	43.5	42.6	1.7	4.4	0.6	93	50.9	32.4	49.6	0.554	wP, mP : wP, wN : wN, wP	0.0	8.6
21	29.399	46.9	42.9	4.0	44.9	+ 2.8	44.1	43.3	1.6	3.9	0.2	93	47.0	41.3	49.3	0.049	wP : wP : wP, mN	0.0	8.6
22	29.701	47.2	37.8	9.4	44.1	+ 2.0	43.7	43.3	0.8	2.7	0.0	97	54.5	28.1	49.2	0.005*	wP, mP : mP, wP : wP	0.0	8.5
23	29.741	48.6	35.7	12.9	38.4	- 3.6	37.7	36.5	1.9	2.4	0.8	93	41.9	36.1	49.0	0.000	wP, ... : ..., wP : wP	0.0	8.5
24	29.749	53.4	42.5	10.9	49.3	+ 7.3	47.7	45.9	3.4	6.5	1.2	88	58.0	34.7	49.1	0.099	wP : wP : mP	0.0	8.4
25	30.222	47.9	35.0	12.9	40.6	- 1.3	39.3	37.4	3.2	7.2	0.8	88	57.6	25.7	49.0	0.003*	wP, mP : mP	2.3	8.4
26	30.305	44.0	28.8	15.2	36.7	- 5.1	36.1	35.1	1.6	2.6	0.0	94	51.0	21.0	48.9	0.008*	mP : mP, wP : wP, mP	0.2	8.3
27	30.097	42.2	36.3	5.9	38.4	- 3.3	38.1	37.6	0.8	1.6	0.3	97	40.8	36.9	48.8	0.000	wP, mP	0.0	8.3
28	30.145	47.1	39.7	7.4	42.2	+ 0.7	41.6	40.9	1.3	3.3	0.3	95	43.9	29.1	48.6	0.000	mP, wP : mP, wP : wP	0.0	8.3
29	29.998	47.1	42.8	4.3	45.1	+ 3.9	44.3	48.5	1.6	3.2	0.6	94	48.2	41.8	48.5	1.002	wP, wN : wN : wN, wP	0.0	8.2
30	30.161	43.4	40.2	3.2	42.1	+ 1.1	41.0	39.5	2.6	5.8	1.1	91	43.4	39.9	48.2	0.018	wP : wP : wP, mP	0.0	8.2
Means	29.781	48.7	38.8	9.9	43.6	+ 0.1	42.0	39.9	3.7	7.5	1.3	87.0	61.5	32.4	50.5	2.242	...	1.0	8.9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

The mean reading of the Barometer (Column 1) and the mean temperatures of the Air and Evaporation (Columns 5 and 7) are deduced from the photographic records. The average temperature (Column 6) is deduced from the 65 years' observations, 1841-1905. The temperature of the Dew Point (Column 8) and the Degree of Humidity (Column 12) are deduced from the corresponding temperatures of the Air and Evaporation by means of Hygrometric Tables issued by the 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 22, 25 and 26, are derived from dew, frost or fog.

The mean reading of the *Barometer* for the month was 29<sup>m</sup>.781, being 0<sup>m</sup>.016 *higher* than the average for the 65 years, 1841-1905.

**TEMPERATURE OF THE AIR.**

The highest in the month was 65°·1 on November 3; the lowest in the month was 28°·8 on November 26; and the range was 36°·3. The mean of all the highest daily readings in the month was 48°·7, being 0°·3 *lower* than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 38°·8, being 0°·9 *higher* than the average for the 65 years, 1841-1905. The mean of the daily ranges was 9°·9, being 1°·2 *less* than the average for the 65 years, 1841-1905. The mean for the month was 43°·6, being 0°·1 *higher* than the average for the 65 years, 1841-1905.

MONTH and DAY, 1927.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.						CLOUDS AND WEATHER.				
	POLARIS.		δ URSÆ MINORIS.		OSLER'S.			ROBINSON'S.							
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.		Pressure on the Square Foot.		Horizontal Movement of the Air.						
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.		A.M.	P.M.				
Nov. 1	0·10	0·01	0·00	0·00	SSW : S	SSW	4·30	0·21	330	0, hy.-d	0, d	9, th.-cl, ci.-s, fq.-so.-ha	10, th.-cl, s, so.-ha	10, r	10, r, w
2	0·10	0·01	0·00	0·00	SW	SW	3·90	0·38	411	10, r, w	10, w	10, n	10, n	10	10, sh, slt.-r, r
3	3·30	0·27	3·10	0·24	SSW	SW	1·20	0·12	303	9, r	10	10	10, s, ci.-s	10	10
4	3·80	0·31	3·70	0·30	SW : WSW	WSW : W	2·90	0·24	398	8	10	9, s.-cu, n	7, cu	r, s.-cu, ci.-s, hy.-d	10, s.-cu, n
5	2·20	0·17	1·30	0·10	NW : W : WSW	SW : WSW	5·50	0·53	448	10, slt.-shs	7	9, th.-cl	10, n, m.-r, slt.-r	10, n, oc.-th.-cl	10, n, m.-r, r
6	8·30	0·64	7·30	0·56	SW : WSW	SW : SSE	1·00	0·10	288	10	p.-cl, th.-cl, hy.-d	p.-cl, ci.-s, s.-cu	7, fq.-th.-cl, cu, fr.-s, p.-so.-ha, prh	6, th.-cl, slt.-shs	[ 3, ci.-cu, s.-cu, hy.-d
7	6·30	0·48	4·00	0·31	SW : Calm	NNW : Calm : SW	0·10	0·00	167	9, d, slt.-ho.-fr	9, h	9, m, glm, fq.-m.-r	10, s, cu, n, fq.-m.-r, glm	10, th.-cl, slt.-m	10, h, th.-cl, m
8	0·00	0·00	0·00	0·00	Calm : NE	NE	0·90	0·01	175	8, m, f	f	10, f, m	10, m	10, m, slt.-m	
9	10·10	0·77	10·00	0·77	NE : NNE	NNW : NW : WSW	2·80	0·20	349	10	10, slt.-sh	10, th.-cl, h	5, h, th.-cl	2, th.-cl, ho.-fr	6, slt.-f
10	6·70	0·52	6·50	0·50	NW : W : NNW	NNW : NW	2·70	0·23	346	7, ho.-fr	0	7, n, h	6, h, n	10, slt.-sh	10
11	11·10	0·85	11·10	0·85	NW	NW : WNW	2·20	0·36	416	8	1	0, h	1, cu, h	0	0
12	11·70	0·90	11·10	0·85	NW : NNW : N	N	4·00	0·32	359	0	8	p.-cl	7, sh	2	0
13	2·80	0·22	1·90	0·14	N : NNW	N : WNW : WSW	0·60	0·06	208	2	8, slt.-ho.-fr	10, s.-cu, slt.-m, slt.-hl	5, cu	0, m, h, ho.-fr	9, th.-cl, tk.-h, m, slt.-sh
14	1·00	0·08	1·00	0·08	WSW : NNW	NW : WSW	0·50	0·03	216	10	10, sh	10, cu.-n, s, fq.-m.-r	10, fr.-cu, cu.-n, oc.-m.-r	10, slt.-sh	10
15	1·40	0·11	0·60	0·05	SW : WSW	W : SW	0·30	0·03	236	10 sh	10, m.-r	10, s.-cu, cu.-n, fq.-th.-cl	10, s.-cu, n, fq.-th.-cl	9, th.-cl	10, s.-cu, n, slt.-r
16	8·70	0·67	8·60	0·66	SW	SW : SSW	0·20	0·02	221	10	9	6, s.-cu	9	1	p.-cl, d
17	1·50	0·12	1·50	0·12	SSW : Calm : SSE	SE : ESE	1·50	0·09	206	9	5, tk.-m	6, ci.-s, fr.-cu, tk.-m	9, fq.-th.-cl, p.-so.-ha	9, th.-cl	10
18	0·00	0·00	0·00	0·00	ESE	ESE : E	1·50	0·18	285	10	10	9, s.-cu, fr.-cu	9, th.-cl	10, oc.-slt.-r	10, m.-r.-sh
19	5·60	0·42	4·50	0·34	E : ENE	E : ESE	3·10	0·36	328	10, m.-r, sh	10, fq.-m.-r	10, fq.-m.-r	10, m.-r	10, m.-r, r	7, sh
20	0·00	0·00	0·00	0·00	E : ENE	ENE	10·21	0·15	461	3	10, m	10, slt.-m, w	10, s, n, r, w	10, r, w	10, s, n, r, w
21	5·00	0·37	5·00	0·37	ENE	ENE : Calm : SE	5·60	0·63	354	10, w	10, w	10, n, sh, r	10, oc.-slt.-m.-r	10, m.-r	10, m.-r
22	0·00	0·00	0·00	0·00	SE : Calm	ENE	0·50	0·04	182	3	f, hy.-d	10, f, d	10, f, fq.-th.-cl	10, oc.-th.-cl	10, h
23	0·00	0·00	0·00	0·00	NE : Calm	Calm : S	1·20	0·05	174	10, slt.-sh	10, m.-r	10, glm	10, glm	10	10, n, d
24	9·60	0·71	9·60	0·71	S	NNW : NW : W	3·30	0·29	316	10, m.-r, r	10, r, m.-r	10, n, s, oc.-m.-r	10, glm, sh, oc.-m.-r	10	2, d
25	13·51	0·00	13·51	0·00	SW	SW : SSW	0·30	0·01	211	0, d, ho.-fr	0	0, h, m	2, h	0, h	0, h, ho.-fr
26	0·00	0·00	0·00	0·00	Calm	Calm	0·20	0·01	80	0, ho.-fr	f		10, slt.-f	10	10, slt.-f, f
27	0·00	0·00	0·00	0·00	Calm	NW : Calm	0·50	0·01	101	10, f	10, f	10, f, glm	10, slt.-f	10, slt.-f	10, f
28	3·00	0·22	3·00	0·22	Calm	SSW : S	1·30	0·05	172	10, slt.-sh	10, slt.-sh, slt.-f	10, slt.-f	10, oc.-slt.-m.-r, slt.-f	1	10
29	0·00	0·00	0·00	0·00	S : SSE : N	NNE : NE : ENE	4·50	0·35	414	10	10, r, m.-r	10, gt.-glm, r	10, r	10, r, fq.-m.-r, w	10, m.-r, r, w
30	0·00	0·00	0·00	0·00	NE : ENE	E : ENE	2·60	0·18	288	10, r, slt.-r	10, m.-r	10, w, oc.-m.-r	10, slt.-sh	10, slt.-sh, m.-r	10, m.-r
Means	3·90	0·30	3·60	0·27	...	...	...	0·21	281						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29					30

The mean *Temperature of Evaporation* for the month was 42°·0, being 0°·1 higher than  
 The mean *Temperature of the Dew Point* for the month was 39°·9, being 0°·2 higher than  
 The mean *Degree of Humidity* for the month was 87·0, being 0·4 greater than  
 The mean *Elastic Force of Vapour* for the month was 0<sup>in</sup>·247, being 0<sup>in</sup>·001 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 8·0.

The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·108. The maximum daily amount of *Sunshine* was 4·3 hours on November 11.

The highest reading of the *Solar Radiation Thermometer* was 99°·9 on November 4; and the lowest reading of the *Terrestrial Radiation Thermometer* was 21°·0 on November 26.

The *Proportions of Wind* referred to the cardinal points were N. 5, E. 5, S. 8, W. 8. Four days were calm.

The *Greatest Pressure of the Wind* in the month was 10·2 lbs. on the square foot on November 20. The mean daily *Horizontal Movement of the Air* for the month was 281 miles; the greatest daily value was 461 miles on November 20; and the least daily value was 80 miles on November 26.

*Rain* (0<sup>in</sup>·005 or over) fell on 15 days in the month, amounting to 2<sup>in</sup>·242, as measured by gauge No. 6 partly sunk below the ground; being 0<sup>in</sup>·022 greater than the average fall for the 65 years, 1841-1905.

MONTH and DAY, 1927.	BARO-METER. Mean of 24 Hourly Values (corrected to 32° and reduced to Fahrenheit).	TEMPERATURE.							Difference between the Air Temperature and Dew Point Temperature.			Degree of Humidity (Saturation = 100).	TEMPERATURE.			Rain collected in Gauge No. 6, whose receiving surface is 5 inches above the ground.	Electricity.	Daily Duration of Sunshine.	Sun above Horizon.
		Of the Air.					Of Evaporation.	Of the Dew Point.	Of Radiation.		Of the Earth 4 ft. below the Surface of the Soil.								
		Highest.	Lowest.	Daily Range.	Mean of 24 Hourly Values.	Excess above Average of 65 Years.	Mean of 24 Hourly Values.	Deducted Mean Daily Value.	Mean.	Greatest.	Least.		Highest in Sun's Rays.	Lowest on the Grass.	Of the Earth 4 ft. below the Surface of the Soil.				
Dec. 1	30.074	43.0	39.0	4.0	40.6	-0.3	38.6	35.6	5.0	6.3	3.7	82	41.5	37.8	48.1	0.000	wP : mP : mP	0.0	8.1
2	30.040	39.6	37.9	1.7	38.9	-2.0	37.3	35.0	3.9	6.1	2.0	85	40.9	36.7	48.0	0.000	wP, mP : mP : mP, wP	0.0	8.1
3	29.904	37.9	33.2	4.7	36.1	-5.0	34.8	32.5	3.6	6.1	1.6	87	40.0	33.0	48.0	0.002	wP	0.0	8.1
4	29.700	39.0	33.5	5.5	36.3	-5.0	36.0	35.5	0.8	2.7	0.0	97	39.0	33.3	47.9	0.008	wP	0.0	8.1
5	29.547	46.2	39.0	7.2	41.1	-0.4	40.3	39.2	1.9	4.7	0.8	93	62.6	35.1	47.8	0.000	mP, wP : wP : wP	1.8	8.0
6	29.449	54.0	39.9	14.1	46.4	+4.9	45.0	43.4	3.0	8.7	0.8	89	84.2	29.4	47.7	0.003*	wP : wP : mP	5.5	8.0
7	29.627	44.6	39.9	4.7	41.7	+0.4	40.9	39.9	1.8	3.3	0.2	93	51.0	31.2	47.5	0.000	mP : mP : mP, wP	0.0	8.0
8	29.722	40.8	37.8	3.0	40.1	-0.9	39.2	37.7	2.4	3.3	1.1	92	40.3	36.2	47.5	0.000	mP	0.0	8.0
9	29.761	46.8	37.6	9.2	41.9	+1.3	40.9	39.6	2.3	3.7	1.1	91	58.0	35.9	47.2	0.000	mP, wP	0.0	7.9
10	29.858	44.9	38.0	6.9	42.6	+2.2	41.5	40.0	2.6	8.0	0.8	91	51.1	37.0	47.3	0.015	wP : mP, wP : wP	0.0	7.9
11	29.776	38.1	35.2	2.9	37.4	-2.8	35.3	31.8	5.6	8.0	4.0	80	42.0	35.1	47.1	0.000	wP	0.0	7.9
12	29.629	37.6	35.7	1.9	36.8	-3.5	34.6	31.0	5.8	8.2	5.1	78	40.1	35.1	47.1	0.000	wP : mP	0.0	7.9
13	29.635	38.1	35.0	3.1	36.8	-3.7	34.5	30.5	6.3	9.9	4.8	77	41.0	34.3	47.0	0.000	wP, mP : sP, mP : mP, wP	0.0	7.8
14	29.477	37.7	33.7	4.0	35.9	-4.8	35.1	33.7	2.2	6.3	0.8	92	44.5	33.9	47.0	0.245	wP : wN, wP : wP, v	0.0	7.8
15	29.731	37.9	31.9	6.0	34.7	-6.1	33.2	30.7	4.0	9.5	1.3	84	42.9	25.7	46.8	0.166	v : wP : mP	0.0	7.8
16	30.197	32.4	20.8	11.6	28.4	-12.3	27.4	24.8	3.6	6.8	0.0	86	46.0	10.0	46.5	0.000	mP : mP : sP, mP	0.9	7.8
17	30.304	31.9	22.8	9.1	27.0	-13.4	25.6	21.4	5.6	9.6	1.4	80	64.0	13.4	46.2	0.000	mP : mP, wP : mP, wP	4.1	7.8
18	30.310	29.6	21.8	7.8	25.9	-14.1	23.9	17.9	8.0	13.6	3.0	72	53.5	12.4	46.1	0.000	wP : mP	1.2	7.8
19	30.066	29.7	18.5	11.2	25.2	-14.3	23.3	17.6	7.6	10.0	2.7	72	53.4	12.0	45.6	0.000	wP : mP : mP, wP	4.7	7.8
20	29.795	28.8	21.5	7.3	25.0	-14.0	23.4	18.6	6.4	11.9	2.6	75	59.6	17.0	45.3	0.000	wP : wP : mP, wP	5.8	7.8
21	29.412	47.3	26.1	21.2	40.0	+1.3	39.7	39.2	0.8	3.2	0.2	97	52.7	26.1	45.0	0.185	wP, v : wP : wP	0.0	7.8
22	28.711	54.2	42.3	11.9	49.1	+10.7	48.4	47.7	1.4	3.7	0.4	95	59.5	40.6	45.0	0.511	wP	0.0	7.7
23	28.720	49.5	42.8	6.7	47.5	+9.3	47.0	46.4	1.1	2.5	0.8	96	50.0	41.7	44.7	0.313	wP : wP, mP : mP, v	0.0	7.8
24	29.104	46.2	40.9	5.3	43.1	+4.9	42.9	42.6	0.5	1.7	0.0	98	56.0	32.5	44.6	0.092	v, wP : mP : mP	0.0	7.8
25	29.030	45.1	32.0	13.1	40.1	+1.7	39.7	39.0	1.1	2.1	0.2	96	48.2	31.4	44.7	0.981	wP : sN, v : v	0.0	7.8
26	29.320	34.7	32.1	2.6	33.2	-5.4	32.5	31.5	1.7	6.4	0.6	92	37.1	31.5	44.7	0.498	wP, wN : wP : wP	0.0	7.8
27	29.971	36.0	28.9	7.1	33.1	-5.7	31.3	27.9	5.2	10.6	0.6	81	43.0	24.6	44.9	0.114	wP : wP, mP : mP	0.0	7.8
28	30.298	34.6	28.2	6.4	31.6	-7.3	29.1	23.6	8.0	12.5	5.0	73	65.3	23.2	44.7	0.000	wP, mP : mP : mP, wP	6.4	7.8
29	30.100	32.4	28.7	3.7	30.7	-8.3	28.0	21.9	8.8	10.7	5.8	69	56.6	24.2	44.2	0.000	wP	3.2	7.8
30	29.983	31.0	20.5	10.5	26.7	-12.2	25.2	20.7	6.0	5.5	0.0	79	52.2	14.6	44.1	0.000	wP : mP	4.3	7.8
31	29.977	33.3	19.4	13.9	27.3	-11.4	26.5	24.1	3.2	5.6	0.8	88	51.0	15.8	44.0	0.263	mP, wP : wP : v, wP	0.2	7.8
Means	29.717	39.4	32.1	7.4	36.2	-3.7	34.9	32.3	3.9	6.8	1.7	85.8	50.6	28.4	46.2	3.396	...	1.2	7.9
Number of Column for Reference.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

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

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

The mean reading of the Barometer for the month was 29.717, being 0.075 lower than the average for the 65 years, 1841-1905.

TEMPERATURE OF THE AIR.

The highest in the month was 54.2 on December 22; the lowest in the month was 18.5 on December 19; and the range was 35.7. The mean of all the highest daily readings in the month was 39.4, being 4.8 lower than the average for the 65 years, 1841-1905. The mean of all the lowest daily readings in the month was 32.1, being 2.9 lower than the average for the 65 years, 1841-1905. The mean of the daily ranges was 7.4, being 1.8 less than the average for the 65 years, 1841-1905. The mean for the month was 36.2, being 3.7 lower than the average for the 65 years, 1841-1905.

MONTH and DAY, 1927.	RECORD OF THE NIGHT SKY.				WIND AS DEDUCED FROM SELF-REGISTERING ANEMOMETERS.							CLOUDS AND WEATHER.			
	POLARIS.		δURSÆ MINORIS.		OSLER'S.					ROBINSON'S.		A.M.		P.M.	
	Duration.	Fraction of Total Exposure.	Duration.	Fraction of Total Exposure.	General Direction.			Pressure on the Square Foot.		Horizontal Movement of the Air.					
					A.M.	P.M.	Greatest.	Mean of 24 Hourly Measures.							
hours.		hours.				lbs.	lbs	miles.							
Dec. 1	0·0	0·00	0·0	0·00	ENE : NE	NE : ENE	0·6	0·08	241	IO, slt.-sh	: IO, n	IO, n	: IO		
2	0·0	0·00	0·0	0·00	NE	NE : ENE	0·2	0·03	216	IO	: IO, oc.-slt.-m.-r	IO, oc.-slt.-m.-r	: IO, oc.-slt.-m.-r		
3	0·0	0·00	0·0	0·00	NE : ENE : Calm	Calm : ESE	0·1	0·00	118	IO	: IO, n, oc.-m.-r, m.-r	IO, n, oc.-slt.-m.-r	: IO, oc.-slt.-m.-r		
4	0·0	0·00	0·0	0·00	ESE : Calm	Calm	0·2	0·00	115	IO, slt.-m.-r	: IO, slt.-m : IO, n, slt.-m.-r, slt.-f	IO, slt.-m.-r, slt.-f, slt.-m	: IO, m, slt.-f		
5	12·1	0·89	11·7	0·87	Calm : SE	SE : SSE	1·7	0·11	210	IO	: IO : 7, s.-cu, n, ci.-s	2, ci.-s, ci.-cu	: p.-cl, th.-cl	: 1, d, p.-lu.-ha	
6	6·3	0·46	5·6	0·41	SSE : SE	SE : ESE : Calm	1·0	0·12	221	1, d	: 1, d : p.-cl	1	: 0, m : 2, m, d		
7	0·0	0·00	0·0	0·00	Calm : ENE	NNE	0·7	0·03	182	IO	: IO, f : IO, f, slt.-f	IO, m, slt.-f	: IO, m : IO, slt.-m		
8	0·0	0·00	0·0	0·00	N	Calm	0·4	0·04	156	IO, slt.-m	: IO, slt.-m : IO, slt.-m, m	IO, m, slt.-glm, slt.-sh	: IO, slt.-m : IO, m, slt.-m.-r		
9	0·0	0·00	0·0	0·00	Calm	Calm	0·0	0·00	111	IO	: IO : IO, fq.-th.-cl	IO, s.-cu, n	: IO : IO, oc.-th.-cl, slt.-sh		
10	0·0	0·00	0·0	0·00	SE : Calm	E : ESE	2·2	0·10	222	IO, sh	: IO : IO, s.-cu, n	IO, s, n	: IO, s		
11	0·0	0·00	0·0	0·00	E : ESE	ENE	5·0	0·80	454	IO	: IO, s.-cu, oc.-th.-cl	IO, cu, n, w	: IO : IO, n		
12	0·0	0·00	0·0	0·00	ENE	NE	6·4	0·81	503	IO, w	: IO, s, n, w	IO, n, w	: IO : IO		
13	0·0	0·00	0·0	0·00	NE : NNE	Calm	0·8	0·03	148	IO	: IO, s, n	IO, s, n, glm	: IO : IO		
14	0·0	0·00	0·0	0·00	Calm : SSE	SE : ESE : E	1·3	0·07	214	IO, m.-r	: IO, m.-r : IO, slt.-r, r	IO, slt.-r, r	: IO, r, oc.-sl	: IO, r	
15	7·5	0·55	6·8	0·50	E : ENE	ENE : NE	1·9	0·15	301	IO, r	: IO, sl : IO, n, s.-cu	IO, s.-cu, n, slt.-sn.-sh	: IO : p.-cl, ho.-fr		
16	8·2	0·60	6·8	0·50	NE	SSE : Calm	0·2	0·00	...	3	: 9, slt.-sn.-sh, ho.-fr : 7, cu.-n, m, h	IO, m, h, fq.-slt.-sn	: 1, ho.-fr : 9, slt.-m, ho.-fr		
17	1·5	0·11	1·3	0·09	NNW : NE : SE	Calm	0·7	0·01	...	6	: 1, ho.-fr : 7, s.-cu, ci.-s, ci.-cu, slt.-sn	p.-cl, ci.-s, cu	: 3 : IO, cu, n, slt.-sn.-sh		
18	6·8	0·49	6·8	0·49	Calm	Calm	0·0	0·00	...	IO, slt.-sn.-sh	: IO : 6, th.-cl, cu, slt.-f	9, slt.-f	: 3, slt.-f : 9, sn.-sh		
19	1·5	0·10	1·1	0·08	E : ESE	E	1·5	0·11	...	2	: 0 : 1, s.-cu	8, slt.-sn	: IO : IO		
20	3·1	0·22	3·1	0·22	E : ESE	ESE : E	1·0	0·07	212	9	: 6 : 2, ci.-s	2, ci.-s	: 5 : IO		
21	0·0	0·00	0·0	0·00	ESE : SE : S	SSW : SSE	0·8	0·08	258	IO, r	: IO, r, slt.-f : IO, oc.-th.-cl, r, slt.-r, slt.-f	IO, s, oc.-m.-r, slt.-f	: IO : IO		
22	0·0	0·00	0·0	0·00	SE : S : SSW	S : SSW	6·0	0·71	478	IO, r	: IO, r, w : IO, n, s.-cu, fq.-shs	IO, n, s.-cu, fq.-shs, w	: IO, slt.-m.-r, w : IO, m.-r, r, w		
23	0·0	0·00	0·0	0·00	SW : WSW	WNW : N : Calm	1·7	0·13	276	IO, r	: IO, r : IO, n, fq.-r, m	IO, slt.-r, r	: IO, r, m		
24	1·7	0·12	1·6	0·12	Calm	Calm : S	0·3	0·01	134	IO, r, m	: IO, m, tk.-m : IO, tk.-m, m, sh	IO, m, oc.-th.-cl	: 9, slt.-sh : 9		
25	0·0	0·00	0·0	0·00	Calm : ENE	NE : NNE	2·8	0·27	365	IO, sh	: IO, r, m : IO, r, m.-r	IO, r, w	: IO, r, w : IO, w, sn		
26	0·0	0·00	0·0	0·00	NNE	NNE	7·3	1·36	770	IO, sn, sl, w	: IO, sn, w : IO, sn, slt.-sn, w	IO, slt.-sn, st.-w	: IO, slt.-sn, st.-w : IO, slt.-sn, st.-w		
27	...	...	...	...	NE : NNE	NE	9·0	1·27	604	IO, sl, sn, st.-w, w	: IO, sl, sn, w : IO, cu.-s, n, w	IO	: 9 : I		
28	11·9	0·85	11·6	0·83	NE : ENE	ENE	10·1	1·51	613	0, w	: 0, w : 0, w, st.-w	0, st.-w	: 0, st.-w : 0, w		
29	13·8	0·99	13·8	0·98	ENE	ENE : E	6·9	1·33	510	0, w	: 9, w : 7, cu, w	5, cu.-s, w	: 2 : 0		
30	9·5	0·68	8·4	0·60	E : ENE	ENE : Calm	0·9	0·05	166	0	: 1, ho.-fr, slt.-m : 1, ci, slt.-m	6, th.-cl, ci.-s, slt.-m	: 0, m : 3, ho.-fr, slt.-f		
31	0·0	0·00	0·0	0·00	Calm	SE : ENE	0·3	0·01	130	5, h, ho.-fr	: 2, h, f, ho.-fr : 8, s.-cu, h, slt.-sn.-sh	IO	: IO, slt.-sn, sn, sl, r : IO, r, sl		
Means	2·8	0·20	2·6	0·19	...	...	...	0·30	294						
Number of Column for Reference.	20	21	22	23	24	25	26	27	28	29	30				

The mean *Temperature of Evaporation* for the month was 34°·9, being 3°·6 lower than  
 The mean *Temperature of the Dew Point* for the month was 32°·3, being 4°·1 lower than  
 The mean *Degree of Humidity* for the month was 85·8, being 1·7 less than  
 The mean *Elastic Force of Vapour* for the month was 0·1183, being 0·0033 less than  
 The mean amount of *Cloud* for the month (a clear sky being represented by 0 and an overcast sky by 10) was 8·1.  
 The mean proportion of *Sunshine* for the month (constant sunshine being represented by 1) was 0·156. The maximum daily amount of *Sunshine* was 6·4 hours on December 28.  
 The highest reading of the *Solar Radiation Thermometer* was 84°·2 on December 6; and the lowest reading of the *Terrestrial Radiation Thermometer* was 10°·0 on December 16.  
 The *Proportions of Wind* referred to the cardinal points were N. 5, E. 13, S. 5, W. 0. Eight days were calm.  
 The *Greatest Pressure of the Wind* in the month was 10·1 lbs. on the square foot on December 28. The mean daily *Horizontal Movement of the Air* for the month was 294 miles; the greatest daily value was 770 miles on December 26; and the least daily value was 111 miles on December 9.  
*Rain* (0·1005 or over) fell on 12 days in the month, amounting to 3·11396, as measured by gauge No. 6 partly sunk below the ground; being 1·1569 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, 1927.	Reading.	Greenwich Mean Time, 1927.	Reading.	Greenwich Mean Time, 1927.	Reading.	Greenwich Mean Time, 1927.	Reading.	Greenwich Mean Time, 1927.	Reading.	Greenwich Mean Time, 1927.	Reading.
<b>January.</b>		<b>January.</b>		<b>April.</b>		<b>April.</b>		<b>August.</b>		<b>August.</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. 9. 0	30.110	3. 14. 25	29.562	18. 9. 0	30.173	23. 3. 55	29.556	26. 9. 20	30.069	28. 15. 0	29.884
5. 2. 30	30.234	7. 9. 0	29.552	23. 21. 0	29.754	25. 15. 40	29.207	30. 12. 35	30.125		
8. 11. 10	30.119	8. 21. 0	29.988	28. 8. 30	29.965	29. 12. 0	29.801			<b>September.</b>	
10. 21. 55	30.319	14. 5. 0	28.944	<b>May.</b>		<b>May.</b>		<b>September.</b>		<b>September.</b>	
16. 10. 25	29.324	17. 13. 35	29.198								
19. 11. 0	29.844	22. 14. 20	29.376	1. 8. 0	30.033	4. 16. 5	29.562	2. 21. 30	30.082	1. 5. 0	29.950
24. 10. 30	29.797	25. 6. 0	29.676	7. 7. 20	30.083	9. 15. 0	29.899	7. 23. 20	29.983	6. 18. 0	29.678
25. 23. 10	29.911	26. 14. 40	29.550	11. 8. 0	30.266	12. 15. 35	29.939	9. 21. 0	29.698	9. 3. 20	29.590
27. 23. 10	30.013	29. 6. 30	29.062	13. 8. 15	30.071	16. 15. 0	29.640	12. 22. 0	29.917	10. 18. 0	29.442
29. 21. 45	29.310	30. 17. 20	29.123	18. 8. 20	30.086	21. 15. 0	29.593	17. 20. 35	29.574	17. 7. 50	29.355
<b>February.</b>		<b>February.</b>		23. 23. 50	30.145	<b>June.</b>		18. 20. 20	29.594	19. 7. 50	29.451
				<b>June.</b>		<b>June.</b>		20. 10. 55	29.733	22. 12. 35	29.124
5. 3. 0	30.310	5. 21. 30	30.019			1. 11. 35	29.457	23. 8. 10	29.226	23. 21. 55	28.675
7. 1. 35	30.369	9. 16. 0	30.266	3. 22. 20	29.931	6. 0. 40	29.491	28. 9. 0	30.073	29. 15. 10	29.500
10. 10. 20	30.381	12. 15. 0	30.119	6. 21. 0	29.836	8. 1. 55	29.630	30. 22. 0	29.861	<b>October.</b>	
14. 21. 15	30.393	18. 15. 10	30.022	9. 12. 0	29.914	11. 3. 10	29.731	<b>October.</b>		1. 18. 30	29.572
19. 10. 25	30.163	23. 3. 15	29.020	15. 14. 5	30.052	17. 15. 45	29.526	2. 6. 10	29.655	2. 15. 10	29.557
23. 21. 30	29.203	24. 12. 0	29.003	18. 7. 55	29.709	19. 0. 40	29.185	5. 23. 0	30.317	7. 15. 0	30.183
25. 1. 30	29.304	25. 14. 20	29.078	20. 21. 40	30.001	21. 11. 35	29.884	9. 10. 30	30.281	14. 5. 0	29.773
26. 10. 0	29.432	27. 6. 30	29.072	22. 11. 0	30.076	24. 12. 30	29.482	15. 10. 0	29.876	17. 15. 45	29.603
27. 23. 0	29.433	28. 17. 55	29.100	25. 7. 45	29.815	26. 8. 0	29.248	18. 9. 0	29.755	19. 16. 0	29.644
<b>March.</b>		<b>March.</b>		28. 9. 0	29.725	<b>July.</b>		21. 0. 0	29.952	23. 0. 0	28.987
				<b>July.</b>		<b>July.</b>		24. 11. 30	29.786	27. 15. 40	29.631
2. 11. 20	29.609	2. 20. 5	29.396			1. 10. 25	29.128	28. 1. 20	29.751	28. 18. 30	29.506
3. 19. 0	29.727	5. 18. 30	29.008	3. 9. 5	29.659	5. 7. 0	29.443	29. 18. 20	29.925	31. 5. 0	29.650
6. 19. 10	29.294	7. 8. 0	29.037	6. 7. 55	29.779	7. 2. 50	29.542	<b>November.</b>		<b>November.</b>	
12. 21. 0	29.983	13. 16. 0	29.825	8. 8. 20	29.678	9. 14. 30	29.383	1. 11. 0	30.129	2. 2. 50	29.967
15. 23. 45	30.229	17. 4. 20	29.898	15. 21. 5	30.061	17. 17. 0	29.898	2. 20. 40	30.150	7. 1. 30	28.974
19. 11. 0	30.251	23. 17. 0	29.055	19. 8. 30	30.071	22. 13. 30	29.489	8. 10. 0	29.482	10. 0. 30	29.294
24. 0. 45	29.148	25. 12. 20	28.672	25. 7. 0	29.903	28. 0. 0	29.387	13. 10. 30	30.136	19. 14. 25	29.330
25. 18. 35	28.769	25. 22. 0	28.654	31. 23. 45	29.829	<b>August.</b>		20. 7. 20	29.458	20. 21. 58	29.233
28. 11. 0	29.615	29. 15. 0	29.419	<b>August.</b>		<b>August.</b>		23. 11. 0	29.759	24. 6. 20	29.647
29. 23. 55	29.524	30. 9. 30	29.375			1. 15. 0	29.720	26. 1. 0	30.377	27. 12. 20	30.053
31. 7. 20	29.822			3. 7. 50	30.168	7. 3. 0	29.461	28. 10. 0	30.200	29. 9. 30	29.936
<b>April.</b>		<b>April.</b>		7. 20. 55	29.562	8. 14. 5	29.466	30. 10. 30	30.202	<b>December.</b>	
				11. 23. 0	29.700	12. 17. 20	29.608	<b>December.</b>		<b>December.</b>	
2. 6. 50	29.958	1. 0. 40	29.117	13. 10. 0	29.732	16. 0. 0	29.333	10. 10. 15	29.881	6. 5. 0	29.393
4. 0. 25	29.860	3. 2. 10	29.611	17. 8. 45	29.729	18. 10. 50	29.374	18. 10. 20	30.341	14. 18. 10	29.445
6. 20. 35	29.616	6. 5. 0	29.280	20. 1. 30	29.788	22. 7. 10	29.281	24. 21. 0	29.147	23. 0. 20	28.425
8. 10. 0	29.399	7. 12. 50	29.178	<b>August.</b>		<b>August.</b>		28. 12. 0	30.339	25. 13. 15	28.947
12. 20. 45	30.191	9. 12. 50	29.263							31. 15. 30	29.958
		15. 1. 0	29.512								

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 reading to reduce to sea level.

HIGHEST and LOWEST READINGS of the BAROMETER in each MONTH for the YEAR 1927.

	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 .....	30.319	30.393	30.251	30.191	30.266	30.076	30.071	30.168	30.082	30.317	30.377	30.341
Lowest .....	28.944	29.003	28.654	29.117	29.562	29.185	29.128	29.281	28.675	28.987	28.974	28.425
Range .....	1.375	1.390	1.597	1.074	0.704	0.891	0.843	0.887	1.407	1.330	1.403	1.916

The highest reading in the year was 30in.393 on Feb. 14. The lowest reading in the year was 28in.425 on Dec. 23. The range of reading in the year was 1in.968.

MONTHLY RESULTS OF METEOROLOGICAL ELEMENTS for the YEAR 1927.

MONTH, 1927.	Mean Reading of the Barometer.	TEMPERATURE OF THE AIR.								Mean Temperature of Evaporation.	Mean Temperature of the Dew Point.	Mean Degree of Humidity. (Saturation = 100.)
		Highest.	Lowest.	Range in the Month.	Mean of all the Highest.	Mean of all the Lowest.	Mean of the Daily Ranges.	Monthly Mean.	Excess of Mean above the Average of 65 years.			
January .....	29.638	52.9	24.0	28.9	46.3	35.8	10.5	41.0	+ 2.4	39.2	36.6	84.8
February .....	29.882	56.3	25.0	31.3	46.0	34.6	11.3	40.2	+ 0.7	38.6	36.3	85.9
March .....	29.568	68.1	29.9	38.2	54.2	39.4	14.8	45.6	+ 3.7	42.7	38.7	76.9
April .....	29.761	72.4	28.1	44.3	57.7	39.7	18.0	48.0	+ 0.7	43.7	38.0	69.2
May .....	29.881	76.5	29.9	46.6	65.8	43.5	22.4	53.9	+ 0.9	48.9	43.3	67.5
June .....	29.737	84.9	41.8	43.1	67.9	48.3	19.5	56.6	- 2.8	52.1	47.6	72.2
July .....	29.728	81.2	47.1	34.1	70.8	53.8	16.9	61.0	- 1.6	57.6	54.9	80.6
August .....	29.710	78.0	46.9	31.1	71.7	53.7	18.0	61.1	- 0.5	57.6	54.7	79.8
September .....	29.625	75.8	34.7	41.1	64.3	49.0	15.4	55.8	- 1.5	53.2	50.8	83.6
October .....	29.872	67.0	33.7	33.3	59.2	43.8	15.4	51.2	+ 1.2	49.2	47.0	85.6
November .....	29.781	65.1	28.8	36.3	48.7	38.8	9.9	43.6	+ 0.1	42.0	39.9	87.0
December .....	29.717	54.2	18.5	35.7	39.4	32.1	7.4	36.2	- 3.7	34.9	32.3	85.8
Means.....	29.742	Highest 84.9	Lowest 18.5	Annual Range 66.4	57.7	42.7	15.0	49.5	0.0	46.6	43.3	79.9

MONTH, 1927.	Mean Elastic Force of Vapour.	Mean Tempera- ture at Noon 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 Hours of Prevalence of each Wind referred to different Points of Azimuth.								Number of Calm or nearly Calm Hours.	Mean Daily Pressure on the Square Foot.		
						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.				
January .....	0.218	44.2	7.3	18	1.500	19	10	10	13	140	409	66	26	51	0.37	353	
February .....	0.215	42.6	8.3	13	3.397	45	46	36	25	137	169	22	35	157	0.22	257	
March.....	0.236	44.2	7.5	18	2.064	33	45	21	30	171	286	77	11	70	0.35	337	
April .....	0.230	46.0	7.3	13	1.826	71	11	2	7	55	231	138	119	86	0.27	329	
May .....	0.281	49.2	6.1	8	1.208	88	135	128	36	45	119	38	31	124	0.15	244	
June .....	0.332	52.0	7.9	17	2.023	28	66	58	14	68	230	125	53	78	0.27	298	
July .....	0.435	55.0	8.2	15	2.787	96	86	50	21	135	193	32	30	101	0.20	248	
August .....	0.431	57.5	7.0	19	3.574	21	20	76	28	114	322	50	23	90	0.27	274	
September .....	0.375	57.0	7.6	15	4.066	51	23	32	12	50	296	90	42	124	0.23	273	
October.....	0.324	53.3	6.9	12	1.258	61	64	31	22	96	223	41	36	170	0.28	266	
November .....	0.247	50.5	8.0	15	2.242	56	71	82	43	61	191	46	73	97	0.21	281	
December .....	0.183	46.2	8.1	12	3.396	44	174	170	95	50	18	5	6	182	0.30	294	
Sums .....	...	...	...	175	29.341	613	751	696	346	1122	2687	730	485	1330	...	...	
Means.....	0.292	49.8	7.5	...	...	...	...	...	...	...	...	...	...	...	0.26	288	

The greatest recorded pressure of wind on the square foot in the year was 16.6 lbs. on October 28.  
 The greatest recorded daily horizontal movement of the air in the year was 770 miles on December 26.  
 The least recorded daily horizontal movement of the air in the year was 39 miles on February 13.

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

1927.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Midnight	29.658	29.803	29.578	29.747	29.900	29.739	29.733	29.720	29.632	29.878	29.782	29.723	29.749
1 <sup>h</sup>	29.655	29.801	29.580	29.742	29.895	29.734	29.729	29.715	29.630	29.877	29.779	29.718	29.745
2	29.654	29.888	29.576	29.739	29.890	29.731	29.725	29.709	29.627	29.873	29.776	29.717	29.742
3	29.652	29.880	29.569	29.737	29.885	29.730	29.722	29.704	29.620	29.869	29.774	29.715	29.738
4	29.648	29.876	29.567	29.737	29.882	29.729	29.720	29.700	29.617	29.869	29.773	29.710	29.736
5	29.645	29.875	29.567	29.743	29.885	29.732	29.721	29.701	29.617	29.869	29.774	29.705	29.736
6	29.642	29.877	29.568	29.754	29.890	29.738	29.723	29.705	29.621	29.871	29.774	29.704	29.739
7	29.645	29.880	29.572	29.763	29.893	29.740	29.724	29.708	29.626	29.876	29.779	29.707	29.743
8	29.648	29.888	29.577	29.771	29.895	29.743	29.726	29.712	29.630	29.883	29.788	29.716	29.748
9	29.653	29.891	29.578	29.776	29.890	29.744	29.724	29.714	29.636	29.885	29.793	29.723	29.751
10	29.655	29.895	29.576	29.778	29.889	29.744	29.724	29.711	29.636	29.886	29.797	29.727	29.752
11	29.648	29.896	29.573	29.777	29.885	29.742	29.724	29.709	29.634	29.882	29.792	29.722	29.749
Noon	29.633	29.890	29.570	29.773	29.879	29.741	29.722	29.707	29.631	29.873	29.784	29.716	29.743
13 <sup>h</sup>	29.620	29.883	29.561	29.770	29.876	29.740	29.724	29.705	29.626	29.863	29.776	29.710	29.738
14	29.614	29.873	29.556	29.766	29.870	29.739	29.724	29.704	29.624	29.856	29.772	29.707	29.734
15	29.615	29.867	29.552	29.760	29.862	29.737	29.724	29.701	29.618	29.850	29.771	29.710	29.731
16	29.619	29.868	29.548	29.758	29.859	29.734	29.723	29.702	29.614	29.848	29.772	29.714	29.730
17	29.622	29.870	29.550	29.757	29.859	29.730	29.722	29.701	29.612	29.855	29.776	29.716	29.731
18	29.625	29.875	29.558	29.758	29.860	29.731	29.724	29.705	29.615	29.861	29.782	29.719	29.734
19	29.628	29.877	29.566	29.765	29.866	29.733	29.729	29.711	29.621	29.869	29.783	29.723	29.739
20	29.632	29.881	29.570	29.772	29.874	29.737	29.738	29.723	29.630	29.876	29.785	29.726	29.745
21	29.635	29.884	29.574	29.776	29.883	29.743	29.746	29.728	29.632	29.881	29.786	29.729	29.750
22	29.636	29.888	29.575	29.778	29.886	29.742	29.750	29.727	29.629	29.883	29.784	29.728	29.751
23	29.636	29.888	29.577	29.778	29.886	29.738	29.751	29.727	29.629	29.884	29.784	29.726	29.750
24	29.634	29.888	29.577	29.776	29.885	29.734	29.748	29.725	29.628	29.884	29.784	29.721	29.749
Means (0 <sup>h</sup> .-23 <sup>h</sup> .)	29.638	29.882	29.568	29.761	29.881	29.737	29.728	29.710	29.625	29.872	29.781	29.717	29.742
Means (1 <sup>h</sup> .-24 <sup>h</sup> .)	29.637	29.882	29.568	29.763	29.880	29.737	29.728	29.711	29.625	29.872	29.781	29.717	29.742
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.

1927.

Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	39.9	38.2	42.6	44.4	47.4	52.2	56.7	56.5	53.0	48.5	43.0	35.6	46.5
1 <sup>h</sup>	39.7	37.7	42.5	43.6	46.8	51.4	56.1	56.1	52.4	48.2	42.9	35.4	46.1
2	39.5	37.3	42.2	42.8	46.1	50.4	55.6	55.8	52.1	47.6	42.4	35.2	45.6
3	39.4	37.3	41.8	42.2	45.4	49.8	55.5	55.6	51.7	47.4	41.9	35.0	45.2
4	39.3	37.2	41.5	41.5	45.1	49.4	55.1	55.1	51.5	47.3	41.4	34.9	44.9
5	39.3	37.5	41.6	41.3	45.6	50.1	55.5	55.5	51.0	47.5	41.2	35.1	45.1
6	38.9	37.8	41.7	42.1	47.8	51.7	57.0	56.4	51.3	47.4	40.9	35.2	45.7
7	38.9	38.0	42.2	44.2	51.2	54.1	58.8	58.3	52.8	47.9	40.9	35.2	46.9
8	38.9	38.6	44.2	46.7	54.0	56.3	61.1	60.7	54.8	49.2	41.6	35.3	48.4
9	39.6	39.4	46.7	48.9	56.7	58.3	63.1	62.9	57.0	51.2	43.0	36.0	50.2
10	40.9	40.5	48.6	50.7	58.7	60.2	64.5	64.7	58.6	53.1	44.5	36.8	51.8
11	42.3	42.0	50.1	52.2	60.9	61.6	65.2	66.4	59.9	55.0	45.4	37.7	53.2
Noon	43.6	42.9	50.9	53.3	61.6	62.9	65.8	67.3	61.2	56.1	46.0	38.3	54.2
13 <sup>h</sup>	44.5	43.9	51.6	54.3	62.6	63.3	65.9	67.6	61.7	56.9	46.6	38.6	54.8
14	44.7	44.3	51.5	54.5	62.5	63.4	66.5	67.9	61.1	57.1	46.7	38.4	54.9
15	43.9	44.2	51.0	54.2	62.5	62.4	66.9	67.6	60.4	56.6	46.1	37.7	54.5
16	43.1	43.6	50.2	54.0	61.7	62.1	66.2	66.5	59.8	55.7	45.4	37.1	53.8
17	42.2	42.7	48.3	53.0	60.1	61.6	65.4	65.5	58.7	54.4	44.4	36.6	52.7
18	41.4	41.8	46.6	51.5	58.3	60.6	64.5	63.9	57.4	52.5	43.9	36.3	51.6
19	41.1	41.1	45.2	49.5	55.7	58.5	62.8	62.1	56.1	51.4	43.6	35.9	50.2
20	40.9	40.6	44.4	48.1	53.1	56.6	61.1	60.0	55.0	50.8	43.5	35.7	49.2
21	40.7	40.3	43.8	47.0	51.3	55.0	59.5	58.7	54.4	50.0	43.6	35.6	48.3
22	40.2	39.7	43.2	45.9	50.0	53.9	58.5	58.0	53.8	49.3	43.5	35.4	47.6
23	40.0	39.1	42.9	44.9	48.8	53.0	57.6	57.2	53.2	48.8	43.2	35.3	47.0
24	39.8	38.6	42.4	44.1	48.1	52.2	56.8	56.5	52.6	48.3	43.0	35.2	46.5
Means (0 <sup>h</sup> .-23 <sup>h</sup> .)	41.0	40.2	45.6	48.0	53.9	56.6	61.0	61.1	55.8	51.2	43.6	36.2	49.5
Means (1 <sup>h</sup> .-24 <sup>h</sup> .)	40.9	40.2	45.6	47.9	53.9	56.6	61.0	61.1	55.8	51.2	43.6	36.2	49.5
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.

1927.														
Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.	
Midnight	38.4	37.1	40.8	42.0	45.0	50.3	55.1	55.0	51.6	47.1	41.8	34.3	44.9	
1 <sup>h</sup>	38.2	36.6	40.7	41.5	44.6	49.5	54.8	54.8	51.2	46.9	41.7	34.1	44.5	
2	38.0	36.2	40.6	41.0	44.2	48.6	54.5	54.5	51.0	46.5	41.3	33.9	44.2	
3	37.8	36.1	40.3	40.5	43.8	48.1	54.4	54.5	50.7	46.3	40.7	33.8	43.9	
4	37.6	36.0	40.0	39.9	43.6	47.9	54.1	54.2	50.3	46.2	40.4	33.7	43.7	
5	37.7	36.3	40.1	39.6	44.1	48.4	54.5	54.5	50.1	46.5	40.1	33.9	43.8	
6	37.5	36.6	40.2	40.2	45.8	49.4	55.6	55.1	50.3	46.4	39.7	34.0	44.2	
7	37.5	36.9	40.7	41.7	47.8	50.9	56.7	56.2	51.3	47.0	39.8	34.1	45.1	
8	37.6	37.4	42.3	43.4	49.4	52.0	58.0	57.8	52.8	48.2	40.5	34.4	46.1	
9	38.3	38.2	43.9	44.6	51.0	53.1	59.0	59.0	54.1	49.6	41.6	35.0	47.3	
10	39.3	38.9	44.7	45.5	51.9	54.0	59.6	59.7	54.9	50.7	42.7	35.5	48.1	
11	40.4	40.1	45.4	46.1	52.8	54.6	59.8	60.3	55.7	51.8	43.4	36.2	48.9	
Noon	41.1	40.6	46.0	46.6	53.1	55.3	60.0	60.7	56.1	52.3	43.9	36.7	49.4	
13 <sup>h</sup>	41.7	41.0	46.2	47.0	53.4	55.3	60.0	60.7	56.4	52.7	44.3	36.7	49.6	
14	41.7	41.3	45.8	47.0	53.3	55.2	60.5	60.9	56.1	52.8	44.0	36.5	49.6	
15	41.1	41.4	45.6	47.1	53.2	54.8	60.6	60.5	55.9	52.8	43.6	36.2	49.4	
16	40.7	41.1	45.1	47.0	52.9	54.8	60.3	60.3	55.7	52.3	43.3	35.7	49.1	
17	40.3	40.5	44.1	46.5	52.1	54.5	60.0	59.8	54.9	51.5	42.7	35.3	48.5	
18	39.7	40.0	43.4	45.7	51.0	54.2	59.4	59.1	54.3	50.5	42.4	35.0	47.9	
19	39.4	39.6	42.4	44.7	50.0	53.4	58.8	58.4	53.7	49.7	42.2	34.7	47.3	
20	39.2	39.2	42.1	44.1	48.9	52.6	58.0	57.4	53.1	49.1	42.2	34.5	46.7	
21	39.1	39.0	41.7	43.3	47.9	51.9	57.1	56.6	52.8	48.5	42.3	34.3	46.2	
22	38.8	38.6	41.4	42.8	47.0	51.4	56.5	56.1	52.3	47.9	42.1	34.1	45.7	
23	38.5	38.0	41.2	42.1	46.1	50.8	55.8	55.5	51.8	47.4	41.9	34.0	45.3	
24	38.3	37.5	40.7	41.7	45.7	50.3	55.2	55.1	51.3	46.9	41.8	34.0	44.9	
Means	0 <sup>h</sup> .-23 <sup>h</sup> .	39.2	38.6	42.7	43.7	48.9	52.1	57.6	57.6	53.2	49.2	42.0	34.9	46.6
	1 <sup>h</sup> .-24 <sup>h</sup> .	39.1	38.6	42.7	43.7	48.9	52.1	57.6	57.6	53.1	49.2	42.0	34.9	46.6
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.

1927.													
Hour, Greenwich Mean Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Yearly Means.
Midnight	36.2	35.3	38.1	38.7	42.1	48.5	53.9	53.8	50.2	45.5	40.1	32.1	42.9
1 <sup>h</sup>	36.0	34.8	38.0	38.5	41.9	47.5	53.7	53.7	50.0	45.4	40.0	31.9	42.6
2	35.8	34.4	38.3	38.3	41.8	46.6	53.6	53.4	49.9	45.1	39.8	31.7	42.4
3	35.5	34.2	38.1	38.0	41.7	46.1	53.5	53.6	49.7	44.9	39.0	31.8	42.2
4	35.1	34.1	37.8	37.6	41.6	46.1	53.3	53.5	49.2	44.9	39.1	31.7	42.0
5	35.4	34.4	37.9	37.1	42.1	46.4	53.7	53.7	49.2	45.3	38.6	31.9	42.1
6	35.4	34.7	38.0	37.4	43.6	46.9	54.5	54.1	49.3	45.1	38.1	31.9	42.4
7	35.4	35.1	38.5	38.2	44.0	47.7	55.0	54.5	49.8	45.9	38.3	32.2	42.9
8	35.6	35.5	39.8	39.2	44.5	47.8	55.5	55.4	50.8	47.2	39.0	32.8	43.6
9	36.3	36.3	40.5	39.1	45.0	48.1	55.9	56.1	51.5	48.0	39.6	33.0	44.1
10	37.0	36.6	39.7	38.8	44.9	48.3	55.9	56.0	51.7	48.4	40.4	33.3	44.2
11	37.6	37.3	39.6	38.3	44.6	48.0	55.7	55.7	52.1	48.8	40.9	34.0	44.4
Noon	37.5	37.1	39.8	38.2	44.5	48.4	55.6	55.8	51.8	48.6	41.3	34.4	44.4
13 <sup>h</sup>	37.7	36.8	39.4	37.8	44.0	48.0	55.5	55.5	51.9	48.6	41.5	33.8	44.2
14	37.4	37.0	38.5	37.5	43.9	47.6	56.0	55.7	51.9	48.8	40.7	33.5	44.0
15	37.1	37.4	38.6	38.3	43.6	47.7	55.9	55.1	52.1	49.2	40.5	34.0	44.1
16	37.1	37.5	38.5	38.3	43.9	48.0	55.8	55.6	52.2	49.1	40.6	33.4	44.2
17	37.5	37.2	38.5	38.3	43.9	47.8	55.9	55.4	51.6	48.7	40.5	33.0	44.0
18	37.2	37.3	39.3	38.2	43.2	48.2	55.5	55.4	51.5	48.6	40.5	32.7	44.0
19	36.9	37.4	38.5	38.5	43.9	48.6	55.8	55.5	51.6	47.9	40.4	32.5	44.0
20	36.7	37.2	38.9	38.8	44.3	48.8	55.5	55.2	51.2	47.2	40.5	32.4	43.9
21	36.8	37.1	38.8	38.5	44.1	49.0	55.1	54.9	51.2	46.7	40.7	32.1	43.7
22	36.7	36.8	38.8	38.6	43.5	49.1	54.8	54.5	50.8	46.3	40.3	31.9	43.5
23	36.3	36.2	38.7	38.1	43.0	48.7	54.3	54.2	50.4	45.8	40.1	31.8	43.1
24	36.1	35.7	38.2	38.4	43.0	48.5	54.0	54.0	50.0	45.3	40.1	31.9	42.9
Means	0 <sup>h</sup> .-23 <sup>h</sup> .	36.5	36.2	38.8	38.3	43.5	47.8	54.8	50.9	47.1	40.0	32.7	43.5
	1 <sup>h</sup> .-24 <sup>h</sup> .	36.5	36.2	38.8	38.3	43.5	47.8	54.9	50.9	47.1	40.0	32.7	43.5



MONTHLY MEAN DEGREE of HUMIDITY (Saturation=100) at every HOUR of the DAY, as deduced from the Corresponding AIR and EVAPORATION TEMPERATURES.

Hour, Greenwich Mean Time.	1927.												Yearly Means.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
Midnight	86	90	84	80	82	87	90	91	91	89	90	87	87	
1 <sup>h</sup>	86	90	84	83	83	87	91	91	91	90	90	87	88	
2	86	90	86	84	84	87	93	91	92	91	91	87	89	
3	86	89	87	85	87	87	93	93	93	91	90	87	89	
4	85	89	87	86	88	89	94	94	91	91	91	87	89	
5	86	89	87	85	88	88	94	94	93	92	90	88	89	
6	87	89	87	84	85	84	91	91	93	92	89	88	88	
7	87	90	87	80	77	79	87	87	90	93	90	88	86	
8	88	89	85	75	70	73	82	83	87	93	90	91	84	
9	88	87	78	69	65	69	77	78	82	89	88	90	80	
10	86	86	72	64	60	64	74	73	78	84	85	87	76	
11	84	83	67	60	55	61	72	69	75	79	84	86	73	
Noon	79	80	66	56	53	59	70	67	71	76	83	85	70	
13 <sup>h</sup>	77	76	64	54	51	57	69	65	70	74	82	82	68	
14	76	75	61	53	51	56	69	65	72	73	79	82	68	
15	77	77	63	55	50	58	68	64	74	76	81	86	69	
16	80	79	65	55	52	60	70	68	76	78	83	87	71	
17	84	81	69	57	55	60	72	70	77	81	86	87	73	
18	85	84	75	61	57	64	73	74	81	86	87	87	76	
19	85	87	78	66	64	70	77	79	85	88	88	88	80	
20	85	87	81	70	72	75	82	85	87	88	89	88	82	
21	86	88	83	72	77	80	86	87	89	89	89	87	84	
22	87	90	85	76	79	83	88	89	90	90	88	87	86	
23	87	90	85	77	80	85	89	89	91	89	89	87	87	
24	86	90	85	80	82	87	90	91	91	89	90	88	87	
Means	0 <sup>h</sup> .—23 <sup>h</sup> .	84	86	78	70	69	73	81	81	84	86	87	87	80
	1 <sup>h</sup> .—24 <sup>h</sup> .	84	86	78	70	69	73	81	81	84	86	87	87	80

TOTAL AMOUNT of SUNSHINE registered in each HOUR of the DAY in each MONTH, as derived from the RECORDS of the CAMPBELL-STOKES SELF-REGISTERING INSTRUMENT for the YEAR 1927.

Month, 1927.	Registered duration of Sunshine in the Hour ending :—																Total Registered Duration of Sunshine in each Month.	Corresponding aggregate Period during which the Sun was above the Horizon.	Proportion of Sunshine.	Mean Altitude of the Sun at Noon.
	5 <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>				
January	—	—	—	—	0·7	6·2	7·0	7·1	8·0	4·7	4·5	1·2	—	—	—	—	39·4	258·5	0·152	18
February	—	—	—	1·0	2·8	4·3	6·3	6·4	6·7	4·0	2·7	0·8	0·2	—	—	—	35·2	276·5	0·127	26
March	—	—	1·8	9·0	12·2	14·1	14·8	14·2	12·7	11·5	10·0	8·3	4·6	0·9	—	—	114·1	365·3	0·312	37
April	—	3·1	8·1	11·9	11·3	12·3	12·8	11·0	12·6	13·1	10·0	10·5	11·4	7·6	1·9	—	137·6	413·0	0·333	48
May	—	6·3	15·8	15·2	17·4	15·9	18·3	19·2	16·9	17·8	17·1	14·6	13·3	9·5	6·2	0·2	203·7	481·1	0·423	57
June	3·5	8·9	9·9	11·2	12·4	11·7	11·3	11·8	9·3	10·6	9·0	9·0	9·5	6·6	5·2	1·4	141·3	494·1	0·286	62
July	1·0	6·0	7·5	10·7	11·9	11·2	9·1	10·1	7·6	9·5	10·8	9·7	10·0	9·8	6·0	1·4	132·3	497·8	0·266	60
August	0·2	3·4	8·3	13·8	14·4	15·5	16·7	17·7	16·9	17·0	18·3	13·4	15·2	12·1	5·5	0·2	188·6	452·1	0·417	52
September	—	0·1	3·9	8·2	8·7	10·0	10·8	13·0	11·4	10·8	9·0	6·7	5·3	1·8	0·0	—	99·7	379·4	0·263	42
October	—	—	—	0·9	5·3	5·5	10·1	10·1	9·4	8·9	8·6	5·8	1·7	—	—	—	66·3	330·8	0·200	30
November	—	—	—	—	2·2	4·7	5·9	4·6	3·4	4·3	2·4	1·2	—	—	—	—	28·7	266·3	0·108	20
December	—	—	—	—	0·8	4·3	6·1	7·7	6·7	7·0	4·7	0·8	—	—	—	—	38·1	244·1	0·156	16
For the Year	4·7	27·8	55·3	81·9	100·1	115·7	129·2	132·9	121·6	119·2	107·1	82·0	71·2	48·3	24·8	3·2	1225·0	4459·0	0·275	...

The hours are reckoned from "apparent" midnight.

READINGS of THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE in the YEAR 1927.  
(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.	9 <sup>h</sup>	Noon.	15 <sup>h</sup>	21 <sup>h</sup>	9 <sup>h</sup>	Noon.	15 <sup>h</sup>	21 <sup>h</sup>		Maximum.	Minimum.	9 <sup>h</sup>	Noon.	15 <sup>h</sup>	21 <sup>h</sup>	9 <sup>h</sup>	Noon.	15 <sup>h</sup>	21 <sup>h</sup>	
JANUARY.											MARCH.											
d	46.3	37.0	38.8	44.3	44.3	41.3	37.9	41.7	42.8	40.3	d	54.6	45.0	48.7	51.0	52.5	45.4	46.5	47.4	47.5	44.5	
1	47.4	40.7	45.7	46.5	46.5	44.5	43.8	44.1	44.0	42.9	1	55.8	41.7	45.9	53.7	51.6	49.1	43.8	47.4	46.7	47.4	
2	46.1	49.4	45.9	47.2	43.7	39.0	43.9	45.1	42.4	37.1	2	53.0	41.0	46.3	50.6	49.8	46.5	41.7	44.2	42.8	44.5	
3	41.0	32.8	34.4	39.5	40.2	36.4	32.9	36.7	36.8	33.2	3	53.1	45.6	48.7	49.7	50.7	45.9	47.6	48.4	46.9	43.8	
4	46.1	34.3	35.6	43.2	45.7	41.5	35.2	42.5	44.7	40.3	4	50.0	42.0	46.6	46.5	48.4	44.4	43.4	44.8	45.9	43.2	
5	52.1	38.5	45.6	50.6	50.3	46.3	44.9	48.6	46.8	43.7	5	51.0	42.7	44.3	50.6	49.4	43.1	41.5	44.3	42.8	39.3	
6	46.3	37.4	38.8	43.0	44.8	42.9	37.6	40.2	40.8	41.8	6	49.0	40.9	43.0	45.9	48.0	43.4	42.6	44.7	45.1	41.0	
7	47.2	34.4	35.9	41.7	45.4	47.2	35.7	39.6	42.1	46.6	7	53.1	39.2	45.1	50.7	50.7	41.4	42.1	43.6	44.6	39.0	
8	52.9	45.4	46.9	48.6	48.6	49.2	44.3	45.2	48.9	47.8	8	53.8	33.1	42.6	52.9	49.3	42.9	39.7	44.8	42.7	39.9	
9	50.1	41.9	47.1	49.1	48.6	42.8	44.8	45.9	45.4	41.8	9	50.9	36.0	43.3	46.2	45.3	37.1	41.6	42.3	42.3	35.9	
10	49.5	40.7	43.6	47.4	47.2	49.4	42.3	44.8	45.3	47.1	10	48.5	34.7	39.1	45.8	45.4	40.2	37.9	41.8	39.8	38.1	
11	50.0	44.8	45.0	48.6	48.5	47.1	44.2	45.9	46.2	46.2	11	46.7	35.4	40.3	46.2	46.2	38.1	38.6	41.0	40.8	36.5	
12	48.2	35.1	37.6	41.4	38.6	36.9	34.8	37.1	34.9	35.6	12	46.1	36.5	40.6	43.5	45.3	39.6	39.0	40.3	40.8	37.1	
13	43.8	35.6	42.8	43.4	43.0	40.0	41.3	41.4	41.6	39.1	13	41.9	38.9	38.9	40.6	41.7	39.6	35.8	36.7	37.0	35.9	
14	45.9	31.7	33.1	42.6	42.8	33.1	32.9	39.8	40.3	32.8	14	50.0	37.0	44.4	47.6	47.5	37.5	39.8	42.4	42.6	35.6	
15	44.0	29.9	34.5	42.2	42.6	35.2	33.5	39.8	38.8	34.8	15	56.1	29.9	43.8	54.1	52.6	42.6	42.3	45.9	45.2	40.1	
16	39.8	27.0	31.1	34.6	38.5	36.4	30.8	33.8	37.7	35.8	16	61.2	35.9	47.3	58.2	59.1	46.5	44.3	50.4	49.8	44.1	
17	41.4	34.0	35.0	39.7	40.7	37.4	34.7	37.6	38.3	36.4	17	58.9	43.0	49.8	51.1	55.0	45.6	48.1	49.2	50.5	44.3	
18	40.4	30.6	34.6	37.6	40.2	37.7	33.2	35.8	37.2	35.1	18	62.2	45.1	49.9	54.5	62.1	46.6	48.0	51.2	55.8	45.8	
19	39.5	24.0	26.1	34.8	34.6	31.0	25.5	31.8	33.3	30.4	19	63.4	40.5	51.1	61.3	61.8	47.0	47.7	54.0	54.3	45.5	
20	38.2	29.2	32.8	34.7	37.0	30.9	32.6	34.2	34.1	30.1	20	68.1	40.0	59.1	65.0	65.8	54.6	53.8	56.4	52.7	48.7	
21	37.2	28.8	32.3	35.6	35.6	37.2	31.3	35.1	35.1	36.7	21	59.4	48.4	54.4	56.5	56.0	48.7	50.6	51.9	51.2	48.0	
22	42.9	35.0	36.5	42.1	37.5	35.0	36.2	40.7	37.3	34.9	22	55.6	43.2	54.4	53.2	49.4	43.7	51.2	51.0	47.8	41.2	
23	48.6	30.1	38.1	45.2	47.4	47.4	37.9	44.6	44.3	43.9	23	53.8	39.9	46.1	51.1	45.5	42.8	44.2	46.1	43.7	41.6	
24	52.1	45.4	48.6	49.1	49.7	45.8	45.8	45.9	46.8	43.9	24	53.0	38.7	44.0	45.1	47.6	42.1	43.1	42.4	42.0	39.8	
25	50.3	42.7	46.5	49.8	46.9	43.0	45.7	46.0	45.0	39.6	25	55.0	40.3	49.5	44.6	46.6	43.9	44.0	42.8	42.5	41.0	
26	50.8	40.1	46.2	47.4	47.9	43.2	44.2	43.1	40.1	39.0	26	59.4	42.0	48.5	56.2	55.1	43.0	44.6	48.1	47.9	41.0	
27	50.2	40.0	46.6	48.6	49.7	47.3	44.2	45.0	44.9	44.0	27	60.2	34.9	48.5	55.8	58.8	44.4	43.8	47.1	48.9	42.1	
28	49.9	38.6	45.7	45.6	44.5	39.4	41.5	39.8	39.5	36.2	28	49.0	38.2	46.1	46.2	47.4	44.7	44.7	44.8	45.8	44.3	
29	46.7	36.4	40.0	44.3	40.6	40.0	38.0	41.2	38.6	38.2	29	54.2	41.0	51.7	51.8	50.0	44.5	47.5	45.9	44.6	40.7	
30	46.9	36.0	37.6	44.1	45.1	37.8	36.1	40.3	39.7	35.7	30	53.1	38.2	46.6	51.6	45.3	43.8	42.3	43.5	42.8	43.0	
31											31											
Means	46.2	36.4	39.6	43.6	43.9	40.7	38.3	41.1	41.1	39.1	Means	54.2	39.6	46.7	50.9	51.0	43.8	43.9	46.0	45.6	41.7	
FEBRUARY.											APRIL.											
d	45.8	35.3	36.3	43.6	45.0	37.5	35.2	39.6	41.0	36.6	d	50.1	38.8	41.4	45.8	46.2	39.1	40.0	42.0	41.5	37.7	
1	43.9	29.9	37.1	41.3	41.7	30.1	35.9	38.8	38.1	29.0	1	54.0	29.4	44.4	51.6	49.3	41.5	41.3	44.5	43.2	40.8	
2	44.8	27.4	38.5	43.2	43.6	42.5	36.8	40.4	40.8	41.1	2	54.0	40.6	47.2	49.5	52.2	40.6	42.8	43.8	44.3	37.3	
3	50.3	35.8	45.6	49.8	48.2	35.8	44.1	44.2	41.2	34.5	3	53.0	33.9	46.6	50.6	49.8	49.2	44.2	46.9	48.1	48.0	
4	47.5	28.1	34.4	45.8	45.0	45.6	32.0	41.6	43.4	44.8	4	61.0	45.5	51.7	58.2	53.3	47.7	47.8	50.1	48.7	46.6	
5	47.0	40.0	43.4	46.2	46.1	42.9	39.9	42.0	42.0	40.8	5	59.1	46.7	47.7	53.5	55.8	46.7	45.4	48.8	47.6	42.0	
6	43.5	33.1	33.3	35.9	38.5	36.0	32.9	35.6	38.0	35.7	6	47.3	40.0	42.0	41.7	43.4	40.5	41.0	40.8	41.8	39.4	
7	37.3	32.8	34.7	35.5	34.9	33.1	31.6	31.8	31.8	31.3	7	57.9	37.2	48.5	52.7	51.9	43.7	44.4	44.8	44.9	41.2	
8	35.0	32.2	33.2	33.0	34.6	33.5	31.8	30.6	31.8	32.1	8	50.0	40.0	46.4	45.9	44.2	41.9	44.0	44.5	42.5	41.5	
9	40.4	25.7	30.0	36.4	39.7	32.8	29.5	32.8	36.2	32.0	9	51.1	40.5	44.0	47.5	46.5	44.5	42.2	43.8	43.8	42.5	
10	32.8	25.0	31.0	31.2	32.3	29.8	30.6	31.2	31.8	29.8	10	50.7	41.2	46.1	48.5	46.8	46.3	42.8	41.8	42.8	44.2	
11	37.5	28.0	31.0	33.2	37.0	32.5	31.0	31.9	35.8	32.5	11	54.4	34.7	46.0	48.8	50.7	47.2	42.3	43.4	43.2	43.0	
12	38.7	28.9	29.5	31.0	38.5	32.4	29.5	31.0	37.6	31.9	12	62.4	44.4	52.5	57.4	59.8	49.5	47.9	49.9	51.0	46.6	
13	46.5	29.1	32.1	37.6	46.5	37.5	31.8	36.9	43.2	37.5	13	64.6	48.1	50.9	58.4	62.6	54.4	50.1	54.3	56.0	51.8	
14	40.7	35.6	35.8	38.7	40.2	38.6	35.8	38.4	39.3	38.1	14	54.4	44.2	47.5	51.0	50.7	48.3	43.2	44.1	44.9	42.9	
15	45.3	37.0	39.3	42.1	44.6	44.8	38.9	41.6	43.6	43.8	15	57.6	41.0	49.0	51.4	53.5	48.5	44.8	44.8	45.8	43.7	
16	52.8	44.0	46.4	48.1	50.4	47.0	45.2	46.3	47.8	45.0	16	62.7	35.2	50.1	57.2	60.7	49.2	45.8	48.6	51.0	44.6	
17	47.6	41.2	42.8	45.6	45.8	43.3	40.5	42.1	42.4	41.5	17	65.8	40.9	56.5	62.4	62.8	53.3	50.7	55.0	55.5	50.2	
18	47.1	34.0	35.7	42.6	44.1	38.8	35.6	40.4	39.5	37.1	18	65.4	40.7	50.6	59.3	62.0	51.0	48.6	53.4	54.7	47.2	
19	48.3	38.1	42.4	45.6	46.7	48.3	41.5	44.7	46.2	47.5	19	67.0	39.1	53.6	60.9	62.7	55.5	47.7	52.0	51.9	47.6	
20	56.3	44.0	46.6	52.8	52.0	46.9	45.8	48.8	46.8	46.3	20	72.4	48.2	59.8	69.6	70.6	57.4	52.4	58.3	58.3	52.3	
21	56.0	42.9	46.2	51.1	53.7	49.5	45.0	47.9	48.5	47.3	21	63.0	49.2	51.2	57.1	60.8	49.6	47.0	50.8	52.8	47.5	
22	50.4	38.7	46.7	44.6	46.1	41.6	43.7	42.9	41.9	39.8	22	58.1	46.2	53.2	52.9	54.2	46.6	45.1	44.2	45.8	39.8	
23	48.9	37.9	41.9	47.1	43.7	38.4	41.0	45.3	42.9	36.7	23	52.1	41.8	48.7	48.3	49.8	48.0	44.3	44.2	45.7	45.1	
24	47.5	33.0	44.4	44.1	44.8	47.1	43.4	43.8	44.3	45.8	24	55.1	43.9	52.5	52.6							

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

(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending 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															
MAY.										JULY.																										
d																	d																			
1	56.1	20.9	49.2	52.7	52.1	40.8	41.7	42.9	42.5	37.7	1	65.8	52.5	58.6	60.9	59.1	55.6	58.3	57.8	54.6	54.2															
2	67.9	38.1	55.0	65.9	62.7	50.6	48.9	55.3	53.0	47.9	2	63.1	54.1	57.9	58.9	58.2	59.3	55.6	56.0	55.8	57.6															
3	70.0	48.1	59.9	63.1	68.6	52.6	54.0	54.6	57.7	49.0	3	70.1	56.1	62.3	63.3	66.8	59.9	56.0	57.2	59.8	57.3															
4	75.1	47.3	68.7	71.6	68.2	62.1	60.1	58.8	58.3	57.0	4	75.6	58.4	64.5	71.1	74.8	61.2	59.8	61.6	64.8	59.8															
5	74.2	51.0	57.3	69.0	70.5	54.3	54.1	61.1	62.7	52.0	5	79.2	54.5	75.4	77.1	66.9	57.5	67.5	65.3	60.1	54.7															
6	75.1	49.2	55.6	69.1	73.6	55.2	54.8	62.9	64.4	52.9	6	71.8	51.2	66.2	64.7	69.4	56.9	59.6	58.0	60.5	56.8															
7	73.8	49.1	64.9	72.3	71.5	59.6	57.8	58.9	57.0	55.4	7	71.0	54.1	65.2	63.5	69.6	57.4	59.9	60.4	61.4	55.6															
8	70.5	50.2	63.7	69.6	67.3	54.9	57.6	59.0	57.5	50.6	8	75.8	53.0	67.5	74.4	73.5	62.8	62.9	64.8	63.7	57.3															
9	72.1	46.0	61.9	69.8	69.6	50.1	56.6	57.4	54.8	48.6	9	70.9	54.8	57.4	59.8	68.3	60.6	56.8	58.8	63.5	58.2															
10	57.4	44.9	52.2	55.6	51.6	45.2	47.6	48.7	45.8	39.6	10	80.9	55.4	66.5	78.0	76.2	65.5	61.7	67.9	65.2	61.7															
11	58.3	40.4	47.9	51.6	56.6	40.5	40.3	42.8	46.4	37.9	11	81.2	56.1	72.5	78.6	64.1	63.5	64.6	66.5	62.6	60.2															
12	60.6	36.2	52.4	56.5	58.1	47.2	46.8	47.8	48.8	43.1	12	65.1	58.3	59.5	63.4	63.3	61.5	58.4	60.1	60.2	60.7															
13	54.3	41.1	48.8	50.2	51.7	43.6	41.5	41.8	43.0	38.9	13	62.8	56.1	58.2	59.8	61.4	58.6	56.9	57.7	58.2	56.8															
14	65.6	42.0	54.2	64.1	60.5	51.3	48.0	53.9	51.8	48.3	14	59.2	53.9	55.3	57.5	58.2	54.0	54.8	56.0	55.9	53.5															
15	67.0	50.0	55.5	59.7	63.6	54.7	53.4	56.2	57.7	52.4	15	69.2	53.1	57.0	62.7	65.3	58.4	55.1	57.3	59.2	55.7															
16	65.3	51.9	57.5	59.2	61.6	52.6	52.8	54.3	53.3	48.8	16	64.8	52.6	56.7	57.9	60.1	56.8	54.1	55.3	57.3	54.5															
17	65.3	49.3	57.5	62.6	62.9	51.1	52.0	53.2	52.9	49.8	17	61.2	51.8	56.6	56.1	60.6	55.9	53.7	53.3	56.6	53.8															
18	67.4	40.3	59.7	63.6	63.6	48.6	51.9	53.8	52.5	43.8	18	68.6	48.6	61.5	65.6	66.6	59.8	54.7	58.8	59.8	56.6															
19	67.9	38.1	54.4	63.6	63.6	50.5	48.9	53.4	52.9	47.9	19	69.0	52.3	59.0	64.7	65.6	55.2	54.8	57.4	57.8	52.8															
20	71.1	40.3	58.6	64.4	67.9	56.7	51.2	53.8	55.9	50.8	20	65.4	47.1	59.6	58.5	63.6	62.1	56.7	57.4	61.2	61.2															
21	62.2	47.8	60.5	56.3	59.9	49.9	53.6	48.5	52.2	46.7	21	69.3	57.2	62.3	66.5	65.2	59.8	60.7	63.0	62.4	57.7															
22	58.5	45.0	52.0	50.3	53.6	45.1	47.2	45.9	48.8	42.9	22	73.9	56.6	63.9	68.0	67.6	59.4	59.8	59.4	58.0	55.0															
23	67.7	35.2	55.0	61.7	66.6	58.1	47.4	50.7	53.3	52.7	23	72.0	53.6	63.6	63.7	69.3	60.6	57.2	56.7	60.8	55.9															
24	76.5	50.4	63.6	69.6	74.6	63.5	57.2	59.8	62.3	57.8	24	70.8	50.6	64.0	64.6	68.8	60.1	56.8	57.8	62.1	58.6															
25	67.1	49.7	60.9	65.2	59.9	52.9	57.0	60.1	53.5	47.1	25	77.6	56.2	66.8	73.7	74.5	61.3	61.7	63.0	63.0	58.9															
26	66.1	49.1	57.9	62.5	65.0	49.8	50.9	52.7	52.8	46.6	26	74.6	60.3	68.5	66.9	69.3	62.8	62.5	60.8	61.0	58.0															
27	52.0	43.6	47.2	47.6	46.3	43.6	46.8	46.9	45.7	43.3	27	72.6	54.3	62.2	70.6	67.8	58.8	60.7	63.9	60.8	56.8															
28	57.8	33.0	47.5	53.6	54.3	42.5	43.3	46.8	46.2	40.5	28	73.3	56.7	64.5	68.7	70.2	58.0	59.8	61.0	61.1	55.0															
29	64.6	35.3	55.4	59.2	61.8	51.0	48.2	49.9	51.0	45.4	29	71.9	52.2	67.7	66.9	69.1	62.9	61.4	61.9	63.9	60.3															
30	69.9	44.1	63.1	67.4	66.2	55.6	54.1	57.3	55.1	52.8	30	72.9	58.8	71.0	65.5	67.9	58.8	64.4	62.3	64.5	56.7															
31	67.1	51.1	60.7	62.7	64.5	56.9	56.1	57.9	59.5	55.8	31	74.8	53.6	63.7	68.6	72.4	60.8	61.1	61.9	63.8	58.3															
Means	66.0	44.1	56.7	61.6	62.5	51.3	51.0	53.1	53.2	47.9	Means	70.8	54.3	63.1	65.8	66.9	59.5	59.0	60.0	60.6	57.1															
JUNE.										AUGUST.																										
d											d																									
1	65.0	52.6	55.9	57.7	58.9	55.5	54.9	55.7	56.2	54.8	1	61.9	54.9	60.7	59.7	60.0	55.5	57.6	58.1	57.9	54.0															
2	68.6	49.4	56.7	65.0	63.2	58.8	54.7	57.8	59.2	56.2	2	74.1	51.1	64.6	68.1	70.7	61.0	59.4	59.2	58.7	56.0															
3	69.5	51.3	60.4	61.3	64.4	54.0	51.8	51.9	52.9	47.5	3	78.0	49.0	60.0	76.0	75.5	60.1	61.2	63.9	62.2	55.9															
4	67.3	42.2	57.2	59.7	60.5	53.0	50.8	48.8	50.4	47.7	4	75.5	52.9	67.8	74.6	73.1	61.0	62.7	62.2	61.8	58.6															
5	69.0	43.1	59.8	62.6	60.3	52.4	52.0	53.3	52.9	51.8	5	76.2	55.2	65.2	70.8	72.6	65.8	62.9	65.7	65.8	63.9															
6	60.0	48.2	52.7	56.6	58.7	51.7	47.9	51.2	51.8	49.8	6	77.2	61.9	72.6	74.8	71.8	63.0	68.9	68.8	66.6	60.8															
7	63.2	46.2	57.0	59.6	61.8	51.6	52.7	53.1	54.9	50.7	7	75.5	59.8	62.4	72.4	71.3	63.0	60.2	63.7	62.7	60.8															
8	67.2	48.1	53.9	62.6	62.8	54.3	49.9	54.5	53.9	50.8	8	74.7	59.0	62.2	64.4	72.2	59.4	61.8	62.6	63.9	56.8															
9	68.3	44.1	59.4	58.9	63.3	55.6	52.0	50.3	52.7	48.7	9	72.2	56.3	64.6	69.2	71.7	59.9	59.3	63.4	63.2	57.8															
10	67.1	49.1	61.7	64.8	60.2	53.7	51.6	54.8	52.9	49.8	10	73.3	57.1	63.6	68.2	71.6	59.6	60.9	61.6	61.8	57.0															
11	65.5	50.2	56.3	64.8	59.6	52.5	50.3	54.6	51.5	48.7	11	70.7	55.2	61.9	67.6	64.6	57.6	56.3	59.6	57.8	54.6															
12	68.2	47.1	56.6	62.6	66.3	52.7	52.2	53.9	55.5	50.8	12	71.6	53.2	63.7	67.6	66.6	59.2	59.7	60.8	59.8	58.0															
13	72.2	41.8	55.7	68.3	70.8	55.7	50.5	56.3	55.9	51.9	13	71.3	57.2	66.7	65.5	63.3	62.6	61.4	61.0	61.7	60.7															
14	68.9	45.7	60.5	67.4	63.7	55.6	53.9	59.9	56.7	51.6	14	73.8	59.2	65.1	69.6	69.4	59.8	61.0	61.8	61.8	58.0															
15	64.0	50.2	57.6	60.6	60.5	53.3	51.5	51.9	52.0	50.3	15	68.8	55.9	60.5	67.0	60.6	56.4	55.9	59.1	58.3	55.5															
16	84.9	52.7	68.1	81.3	83.1	68.0	61.0	67.8	67.6	63.1	16	65.4	53.4	59.9	62.6	61.6	54.2	56.0	56.3	57.2	53.6															
17	68.0	55.8	63.8	61.6	62.5	56.3	59.8	60.8	57.4	54.0	17	72.3	49.1	62.2	68.7	69.6	55.7	57.6	57.8	56.6	51.9															
18	69.1	49.1	62.9	67.6	62.2	54.2	56.2	60.4	54.9	53.6	18	70.3	52.8	57.7	64.7	68.3	52.8	57.2	59.0	59.0	51.9															
19	67.9	52.8	56.7	65.2	60.0	56.4	51.8	56.1	56.0	52.5	19	65.8	52.8	55.8	58.8	62.6	56.7	53.5	55.5	56.4	54.4															
20	70.3	50.1	63.3	68.6	68.2	58.6	55.9	57.6	56.9	54.7	20	66.3	53.0	55.4	57.7	62.6	61.5	54.3	57.1	61.4	60.1															
21	67.0	53.9	64.3	57.6	55.4	55.4	57.9	55.9	52.2	50.2	21	72.5	57.1	65.2	68.5	61.4	58.4	59.8	60.1	58.5	56.1															
22	69.8	47.4	57.8	64.6	68.2	58.0	49.8	53.7	55.7	50.8	22	69.2	56.8	61.5	65.8	67.2	59.0	58.9	59.1	59.9	55.7															
23	68.0	51.7	59.6	61.8	61.2	55.0	51.9	51.4	51.9	50.8	23	71.8	56.1	62.5	64.6	69.3	56.9	57.5	57.6	59.8	54.3															
24	68.4	51.6	54.9	61.8	61.9	53.6</																														

READINGS of THERMOMETERS on the ORDINARY STAND in the MAGNETIC PAVILION ENCLOSURE—concluded.  
(The readings of the maximum and minimum thermometers apply to the twenty-four hours ending 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.	9 <sup>h</sup>	Noon.	15 <sup>h</sup>	21 <sup>h</sup>	9 <sup>h</sup>	Noon.	15 <sup>h</sup>	21 <sup>h</sup>		Maximum.	Minimum.	9 <sup>h</sup>	Noon.	15 <sup>h</sup>	21 <sup>h</sup>	9 <sup>h</sup>	Noon.	15 <sup>h</sup>	21 <sup>h</sup>
SEPTEMBER.											NOVEMBER.										
d	70.3	56.7	62.7	65.8	68.7	61.2	61.2	62.9	65.1	60.8	d	60.1	38.1	49.6	56.2	55.9	54.0	48.3	53.6	52.5	53.1
1	75.8	51.3	65.4	70.7	71.3	63.3	61.8	62.8	64.6	59.8	2	63.2	53.5	61.4	61.4	60.5	58.9	59.3	59.6	59.3	58.1
2	66.5	56.7	60.8	63.0	64.7	60.2	58.9	59.9	60.3	57.4	3	65.1	54.3	56.9	62.4	61.9	54.7	53.9	58.7	55.2	52.7
3	65.6	56.4	58.7	64.3	64.4	59.6	57.3	60.8	61.1	58.3	4	60.0	51.0	54.5	57.5	58.2	52.0	51.1	52.3	52.8	50.1
4	68.9	57.7	59.6	65.7	67.2	61.5	57.9	61.4	62.6	59.8	5	52.3	44.2	47.2	50.3	49.9	50.5	44.5	46.0	45.8	47.7
5	66.4	56.5	62.7	64.5	60.6	57.2	58.9	59.9	59.6	57.0	6	51.0	38.8	43.8	48.4	46.7	41.1	41.7	43.4	42.7	39.6
6	71.4	55.2	61.5	66.1	69.6	55.6	58.2	58.8	59.2	52.4	7	43.2	34.0	38.8	41.4	43.0	38.8	37.8	40.2	40.7	38.1
7	68.8	43.7	62.6	66.2	61.7	61.1	57.1	59.8	58.2	60.0	8	39.3	29.2	33.1	34.4	36.0	39.0	33.1	34.1	35.8	38.2
8	70.7	56.2	62.9	70.2	65.2	56.5	57.0	60.5	57.4	53.9	9	43.3	34.0	39.5	42.3	41.1	34.3	36.5	38.9	35.3	32.9
9	61.4	52.8	54.4	53.9	60.2	53.0	54.0	53.3	55.1	51.9	10	40.9	30.0	34.9	38.6	39.9	37.0	32.3	35.8	35.8	34.4
10	58.9	46.2	53.9	57.4	54.2	51.6	51.1	51.6	48.8	47.4	11	41.1	32.4	35.2	40.2	40.1	34.9	32.1	36.2	35.8	32.2
11	61.4	46.7	55.4	55.8	58.5	48.1	50.3	49.5	50.8	46.8	12	45.7	31.0	37.7	44.9	40.5	37.4	36.5	41.0	39.0	36.3
12	60.8	48.0	54.6	55.5	55.1	55.8	49.9	52.0	54.1	54.9	13	42.9	32.4	35.4	41.1	40.6	34.6	34.2	38.3	36.8	32.8
13	62.9	49.1	57.6	60.2	56.5	52.4	55.2	56.4	55.3	52.3	14	46.2	34.5	42.6	46.2	44.8	43.6	41.0	42.7	42.2	42.0
14	66.6	52.0	57.0	64.1	62.7	57.1	56.6	60.1	59.4	56.8	15	52.0	40.5	44.7	49.1	50.3	45.7	43.2	46.9	46.4	43.8
15	60.6	54.0	59.5	56.4	57.6	54.6	57.5	55.8	56.0	53.8	16	53.0	40.9	46.8	50.7	52.2	41.2	45.3	48.6	49.0	41.0
16	62.6	48.4	53.6	57.4	60.8	50.6	53.2	51.8	53.0	48.4	17	49.1	37.5	40.3	46.6	45.8	44.3	40.1	44.3	43.3	42.2
17	61.4	47.4	51.4	59.3	58.8	52.9	49.5	54.8	53.0	51.3	18	50.0	39.4	42.1	47.6	48.7	46.8	40.8	44.8	44.8	45.0
18	65.7	52.8	63.7	63.6	62.8	56.6	59.9	58.6	56.7	53.3	19	48.0	44.5	45.4	45.6	47.2	47.0	44.4	45.1	46.5	46.0
19	68.0	54.6	58.7	64.0	61.4	61.8	56.1	58.7	59.0	60.2	20	47.1	41.1	43.6	46.4	44.6	44.3	43.3	45.0	44.2	44.0
20	69.0	59.7	63.2	66.7	64.6	60.6	60.7	62.3	60.8	59.3	21	46.9	42.9	44.6	44.8	45.9	46.7	43.1	43.9	45.4	46.7
21	65.2	51.9	62.4	63.2	57.0	52.2	60.7	59.8	55.8	49.6	22	47.2	37.8	44.8	45.5	46.1	43.2	44.8	45.5	45.2	42.3
22	58.0	47.9	54.3	56.6	51.3	51.6	47.9	50.1	50.8	50.5	23	43.5	35.7	36.4	36.0	36.8	42.6	35.6	35.3	36.5	41.8
23	60.6	42.8	52.8	54.6	55.5	50.2	48.3	48.3	49.4	46.7	24	53.4	42.3	50.3	52.4	51.0	46.6	49.5	51.7	48.7	44.8
24	62.8	41.2	53.5	59.0	55.2	49.2	48.7	51.7	50.7	48.2	25	48.8	35.1	39.6	46.8	45.3	35.7	38.9	44.6	42.9	35.5
25	59.3	42.4	50.5	57.2	56.6	42.7	46.8	48.9	49.3	42.0	26	44.0	28.8	33.0	37.3	43.3	39.6	31.8	37.3	42.7	39.5
26	59.3	34.7	42.6	58.9	54.6	47.7	42.2	53.0	51.1	47.2	27	40.1	36.3	37.4	38.0	37.6	40.1	37.3	37.6	36.8	39.7
27	63.7	37.8	46.8	61.2	60.5	49.2	46.3	54.4	53.9	47.0	28	45.3	39.7	41.4	40.8	41.6	45.3	40.9	40.6	41.1	43.9
28	55.8	46.3	55.0	55.0	54.4	47.0	51.8	53.2	53.3	46.9	29	47.1	43.0	45.6	45.3	44.2	44.8	45.4	44.8	43.9	43.9
29	61.8	40.3	51.0	58.6	61.4	51.9	48.1	51.8	53.0	49.3	30	45.2	40.2	42.3	41.4	41.9	42.9	40.6	39.9	40.3	42.1
30	61.8	40.3	51.0	58.6	61.4	51.9	48.1	51.8	53.0	49.3	Means	48.5	38.8	43.0	46.0	46.1	43.6	41.6	43.9	43.6	42.3
Means	64.3	49.6	57.0	61.2	60.4	54.4	54.1	56.1	55.9	52.8	DECEMBER.										
OCTOBER.											d	43.4	39.0	40.8	40.3	39.6	39.1	38.8	38.4	37.8	37.3
1	58.3	48.1	55.6	55.2	56.0	58.0	53.1	52.7	54.7	57.6	2	39.6	38.4	39.3	39.4	38.8	38.8	37.7	37.9	37.8	37.4
2	65.2	51.7	59.5	63.2	51.3	51.9	58.1	59.2	59.5	48.2	3	39.2	33.7	36.7	36.6	36.0	33.7	36.3	35.8	34.8	32.8
3	59.9	39.3	51.3	56.6	56.7	39.6	47.6	48.9	48.0	39.6	4	38.8	33.2	34.9	36.2	38.2	38.8	34.4	36.0	37.9	38.6
4	56.9	33.9	48.4	54.4	51.6	41.4	47.1	50.8	49.4	41.1	5	44.2	38.7	39.9	40.6	41.6	44.2	38.7	38.9	40.4	43.6
5	56.6	35.8	40.8	53.9	55.6	41.8	40.8	49.1	50.3	41.7	6	54.0	40.8	46.8	53.6	51.1	41.2	45.9	50.0	48.1	41.1
6	62.7	35.2	43.5	59.2	61.6	47.4	43.5	53.8	55.9	47.4	7	44.6	39.9	42.2	44.2	41.6	40.2	42.1	43.3	40.9	39.5
7	62.4	39.4	43.6	54.6	62.0	49.8	43.6	54.1	57.8	49.6	8	40.8	39.2	40.2	40.2	40.6	39.5	39.3	39.3	39.7	38.9
8	62.7	46.6	48.3	56.5	60.4	55.3	47.5	52.9	55.5	53.5	9	46.8	37.6	40.6	44.6	45.7	43.4	40.0	43.3	44.4	42.8
9	60.2	46.3	52.9	59.2	59.6	48.5	51.1	53.7	52.2	47.9	10	44.9	39.2	42.8	44.4	43.6	39.5	42.3	43.3	42.7	36.7
10	61.7	38.0	46.0	56.5	60.0	44.4	45.8	52.8	54.1	43.8	11	39.8	35.2	36.0	38.0	37.8	37.6	34.4	36.0	36.0	35.9
11	57.2	37.9	44.7	52.2	56.2	48.6	44.6	48.9	51.8	46.9	12	37.6	35.7	37.6	37.4	36.2	36.1	35.7	35.1	33.8	34.3
12	53.7	47.2	49.7	52.6	52.0	50.1	48.2	50.2	50.0	48.9	13	38.1	35.3	37.5	37.7	37.0	35.6	35.3	34.8	33.9	33.8
13	52.9	42.7	46.2	48.5	50.6	43.5	44.9	45.2	47.1	43.3	14	37.7	34.3	36.9	37.2	35.9	34.4	36.4	36.8	35.7	34.2
14	57.6	42.8	50.3	53.8	54.8	51.0	49.1	50.4	51.4	49.6	15	37.9	31.9	35.4	37.1	37.0	32.2	34.8	34.9	34.8	29.6
15	60.6	49.0	53.0	57.0	56.4	50.8	51.2	51.5	51.8	49.6	16	32.4	20.8	28.2	32.0	29.1	25.8	27.9	30.8	27.8	24.3
16	57.0	45.3	51.7	55.5	54.5	49.7	48.8	51.7	49.8	48.0	17	31.9	22.8	28.4	31.0	30.3	25.6	27.8	29.5	28.9	23.8
17	60.4	48.9	55.6	58.8	56.6	50.8	53.0	53.5	53.3	46.5	18	29.6	21.8	25.8	29.5	26.9	25.4	23.0	25.2	24.1	24.8
18	55.8	40.0	48.6	54.6	53.1	47.2	45.6	48.0	46.6	44.8	19	29.7	18.5	22.4	27.6	27.7	28.3	21.0	24.8	25.9	25.6
19	58.9	42.0	52.6	56.3	53.4	50.2	49.8	51.1	51.4	48.8	20	28.8	21.5	23.6	28.6	25.6	24.6	22.2	25.7	23.6	23.7
20	53.1	38.9	45.4	50.3	49.7	39.0	44.6	44.0	44.1	37.8	21	47.3	24.1	38.6	45.2	46.9	45.9	38.0	44.9	46.7	45.5
21	54.1	38.2	46.0	49.8	51.9	47.3	43.6	48.0	50.8	47.3	22	54.2	42.3	49.7							

AMOUNT OF RAIN COLLECTED in each MONTH of the YEAR 1927.

Gauges partly sunk in the Ground in the Magnetic Pavilion 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.
	6	in. 1·500	in. 3·397	in. 2·064	in. 1·826	in. 1·208	in. 2·023	in. 2·787	in. 3·574	in. 4·066	in. 1·258	in. 2·242	in. 3·396	in. 29·341	ft. in. 0 5	ft. in. 149 6
8	in. 1·512	in. 3·479	in. 2·055	in. 1·756	in. 1·214	in. 2·031	in. 2·792	in. 3·554	in. 4·105	in. 1·256	in. 2·290	in. 3·430	in. 29·474	ft. in. 1 0	ft. in. 150 1	
Number of Rainy Days (0·005 in. or over).	...	18	13	18	13	8	17	15	19	15	12	15	12	175	...	...

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.	1927.													Mean for the Year.
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		
h	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.
1	13·3	9·2	13·5	12·2	8·1	11·1	8·6	9·8	11·0	9·9	11·7	11·3	10·8	
2	13·6	8·9	13·4	11·7	7·9	11·4	8·0	9·9	10·3	9·9	11·3	12·4	10·7	
3	13·8	9·2	12·9	12·0	7·7	10·9	8·4	9·3	9·6	9·9	11·3	11·4	10·5	
4	13·9	9·8	12·6	11·8	8·2	10·8	8·2	8·8	9·6	9·3	11·3	11·2	10·5	
5	14·0	9·9	12·9	12·2	8·5	10·9	8·5	9·2	9·8	9·5	11·5	11·5	10·7	
6	13·5	9·5	12·8	11·6	8·2	11·2	8·7	8·8	9·9	9·4	11·1	11·8	10·5	
7	13·5	10·1	12·3	12·5	8·2	11·4	9·1	9·5	10·4	10·1	11·2	12·1	10·9	
8	13·3	10·2	12·6	13·0	9·1	12·7	10·1	10·4	10·6	9·9	11·0	11·8	11·2	
9	13·7	10·2	13·7	13·6	10·1	12·8	10·3	11·0	11·9	11·3	11·1	11·7	11·8	
10	14·4	10·9	14·5	13·8	9·9	13·4	11·3	11·4	12·9	11·5	11·2	12·3	12·3	
11	15·2	11·5	16·1	14·4	11·5	13·1	11·4	12·8	13·6	11·8	11·9	12·8	13·0	
Noon	16·5	11·7	17·2	16·1	12·5	14·0	11·6	14·2	13·9	13·0	12·2	12·6	13·8	
13	16·9	11·5	17·3	16·2	12·3	14·4	12·0	13·8	13·7	12·9	12·7	13·0	13·9	
14	17·0	12·6	17·8	16·5	12·4	14·5	12·9	15·0	14·0	12·7	12·9	13·0	14·3	
15	17·1	11·4	16·9	16·6	13·0	14·5	12·7	14·5	13·8	12·4	12·2	13·7	14·1	
16	16·1	11·5	16·7	16·7	12·6	14·5	13·2	14·2	13·2	12·0	11·3	13·3	13·8	
17	15·3	12·2	15·1	16·5	12·6	14·1	12·5	14·2	12·2	12·2	11·6	12·8	13·4	
18	14·5	11·6	13·9	15·0	12·5	13·2	12·5	13·6	10·6	12·0	11·7	12·6	12·8	
19	14·8	12·1	13·4	14·2	11·6	12·8	10·7	12·3	10·7	11·9	11·7	12·6	12·4	
20	14·5	11·3	12·7	13·8	10·4	12·0	9·9	11·1	9·9	11·6	11·8	12·4	11·8	
21	15·0	11·0	12·6	12·9	9·7	11·4	9·8	10·4	10·3	11·5	12·4	12·4	11·6	
22	14·6	10·5	12·0	12·5	9·0	10·9	9·5	10·0	10·2	10·7	12·0	11·8	11·1	
23	14·4	10·5	12·2	11·7	9·3	10·6	9·5	10·0	10·0	10·7	12·4	11·5	11·1	
Midnight	14·2	9·9	12·2	11·4	8·9	11·7	9·1	10·3	10·3	10·2	10·2	12·0	10·9	
Means ...	14·7	10·7	14·1	13·7	10·2	12·4	10·4	11·4	11·4	11·1	11·7	12·2	12·0	
Greatest Hourly Measures	(1) 43	38	37	40	27	35	26	32	32	39	31	38	...	
	(2) 33	29	29	31	22	27	21	25	25	30	25	29	...	

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

MONTHLY MEAN VALUES of the ATMOSPHERIC POTENTIAL GRADIENT for every HOUR of the DAY.

Month. 1927.	Potential expressed in volts per metre above earth's surface.																									
	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>	Mean.
January ...	v. 332	v. 297	v. 279	v. 266	v. 270	v. 275	v. 284	v. 319	v. 346	v. 354	v. 350	v. 323	v. 332	v. 359	v. 363	v. 363	v. 385	v. 416	v. 443	v. 403	v. 412	v. 394	v. 359	v. 341	v. 344	v. 344
February ...	v. 346	v. 323	v. 319	v. 297	v. 257	v. 248	v. 284	v. 297	v. 328	v. 354	v. 359	v. 328	v. 319	v. 354	v. 372	v. 372	v. 381	v. 377	v. 359	v. 368	v. 363	v. 354	v. 354	v. 354	v. 354	v. 336
March ...	v. 261	v. 213	v. 213	v. 182	v. 182	v. 182	v. 208	v. 244	v. 239	v. 266	v. 284	v. 275	v. 297	v. 319	v. 328	v. 310	v. 301	v. 319	v. 319	v. 301	v. 319	v. 306	v. 306	v. 306	v. 288	v. 269
April ...	v. 301	v. 261	v. 190	v. 222	v. 244	v. 195	v. 275	v. 315	v. 363	v. 399	v. 425	v. 390	v. 363	v. 363	v. 363	v. 390	v. 377	v. 412	v. 350	v. 403	v. 368	v. 337	v. 328	v. 319	v. 331	v. 331
May ...	v. 168	v. 177	v. 173	v. 173	v. 173	v. 190	v. 244	v. 328	v. 354	v. 310	v. 297	v. 266	v. 284	v. 292	v. 284	v. 310	v. 292	v. 275	v. 270	v. 244	v. 226	v. 204	v. 204	v. 204	v. 195	v. 247
June ...	v. 177	v. 164	v. 164	v. 155	v. 168	v. 177	v. 217	v. 261	v. 288	v. 275	v. 261	v. 230	v. 213	v. 204	v. 217	v. 217	v. 217	v. 213	v. 186	v. 190	v. 173	v. 173	v. 213	v. 213	v. 209	v. 209
July ...	v. 177	v. 173	v. 173	v. 155	v. 173	v. 168	v. 186	v. 204	v. 204	v. 199	v. 182	v. 173	v. 159	v. 177	v. 159	v. 164	v. 164	v. 173	v. 168	v. 182	v. 164	v. 186	v. 190	v. 195	v. 177	v. 177
August ...	v. 142	v. 133	v. 128	v. 128	v. 137	v. 146	v. 164	v. 186	v. 230	v. 222	v. 199	v. 204	v. 195	v. 204	v. 204	v. 199	v. 217	v. 222	v. 217	v. 186	v. 173	v. 164	v. 186	v. 159	v. 181	v. 181
September ...	v. 199	v. 186	v. 182	v. 182	v. 186	v. 217	v. 230	v. 239	v. 248	v. 253	v. 244	v. 230	v. 253	v. 275	v. 292	v. 319	v. 306	v. 310	v. 297	v. 301	v. 292	v. 253	v. 257	v. 235	v. 249	v. 249
October ...	v. 225	v. 213	v. 199	v. 204	v. 208	v. 217	v. 235	v. 257	v. 261	v. 288	v. 315	v. 319	v. 323	v. 319	v. 332	v. 328	v. 350	v. 354	v. 359	v. 315	v. 288	v. 266	v. 253	v. 244	v. 278	v. 278
November ...	v. 261	v. 253	v. 239	v. 239	v. 235	v. 257	v. 284	v. 319	v. 337	v. 341	v. 315	v. 315	v. 306	v. 310	v. 306	v. 310	v. 315	v. 315	v. 332	v. 306	v. 310	v. 306	v. 297	v. 284	v. 295	v. 295
December ...	v. 222	v. 208	v. 173	v. 199	v. 182	v. 195	v. 190	v. 218	v. 230	v. 239	v. 266	v. 275	v. 265	v. 292	v. 292	v. 297	v. 288	v. 292	v. 301	v. 301	v. 297	v. 270	v. 261	v. 239	v. 249	v. 249
Means ...	234	217	203	200	201	205	233	265	286	292	291	277	276	289	293	298	299	307	302	291	283	268	267	256	264	264





