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RESULTS OF THE MAGNETIC & METEOROLOGICAL OBSERVATIONS

MADE AT

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

IN THE YEAR

1926

UNDER THE DIRECTION OF

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ASTRONOMER ROYAL.

*Published by Order of the Board of Admiralty
in Obedience to His Majesty's Command.*



LONDON:
PUBLISHED BY HIS MAJESTY'S STATIONERY OFFICE

1928.

INDEX.

INTRODUCTION.

	PAGE
PERSONAL ESTABLISHMENT AND ARRANGEMENTS	E i

MAGNETIC SECTION.

GENERAL DESCRIPTION OF THE BUILDINGS AND INSTRUMENTS AT GREENWICH...	E i
MAGNETOGRAPH HOUSE	E ii
DECLINATION MAGNET FOR ABSOLUTE DETERMINATIONS	E iii
ABSOLUTE HORIZONTAL FORCE INSTRUMENT	E iii
DIP INDUCTOR	E iv
THE DECLINATION VARIOMETER	E iv
THE NORTH FORCE VARIOMETER	E v
THE QUARTZ-THREAD VERTICAL FORCE VARIOMETER	E vi
THE MAGNETIC STATION AT ABINGER, SURREY	E vii
GENERAL DESCRIPTION OF BUILDINGS AND INSTRUMENTS AT ABINGER	E viii
DECLINATION MAGNET FOR ABSOLUTE DETERMINATIONS	E viii
ABSOLUTE HORIZONTAL FORCE INSTRUMENTS	E ix
THE SCHUSTER-SMITH COIL MAGNETOMETER FOR HORIZONTAL FORCE	E ix
ABSOLUTE INCLINATION INSTRUMENT	E xi
DECLINATION VARIOMETER	E xi
HORIZONTAL FORCE VARIOMETER	E xii
VERTICAL FORCE VARIOMETER	E xiii
MAGNETIC REDUCTIONS	E xiv
TABLE OF MAGNETIC ELEMENTS DETERMINED AT GREENWICH FROM 1841-1925 AND AT ABINGER, 1925-1926	E xvii

RESULTS OF MAGNETIC OBSERVATIONS IN TABULAR ARRANGEMENT :— GREENWICH.

TABLE (G) I.—Hourly Means of Magnetic Declination West for each Civil Day	E 2
TABLE (G) II.—Hourly Means of North Component of Magnetic Force	E 4
TABLE (G) III.—Hourly Means of Vertical Component of Magnetic Force	E 7
TABLE (G) IV.—Monthly and Annual Mean Diurnal Inequalities of Magnetic Declination West	E 8
TABLE (G) V.—Diurnal Range of Declination on each Civil Day, as deduced from Table (G) I	E 8

INDEX.

RESULTS OF MAGNETIC OBSERVATIONS—*continued.*

GREENWICH— <i>continued.</i>		PAGE
TABLE (G) VI.—Monthly and Annual Mean Diurnal Inequalities of Magnetic Declination West from Hourly Ordinates, on Selected Quiet Days in each Month... ..	E 9	
TABLE (G) VII.—Monthly and Annual Mean Diurnal Inequalities of Magnetic Declination West from Hourly Ordinates, on Selected Disturbed Days in each Month	E 9	
TABLE (G) VIII.—Monthly and Annual Mean Diurnal Inequalities of Magnetic North Force	E 8	
TABLE (G) IX.—Diurnal Range of Magnetic North Force on each Civil Day, as deduced from Table (G) II.	E 8	
TABLE (G) X.—Monthly and Annual Mean Diurnal Inequalities of Magnetic North Force from Hourly Ordinates, on Selected Quiet Days in each Month	E 9	
TABLE (G) XI.—Monthly and Annual Mean Diurnal Inequalities of Magnetic North Force from Hourly Ordinates, on Selected Disturbed Days in each Month... ..	E 9	
TABLE (G) XII.—Monthly and Annual Diurnal Inequalities of Vertical Magnetic Force	E 8	
TABLE (G) XIII.—Diurnal Range of Vertical Magnetic Force on each Civil Day, as deduced from Table (G) III.... ..	E 8	
TABLE (G) XIV.—Monthly and Annual Mean Diurnal Inequalities of Vertical Magnetic Force from Hourly Ordinates, on Selected Quiet Days in each Month... ..	E 9	
TABLE (G) XV.—Monthly and Annual Mean Diurnal Inequalities of Vertical Magnetic Force from Hourly Ordinates, on Selected Disturbed Days in each Month... ..	E 9	
TABLE (G) XVI.—Values of the Coefficients and Phase Angles in the Periodical Expression— $V_t = m + a_1 \cos t + b_1 \sin t + a_2 \cos 2t + b_2 \sin 2t + a_3 \cos 3t$ $+ b_3 \sin 3t + a_4 \cos 4t + b_4 \sin 4t$ $= m + c_1 \sin (t + a_1) + c_2 \sin (2t + a_2) + c_3 \sin (3t + a_3)$ $+ c_4 \sin (4t + a_4) \quad \dots \dots \dots$	E 10	
TABLE (G) XVII.—Results of Observations of Magnetic Declination, with Deduced Values of the Base-Line of the Declination Magnetograms	E 11	
TABLE (G) XVIII.—Results of Determinations of the Absolute Value of Horizontal Magnetic Force with Deduced Values of the Base-Line of the North Force Magnetograms ...	E 12	
TABLE (G) XIX.—Results of Observations of Magnetic Dip made with the Dip Inductor with Deduced Values of the Base-Line of the Vertical Force Magnetograms ...	E 12	
TABLE (G) XX.—Summary of the Magnetic Elements	E 12	
ANNUAL VALUES OF MAGNETIC ELEMENTS AT GREENWICH, 1841-1925	E 13	

ABINGER MAGNETIC STATION.

TABLE (A) I.—Hourly Means of Declination West for each day of the Year	E 14
TABLE (A) II.—Hourly Means of Horizontal Component of Magnetic Force	E 20
TABLE (A) III.—Hourly Means of Vertical Component of Magnetic Force... ..	E 26
TABLE (A) IV.—Daily Mean and Extreme Values of Magnetic Elements recorded by the Magnetographs	E 32
TABLE (A) V.—Mean Diurnal Inequalities of the Components of Magnetic Force. All Days	E 38

INDEX

RESULTS OF MAGNETIC OBSERVATIONS—*continued.*

ABINGER MAGNETIC STATION— <i>continued.</i>		PAGE
TABLE (A) VI.—Mean Diurnal Inequalities of the Components of Magnetic Force		
International Quiet Days		E 40
TABLE (A) VII.—Mean Diurnal Inequalities of the Components of Magnetic Force		
International Disturbed Days		E 42
TABLES (A) VIII, IX.—Harmonic Components of the Diurnal Inequality of Magnetic Force		E 44
TABLE (A) X.—Range of Diurnal Inequalities for the Months, Year and Seasons ...		E 45
TABLE (A) XI.—Monthly and Annual Value of Non-cyclic Change in the Magnetic Elements		E 45
TABLE (A) XII.—Mean Monthly and Annual Values of Magnetic Elements		E 45
TABLE (A) XIII.—Daily Mean Value of the Base-Line of the Declination Magnetograms		E 46
TABLE (A) XIV.—Absolute Observations of Horizontal Force, with deduced values of the		
Base-Line of the Horizontal Force Magnetograms		E 47
TABLE (A) XV.—Daily Value of the Base-Line of the Vertical Force Magnetograms		
deduced from observations of Dip with the Dip Inductor		E 49
MAGNETIC DISTURBANCES.		
Brief description of Magnetic Movements (superposed on the ordinary diurnal		
movement) exceeding 3' in Declination, 20 γ in Horizontal Force, or 12 γ in		
Vertical Force, taken from the Photographic Register		E 50
Explanation of the Plates		E 66
PLATES I.—XI—Photo-lithographed from tracings of the Photographic Registers of		
Magnetic Disturbances.		
APPENDIX I.—Comparison between simultaneous records of the variation of magnetic		
elements at Greenwich and Abinger		E 67
APPENDIX II.—The adoption of a Standard Inertia Cylinder		E 70
METEOROLOGICAL SECTION.		
SUBJECTS OF OBSERVATION		F i
INSTRUMENTS		F i
STANDARD BAROMETER		F ii
PHOTOGRAPHIC BAROMETER		F ii
DRY AND WET BULB THERMOMETERS		F iii
PHOTOGRAPHIC DRY AND WET BULB THERMOMETERS		F iv
RADIATION THERMOMETERS		F iv
EARTH THERMOMETERS		F v
OSLER'S ANEMOMETER		F v
ROBINSON'S ANEMOMETER		F v
RAIN-GAUGES		F vi
ELECTROMETER		F vii

INDEX.

METEOROLOGICAL SECTION— <i>continued.</i>		PAGE
SUNSHINE RECORDER		F vii
NIGHT-SKY RECORDER		F viii
METEOROLOGICAL REDUCTIONS		F ix
RESULTS OF METEOROLOGICAL OBSERVATIONS		F 1
Daily Results of the Meteorological Observations		F 2
Highest and Lowest Readings of the Barometer		F 26
Highest and Lowest Readings of the Barometer for each Month		F 26
Monthly Results of Meteorological Elements		F 27
Monthly Mean Reading of the Barometer at every Hour of the Day		F 28
Monthly Mean Temperature of the Air at every Hour of the Day		F 28
Monthly Mean Temperature of Evaporation at every Hour of the Day		F 29
Monthly Mean Temperature of the Dew-Point at every Hour of the Day		F 29
Monthly Mean Degree of Humidity at every Hour of the Day		F 30
Total Amount of Sunshine registered in each Hour of the Day in each Month		F 30
Readings of Thermometers on the Ordinary Stand in the Magnetic Pavilion Enclosure		F 31
Amount of Rain collected in each Month by the different gauges		F 34
Mean Hourly Measures of the Horizontal Movement of the Air in each Month, and Greatest and Least Hourly Measures as derived from the Records of Robinson's Anemometer		F 34
Monthly Mean Values of the Atmospheric Potential Gradient for every Hour of the Day		F 34

ERRATA

RESULTS OF MAGNETIC OBSERVATIONS.

- 1912 Page E 11. Declination West, November. For value of m read $1^{\circ}43'$ instead of $1^{\circ}23'$.
- 1920 PLATES I-III. By an oversight the scale for Vertical Force on Plates I-III was drawn from the value in use during 1919. The figures attached to the scale should be multiplied by the factor 0.561 in order to give the true value for 1920.
- 1924 Page E 26 } Correction for reducing phase angles from Mean Time to Apparent Time. October,
1925 Page E 26 } for $-0^{\circ}.28'$ read $-3^{\circ}.28'$.

RESULTS OF METEOROLOGICAL OBSERVATIONS.

- 1922 Page E 80. Duration of Sunshine, June. Hour ending 11^h : for 13.3 read 15.3 .

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

MAGNETIC AND METEOROLOGICAL
OBSERVATIONS, 1926.

INTRODUCTION.

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

Personal Establishment and Arrangements.

During the year 1926, 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. C. Burridge, L. D. Melotte and Miss E. W. Clack.

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

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

The Magnetic Pavilion at Greenwich is constructed of non-magnetic materials, and stands in an enclosure in Greenwich Park, 350 yards to the east of the Observatory, on a site carefully chosen for its freedom from abnormal magnetic conditions.

For a detailed description of the Magnetograph House, which was completed in 1914, reference should be made to the Greenwich Observations for 1915.

E ii INTRODUCTION TO GREENWICH MAGNETIC OBSERVATIONS, 1926.

The Magnetograph House stands 50 feet north-west of the Magnetic Pavilion in which the absolute magnetic observations are made. The recording instruments are situated in a small inner chamber 15 feet long, 12 feet wide, and 8 feet high. This chamber is supported on small concrete piers and surrounded by an outer chamber, whose walls of non-conducting material are nearly 2 feet thick. Between the walls of the two chambers is an air space of from 2 to 3 feet. The inner chamber is electrically heated by about 50 suitably insulated low-temperature non-magnetic metallic resistance strips, each consuming 25 watts. The current used is alternating, and is therefore without effect upon the magnetic registration.

The temperature is controlled by a thermostat placed in the centre of the room, at the same level as the magnetic instruments. This actuates a relay, which switches the electric current into or out of the heating circuits.

The centres of the three instrument piers are situated as follows: For the north force instrument, 2 feet south and 2 feet 6 inches east of the north-west angle of the room; for the declination instrument, 5 feet 6 inches south and 5 feet east of the same angle; for the vertical force instrument, 2 feet north and 3 feet west of the south-east angle. The two piers which support the recording mechanism occupy the north-east and south-west corners of the room, their longer sides being in the direction of the meridian. The clocks can be wound and the recording drums inserted or removed through shuttered openings in the wall of the inner chamber. The temperature in the chamber is read daily from a thermometer attached to the north force instrument, by means of a small telescope, projecting into the room.

The Magnetograph House contains also the photographic and standard barometers. The former is mounted on the south wall of the instrument room, $5\frac{1}{2}$ feet from the south-east corner of the room. The standard barometer is situated in the passage way, being supported on a board screwed to the north-west corner pillar of the inner room.

The north force and declination instruments record on the north-east drum; the vertical force instrument and the barometer record on the other drum. Both drums are horizontal and are 10 inches long by $5\frac{1}{2}$ inches in diameter. Their normal period of revolution is 30 hours and the time-scale is 15 mm. to the hour. The registering beams of light are focussed on the drum by an adjustable cylindrical lens. Two horizontal straight-filament lamps mounted at suitable heights on the east and west walls of the chamber provide the time registration for the photographic sheets. The lamps are illumined for a period of one second centred at each exact hour of Greenwich time, the current being controlled by a relay connected

to the Mean Solar clock in the Clock Room of the Observatory. The effect is to produce narrow dark hour-lines right across the photographic records.

Magnetic Instruments at Greenwich.

DECLINATION MAGNET FOR ABSOLUTE DETERMINATIONS.—The hollow cylindrical magnet Elliott No. 75 is used in conjunction with a telescope by Troughton and Simms, placed on a pier about 2 feet south of the magnet. The magnet is about 4 inches long, and at one end is an engraved glass scale for collimation. The telescope is 21 inches long, and the aperture of its object-glass is 2 inches ; its horizontal circle is 16·6 inches in diameter, divided to 5', and read by verniers to 5".

Since 1913 September the magnet has been suspended by a tungsten wire of 0·02 mm. diameter, and about 25 cm. length. The effect of 90° of torsion is to turn the magnet through about 4'. The torsion is found to change little or not at all ; it is checked at intervals, and a correction on this account is made when necessary. The collimation error is eliminated by reversing the magnet in the middle of each month (turning the magnet with its carrier through 180° about the longitudinal axis), so that half the observations are made with the scale direct and half with the scale reversed.

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

Declination observations were made at least thrice weekly during 1926 until the first week of June, after which they were discontinued on account of interference by electric trains.

ABSOLUTE HORIZONTAL FORCE INSTRUMENT.—This instrument is of the Kew unifilar pattern, and rests on a slate slab in the Magnetic Pavilion. A full account of its construction and use is given in earlier volumes, and will not be repeated here.

Observations of the absolute horizontal magnetic force were made at least twice weekly until their discontinuance at the beginning of June.

Six observations of the moment of inertia of the deflecting magnet were made in the year. The mean observed value of $\log K$ was 2·44612 (C.G.S. units) at 0° C., and this value has been used in the reductions.

E iv INTRODUCTION TO GREENWICH MAGNETIC OBSERVATIONS, 1926.

DIP INDUCTOR.—The dip inductor is used in conjunction with a Broca mirror galvanometer, with electric light and scale. Observations are made in four positions to eliminate any small errors arising from slight asymmetry in the instrument. After the first adjustment, the 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 circles for the measurement of inclination and azimuth are each 8 inches in diameter, and are read by means of screw micrometers to one second of arc. The levels on the base can likewise be read to one second. A detailed description of the dip inductor will be found in the volume for 1915.

Observations were discontinued after the end of February on account of serious interference from electric trains which arose when a comparatively distant portion of the electrified Southern Railway was put in operation.

THE DECLINATION VARIOMETER.—This instrument consists essentially of a magnet and mirror suspended by a fine phosphor-bronze strip 30 cm. long. The torsion head to which the top of the fibre is attached is adjusted so that there shall be no torsion in the mean position of the magnet. A quarter revolution of the torsion head deflects the magnet through 8'.

The magnet consists of nine short pieces of steel 4.5 cm. long and of 1 mm. diameter, supported in an aluminium holder. The mounting of the movable mirror attached to this holder is also of aluminium. It can be turned relative to the magnet, so that the beam of light can be suitably adjusted in azimuth. The fixed mirror for base-line registration is situated beneath the magnet and mirror system. Both mirrors are of silvered glass, 2.5 cm. long and 1 cm. wide, and possess the necessary adjustments for tilt and orientation. The magnet is surrounded by copper blocks, rendering the instrument almost dead-beat.

The instrument rests on three foot-screws, which provide adjustment for level. It is completely enclosed by a tall brass cylinder with lid, resting on the concrete pier; this protects the instrument from dust, draughts, and accidental displacements. The lens which focusses the beam of light passing from lamp to mirror and mirror to drum is mounted in the side of this cylinder, the mirror chamber of the instrument itself being closed by a plane glass window.

The distance from the mirrors to the centre of the slit of the drum box is such that the scale value at the middle of the photographic sheets is 0' .58 per millimetre; at the present time this angle represents 3.11 γ , in terms of force. Since the beam of light, when directed towards the centre of the slit, makes an angle

DECLINATION AND NORTH FORCE VARIOMETERS.

E v

$11^{\circ} 42'$ with the normal to the drum, the scale value is not the same right across the sheet, the percentage difference of scale between the centre and edges being 0.4. This is allowed for, when necessary, in measuring the photographic traces.

The photographic sheets are changed generally at about 11 a.m. The time scale is 15 mm. per hour. The base-line value is determined from the absolute declination observations.

THE NORTH FORCE VARIOMETER.—The general construction of this instrument resembles that of the declination variometer. The suspension is of quartz, however, 20 cm. long, and the magnet system contains a single magnet similar to those in the declination instrument. In other respects the magnet and mirror systems of the two instruments are identical.

The torsion head is adjusted so that the magnetic axis of the magnet system is kept in the (geographical) east-west direction. The angle between this direction and the line joining the mirror to the middle of the slit of the drum is $7^{\circ} 30'$. The mirror was adjusted relative to the magnetic axis so that the angle between the latter and the normal to the mirror agreed with the above angle to within a few minutes of arc. The magnet can consequently be maintained in the right direction by keeping the beam of light directed towards the middle of the photographic sheet.

The adjustment of the magnet was independently tested after the cessation of recording at Greenwich, by the method devised for use at the Abinger Station (*q.v.*). The test indicated an error of approximately $1\frac{1}{2}^{\circ}$ in the orientation. The northern end of the magnet was found to point slightly south of true east.

The instrument is enclosed in a brass cylinder, in which is mounted the focussing lens, as in the case of the declination variometer. Through apertures in this casing also project two arms, one to the north and the other to the south of the instrument, to which they are attached. These are designed to support a deflecting magnet for the determination of the scale value of the variometer. The deflecting magnet is similar to those in the magnet system itself, but is cased in brass so as to be preserved from rust and made convenient for handling; its external diameter and length are 5 mm. and 7 cm. respectively. Deflections are made at two distances along both north and south arms, and in each position the magnet is used with its north-seeking pole directed to the north and also to the south. Thus eight deflections are involved in each determination of scale value. The deflected positions are recorded on the photographic sheet, and the measurement is performed subsequently. The two adopted distances of the deflecting magnet from the magnet

E vi INTRODUCTION TO GREENWICH MAGNETIC OBSERVATIONS, 1926.

system are 27 cm. and 32 cm. The deflecting forces at these two distances are determined monthly by deflecting the mirror-magnet of the Gibson magnetometer (in the sine method) during the progress of an ordinary observation of horizontal force. The horizontal force being known from the observation, the angle of deflection enables the deflecting force to be calculated readily in absolute measure. It is found that the magnetic moment of the deflecting magnet is slowly diminishing; the deflecting forces at the above two distances were 222.0γ and 134.2γ in the mean, and the present rates of diminution of their values are 2.5γ and 1.5γ per year.

The scale value determinations for the north force instrument are made once weekly. The adopted scale value for 1926 was 3.50γ per mm.

The base-line value of the instrument is determined by means of the absolute horizontal force observations together with the absolute and photographic declination determinations.

The instrument is kept at a constant temperature, and therefore the records require no temperature correction in general. The temperature correction of the instrument was determined from observations secured when the whole room was heated up to a high temperature. It was found that a rise of temperature through 1°C . increased the base-line value of the instrument by 2γ . More recent comparisons of the mean change in base-line which occurs when changing the temperature at which the room is maintained in different seasons of the year, gives a value of 3γ per 1°C . When necessary the observations were corrected for temperature according to this latter determination.

THE QUARTZ-THREAD VERTICAL FORCE VARIOMETER.—For a detailed description of this instrument reference may be made to the *Philosophical Magazine*, vol. vii., sixth series (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. The latter consists of two magnets, 8 cms. long and 1 mm. in diameter, which are attached by small platinum stirrups to two rods of fused quartz; these are fused to a quartz plate, the upper surface of which is optically worked and platinised to form a plane mirror. The quartz rods are drawn out at their other ends into fibres of about 0.008 to 0.010 cm. diameter; one of these is 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 adjusting the centre of gravity of the magnet system. For this purpose a small vertical screw is fixed to one of the rods attached to the mirror and a small piece of brass can be moved up and down the screw, being fixed into any desired position by means of a little shellac.

SCALE VALUE OF VERTICAL FORCE VARIOMETER.—The scale value of the instrument is determined by the method of deflections, which in this case are produced electro-magnetically. The deflecting coil consists of two equal parallel circular rings of wire separated by a distance equal to their own radii. The wire is laid in V-grooves on a vulcanised fibre framework which rests permanently on the instrument pier. The leads and connections between the two separate rings are laid side by side. With such an arrangement a very uniform magnetic field is produced at the centre of the coil when an electric current circulates in the same direction round the two circles. The diameter of each circular turn of wire is 55.7 cm., and the distance between their two centres is 27.7 cm.

In making scale value determinations, the current is supplied by a large dry cell, and is measured by an ammeter. Current strengths from 25 up to 100 milliamperes are used, which allowing for the slight noncentrality of the magnets with respect to the coil, produce deflecting forces in proportion, that for 100 milliamperes being 323 γ .

The scale value determinations are made weekly. The scale value is found to remain nearly constant, but is not uniform across the sheet. The variation in force is computed from the scale value observations as a quadratic function of the ordinate. The average value is 3.2 γ per mm.

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

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

In consequence of the approaching electrification of the suburban section of the Southern Railway (several of the tracks of which pass within a mile of the Observatory at Greenwich), a magnetic observing and recording station was erected in

E viii INTRODUCTION TO GREENWICH MAGNETIC OBSERVATIONS, 1926.

1924 on a site on the northern slope of Leith Hill, in the county of Surrey. The station is capable of being maintained in frequent contact with Greenwich, and there is small possibility of its being seriously affected by electric traction. The nearest railway track approaches to within $2\frac{1}{2}$ 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 about 26 miles in a direction a little south of south-west. The geographical position is Latitude $51^{\circ}11'1''$ N., Longitude $0^{\circ}23'2''$ W.; and the height above sea level is approximately 800 feet.

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.

The buildings, equipment and general arrangement of the instruments are 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.

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

ABINGER MAGNETIC STATION : EQUIPMENT.

E ix

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. There are two azimuth marks, situated approximately 80 yards from the telescope, north and south, fixed in each case to the stem of a large tree. Frequent determinations of the azimuth of these marks 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, 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 INSTRUMENT.—A Kew-pattern unifilar magnetometer by Messrs. C. F. Casella & Co. (No. 181) is in use to determine absolute horizontal force.

Deflection observations are made at three distances, namely, 22.5 cms., 30 cms. and 40 cms. ; and at least six observations are taken each week. 39 observations of the moment of inertia of the collimator magnet were made during the year 1926. The mean observed value of log. K was 2.42483 (C.G.S. units). This value has been used in the reductions.

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 on May 1 ; but owing to difficulties connected with the insulation of the electric circuits which form part of the subsidiary apparatus, observations during 1926 have been of an experimental character only.

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

E x INTRODUCTION TO GREENWICH MAGNETIC OBSERVATIONS, 1926.

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-Gauguin 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 α 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

SCHUSTER-SMITH COIL MAGNETOMETER.

E xi

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° 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° 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 adjustment of the coil bringing the spot of light reflected by the magnet-mirror accurately to the reference mark on the opposite scale to that last used, together with a second reading of the azimuth of the coil completes the observation.

The suspension box and tube are turned 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.

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 γ 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.

ABSOLUTE INCLINATION INSTRUMENT.—An Earth Inductor by The Cambridge Instrument Co., of closely similar design to that at Greenwich (*q.v.*) is used to determine magnetic inclination. At least twelve observations are made each week.

E xii INTRODUCTION TO GREENWICH MAGNETIC OBSERVATIONS, 1926.

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 .003 mm. in diameter was introduced in place of the phosphor-bronze originally supplied, and the displacement produced by revolving the torsion head 360° was thereby reduced to a fraction of a minute of arc.

The general details of the recording mechanism correspond closely to those of the Greenwich instrument. The focussing lens is mounted in the side of the magnet chamber of the variometer, 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 mirrors from the recording cylinder is such that the geometric scale value at the centre of the photographic sheet is 0'·610 per mm. As the beam is not normal to the drum, however, the scale value varies from 0'·605 at the top of the sheet to 0'·615 at the bottom. The corresponding mean value in magnetic force would be 3.30 γ 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 since 1915). The general construction of the instrument is in all respects similar to that of the declination variometer. The suspension filament is of quartz .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 placed beneath the base of the variometer is by this means easily set at right angles to the magnetic meridian, and upon

HORIZONTAL FORCE VARIOMETER.

E xiii

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.

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 for the year is 2.60 γ per mm.

THE VERTICAL FORCE VARIOMETER.—This instrument is similar in general plan to that at Greenwich, but 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 detailed description given in the *Philosophical Magazine* (1904).

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 September 14. The scale value is obtained as at Greenwich by electro-magnetic deflections. The radius of the coil used in these experiments is 30.15 cms. The mean scale value adopted in 1926 is 0.83 γ per mm. to September 14, and 2.38 γ thereafter. It is sensibly uniform over the range allowed by the photographic sheet.

c

E xiv INTRODUCTION TO GREENWICH MAGNETIC OBSERVATIONS, 1926.

Magnetic Reductions.

From the commencement on February 28 of the operation of electric train service on the section of the Southern Railway passing through New Cross and Lewisham, continuous disturbance of all the Greenwich traces, but especially of the vertical force trace, occurred during the working hours. The declination and north force traces have been measured, however, until the end of May, after which, the full electric train service being in operation on lines passing within half-a-mile of the Observatory further measurement was deemed valueless.

The results obtained from the Greenwich traces are printed on the same plan as in former years in tables numbered (G) I-XX.

The following paragraphs refer to the records taken at the Abinger Magnetic Station :—

Two days in the year 1926, namely April 14-15 and October 15, are classed as days of great disturbance and have been omitted in the formation of the tables.

January 26-27 is also classed as a day of great disturbance.

Days of lesser disturbance in conformity with the list issued by the International Committee from De Bilt Observatory, Holland, are February 24-25 ; March 5-6 ; May 3-4 ; June 1-2 ; September 15-16, 20-21. Where two days are mentioned together, it is to be understood that the reference is to a series of 24 consecutive hours comprising parts of two consecutive days.

The time used is Greenwich Mean Time.

The mean ordinates for each hour are measured by the aid of an etched glass scale, the hour being the period of sixty minutes *commencing* at the time named in the table, and from the tables of these measures, for each calendar month, are obtained the mean monthly values for each hour of the day, and the mean daily value of the element for each day of the month. The daily mean is taken from the 24 hourly mean ordinates.

Commencing with the year 1926—the first full working year at the Abinger Station—some changes in the tabulation of the results are introduced.

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

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

Then follow in Tables (A) 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 (A) 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 (A) 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 (A) V to VII.

Table (A) XI gives in similar arrangement the non-cyclic change 24^h minus 0^h . The quantities were computed from Tables (A) 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 (A) XII contains the mean monthly and annual values of the components of magnetic force collected together.

Tables (A) XIII to XV contain the 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

E xvi INTRODUCTION TO GREENWICH MAGNETIC OBSERVATIONS, 1926.

principle the days of disturbance are 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 description of other significant magnetic motions (superposed on the ordinary diurnal movement) recorded during the year.

With regard to the plates, on each day three distinct registers are usually given, viz. : declination, 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. E 13 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.

ROYAL OBSERVATORY, GREENWICH.

F. W. DYSON.

1927, *September* 30.

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ROYAL OBSERVATORY, GREENWICH

Results of Magnetical Observations

1926

GREENWICH MAGNETIC AND METEOROLOGICAL RESULTS 1926

TABLE (G) I.—HOURLY MEANS OF MAGNETIC DECLINATION WEST AT GREENWICH.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
January.																										
12° + Tabular Quantities.																										
Mean.																										
1	63.5	64.1	63.5	62.5	62.5	61.9	63.1	63.2	63.8	64.9	65.3	65.8	66.4	66.1	62.3	65.3	65.0	64.5	64.3	63.1	61.2	62.7	62.3	62.2	63.7	63.7
2	62.3	59.9	58.4	61.1	61.6	61.5	62.4	63.1	63.3	65.5	67.5	66.3	67.7	68.5	66.7	65.4	66.2	62.9	61.8	64.1	63.5	62.0	62.5	62.4	63.6	63.6
3	63.5	63.0	63.1	63.3	63.4	63.3	63.4	62.9	62.9	63.3	63.7	64.8	65.5	64.8	64.1	63.5	63.9	64.1	64.0	63.5	63.5	63.3	63.5	63.6	63.7	63.7
4	64.6	64.3	64.3	65.3	64.3	66.5	67.8	63.8	64.6	65.9	67.1	64.9	65.9	66.1	65.7	64.7	64.7	64.5	64.3	64.3	63.3	63.2	63.3	63.4	64.9	64.9
5*	63.6	63.9	63.0	62.5	61.4	61.7	62.6	61.6	62.4	63.5	63.8	65.5	66.3	66.1	64.5	65.2	65.1	64.3	63.9	63.1	63.2	62.7	61.7	62.3	63.5	63.5
6	62.5	62.7	63.8	63.5	63.5	63.5	63.4	62.9	63.1	63.3	64.4	66.2	66.7	67.2	65.9	64.9	64.2	64.3	64.3	63.3	62.5	61.8	61.5	62.3	63.8	63.8
7	63.7	63.5	64.2	63.1	62.5	63.3	63.7	64.2	66.0	66.5	66.3	66.8	68.6	68.9	67.5	65.4	59.9	66.7	63.5	60.6	59.2	61.7	61.3	60.8	64.1	64.1
8	61.5	61.1	61.9	64.5	63.0	63.8	63.8	63.5	64.2	63.2	65.1	66.2	65.9	65.0	64.2	63.9	64.2	63.6	60.6	62.5	62.5	62.5	62.7	62.5	63.5	63.5
9	63.5	62.8	62.3	64.1	64.5	63.6	63.1	62.5	61.2	61.4	62.5	65.1	66.8	67.3	68.1	66.3	65.1	63.5	62.7	63.4	62.8	62.7	62.5	62.7	63.8	63.8
10	63.4	63.3	63.2	63.1	62.9	62.5	62.5	62.2	61.5	61.8	63.3	64.9	66.3	66.7	65.8	65.5	64.3	63.8	63.3	62.3	62.5	59.5	57.5	59.5	63.0	63.0
11	60.4	64.8	63.7	63.5	64.1	64.5	64.6	64.5	63.1	62.5	65.0	(66.9)	67.1	66.8	67.2	66.8	65.9	64.9	64.5	64.5	64.2	63.4	(63.7)	(63.7)	(64.6)	(64.6)
12	64.3	63.9	62.8	63.5	62.0	62.6	63.2	63.0	62.2	61.5	(63.9)	65.9	67.3	66.7	65.6	65.4	64.7	64.5	64.1	63.5	63.2	63.2	—	—	—	—
13	—	58.2	57.5	60.3	60.3	59.8	62.4	63.4	63.2	64.0	65.3	67.3	69.2	69.8	69.0	68.6	66.9	67.3	69.6	65.3	64.5	50.8	53.5	—	—	—
14	—	—	—	—	—	—	—	—	—	—	—	—	—	70.1	68.6	70.0	68.2	67.0	65.1	64.8	62.7	61.7	60.8	58.4	—	—
15	61.8	62.6	60.3	64.3	63.3	63.3	63.5	63.6	63.7	—	—	—	—	—	—	67.8	64.9	64.5	61.8	60.3	60.8	60.1	58.9	60.8	—	—
16	60.8	62.2	57.6	59.3	60.5	61.5	62.1	61.6	61.5	62.5	64.7	66.5	68.4	69.8	68.9	67.3	66.3	65.5	65.5	63.1	62.8	61.5	57.1	58.2	63.1	63.1
17	59.3	60.5	62.4	63.5	63.7	63.3	62.9	62.5	61.8	61.1	62.9	64.5	65.4	66.1	65.7	65.5	64.9	64.4	63.9	64.1	60.6	62.7	62.2	62.3	63.2	63.2
18**	62.5	62.2	62.9	63.2	63.0	63.0	63.7	62.7	61.5	68.9	69.1	69.9	68.0	68.5	69.5	67.3	66.6	64.9	67.1	69.4	64.8	61.5	62.1	60.5	61.1	61.1
19	51.1	51.8	55.3	60.3	61.0	61.7	62.2	63.0	62.2	61.6	62.9	65.5	68.7	70.0	66.9	67.8	65.8	64.3	65.1	61.3	60.4	62.8	62.5	62.8	62.4	62.4
20*	62.8	62.6	63.1	62.9	62.5	62.8	63.1	62.3	62.0	62.8	64.2	65.3	67.4	67.1	66.6	65.7	65.0	64.7	64.7	63.9	61.5	63.2	62.7	62.6	63.8	63.8
21*	62.4	62.2	62.3	62.2	61.8	61.3	61.9	62.1	61.8	62.3	63.5	65.1	66.1	66.5	66.1	65.0	64.7	64.5	64.9	64.5	63.9	63.3	62.8	61.9	63.5	63.5
22**	62.5	62.5	61.8	61.8	61.3	61.7	61.3	61.4	60.8	61.8	64.7	65.9	67.3	68.2	68.0	66.5	68.1	68.5	72.3	67.9	64.7	53.0	49.1	52.5	63.1	63.1
23**	56.1	51.5	59.7	60.5	61.3	62.8	64.7	63.3	61.5	61.7	62.9	62.7	65.5	65.7	64.1	64.9	64.5	64.1	64.5	63.8	62.8	62.7	62.6	62.3	62.3	62.3
24	61.5	61.5	61.4	61.2	60.9	61.1	61.3	61.3	61.4	62.2	63.5	65.6	65.7	66.1	65.4	64.5	63.8	63.5	63.3	63.2	63.0	62.6	62.5	62.3	62.9	62.9
25*	62.3	62.4	61.6	61.6	61.5	62.5	62.0	61.4	61.2	62.1	63.5	64.1	65.5	66.8	66.4	65.2	64.3	64.7	64.5	63.8	63.4	62.9	62.1	62.1	63.2	63.2
26**	61.5	61.4	62.5	62.1	61.0	62.1	61.2	61.3	63.1	61.7	61.3	61.6	64.1	66.1	65.5	63.5	52.4	60.2	67.2	63.5	65.0	58.1	57.6	66.5	62.1	62.1
27**	60.5	43.3	54.3	60.9	61.0	60.6	61.3	60.5	61.3	61.5	61.5	63.0	62.7	61.5	57.1	53.8	60.4	60.6	61.7	61.5	55.7	60.5	63.7	59.7	59.5	59.5
28	60.1	61.9	62.5	62.0	61.9	61.6	62.3	61.8	62.8	65.0	64.5	66.1	66.5	65.1	64.8	63.6	60.3	58.9	60.1	62.0	57.8	62.1	62.5	62.4	62.4	62.4
29	62.5	62.5	64.5	62.3	61.5	61.9	61.1	62.1	63.4	62.5	63.5	64.2	66.0	64.5	65.1	63.4	64.1	63.2	61.3	61.9	62.0	62.0	61.6	61.7	62.9	62.9
30*	62.3	62.4	62.5	62.8	63.5	61.8	61.8	62.1	61.4	61.2	62.5	62.9	65.0	66.5	65.6	64.8	64.3	63.3	62.8	62.3	62.1	61.9	61.7	59.5	62.8	62.8
31	61.3	60.3	61.8	62.0	62.3	62.5	64.0	65.4	63.7	62.9	63.7	64.6	64.6	65.5	65.9	65.2	64.5	63.4	62.9	62.3	61.7	61.5	61.0	61.2	63.1	63.1
Mean	61.6	60.9	61.8	62.4	62.3	62.5	62.9	62.6	62.5	63.1	64.1	65.2	66.3	66.6	65.7	64.9	64.0	63.9	64.1	63.4	62.4	61.6	61.3	61.6	63.2	63.2
Mean*	62.7	62.7	62.5	62.4	62.1	62.0	62.3	61.9	61.8	62.4	63.5	64.6	66.1	66.5	65.8	65.2	64.7	64.3	64.2	63.5	62.8	62.8	62.2	61.7	63.4	63.4
Mean**	60.6	56.2	60.2	61.7	61.5	62.0	62.4	61.8	61.6	62.9	63.9	64.6	65.5	66.0	64.8	63.2	62.4	63.7	66.6	65.2	62.6	59.2	59.0	60.3	62.4	62.4
February.																										
12° + Tabular Quantities.																										
Mean.																										
1	61.7	61.7	62.4	62.3	62.3	62.5	62.8	61.5	61.3	61.3	63.7	65.2	64.3	67.5	66.9	64.4	63.5	62.3	61.8	63.5	62.1	61.1	59.7	61.5	62.8	62.8
2	62.0	62.1	63.2	60.5	60.5	61.7	62.8	63.9	62.6	62.7	62.7	65.0	65.8	65.5	65.1	64.2	63.8	63.5	63.3	62.5	59.3	48.5	54.8	54.5	61.7	61.7
3	58.7	63.0	61.7	61.7	63.5	66.1	64.5	61.7	60.6	61.4	63.1	64.9	67.5	65.1	66.6	66.1	65.5	60.9	60.5	60.9	—	—	—	—	—	—
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	61.4	62.5	64.3	61.5	61.9	62.2	61.9	61.3	60.5	61.3	62.0	64.5	65.8	66.1	65.0	64.1	63.5	62.5	62.7	62.3	61.5	60.3	61.5	61.5	62.6	62.6
6*	61.8	61.8	62.0	62.3	61.9	61.8	61.4	60.6	59.8	60.2	62.3	64.5	66.5	66.0	65.5	63.5	62.2	63.0	62.7	62.5	62.0	61.7	61.8	61.9	62.5	62.5
7*	62.3	62.3	62.5	62.4	62.5	62.3	61.7	61.5	60.6	59.8	61.5	64.5	66.5	66.9	66.2	65.2	64.1	63.5	63.2	63.1	62.5	62.3	62.3	62.4	63.0	63.0
8*	62.5	62.7	62.8	63.0	62.7	62.5	62.1	61.2	60.1	59.5	62.3	64.5	65.9	66.2	65.5											

TABLE (G) I.—HOURLY MEANS OF MAGNETIC DECLINATION AT GREENWICH—*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.																								Mean.		
1	60.8	61.1	61.3	61.3	61.2	61.4	61.3	60.9	60.1	59.3	61.2	63.5	66.3	66.6	65.8	64.5	64.1	64.9	64.2	59.5	51.2	57.1	61.1	57.3	61.5		
2	56.3	62.5	62.3	61.6	62.0	64.1	69.5	66.1	62.4	60.7	61.5	63.5	65.5	66.3	64.8	60.8	63.0	63.5	63.0	61.2	61.7	58.7	55.1	55.0	62.1		
3	57.3	58.1	60.2	60.4	61.1	61.8	62.2	60.1	59.2	59.5	61.9	65.7	65.7	66.7	66.3	64.1	61.7	52.8	51.2	56.1	58.5	58.3	57.5	62.3	60.7		
4	63.1	60.5	59.9	61.3	61.0	60.9	60.5	59.9	59.2	59.5	61.5	64.3	66.1	67.5	66.1	61.7	62.7	62.0	59.9	58.8	60.5	59.9	58.9	60.9	61.6		
5**	61.5	61.5	61.3	61.3	61.3	61.6	60.8	59.3	58.0	58.3	61.9	68.9	72.9	74.1	73.0	75.7	63.3	62.5	58.5	51.3	52.5	45.5	49.5	59.1	61.4		
6**	59.6	65.5	60.0	53.5	61.5	59.7	59.8	59.5	58.9	61.8	60.1	63.7	66.4	66.6	67.6	66.4	64.7	62.5	59.9	60.3	62.3	61.1	61.5	57.4	61.7		
7	56.7	59.0	59.9	60.2	60.3	60.2	60.1	60.1	59.8	59.3	62.1	64.8	67.3	66.5	66.5	65.5	64.5	57.5	57.2	60.0	58.7	56.8	56.5	58.7	60.8		
8*	61.3	61.7	62.7	60.6	60.8	61.2	61.3	60.2	59.5	59.5	61.0	64.1	66.6	67.0	65.8	64.8	63.5	63.2	62.7	62.5	62.1	62.0	61.8	61.3	62.4		
9**	61.1	60.7	60.4	60.5	60.3	60.1	60.3	59.8	59.3	60.2	61.7	67.3	70.4	71.8	67.3	69.7	69.8	67.7	66.1	65.0	47.5	45.7	57.5	53.2	62.2		
10**	49.8	52.8	46.5	56.7	59.4	55.1	59.5	62.7	58.7	61.0	63.3	66.5	69.4	69.0	66.5	65.8	64.5	58.0	61.7	60.2	58.5	58.5	56.3	61.5	60.1		
11	58.5	56.6	64.3	58.7	57.8	65.5	64.6	58.0	59.1	58.5	61.4	65.0	68.3	67.7	66.3	65.7	65.7	61.3	61.5	59.3	54.9	58.3	59.3	55.8	61.3		
12	57.0	57.5	60.2	60.3	61.2	58.3	58.3	58.1	59.3	60.0	60.8	63.5	66.5	66.3	66.1	65.2	63.3	62.5	59.5	59.5	56.9	58.2	60.3	58.7	60.7		
13	61.0	61.8	60.9	60.1	59.3	59.5	59.4	58.6	58.5	59.5	61.1	65.0	66.4	70.7	69.0	66.7	64.3	60.0	60.8	61.3	60.1	59.1	57.8	58.5	61.6		
14	57.2	57.5	55.4	57.9	60.5	59.1	57.9	57.3	56.7	57.8	60.2	64.8	68.2	69.3	68.3	66.3	64.3	62.6	62.4	62.1	60.5	60.5	61.5	61.3	61.1		
15*	61.5	61.5	61.1	61.7	60.5	60.8	59.8	58.3	57.1	57.5	60.5	63.0	67.3	69.2	67.9	65.9	63.5	63.3	62.1	61.7	60.6	60.5	61.5	60.3	62.0		
16	59.0	58.9	57.5	58.7	59.1	58.8	58.8	57.7	59.3	60.1	62.5	66.5	67.1	67.3	67.5	66.1	63.9	61.3	62.3	61.2	58.1	59.5	59.3	56.0	61.1		
17	55.7	58.5	62.3	59.8	59.5	59.3	61.0	59.3	57.9	58.5	61.7	65.1	65.7	67.0	67.7	65.2	64.4	63.5	62.1	61.5	62.3	62.4	58.1	54.0	61.4		
18**	54.5	49.6	52.7	51.0	54.0	60.9	59.0	57.6	58.6	60.5	64.2	66.7	70.1	70.9	73.7	71.0	69.5	62.6	63.1	60.7	59.5	57.2	53.8	56.7	60.7		
19	56.3	55.8	57.5	57.2	58.4	59.1	59.5	59.0	59.3	59.9	61.7	65.1	65.5	67.7	68.9	69.1	67.5	66.5	59.0	61.3	61.5	55.5	55.0	57.3	61.0		
20	57.8	54.8	56.5	56.3	59.2	63.5	64.0	62.3	59.7	59.3	61.7	63.0	65.1	69.2	69.5	65.9	66.3	65.3	64.0	56.5	54.7	57.5	59.8	55.1	61.1		
21	57.1	53.1	57.1	58.3	59.1	59.8	58.3	59.8	59.2	60.5	63.5	64.3	67.3	67.3	67.9	65.5	63.4	61.1	55.7	61.3	59.7	58.4	57.3	63.8	60.8		
22	54.5	55.9	59.4	59.6	59.7	60.8	61.3	61.0	60.5	61.2	62.3	62.9	66.7	67.5	68.1	66.8	65.5	64.3	63.1	62.4	61.8	60.2	61.0	61.1	63.1		
23	62.3	61.0	61.5	57.1	58.5	59.5	60.2	59.5	59.7	60.5	62.5	65.9	67.5	68.1	66.7	64.5	62.9	63.0	61.8	61.5	61.7	61.5	61.0	60.5	62.0		
24	60.7	60.6	60.5	60.2	61.1	60.5	61.1	60.0	59.5	61.5	62.9	66.0	69.2	70.1	69.2	66.1	63.1	59.8	60.1	61.5	61.7	61.5	61.7	61.1	62.5		
25*	61.8	59.3	62.3	59.5	59.6	61.3	61.5	58.9	57.5	57.9	59.8	62.3	65.5	66.7	66.9	64.1	62.9	62.5	62.1	62.1	61.7	61.2	61.1	60.9	61.6		
26*	61.1	61.1	60.5	59.8	59.8	60.1	61.3	60.9	58.0	57.7	59.8	64.5	66.7	67.9	67.5	65.6	63.5	62.2	60.7	61.3	61.4	61.3	60.9	60.5	61.8		
27	60.5	60.8	60.8	60.5	60.7	60.5	59.5	57.7	56.1	57.5	59.8	65.1	68.1	69.8	68.5	66.8	64.3	60.5	60.7	61.3	61.3	61.3	60.9	61.0	61.8		
28	60.9	61.5	61.4	63.7	61.5	59.8	59.3	58.2	57.3	57.7	63.1	65.8	70.3	70.8	66.5	65.6	64.5	62.9	61.5	60.6	59.5	60.0	57.8	58.3	62.0		
29	59.8	59.8	60.7	64.5	64.8	63.9	63.1	62.6	61.1	60.9	63.3	66.1	67.5	69.6	68.1	65.4	63.8	61.7	54.2	60.0	61.4	59.3	60.8	58.7	62.5		
30	58.5	62.8	60.6	59.5	60.0	60.3	59.5	58.2	57.7	58.1	59.1	64.5	67.5	69.8	66.5	60.4	63.3	62.4	57.1	56.8	58.3	59.9	59.7	61.8	60.9		
31*	61.1	59.7	60.2	62.1	61.0	60.1	59.5	58.8	57.5	58.4	61.3	63.7	67.5	68.3	66.4	64.3	63.3	62.3	61.8	60.5	60.2	61.1	61.1	60.8	61.7		
Mean	58.8	59.1	59.6	59.5	60.1	60.6	60.7	59.7	58.9	59.4	61.6	64.9	67.4	68.5	67.6	65.8	64.3	62.1	60.6	60.3	59.0	59.0	58.8	59.1	61.5		
Mean*	61.4	60.7	61.4	60.7	60.3	60.7	60.7	59.4	57.9	58.2	60.5	63.5	66.7	67.8	66.9	64.9	63.3	62.7	61.9	61.6	61.2	61.4	61.2	60.8	61.9		
Mean**	57.3	58.0	56.2	56.6	59.3	59.5	59.9	59.8	58.7	60.4	62.2	66.6	69.8	70.5	69.6	69.7	66.4	62.7	61.9	59.5	56.1	53.6	55.7	57.6	61.2		
12° + Tabular Quantities.																											
April.																									Mean.		
1	60.8	60.5	60.5	60.6	60.8	61.3	60.5	58.7	57.7	59.1	61.7	63.3	66.9	69.7	67.5	66.0	63.8	62.7	58.7	60.1	61.5	61.3	61.1	60.9	61.9		
2*	60.8	60.5	60.5	60.6	60.8	60.5	59.2	57.0	55.9	57.5	61.5	64.2	68.7	69.0	69.3	67.0	64.5	62.9	61.8	61.6	61.3	60.5	60.1	60.5	61.9		
3	60.5	59.6	59.5	60.0	60.7	59.5	60.1	58.2	56.8	56.3	60.5	61.7	64.7	67.5	65.7	64.3	62.7	61.8	61.3	59.9	59.4	60.4	60.8	59.3	60.9		
4	60.7	59.5	59.5	59.9	61.1	60.9	59.5	57.5	56.3	56.9	59.4	61.7	64.5	66.0	65.6	63.7	61.9	62.1	61.5	59.9	56.8	60.5	61.2	60.8	60.7		
5	60.5	60.3	60.1	59.7	59.8	60.1	59.3	57.8	57.5	58.2	61.1	63.5	65.6	67.1	66.2	65.3	63.9	62.5	62.5	62.3	62.0	61.6	59.3	57.5	61.4		
6**	57.5	54.5	57.3	52.5	56.3	53.5	55.5	57.3	55.8	56.8	59.9	64.0	68.2	67.8	67.2	65.1	62.3	61.5	60.8	59.9	54.5	56.5	57.5	59.6	59.2		

TABLE (G) I.—HOURLY MEANS OF MAGNETIC DECLINATION AT GREENWICH—continued.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon.	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	Mean.
12° + Tabular Quantities.																										
May.																										
192860A																										
1*	59.8	59.3	59.2	59.1	58.6	57.9	57.0	55.7	55.5	56.3	58.1	61.5	64.5	65.3	64.9	63.7	62.1	60.7	59.9	59.6	60.1	59.9	60.0	59.7	59.9	
2*	58.5	58.7	59.3	59.0	58.2	57.2	55.0	53.4	53.9	55.7	57.4	61.0	64.5	65.9	64.3	62.4	60.9	59.9	59.3	59.7	60.1	59.6	59.4	59.3	59.3	
3	59.1	59.0	59.0	58.2	57.7	55.9	54.8	54.1	54.5	56.4	58.8	61.5	64.6	65.5	65.0	64.1	63.3	61.5	59.6	59.7	59.6	59.5	59.6	59.1	59.3	
4**	59.1	44.1	51.9	52.5	53.7	53.1	55.5	55.5	55.6	57.5	59.8	62.3	66.2	69.1	69.2	68.5	67.3	63.5	55.5	58.6	57.5	57.5	58.2	53.7	58.6	
5**	56.1	58.1	56.7	59.5	56.3	57.5	60.1	58.7	55.5	57.5	62.5	65.4	64.9	65.0	66.7	65.3	63.5	59.8	59.5	59.6	60.5	60.3	59.5	59.8	60.3	
6**	59.3	56.5	56.3	58.9	59.9	59.2	56.8	56.9	55.7	57.7	61.0	64.5	65.5	67.1	64.5	64.3	59.9	61.0	59.0	56.5	58.9	58.3	52.6	58.3	59.5	
7	60.7	58.2	57.0	55.1	55.2	54.3	53.3	51.9	53.3	56.1	59.5	63.8	65.6	66.2	65.3	64.6	62.5	60.1	56.2	57.7	57.1	53.7	57.0	58.5	58.4	
8	58.8	59.5	59.9	58.0	55.2	53.0	52.5	52.5	53.8	57.3	59.5	62.1	64.5	65.1	64.5	63.9	62.0	59.9	59.0	59.1	59.3	56.7	58.4	57.7	57.8	
9	58.5	58.6	56.3	56.0	54.7	52.9	51.5	52.0	55.2	58.2	61.8	64.4	65.9	66.6	65.3	64.4	63.7	61.2	56.7	56.8	56.3	57.5	59.3	59.7	58.9	
10**	59.3	57.5	59.7	57.9	57.5	59.3	57.2	59.1	54.9	57.5	61.2	64.3	66.4	66.8	68.3	63.8	63.8	58.5	60.1	59.5	55.3	57.5	56.8	59.1	60.1	
11**	60.5	61.1	60.5	56.7	56.7	55.3	51.3	49.5	50.5	54.3	59.1	63.5	65.4	64.8	67.5	63.1	61.3	60.5	58.7	57.5	57.7	57.8	59.5	59.1	58.8	
12	53.7	55.3	61.2	56.5	56.9	57.5	55.5	55.4	54.1	56.8	61.2	66.5	67.2	67.3	65.7	64.3	62.3	60.8	59.8	57.7	54.5	58.5	57.8	58.2	59.4	
13	59.1	60.5	57.3	54.4	55.0	53.1	53.1	57.7	54.8	55.5	60.3	64.5	66.5	67.3	66.9	65.9	62.3	60.5	58.4	58.3	58.0	57.8	57.2	57.8	59.3	
14	59.7	61.3	58.6	57.9	58.0	56.3	55.1	55.2	56.5	58.5	59.5	62.5	64.9	65.7	65.2	63.5	62.4	61.2	59.7	56.5	56.6	57.5	58.3	57.9	59.5	
15*	58.3	58.5	57.5	56.9	56.5	55.2	53.7	53.6	52.5	53.5	58.3	62.5	65.5	65.8	66.0	64.5	62.5	60.8	59.5	59.1	58.5	55.8	57.1	57.1	58.7	
16	57.7	58.4	56.8	57.3	57.2	56.1	54.8	54.1	54.2	55.5	56.8	61.9	64.5	65.1	65.0	63.8	62.7	61.2	60.1	59.5	59.1	59.3	57.5	54.1	58.9	
17	53.8	56.5	57.5	62.3	55.8	54.4	52.5	52.3	52.5	54.3	58.2	61.5	63.5	65.1	64.9	64.1	62.7	61.0	60.3	61.0	60.1	56.3	54.8	56.7	58.4	
18	55.5	47.6	52.3	55.9	54.6	53.2	52.8	52.6	53.1	56.0	59.3	63.5	65.0	66.2	67.4	63.7	63.5	61.8	60.6	60.5	60.4	59.4	59.8	58.5	58.5	
19	57.7	57.5	57.8	56.5	56.0	54.5	53.8	55.9	54.9	55.1	57.3	61.5	64.7	65.3	64.4	63.0	61.5	59.7	59.3	59.4	59.5	59.7	59.5	55.3	58.7	
20	57.5	58.3	56.5	56.5	51.6	62.1	61.0	58.5	57.3	57.5	58.9	61.5	62.8	64.0	63.1	61.2	60.1	58.7	57.7	58.5	59.1	58.5	54.0	58.3	59.3	
21	58.2	60.2	58.5	60.0	56.3	53.6	54.5	54.6	55.1	54.7	57.7	61.7	63.5	62.8	62.5	61.5	60.3	59.0	58.5	58.2	57.5	54.8	58.1	59.2	58.4	
22	59.5	57.7	57.8	57.1	56.2	55.1	54.0	54.1	54.5	56.5	59.8	63.5	65.5	65.2	63.8	61.0	60.1	58.6	58.5	59.1	58.9	58.5	58.1	58.3	58.8	
23	58.3	58.1	57.5	57.3	57.3	55.5	54.7	53.8	54.6	55.7	58.8	62.5	63.4	62.3	61.5	59.7	58.8	58.2	57.8	58.3	58.2	58.5	55.9	57.5	58.1	
24	57.4	58.3	58.1	57.3	56.3	54.5	53.5	53.3	53.5	55.4	58.7	60.5	62.4	62.5	61.9	60.8	59.9	58.6	58.3	58.1	58.8	59.3	57.8	58.4	58.1	
25	58.7	58.8	58.5	57.7	56.1	55.3	56.3	55.8	55.8	56.5	58.5	61.0	62.5	62.5	62.1	60.8	59.8	59.1	58.5	58.3	58.3	57.1	58.3	58.4	58.5	
26*	58.0	57.7	57.6	57.5	56.8	55.8	54.5	52.6	52.0	54.0	57.1	59.8	63.0	63.6	62.8	61.7	61.7	60.5	59.5	59.1	58.6	58.9	58.8	58.7	58.3	
27	58.6	58.7	58.9	58.6	58.0	56.5	55.5	53.4	52.3	53.5	56.0	58.6	62.1	63.5	63.5	61.5	60.3	59.2	58.3	58.2	58.8	59.2	59.2	59.2	58.4	
28	59.1	59.1	59.2	58.3	56.7	55.0	53.8	53.5	53.3	54.5	56.6	59.1	61.2	62.3	62.5	61.9	61.5	60.5	59.3	58.9	58.7	58.9	58.9	59.1	58.4	
29	58.2	58.1	58.3	58.1	58.1	57.5	55.5	55.5	56.8	58.7	59.5	61.3	62.9	63.3	62.9	61.8	61.0	60.3	59.6	59.5	59.2	58.7	58.5	58.5	59.2	
30	58.1	57.5	57.5	57.3	56.5	55.7	55.7	54.1	53.3	54.7	57.5	60.5	62.5	63.3	62.9	62.2	61.1	59.7	58.7	58.5	58.7	59.0	58.5	58.1	58.4	
31*	57.7	57.7	58.7	57.6	57.7	55.7	54.3	53.5	52.8	55.1	58.7	60.9	63.3	64.4	64.2	63.3	62.3	60.7	59.7	59.3	58.9	58.7	58.8	58.5	58.9	
Mean	58.2	57.6	57.8	57.5	56.8	55.7	54.8	54.5	54.3	56.0	58.9	62.2	64.4	65.0	64.7	63.2	61.8	60.2	58.9	58.7	58.5	58.2	58.0	58.1	58.9	
Mean*	58.5	58.4	58.5	58.0	57.6	56.2	54.9	53.8	53.3	54.9	57.9	61.1	64.2	65.0	64.4	63.1	61.9	60.5	59.6	59.4	59.2	58.7	58.9	58.7	59.0	
Mean**	58.9	55.5	57.0	57.1	56.8	56.9	56.2	55.9	54.4	56.9	60.7	64.0	65.7	66.6	67.2	65.0	63.2	60.7	58.6	58.3	58.0	58.3	57.3	58.0	59.5	

TABLE (G) II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE AT GREENWICH.

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon.	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h
January.	17000 γ + Tabular Quantities (in γ).																								Mean.
1	921	921	926	923	924	931	924	924	921	919	921	907	905	909	905	910	910	917	926	924	928	926	924	931	920
2	930	936	936	929	930	934	936	934	920	909	908	915	920	918	906	915	913	913	936	909	918	925	922	927	922
3	926	929	931	935	936	936	940	935	933	929	915	929	928	923	928	920	921	928	932	934	934	932	939	939	931
4	938	934	938	938	945	927	948	936	931	905	906	913	916	918	921	921	921	926	930	930	930	930	928	928	927
5*	929	929	929	929	931	931	934	936	934	931	924	917	915	915	918	918	918	922	929	931	929	934	936	931	927
6	927	927	925	931	934	934	931	929	929	925	918	901	915	913	915	918	924	932	929	929	925	925	936	927	925
7	927	929	932	938	939	939	934	925	918	918	920	917	911	906	908	911	917	908	915	925	939	929	929	950	924
8	945	938	929	918	931	929	927	929	915	904	906	911	913	918	922	924	918	924	927	939	934	931	932	934	925
9	940	937	933	930	930	933	935	933	930	919	907	905	900	907	909	918	923	925	930	932	933	933	933	933	925
10	935	937	937	932	930	933	933	933	930	923	914	905	902	904	914	923	926	930	930	933	939	935	933	933	927
11	928	926	933	932	937	940	944	947	940	932	930	923	916	916	923	923	930	933	935	935	940	940	939	937	934
12	936	934	931	927	931	931	940	941	936	934	924	917	945	952	957	959	959	962	962	962	961	959	(948)	(945)	(944)
13	(941)	941	943	941	945	961	961	962	948	926	915	913	915	917	926	931	933	938	919	908	892	903	(917)	(919)	(934)
14												929	919	912	926	910	915	933	934	940	940	941	941	948	—
15	945	947	941	941	945	950	948	938	941	(924)	(919)	910	903	908	906	906	913	919	940	941	924	927	976	941	(931)
16	935	935	935	956	946	939	942	941	935	925	921	920	918	906	914	928	925	925	928	928	923	941	942	941	931
17	942	944	942	944	948	951	949	946	946	941	942	932	932	935	939	942	946	949	953	953	942	949	953	953	945
18**	951	949	946	949	949	948	953	956	914	871	893	914	916	928	918	920	935	939	941	927	937	949	946	942	933
19	974	935	927	925	935	939	942	942	946	939	928	921	911	907	923	921	914	932	935	942	951	946	948	946	935
20*	947	943	943	943	952	954	945	947	947	942	940	940	940	940	940	942	943	947	950	952	961	952	952	950	946
21*	950	947	947	947	950	954	954	954	950	943	933	929	931	936	940	943	947	949	949	947	945	950	952	950	946
22**	950	952	952	956	961	954	954	954	952	947	940	936	931	929	926	940	954	968	938	940	935	947	880	880	941
23**	897	927	902	908	916	923	918	927	927	923	916	913	923	909	909	915	923	939	944	955	941	944	941	934	924
24	934	934	934	934	936	937	939	937	937	930	920	920	922	918	920	929	932	937	948	948	950	944	939	939	934
25*	939	939	937	939	941	944	946	944	944	937	934	927	923	929	930	932	939	950	951	955	955	948	946	944	941
26**	937	946	950	951	951	957	948	941	929	920	918	925	927	930	934	951	1067	1113	1021	927	969	955	913	873	948
27**	843	831	801	808	850	853	867	876	881	874	878	880	874	894	888	927	909	909	911	915	930	922	897	906	880
28	905	907	910	907	914	912	914	914	903	891	891	903	902	919	921	921	924	935	928	924	928	944	928	926	916
29	924	924	928	928	930	931	921	924	921	928	928	928	928	923	917	907	916	924	930	931	935	933	931	930	926
30*	931	931	935	935	942	938	938	935	931	923	919	912	914	919	921	924	924	931	938	942	940	938	938	938	931
31	938	940	935	937	942	945	942	938	945	945	931	912	919	917	909	910	931	935	938	942	935	938	937	937	933
Mean	932	932	930	930	935	936	937	936	931	923	919	917	917	919	920	925	932	935	938	935	937	938	934	932	930
Mean*	939	938	938	939	943	944	943	943	941	935	930	925	925	928	930	932	934	940	943	945	946	944	945	943	938
Mean**	916	921	916	914	925	927	928	925	921	909	909	918	918	918	918	918	918	918	918	918	918	918	918	918	918

TABLE (G) II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE AT GREENWICH—*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
February.																									
17000 γ + Tabular Quantities (in γ).																									
																									Mean.
1	944	944	942	944	944	944	944	949	947	928	909	893	916	921	910	923	931	933	921	931	938	933	944	942	932
2	942	945	965	944	945	947	944	944	940	935	928	926	921	923	926	933	938	944	928	938	959	972	933	940	940
3	937	940	938	940	935	942	952	944	949	931	924	916	910	914	924	916	919	935	928	938	944	944	942	945	—
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	935	942	942	940	938	935	938	942	938	935	928	928	921	917	924	931	931	938	942	945	944	952	945	945	937
6*	945	945	944	945	945	945	949	949	944	937	928	921	917	917	928	935	937	942	945	947	947	947	947	947	940
7*	945	945	945	949	949	951	952	951	947	940	931	928	919	923	931	937	942	945	947	949	949	949	949	947	942
8*	945	945	949	949	952	956	958	956	952	944	935	928	926	931	935	940	944	945	947	949	952	952	951	949	945
9*	949	949	951	952	954	952	954	956	949	940	931	928	928	935	942	944	942	944	947	947	951	951	956	952	946
10	949	947	947	949	952	956	970	961	949	940	942	944	942	935	938	942	947	949	952	952	945	935	930	928	946
11**	931	930	928	930	935	942	945	945	944	935	928	926	935	935	937	935	914	910	917	896	879	909	917	923	926
12	926	931	926	917	930	928	928	938	935	926	923	919	914	914	916	926	935	928	928	928	944	940	942	942	929
13	940	947	949	942	952	938	944	954	949	937	931	926	910	895	917	924	930	931	942	931	938	926	924	940	934
14	949	949	947	945	942	945	945	947	945	935	931	916	914	919	917	917	924	928	935	935	942	940	926	935	935
15	938	938	938	937	949	945	949	945	935	910	907	900	898	905	900	905	926	937	942	951	921	910	938	928	927
16	937	933	935	935	938	944	949	942	930	923	914	903	895	907	921	930	938	942	944	944	945	944	944	949	933
17	942	942	942	942	945	947	949	952	944	930	916	905	889	902	917	928	940	937	919	938	949	958	966	958	936
18**	921	945	942	954	942	931	924	921	917	916	903	889	889	896	914	921	928	931	935	933	938	938	938	933	925
19	952	938	940	938	935	938	933	938	928	916	914	909	902	907	924	933	935	940	947	966	951	951	940	935	934
20	938	937	940	942	942	949	949	945	942	924	910	903	903	909	905	916	928	931	933	942	944	942	942	951	932
21	945	937	938	942	945	945	944	942	938	935	930	924	924	924	931	933	935	917	923	928	942	963	942	938	936
22	937	938	942	945	952	945	945	938	928	907	907	914	916	919	919	926	930	926	917	931	952	931	928	930	930
23**	928	924	928	930	928	931	931	928	917	917	916	919	921	924	935	945	947	949	965	945	944	931	917	914	931
24**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
25**	854	872	910	872	837	884	886	874	877	868	858	858	865	886	900	907	910	910	914	916	921	921	923	924	890
26	924	931	917	917	931	912	903	921	917	907	893	879	877	877	888	903	912	917	924	924	928	942	930	930	913
27*	928	928	930	930	931	933	938	938	931	917	903	893	889	895	907	914	921	924	930	928	935	933	931	935	923
28	935	935	933	935	935	938	945	952	952	935	924	914	910	914	907	914	923	930	935	933	924	940	945	931	—
Mean	935	937	939	937	938	939	941	941	936	925	918	912	910	914	920	926	932	933	935	937	939	940	938	934	932
Mean*	942	942	944	945	946	947	950	950	945	936	926	920	916	920	929	934	937	940	943	944	947	947	947	946	939
Mean**	909	918	927	922	911	922	922	917	914	909	901	898	903	910	922	927	925	925	933	923	921	925	924	924	918

March.																									
17000 γ + Tabular Quantities (in γ).																									
																									Mean.
1	942	938	937	938	942	945	949	952	940	937	928	919	917	919	914	914	931	935	931	949	933	940	945	934	
2	952	931	930	935	935	928	917	942	933	921	879	879	924	902	912	907	926	924	930	938	935	942	973	942	927
3	935	933	926	931	935	938	944	942	937	928	921	900	898	923	928	928	924	924	923	914	928	926	931	928	927
4	937	945	935	928	931	938	942	940	928	921	907	905	909	917	917	924	931	933	924	938	942	940	938	935	929
5**	938	938	940	942	945	945	945	942	931	919	931	923	907	907	910	931	914	891	851	847	875	900	896	875	914
6**	886	867	889	903	910	910	893	909	893	886	882	882	877	886	895	905	909	916	931	930	921	924	926	919	902
7	921	928	921	921	923	924	928	928	924	916	910	896	891	900	907	910	919	919	914	903	914	910	923	921	916
8*	924	926	930	931	935	935	935	938	933	924	917	910	910	917	923	930	931	931	931	935	935	938	945	944	930
9**	938	940	942	942	944	949	945	952	949	938	931	935	907	902	914	945	942	917	914	872	891	889	910	921	926
10**	921	886	917	896	910	940	903	886	884	889	881	875	863	879	896	912	914	930	924	938	942	930	942	931	908
11	949	942	924	938	935	938	931	928	914	898	893	884	884	886	896	917	921	909	926	938	924	912	938	937	919
12	928	931	919	924	928	935	924	921	898	889	896	896	893	900	909	919	914	921	938	935	940	930	942	938	920
13	928	931	928	931	933	935	938	938	926	914	909	898	896	903	898	912	924	938	935	938	930	931	928	935	928
14	937	949	938	928	931	940	938	935	926	919	907	902	905	914	921	924	928	931	935	940	942	942	958	942	931
15*	938	940	942	940	947	942	947	945	935	921	910	903	905	914	917	931	930	931	940	942	945	940	945	958	934
16	954	949	949	952	952	952	949	931	917	910	900	893	905	917	923	928	923	928	930	931	942	944	949	935	932
17	943	934	936	945	941	939	936	939	932	929	917	904	908	922	924	922	932	938	936	941	946	955	957	960	932
18**	950	950	950	952	941	936	939	938	918	901	892	889	889	887	883	890	890	913	903	904	917	922	931	943	918
19	930	937	940	937	935	932	933	933	923	912	905	902	902	9											

TABLE (G) II.—HOURLY MEANS OF NORTH COMPONENT OF MAGNETIC FORCE AT GREENWICH—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
April.	17000 γ + Tabular Quantities (in γ).																								Mean.
1	957	959	959	959	959	961	957	952	941	929	917	910	917	927	924	941	949	943	952	946	951	950	953	950	944
2*	953	953	955	955	958	958	960	957	946	929	918	906	909	915	927	934	930	937	948	951	955	957	955	955	943
3	955	958	958	951	962	965	962	958	944	941	930	913	912	909	917	930	938	945	949	949	949	949	949	959	944
4	959	953	950	952	957	962	960	967	964	943	931	924	918	922	931	936	939	943	952	953	960	953	952	952	947
5	953	952	950	953	955	957	957	960	953	943	932	925	917	922	925	939	946	950	955	959	964	967	969	985	950
6**	981	967	960	974	964	995	967	957	945	918	908	901	886	889	914	912	931	940	945	952	954	952	945	942	942
7**	951	955	950	942	950	958	958	953	941	909	908	899	901	885	909	932	944	944	957	943	943	955	955	951	937
8	948	951	955	955	951	943	939	944	936	908	906	899	888	895	902	930	930	943	943	951	962	976	964	950	936
9	943	944	943	944	944	950	944	930	906	894	908	892	895	897	904	941	941	946	960	958	948	951	958	972	934
10	941	941	943	941	941	953	946	943	927	920	916	918	920	920	920	936	951	951	953	964	948	955	951	948	939
11	946	948	948	948	950	951	953	943	925	916	909	913	916	923	932	934	936	941	955	958	965	955	944	948	940
12	960	978	955	948	958	953	939	944	920	909	909	909	906	920	930	939	944	946	953	955	969	951	955	955	942
13	971	958	951	958	951	951	944	937	927	915	909	906	904	916	934	941	946	955	951	951	969	958	951	951	942
14**	950	951	955	953	950	960	958	948	930	913	902	895	902	913	981	958	988	932	920	930	930	916	909	941	937
15**	948	885	976	883	915	857	808	684	666	696	725	726	808	824	864	864	860	908	888	888	892	911	895	902	848
16**	902	902	909	916	932	930	913	871	836	843	822	843	848	871	888	902	916	930	944	953	948	922	927	937	900
17	941	899	915	909	908	906	901	913	902	881	867	857	876	885	899	920	946	944	934	934	941	937	923	930	911
18	930	937	932	927	929	930	934	920	916	906	899	902	909	920	927	927	929	930	937	944	955	965	937	930	928
19	936	934	944	934	944	946	951	944	934	920	916	909	911	915	927	927	927	934	937	941	944	946	962	944	934
20*	945	938	937	942	945	944	945	942	938	931	924	921	917	916	919	924	931	938	942	945	947	951	949	952	937
21	952	949	952	956	959	952	945	942	931	921	916	914	914	918	917	930	938	949	952	954	956	949	942	952	940
22	963	949	945	935	942	952	956	924	916	917	910	896	907	928	923	903	907	935	942	942	938	938	952	956	932
23	982	942	928	935	931	938	935	931	921	912	907	893	924	938	938	935	931	938	942	944	944	942	952	963	939
24	949	944	942	942	935	938	935	926	924	921	921	921	912	931	935	940	949	956	956	965	968	961	970	952	942
25	945	945	956	945	942	942	931	924	921	930	917	924	928	931	931	935	944	952	949	947	949	949	952	956	939
26	955	948	939	950	950	946	941	936	918	889	911	915	920	922	918	938	955	964	955	953	962	960	960	964	940
27	945	948	946	946	943	945	943	936	932	934	939	929	936	936	939	943	946	955	950	953	967	957	957	959	945
28*	952	950	952	950	950	948	950	945	945	939	939	932	936	938	943	946	953	953	955	953	950	950	950	948	948
29*	950	950	950	950	948	948	945	943	936	929	925	925	934	939	939	941	943	950	950	950	948	950	950	953	944
30*	953	955	955	953	952	952	950	945	939	931	918	911	911	915	931	939	946	948	953	957	957	953	953	953	943
Mean	951	945	947	944	946	946	941	931	920	910	905	901	906	913	923	931	938	943	946	948	951	950	948	950	935
Mean*	951	949	950	950	951	950	950	946	941	932	925	919	921	925	932	937	941	945	950	951	951	952	951	952	943
Mean**	946	932	950	934	942	940	921	883	870	856	853	853	869	876	911	914	928	931	931	933	933	931	926	935	913
May.	17000 γ + Tabular Quantities (in γ).																								Mean.
1*	958	958	956	958	960	961	961	958	947	937	926	921	916	923	932	942	951	958	961	956	958	954	954	954	948
2*	960	954	954	954	958	958	958	951	940	928	925	912	912	921	930	937	946	954	961	960	958	958	954	954	946
3	961	961	961	967	961	963	961	958	937	944	930	923	926	932	940	951	954	958	965	958	958	979	984	982	955
4**	982	972	954	970	951	947	933	935	933	912	905	916	923	923	923	919	950	979	944	944	944	935	944	940	941
5**	926	930	947	940	954	923	907	902	900	902	881	872	898	905	926	914	919	947	958	947	947	958	946	942	925
6**	949	947	937	933	933	933	919	914	919	912	902	888	911	918	930	947	974	954	958	975	944	951	972	944	936
7	941	959	947	938	934	934	934	926	924	913	910	905	906	913	936	933	945	950	969	962	955	966	948	945	937
8	945	948	945	948	948	945	941	941	938	936	927	924	920	920	927	945	952	945	952	954	955	962	957	952	943
9	950	962	952	954	940	941	940	934	926	920	917	912	910	922	933	945	969	983	990	969	954	938	945	948	944
10**	955	953	958	960	928	890	897	892	900	890	881	876	886	881	913	944	932	969	949	939	963	953	935	935	924
11**	935	928	928	935	925	930	941	932	916	890	892	888	902	914	925	932	962	960	960	967	963	958	967	960	934
12	907	948	934	946	927	932	928	911	913	906	893	911	907	918	932	953	946	960	967	962	970	949	956	958	937
13																									

TABLE (G) III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE AT GREENWICH.

	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	
1928286																										
January.	43000 γ + Tabular Quantities (in γ).																								Mean.	
1	81	77	77	75	76	78	80	82	78	86	70	68	74	76	86	80	91	87	87	92	85	81	81	81	81	80
2	82	75	77	79	80	83	83	81	83	88	86	84	81	88	96	96	96	98	99	100	102	97	93	92	92	88
3	91	87	85	84	85	85	83	85	84	89	89	84	87	92	94	94	93	93	91	92	89	89	85	85	88	
4	82	82	82	84	82	87	78	80	83	88	92	92	91	94	100	96	97	92	97	95	95	93	93	91	89	
5*	88	87	85	85	87	91	93	91	88	89	90	87	87	89	92	91	95	97	95	96	92	91	87	85	90	
6	84	83	84	84	87	87	91	91	88	85	67	57	61	68	68	78	94	96	94	92	93	95	89	89	84	
7	39	87	85	83	85	90	91	93	93	90	100	83	80	82	87	95	110	106	110	108	103	96	93	85	93	
8	80	81	83	85	90	95	98	98	100	95	96	92	96	101	99	100	102	100	104	104	98	98	98	98	95	
9	91	90	91	91	92	96	100	100	104	97	99	101	105	111	109	111	110	106	106	106	107	107	105	104	102	
10	105	103	101	101	104	104	102	104	107	99	99	101	100	104	111	111	110	109	107	109	110	110	110	106	105	
11	103	98	97	100	100	103	101	103	101	104	107	113	113	113	114	110	108	108	106	107	107	107	107	109	106	
12	108	107	107	105	106	109	108	109	112	114	110	107	108	108	110	108	112	111	109	109	112	110	110	110	109	
13	111	111	111	109	105	109	109	105	110	110	110	115	116	121	130	132	132	135	145	144	151	149	145	145	123	
14	137	130	123	123	118	116	126	128	119	117	119	117	120	127	134	141	145	148	144	140	139	137	139	133	130	
15	132	129	113	118	125	127	127	125	122	117	117	118	122	127	132	143	147	149	145	141	140	138	140	134	130	
16	132	131	113	117	125	127	129	125	122	117	117	118	122	131	140	149	158	156	154	145	145	147	134	122	132	
17	129	132	125	118	118	122	123	127	127	125	122	123	129	134	141	145	145	149	145	149	149	147	141	140	134	
18**	134	132	134	134	134	134	134	152	129	122	120	122	123	129	134	136	138	140	136	136	141	138	136	134	133	
19	138	131	134	138	136	138	141	138	140	140	140	134	132	138	152	154	159	158	152	152	149	145	141	141	143	
20*	141	138	138	138	134	138	140	138	141	140	132	129	132	138	140	141	145	143	145	143	141	140	141	141	139	
21*	140	140	141	140	140	141	145	141	141	138	140	140	138	145	143	145	149	147	147	147	145	147	145	143	143	
22**	141	140	138	138	138	141	141	140	145	136	141	134	138	143	145	149	147	145	149	159	175	168	136	127	144	
23**	183	176	131	145	149	150	149	145	143	141	140	143	141	141	145	149	150	150	149	147	145	147	147	149	148	
24	147	145	145	145	145	143	141	141	145	138	147	145	145	145	149	149	150	147	143	143	143	145	143	143	145	
25*	141	141	141	141	141	140	143	141	140	140	145	147	141	145	147	150	145	141	138	138	138	138	138	141	142	
26**	138	138	136	134	134	127	125	127	131	134	145	150	141	150	152	156	149	161	201	308	264	278	185	147	163	
27**	105	86	75	100	131	158	166	172	174	181	189	185	177	172	181	196	207	181	170	166	158	134	147	140	156	
28	131	129	127	132	127	134	141	147	145	143	147	149	154	156	168	158	156	158	152	152	149	145	145	146	146	
29	145	143	141	138	134	138	141	143	143	141	140	143	149	143	147	159	166	156	154	149	149	147	145	141	146	
30*	143	140	140	138	136	140	140	140	140	141	141	141	145	145	149	150	149	145	145	143	141	141	138	140	142	
31	131	129	131	132	134	134	132	131	131	131	129	134	131	140	145	145	141	140	140	140	138	138	134	134	135	
Mean	119	119	116	114	115	118	119	120	120	119	119	118	119	122	127	129	132	131	134	134	132	131	125	122	123	
Mean*	131	129	129	128	128	130	132	130	130	130	130	129	129	132	134	135	137	135	134	133	131	131	130	130	131	
Mean**	140	134	123	130	137	142	143	147	144	143	147	147	144	147	151	157	158	155	161	183	177	173	150	139	140	
February.	43000 γ + Tabular Quantities (in γ).																								Mean.	
1	129	129	129	131	131	132	134	131	134	131	136	132	138	138	149	147	141	141	145	141	138	138	136	134	136	
2	131	127	115	117	120	123	127	125	127	125	120	117	117	118	122	123	129	132	136	134	131	122	120	117	124	
3	117	108	113	118	120	122	118	122	123	129	127	123	127	131	136	134	143	143	141	138	138	125	122	125	127	
4	123	117	113	117	120	122	122	120	122	122	120	120	120	131	141	149	154	138	136	138	131	127	125	123	127	
5	123	120	113	117	118	120	123	123	122	118	120	122	123	125	132	138	134	131	127	123	123	123	122	122	124	
6*	120	120	118	118	120	123	123	125	123	122	117	115	118	122	122	125	127	125	123	122	122	122	120	120	121	
7*	118	117	117	115	117	117	117	113	117	118	117	115	115	117	120	120	122	122	120	118	118	118	118	117	118	
8*	113	113	113	115	115	117	117	120	120	120	125	120	120	122	123	122	120	118	115	117	117	117	115	113	119	
9*	113	112	112	110	110	113	113	115	117	113	115	110	115	117	120	120	117	117	115	117	117	118	117	117	115	
10	115	113	113	113	113	115	112	110	110	110	113	113	113	117	123	122	120	118	117	118	120	123	127	129	117	
11**	129	127	125	123	123	122	122	122	120	117	113	113	110	113	125	132	149	147	154	163	156	149	131	131	130	
12	129	120	112	110	113	122	123	123	120	120	131	123	122	123	131	138	145	134	134	132</						

MONTHLY MEAN DIURNAL INEQUALITIES OF MAGNETIC ELEMENTS.

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

1926.

TABLE (G) IV.—DECLINATION WEST.

TABLE (G) VIII.—NORTH FORCE.

TABLE (G) XII.
VERTICAL FORCE.

Greenwich Mean Time. Hour commencing	January.	February.	March.	April.	May.	January.	February.	March.	April.	May.	January.	February.
Midnight	0.7	0.8	0.0	1.7	3.9	15y	25y	37y	50y	41y	5y	8y
1h.	0.0	1.2	0.3	1.4	3.3	15	27	35	44	40	5	4
2	0.9	1.6	0.8	1.7	3.5	13	29	34	46	39	2	0
3	1.5	2.0	0.7	1.5	3.2	13	27	34	43	40	0	0
4	1.4	2.0	1.3	1.6	2.5	18	28	36	45	36	1	1
5	1.6	2.0	1.8	1.2	1.4	19	29	37	45	33	4	4
6	2.0	2.0	1.9	1.4	0.5	20	31	38	40	29	5	5
7	1.7	1.7	0.9	0.4	0.2	19	31	34	30	24	6	5
8	1.6	1.1	0.1	0.0	0.0	14	26	25	19	20	6	5
9	2.2	1.4	0.6	1.4	1.7	6	15	14	9	14	5	5
10	3.2	3.2	2.8	3.7	4.6	2	8	5	4	4	5	4
11	4.3	5.5	6.1	6.9	7.9	0	2	0	0	0	4	2
Noon	5.4	7.5	8.6	9.6	10.1	0	0	0	5	2	5	7
13h.	5.7	8.1	9.7	10.5	10.7	2	4	5	12	7	8	10
14	4.8	7.9	8.8	9.9	10.4	3	10	10	22	18	13	19
15	4.0	6.3	7.0	8.0	8.9	8	16	20	30	28	15	24
16	3.1	5.0	5.5	6.6	7.5	15	22	24	37	37	18	28
17	3.0	4.0	3.3	4.7	5.9	18	23	26	42	44	17	25
18	3.2	4.1	1.8	3.4	4.6	21	25	29	45	48	20	24
19	2.5	2.9	1.5	2.9	4.4	18	27	29	47	47	20	23
20	1.5	1.5	0.2	1.6	4.2	20	29	34	50	46	18	20
21	0.7	0.0	0.2	1.5	3.9	21	30	34	49	46	17	15
22	0.4	0.6	0.0	2.0	3.7	17	28	41	47	44	11	12
23	0.7	1.0	0.3	2.0	3.8	15	24	38	49	42	8	14
Means	2.34	3.06	2.68	3.57	4.62	13.0	21.5	25.8	33.8	30.4	9.1	11.0

DIURNAL RANGE OF MAGNETIC ELEMENTS AS DEDUCED FROM TABLES (G) I, II AND III.

1926.

TABLE (G) V.—DECLINATION WEST.

TABLE (G) IX.—NORTH FORCE.

TABLE (G) XIII.
VERTICAL FORCE.

Day of Month.	January.	February.	March.	April.	May.	January.	February.	March.	April.	May.	January.	February.
d.												
1	5.2	7.8	15.4	12.0	9.8	26y	56y	38y	51y	45y	24y	20y
2	10.1	17.3	14.5	13.4	12.5	30	51	94	54	49	27	21
3	2.6	—	15.5	11.2	11.4	25	—	46	56	61	11	35
4	4.6	—	8.7	9.7	25.1	43	—	40	49	77	22	41
5	4.9	5.8	30.2	9.6	11.2	21	35	98	68	86	12	25
6	5.7	6.7	14.1	15.7	14.5	35	32	64	109	87	39	12
7	9.7	7.1	10.8	14.0	14.3	44	33	37	73	64	30	34
8	5.6	6.7	7.5	18.4	12.6	41	32	35	88	42	24	12
9	6.9	7.0	26.1	14.5	15.1	40	28	80	80	80	21	10
10	9.2	7.6	22.9	13.9	13.4	37	42	79	48	93	12	19
11	6.8	15.7	13.6	15.0	18.0	31	66	65	56	79	17	53
12	—	13.3	9.6	15.7	13.6	45	30	53	72	77	9	35
13	—	13.5	12.9	16.8	14.2	70	59	42	67	96	46	18
14	—	15.1	13.9	38.1	10.6	—	35	56	93	67	32	26
15	—	18.1	12.1	42.6	13.5	73	53	55	292	54	36	26
16	12.7	9.4	11.5	13.0	11.0	50	54	59	131	49	45	15
17	6.8	11.1	13.7	12.0	12.8	21	77	56	89	82	31	33
18	9.4	14.5	22.7	10.0	19.8	85	65	69	66	81	32	21
19	18.9	14.5	14.1	10.1	11.5	67	64	70	53	61	28	21
20	5.9	12.1	10.8	10.3	10.0	21	48	63	36	72	16	14
21	5.2	9.2	14.8	13.6	9.9	25	46	63	45	72	11	28
22	23.2	9.7	13.0	11.6	11.5	88	45	52	67	37	48	25
23	14.2	11.3	11.0	12.1	9.6	58	51	54	89	43	52	78
24	5.2	—	10.6	8.7	9.2	32	—	54	58	44	12	—
25	5.6	21.2	9.4	7.6	7.2	32	87	44	39	40	12	105
26	8.5	13.3	10.2	12.9	11.6	240	65	42	75	21	183	36
27	20.4	10.4	13.7	6.9	11.2	129	49	61	38	31	132	27
28	8.7	10.8	13.5	7.9	9.2	53	45	67	23	21	41	50
29	4.9	—	10.9	6.9	7.8	28	—	74	28	31	32	—
30	7.0	—	13.0	11.7	10.0	30	—	56	46	54	14	—
31	5.6	—	10.8	—	11.6	36	—	44	—	49	16	—
Means	8.6	11.6	13.6	13.4	12.4	51.9	49.9	58.4	71.3	59.5	34.4	30.0

MONTHLY MEAN DIURNAL INEQUALITIES from HOURLY ORDINATES, on FIVE SELECTED QUIET DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on five quiet days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January 5, 20, 21, 25, 30.
February 6, 7, 8, 9, 27.

March 8, 15, 25, 26, 31.
April 2, 20, 28, 29, 30.

May 1, 2, 15, 26, 31.

TABLE (G) VI.—DECLINATION WEST.						TABLE (G) X.—NORTH FORCE.					TABLE (G) XIV. VERTICAL FORCE.	
Greenwich Mean Time. Hour commencing	January.	February.	March.	April.	May.	January.	February.	March.	April.	May.	January.	February.
Midnight	1.0	2.5	3.5	3.7	5.2	14y	26y	32y	32y	36y	3y	4y
1h.	1.0	2.5	2.8	3.7	5.1	13	26	33	30	35	1	3
2	0.8	2.7	3.5	3.7	5.2	13	28	34	31	35	1	3
3	0.7	2.7	2.8	3.0	4.7	14	29	33	31	35	0	3
4	0.4	2.3	2.4	2.5	4.3	18	30	37	32	36	0	3
5	0.3	2.0	2.8	2.0	2.9	19	31	35	31	36	2	4
6	0.6	1.7	2.8	1.1	1.6	18	34	34	31	33	4	4
7	0.2	1.0	1.5	0.2	0.5	18	34	34	27	29	2	6
8	0.1	0.1	0.0	0.0	0.0	16	29	28	22	22	2	9
9	0.7	0.0	0.3	1.1	1.6	10	20	15	13	14	2	5
10	1.8	2.4	2.6	3.5	4.6	5	10	5	6	4	2	5
11	2.9	5.3	5.6	6.5	7.8	0	4	0	0	0	1	0
Noon	4.4	7.3	8.8	9.4	10.9	0	0	0	2	0	1	4
13h.	4.8	6.8	9.9	9.9	11.7	3	4	6	6	2	4	8
14	4.1	6.3	9.0	9.4	11.1	5	13	11	13	11	6	10
15	3.5	5.0	7.0	7.9	9.8	7	18	21	18	18	7	11
16	3.0	4.0	5.4	6.7	8.6	9	21	25	22	25	9	11
17	2.6	3.7	4.8	5.4	7.2	15	24	29	26	35	7	10
18	2.5	3.3	4.0	4.7	6.3	18	27	31	31	41	6	8
19	1.8	2.5	3.7	4.5	6.1	20	28	33	32	39	5	8
20	1.1	2.2	3.3	4.4	5.9	21	31	36	32	39	3	7
21	1.1	1.8	3.5	4.1	5.4	19	31	37	33	38	3	8
22	0.5	1.7	3.3	3.9	5.6	20	31	38	32	37	2	6
23	0.0	2.2	2.9	4.1	5.4	18	30	42	33	38	2	5
Means	1.66	3.00	4.01	4.39	5.73	13.0	23.3	26.2	23.6	26.6	3.1	6.0

MONTHLY MEAN DIURNAL INEQUALITIES from HOURLY ORDINATES, on FIVE SELECTED DISTURBED DAYS in each MONTH.

Each result is the mean of the corresponding hourly ordinates from the photographic registers, on (in general) five disturbed days in each month, selected by the International Committee for comparison with results at other Observatories. The results in each case are diminished by the smallest hourly value. The days included are :—

January 18, 22, 23, 26, 27.
February 11, 18, 23, (24)*, 25.

March 5, 6, 9, 10, 18.
April 6, 7, 14, 15, 16.

May 4, 5, 6, 10, 11.

TABLE (G) VII.—DECLINATION WEST.						TABLE (G) XI.—NORTH FORCE.					TABLE (G) XV. VERTICAL FORCE.	
Greenwich Mean Time. Hour commencing	January.	February.	March.	April.	May.	January.	February.	March.	April.	May.	January.	February.
Midnight	4.4	0.0	3.7	1.2	4.5	9y	11y	38y	93y	61y	17y	22y
1h.	0.0	1.6	4.4	0.7	1.1	14	20	27	79	58	11	14
2	4.0	5.0	2.6	1.1	2.6	3	29	39	97	57	0	3
3	5.5	6.4	3.0	0.0	2.7	7	24	38	81	60	7	0
4	5.3	7.4	5.7	2.1	2.4	18	13	41	89	50	14	1
5	5.8	5.8	5.9	3.0	2.5	20	24	47	87	37	19	8
6	6.2	5.4	6.3	7.6	1.8	21	24	36	68	31	20	12
7	5.6	5.4	6.2	6.4	1.5	24	19	36	30	27	24	14
8	5.4	5.0	5.1	4.6	0.0	14	16	26	17	26	21	14
9	6.7	4.8	6.8	6.5	2.5	0	11	18	3	13	20	15
10	7.7	6.7	8.6	7.5	6.3	2	3	14	0	4	24	15
11	8.4	8.9	13.0	10.6	9.6	7	0	12	0	0	24	16
Noon	9.3	10.2	16.2	14.6	11.3	7	5	0	16	16	21	22
13h.	9.8	10.8	16.9	14.9	12.2	11	12	3	23	20	24	29
14	8.6	11.1	16.0	15.8	12.8	8	24	11	58	33	28	56
15	7.0	9.2	16.1	13.9	10.6	24	29	28	61	43	34	70
16	6.2	7.8	12.8	12.2	8.8	51	27	25	75	71	35	86
17	7.5	6.7	9.1	7.8	6.3	47	27	24	78	74	32	72
18	10.4	8.5	8.3	6.3	4.2	44	35	16	78	66	38	69
19	9.0	6.5	5.9	5.9	3.9	26	25	9	80	66	60	65
20	6.4	5.9	2.5	1.8	3.6	35	23	20	80	64	54	51
21	3.0	1.7	0.0	2.8	3.9	36	27	24	78	63	50	43
22	2.8	3.9	2.1	5.3	2.9	8	26	32	73	65	27	34
23	4.1	3.7	4.0	2.8	3.6	0	26	30	82	56	16	31
Means	6.21	6.18	7.55	6.48	5.97	18.2	20.9	24.8	59.4	44.2	25.8	31.8

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* Vertical Force only.

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

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

in which t represents the time from Greenwich mean midnight converted into arc at the rate of 15° to each hour, and V_t the annual or monthly mean hourly value of the Magnetic element at time t , as given in Tables (G) IV., VIII. and XII.

The coefficients, a, b, c , are given in units of 1γ (0.00001 C.G.S. unit) for N.F. and V.F., and in minutes of arc ($1' = 5.37\gamma$) for Declination.

If the inequalities are expressed relative to time reckoned from apparent midnight, the new phase angles a_1', a_2', a_3', a_4' may be obtained from a_1, a_2, a_3, a_4 by adding respectively $a, 2a, 3a, 4a$, the value of a for each month being as follows:—

Jan. + $2^\circ 19'$.
Feb. + $3^\circ 28'$.
Mar. + $2^\circ 12'$.

April + $0^\circ 4'$.
May - $0^\circ 51'$.
June + $0^\circ 5'$.

July + $1^\circ 22'$.
Aug. + $0^\circ 59'$.
Sept. - $1^\circ 12'$.

Oct. - $3^\circ 28'$.
Nov. - $3^\circ 42'$.
Dec. - $1^\circ 6'$.

Month, 1925.	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	c_1	α_1	c_2	α_2	c_3	α_3	c_4	α_4
DECLINATION WEST.																
January ...	- 1.86	- 0.80	+ 0.14	+ 0.57	- 0.46	- 0.25	+ 0.26	+ 0.24	2.03	246.7	0.58	13.8	0.52	241.5	0.36	47.3
February...	- 2.42	- 1.38	+ 0.31	+ 1.61	- 0.48	- 0.48	+ 0.37	+ 0.44	2.78	240.3	1.64	10.9	0.68	225.0	0.58	40.1
March ...	- 3.12	- 1.53	+ 0.76	+ 2.07	- 0.42	- 1.12	+ 0.38	+ 0.33	3.47	243.9	2.20	20.2	1.19	200.6	0.50	49.0
April ...	- 2.76	- 2.26	+ 1.19	+ 2.07	- 0.45	- 0.90	+ 0.38	+ 0.20	3.57	230.7	2.39	29.9	1.00	206.6	0.42	62.2
May ...	- 1.90	- 2.76	+ 1.59	+ 2.06	- 0.71	- 0.63	+ 0.17	+ 0.06	3.35	214.5	2.60	37.7	0.95	228.4	0.17	70.6
NORTH FORCE.																
January ...	+ 6.9	- 0.1	- 6.1	- 2.4	+ 1.3	- 0.7	+ 0.7	+ 0.4	6.9	90.6	6.6	248.8	1.5	117.6	0.8	59.7
February...	+ 10.2	+ 2.6	- 7.3	- 2.3	+ 2.7	- 0.4	- 1.7	+ 0.6	10.5	75.6	7.7	252.4	2.7	97.4	1.8	290.4
March ...	+ 15.6	+ 3.3	- 7.1	- 1.4	+ 4.1	- 2.1	+ 0.0	- 0.1	15.9	78.1	7.2	259.0	4.6	117.2	0.1	172.9
April ...	+ 20.9	- 3.2	- 8.9	+ 1.9	+ 2.0	- 2.3	+ 0.6	+ 0.4	21.1	98.8	9.1	282.0	3.1	139.2	0.7	53.6
May ...	+ 18.5	- 6.1	- 8.8	0.0	+ 2.0	+ 1.2	- 0.9	- 0.4	19.5	108.1	8.8	270.0	2.3	60.0	1.0	244.2
VERTICAL FORCE.																
January ...	+ 0.4	- 8.0	- 2.9	- 2.0	+ 0.8	- 0.3	- 0.6	+ 0.4	8.0	177.1	3.5	235.5	0.8	111.9	0.8	310.2
February...	- 0.2	- 11.3	- 4.1	- 0.2	+ 2.9	- 0.4	+ 0.1	- 0.2	11.3	180.8	4.1	266.9	2.9	98.3	0.2	159.1

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

Greenwich Mean Time, 1926.	Declination.	Deduced value of Base-line.	Greenwich Mean Time, 1926.	Declination.	Deduced value of Base-line.	Greenwich Mean Time, 1926.	Declination.	Deduced value of Base-line.
d h m	° ' "	° ' "	d h m	° ' "	° ' "	d h m	° ' "	° ' "
Jan. 4 10 33	I3 8.5	I3 58.3	Feb. 13 12 16	I3 8.9	I3 58.0	Mar. 27 12 19	I3 8.3	I3 58.3
10 43	5.9	57.9	15 10 45	5.6	56.8	30 11 50	5.2	58.2
10 49	4.9	57.2	11 4	5.3	57.1	12 50	8.4	57.6
5 11 43	6.1	57.5	16 11 30	3.7	57.0			
13 3	6.1	57.4	13 6	7.9	57.2			
7 11 52	6.7	57.3	17 12 3	7.6	56.9	April 1 10 48	1.3	56.6
8 11 7	4.5	57.3	18 12 36	6.0	57.0	13 7	8.9	57.5
9 11 24	5.5	57.5	19 11 11	4.5	56.9	6 15 52	5.5	58.5
11 10 16	3.4	57.5	20 10 44	3.9	56.9	8 11 11	4.0	57.9
12 12 17	7.4	57.7	12 19	8.1	56.9	11 6 57	I2 53.5	56.4
15 8	6.2	58.4	22 10 16	4.1	57.3	8 46	54.0	56.4
13 10 46	5.5	57.5	12 3	6.9	57.6	12 12 37	I3 7.1	57.1
11 3	6.1	57.5	16 14	5.7	57.4	13 10 30	I2 56.9	56.1
14 15 42	7.8	57.5	23 10 56	3.9	57.7	12 33	I3 10.6	58.2
15 12 9	7.6	57.5	12 54	6.0	57.7	14 16 0	20.9	57.9
16 11 29	5.9	57.3	24 15 1	20.7	57.7	17 11 26	1.3	57.0
18 10 44	9.0	58.2	15 23	31.2	58.0	12 10	4.6	57.4
11 9	10.7	57.7	15 50	8.7	56.9	19 10 6	I2 57.3	56.7
12 41	8.2	57.3	16 30	4.0	57.3	10 10	57.3	57.0
15 22	7.4	57.7	25 15 32	2.0	57.0	10 13	58.8	57.0
19 12 2	6.7	57.5	26 10 46	4.1	57.2	11 37	I3 1.8	57.3
21 12 3	5.7	57.3	12 38	8.7	57.1	11 40	2.0	57.3
12 27	6.5	57.6	27 11 5	4.7	57.4	11 43	2.3	57.5
22 12 5	7.5	57.6				20 10 53	I2 59.7	56.6
23 11 24	3.4	57.6	Mar. 2 11 20	3.0	57.8	12 25	I3 6.7	57.7
24 10 23	4.5	57.9	15 0	4.3	57.2	22 11 14	4.1	57.7
26 11 21	1.7	57.7	3 15 33	3.7	57.1	26 13 35	5.3	56.9
27 15 20	I2 59.8	56.8	4 12 0	6.0	57.6	27 10 55	0.9	57.6
15 25	53.0	58.0	6 12 39	5.8	56.8	12 36	4.7	57.7
15 30	54.6	57.8	12 42	6.8	57.9	29 11 4	0.9	57.4
15 40	54.2	57.6	12 43	7.0	58.0	30 10 19	I2 58.5	56.8
15 50	57.4	58.3	12 46	5.7	56.7			
16 0	59.6	57.6	9 12 10	8.8	57.2	May 3 11 4	I3 0.6	57.7
28 11 15	I3 5.3	57.1	10 11 54	7.4	57.4	4 9 18	I2 56.2	57.2
12 37	6.6	57.5	11 10 18	0.3	57.0	10 20	59.5	57.1
29 11 26	4.3	57.6	12 16	4.5	56.8	6 12 20	I3 4.8	57.6
13 20	4.8	58.2	15 14 2	9.1	57.5	8 10 9	I2 58.8	57.0
31 10 33	3.1	57.7	15 42	5.7	57.8	11 10 47	59.5	57.0
Feb. 1 16 26	4.0	58.0	16 15 48	6.1	57.4	18 13 45	I3 6.1	57.7
2 12 45	5.2	57.4	17 11 6	3.9	57.4	15 17	4.2	57.5
3 12 40	7.7	57.4	18 15 2	12.6	57.3	20 14 24	2.9	57.3
4 10 35	2.0	57.1	19 10 47	3.0	57.3	19 57	I2 58.4	57.0
5 11 51	5.2	57.2	12 1	4.3	57.1	21 10 33	58.9	57.3
12 21	5.7	57.7	21 7 58	7.5	56.9	12 17	I3 3.1	57.4
6 10 50	3.2	57.4	22 14 40	6.9	57.0	25 9 51	I2 56.8	57.1
8 10 11	0.2	57.4	23 12 48	7.5	57.5	10 51	59.1	57.2
9 11 18	4.4	56.6	25 12 51	7.5	57.5	28 11 5	57.9	57.3
12 29	6.6	57.0	25 11 22	1.7	57.0	11 57	I3 0.6	57.4
10 11 27	2.7	57.1	16 1	3.2	57.4	14 38	1.9	57.3
11 15 6	7.1	57.1	26 11 8	3.8	57.5	29 11 2	1.3	57.7
13 11 6	0.8	56.8	16 54	3.0	57.7	31 10 51	0.1	57.6

TABLE (G) XVIII.

Greenwich Mean Time, 1926.						In C.G.S. Measure.	
						Value of observed Horizontal Force.	Deducted Value of North Force Base-line.
d	h	m	h	m		·18000+	·18000+
January	5	12	20-12	58		409	84
	8	11	31-12	12		386	67
	12	15	35-16	19		418	93
	15	11	5-11	58		370	50
	19	12	12-13	31		389	63
	21	15	2-16	6		417	93
	28	11	53-12	32		384	62
	29	11	56-13	16		417	94
February	3	11	33-12	26		385	64
	5	10	44-11	36		404	85
	9	11	39-12	25		380	58
	13	11	30-12	13		412	88
	16	11	52-12	24		374	75
	18	11	31-12	27		354	65
	23	11	50-12	21		388	71
	26	11	18-12	33		366	82
March	2	11	46-12	47		370	80
	6	11	28-12	14		359	83
	9	15	18-16	0		435	77
	10	11	49-12	34		345	76
	17	11	15-12	5		378	73
	19	10	38-11	48		373	71
	23	11	33-12	22		391	78
	25	14	40-15	56		410	85
April	30	12	6-12	44		421	109
	1	12	28-13	3		398	83
	6	15	1-15	47		390	96
	11	7	2-7	41		381	69
	13	11	49-12	28		385	103
	19	10	35-11	30		381	100
	20	11	0-12	14		404	109
	26	11	1-11	52		388	96
May	27	11	2-12	32		406	98
	30	10	26-11	20		387	98
	3	9	30-10	16		383	78
	8	10	15-11	10		391	93
	18	14	15-15	11		405	101
	21	10	47-12	15		377	105
	25	10	2-10	45		427	116
	28	11	16-11	52		410	102

TABLE (G) XIX.

Greenwich Mean Time, 1926.			Magnetic Dip.		Deducted Value of Vertical Force Base-line.
d	h		°	'	·42000+
January	5	11·9	66	52·6	687
	8	11·3		52·4	685
	9	12·0		53·7	698
	12	15·3		51·2	763
	16	12·0		52·9	730
	18	15·2		54·1	756
	21	12·3		53·3	759
	23	11·7		55·6	790
	24	10·6		53·0	(698)
	28	11·6		56·2	772
	29	15·4		55·8	750
	31	10·8		53·6	750
February	2	12·6		53·6	759
	5	12·1		54·4	786
	6	11·1		53·2	745
	9	11·4		52·5	745
	11	15·3		53·3	757
	13	11·3		53·7	772
	16	11·7		54·4	742
	17	12·2		55·0	740
	19	13·1		54·9	768
	19	15·3		53·1	757
	19	16·5		52·4	733
	20	11·3		54·5	756
	20	12·2		53·8	720
	22	10·5		54·8	748
	22	11·7		54·1	750
	22	15·1		53·7	750
	22	16·1		53·0	759
	23	11·1		53·9	760
	23	11·9		53·1	743
	25	15·9		55·3	747
	26	11·1		55·6	738

Observations were discontinued on account of
interference from electric trains.

TABLE (G) XX.—SUMMARY OF THE MAGNETIC ELEMENTS.

Month. 1926.	Mean Value of						Monthly Mean Diurnal Range of			Sum of Hourly Deviations from Mean of		
	Declination.	Horizontal Force. C.G.S.	Dip.	West Force. C.G.S.	North Force. C.G.S.	Vertical Force. C.G.S.	Declination.	North Force.	Vertical Force.	Declination.	North Force.	Vertical Force.
January	13 3·2	·18406	66 53·2	·04157	·17930	·43123	5·7	21γ	20γ	31·5	140γ	134γ
February ...	2·2	·18406	53·3	·04153	·17932	·43128	8·1	31	28	48·4	186	187
March	1·5	·18404	—	·04158	·17931	—	9·7	41	—	61·0	257	—
April	0·1	·18407	—	·04141	·17935	—	10·5	50	—	63·0	344	—
May	12 58·9	·18416	—	·04136	·17945	—	19·7	48	—	58·0	317	—

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

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

1928 GOAM.

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
January.	13° + Tabular Quantities.																								
1	16.7	17.6	16.8	15.9	16.1	15.3	16.3	16.2	16.8	17.9	18.2	18.6	19.5	19.6	15.1	18.5	18.1	17.9	17.2	16.2	14.4	16.0	15.5	15.2	15.2
2	15.6	13.6	11.8	14.6	15.0	14.7	15.2	16.2	16.4	18.3	20.4	19.2	20.3	21.5	19.8	18.3	19.1	16.7	14.2	17.2	16.5	15.1	15.5	15.2	15.2
3	16.2	16.1	15.9	16.2	16.3	16.4	16.2	16.1	15.8	16.3	16.7	17.7	18.5	18.0	17.4	16.5	16.8	17.0	16.7	16.6	16.3	16.1	16.3	16.5	16.5
4	17.4	17.2	17.1	18.4	17.4	19.0	20.9	16.7	17.5	18.7	20.0	17.7	18.6	18.7	18.4	17.6	16.9	17.1	16.7	16.7	15.9	15.7	15.7	15.7	15.7
5*	16.3	17.0	15.9	15.5	14.2	14.6	15.3	14.5	15.0	15.9	16.7	18.3	19.1	18.7	17.3	18.0	17.7	16.8	16.6	15.7	15.8	15.7	14.7	14.9	14.9
6	15.2	15.7	16.7	16.4	16.2	16.1	16.3	15.7	15.6	15.9	17.2	19.3	19.7	20.0	18.7	17.8	16.7	16.7	16.7	15.8	15.3	14.7	14.2	14.7	14.7
7	16.1	16.3	16.8	15.9	15.2	15.6	16.1	16.5	18.3	18.6	18.6	19.4	21.0	21.6	20.1	18.3	12.6	18.8	15.9	13.6	11.4	14.3	13.8	13.4	13.4
8	13.6	13.6	14.5	16.9	15.5	16.4	16.4	15.8	16.2	16.8	15.9	18.0	19.0	19.2	18.1	17.3	16.5	16.6	16.4	13.7	15.4	15.4	15.4	15.4	15.4
9	16.1	15.6	15.3	17.2	17.3	16.3	15.6	15.2	14.0	13.9	15.5	18.1	19.4	20.2	20.9	19.2	17.8	16.2	15.4	16.2	15.7	15.5	15.4	15.7	15.7
10	16.2	16.2	16.1	16.2	16.0	15.4	15.4	15.2	14.5	14.9	16.2	17.9	19.2	19.3	18.7	18.2	17.2	16.5	16.2	15.2	15.2	12.5	10.5	12.5	12.5
11	13.2	17.9	16.4	16.2	16.9	17.2	17.2	17.0	15.3	14.5	17.3	19.3	19.2	19.5	19.3	18.4	17.2	16.8	16.8	16.5	16.0	15.9	16.1	16.4	16.4
12	16.2	15.4	16.0	14.8	15.3	15.5	15.4	14.5	13.9	14.3	16.9	18.8	20.1	20.1	19.3	18.4	17.8	17.1	17.1	16.6	16.1	15.7	15.8	10.2	10.2
13	10.0	10.7	10.0	12.9	13.0	12.3	14.9	15.8	15.8	16.4	17.9	20.5	22.0	22.7	21.8	21.6	19.6	19.9	21.9	19.6	14.4	3.5	6.4	12.4	12.4
14	14.2	14.2	15.0	14.5	14.1	13.2	13.8	16.7	17.9	15.7	16.6	17.8	22.2	21.1	22.5	21.1	19.5	17.1	17.0	15.0	14.2	13.0	11.2	9.7	9.7
15	14.3	14.4	21.6	17.2	15.5	15.7	15.7	16.0	16.0	14.7	17.8	18.2	20.5	21.3	22.2	20.5	17.4	16.9	13.9	12.7	13.5	12.6	12.5	13.2	13.2
16	12.9	14.5	10.6	11.5	12.9	14.0	14.4	13.9	13.5	14.3	16.3	18.8	20.4	21.6	20.8	19.3	18.3	17.6	17.9	15.1	15.0	13.6	9.5	10.3	10.3
17	11.4	12.9	14.4	15.6	15.9	15.5	15.3	14.9	14.2	13.1	14.9	16.8	17.6	18.2	18.1	17.7	17.1	16.5	16.1	16.2	12.7	14.7	14.3	14.2	14.2
18**	14.4	14.0	14.6	14.9	14.8	14.8	15.5	14.5	13.1	20.2	20.8	21.0	19.6	20.3	21.0	19.5	18.5	17.5	18.3	21.4	17.3	13.0	14.2	12.7	12.7
19	3.6	4.2	7.6	12.0	13.1	13.4	13.9	14.6	13.6	12.9	14.6	16.4	20.1	21.7	18.7	19.4	17.2	15.7	16.3	14.2	11.7	14.2	13.8	14.4	14.4
20*	14.5	14.4	15.0	14.8	14.6	14.5	14.9	14.0	14.0	14.2	16.0	17.5	19.2	19.1	18.7	17.8	16.8	16.2	16.3	15.9	13.2	15.2	14.7	14.7	14.7
21*	14.5	14.3	14.5	14.4	14.2	13.3	13.9	13.9	13.7	13.9	15.4	17.0	18.3	19.0	18.3	17.3	16.8	16.5	16.9	16.6	16.3	15.6	15.3	14.2	14.2
22**	14.6	15.1	14.4	14.4	13.7	14.2	13.6	13.6	13.1	13.7	17.0	18.2	19.8	20.9	20.6	19.5	20.5	20.5	24.5	20.5	17.5	4.8	-1.5	5.2	5.2
23**	10.1	4.1	12.6	13.3	14.3	15.1	16.6	15.6	13.9	13.9	15.5	15.6	17.5	18.2	16.5	17.5	17.1	16.4	17.2	16.5	15.8	15.5	15.5	14.9	14.9
24	14.3	14.3	14.2	13.9	13.7	13.7	13.9	13.8	13.8	14.5	15.8	17.8	18.1	18.4	17.9	16.9	16.3	15.9	15.7	15.5	15.4	15.0	15.0	14.8	14.8
25*	15.1	15.1	14.3	14.1	14.2	14.3	14.2	13.7	13.5	14.0	15.7	16.4	17.8	19.3	18.9	17.8	16.5	16.6	16.5	16.2	15.5	15.3	14.2	14.1	14.1
26**	13.6	13.6	14.9	14.3	13.5	14.2	13.5	13.7	15.0	13.8	13.7	14.2	16.3	18.6	18.4	16.0	8.3	12.9	19.4	16.4	17.9	10.4	13.9	19.3	19.3
27**	14.0	-1.0	7.0	14.0	13.6	13.0	14.1	13.1	13.6	14.1	14.1	15.6	15.3	14.4	9.9	5.6	12.9	12.8	13.8	14.2	8.7	12.5	16.2	12.4	12.4
28	12.6	14.9	15.2	14.7	14.6	14.3	14.4	14.4	15.4	17.2	17.1	18.8	19.3	17.9	17.7	16.5	13.5	11.3	12.5	14.5	14.4	10.5	14.8	15.1	15.1
29	15.2	15.2	17.6	15.2	14.4	14.6	14.1	14.6	16.0	15.0	16.6	16.9	18.7	17.0	17.9	16.4	16.7	15.7	13.9	14.7	14.7	14.8	14.4	14.3	14.3
30*	14.8	15.2	15.3	15.6	16.2	14.5	14.7	14.7	14.0	13.7	15.2	15.7	17.7	19.2	18.6	17.7	17.0	16.1	15.7	15.1	14.8	14.7	14.7	12.3	12.3
31	14.3	13.1	14.6	14.7	14.9	15.2	16.7	18.0	16.5	15.8	16.6	17.6	17.6	18.8	18.7	17.9	17.3	16.2	15.6	14.9	14.6	14.4	13.7	13.8	13.8
Mean	14.1	13.7	14.6	15.0	14.9	14.9	15.3	15.1	15.0	15.4	16.7	17.8	19.1	19.5	18.7	17.8	16.8	16.5	16.6	16.0	14.9	13.7	13.7	13.8	13.8
Mean*	15.0	15.2	15.0	14.9	14.7	14.2	14.6	14.2	14.0	14.3	15.8	17.0	18.4	19.1	18.4	17.7	17.0	16.4	16.4	15.9	15.1	15.3	14.7	14.0	14.0
Mean**	13.3	9.2	12.7	14.2	14.0	14.3	14.7	14.1	13.7	15.1	16.2	16.9	17.7	18.5	17.3	15.6	15.5	16.0	18.6	17.8	15.4	11.2	12.3	12.0	12.0

February.

13° + Tabular Quantities.

1	14.4	14.3	14.9	14.7	15.1	15.0	15.3	13.9	13.6	13.6	16.8	17.2	16.9	20.0	19.6	17.0	16.1	14.8	13.7	15.6	14.6	13.6	12.0	13.7	
2	14.1	14.5	15.6	13.2	13.1	14.2	15.2	16.1	14.9	14.6	15.3	17.5	18.5	18.3	17.6	16.6	16.0	15.6	15.5	14.9	11.9	0.7	7.3	6.6	
3	11.4	15.1	14.1	14.0	15.9	18.5	16.7	13.8	12.9	13.7	15.7	17.3	19.8	17.7	19.0	18.3	17.9	12.9	9.1	14.8	12.3	14.0	10.7	13.7	
4	12.9	13.0	12.8	16.4	14.7	16.1	16.8	15.6	13.0	12.8	14.4	16.9	19.0	18.0	17.1	15.5	13.9	15.3	12.8	11.3	11.5	13.1	12.3	11.5	
5	13.7	14.8	16.8	13.8	14.6	14.6	14.1	13.6	12.8	13.8	14.0	16.4	18.2	18.7	17.6	17.6	15.9	14.7	14.9	14.8	13.9	12.9	14.0	13.9	
6*	14.0	14.1	14.4	14.7	14.5	14.4	13.9	13.0	12.0	12.4	14.8	17.1	18.7	18.4	18.0	16.1	14.8	15.5	15.2	15.1	14.7	14.3	14.4	14.5	
7*	14.7	15.1	15.1	15.1	15.1	14.8	14.5	14.1	13.1	12.6	14.1	16.6	18.6	19.3	18.6	17.3	16.2	15.5	15.5	15.2	14.9	14.4	14.4	14.5	
8*	14.8	15.0	15.2	15.2	14.9	14.6	13.9	13.2	12.2	11.3	14.2	16.5	18.2	18.5	17.8	16.3	15.4	15.3	15.2	14.7	14.6	14.4	14.9	15.0	
9*	15.1	15.0	14.9	14.7	14.5	14.1	13.8	13.3	12.8	12.7	14.2	17.4	19.1	19.1	18.5	17.6	17.1	16.7	16.6	15.8	15.0	14.5	12.3	13.4	
10	13.7	14.0	13.8	13.5	12.9	12.7	11.7	13.0	12.4	13.9	14.9	15.4	16.8	17.3	17.4	17.0	16.5	15.7	15.8	15.5	14.6	12.3	10.1	12.7	
11**	12.7	13.0	14.2	14.6	13.4	13.0	13.2	12.5	11.7	12.3	14.3	17.0	18.2	19.2	20.2	18.7	18.5	16.1	19.8	15.3	12.7	4.1	7.1	6.9	
12	9.6	8.7	6.8	14.3	11.5	12.0	13.8	12.7	10.0	12.5	13.4	15.4	17.8	19.6	18.8	17.6	17.1	16.8	16.8	15.1	9.8	13.4	13.3	13.4	
13	13.6	14.5	13.2	13.4	11.6	12.4	13.5	15.3	12.4	12.3	12.8	15.8	20.7	21.8	21.8	20.8	17.8	14.8	14.8	15.1	10.8	8.3	13.8	13.3	
14	11.9	10.7	9.8	10.8	12.8	11.7	12.1	14.0	12.8	12.8	16.5	17.5	19.8	21.3	22.3	20.6	19.8	14.0	16.8	15.8	12.8	7.8	9.9	10.2	
15	11.8	12.0	11.8	12.1	11.2	12.9	11.8	12.0	12.9	12.2	16.3	17.7	18.1	20.6	22.5	22.5	19.5	16.8	15.8	14.8	5.1	11.1	11.0	10.5	
16	12.8	12.9	13.5	13.8	13.6	13.7	12.9	12.9	11.9	10.8	11.8	15.9	19.2	20.5	20.7	19.0	16.9	15.7	15.8	14.9	14.6	14.1	12.7	12.3	
17	12.9	13.7	13.1	13.4	13.3	13.1	12.8	12.6	11.3	11.4	14.1	17.7	21.5	21.2	23.2	21.0	18.1	22.2	21.2	19.2	14.7	13.7	13.8	13.0	
18**	8.0	9.1	11.3	8.6	12.3	14.3	14.3	13.8	13.2	11.8	14.3	16.6	18.4	21.4	21.6	18.6	16.4	16.1	16.2	14.4	15.0	14.9	14.5	13.3	
19	10.8	10.5	11.2	11.8	12.9	11.7	13.7	12.9	12.9	14.9	15.2	17.9	21.4	22.1	19.8	18.0	15.6	15.2	11.6	7.6	10.2	14.3	12.7	14.8	
20	13.7	13.9	13.5	13.7	14.7	12.9	13.2	13.5	13.4	13.2	16.3	19.1	21.1	22.8	22.8	21.3	18.3	17.2	16.6	15.8	15.3	15.2	13.8	10.8	
21	9.9	10.6	11.5	12.4	12.9	12.5	12.5	12.9	13.5	14.3	15.4	17.4	18.8	18.3	17.5	17.1	17.0	14.0	16.2	16.6	15.5	12.0	13.0	12.1	
22	13.8	13.5	11.8	10.0	9.7	11.0	12.1	12.0	12.4	14.9	17.4	18.4	18.6	19.2	19.1	18.1	17.6	16.1	16.7	14.6	10.1	13.5	12.7	12.0	
23**	9.7	11.4	11.2	11.0	11.7	12.2	11.6	11.3	12.2	13.2	15.5	17.5	19.0	18.2	18.2	17.7	14.2	12.2	17.9	15.7	17.0	7.9	13.8	15.2	
24**	10.5	11.8	6.5	6.9	5.7	6.9	9.8	9.2	15.5	17.5	18.3	24.2	29.8	32.4	33.7	32.3	17.8	15.3	16.3	3.3	7.8	4.3	0.3	2.8	
25**	3.3	5.9	17.3	24.3	24.3	16.3	16.1	16.4	14.1	12.5	15.0	15.9	17.1	16.8	16.4	14.8	13.8	13.1	12.5	12.8	11.4	11.8	12.6	12.6	
26	14.3	15.3	14.0	14.9	16.1	19.6	18.1	12.7	11.3	12.0	16.3	19.4	21.4	22.4	19.4	17.4	15.3	11.5	13.7	13.4	12.5	19.4	13.0	13.5	
27*	13.6	14.2	14.9	14.3	13.2	12.4	12.4	11.4	10.4	10.6	14.1	17.5	20.6	18.6	19.2	18.0	16.5	15.1	13.6	12.2	12.2	11.5	13.0	13.5	
28	13.1	13.5	13.9	14.2	13.8	14.5	13.6	12.4	10.5	10.5	12.5	15.2	18.1	20.4	19.5	18.5	15.8	15.1	14.5	13.5	10.8	10.5	12.1	12.9	
Mean	12.3	12.9	13.1	13.6	13.6	13.6	13.7	13.2	12.6	12.9	14.9	17.3	19.4	20.1	19.9	18.5	16.5	15.3	15.4	13.9	12.9	11.9	11.7	12.2	
Mean*	14.4	14.7	14.9	14.8	14.4	14.1	13.7	13.0	12.1	11.9	14.3	17.0	19.0	18.8	18.4	17.1	16.0	15.6	15.2	14.6	14.3	13.9	13.8	14.2	
Mean**	John G. Wobuch Library, Harvard-Smithsonian Center for Astrophysics. Provided by the NASA Astrophysics Data System																							9.7	10.2

TABLE (A) 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
13° + Tabular Quantities.																									
March.																									
1	13.3	13.6	13.7	13.9	13.6	13.6	14.0	13.4	12.4	11.3	13.4	15.6	18.5	18.9	18.4	17.4	16.3	16.5	16.3	12.5	13.4	9.9	13.9	9.4	
2	8.3	14.8	14.9	14.3	14.4	16.4	22.1	18.3	14.4	13.2	14.3	16.4	18.3	18.6	17.7	13.4	15.3	15.5	15.0	13.3	14.0	12.5	7.3	7.3	
3	9.9	10.5	12.7	12.8	13.3	14.0	14.2	12.1	11.2	11.3	15.0	18.2	18.1	18.9	16.4	13.9	5.5	5.5	3.2	8.2	10.5	10.7	9.7	14.2	
4	15.1	13.1	12.1	13.6	13.2	13.1	12.4	11.9	11.1	11.5	13.7	16.4	18.7	20.0	19.0	14.2	14.9	13.8	12.0	11.0	13.0	12.5	11.7	13.3	
5**	13.9	14.2	13.9	13.9	13.9	14.2	13.3	11.9	10.4	10.6	14.9	22.5	25.8	26.8	25.5	29.1	18.8	13.8	12.3	6.8	8.8	0.8	2.8	11.3	
6**	12.3	18.4	13.7	7.2	14.2	12.7	12.7	12.4	11.7	14.7	12.7	16.3	18.9	18.8	20.4	19.1	17.7	14.7	13.2	12.7	14.9	14.0	14.3	10.2	
7	9.5	11.9	12.4	13.2	12.7	12.9	12.9	12.8	12.2	11.3	15.2	17.9	19.1	18.9	18.8	17.6	16.3	9.6	9.6	12.1	10.9	9.1	8.9	11.3	
8*	14.0	14.3	15.3	13.0	13.0	13.4	13.3	12.2	11.0	11.1	13.0	16.5	19.1	19.6	18.4	17.3	15.9	15.0	14.7	14.6	14.2	14.1	13.8	13.4	
9**	13.2	13.2	12.8	12.7	12.5	12.2	12.2	11.9	11.2	12.2	14.2	19.2	22.9	24.2	20.2	22.1	22.4	20.2	18.2	18.7	3.6	8.6	10.1	5.8	
10**	2.1	6.9	-0.7	9.3	12.1	7.3	11.5	15.1	11.1	13.1	15.4	19.1	22.0	21.8	19.0	18.4	17.0	10.5	14.2	12.8	11.4	11.3	9.0	14.8	
11	10.9	9.2	17.0	11.9	10.7	17.9	17.8	10.6	11.6	11.1	13.8	17.8	20.8	20.8	19.0	18.7	18.7	13.7	13.8	11.9	7.7	11.2	11.9	8.7	
12	9.9	10.3	12.7	13.4	14.3	11.1	10.8	10.5	11.4	12.5	13.3	16.4	18.6	18.6	18.8	17.7	15.6	14.6	11.8	11.6	9.7	10.6	12.6	10.9	
13	13.5	14.6	13.6	12.7	11.7	11.7	11.7	9.9	10.4	11.4	13.7	16.5	18.3	22.5	21.3	18.9	16.6	12.4	12.7	13.7	12.3	11.4	10.1	10.7	
14	9.8	9.8	8.0	10.8	12.8	11.7	10.4	9.8	8.8	10.4	13.3	16.9	20.1	21.4	20.5	18.8	16.7	14.8	14.7	14.4	12.6	12.7	10.8	13.3	
15*	14.0	13.8	13.6	14.3	13.0	12.8	11.6	10.3	8.9	9.2	12.7	15.8	19.5	21.7	20.5	18.4	15.9	15.3	13.8	13.8	12.8	13.5	13.1	12.8	
16	10.9	11.2	9.7	10.7	11.3	11.0	10.7	9.9	11.2	11.6	14.7	18.7	18.7	19.2	19.7	18.7	16.1	13.2	14.3	13.2	10.4	11.7	11.5	8.4	
17	7.9	10.6	14.6	12.3	12.0	11.6	13.2	11.5	9.8	10.6	14.5	18.1	18.0	19.6	20.4	(17.9)	(17.1)	(16.2)	(14.9)	(14.2)	14.8	15.2	10.6	6.7	
18**	7.5	3.2	5.4	3.5	7.1	13.5	11.5	10.2	11.0	13.0	16.5	19.2	22.5	23.5	26.5	23.7	22.2	14.2	15.5	13.5	12.0	9.8	6.5	9.4	
19	8.6	8.5	10.5	9.7	11.2	11.5	11.8	11.3	11.4	11.9	14.1	16.5	17.7	19.6	21.4	21.5	19.7	18.7	11.1	13.6	13.7	7.6	7.5	9.5	
20	9.9	7.1	8.5	8.7	11.5	15.5	16.3	14.7	11.8	11.5	13.5	15.5	16.9	20.7	22.0	18.3	18.5	17.7	16.2	8.4	7.0	10.1	12.8	7.1	
21	9.1	5.4	9.6	10.6	11.6	12.5	10.7	12.4	11.5	13.5	17.0	16.8	19.5	19.7	20.2	17.9	15.9	13.8	8.3	13.6	12.3	11.2	10.1	17.6	
22	7.4	8.8	12.1	12.2	12.8	13.6	13.7	13.5	12.9	13.8	15.1	17.6	19.1	20.0	19.5	18.2	16.9	15.0	14.4	14.5	12.8	13.8	13.8	15.8	
23	14.7	13.9	14.4	9.8	11.6	12.3	12.8	12.4	11.9	12.7	15.3	18.5	20.3	20.6	19.5	17.4	15.6	13.4	14.0	14.3	14.3	13.7	13.1	13.3	
24	13.2	13.5	13.2	13.0	13.7	13.2	13.3	12.4	11.5	13.5	15.6	18.6	22.0	22.8	21.8	18.8	15.7	12.0	12.3	14.1	14.1	14.1	14.1	13.6	
25*	14.1	12.0	14.9	12.1	12.1	13.6	13.8	11.1	9.3	9.9	12.0	14.6	17.6	19.1	19.3	16.5	15.1	14.3	14.1	14.2	14.0	13.4	13.3	13.1	
26*	13.2	13.5	13.1	12.2	12.2	12.3	13.5	13.2	10.0	9.5	12.5	16.5	19.3	20.3	19.8	18.0	15.6	14.1	12.6	13.1	13.3	13.1	13.0	12.6	
27	12.5	13.2	13.3	12.8	12.9	12.4	11.7	9.8	8.0	9.5	11.8	17.2	20.1	21.9	20.6	18.9	16.4	12.6	12.9	13.4	13.3	13.4	13.3	13.3	
28	13.2	13.8	13.8	16.0	13.8	12.1	11.9	10.6	9.3	9.9	14.5	17.9	22.1	22.8	18.9	17.8	16.7	15.1	14.0	12.8	11.3	12.0	10.3	10.2	
29	12.1	12.1	13.1	16.5	17.1	16.1	15.1	14.7	13.1	12.2	14.9	18.0	19.4	21.9	20.4	17.4	15.8	13.4	6.8	11.7	13.1	11.1	13.1	10.8	
30	10.2	15.2	12.9	11.5	12.2	12.2	11.3	10.0	9.2	9.4	11.2	16.3	19.4	22.1	19.2	12.5	15.2	14.2	9.4	8.9	10.3	12.1	11.7	13.7	
31*	13.2	12.0	12.2	14.4	13.2	12.0	11.5	11.1	9.2	10.2	13.2	15.9	20.0	20.9	19.2	17.1	15.6	14.3	14.3	13.1	12.8	13.4	13.3	13.1	
Mean	11.2	11.7	12.2	12.0	12.6	12.9	13.0	12.0	10.9	11.6	14.0	17.3	19.7	20.8	20.2	18.3	16.8	14.1	12.9	12.7	11.7	11.6	11.2	11.5	
Mean*	13.7	13.1	13.8	13.2	12.7	12.8	12.7	11.6	9.7	10.0	12.7	15.9	19.1	20.3	19.4	17.5	15.6	14.6	13.9	13.8	13.4	13.5	13.3	13.0	
Mean**	9.8	11.2	9.0	9.3	12.0	12.0	12.2	12.3	11.1	12.7	14.7	19.3	22.4	23.0	22.3	22.5	19.6	14.7	14.7	12.9	8.7	8.9	8.5	10.3	

April.		13° + Tabular Quantities.																							
	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
1	12.6	12.7	12.8	12.9	13.0	13.3	12.5	10.5	9.3	10.6	13.5	15.8	18.6	21.6	19.8	18.3	15.3	14.3	11.0	12.3	13.3	13.3	13.3	12.8	
2*	13.4	12.9	12.7	12.8	12.9	12.8	11.6	9.4	7.9	9.8	12.9	16.4	20.8	21.4	21.6	19.6	17.0	15.4	14.4	14.1	13.5	12.4	11.8	12.1	
3	12.5	12.4	12.2	12.8	13.4	12.1	12.6	10.7	9.6	8.9	12.1	15.5	18.0	20.3	18.5	16.8	15.0	14.3	13.5	12.5	11.6	12.9	13.4	11.5	
4	13.0	11.6	11.8	12.0	13.6	13.3	12.1	10.1	8.7	9.3	11.1	14.2	16.8	18.5	17.8	16.1	14.0	13.8	13.6	12.1	9.0	12.8	13.1	11.8	
5	13.0	12.7	12.3	12.0	12.0	12.0	10.8	9.8	9.5	10.3	12.8	16.0	18.1	19.7	18.9	17.9	16.3	15.1	14.9	14.8	14.1	14.2	11.8	9.7	
6**	10.3	7.2	10.2	5.8	8.0	6.0	7.8	9.8	7.7	9.4	12.6	17.2	20.2	20.2	20.2	17.7	14.9	13.3	13.1	12.2	6.5	9.2	10.1	11.6	
7**	13.6	11.1	10.3	7.6	12.6	10.8	9.8	8.3	7.4	9.0	12.2	14.7	21.4	21.3	18.4	17.0	15.4	13.6	10.1	10.1	11.8	12.0	13.3	11.2	
8	12.3	15.3	9.8	9.6	8.3	10.3	11.2	8.6	7.5	9.0	12.0	18.0	21.1	24.1	20.7	17.6	14.5	13.3	12.7	12.1	7.9	5.2	7.4	8.9	
9	11.1	10.7	11.1	10.9	11.3	10.3	9.4	10.1	9.0	12.8	15.5	20.2	21.8	22.3	21.0	15.5	14.7	13.3	9.5	9.8	9.9	8.9	8.1	9.8	
10	10.2	10.3	10.3	10.9	12.3	10.7	9.1	6.9	7.4	9.9	13.8	18.4	20.9	20.8	19.5	16.4	14.0	11.2	10.0	9.8	12.6	12.4	12.4	13.0	
11	13.4	13.3	13.0	12.0	11.3	10.8	8.4	7.3	7.4	9.8	13.4	18.2	20.0	20.6	21.5	19.9	16.3	13.9	12.9	9.7	6.9	8.7	10.1	11.3	
12	9.0	5.7	7.7	10.5	10.3	9.7	9.8	7.9	7.4	8.9	10.9	16.1	19.9	21.2	20.0	17.9	15.9	13.9	12.3	11.4	7.9	9.9	10.2	11.5	
13	11.6	8.8	10.0	9.7	8.6	8.9	7.3	6.0	5.6	6.9	10.9	16.4	21.2	22.7	20.9	19.1	16.9	14.9	11.9	10.0	10.7	9.9	10.4	11.9	
14**	12.0	12.9	12.9	12.8	13.9	10.4	7.9	5.9	5.9	7.9	11.9	16.9	(												
15**	—	—	—	—	—	—	—	—	—	—	—	—	16.9	16.3	16.6	13.3	12.8	8.5	10.3	12.0	11.9	10.3	13.2	11.7	
16**	10.9	9.9	7.4	9.1	8.5	7.7	11.2	6.8	12.8	14.9	14.2	17.7	19.7	19.9	18.9	16.5	13.9	12.7	9.2	8.9	10.3	9.3	11.2	9.1	
17	7.4	11.4	13.6	9.9	11.5	12.9	13.3	9.3	8.2	8.3	11.3	14.7	17.3	19.8	19.5	18.0	15.8	12.8	12.5	12.4	11.7	10.8	13.6	14.1	
18	11.9	10.8	9.3	9.9	10.4	9.4	8.1	8.1	7.9	9.7	12.7	16.1	17.2	17.4	17.2	15.9	14.9	14.4	14.0	13.4	8.5	7.6	10.2	12.7	
19	12.1	11.8	10.9	12.8	8.5	7.4	8.4	10.3	8.9	9.9	12.2	14.9	17.1	17.9	17.6	16.9	15.9	15.1	12.6	12.9	12.4	12.0	11.7	11.4	
20*	11.9	12.6	13.8	11.9	10.6	9.9	10.1	9.5	9.4	10.9	12.7	15.3	18.9	19.9	18.9	17.9	16.3	14.9	14.5	14.1	13.9	13.4	12.9	12.3	
21	12.1	11.9	12.6	12.2	10.4	8.9	7.9	6.7	6.9	9.7	13.9	17.8	19.3	20.9	20.8	17.9	15.8	13.9	13.4	13.3	12.3	10.3	7.3	9.3	
22	8.1	10.9	12.9	16.1	13.9	8.9	8.3	9.6	10.9	12.2	14.3	17.9	17.2	19.9	19.0	14.9	16.4	14.9	11.3	11.4	12.9	13.1	11.9	11.5	
23	7.6	4.9	10.3	10.6	12.6	11.3	9.3	8.6	9.1	11.6	13.9	15.9	15.9	16.5	16.2	14.5	13.4	13.3	12.9	12.9	12.4	12.5	11.9	11.8	
24	12.9	11.2	11.9	12.9	12.3	10.6	9.3	9.1	9.5	10.0	11.9	14.9	17.0	17.8	18.5	15.5	15.4	14.4	14.0	9.9	11.9	10.9	12.0	11.6	
25	12.5	14.1	11.3	10.9	11.6	10.6	11.8	10.9	10.9	11.9	13.6	14.9	16.9	17.8	16.0	15.0	13.7	13.1	12.0	12.6	12.7	12.2	11.9	11.7	
26	11.1	12.9	16.2	13.5	11.2	9.2	8.3	8.0	8.9	11.9	14.1	15.7	18.0	19.0	17.0	15.6	14.7	10.9	12.4	11.9	9.2	5.8	6.5	8.3	
27	10.6	11.0	10.9	12.9	12.6	12.1	10.7	9.8	9.0	9.7	12.1	14.0	16.9	10.7	15.7	14.3	13.9	13.3	12.1	10.9	12.2	11.9	10.9	11.8	
28*	12.0	11.5	11.5	11.2	11.0	11.0	10.1	9.1	8.6	8.6	10.5	13.3	16.2	16.8	16.8	14.8	13.8	13.0	12.8	12.7	12.7	12.3	11.5	12.0	
29*	12.2	11.9	11.3	11.0	11.0	9.8	8.7	8.7	9.2	10.3	12.3	14.5	15.7	15.8	15.5	14.5	14.2	13.6	12.8	12.5	12.0	12.5	12.6	12.7	
30*	12.8	13.5	12.4	11.5	10.5	8.8	7.2	6.0	6.2	8.5	12.3	15.7	18.3	18.5	17.5	15.5	13.9	12.5	12.2	11.4	12.7	12.7	12.5	12.5	
Mean	11.5	11.3	11.5	11.3	11.3	10.3	9.8	8.7	8.5	10.0	12.7	16.1	18.5	19.5	18.6	17.6	15.0	13.5	12.3	11.9	11.2	11.0	11.3	11.5	
Mean*	12.5	12.5	12.3	11.7	11.2	10.5	9.5	8.5	8.3	9.6	12.1	15.0	18.0	18.5	18.1	10.5	15.0	13.9	13.3	13.0	13.0	12.7	12.3	12.3	
Mean**	11.7	10.3	10.2	8.8	10.8	8.7	9.2	7.7	8.5	10.3	12.7	16.6	19.6	19.4	18.5	16.1	14.3	11.0	10.7	10.8	10.1	10.2	11.9	10.9	

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

1928G04M...	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h
May.	13° + Tabular Quantities.																								
1*	12.6	11.6	11.7	11.5	11.2	10.1		9.2	7.6	7.3	8.0	9.9	12.8	15.7	17.3	16.9	15.7	14.1	12.7	11.7	11.6	11.8	11.9	11.7	11.5
2*	10.8	11.0	11.6	11.3	10.6	9.2		7.1	5.5	6.2	8.0	9.7	13.1	16.4	17.9	16.6	14.5	13.2	12.1	11.5	11.9	12.5	12.4	11.9	11.9
3	11.7	11.7	11.8	11.0	10.0	8.4		6.9	6.4	6.7	8.8	10.9	14.5	16.9	17.9	17.6	16.3	15.3	13.8	12.7	12.1	11.9	12.1	11.9	11.4
4**	11.9	-3.6	4.6	5.0	6.6	5.9		7.9	7.9	7.9	9.9	12.3	14.6	18.7	21.8	21.9	21.0	19.4	16.1	8.4	11.1	10.2	10.7	11.9	6.4
5**	8.2	11.4	9.6	12.4	8.9	10.1	13.4	11.8	8.7		9.9	14.9	17.9	17.5	17.6	18.7	17.5	15.5	11.1	11.2	11.8	12.7	12.6	11.8	11.7
6**	11.7	9.0	8.5	11.0	11.9	11.4	9.4	9.6	7.7	10.0	13.7	16.9	17.8	19.5	17.2	16.9	15.5	13.6	11.8	8.5	11.7	11.5	5.6	11.3	
7	14.3	10.5	10.4	7.9	8.1	7.5	6.1	4.6	6.1	8.6	12.4	16.4	18.3	18.8	17.8	17.5	15.3	12.9	8.8	10.8	10.6	6.8	9.8	11.2	
8	11.4	12.5	12.5	10.5	8.1	5.6	5.1	5.1	6.3	9.6	12.3	14.7	17.2	18.0	17.2	16.4	14.8	12.8	11.6	11.6	11.9	9.3	11.2	10.5	
9	11.1	10.9	8.9	8.4	7.2	5.6	3.9	4.5	7.5	10.6	14.1	16.8	18.3	19.1	18.2	16.8	16.3	13.9	9.2	9.5	8.9	10.5	11.9	12.2	
10**	12.0	9.9	12.5	10.7	10.8	11.7	9.9	11.4	7.3	10.1	13.9	16.8	18.8	19.6	20.8	16.8	16.5	10.8	12.4	11.8	7.8	10.6	9.4	11.7	
11**	13.3	13.9	12.9	9.5	9.5	7.9	3.9	1.9	2.7	6.8	11.4	15.9	17.7	17.0	19.9	15.3	13.1	12.8	10.9	9.7	10.0	10.1	12.0	11.2	
12	6.2	7.8	13.9	9.0	9.2	9.8	7.9	7.8	6.3	9.3	14.1	19.2	19.4	19.7	18.3	17.1	15.0	13.3	12.0	10.5	7.1	11.4	10.6	10.6	
13	11.5	13.2	9.8	7.1	7.6	5.7	6.0	10.6	7.5	8.2	12.8	17.1	19.5	20.1	19.5	18.5	14.8	13.1	11.0	10.5	10.5	10.4	9.7	10.3	
14	12.5	13.7	11.4	10.4	10.6	9.3	7.5	7.5	7.5	8.8	11.2	15.2	17.5	18.7	17.9	16.5	15.1	14.1	12.5	9.1	9.6	10.5	11.1	10.9	
15*	11.2	11.0	10.1	9.7	9.1	7.9	6.4	5.9	4.8	6.0	10.4	15.4	18.3	18.5	18.9	17.4	15.4	13.7	12.4	11.4	11.4	8.7	9.9	10.0	
16	10.4	11.0	9.4	10.3	10.1	8.9	7.5	7.0	7.1	8.4	11.2	15.0	17.4	18.0	17.8	16.8	15.6	14.3	13.1	12.4	11.8	12.4	10.1	6.9	
17	6.7	9.3	10.5	14.6	8.7	7.2	5.0	5.0	5.1	6.8	10.9	14.3	16.4	18.0	17.8	16.6	15.1	13.5	12.7	13.2	12.8	9.2	7.6	9.3	
18	8.0	0.4	5.4	8.8	7.4	5.6	5.1	4.9	5.3	8.1	11.8	13.1	17.5	18.9	19.7	16.1	15.3	14.0	13.0	12.7	12.7	11.9	12.0	11.0	
19	10.0	10.0	10.3	9.0	8.0	7.0	6.0	8.0	7.0	7.2	10.0	14.0	17.3	18.0	17.0	15.7	13.7	12.1	11.8	12.0	12.1	12.1	12.1	7.8	
20	10.2	10.6	9.1	9.4	14.5	14.6	13.3	10.4	9.6	10.0	11.6	14.6	15.6	16.7	16.0	13.6	12.5	11.3	10.3	11.0	11.6	11.9	6.2	10.9	
21	10.7	12.7	11.2	12.8	8.7	5.7	6.7	6.7	7.2	6.8	10.5	14.7	16.1	15.2	15.2	13.8	12.3	11.3	10.9	10.6	10.3	7.8	10.7	11.4	
22	12.2	10.5	10.3	10.0	9.0	7.4	6.6	6.6	7.1	9.1	11.8	16.1	18.2	17.6	16.2	13.4	12.5	11.2	10.9	11.7	11.5	11.3	10.7	10.8	
23	11.1	11.0	10.4	10.3	9.9	8.5	7.6	6.4	7.3	8.5	11.5	15.1	15.8	14.8	14.2	12.4	11.5	10.6	10.4	10.6	11.2	8.4	10.0		
24	10.1	11.0	10.7	10.0	9.2	7.6	5.9	5.7	6.1	8.4	11.0	12.9	14.9	15.3	14.7	13.7	12.7	11.7	10.7	10.8	11.4	11.8	10.6	10.8	
25	11.5	11.4	11.2	10.5	8.9	7.8	8.8	8.0	8.1	8.9	10.9	13.6	14.9	14.9	14.2	13.0	11.1	11.1	11.0	10.2	10.3	9.9	10.3	10.7	
26*	10.3	10.2	10.1	10.1	9.3	8.1	6.8	4.9	4.1	6.2	9.3	12.4	15.2	16.0	15.2	13.9	13.8	12.8	11.6	11.2	11.1	11.3	11.2	11.2	
27	11.3	11.3	11.3	11.3	10.3	8.9	8.0	5.9	4.6	5.7	(7.6)	(10.6)	(13.9)	(15.8)	(15.4)	14.0	12.6	11.5	10.7	10.6	11.6	11.6	11.7	11.6	
28	11.7	11.8	11.8	11.0	9.5	7.3	6.1	5.8	5.7	7.0	10.0	11.7	13.9	15.0	15.0	14.2	13.7	13.0	12.0	11.3	11.1	11.9	11.3	11.6	
29	11.0	10.9	11.0	11.1	10.7	10.1	8.2	8.1	9.1	11.2	12.1	13.4	15.2	15.6	15.6	14.5	13.7	13.1	12.2	12.1	11.5	11.3	11.1	11.1	
30	10.7	10.1	10.1	10.0	9.2	8.1	8.4	6.4	5.7	7.0	9.5	12.6	15.1	15.5	15.2	14.2	13.2	12.2	11.0	10.8	11.0	11.2	10.8	10.5	
31*	10.3	10.3	11.2	10.3	10.4	8.1	6.3	5.5	4.7	7.3	11.1	13.2	16.0	17.3	17.3	15.8	14.6	13.3	12.3	11.8	11.3	11.3	11.4	11.3	
Mean	10.9	10.2	10.5	10.2	9.5	8.3	7.3	6.9	6.6	8.4	11.4	14.7	16.8	17.6	17.2	15.7	14.2	12.7	11.4	11.1	11.0	10.9	10.5	10.6	
Mean*	11.0	10.8	10.9	10.6	10.1	8.7	7.2	5.9	5.4	7.1	10.1	13.4	16.3	17.4	17.0	15.5	14.2	12.9	11.9	11.6	11.6	11.1	11.2	11.2	
Mean**	11.4	8.1	9.6	9.7	9.5	9.4	8.9	8.5	6.0	9.3	13.2	16.4	18.1	19.1	19.7	17.5	15.4	12.9	10.9	10.6	10.5	11.1	10.1	10.5	
June.	13° + Tabular Quantities.																								
1**	10.4	10.0	10.4	9.6	7.8	6.2	5.9	5.2	4.0	4.6	7.8	12.3	19.5	18.5	24.7	23.8	20.3	19.5	16.5	14.1	9.3	9.3	5.4	3.8	
2**	-1.5	-9.6	-2.0	3.6	13.2	5.5	8.5	13.5	13.8	17.0	15.2	15.8	18.8	19.1	19.3	18.4	16.3	13.3	11.8	11.7	10.8	10.7	11.0	10.9	
3	12.5	12.0	8.7	7.5	5.1	3.1	3.1	3.3	3.7	5.5	9.2	13.0	16.0	16.5	15.6	14.7	13.4	11.9	9.5	10.1	10.8	10.8	10.4	8.1	
4*	8.7	8.8	8.6	8.6	7.3	5.6	5.1	4.9	5.1	8.6	12.9	16.1	17.2	17.7	18.1	16.1	14.0	12.1	10.9	10.7	11.0	10.3	9.0	9.5	
5	9.4	8.2	9.4	8.6	7.6	5.6	4.8	3.8	5.1	7.2	10.6	14.1	15.3	17.2	16.9	15.5	13.3	11.7	10.9	10.8	10.5	9.7	10.7	10.8	
6	10.8	10.5	9.5	8.6	7.0	4.7	3.7	3.5	5.4	7.4	10.9	14.9	17.4	17.8	17.1	15.1	13.1	12.2	11.6	11.5	11.2	8.0	7.7	9.9	
7	10.8	6.6	7.1	6.2	5.6	4.5	4.0	2.3	5.2	8.3	12.3	15.4	18.1	18.8	18.7	15.2	14.1	12.5	11.3	11.6	13.0	12.9	12.3	11.5	
8**	12.5	8.6	6.3	8.5	12.0	11.2	5.8	4.3	5.3	7.5	12.6	16.2	17.5	19.2	20.4	17.7	15.4	12.7	10.7	10.0	9.7	10.8	9.3	5.3	
9**	7.6	5.2	5.6	5.8	8.1	6.9	4.8	3.9	5.0	9.0	13.6	17.7	19.8	19.5	18.1	17.0	15.3	10.7	11.8	11.1	9.8	8.5	10.6	8.6	
10	8.8	6.8	7.8	8.3	5.3	4.3	4.0	5.5	5.8	7.8	10.4	13.8	14.8	16.4	16.7	15.8	14.8	12.8	11.7	11.7	11.6	11.8	10.8	10.3	
11	9.8	8.1	6.2	7.3	6.8	5.8	3.8	4.0	3.8	5.8	9.7	13.6	16.4	17.5	17.7	16.7	14.8	11.8	11.1	11.0	11.2	11.1	10.2	10.6	
12*	10.1																								

TABLE (A) 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
13° + Tabular Quantities.																									
July.																									
1	9.7	9.6	9.1	8.9	9.2	7.4	6.0	5.2	4.8	6.1	8.2	11.4	13.6	15.2	15.6	14.7	14.1	12.9	11.7	11.3	11.1	10.7	10.9	10.3	
2	8.7	7.0	8.0	7.6	7.1	6.3	5.0	4.1	4.0	5.5	7.2	10.1	13.4	15.6	16.4	14.8	13.3	11.7	11.7	11.4	10.9	10.8	10.3	10.4	
3	10.5	9.8	9.1	9.5	8.2	6.1	4.5	3.5	4.1	6.1	8.7	12.3	13.9	15.3	16.3	15.2	13.1	11.3	10.6	8.8	8.1	7.6	8.5	8.6	
4	4.0	5.0	6.5	7.7	6.8	6.1	5.7	5.2	5.7	8.9	11.7	15.7	16.0	16.0	16.7	14.9	13.7	11.7	10.7	9.9	9.5	9.5	9.5	9.0	
5**	8.8	9.3	9.0	7.8	6.7	3.3	2.7	3.7	4.9	8.1	10.5	14.4	18.0	17.3	16.8	16.8	15.9	12.9	12.6	12.1	9.8	9.8	7.8	10.1	
6	8.4	8.4	8.6	8.7	7.9	5.0	3.8	3.5	4.7	6.9	9.6	12.6	15.3	17.0	18.0	15.1	13.0	11.9	10.9	9.4	9.9	8.7	9.9	10.7	
7**	9.6	9.7	8.7	7.9	6.9	6.4	5.5	5.6	5.0	8.8	10.9	15.9	18.8	19.0	18.2	12.9	12.8	12.3	12.3	10.9	9.9	8.9	8.1	7.1	
8	9.3	9.3	9.2	9.9	11.0	10.1	6.5	4.3	4.9	8.0	12.7	17.3	18.6	19.1	18.0	16.0	14.2	12.9	11.0	10.1	9.9	9.5	8.0	7.9	
9	8.9	8.9	9.1	11.5	7.7	5.7	4.9	4.8	4.9	6.0	10.2	15.0	17.9	17.3	17.0	15.9	13.5	11.6	10.1	10.0	9.2	9.0	8.0	9.0	
10	9.6	9.3	9.3	8.9	7.8	6.4	4.7	4.0	4.3	8.0	12.0	14.8	17.8	18.1	16.6	14.5	12.5	11.2	10.2	10.1	10.2	9.7	8.8	9.2	
11*	9.4	11.1	10.3	7.0	6.2	5.6	5.4	5.2	6.5	9.2	11.9	15.0	16.8	17.2	16.5	15.1	13.3	11.7	10.3	9.4	9.4	10.1	9.9	9.7	
12	9.5	9.5	8.4	8.3	6.5	5.5	5.9	4.4	5.5	8.4	12.7	16.4	18.5	19.6	19.2	16.6	15.5	13.0	10.9	10.2	9.0	9.5	8.4	5.2	
13	7.9	9.6	9.4	10.1	7.5	5.3	3.7	3.7	4.7	6.6	8.6	12.5	16.2	17.7	17.2	17.2	15.7	12.7	10.6	9.7	9.6	9.7	8.2	8.0	
14*	8.5	9.0	9.1	9.2	7.5	6.5	5.8	5.7	6.7	8.9	10.7	13.5	16.1	17.3	16.9	15.2	13.6	11.6	9.9	9.9	9.9	10.2	9.9	9.8	
15	10.0	10.3	10.8	10.0	7.6	5.8	6.0	7.2	5.6	7.5	10.8	13.0	14.9	15.0	15.3	14.0	12.7	11.9	10.1	9.0	10.1	10.4	10.2	9.2	
16	9.4	8.5	8.7	8.1	7.6	6.8	5.9	5.4	5.7	7.1	9.0	12.1	14.0	14.5	15.1	14.6	13.7	12.1	10.7	10.2	11.1	10.7	10.5	10.9	
17	10.6	11.4	8.7	8.9	7.2	6.4	6.3	6.3	7.2	9.6	10.6	12.8	14.9	15.2	15.6	14.4	12.5	11.2	10.2	10.1	10.2	10.1	9.7	9.3	
18	11.3	11.2	8.8	8.6	9.3	10.3	10.3	6.9	6.3	7.8	10.3	12.8	15.3	15.6	14.3	13.5	12.8	11.1	10.6	9.5	9.3	9.6	9.1	9.3	
19	9.4	9.6	9.7	10.4	9.0	6.9	5.8	5.6	6.0	9.0	11.4	14.5	15.4	15.2	14.4	12.4	10.8	10.2	10.4	10.4	10.4	10.4	10.4	10.5	
20	9.6	9.5	9.8	10.4	8.9	5.8	4.6	4.7	4.4	8.2	10.7	13.4	14.1	13.2	12.4	11.7	11.4	10.6	10.4	10.2	10.4	10.2	9.4	10.1	
21*	10.1	9.6	9.2	8.9	7.8	6.4	5.6	5.2	6.3	7.7	8.7	11.5	13.9	14.7	14.3	12.9	11.3	10.1	9.9	9.8	10.1	10.2	10.3	9.4	
22*	9.4	9.1	8.6	8.4	7.4	6.6	6.4	6.7	7.4	7.5	9.1	11.4	13.9	14.9	15.4	14.3	13.1	12.3	11.4	10.6	10.3	10.4	10.4	10.2	
23*	10.1	9.4	9.4	9.4	8.9	6.5	4.4	3.5	4.7	6.4	8.1	11.1	13.1	14.5	15.4	14.6	11.4	10.6	10.4	10.0	9.4	9.4	9.4	9.6	
24	9.4	9.2	8.6	8.4	7.4	6.3	5.3	5.4	4.6	5.0	7.7	11.4	15.4	19.4	20.0	17.4	15.4	13.9	11.4	10.2	10.8	9.7	9.4	9.0	
25	8.4	7.6	6.6	6.4	6.0	4.5	4.3	4.6	5.4	6.6	9.3	12.0	15.3	17.3	17.3	15.1	12.3	10.4	9.0	9.7	10.1	10.3	8.7	7.7	
26	8.2	8.0	9.3	9.3	7.1	5.0	4.6	4.6	5.5	8.2	11.3	15.0	18.2	18.8	17.3	14.4	12.7	11.0	10.7	10.8	9.6	8.9	8.6	10.0	
27**	10.1	7.6	9.3	7.3	7.3	5.9	7.3	6.5	6.3	8.2	10.2	14.2	16.2	18.2	17.9	15.1	14.0	12.1	9.1	5.1	4.1	5.4	8.7	9.1	
28**	7.5	7.0	4.2	13.4	13.0	13.5	10.0	6.4	5.6	5.7	9.7	13.1	14.0	16.5	16.5	14.0	12.9	10.8	9.1	9.6	9.0	9.0	10.0	9.5	
29	8.7	8.2	8.2	7.3	7.0	6.0	7.5	8.0	7.2	8.1	9.1	11.0	13.8	15.5	15.1	13.8	12.5	11.7	11.3	10.6	10.1	10.0	9.8	8.1	
30	7.5	5.9	5.5	7.2	6.0	4.4	3.9	3.2	3.5	5.8	8.2	10.8	13.5	14.9	15.3	14.2	13.0	11.3	10.7	10.3	9.8	9.6	9.0	8.8	
31**	8.5	7.4	6.6	6.4	7.3	6.5	4.6	4.4	5.4	6.4	8.1	11.3	13.9	16.4	16.1	15.0	15.2	13.8	5.7	8.4	7.4	9.4	8.4	5.4	
Mean	9.1	8.9	8.6	8.8	7.8	6.4	5.6	5.1	5.4	7.4	9.9	13.2	15.5	16.5	16.4	14.9	13.3	11.8	10.5	9.9	9.6	9.6	9.3	9.1	
Mean*	9.5	9.6	9.3	8.6	7.6	6.3	5.5	5.3	6.3	7.9	9.7	12.5	14.8	15.7	15.7	14.4	12.5	11.3	10.4	9.9	9.8	10.1	10.0	9.7	
Mean**	8.9	8.2	7.6	8.6	8.2	7.1	6.0	5.3	5.4	7.4	9.9	13.8	16.2	17.5	17.3	15.8	14.2	12.5	9.8	9.2	8.0	8.5	8.6	8.2	
August.																									
13° + Tabular Quantities.																									
1**	4.6	4.6	2.4	4.1	(4.0)	(3.3)	(3.6)	4.4	5.4	8.4	9.4	12.4	15.4	16.4	15.4	14.4	11.4	10.4	11.4	10.3	8.5	8.7	9.1	6.4	
2	6.1	6.5	6.4	8.9	7.4	5.8	4.4	3.4	2.8	4.4	6.1	9.6	12.0	13.4	13.8	13.4	11.7	11.2	10.7	9.3	9.4	9.3	7.9	5.1	
3	4.9	6.3	6.4	6.3	5.6	3.3	2.8	3.7	4.6	6.6	8.0	10.6	13.3	14.0	12.8	12.1	11.6	11.4	10.0	6.9	7.8	8.6	8.3	8.3	
4	8.0	5.4	5.9	6.5	6.3	6.0	5.5	5.5	6.9	8.5	9.5	11.7	13.9	15.4	14.4	12.4	11.4	10.1	9.4	9.4	8.9	8.6	8.7	8.6	
5	7.4	5.4	6.3	6.5	6.3	5.2	5.4	5.4	6.1	7.2	9.4	11.5	14.4	17.0	15.2	13.5	11.4	9.9	9.4	9.4	9.4	8.6	8.4	8.4	
6	8.4	8.4	8.6	8.8	9.3	7.9	6.5	5.1	4.7	6.5	9.4	12.7	15.5	15.5	14.2	12.3	9.4	8.2	8.2	8.4	8.5	8.8	7.4	8.7	
7*	9.2	8.4	8.5	7.2	5.6	4.3	3.3	2.6	4.0	6.0	9.2	12.4	14.8	14.6	13.4	11.3	9.6	8.3	8.4	8.4	8.4	8.6	8.6	8.4	
8*	8.4	8.7	8.5	8.2	7.4	6.4	5.3	5.1	5.0	5.8	8.9	12.2	13.5	14.4	14.1	12.6	10.5	9.1	8.7	9.0	8.8	8.9	8.4	8.4	
9**	7.7	7.5	7.7	8.7	6.5	5.0	3.7	2.6	4.6	9.6	14.4	17.1	19.6	20.4	19.6	17.6	15.6	11.8	11.6	11.7	11.3	10.7	9.4	6.2	
10	3.8	2.6	4.7	5.8	5.4	6.0	5.1	3.8	5.1	7.5	10.4	13.7	16.2	16.9	14.2	12.4	10.5	9.1	8.9	8.9	7.0	8.9	8.9	7.2	
11	9.2	8.1	7.0	7.0	5.7	4.5	3.5	3.5	4.9	7.9	10.0	13.6	15.3	15.3	15.0	12.4	10.1	8.1	8.8	9.1	9.2	9.1	9.1	9.0	
12	9.2	8.8	9.7	7.5	6.5	5.3	5.1	5.3	7.1	10.5	13.2	15.1	16.1	17.6	15.1	12.8	12.2	11.0	9.1	10.7	11.1	10.8	9.3	9.1	
13**	9.2	6.2	2.2	5.0	5.8	7.3	7.7	6.4	7.3	13.1	13.3														

TABLE (A) 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	
September.																										
13° + Tabular Quantities.																										
1*	6.8	6.0	5.0	5.2	5.1	4.2	4.0	3.7	4.1	6.3	8.8	11.0	13.0	13.1	11.8	9.7	8.4	8.2	8.7	8.9	8.5	8.2	8.3	8.2		
2	7.8	7.3	6.7	6.3	5.6	5.3	4.3	4.3	4.6	6.3	9.3	12.9	13.6	14.2	12.5	10.7	9.1	8.4	9.1	9.4	9.3	8.5	6.6	5.8		
3	6.6	7.1	7.8	7.6	5.5	4.6	4.2	3.6	5.1	7.4	9.7	13.4	15.2	14.6	12.5	9.8	8.6	7.5	8.5	8.8	8.5	8.5	8.3	7.8		
4*	7.8	7.7	7.7	7.5	6.6	5.7	5.0	3.8	5.0	6.9	9.6	12.6	13.6	13.6	12.4	10.9	9.6	8.6	8.8	9.1	8.5	8.4	8.2	7.7		
5*	7.6	7.3	6.7	6.5	6.5	5.7	4.7	4.0	3.7	5.5	7.9	11.2	13.0	14.0	13.2	11.7	10.3	9.2	8.7	8.5	8.0	8.0	7.8	7.6		
6	7.6	7.5	7.1	6.8	6.6	6.0	4.8	3.8	3.0	3.9	7.3	11.8	14.8	14.8	13.9	12.6	11.5	10.8	9.4	8.8	8.5	3.8	-1.7	3.3		
7	6.6	6.0	6.8	6.3	5.8	5.1	5.6	4.8	5.3	8.8	10.3	13.0	15.4	15.6	14.0	11.2	9.9	8.9	8.9	7.9	5.9	5.6	3.6	3.8		
8	5.3	5.6	8.6	11.9	3.0	3.8	4.3	5.2	7.5	9.7	12.3	16.8	21.1	18.9	24.2	21.4	16.4	11.2	7.2	6.9	6.0	2.1	1.8	0.2		
9**	4.2	6.2	14.0	5.0	5.0	3.2	8.2	6.2	3.4	6.0	8.7	12.9	15.2	15.2	13.3	9.9	8.8	2.8	6.2	4.6	6.1	3.7	3.2	4.9		
10	9.1	8.1	9.3	13.6	10.1	8.3	6.2	6.8	6.4	7.8	7.1	10.3	13.1	14.0	13.5	11.2	8.7	8.9	8.0	7.9	8.0	8.0	7.2	7.1		
11	7.4	8.9	14.8	3.8	5.9	6.1	5.9	7.9	7.9	6.8	8.4	10.4	13.1	14.8	13.8	13.8	11.8	10.8	9.4	7.2	2.4	6.5	6.9	7.6		
12	8.6	8.4	7.9	7.6	6.5	7.1	6.7	5.9	5.0	6.1	8.9	12.1	14.2	13.9	13.4	12.0	10.0	8.3	7.7	7.6	7.0	4.4	2.7	6.9		
13	5.7	6.8	6.5	6.9	6.9	7.0	5.0	3.1	3.1	4.1	6.9	12.1	14.7	13.8	13.7	12.4	10.1	8.8	7.8	7.6	7.6	7.5	7.4	8.0		
14**	8.1	7.4	7.3	6.2	6.6	6.4	5.2	4.2	4.0	6.2	10.2	14.6	18.3	(20.2)	(18.2)	(17.2)	15.3	11.2	9.0	7.2	4.4	4.1	-1.5	-1.9		
15**	1.8	5.2	8.5	8.2	5.6	5.7	2.5	0.2	1.2	3.7	6.5	10.9	14.6	17.1	19.3	16.0	17.6	16.2	11.3	1.4	0.7	-0.7	9.1	4.4		
16	1.3	2.3	2.7	1.2	3.3	5.4	4.6	4.0	4.6	6.0	7.7	12.1	13.3	14.7	15.5	12.9	12.7	12.7	10.7	9.7	7.9	4.5	3.5	0.4		
17	2.8	3.2	4.8	6.6	7.8	9.0	7.7	6.3	5.7	5.8	7.2	9.3	11.3	11.2	10.8	10.2	9.2	8.2	8.2	7.8	7.8	7.4	6.3	6.9		
18	6.8	6.4	5.8	6.5	5.9	6.6	7.4	8.5	7.9	7.9	10.6	12.6	13.5	12.0	10.0	8.0	8.0	8.0	8.0	8.3	6.0	1.0	2.3			
19	1.1	4.1	6.4	7.7	8.6	9.5	5.7	4.5	4.0	5.5	8.5	11.1	13.1	13.2	12.3	12.3	9.7	6.6	-0.8	4.1	6.4	2.9	5.2	6.2		
20**	7.1	6.3	2.5	5.9	5.3	4.8	11.3	6.3	4.3	7.3	9.4	11.8	13.0	12.8	10.3	8.4	7.4	8.2	3.4	1.2	6.2	6.6	-0.6	-3.0		
21**	-2.1	-3.1	4.2	3.4	13.3	32.5	21.5	20.7	10.8	8.4	11.6	12.4	12.0	10.2	11.6	6.4	-1.6	0.2	2.2	0.0	-1.8	1.4	1.7	9.2		
22	7.1	6.1	6.6	6.1	6.3	8.1	4.3	2.0	3.5	5.2	10.4	12.1	14.0	14.1	13.4	11.0	7.1	4.0	4.9	6.5	7.2	7.2	6.5	4.4		
23	3.9	1.9	2.9	3.6	4.4	5.2	3.9	3.3	3.6	5.8	7.9	11.9	14.3	14.2	12.3	9.9	5.5	6.1	7.0	4.8	4.5	4.8	6.2	6.2		
24	6.8	6.6	6.7	7.2	6.5	5.7	5.0	4.2	4.3	5.0	9.0	12.7	14.3	15.7	13.4	10.5	9.2	6.3	7.1	7.4	6.7	6.2	5.7	4.7		
25	5.6	6.7	6.2	6.0	5.6	5.7	6.1	5.5	5.6	8.2	11.2	14.1	15.5	14.5	12.5	9.6	8.1	6.6	7.0	7.5	7.7	8.0	7.3	7.1		
26	6.4	6.7	6.3	6.4	6.3	6.2	5.3	4.0	3.6	4.8	8.2	11.2	12.3	12.2	11.1	9.9	9.0	9.0	9.0	8.5	7.9	7.4	7.2	7.2		
27	7.2	6.8	6.7	6.3	6.0	5.9	5.6	4.7	4.5	5.2	7.2	9.0	11.6	11.6	10.6	10.1	9.0	8.7	8.4	7.6	7.3	6.8	7.6	7.6		
28*	7.2	6.8	6.6	6.6	6.6	6.5	6.3	5.5	4.8	5.5	7.0	9.4	10.8	11.3	11.8	10.7	9.3	8.3	7.5	7.3	7.3	7.3	7.3	6.9		
29*	7.1	7.0	6.7	6.6	6.4	5.9	5.3	4.3	3.1	3.3	5.5	8.1	10.0	10.7	10.2	9.4	9.0	8.4	8.2	7.5	7.4	7.2	7.2	7.1		
30	6.9	6.6	6.3	6.4	6.3	6.2	5.2	4.1	3.2	3.7	5.8	8.9	10.8	11.3	11.1	9.5	8.6	8.3	7.7	7.3	7.4	7.3	7.3	7.3		
Mean	5.9	6.0	6.9	6.5	6.3	6.9	6.1	5.2	4.8	6.1	8.6	11.7	13.7	14.0	13.3	11.4	9.5	8.3	7.6	6.9	6.6	5.9	5.2	5.4		
Mean*	7.3	7.0	6.5	6.5	6.2	5.6	5.1	4.3	4.1	5.5	7.8	10.5	12.1	12.5	11.9	10.5	9.3	8.5	8.4	8.3	7.9	7.8	7.8	7.5		
Mean**	3.8	4.4	7.3	5.7	7.2	10.5	9.7	7.5	4.7	6.3	9.3	12.5	14.6	15.1	14.5	11.6	9.5	7.7	6.4	2.9	3.1	3.0	2.4	2.7		
October.																										
13° + Tabular Quantities.																										
1*	7.2	6.8	6.6	6.4	6.1	5.5	5.5	5.3	4.4	5.6	7.4	8.9	9.8	10.3	9.8	9.4	9.2	9.2	8.7	8.0	7.3	5.9	6.3	6.3		
2	6.0	6.4	6.4	6.1	6.0	5.7	5.0	3.7	3.5	4.3	6.5	9.5	12.0	13.2	12.6	12.0	10.7	10.1	8.9	8.7	7.6	7.0	6.7	6.6		
3	6.8	6.1	5.8	5.6	5.8	5.0	5.8	4.7	4.3	4.8	(6.7)	(9.3)	(11.1)	(11.2)	11.3	10.1	8.3	6.6	7.0	7.3	5.7	3.2	5.4	6.4		
4	7.2	9.9	6.8	5.5	12.6	12.6	13.2	8.6	5.8	5.9	8.9	10.7	9.9	11.1	10.9	9.5	7.8	6.8	6.5	6.4	6.1	6.2	6.2	6.2		
5	6.4	6.7	6.8	6.8	6.4	6.1	5.6	4.1	3.0	3.8	6.1	9.4	12.2	13.2	13.0	11.3	9.2	8.1	7.2	6.6	5.3	6.4	5.5	5.3		
6	6.3	6.3	6.6	7.2	6.7	6.1	5.2	3.8	3.2	3.8	6.8	11.1	12.3	13.2	13.6	12.2	8.6	7.6	7.7	7.0	5.7	4.7	5.1	6.4		
7	6.9	6.8	7.7	7.4	5.2	6.5	8.3	7.0	5.9	7.3	10.8	13.4	14.9	15.3	13.3	11.7	10.0	7.4	6.4	5.2	4.4	2.3	1.7	1.9		
8	2.9	7.9	8.0	5.9	5.9	5.7	4.9	4.4	5.9	7.4	9.7	12.2	14.0	13.9	12.0	11.9	9.8	8.8	8.0	7.2	6.7	6.7	6.6	4.9		
9	5.0	5.1	6.4	5.9	5.8	5.0	4.7	4.5	5.7	5.9	9.7	11.7	12.5	12.0	11.7	9.7	9.2	8.7	8.3	7.9	7.4	7.0	6.6	6.8		
10*	6.7	7.0	7.2	6.5	6.4	6.4	6.4	5.7	5.4	6.6	9.5	12.0	13.0	12.4	11.3	10.3	9.0	8.0	7.6	7.9	7.6	7.2	7.3	7.2		
11	6.6	6.2	6.1	6.4	6.5	5.6	8.0	6.6	6.1	7.1	10.1	12.1	14.1	13.8	12.2	11.3	10.0	9.0	8.6	7.6	6.8	6.6	6.0	7.0		
12	6.6	8.0	6.3	6.0	6.6	5.9	5.1	5.0	3.6	4.4	7.6	10.5	12.0	12.8	12.1	10.5	9.6	9.0	8.7	8.0	7.8	7.2	7.0	7.0		
13	4.2	3.5	5.7	6.5	6.8	6.5	6.0	4.9	4.0	4.4	6.6	10.0	12.7	14.0	14.0	10.9	9.6	9.3	8.5	9.0	8.3	4.7	5.3	4.2		
14**	-1.0	-6.0	2.0	5.0	6.4	6.0	4.7	3.6	2.7	3.8	7.0	11.0	15.0	14.4	15.9	14.9	14.2	13.4	8.8	11.4	-0.5	-8.5	-13.0	-5.0		
15**	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)	(—)		
16																										

TABLE (A) 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
November.																									
13° + Tabular Quantities.																									
1**	3.2	1.5	2.2	3.3	4.3	5.2	5.2	4.2	3.7	5.2	7.5	10.1	11.1	10.5	9.2	7.8	7.1	6.8	7.2	0.8	1.2	2.2	0.6	0.3	
2	6.9	5.3	5.3	6.3	7.3	6.4	5.3	4.3	3.3	3.3	6.3	8.5	8.9	10.2	9.1	8.3	7.6	7.2	6.8	6.3	5.3	5.0	2.8	2.1	
3**	1.2	6.5	5.9	6.3	5.2	4.4	6.4	5.9	10.2	9.4	10.0	12.3	12.4	10.4	9.0	4.3	3.2	4.5	3.4	3.5	5.3	5.4	4.5	4.1	
4	6.5	6.0	6.4	6.0	5.8	5.5	5.5	4.6	4.1	4.4	7.4	9.1	9.5	9.6	8.6	8.0	6.9	5.8	4.6	5.9	4.7	4.6	4.6	5.5	
5	5.8	6.4	6.2	5.8	5.4	4.7	4.3	3.8	3.3	3.8	6.7	8.8	10.1	9.8	9.1	8.0	7.7	6.9	6.0	5.1	5.4	5.0	5.0	5.1	
6	5.2	5.9	6.3	6.1	4.9	4.3	3.6	4.9	3.6	2.9	4.9	6.6	8.4	9.4	9.3	8.3	7.5	7.3	6.9	6.1	5.4	5.0	5.0	5.1	
7*	5.2	6.1	6.1	5.9	5.6	5.1	4.6	4.0	3.1	3.8	6.1	8.1	9.1	8.6	7.5	7.1	6.8	6.5	6.0	5.8	5.6	5.2	5.3	5.4	
8*	5.9	6.1	6.1	6.1	5.6	5.3	4.9	4.3	3.8	4.8	7.0	8.7	9.1	8.2	7.7	7.1	7.3	6.6	6.2	6.2	5.5	5.2	5.1	5.2	
9	5.2	5.2	5.9	4.2	4.3	5.1	4.8	4.4	3.9	4.2	5.6	7.2	8.2	7.9	7.0	6.9	6.5	6.3	6.0	6.2	5.8	5.5	5.5	5.4	
10	5.8	6.2	6.2	6.3	6.2	5.6	5.2	4.5	4.2	5.0	7.1	8.8	9.0	8.8	7.9	7.2	7.0	6.5	6.2	5.8	5.4	5.3	5.2	5.0	
11	5.2	5.5	6.0	6.2	6.2	5.2	5.4	5.5	5.1	5.5	7.1	8.2	8.7	8.9	8.2	8.1	7.1	6.2	6.1	5.6	5.2	4.7	4.7	4.0	
12	1.6	3.2	4.9	5.2	5.4	5.1	4.2	4.4	3.8	4.4	6.3	9.1	10.4	9.8	8.7	7.1	6.4	6.2	6.2	5.8	5.7	5.2	5.2	5.0	
13	5.2	5.4	5.4	5.4	5.3	4.8	4.4	4.3	3.9	4.5	6.7	8.3	8.0	7.6	6.9	6.4	6.4	5.9	5.9	5.7	5.4	5.4	5.4	5.3	
14*	5.5	5.5	5.8	5.9	5.7	5.5	5.1	4.6	3.8	4.3	6.5	8.6	9.8	9.5	8.3	7.4	6.5	5.8	5.5	5.5	5.5	5.1	5.1	5.5	
15*	5.6	5.8	6.0	5.8	5.6	5.2	4.6	3.6	3.5	4.1	7.1	9.6	11.5	10.9	10.0	8.9	8.3	7.5	6.1	5.5	5.4	5.3	5.5	5.5	
16*	5.6	5.6	5.6	5.5	5.5	5.0	4.9	4.5	3.4	3.5	5.5	7.9	9.5	9.5	8.5	7.5	6.7	5.5	5.1	5.5	5.3	5.1	5.4	5.5	
17	5.6	6.1	5.9	5.8	5.6	4.9	4.7	4.3	3.6	4.2	6.1	7.6	7.9	7.7	7.2	6.7	6.5	5.7	5.7	5.2	4.7	4.6	4.7	4.7	
18	4.8	5.5	5.6	5.2	4.8	4.3	4.3	3.8	2.8	3.8	6.3	9.0	10.7	10.9	9.9	7.9	6.9	5.9	5.2	5.0	4.9	4.5	3.9	3.3	
19	5.0	5.6	5.6	5.7	5.4	5.0	5.0	4.4	3.8	3.2	5.1	7.0	8.0	8.1	8.2	7.3	7.0	6.0	6.0	5.7	5.2	2.1	3.5	5.0	
20	5.2	5.9	6.0	6.0	6.0	5.4	5.0	4.7	3.5	2.9	4.9	7.6	8.8	8.8	8.0	7.4	6.3	5.8	5.8	5.1	4.9	4.8	4.8	4.9	
21**	5.2	5.7	5.7	5.8	5.7	5.6	5.0	4.4	3.6	3.7	5.7	8.3	10.3	10.2	7.8	8.3	8.8	6.7	5.4	6.1	4.5	3.8	3.2	4.4	
22	4.7	5.1	5.8	6.3	6.0	5.9	5.7	5.1	4.3	3.8	5.2	7.1	7.9	8.2	7.7	5.8	5.2	5.2	5.7	5.6	4.7	1.9	1.6	3.7	
23	4.7	7.4	5.9	5.8	4.7	8.8	5.0	4.7	4.3	5.4	6.9	7.2	9.4	8.8	8.2	4.7	6.6	6.7	5.7	5.7	4.7	4.6	4.3	4.3	
24	4.9	5.6	6.8	3.1	4.7	4.4	4.3	3.6	2.9	2.7	5.1	7.9	9.5	8.8	8.1	7.4	6.8	6.5	5.3	5.3	5.4	4.8	4.3	3.5	
25	4.7	5.4	5.0	5.0	5.0	4.9	5.0	4.4	3.4	3.3	4.8	6.4	6.8	7.3	7.1	7.0	6.3	5.7	5.4	5.3	5.2	5.3	4.2	3.4	
26	5.3	5.3	5.0	5.3	5.3	4.8	5.0	4.8	4.3	4.3	5.8	7.8	8.3	8.3	7.9	7.5	6.3	6.2	5.8	5.7	5.1	5.0	4.9	4.6	
27	5.1	5.2	5.2	5.4	5.2	4.9	4.8	4.7	4.3	4.7	6.2	7.9	8.6	8.2	7.9	7.1	5.9	6.1	5.5	5.4	5.4	5.0	4.9	3.5	
28**	1.9	4.9	4.2	5.1	5.3	5.1	5.3	4.5	3.8	5.0	7.5	10.3	11.1	11.3	9.3	8.9	10.6	5.1	6.5	2.9	5.1	0.5	1.8	4.3	
29**	5.4	3.2	3.2	7.3	9.5	8.1	10.6	12.2	10.1	8.0	8.7	8.7	10.3	10.6	11.6	11.8	8.6	6.4	3.5	5.1	5.3	4.6	4.2	4.3	
30	5.0	5.2	5.4	5.2	4.7	4.4	4.4	4.4	3.8	4.3	5.3	6.3	7.5	8.4	7.6	7.0	6.4	5.5	5.0	4.7	4.5	4.6	4.5	4.7	
Mean	4.5	5.4	5.5	5.6	5.5	5.3	5.1	4.7	4.2	4.4	6.4	8.3	9.3	9.2	8.4	7.5	6.8	6.4	5.6	5.3	5.0	4.4	4.2	4.1	
Mean*	5.6	5.8	5.9	5.8	5.6	5.2	4.8	4.2	3.5	4.1	6.4	8.6	9.8	9.3	8.4	7.6	7.1	6.4	5.8	5.7	5.5	5.2	5.3	5.4	
Mean**	0.2	4.4	4.2	5.6	6.0	5.7	6.5	6.2	6.3	6.3	7.9	9.9	11.0	10.6	9.7	8.3	7.3	7.0	4.9	4.1	3.8	2.7	2.4	2.1	

December.

13° + Tabular Quantities.

	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
1	5.0	5.3	5.5	5.6	5.3	4.6	4.1	3.6	3.1	2.8	4.3	5.6	6.6	7.8	7.2	6.9	5.9	5.2	4.0	4.4	4.1	4.1	4.6	4.6	
2	5.6	6.1	5.1	4.7	4.7	4.7	4.6	4.6	3.6	2.5	3.5	4.9	6.7	7.9	7.4	6.6	6.1	5.7	5.3	5.0	4.7	4.7	4.8	5.2	
3	5.5	5.6	5.6	5.7	5.7	5.6	4.9	4.6	4.8	5.1	5.8	7.6	8.2	9.3	10.1	9.2	6.3	5.6	4.8	4.6	4.5	4.5	4.6	4.6	
4	4.9	5.8	6.6	7.0	6.6	4.6	4.1	3.8	4.0	4.5	5.6	7.3	8.4	7.8	6.9	6.6	6.1	5.5	5.2	3.7	4.5	4.5	4.6	4.8	
5	5.1	5.3	5.4	5.4	3.6	3.7	3.7	3.7	3.7	3.8	5.0	6.7	7.7	7.7	7.7	7.1	6.7	6.0	5.5	5.2	4.9	4.7	4.9	5.1	
6*	5.4	5.5	5.6	5.7	5.3	4.9	4.3	4.1	4.3	4.4	4.7	6.1	7.1	7.7	7.5	7.0	6.1	5.7	5.5	5.2	4.9	4.7	3.7	2.7	
7	2.0	2.7	6.1	4.7	5.3	5.2	4.4	4.3	3.8	2.7	4.3	5.6	6.7	8.0	7.7	7.2	6.7	5.7	5.5	4.3	4.6	3.1	3.6	3.7	
8*	4.6	5.1	5.6	5.6	5.2	4.8	4.4	3.8	3.4	2.9	4.0	5.6	6.6	6.9	6.7	6.6	5.6	5.0	4.6	4.3	3.8	3.9	3.8	3.7	
9*	4.2	4.7	5.5	5.6	5.5	5.0	4.6	3.9	3.3	3.1	4.7	6.3	7.2	7.6	7.6	6.3	5.1	4.8	4.4	4.1	3.9	3.6	3.7	3.9	
10	4.1	4.3	4.4	4.7	4.8	4.5	4.4	4.5	4.1	4.0	5.5	7.3	8.1	9.8	9.0	8.4	6.4	6.2	5.7	5.1	4.6	4.2	3.8	3.5	
11	3.5	4.0	4.6	4.5	4.6	3.8	3.9	3.9	4.3	4.2	5.7	6.8	7.9	9.7	10.4	9.3	7.7	6.6	5.8	5.0	4.4	4.2	4.0	3.9	
12	3.4	2.8	3.9	5.1	5.1	5.2	5.2	4.4	4.4	4.8	5.1	6.2	7.4	7.1	6.7	6.4	6.0	5.4	5.4	5.2	3.1	2.9	3.0	3.3	
13	3.7	3.8	4.4	4.8	4.1	4.6	4.3	4.3	3.8	4.3	5.1	7.6	8.1	8.5	7.4	6.6	6.4	6.0	5.6	5.6	4.5	4.3	5.0	3.3	
14*	3.0	4.7	4.6	4.9	5.0	4.5	4.6	4.2	3.5	3.1	4.8	6.7	8.4	8.6	7.9	7.0	6.3	5.7	5.4	5.2	4.6	3.9	4.3	4.4	
15	4.5	4.3	4.2	4.2	4.1	3.5	3.5	3.9	3.6	3.9	5.3	6.9	7.2	7.2	7.7	6.0	6.9	5.5	4.6	5.7	5.3	4.4	1.8	-1.9	
16**	-1.0	1.7	1.1	2.4	1.2	2.8	4.0	7.0	7.0	7.8	8.9	9.5	10.9	11.9	10.0	8.0	7.9	6.0	6.9	7.4	4.0	0.0	0.5	2.3	
17	0.3	1.2	1.1	2.4	4.3	4.4	4.8	4.7	3.8	3.0	4.3	5.8	7.7	7.6	6.7	6.2	5.7	5.4	5.1	4.7	4.7	4.1	3.9	4.2	
18	4.8	5.4	5.7	5.4	5.0	4.3	3.8	3.2	2.8	2.8	4.1	6.1	7.6	7.8	6.7	6.0	5.8	5.7	4.8	4.4	3.8	3.3	2.8	2.6	
19*	3.9	4.9	5.3	5.6	4.9	4.4	4.1	3.9	3.9	3.9	3.9	6.8	7.9	7.9	7.9	7.1	6.3	5.3	4.9	4.5	4.3	4.4	4.0	3.0	
20**	4.4	5.3	5.3	5.4	5.1	4.2	4.9	3.9	3.8	3.9	5.8	6.9	7.7	8.9	7.8	7.7	7.0	5.4	4.8	3.0	4.1	3.0	-1.2	-9.2	
21	-4.2	-2.9	-0.7	3.8	3.6	3.7	3.9	4.0	3.7	4.3	3.7	6.7	7.9	8.0	7.8	6.8	6.0	5.0	4.8	4.3	-0.5	2.7	3.6	3.6	
22	4.4	5.5	5.5	5.5	5.6	5.0	4.6	4.6	3.6	3.0	3.6	5.6	7.2	8.3	7.0	5.7	6.5	6.1	5.5	5.5	3.6	4.1	3.6	3.5	
23**	3.6	4.6	4.8	4.5	3.6	4.0	4.3	4.1	4.2	3.0	3.7	4.9	6.9	9.8	13.9	9.5	1.7	5.3	5.2	-2.7	2.1	4.3	4.8	4.9	
24	4.7	4.5	5.0	5.3	5.4	4.8	4.6	4.6	6.1	8.1	8.3	8.6	9.0	9.1	8.9	7.6	6.8	4.9	3.7	-2.6	2.2	2.7	3.9	3.9	
25	4.3	4.4	4.3	4.8	4.4	5.4	5.6	4.7	4.5	6.1	6.7	8.2	9.1	9.0	7.5	6.3	5.2	4.3	3.7	5.0	4.2	3.8	3.6	3.0	
26	3.0	3.7	3.7	5.5	4.7	3.8	5.0	4.4	3.4	3.7	4.9	6.0	7.1	7.5	7.0	5.7	5.5	4.9	5.0	4.6	4.0	3.9	3.5	3.8	
27	4.4	4.6	4.9	5.1	4.9	4.8	4.3	3.7	2.8	3.4	5.1	6.4	8.2	9.4	9.4	7.7	4.2	5.6	6.4	1.5	1.6	1.9	1.5	0.7	
28**	3.0	4.4	4.6	5.2	4.6	4.4	4.4	4.0	3.1	2.4	3.4	5.3	6.9	7.9	7.4	6.4	4.4	4.7	4.4	1.0	-4.1	2.3	0.4	2.1	
29**	2.9	2.5	4.0	7.4	6.0	5.5	5.2	5.1	5.4	4.5	4.4	4.5	6.1	9.7	6.6	6.9	5.6	0.0	3.5	3.1	0.3	2.3	2.5	3.5	
30	1.9	2.7	3.8	4.2	4.3	4.4	4.2	4.6	3.8	3.3	5.0	6.7	6.9	7.0	6.8	5.9	5.3	4.6	4.7	4.1	3.8	3.5	2.9	3.7	
31	4.1	4.2	4.6	4.7	4.2	4.0	4.0	3.7	2.9	2.6	3.7	5.8	7.2	7.7	6.7	5.7	5.8	3.5	5.4	4.8	4.2	3.6	3.4	3.4	
Mean	3.5	4.1	4.5	5.0	4.7	4.5	4.4	4.3	4.0	3.9	4.9	6.5	7.6	8.4	7.9	7.0	6.0	5.2	5.0	4.2	3.5	3.6	3.4	3.0	
Mean*	4.2	5.0	5.3	5.5	5.2	4.7	4.4	4.0	3.7	3.5	4.4	6.3	7.4	7.7	7.5	6.8	5.9	5.3	5.0	4.7	4.3	4.1	3.9	3.5	
Mean**	2.6	3.7	4.0	5.0	4.1	4.6	4.6	4.6	3.8	3.6	5.6	6.6	7.6	8.0	7.6	6.6	5.9	5.0	4.5	3.9	3.3	3.4	2.9	0.7	

[To be substituted for page E 20 in "Magnetic Results for the Year 1916."]

TABLE XII.—MONTHLY AND ANNUAL MEAN DIURNAL INEQUALITIES OF VERTICAL MAGNETIC FORCE.
(The results are expressed in C.G.S. units and in each case are diminished by the smallest hourly value.)

1916.													
Hour Greenwich Civil Time.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	For the Year.
Midnight	2 γ	9 γ	12 γ	12 γ	16 γ	13 γ	9 γ	5 γ	5 γ	2 γ	4 γ	3 γ	6.0 γ
1h	1	7	8	9	12	13	6	3	4	0	0	3	3.8
2	0	6	6	9	11	15	6	0	4	0	0	2	3.2
3	0	6	6	9	14	16	8	1	6	0	0	1	3.9
4	1	8	8	12	15	17	9	2	6	2	1	1	5.1
5	2	8	7	14	15	17	9	4	6	4	1	1	5.6
6	3	6	7	16	14	17	8	8	7	4	1	0	5.9
7	2	6	11	17	13	18	10	11	11	6	1	0	7.1
8	3	6	11	15	12	16	9	11	9	9	4	2	7.2
9	6	6	8	12	9	12	6	7	6	8	4	3	5.6
10	5	2	4	4	3	5	2	3	0	5	3	4	1.6
11	4	0	0	0	0	0	0	2	0	4	6	5	0.0
Noon	5	1	4	1	1	2	0	2	1	7	9	9	1.8
13h	7	5	9	7	6	7	4	8	6	10	12	10	5.9
14	9	8	16	14	13	13	11	15	11	16	15	12	11.1
15	8	12	22	19	21	20	16	20	15	23	16	13	15.4
16	8	14	29	24	27	25	20	24	18	24	17	14	18.7
17	7	15	32	28	29	25	22	24	17	22	16	16	19.4
18	7	14	31	30	30	25	23	22	16	19	15	11	18.5
19	6	13	27	28	27	25	22	19	14	16	14	12	16.9
20	6	13	24	26	25	23	21	17	13	12	11	11	15.2
21	6	13	21	25	22	21	16	14	11	10	11	11	13.4
22	4	12	18	22	21	18	14	11	7	6	8	10	10.9
23	4	10	15	19	19	15	13	9	4	1	6	9	8.6
Means	4.4	8.3	14.0	15.5	15.6	15.8	11.0	10.1	8.2	8.8	7.3	6.8	8.8

TABLE XIII.—DIURNAL RANGE OF VERTICAL MAGNETIC FORCE, on each CIVIL DAY, as deduced from the TWENTY-FOUR HOURLY MEASURES OF ORDINATES of the PHOTOGRAPHIC REGISTERS.

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

1916.												
Day of Month.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1	11 γ	12 γ	20 γ	52 γ	24 γ	34 γ	83 γ	— γ	28 γ	92 γ	17 γ	63 γ
2	13	12	22	26	25	29	22	—	33	16	38	38
3	15	12	29	27	41	—	31	25	37	28	42	36
4	17	16	37	31	24	26	26	16	37	12	43	28
5	20	28	29	33	45	44	44	38	61	20	36	14
6	11	12	38	31	38	41	41	51	—	120	61	12
7	13	15	60	29	36	28	23	46	22	118	29	25
8	10	35	105	32	35	47	54	41	15	79	29	29
9	12	24	199	25	29	26	58	26	20	36	25	—
10	25	19	60	21	23	20	—	23	27	31	28	20
11	35	(30)	17	50	37	28	41	29	48	43	23	18
12	33	25	34	25	26	28	40	32	63	53	47	22
13	21	24	16	13	32	38	18	31	42	76	12	16
14	22	13	25	36	31	22	32	28	18	15	12	20
15	13	15	22	51	23	21	33	27	47	20	19	32
16	15	12	22	53	45	18	(40)	23	28	—	17	20
17	7	33	73	27	31	23	20	22	55	—	—	20
18	13	25	39	51	32	33	34	28	27	—	—	13
19	7	29	41	26	34	38	27	41	18	20	23	23
20	29	23	42	22	33	38	25	32	12	11	24	21
21	18	21	36	28	85	31	25	21	19	21	17	16
22	29	26	27	25	74	47	26	—	16	19	12	17
23	—	16	35	30	46	52	30	—	17	43	34	13
24	—	18	78	23	50	38	27	39	17	23	17	11
25	32	23	53	111	39	37	24	—	22	28	18	—
26	10	28	38	88	30	32	26	—	25	18	29	—
27	8	33	14	69	30	31	27	223	53	22	32	37
28	11	29	16	89	28	32	—	22	32	12	39	21
29	34	22	86	127	26	37	—	43	19	21	22	18
30	9	—	72	43	45	33	28	21	66	22	48	25
31	18	—	41	—	105	—	28	22	—	21	—	18
Means	17.6	21.8	46.0	43.1	38.8	32.8	33.3	38.0	31.8	37.7	27.5	23.1

TABLE (A) II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE AT ABINGER—continued.

122860AM.

	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.	18000 γ + Tabular Quantities (in γ).																									
1	588	585	584	585	589	593	596	598	587	583	574	566	569	571	564	562	561	585	588	572	579	572	586	585		
2	590	580	577	581	583	580	576	597	583	568	516	532	543	555	565	554	579	580	584	588	585	587	615	579		
3	576	576	572	579	584	588	594	590	584	576	566	541	553	577	581	580	572	561	562	555	571	570	575	579		
4	587	592	577	573	579	584	587	586	573	566	549	554	560	572	571	572	582	584	571	584	587	585	581	581		
5**	585	586	586	588	592	592	590	586	575	564	583	577	564	570	573	589	580	540	485	472	519	508	521	516		
6**	530	517	534	529	555	553	536	551	534	530	527	529	529	540	549	554	559	562	579	573	567	568	571	559		
7	558	566	563	562	564	568	569	570	566	558	550	545	542	554	559	560	570	557	553	547	557	551	561	563		
8*	570	573	577	575	579	581	583	584	581	572	563	560	564	571	576	583	583	584	585	586	590	595	592			
9**	586	586	587	589	589	596	593	599	597	588	584	591	567	563	569	609	602	579	568	530	555	533	553	558		
10**	550	514	544	537	553	577	550	535	529	536	531	528	521	537	547	562	564	572	573	584	584	571	586	585		
11	591	579	572	581	572	592	579	568	559	541	539	535	539	540	550	566	573	554	573	586	563	553	584	576		
12	566	571	560	566	572	573	564	561	542	535	542	545	544	553	560	571	560	568	585	577	581	571	589	583		
13	572	576	573	573	574	576	580	581	568	558	551	549	551	564	553	566	575	583	581	583	572	572	568	578		
14	577	586	576	566	575	581	578	573	565	559	551	553	560	571	575	577	577	579	581	585	586	586	599	586		
15*	584	584	585	585	589	586	589	586	573	561	550	550	558	570	570	584	578	581	589	589	584	590	590	602		
16	597	590	589	593	594	594	589	570	560	553	545	542	557	568	576	581	571	575	578	578	581	589	592	571		
17	577	572	581	585	580	581	579	579	573	567	558	552	556	573	—	—	—	575	—	—	576	587	595	592		
18**	582	576	578	580	572	581	580	577	557	542	537	534	542	542	541	544	542	560	548	544	555	557	562	576		
19	562	565	574	570	568	567	570	569	562	550	544	543	544	553	563	579	578	583	599	568	578	589	606	566		
20	573	568	577	583	576	568	560	557	542	534	527	528	542	558	544	542	570	572	567	565	568	565	557	578		
21	565	558	554	556	565	570	576	558	553	532	545	549	554	556	561	562	567	566	592	581	592	582	569	569		
22	572	567	562	569	574	570	567	571	573	566	553	549	557	562	569	579	579	579	591	581	581	584	597	605		
23	595	590	601	592	579	584	583	584	580	568	550	558	561	563	570	576	579	580	584	589	589	586	589	591		
24	585	585	584	584	586	589	590	592	578	568	566	560	549	549	558	567	573	567	568	588	585	586	586	584		
25*	593	585	585	583	585	580	585	584	574	558	549	548	555	562	571	569	584	589	592	592	592	593	591	592		
26*	592	594	598	594	594	596	594	596	592	574	565	560	568	569	581	583	591	588	586	594	597	598	599	602		
27	597	595	597	595	595	596	597	596	589	569	561	556	549	566	580	591	595	582	596	597	599	599	598	599		
28	600	598	598	601	598	596	601	596	583	570	560	551	577	583	580	580	587	587	572	586	581	593	612	603		
29	595	594	588	575	593	588	590	580	580	567	550	551	558	563	558	582	589	592	572	594	593	620	622	593		
30	600	602	591	588	591	595	595	589	581	560	555	560	562	565	581	590	578	576	591	607	597	589	594	610		
31*	590	590	590	586	593	592	586	582	576	564	554	553	567	572	575	592	595	595	592	592	592	595	595	595		
Mean	580	578	578	577	580	583	581	579	569	559	551	550	554	561	566	574	576	575	576	575	579	578	585	582		
Mean*	586	585	587	585	588	587	587	586	579	566	556	554	562	569	575	582	586	587	588	590	591	592	594	597		
Mean**	567	556	566	565	572	580	570	570	558	552	552	552	545	550	556	572	569	563	551	541	556	547	559	559		

April.

18000 γ + Tabular Quantities (in γ).

1	595	595	596	596	596	599	596	589	578	569	553	551	565	577	570	588	591	587	593	591	597	599	599	599		
2*	597	597	599	601	603	604	603	596	583	569	565	554	567	574	585	588	578	587	593	601	603	604	601	603		
3	603	602	603	596	607	611	606	599	586	581	575	561	566	564	572	579	588	596	598	593	591	596	596	603		
4	603	596	594	595	601	606	605	607	601	583	573	570	570	577	583	585	592	599	599	602	598	598	598	598		
5	597	595	596	596	598	601	601	601	596	586	578	577	570	577	580	593	598	601	606	609	614	619	613	627		
6**	626	605	603	611	601	634	607	602	585	558	552	539	545	544	567	565	581	588	594	598	590	593	587	590		
7**	599	596	589	583	595	601	598	593	578	549	549	542	557	539	562	583	596	593	601	585	587	601	604	596		
8	594	599	596	593	587	583	583	584	575	551	546	556	560	560	562	588	586	597	596	602	608	620	608	594		
9	590	590	589	590	590	596	588	578	552	544	561	549	557	560	566	596	596	599	608	604	596	595	601	617		
10	588	583	587	586	588	599	590	582	570	568	568	577	581	584	579	594	601	599	597	597	596	604	601	599		
11	596	596	594	594	595	594	594	579	565	556	557	572	578	585	593	591	587	590	601	602	604	596	588	593		
12	604	613	594	591	599	595	581	583	559	551	553	562	562	578	587	594	599	597	601	601	609	595	599	604		
13	617	599	596	601	591	594	583	575	566	556	555	556	565	578	594	601	604	610	600	598	614	601	595	598		
14**	597	—	—	—	599	604	599	588	570	557	549	546	562	575	—	—	—	—	—	—	—	—	—	—		
15**	—	—	—	—	—	—	—	—	—	—	—	—	—	—	513	510	507	556	536	534	540	557	546	547		
16**	546	547	549	557	578	571	558	504	480	492	466	492	503	531	546	557	571	583	589	600	594	505	575	582		
17	582	541	563	549	552	552	549	555	545	523	513	504	530	545	557	577	600	591	581	581	588	581	571	581		
18	576	581	572	568	571	573	572	560	556	548	544	553	562	574	579	581	578	582	586	594	600	605	578	575		
19	581	578	588	578	585	585	594	591	578	562	557	557	562	568	581	583	588	586	588	586	588	591	594	586		
20*	588	581	581	586	587	586	588	586	583	575	570	570	572	570	577	579	587	594	598	601	601	604	599	599		

TABLE (A) II.—HOURLY MEANS OF HORIZONTAL COMPONENT OF MAGNETIC FORCE AT ABINGER—*continued*.

1928360AM

	0h	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	11h	Noon	13h	14h	15h	16h	17h	18h	19h	20h	21h	22h	23h	24h	
May.	18000 γ + Tabular Quantities (in γ).																									
1*	601	601	599	601	604	604	603	598	588	578	570	568	570	575	583	593	600	603	608	602	603	601	601	601	601	
2*	601	596	598	598	598	598	594	587	578	567	564	559	565	575	581	587	593	602	607	606	604	604	602	604	604	
3	603	605	604	608	605	603	601	598	593	584	571	571	574	582	590	603	607	609	612	604	601	626	629	625	625	
4**	623	594	583	604	584	581	571	574	568	551	545	561	577	579	577	577	613	629	579	583	582	578	590	574	582	
5**	562	573	585	583	592	562	548	541	536	539	525	522	549	554	577	562	566	587	600	589	591	603	584	582	582	
6**	590	582	571	570	574	574	556	552	557	551	543	537	560	570	578	595	621	598	599	610	584	592	605	583	583	
7	581	598	583	570	566	567	567	555	556	548	550	551	553	562	583	579	591	590	605	599	590	597	584	583	583	
8	584	590	585	586	581	575	573	572	571	573	569	569	569	569	574	591	596	583	592	592	594	598	595	588	588	
9	587	601	584	587	571	570	567	563	558	557	560	559	558	573	579	592	616	626	629	603	588	571	586	588	588	
10**	593	588	596	601	563	524	528	524	533	522	520	517	533	530	559	587	580	605	585	575	597	591	567	573	573	
11**	576	572	569	571	558	562	565	558	540	519	531	532	547	560	575	573	606	600	595	606	597	594	606	597	597	
12	597	578	576	577	558	567	560	544	542	540	534	535	558	566	579	600	590	600	607	597	601	583	594	594	594	
13	(589	597	621	586	—	—	—	—	—	—	—	—	—	545	557	588	568	588	612	608	613	591	585	583	583	
14	583	588	591	582	585	582	574	564	556	548	541	553	556	564	582	590	598	610	607	605	597	587	586	588	588	
15*	590	594	590	590	590	590	586	577	569	564	554	552	565	564	582	588	594	603	601	599	601	598	596	592	592	
16	594	591	590	590	591	590	590	580	570	565	560	561	570	581	591	604	609	604	605	607	601	604	603	594	594	
17	589	594	599	618	599	590	587	578	574	568	553	556	562	573	578	587	596	601	613	622	620	633	604	607	607	
18	631	600	589	591	591	591	587	580	569	562	559	558	560	573	583	584	609	610	612	609	610	608	609	608	608	
19	601	600	600	600	604	604	605	597	587	579	570	566	562	570	580	593	604	609	615	615	613	610	609	602	602	
20	600	597	584	595	589	608	597	591	576	563	546	547	545	573	563	595	596	600	600	601	599	602	608	587	587	
21	586	600	597	589	584	582	569	565	561	552	547	548	567	576	579	589	600	595	599	602	605	608	589	597	597	
22	595	584	588	586	587	583	577	573	570	570	576	578	590	602	596	597	605	610	606	603	605	611	602	602	602	
23	597	596	593	594	593	584	587	583	584	583	586	593	577	576	582	583	591	602	603	610	609	612	614	608	608	
24	597	597	599	597	595	595	592	590	589	583	575	576	577	573	580	587	593	602	614	608	608	608	605	598	598	
25	596	594	592	597	592	583	582	589	592	589	587	588	584	572	584	597	608	609	596	597	601	610	600	597	597	
26*	597	596	598	593	590	589	585	581	580	581	580	588	593	590	589	590	591	598	603	605	604	604	605	604	604	
27	606	606	606	605	604	603	601	600	599	593	576	565	565	578	592	597	593	593	598	593	593	596	596	598	598	
28	600	599	598	597	597	596	592	586	576	572	576	582	587	594	599	608	603	604	605	602	600	598	597	602	602	
29	600	600	600	600	600	598	595	590	589	586	592	593	592	582	600	598	612	611	610	607	608	607	606	604	604	
30	606	605	605	607	604	598	593	593	595	595	582	570	561	569	589	600	606	610	612	608	609	608	605	602	602	
31*	603	603	606	603	606	604	594	596	588	578	567	572	575	577	585	591	603	613	620	616	610	610	611	614	614	
Mean	595	594	592	590	589	585	581	576	571	565	561	562	567	573	582	591	600	604	605	603	601	602	600	597	597	
Mean*	598	598	598	597	598	597	592	588	581	574	567	568	574	576	584	590	596	604	608	606	604	603	603	603	603	
Mean**	589	582	581	586	574	561	554	550	547	536	533	534	553	559	573	579	597	604	592	593	590	592	590	582	582	

June.

18000 γ + Tabular Quantities (in γ).

1**	609	605	605	604	607	603	601	604	604	592	586	595	607	580	695	572	600	637	640	592	607	617	583	561
2**	543	543	553	586	540	535	491	473	449	491	500	532	532	523	568	570	579	625	608	588	571	564	566	569
3	571	577	574	581	582	566	550	548	546	548	549	546	545	555	568	575	587	594	600	598	590	592	598	587
4*	581	579	577	579	580	577	568	556	554	551	546	547	553	562	571	581	587	595	596	597	595	597	594	588
5	582	582	587	587	594	591	584	577	573	568	564	567	560	559	561	584	589	592	603	602	599	595	595	592
6	594	592	590	588	586	580	573	570	570	570	568	566	573	575	583	591	602	613	617	628	626	614	605	608
7	609	595	584	584	582	581	582	581	574	566	557	573	570	570	587	600	601	608	608	603	602	606	606	599
8**	594	587	588	605	567	558	559	555	554	543	552	573	573	581	568	561	575	581	593	612	605	600	597	626
9**	594	584	582	581	566	568	564	556	547	542	555	556	559	570	569	588	596	619	608	609	607	594	591	594
10	594	588	582	584	588	570	557	561	563	548	533	551	561	562	568	583	609	617	620	604	594	595	594	600
11	611	608	588	589	587	585	570	560	557	560	557	565	577	577	586	592	594	604	609	604	602	601	594	593
12*	591	591	594	594	594	587	580	573	569	568	576	580	579	589	596	594	606	605	608	607	605	602	599	601
13	595	591	592	594	592	590	590	590	587	579	577	579	586	593	617	625	617	607	616	612	604	601	594	589
14	587	583	591	589	590	583	578	571	562	555	562	568	573	580	581	588	599	609	612	613	604	603	599	601
15	605	603	604	605	613	609	603	596	586	568	570	572	576	580	581	599	601	620	626	624	614	604	601	601
16	599	598	601	604	603	601	597	585	582	568	565	565	558	572	581	588	605	603	617	611	611	606	600	596
17	596	596	599	600	603	599	594	587	573	579	583	577	578	586	595	605	616	626	628	624	614	609	610	601
18	599	596	596	597	617	608	595	587	581	570	556	561	569	575	575	594	612	617	606	605	609	606	604	597
19	597	596	595	601	601	597	596	589	586	583	577	571	568	575	583	599	599	603	607	609	610	605	606	605
20*	603	603	598	597	594	588	581	575	571	568	568	580	587	590	594	596	601	608	608	609	606	608	603	600
21	597	599	595	592	597	596	595	587	584	583	585	590	592	588	591	607	604	612	619	619	614	610	609	608
22	604	604	603	599	600	597	595	589	579	569	578	584	582	587	592	593	595	596	607	609	607	610	609	618
23**	620	609	607	607	605	601	597	591	583	576	575	579	582	594	597	620	628	627	626	617	599	604	614	598
24	603	607	609	607	607	604	598	594	601	588	579	582	591	598	602	601	599	596	600	606	605	603	601	599
25*	597	595	593	594	593	592	586	579	575	571	571	569	569	577	599	600	596	604	612	611	607	602	601	600
26*	599	599	597	596	596	594	583	574	573	569	564	573	582	578	587	599	600	604	607	607	609	609	607	606
27	606	605	599	599	601	599	593	584	584	583	582	581	583	591	596	607	613	610	614	618	617	614	618	618
28	621	614	601	601	599	601	596	590	578	570	564	573	577	582	592	605	618	620	621	620	617	612	601	599
29	600	600	601	605	606	602	593	586	586	577	573	577	599	586	593	599	601	618	614	608	607	605	597	596
30	594	592	592	595	594	588	585	578	572	568	563	565	569	578	582	587	591	604	611	612	605	605	604	594
Mean	597	594	593	595	593	588	581	575	570	566	565	570	573	577	589	593	601	609	612	609	606	603	600	598
Mean*	594	593	592	592	591	588	580	571	568	565	565	570	574	579	588	594	598	603	606	606	604	604	601	599
Mean**	592	586	587	597	577	573	562	556	547	549	554	567	571	570	599	582	596	618	615	604	598	596	590	590

TABLE (A) 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 γ + Tabular Quantities (in γ).																									
1	592	593	592	592	591	595	594	586	578	567	557	558	567	579	592	596	609	613	612	611	610	607	608	609	609	
2	618	605	595	596	597	597	604	600	593	577	575	583	578	579	584	593	596	604	614	615	613	612	608	608	608	
3	608	609	605	606	602	597	599	595	589	580	575	575	573	581	594	610	607	618	624	614	601	596	590	596	596	
4	593	592	593	591	590	585	583	579	580	583	589	587	587	590	590	585	595	600	614	611	611	603	603	600	600	
5**	593	595	592	591	596	594	592	583	581	590	590	602	602	572	589	620	635	609	611	632	617	611	605	606	606	
6	605	599	598	603	609	586	583	577	580	574	576	583	593	599	611	594	593	603	618	606	611	600	597	601	601	
7**	598	601	597	598	596	595	584	583	579	573	585	589	577	584	598	615	602	602	599	610	614	615	630	602	602	
8	591	590	594	592	584	580	574	567	572	567	564	564	566	592	591	593	593	597	601	608	611	611	614	606	606	
9	598	597	597	603	600	598	591	581	567	558	568	585	593	589	593	599	609	600	597	604	606	609	609	602	602	
10	603	603	603	602	601	601	596	585	577	577	575	574	581	585	598	604	609	611	609	613	610	612	604	599	599	
11*	604	605	607	604	603	598	592	586	576	566	569	574	588	595	603	606	605	607	609	609	605	604	598	599	599	
12	599	599	601	604	606	599	596	589	580	560	559	562	566	573	591	598	606	609	614	623	614	611	612	610	610	
13	604	608	608	605	605	606	604	600	589	574	561	577	580	578	582	598	600	606	618	615	618	615	609	611	611	
14*	603	599	599	597	600	600	598	594	586	570	563	565	571	579	583	596	598	610	606	605	607	605	603	601	601	
15	602	600	604	605	605	603	597	590	592	588	587	597	595	602	599	602	609	608	612	615	616	614	614	610	610	
16	612	606	605	605	607	606	601	595	586	577	571	566	569	571	578	584	598	603	618	618	623	615	608	612	612	
17	609	611	611	609	608	609	606	599	588	578	570	578	585	580	580	594	609	607	604	609	611	604	598	597	597	
18	596	597	597	597	606	605	599	590	580	575	565	577	583	565	579	593	607	607	603	608	610	604	597	596	596	
19	597	596	595	596	604	604	598	589	579	574	567	560	571	587	582	587	594	603	607	615	611	603	602	601	601	
20	597	595	595	593	590	591	590	589	585	585	589	594	593	595	586	587	593	600	607	608	608	609	601	600	600	
21*	598	597	596	598	601	600	597	592	587	584	587	587	581	581	584	584	587	592	600	607	608	605	600	597	597	
22*	596	595	595	595	595	593	592	597	597	590	592	591	587	585	594	597	600	601	606	607	609	609	610	605	605	
23*	602	601	598	595	598	598	601	601	596	589	582	580	587	594	596	606	597	592	596	599	600	605	604	604	604	
24	602	602	602	600	600	597	597	599	599	600	592	587	598	610	614	601	607	621	622	605	618	619	615	607	607	
25	601	603	604	599	603	603	597	588	577	570	570	577	582	589	601	607	612	614	615	611	607	602	607	601	601	
26	602	602	604	609	609	602	591	583	573	568	573	581	586	587	593	596	602	602	611	612	607	605	603	608	608	
27**	618	609	602	605	605	602	599	592	579	572	571	587	580	603	587	596	613	632	617	608	590	575	584	590	590	
28**	588	598	611	614	584	574	584	558	554	537	526	523	541	552	559	574	584	583	590	585	585	584	584	582	582	
29	587	582	579	583	586	582	573	568	566	563	566	566	570	573	574	585	596	601	597	598	594	593	592	591	591	
30	596	589	586	584	584	581	579	575	568	568	564	559	559	560	570	570	576	592	614	611	611	606	605	602	602	
31**	607	601	597	598	592	601	601	594	584	571	572	579	585	604	611	622	637	628	612	595	560	566	563	573	573	
Mean	601	599	599	599	599	596	593	587	581	574	573	576	580	584	590	597	603	606	609	609	607	604	602	601	601	
Mean*	601	599	599	598	599	598	596	594	588	580	579	579	583	587	592	598	597	600	603	605	606	606	603	601	601	
Mean**	601	601	600	601	595	593	592	582	575	569	569	576	577	583	589	605	614	611	606	606	595	590	593	591	591	
August.	18000 γ + Tabular Quantities (in γ).																									
1**	532	542	557	558	(580)	(564)	(558)	545	532	530	538	541	559	564	574	571	586	596	596	597	584	590	584	575	575	
2	567	577	576	581	582	576	579	568	553	546	556	562	570	576	583	589	582	582	597	594	594	593	594	602	602	
3	584	582	581	584	583	581	573	566	566	560	565	567	569	570	573	587	598	597	615	610	592	591	589	585	585	
4	604	589	584	585	584	579	569	560	551	553	560	568	579	584	584	597	594	595	599	602	598	598	592	594	594	
5	599	594	588	589	589	586	581	575	566	567	576	581	585	585	580	589	586	592	594	597	596	593	590	591	591	
6	589	590	589	589	594	585	580	573	568	558	553	563	577	585	591	599	598	598	605	596	597	597	601	602	602	
7*	602	599	592	592	588	585	582	576	568	581	555	570	579	581	586	586	586	581	592	597	597	597	594	594	594	
8*	592	594	591	592	589	588	588	584	573	566	567	575	586	591	597	599	597	595	598	604	599	597	599	597	597	
9**	599	596	594	601	602	595	591	572	558	552	566	575	581	575	577	582	590	585	602	615	610	611	614	607	607	
10	598	592	587	601	597	587	581	568	553	542	547	560	568	564	569	587	590	590	590	592	592	593	599	598	598	
11	594	594	592	589	589	589	584	576	566	558	556	566	574	576	582	586	591	594	601	602	601	601	599	598	598	
12	599	597	600	601	602	5																				

TABLE (A) 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	
September.																										
18000 γ + Tabular Quantities (in γ).																										
1*	591	593	596	594	596	588	583	578	575	575	578	585	593	592	589	589	593	598	602	604	601	602	601	602	602	602
2	599	596	598	597	595	587	582	578	575	574	575	579	584	590	597	601	605	610	608	613	614	613	602	600	600	600
3	597	598	592	597	596	592	584	577	571	571	575	582	581	582	579	579	589	594	603	603	603	604	605	605	605	605
4*	603	603	603	600	599	593	587	584	579	573	573	582	585	590	592	593	598	597	599	601	604	605	605	605	603	603
5*	600	599	596	596	597	596	592	588	576	569	565	568	576	581	585	589	592	597	600	604	604	604	605	605	605	605
6	605	605	604	603	604	604	604	600	594	587	576	576	583	589	598	596	600	602	601	602	599	599	625	591	591	591
7	596	598	591	591	596	596	592	591	571	564	562	568	575	578	581	586	583	590	594	601	594	594	587	581	584	584
8	588	591	591	602	598	587	576	576	572	561	538	524	526	544	562	549	542	545	565	572	582	591	588	573	573	573
9**	585	581	597	612	586	578	560	546	563	549	537	521	521	550	551	582	583	611	585	599	582	607	600	573	573	573
10	580	578	578	575	588	576	572	557	549	544	552	545	555	552	565	592	591	581	582	595	588	602	587	586	586	586
11	593	609	592	586	582	585	586	566	567	564	556	544	553	562	563	587	583	583	586	593	608	589	589	588	588	588
12	593	590	587	588	585	585	576	563	565	552	559	562	568	570	575	581	589	592	592	595	595	594	585	587	587	587
13	590	588	584	586	586	586	587	582	570	555	565	572	572	574	576	575	578	586	589	591	591	591	591	594	594	594
14**	596	589	587	587	585	589	591	584	573	569	560	562	573	567	587	601	609	590	560	536	552	591	562	544	544	544
15**	557	567	569	569	568	575	577	562	559	562	571	560	562	557	567	601	573	573	573	519	478	495	484	508	529	529
16	528	531	537	547	539	552	560	560	552	547	536	523	530	552	543	541	560	556	565	574	573	538	586	557	557	557
17	557	557	564	563	564	578	578	577	571	562	555	553	554	554	558	567	573	578	583	583	583	585	589	588	588	588
18	586	582	583	592	591	594	581	576	574	561	556	558	568	568	561	562	568	565	553	571	585	578	574	602	602	602
19	569	581	577	579	573	578	586	578	568	571	561	560	566	575	577	587	592	581	558	542	566	548	564	566	566	566
20**	569	580	577	554	564	577	559	575	570	563	551	554	562	575	547	590	590	573	554	523	543	570	577	548	548	548
21**	528	551	555	575	574	538	469	439	485	486	452	468	515	504	545	567	596	533	549	533	523	541	549	560	560	560
22	557	558	557	562	552	547	554	546	529	504	518	539	552	556	559	553	560	572	507	573	574	576	591	573	573	573
23	577	586	573	580	563	563	560	553	544	539	534	542	550	557	565	564	568	573	574	569	581	582	568	572	572	572
24	574	575	577	574	579	577	569	558	549	543	549	551	556	569	566	578	573	573	582	585	582	582	583	582	582	582
25	591	586	580	580	583	579	575	562	552	542	552	560	565	573	574	570	570	571	575	578	580	580	580	580	580	580
26	584	580	580	577	579	579	576	561	555	551	555	560	566	571	576	575	575	576	581	584	583	584	584	583	583	583
27	582	582	582	582	582	582	582	577	566	559	560	561	566	567	569	580	580	582	585	585	588	585	585	582	582	582
28*	583	584	584	586	583	583	581	579	570	565	560	560	562	563	570	573	581	585	588	589	589	589	589	589	588	588
29*	587	586	587	587	589	589	589	584	574	563	558	558	566	572	576	577	579	588	591	592	592	592	591	590	590	590
30	590	590	589	590	590	590	590	585	578	571	569	570	570	573	579	584	593	596	596	593	593	593	595	595	595	595
Mean	581	583	582	584	582	581	575	568	563	557	554	555	562	567	571	579	582	582	580	579	582	583	584	581	581	581
Mean*	593	593	593	593	593	590	586	583	575	569	567	571	576	580	582	584	589	593	596	598	598	598	598	598	598	598
Mean**	567	574	577	579	575	571	551	541	550	546	534	533	547	551	559	588	590	576	553	534	539	559	559	559	551	551
October.																										
18000 γ + Tabular Quantities (in γ).																										
1*	594	594	594	595	595	595	597	597	587	584	581	577	579	582	581	583	584	589	594	595	598	602	598	597	597	597
2	598	598	597	598	595	597	595	585	579	575	569	571	575	577	579	584	578	580	596	591	590	596	590	592	592	592
3	596	596	596	596	602	607	612	614	604	594	(591)	(588)	(585)	(582)	581	586	593	598	590	584	569	576	580	589	589	589
4	593	592	600	603	623	605	594	569	580	566	544	545	567	575	579	579	581	587	587	589	589	579	590	589	589	589
5	587	587	587	587	588	587	588	586	576	569	559	559	566	572	577	582	584	584	582	586	595	590	596	604	604	604
6	596	591	588	588	591	592	595	594	591	586	580	577	574	587	590	587	567	575	583	579	582	584	589	591	591	591
7	592	591	594	614	609	606	592	579	573	555	539	539	543	554	550	559	556	547	548	559	565	560	564	570	570	570
8	571	584	592	583	583	584	585	579	563	561	558	558	565	559	560	562	563	569	578	586	588	587	585	593	593	593
9	598	585	587	587	587	592	583	567	562	559	561	562	569	577	581	581	587	590	590	590	589	588	590	590	590	590
10*	589	592	595	592	590	589	587	582	579	569	561	561	566	573	576	577	582	588	590	592	591	593	592	591	591	591
11	590	591	590	592	592	598	600	602	587	576	569	571	582	582	587	589	589	593	593	592	593	601	598	593	593	
12	595	600	593	596	589	591	589	592	582	569	561	561	568	582	589	587	591	593	603	595	597	602	600	598	598	598
13	612	587	590	595	601	603	605	598	587	577	568	556	566	570	585	586	593	597	599	619						

TABLE (A) 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	
November.																										
18000 γ + Tabular Quantities (in γ).																										
1**	573	563	566	567	576	573	571	571	566	558	550	545	546	561	569	571	574	578	573	553	542	532	545	556	556	
2	569	592	573	580	579	575	580	565	558	551	545	540	551	558	568	573	580	580	581	553	542	532	545	556	556	
3**	560	566	571	571	579	579	576	559	531	531	521	530	532	536	550	545	558	552	570	574	571	573	573	580	580	
4	577	572	571	574	576	572	568	571	568	566	568	561	560	566	563	561	565	569	563	568	568	568	567	571	571	
5	574	571	574	574	575	576	576	574	565	556	554	558	563	568	571	571	574	576	576	577	581	581	581	582	582	
6	580	581	581	584	594	592	575	580	574	566	557	558	563	574	578	584	585	587	587	584	584	584	584	583	583	
7*	584	584	584	584	582	581	579	574	566	557	557	560	565	571	577	581	581	584	584	584	584	584	584	584	584	
8*	585	585	586	587	589	589	586	579	571	561	556	560	569	579	584	583	584	586	587	589	587	586	587	582	582	
9	581	583	585	581	580	581	581	579	573	566	561	561	567	575	579	579	581	587	587	589	587	587	586	585	585	
10	584	584	585	586	587	587	587	584	576	571	567	563	568	574	578	580	584	586	587	588	589	587	588	588	588	
11	587	586	587	591	592	591	588	587	587	585	580	579	580	583	583	583	588	588	597	596	596	593	590	583	583	
12	591	583	580	584	585	590	593	591	578	573	570	575	568	576	578	580	583	590	589	586	588	588	586	584	584	
13	583	583	584	585	583	583	583	582	579	574	566	563	566	573	578	580	585	588	588	590	591	590	588	587	587	
14*	585	585	585	586	587	588	590	590	581	569	561	561	565	576	584	587	589	592	592	592	589	589	588	587	587	
15*	586	585	585	585	585	591	593	591	581	563	557	554	553	562	572	574	573	577	579	581	581	587	587	587	587	
16*	586	585	585	587	587	590	589	587	581	573	562	561	564	572	577	580	582	585	587	590	591	591	591	591	591	
17	590	590	590	590	590	590	590	590	586	581	579	579	582	587	585	585	590	591	592	590	587	590	592	591	591	
18	590	590	591	590	591	592	592	590	582	572	564	573	572	569	566	582	587	590	591	592	587	585	587	590	590	
19	587	588	588	588	591	592	592	593	592	590	584	576	582	588	592	592	595	587	587	586	586	588	586	587	587	
20	587	588	589	590	590	592	592	590	586	580	577	572	572	577	582	587	588	592	590	585	587	587	589	587	587	
21**	590	590	592	593	595	596	597	595	590	582	582	587	590	582	586	585	582	582	564	565	567	587	582	578	578	
22	585	580	582	585	587	587	589	585	574	563	564	564	568	574	575	563	561	577	575	578	579	583	581	574	574	
23	577	587	586	585	595	596	592	590	574	555	558	561	565	569	572	561	574	582	586	585	585	586	586	585	585	
24	585	587	594	591	579	577	582	579	570	559	560	561	563	569	576	577	577	572	574	574	577	579	581	579	579	
25	579	581	583	582	582	583	584	583	578	572	568	565	566	568	571	576	579	582	583	582	581	580	582	577	577	
26	577	583	579	579	581	585	587	586	581	582	581	581	581	579	578	583	590	592	590	589	587	584	584	584	584	
27	583	582	584	586	587	590	589	589	585	578	571	571	574	576	578	579	581	588	593	591	590	587	582	581	581	
28**	576	576	581	584	589	592	596	593	582	565	554	548	552	555	547	533	532	544	538	509	541	564	564	549	549	
29**	538	568	555	556	568	585	578	548	524	503	513	500	509	513	522	522	537	545	557	564	560	562	557	561	561	
30	562	559	563	562	563	568	568	568	564	558	545	545	553	557	563	567	571	571	572	572	570	570	570	570	570	
Mean	580	581	585	586	584	586	585	581	573	565	561	560	564	569	573	573	577	580	581	579	580	581	582	580	580	
Mean*	585	585	585	586	587	588	587	584	576	564	559	559	563	572	579	581	582	585	586	587	587	587	587	586	586	
Mean**	567	573	573	574	581	585	584	573	559	548	544	542	546	549	555	551	557	560	560	553	556	564	564	565	565	
December.																										
18000 γ + Tabular Quantities (in γ).																										
1	568	568	569	570	574	575	573	574	574	568	564	557	558	560	563	565	568	572	565	572	573	574	576	575	575	
2	576	581	581	581	583	582	581	575	571	567	565	565	566	565	567	570	577	581	581	583	583	584	584	583	583	
3	584	584	582	583	586	588	594	594	589	585	578	571	561	553	546	552	569	575	578	581	586	584	597	592	592	
4	591	590	592	597	596	599	596	589	590	585	578	568	569	578	577	576	576	577	577	579	583	581	582	581	581	
5	581	582	584	584	594	580	578	578	575	570	566	565	568	572	576	578	580	583	583	585	583	581	581	581	581	
6*	583	582	584	585	584	584	582	581	581	581	576	576	578	580	581	583	589	591	591	586	585	583	581	583	583	
7	576	574	577	580	580	583	586	586	584	583	580	571	567	570	570	576	581	582	582	583	584	587	582	581	581	
8*	583	583	582	583	585	586	586	585	584	578	573	568	567	570	573	580	583	584	587	587	588	586	585	586	586	
9*	586	586	590	594	593	596	595	596	593	584	576	576	576	581	583	585	589	591	591	588	590	590	590	589	589	
10	589	589	591	592	592	596	597	596	594	591	591	589	586	587	593	599	594	593	593	591	592	593	590	587	587	
11	585	583	578	579	582	586	591	591	591	587	581	576	576	591	586	581	584	591	593	591	591	588	584	580	580	
12	578	586	585	587	590	594	597	596	598	598	595	580	581	583	581	581	586	588	583	578	570	571	573	578	578	
13	580	584	581	586	586	585	591	592	584	574	573	568	567	572	573	574	578	581	586	585	583	580	586	597	597	
14*	586	586	588	589	590	592	593	592	589	578	570	570	577	576	576	580	583	585	587	589	586	589	586	586	586	
15	583	583	583	582	584	584	583	584	583	5																

TABLE (A) 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	
1928600																										
January.																										
42000 γ + Tabular Quantities (in γ).																										
I	958	957	955	954	955	954	954	953	951	956	955	952	958	960	968	964	964	963	961	960	959	957	956	955	955	
2	955	952	953	953	953	954	954	954	954	956	959	956	955	957	964	955	968	968	971	970	971	968	964	963	963	
3	961	959	959	958	957	957	957	956	954	956	956	952	953	960	963	962	962	960	959	958	957	955	954	953	953	
4	951	951	951	952	952	952	943	943	945	948	955	956	954	958	960	960	958	958	958	958	955	955	955	954	954	
5*	954	952	953	954	955	956	955	955	953	954	953	953	953	955	957	963	962	961	961	959	959	957	952	951	951	
6	951	951	952	953	955	955	955	955	953	951	950	948	953	958	961	961	962	961	960	959	959	959	956	954	954	
7	953	953	952	949	949	951	952	952	952	947	948	950	952	956	960	962	970	967	967	968	965	957	956	951	951	
8	942	951	945	948	952	954	955	956	956	954	953	953	955	959	958	959	960	960	960	961	957	956	956	953	953	
9	950	948	949	949	949	951	952	954	954	949	952	954	955	958	958	959	959	959	960	958	958	957	956	955	955	
10	954	952	951	951	951	951	952	953	953	950	949	949	951	953	957	958	957	956	956	956	955	955	956	953	953	
11	950	945	944	947	948	947	947	947	947	947	944	947	953	954	954	953	953	951	950	951	951	950	951	951	951	
12	949	949	949	948	949	949	948	949	951	949	945	946	949	949	950	948	949	948	949	949	949	950	950	949	949	
13	951	951	951	950	945	944	944	942	941	939	943	948	953	957	966	967	965	963	966	979	977	983	982	980	980	
14	972	965	959	956	952	950	954	957	948	945	951	947	950	956	964	971	970	973	968	965	963	961	962	959	959	
15	958	955	938	943	950	951	949	948	944	937	936	940	944	953	962	972	975	975	973	967	966	967	959	939	939	
16	951	953	949	940	940	942	946	946	946	943	942	943	946	951	958	962	963	965	964	963	965	964	957	955	955	
17	953	951	951	951	951	951	950	947	944	936	932	934	936	941	945	948	951	950	948	949	951	947	947	946	946	
18**	945	946	946	946	946	946	946	944	942	935	931	928	932	939	941	947	954	957	963	962	966	964	957	955	955	
19	949	941	945	947	947	947	948	946	946	946	938	935	934	941	956	960	964	966	962	959	959	954	952	951	951	
20*	949	947	947	946	944	943	945	946	946	943	935	934	936	942	945	946	949	950	950	950	951	948	947	947	947	
21*	947	946	946	946	946	946	945	944	945	942	938	938	938	942	941	942	946	947	947	948	948	949	947	946	946	
22**	946	945	944	944	942	942	944	945	946	939	933	933	935	939	943	947	947	945	948	963	976	971	936	936	936	
23**	(890)	(892)	939	952	956	954	952	952	949	945	945	947	946	941	949	951	954	954	953	951	952	953	952	953	953	
24	954	953	953	952	952	951	950	948	950	946	952	954	952	955	957	957	958	955	952	952	952	948	952	953	953	
25*	953	952	953	952	951	950	949	948	947	946	949	950	946	947	951	955	955	952	950	950	951	951	952	954	954	
26**	955	956	954	951	949	944	941	943	943	947	950	951	948	953	958	963	963	974	(1002)	—	—	—	994	955	955	
27**	916	909	890	920	956	973	980	983	986	992	994	989	985	994	1003	1018	996	985	979	975	972	964	958	948	948	
28	950	949	953	949	955	960	962	962	960	964	964	970	971	985	980	977	975	975	971	968	966	962	961	963	963	
29	964	963	958	954	958	958	958	959	959	957	953	953	952	957	966	974	971	969	967	965	963	961	961	961	961	
30*	961	961	961	961	958	958	958	957	956	959	960	959	961	964	966	966	965	964	963	963	962	960	959	959	959	
31	953	951	954	956	957	957	955	954	954	953	949	956	954	959	966	969	966	963	963	962	961	960	959	959	959	
Mean	950	948	948	949	951	952	952	952	951	949	949	949	951	955	959	961	962	961	960	960	960	958	955	954	954	
Mean*	953	952	952	952	951	951	950	950	949	949	947	947	947	950	953	954	955	955	954	954	954	953	951	951	951	
Mean**	924	923	930	941	950	954	956	956	956	953	951	949	950	953	959	966	963	960	961	963	967	951	941	948	948	
February.																										
42000 γ + Tabular Quantities (in γ).																										
I	956	954	956	956	957	957	956	955	956	956	954	953	956	957	964	967	966	965	969	968	964	963	962	959	959	
2	957	956	947	944	949	953	953	953	952	951	949	950	950	954	959	960	958	961	963	964	962	951	947	944	944	
3	946	940	945	950	951	949	944	950	953	953	951	952	954	956	962	965	970	969	969	966	967	956	946	953	953	
4	953	949	945	949	952	951	951	950	952	951	948	949	950	959	970	977	981	970	967	969	964	959	958	956	956	
5	956	955	948	949	952	953	955	955	952	950	948	949	952	957	962	965	965	963	962	960	960	958	957	956	956	
6*	955	954	954	954	955	956	956	957	956	952	948	949	951	953	958	961	963	962	959	958	958	957	956	955	955	
7*	954	953	953	953	953	954	954	955	956	955	951	951	952	953	956	957	957	957	956	955	955	955	955	955	955	
8*	954	953	952	952	952	953	954	955	956	952	946	944	945	949	952	955	954	954	954	955	955	954	953	952	952	
9*	951	951	950	950	950	950	950	951	952	950	943	940	944	947	950	950	950	952	952	952	954	954	954	954	954	
10	953	952	952	951	950	950	946	945	945	943	944	946	949	953	955	955	953	952	952	952	954	957	964	964	964	
11**	964	962	960	959	957	955	954	953	950	945	941	938	938	941	953	963	974	976	982	996	989	981	965	966	966	
12	965	955	947	945	949	954	955	955	951	949	946	943	941	945	953	958	963	963	963	965	966	960	958	957	957	
13	957	956	951	952	952	951	950	945	943	944	944	945	946	952	955	960	960	962	961	959	963	965	962	960	960	
14	954	950	949	948	950	950	949	947	945	940	936	939	944	949	956	957										

TABLE (A) III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE AT ABINGER—*continued*.

1956 GOAM...

	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.	42000 γ + Tabular Quantities (in γ).																									
1	951	951	953	952	952	952	950	951	950	947	939	938	944	954	961	974	975	966	960	960	963	956	947	935		
2	939	940	943	948	950	950	944	941	942	945	940	943	945	958	969	980	977	968	961	958	955	954	945	934		
3	938	939	945	949	951	951	948	950	951	949	943	940	945	950	954	957	967	972	976	970	962	958	953	950		
4	945	937	940	946	950	952	953	954	955	952	945	945	945	950	957	969	965	961	961	962	954	952	946	948		
5**	947	947	948	949	949	950	950	953	952	944	928	928	942	957	968	1017	—	—	—	—	1023	986	949	961		
6**	964	941	930	932	926	918	930	940	947	946	952	953	957	963	970	977	984	986	984	979	971	968	962	956		
7	958	957	956	958	959	960	960	961	958	953	953	951	953	955	959	964	970	985	988	985	978	970	968	968		
8*	964	962	960	959	962	962	963	966	965	964	956	946	947	954	959	962	962	959	958	958	958	957	957	956		
9**	956	955	955	954	954	953	954	955	952	950	945	939	943	950	952	957	960	963	989	1010	992	980	975	972		
10**	955	925	936	943	935	932	932	935	939	945	943	940	947	960	970	978	981	989	977	970	964	964	961	950		
11	939	942	942	940	945	941	929	937	943	946	946	946	950	960	965	970	978	982	981	975	967	971	966	953		
12	952	953	955	951	952	946	950	953	955	960	961	958	957	961	961	965	973	977	974	969	964	962	959	951		
13	954	953	954	956	957	957	957	959	958	956	951	947	950	958	967	974	976	977	969	964	963	964	962	956		
14	951	947	941	946	949	949	953	953	951	945	937	934	935	943	951	957	959	960	958	956	955	956	950	948		
15*	949	952	952	952	950	950	950	953	953	952	945	937	937	945	954	962	963	962	959	957	956	955	953	947		
16	941	941	943	943	944	944	944	947	946	943	938	933	932	936	945	954	962	966	964	963	960	954	937	941		
17	939	943	943	942	944	947	949	951	948	942	932	932	937	940	945	954	962	966	964	963	949	949	950	948		
18**	942	928	935	935	939	941	939	942	941	939	934	933	934	946	965	987	1008	1012	1002	997	991	986	974	955		
19	951	948	948	946	948	950	950	949	944	934	932	927	930	932	938	947	952	958	965	962	962	959	944	940		
20	940	931	931	933	927	929	934	942	946	944	939	937	938	943	950	960	963	965	967	968	963	953	939	942		
21	936	933	938	944	943	937	944	943	939	940	936	935	937	941	946	956	967	971	970	956	951	945	942	922		
22	921	921	932	938	938	939	939	938	934	928	929	928	928	931	938	945	944	946	946	946	947	948	944	926		
23	922	915	916	920	925	928	929	930	926	924	920	916	917	923	929	935	939	940	940	939	938	938	938	936		
24	935	934	934	934	933	932	933	934	930	925	916	916	922	932	940	946	950	959	952	946	941	940	939	938		
25*	937	930	929	928	930	931	933	935	934	928	926	923	922	927	934	938	941	938	936	934	934	934	934	934		
26*	934	933	930	929	929	929	930	929	928	922	917	911	915	919	929	934	938	939	936	935	934	933	932	931		
27	931	932	930	930	930	929	931	932	928	924	919	912	916	920	925	932	938	941	939	939	933	933	932	932		
28	932	931	931	927	924	926	931	931	929	924	916	917	920	927	942	949	946	950	948	945	943	940	933	927		
29	929	931	931	929	925	923	927	928	928	926	924	921	926	934	942	945	948	950	955	952	946	939	927	924		
30	924	923	923	932	937	939	941	942	940	937	936	931	929	933	952	972	969	969	966	954	947	945	946	938		
31*	940	943	946	946	946	947	949	950	947	943	936	930	931	936	949	953	955	956	954	954	954	952	952	952		
Mean	943	939	940	942	942	942	942	944	943	941	937	934	936	943	951	959	959	960	959	957	957	954	949	944		
Mean*	945	944	943	943	943	944	945	947	945	942	936	929	930	936	945	950	952	951	949	948	947	946	946	944		
Mean**	954	937	939	941	939	936	939	943	945	945	944	941	945	955	964	975	983	988	988	989	980	975	963	958		

April.

42000 γ + Tabular Quantities (in γ).

1	954	954	954	955	955	956	958	959	956	951	945	939	935	940	945	954	966	972	974	969	965	963	961	960
2*	962	961	961	962	962	962	965	966	962	955	946	941	943	947	958	973	978	975	976	972	970	972	967	959
3	953	950	946	946	945	942	946	949	948	940	928	924	938	943	949	952	954	955	956	956	957	955	953	951
4	948	945	948	950	950	948	950	952	951	947	940	936	937	939	948	954	957	956	955	955	955	951	949	950
5	950	949	950	950	950	950	952	954	947	940	934	929	928	931	937	943	947	949	949	949	949	949	949	948
6**	942	936	938	937	936	920	920	930	935	938	934	927	929	933	947	952	959	959	958	957	962	961	956	951
7**	941	937	937	940	935	931	937	942	944	940	940	935	937	948	950	955	957	962	967	964	961	958	949	948
8	949	937	936	940	938	942	943	945	942	936	935	932	933	943	951	960	958	958	953	954	950	950	942	943
9	945	945	946	945	947	947	947	945	939	938	931	925	937	945	955	965	964	962	962	957	956	953	942	929
10	935	943	947	947	946	947	949	949	946	939	936	934	937	943	949	957	967	968	965	960	955	954	951	951
11	950	950	950	950	950	949	949	947	942	932	924	922	923	928	938	947	952	954	955	957	955	953	952	953
12	949	944	942	944	945	946	947	946	943	936	927	916	918	927	936	944	951	954	956	956	954	954	951	949
13	937	937	940	939	942	947	949	947	941	938	931	919	918	928	937	941	949	955	958	959	954	948	949	948
14**	949	949	948	948	945	940	943	941	937	930	922	918	918	925	(917	967	—	—	1006	990	999	985	974	(981)
15**	(912	909	—	—	—	—	—	—	—	923	963	1012	1045	1055	1050	1045	1025	1023	1024	994	984	974	968	970)
16**	974	973	973	968	949	949	947	950	957	955	957	961	960	964	968	974	978	980	987	982	965	955	955	948
17	936	928	931	935	939	944	949	959	958	955	948	944	945	946	951	962	976	981	979	973	967	963	954	948
18	940	945	946	950	953	956	956	956	950	940	935	933	935	942	950	955	955	958	959	960	960	955	953	953
19	954	955	951	944	936	936	940	938	940	937	930	927	927	936	944	947	951	955	957	958	957	957	952	946
20*	948	948	949	950	953	952	952	953	950	942	935	931	932	939	945	948	951	955	955	955	950	950	954	954
21	953	953	952	949	948	949	951	952	948	935	922	928	929	935	945	950	950	953	955	954	957	950	950	948

TABLE (A) III.—HOURLY MEANS OF VERTICAL COMPONENT OF MAGNETIC FORCE AT ABINGER—*continued*.

	0 ^h	1 ^h	2 ^h	3 ^h	4 ^h	5 ^h	6 ^h	7 ^h	8 ^h	9 ^h	10 ^h	11 ^h	Noon	13 ^h	14 ^h	15 ^h	16 ^h	17 ^h	18 ^h	19 ^h	20 ^h	21 ^h	22 ^h	23 ^h	24 ^h		
May.	42000 γ + Tabular Quantities (in γ).																										
1*	950	949	951	951	953	952	951	949	944	936	932	927	927	935	942	946	950	954	955	952	951	950	949	949	949	949	
2*	948	948	949	950	951	953	952	950	944	932	922	920	920	924	931	937	944	950	951	949	949	947	947	947	947	947	
3	947	947	947	946	948	948	948	945	942	934	922	920	923	933	940	946	947	949	952	952	952	952	949	949	944	944	
4**	930	919	934	936	934	935	938	936	928	921	921	921	924	937	951	959	975	1007	1004	987	978	955	926	931	931	931	
5**	929	921	923	916	911	923	930	932	942	938	928	931	943	949	962	967	972	983	982	971	964	957	947	950	950	950	
6**	935	932	941	940	936	936	940	943	941	938	931	928	934	944	963	972	978	976	979	970	959	957	951	945	945	945	
7	936	930	927	934	941	945	942	940	936	936	929	925	930	940	955	959	968	968	969	962	957	954	949	949	949	949	
8	950	949	937	941	944	947	948	944	940	933	923	923	926	931	936	947	954	960	962	958	956	934	951	948	948	948	
9	947	936	935	934	935	940	942	940	937	932	927	924	926	932	937	946	955	966	976	978	972	969	961	955	955	955	
10**	955	953	942	924	904	910	908	911	922	924	928	932	946	956	969	991	984	996	979	974	967	956	953	953	953	953	
11**	947	945	941	947	945	947	951	949	944	936	931	926	939	944	952	961	970	967	965	962	957	953	943	933	933	933	
12	935	929	925	928	941	943	942	939	934	922	918	924	927	939	948	960	969	975	973	969	959	951	950	943	943	943	
13	945	935	920	918	931	938	941	941	935	921	914	926	939	947	952	959	962	964	965	965	953	945	948	948	948	948	
14	948	944	942	945	948	952	953	953	950	940	935	935	937	944	953	955	957	960	960	961	957	953	950	949	949	949	
15*	949	947	947	948	949	949	951	948	940	931	920	914	919	929	940	947	954	957	956	954	951	951	949	948	948	948	
16	948	946	946	948	948	949	951	952	945	934	925	923	925	929	937	945	951	956	959	959	956	954	952	949	949	949	
17	946	947	948	937	931	942	948	948	944	931	921	921	926	934	942	948	953	958	959	956	954	951	947	949	949	949	
18	935	924	934	942	950	951	950	946	945	939	931	931	931	938	946	956	961	960	958	956	954	953	953	951	951	951	
19	952	952	952	954	957	957	955	955	952	947	940	936	939	945	946	948	954	957	958	956	953	953	952	952	952	952	
20	950	945	947	951	950	940	935	936	936	937	940	944	948	954	955	964	968	969	967	965	961	958	945	945	945	945	
21	951	953	942	946	947	953	953	952	947	942	938	943	948	952	956	961	964	966	966	964	960	956	954	954	954	954	
22	945	950	952	954	955	956	955	953	950	944	936	934	939	943	949	957	964	967	967	961	960	958	954	954	954	954	
23	954	955	955	956	955	957	954	951	952	952	942	937	941	949	956	959	963	965	963	963	961	959	958	954	954	954	
24	954	955	955	956	958	958	957	952	947	938	934	932	934	952	948	954	947	962	966	965	963	960	950	950	950	950	
25	959	959	959	958	960	961	957	951	951	949	944	940	944	949	953	959	968	973	973	969	968	964	961	961	961	961	
26*	961	960	959	960	962	963	959	955	955	953	945	939	945	954	958	962	966	968	967	966	965	964	964	964	964	964	
27	965	965	965	965	967	967	967	964	965	961	952	942	939	943	947	955	960	963	960	956	951	949	948	947	947	947	
28	948	948	948	950	951	950	946	943	941	939	935	926	928	937	940	944	948	951	958	949	947	945	944	944	944	944	
29	944	944	945	947	947	945	945	946	940	937	929	927	929	936	944	948	954	953	950	946	945	943	942	941	941	941	
30	942	942	943	944	946	945	942	939	933	923	916	920	924	929	937	940	944	946	945	944	943	941	939	939	939	939	
31*	940	940	941	942	942	940	940	934	931	924	920	918	921	928	934	940	943	950	952	948	945	941	940	939	939	939	
Mean	947	944	944	944	945	947	947	945	942	936	930	929	933	941	948	955	960	964	964	961	957	953	950	948	948	948	
Mean*	950	949	949	950	951	951	951	947	943	935	928	924	926	934	941	946	951	956	956	954	952	951	950	949	949	949	
Mean**	939	934	936	933	926	930	933	934	935	931	928	928	937	946	959	970	976	986	982	973	965	956	944	942	942	942	

June.

42000 γ + Tabular Quantities (in γ).

1**	936	936	937	940	942	941	939	933	930	927	927	915	905	913	941	940	949	951	959	961	967	961	931	920
2**	900	886	868	879	869	880	897	911	922	938	948	946	947	953	984	994	997	1005	994	986	978	972	968	965
3	962	954	956	957	957	957	961	959	956	953	951	944	945	947	950	957	964	971	974	973	967	963	959	953
4*	953	954	954	957	959	960	959	957	955	949	938	930	932	933	944	953	960	965	965	961	960	959	958	958
5	958	957	954	950	950	952	955	953	948	941	938	935	933	939	949	959	965	968	966	961	961	959	958	958
6	958	957	957	957	959	959	954	948	948	944	939	935	938	948	952	954	956	959	960	961	961	955	956	955
7	954	943	948	951	955	955	955	948	941	929	925	922	929	942	961	980	989	990	982	973	968	965	962	959
8**	957	934	948	950	944	942	941	940	936	933	937	935	931	943	954	965	972	974	971	968	963	961	956	941
9**	936	932	935	937	932	938	944	949	949	949	944	937	940	940	949	964	972	978	971	966	966	962	956	954
10	954	951	948	951	949	951	950	948	943	940	940	942	934	941	940	953	961	967	970	965	961	955	954	954
11	950	942	945	951	956	959	957	948	943	938	938	939	937	936	947	953	956	959	961	959	956	953	952	952
12*	953	953	953	954	955	955	954	951	947	940	928	922	924	932	939	949	958	957	955	953	952	949	949	949
13	949	950	952	953	955	953	949	940	933	929	926	923	926	933	942	952	962	966	968	963	959	953	953	952
14	952	951	951	953	956	958	957	956	955	948	939	933	929	937	943	951	956	957	959	959	955	952	950	948
15	948	948	949	950	951	952	950	944	935	932	929	926	927	936	940	945	947	954	958	959	957	953	952	950
16	950	950	947	940	939	947	950	948	946	941	934	932	936	940	944	950	957	965	968	965	960	955	951	951
17	952	952	953	953	955	954	951	947	942	940	931	926	928	936	941	946	953	957	957	956	953	951	949	946
18	948	948	947	944	940	940	944	942	942	942	943	944	940	943	948	954	961	965	966	964	959	954	952	951
19	950	949	951	952	952	952	949	947	946	942	938	936	941	944	944	947	952	954	956	956	955	952	951	950
20*	949	947	946	949	951	951	950	946	944	943	938	934	934	935	938	941	944	951	955	957	955	951	950	949
21	950	949	948	949	952	952	949	946	942	934	931	934	937	941	944	947	950	953	952	952	951	949	949	948
22	949	949	949	949	951	952	948	947	944	936	932	927	926	923	930	942	950	953	955	953	952	951	949	949
23**	946	945	947	950	953	952	955	953	950	947	940	934	931	931	942	955	961	971	979	976	964	959	950	945
24	948	949	949	950	952	951	948	945	942	933	933	928	928	928	934	943	952	954	955	954	952	949	948	948
25*	948	948	949	950	950	950	950	947	941	934	926	924	928	930	940	941	954	957	954	950	948	946	946	946
26*	947	947	947	949	951	952	948	947	945	941	934	931	936	937	941	945	950	951	949	949	946	945	943	943
27	945	944	945	947	949	949	947	946	941	932	925	923	926	928	932	940	944	947	950	946	943	941	941	941
28	941	942	942	944	946	949	949	947	943	938	931	923	924	925	931	938	943	947	948	947	946	946	945	943
29	940	942	942	942	946	945	937	933	929	928	923	916	917	925	940	943	948	952	952	951	951	948	944	944
30	944	943	945	947	949	947	943	940	938	935	930	928	932	931	936	943	949	954	955	954	951	947	946	944
Mean	948	945	945	947	948	949	948	946	943	939	935	931	931	936	944	951	958	962	962	960	957	954	951	949
Mean*	950	950	950	952	953	954	952	950	946	941	938	928	931	933	940	946	953	956	956	954	952	950	949	949
Mean**	935	927	927	931	928	931	935	937	937	939	939	933	931	936	954	964	970	976	975	971	968	963	952	947

TABLE (A) 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
42000 γ + Tabular Quantities (in γ).																									
1	945	945	945	946	949	947	946	946	941	934	929	924	925	925	937	943	948	952	953	950	948	947	946	944	944
2	943	939	941	944	948	948	944	946	945	944	942	933	930	934	940	943	946	950	953	951	951	949	947	946	946
3	946	945	946	947	949	949	950	951	948	945	943	938	937	939	950	955	961	967	974	975	971	965	961	957	957
4	953	951	948	949	952	954	955	952	947	942	936	931	931	939	947	950	959	964	963	960	958	955	953	951	951
5**	952	951	950	950	952	951	945	941	941	937	931	928	923	933	944	946	954	955	960	961	961	958	955	949	949
6	943	946	946	939	934	935	938	940	942	934	928	922	930	935	946	949	953	954	960	959	960	957	953	951	951
7**	950	950	949	950	950	950	947	941	936	930	925	931	932	938	944	956	966	969	965	964	960	958	948	942	942
8	948	949	951	951	949	945	945	946	945	941	935	928	931	938	947	955	957	957	956	955	955	954	952	949	949
9	951	951	951	950	951	954	952	948	948	943	931	918	918	926	943	950	954	959	960	958	955	954	952	952	952
10	952	952	953	954	957	957	953	952	947	942	931	932	934	940	948	955	959	961	960	960	958	954	950	950	950
11*	951	951	947	949	952	952	948	946	946	944	938	932	930	934	941	951	955	961	961	958	955	953	952	952	952
12	952	953	953	955	958	960	958	959	958	953	952	940	941	945	948	957	965	970	970	966	964	963	959	952	952
13	952	955	955	957	958	960	962	963	959	950	942	937	939	946	950	955	960	965	967	963	962	960	957	955	955
14*	954	955	956	957	960	961	962	965	961	955	952	955	958	958	956	959	963	967	972	970	965	961	959	957	957
15	957	957	956	957	959	960	962	962	954	947	943	939	939	944	949	954	959	964	965	965	962	959	956	954	954
16	951	951	952	954	956	957	957	956	956	948	940	935	940	941	946	950	956	957	960	957	955	953	953	952	952
17	952	951	948	950	953	953	951	953	953	950	945	937	937	941	946	951	954	959	963	959	958	955	954	953	953
18	954	944	947	947	949	947	949	950	949	948	942	945	948	948	955	960	965	969	969	968	963	959	957	957	957
19	956	955	955	954	953	952	951	951	949	941	932	929	934	943	951	959	964	966	963	961	959	957	956	955	955
20	953	954	954	953	955	956	954	954	950	946	942	939	938	944	951	958	958	955	957	958	957	955	955	955	955
21*	955	955	954	955	956	958	955	954	953	945	931	920	934	937	945	955	960	962	960	957	956	955	954	953	953
22*	954	954	953	953	954	953	952	949	946	942	947	945	941	937	943	948	953	955	955	954	953	953	952	952	952
23*	952	952	951	952	953	954	958	957	953	948	947	946	944	947	949	948	951	953	953	952	952	951	951	951	951
24	951	951	951	951	953	952	950	947	941	934	929	928	926	927	938	946	949	951	954	954	952	950	948	949	949
25	950	951	950	949	951	950	949	948	945	933	924	924	929	935	945	949	954	952	952	951	949	948	948	946	946
26	948	949	949	947	947	948	947	945	939	935	926	923	927	929	934	942	952	953	953	952	950	948	948	948	948
27**	938	936	939	941	947	948	948	946	944	938	931	922	924	933	941	949	958	971	980	978	966	958	956	952	952
28**	948	936	914	904	892	893	911	927	942	938	936	934	943	949	955	963	966	966	970	964	960	957	955	952	952
29	951	947	948	951	955	956	954	949	950	947	944	938	941	943	951	957	964	965	964	962	961	958	956	953	953
30	952	942	943	948	952	954	953	949	946	940	934	931	925	925	931	941	947	953	954	953	952	950	948	948	948
31**	948	947	947	949	948	944	944	946	942	939	938	930	926	932	950	967	986	998	1003	991	977	971	958	932	932
Mean	950	949	948	949	950	950	950	950	948	942	937	933	934	938	946	952	958	961	963	961	958	956	953	951	951
Mean*	953	953	952	953	955	956	955	954	952	947	943	941	941	943	947	952	956	960	960	958	956	955	954	953	953
Mean**	947	944	940	939	938	937	939	940	941	936	932	929	930	937	947	956	966	972	976	972	965	960	954	945	945

August.

42000 γ + Tabular Quantities (in γ).

1**	918	934	947	947	932	944	953	954	952	950	950	947	942	939	950	958	969	969	964	966	965	960	956	951
2	953	953	952	952	949	953	955	955	956	950	945	939	940	943	949	950	952	956	958	957	956	956	956	952
3	950	950	950	950	949	947	948	949	947	942	938	935	933	938	942	946	954	954	960	964	961	956	954	953
4	950	944	947	948	949	948	949	947	943	939	934	931	936	942	948	957	958	953	952	951	950	951	952	948
5	947	944	946	947	948	946	946	945	941	937	932	927	924	925	933	944	950	950	948	947	947	947	948	948
6	949	949	948	948	946	946	947	946	941	936	932	926	925	929	937	947	951	953	952	949	947	945	944	945
7*	940	941	943	942	946	947	945	940	936	934	928	926	926	929	939	946	947	946	945	944	944	944	945	944
8*	944	944	944	944	945	946	945	941	939	933	932	930	924	926	937	944	950	949	945	942	940	941	941	941
9**	941	940	941	941	938	940	940	937	934	924	916	916	923	927	937	943	960	965	962	951	945	945	944	938
10	939	936	933	938	942	942	941	943	940	934	931	932	934	942	953	959	960	960	955	951	950	947	945	943
11	941	942	944	946	949	949	948	944	941	938	932	929	928	932	937	946	949	948	946	944	943	943	941	941
12	941	941	941	939	941	941	941	936	934	928	926	924	925	934	944	957	961	961	958	953	947	943	941	940
13**	940	921	923	932	939	938	933	932	931	930	927	917	928	936	950	962	967	970	971	965	957	949	946	946
14	946	940	939	944	948	950	950	949	947	949	931	932	933	935	943	949	956	958	954	951	952	948	945	937
15	935	936	933	930	933	935	940	941	940	935	931	924	922	933	940	945	951	948	948	947	946	945	944	944
16	942	942	942	943	946	944	946	947	946	942	939	936	931	928	933	940	948	954	960	954	950	949	941	937
17**	935	931	934	939	936	937	932	934	932	930	924	925	927	935	943	956	960	965	958	951	949	949	946	943
18**	940	933	937	942	943	943	942	941	942	935	927	917	917	932	940	952	959	956	948	946	948	949	948	940
19	946	946	946	943	941	935	941	935	940	936	937	935	935	938	938	944	953	962	965	958	953	950	949	949
20	949	948	947	947	950	949	949	947	944	939	935	930	934	936	939	944	952	956	961	958	953	948	946	947
21**	946	942	945	947	950	953	953	952	949	942	935	934	935	940	944	950	954	953	948	948	949	949	949	949
22*	949	948	947	947	947	947	945	942	936	933	924	923	926	928	927	931	930	942	943	945	945	943	943	943
23*	944	945	945	945	946	946	944	939	934	930	917	912	910	919	928	935	938	938	935	930	930	936	936	936
24	937	934	936	937	938	938	935	933	930	926	920	922	917	920	929	935	940	942	940	939	939	939	936	933
25	936	938	939	937	935	938	940	940	935	932	928	917	914	920	931	939	945	947	945	943	942	940	939	938
26	939	940	940	939	936	936	939	941	938	932	924	925	926	932	937	943	949	951	949	946	944	941	941	941
27	941	937	937	936	939	942	942	939	937	923	919	916	920	927	930	945	948	947	944	943	942	941	939	939
28	940	939	939	940	940	942	943	943	940	938	932	931	931	938	944	947	949	950	947	945	940	942	939	935
29	936	937	939	939	940	943	942	940	936	930	923	921	922	926	932	940	940	943	942	942	941	940	939	937
30	938	937	938	939	940	940	942	940	936	930	920	916	920	926	935	941	944	942	939	939	939	940	940	939
31	938	938	936	934	938	941	943	942	939	936	931	928	929	934	938	942	942	942	941	942	943	944	944	943
Mean	942	940	941	942	943	943	944	942	940	935	930	927	927	932	939	946	951	953	951	949	947	946	944	943
Mean*	945	944	945	945	947	948	946	943	939	934	927	925	924	928	935	941	945	946	943	943	943	943	943	943
Mean**	910	932	946	948	948	948	948	948	948	938	932	927	937	934	940	951	962	965	961	956	953	950	948	945

TABLE (A) 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	
September.																										
42000 γ + Tabular Quantities (in γ).																										
1*	943	943	942	942	942	942	943	943	939	937	930	926	927	933	934	937	941	941	941	941	941	942	941	941	941	941
2	941	941	941	940	941	942	942	940	936	933	926	923	925	928	932	935	940	940	938	939	939	940	941	941	942	942
3	942	941	941	940	940	941	940	937	930	920	917	919	923	930	936	940	941	941	938	940	940	941	941	941	941	941
4*	942	941	941	941	941	942	945	943	936	930	924	926	932	941	946	947	947	944	941	942	941	942	942	942	943	943
5*	943	943	944	943	942	943	944	943	941	936	932	930	933	939	942	946	945	942	941	941	940	941	941	941	942	942
6	943	942	942	942	942	941	943	943	939	931	924	925	927	931	937	940	943	943	946	946	947	948	938	928	928	928
7	937	938	941	943	945	945	945	944	941	935	928	928	932	937	943	949	950	948	947	948	948	950	948	947	947	947
8	948	946	942	937	939	942	945	943	942	933	926	929	945	958	967	979	1002	1010	1005	981	971	960	943	938	938	938
9**	942	946	926	908	908	920	928	937	943	943	943	943	953	967	971	982	980	983	969	967	956	954	941	941	941	941
10	941	947	948	940	942	944	953	952	952	948	945	941	948	956	968	981	986	976	969	963	957	953	950	953	953	953
11	954	947	936	942	949	954	957	956	956	952	949	948	952	956	966	972	971	968	963	963	960	953	953	953	953	953
12	951	947	948	950	952	955	957	952	945	939	937	934	938	941	947	951	955	956	955	954	954	952	952	950	950	950
13	948	948	949	950	951	951	951	951	945	939	934	927	930	937	943	949	954	955	954	953	952	950	949	948	948	948
14**	944	944	946	947	948	948	949	947	941	930	924	(921)	—	—	—	—	939	964	984	986	960	931	939	936	936	936
15**	935	928	929	931	941	948	955	955	950	946	941	936	938	947	966	1000	1017	1046	1060	1017	993	983	981	981	981	981
16	974	970	963	954	950	945	950	953	953	950	947	946	948	956	960	975	980	977	973	967	964	957	926	926	926	926
17	930	923	929	933	933	926	936	944	940	946	951	938	941	944	947	950	952	952	949	948	948	948	947	947	947	947
18	946	945	944	942	940	942	944	945	945	942	944	941	941	940	943	955	966	977	975	967	960	957	956	945	945	945
19	935	938	940	941	942	943	945	948	948	943	935	930	934	937	942	948	956	974	990	977	955	951	957	956	956	956
20**	956	946	935	940	946	951	948	941	943	940	941	945	947	956	959	982	1005	1009	1004	986	980	969	943	928	928	928
21**	913	913	911	917	918	864	849	860	912	937	948	965	994	1027	1050	1070	1055	1040	1003	984	967	937	935	932	932	932
22	939	950	954	955	955	957	957	957	950	942	938	939	945	947	952	961	971	972	963	957	953	950	940	939	939	939
23	939	932	932	928	933	940	945	945	944	938	933	931	935	940	949	955	959	959	957	955	952	940	942	944	944	944
24	946	948	948	948	946	947	948	949	946	941	935	931	934	941	943	949	951	954	954	952	950	950	949	943	943	943
25	946	941	946	948	950	950	951	951	946	937	929	926	932	944	950	956	961	962	960	957	954	953	950	951	951	951
26	949	950	950	952	952	952	953	955	951	943	934	934	936	939	946	951	953	952	953	953	953	952	951	951	951	951
27	951	951	952	952	953	954	956	957	955	949	940	938	942	947	950	955	955	955	958	958	956	957	956	955	955	955
28*	956	956	956	954	955	956	958	960	960	955	949	945	945	947	949	953	957	959	957	957	956	956	955	954	954	954
29*	953	953	953	953	953	953	956	956	956	952	946	941	938	939	943	948	949	953	953	953	952	952	952	951	951	951
30	951	950	950	950	950	950	951	952	949	944	941	939	939	939	941	946	948	948	950	951	951	951	951	949	949	949
Mean	945	944	943	942	943	943	945	945	945	940	937	935	940	947	952	961	965	967	964	961	955	951	948	945	945	945
Mean*	947	947	947	947	947	947	949	949	946	942	936	934	935	940	943	946	948	948	947	947	946	947	946	946	946	946
Mean**	937	933	925	924	928	921	920	923	937	942	943	947	958	974	987	1009	1014	1020	1009	1000	974	961	950	946	946	946
October.																										
42000 γ + Tabular Quantities (in γ).																										
1*	948	948	948	947	947	948	949	948	945	941	941	939	939	941	944	948	947	947	948	949	949	948	947	946	946	946
2	946	945	944	942	942	943	944	943	944	942	940	940	943	948	952	963	967	961	963	962	964	964	963	963	963	963
3	962	958	957	957	957	955	951	950	949	946	941	941	945	950	953	957	965	966	965	966	961	971	971	966	966	966
4	962	958	951	950	941	931	929	936	947	951	953	956	955	954	954	960	963	962	962	961	961	961	961	961	961	961
5	960	960	960	959	959	959	959	959	959	959	953	947	946	945	949	959	964	964	964	964	963	960	960	957	957	957
6	956	956	957	958	958	958	958	956	952	946	939	934	933	939	946	957	963	968	965	965	965	965	964	963	963	963
7	961	961	961	952	944	943	944	946	948	946	944	949	958	968	974	981	989	993	992	987	979	974	972	966	966	966
8	964	962	952	955	960	962	964	965	962	960	957	956	962	964	971	980	981	979	976	971	967	965	964	966	966	966
9	961	956	960	960	962	964	966	966	964	960	955	957	960	963	967	970	969	968	967	967	966	966	964	964	964	964
10*	964	965	965	964	965	965	967	969	967	960	953	952	952	955	963	969	971	972	970	968	967	964	963	963	963	963
11	963	962	963	963	963	962	962	960	955	951	945	947	948	952	955	961	964	965	963	963	964	962	960	959	959	959
12	959	957	957	959	959	959	959	960	957	952	947	944	943	945	952	957	960	960	960	960	960	960	957	957	957	957
13	952	953	955	957	957	957	958	957	957	951	942															

TABLE (A) 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		
1988GDM.																											
November.	42000 γ + Tabular Quantities (in γ).																										
1**	955	953	952	952	951	951	950	950	949	947	942	948	951	955	956	954	952	951	950	954	961	962	964	959			
2	951	936	940	941	943	944	944	945	946	947	946	945	947	949	949	951	949	947	947	947	947	948	948	948	940		
3**	943	943	946	945	943	946	945	946	946	941	943	948	951	962	967	969	971	962	958	953	950	948	949	948			
4	946	944	946	947	946	945	944	942	943	942	939	941	946	950	953	955	956	953	953	953	952	951	951	951			
5	951	950	949	949	949	949	949	949	949	945	942	942	945	948	950	951	950	949	948	949	948	947	947	947			
6	947	947	946	947	944	942	942	942	944	943	940	938	938	944	948	947	947	947	945	945	945	945	946	945			
7*	948	946	946	946	945	946	945	946	947	943	939	940	943	945	946	946	947	948	946	945	944	944	943	943			
8*	943	943	943	944	943	944	943	945	947	943	941	941	943	945	948	945	945	945	945	943	943	942	942	942			
9	944	944	944	942	943	944	944	942	942	940	937	935	937	941	944	944	946	945	945	943	941	941	941	940			
10	940	940	940	941	941	942	942	940	939	936	932	932	936	940	944	944	944	944	944	944	943	942	942	941			
11	940	939	939	939	939	941	940	941	941	939	936	934	936	938	940	941	942	943	940	939	938	937	938	939			
12	937	935	937	938	938	940	940	940	940	936	933	929	931	935	937	941	943	943	943	941	941	940	939	939			
13	939	938	938	937	938	940	940	939	939	936	935	935	—	—	—	—	—	—	—	—	—	—	—	—			
14*	938	936	936	936	936	937	937	937	938	935	929	930	934	936	938	938	938	938	937	937	938	938	937	937			
15*	936	935	935	934	935	936	935	938	940	937	931	933	936	941	943	942	942	942	942	942	941	942	939	939			
16*	938	937	937	936	936	936	936	936	938	935	931	930	932	939	942	941	941	939	939	938	938	937	936	936			
17	936	935	934	934	933	934	934	934	934	932	928	934	937	938	939	938	937	936	935	935	936	936	936	936			
18	936	936	934	934	932	934	932	932	930	927	925	930	934	936	938	939	939	936	936	939	934	934	934	932			
19	934	933	933	933	932	931	930	929	930	928	923	922	924	929	933	933	935	933	935	935	935	936	935	935			
20	936	935	934	934	934	934	933	931	934	931	926	924	926	929	934	935	936	934	934	933	933	932	932	932			
21**	931	931	931	931	931	931	929	927	926	927	921	919	922	926	936	934	933	935	938	943	943	943	930	931			
22	932	932	935	933	934	935	931	932	932	932	930	933	934	937	939	942	947	947	941	940	938	937	934	933			
23	932	932	930	932	932	931	928	930	932	933	932	932	935	939	941	943	945	941	939	937	937	935	932	932			
24	931	930	927	925	927	929	931	933	933	930	927	925	925	931	934	937	937	936	937	937	937	935	933	932			
25	932	931	930	930	930	931	931	931	929	926	924	923	924	926	928	931	933	933	933	932	931	931	929	928			
26	928	927	926	928	930	931	930	929	928	922	917	917	919	921	925	927	929	929	929	929	930	930	928	928			
27	929	927	927	928	928	929	928	928	927	924	923	920	928	935	937	936	938	937	934	932	931	931	931	931			
28**	931	929	927	928	927	926	926	926	928	927	928	927	929	935	944	955	966	974	962	972	971	955	943	937			
29**	930	913	916	926	928	924	924	926	931	935	944	946	954	978	980	978	974	965	963	956	952	951	950	950			
30	948	947	946	946	945	945	944	942	940	937	938	940	940	942	942	943	944	943	943	943	943	943	943	943			
Mean	938	937	937	937	937	938	937	937	937	935	933	933	936	940	943	944	945	944	943	943	942	941	939	938			
Mean*	941	939	939	939	939	940	939	940	942	939	934	935	938	941	943	942	943	942	942	942	941	940	939	939			
Mean**	938	934	934	936	936	936	935	935	936	935	936	938	941	951	957	958	959	957	954	956	955	952	947	945			

December.

42000 γ + Tabular Quantities (in γ).

1	942	942	942	940	940	940	941	940	941	940	936	935	938	940	940	942	944	944	944	944	944	943	943	942	942
2	941	937	935	936	936	935	935	936	936	935	934	932	931	935	939	940	942	940	940	940	939	939	938	939	939
3	938	937	937	937	937	937	936	933	932	930	930	936	939	942	945	949	948	945	943	942	940	939	938	935	935
4	935	935	935	933	932	932	931	931	931	933	931	933	936	938	939	940	940	940	939	940	937	937	937	937	937
5	937	937	937	937	933	933	934	934	933	933	933	933	935	937	939	940	940	939	936	936	936	936	936	936	936
6*	937	936	936	936	936	935	935	933	931	930	931	930	932	934	938	939	939	937	936	935	935	934	935	936	936
7	935	935	931	931	932	935	934	933	931	927	923	924	925	930	935	937	939	937	937	937	935	935	934	934	934
8*	935	935	936	936	936	936	936	934	933	931	928	931	931	936	937	939	939	938	937	936	936	934	934	934	934
9*	933	933	934	933	933	933	932	932	930	927	926	925	926	927	931	933	936	936	935	936	935	934	932	932	932
10	932	932	932	931	931	932	931	929	928	925	923	923	922	925	928	931	932	932	933	933	934	932	932	931	931
11	933	932	933	933	934	934	934	932	932	931	928	927	929	931	929	933	936	937	936	936	936	935	935	933	933
12	933	932	931	930	930	931	931	930	928	925	921	924	924	926	928	932	934	933	933	935	937	937	937	935	935
13	934	929	929	927	929	933	933	934	934	933	931	928	926	931	935	936	938	937	937	937	937	937	936	933	933
14*	931	931	931	931	931	931	931	933	933	931	927	927	927	929	933	934	936	936	936	936	935	936	935	935	935
15	936	935	935	934	934	934	934	934	933	931	929	933	933	938	939	941	943	944	950	945	944	946	944	940	940
16**	938	939	937	928	928	928	925	929	930	932	934	937	943	948	952	955	958	956	958	958	960	952	949	947	947
17	947	945	943	941	939	940	940	940	941	940	937	935	936	940	943	945	942	940	938	937	937	937	938	938	938
18	938	938	936	936	936	936	936	936	936	935	935	931	931	936	940	941	941	940	938	937	937	937	936	935	935
19*	935	934	934	935	935	935	934	933	933	931	929	932	933	936	940	940	940	940	936	935	935	934	934	936	936
20**	938	936	935	935	936	937	933	934	932	929	927	931	933	936	938	943	943	942	941	943	941	938	934	928	928
21	930	928	928	930	931	935	935	935	933	930	927	928	927	930	935	940	947	949	949	945	942	940	937	937	937
22	937	936	937	937	937	937	937	937	935	930	928	928	930	934	938	942	942	940	941	941	939	937	935	933	933
23**	933	932	929	930	932	935	933	932	932	929	926	925	929	944	954	962	982	971	966	974	968	956	949	946	946
24	947	947	945	941	940	942	943	943	941	940	938	941	943	955	956	955	955	951	951	951	948	947	943	942	942
25	941	941	940	941	941	941	939	939	937	934	934	934	934	939	944	947	945	944	945	943	942	941	939	938	938
26	937	936	936	936	933	932	932	932	935	934	930	930	933	935	938	939	939	938	937	937	937	936	935	935	935
27	933	932	932	932	933	934	934	934	934	931	931	931	931	933	938	941	948	943	943	950	950	945	941	937	937
28**	935	933	933	934	933	934	934	935	937	936	932	934	930	932	938	941	939	939	941	939	943	938	938	936	936
29**	931	929	929	927	928	929	930	931	932	934	935	937	936	934	941	945	945	945	944	943	943	940	937	937	937
30	935	932	933	933	933	934	934	935	936	937	934	932	932	932	937	940	939	937	936	936	935	935	935	936	936
31	935	934	933	933	932	933	932	932	933	930	930	927	925	931	939	940	938	939	937	935	935	936	936	936	936
Mean	936	935	935	934	934	935	934	934	934	932	930	931	932	935	939	941	943	942	941	941	940	939	937	936	936
Mean*	934	934	934	934	934	934	934	933	932	930	928	929	930	932	936	937	938	937	936	936	935	934	934	935	935
Mean**	935	934	933	933	933	933	933	933	932	931	931	931	931	931	931	931	931	931	931	931	931	931	931	931	931

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

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.
JAN.	13° +	G.M.T. h m	13° +	13° +	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	16° 9	12 55	20° 2	13° 0	14 30	7° 2	578	5 33	594	547	14 2	47	957	14 46	972	950	8 30	22
2	16° 7	13 42	22° 7	7° 8	18 0	14° 9	577	18 20	613	553	17 47	60	959	18 10	977	949	1 33	28
3	16° 6	12 38	19° 0	14° 8	8 14	4° 2	590	22 25	611	567	10 34	44	958	15 6	964	950	11 52	14
4	17° 6	5 59	25° 7	15° 2	21 37	10° 5	591	6 40	626	551	9 55	75	953	15 10	961	940	6 55	21
5	16° 3	13 24	19° 9	12° 9	22 23	7° 0	589	21 59	611	570	14 0	41	956	14 37	964	948	23 54	16
6	16° 6	13 0	22° 4	12° 7	22 14	9° 7	588	22 22	611	558	11 35	53	956	16 28	962	946	11 23	16
7	16° 6	13 58	23° 0	8° 4	20 50	14° 6	588	23 54	637	550	16 4	87	956	16 23	973	943	23 59	30
8	16° 2	13 12	20° 2	10° 7	19 13	9° 5	588	1 6	610	562	10 14	48	955	19 20	960	940	0 18	20
9	16° 6	13 54	22° 2	13° 1	8 53	9° 1	590	0 7	612	558	12 40	54	954	15 10	960	946	9 55	14
10	15° 9	13 24	20° 0	7° 7	21 57	12° 3	593	20 20	611	571	12 29	40	953	15 42	959	947	9 56	12
11	16° 9	11 15	20° 8	10° 7	0 5	10° 1	602	7 29	620	578	12 24	42	949	12 44	955	941	11 16	14
12	16° 3	12 6	21° 5	8° 4	23 46	13° 1	601	0 0	626	579	11 37	47	949	23 1	953	942	11 3	11
13	15° 3	20 18	23° 7	0° 6	21 28	23° 1	575	7 26	614	489	20 27	125	958	19 55	995	936	9 12	59
14	16° 1	12 38	24° 7	4° 4	23 4	20° 3	570	23 16	596	535	15 10	61	959	0 3	976	942	9 13	34
15	16° 4	2 20	27° 4	3° 0	22 22	24° 4	575	22 27	673	543	15 40	130	954	18 4	980	928	2 28	52
16	15° 3	13 30	23° 2	6° 5	2 38	16° 7	574	2 47	625	560	13 35	65	952	20 50	968	937	3 59	31
17	15° 3	13 58	18° 7	9° 2	20 36	9° 5	586	19 11	602	564	20 28	38	946	0 2	954	930	10 30	24
18	16° 9	14 17	24° 2	9° 3	21 14	14° 9	577	7 3	602	498	9 3	104	947	21 17	969	925	11 15	44
19	14° 1	13 14	23° 3	— 3° 6	0 33	26° 9	575	0 32	620	535	13 56	85	950	17 0	970	929	12 40	41
20	15° 7	12 52	20° 1	11° 1	19 58	9° 0	588	20 24	606	575	10 14	31	945	20 11	953	930	10 50	23
21	15° 6	13 41	19° 2	12° 6	8 52	6° 6	587	22 21	599	569	10 55	30	945	21 9	958	936	11 59	22
22	15° 5	18 10	26° 6	— 2° 0	22 4	28° 6	581	17 38	651	476	23 7	175	945	21 20	996	920	23 21	76
23	15° 0	12 55	20° 5	— 6° 2	0 59	26° 7	564	19 41	614	505	0 0	109	945	4 57	960	836	0 52	124
24	15° 3	13 56	19° 6	12° 8	4 30	6° 8	577	16 40	611	545	11 2	66	952	16 37	968	944	9 36	24
25	15° 6	14 4	20° 0	12° 6	22 48	7° 4	585	19 12	608	568	11 28	40	951	16 10	957	943	12 40	14
26	14° 8	19 4	34° 3	— 17° 3	16 50	51° 6	589	—	—	469	22 30	—	—	—	—*	934	23 55	—
27	12° 2	22 30	23° 8	— 26° 0	1 28	49° 8	517	0 3	610	313	1 24	297	969	15 20	1027	865	1 12	162
28	15° 1	12 52	20° 5	7° 8	21 40	12° 7	557	21 46	591	529	10 52	62	965	13 25	992	943	1 10	49
29	15° 6	12 25	19° 4	12° 8	18 20	6° 6	568	12 5	586	544	15 43	42	961	15 49	977	949	12 38	28
30	15° 5	13 56	19° 8	10° 3	23 32	9° 5	574	4 14	589	549	11 40	40	961	15 46	967	955	4 34	12
31	15° 9	13 38	20° 8	12° 2	1 28	8° 6	578	7 58	596	545	15 1	51	958	15 7	970	947	10 0	23
Mean	15° 8	—	22° 5	6° 6	—	15° 9	580	—	613	537	—	73	954	—	967	935	—	32
No. of Days used.	31	—	31	31	—	31	31	—	30	31	—	30	30	—	30	31	—	30
FEB.	13° +	h m	13° +	13° +	h m		18000γ +	h m	18000γ +	18000γ +	h m	γ	42000γ +	h m	42000γ +	42000γ +	h m	γ
1	15° 3	13 36	20° 9	9° 3	22 24	11° 6	575	8 9	593	530	11 30	63	959	18 34	973	949	11 8	24
2	14° 1	12 0	19° 5	— 9° 3	21 38	28° 8	581	20 51	631	550	22 57	81	954	19 20	967	938	2 48	29
3	15° 0	12 18	21° 3	4° 9	18 8	16° 4	577	21 11	632	543	13 4	89	955	16 22	973	938	1 28	35
4	14° 4	12 37	19° 9	6° 7	19 2	13° 2	574	21 1	610	528	16 4	82	958	16 20	986	942	2 10	44
5	15° 0	13 36	19° 6	10° 3	21 20	9° 3	579	21 25	611	561	14 3	50	956	15 25	968	945	2 32	23
6	15° 0	12 8	19° 4	11° 3	8 33	8° 1	582	19 58	595	560	12 56	35	956	17 8	965	947	10 34	18
7	15° 4	12 50	20° 1	11° 8	9 20	8° 3	586	20 8	598	559	11 55	39	954	15 40	958	948	11 53	10
8	15° 1	13 20	19° 4	10° 6	9 12	8° 8	589	6 19	601	569	11 26	32	952	8 26	956	943	12 5	13
9	15° 3	13 7	20° 0	11° 2	22 34	8° 8	590	22 10	603	570	11 37	33	950	22 6	955	937	11 34	18
10	14° 3	10 40	19° 2	7° 3	21 50	11° 9	589	6 18	616	552	21 46	64	952	23 21	965	939	9 56	26
11	14° 1	18 33	22° 7	— 3° 9	21 30	26° 6	568	13 50	596	507	21 12	89	961	20 8	999	934	12 12	65
12	13° 8	14 0	20° 2	4° 3	20 10	15° 9	570	20 23	590	538	2 56	52	954	20 20	970	938	12 23	32
13	14° 8	13 21	24° 6	5° 0	20 48	19° 6	576	7 38	603	522	13 33	81	954	21 50	966	941	8 30	25
14	14° 4	14 55	24° 1	4° 1	21 4	20° 0	576	0 43	598	546	11 49	52	952	17 34	968	933	10 34	35
15	13° 5	15 6	23° 8	— 0° 4	22 34	24° 2	569	7 9	593	536	12 48	57	955	21 54	971	934	11 18	37
16	14° 7	14 30	21° 3	10° 4	22 55	10° 9	574	23 5	592	533	12 20	59	952	16 44	959	937	11 54	22
17	15° 9	17 53	26° 7	6° 4	23 59	20° 3	578	22 22	627	532	12 21	95	953	18 54	978	935	11 29	43
18	14° 5	13 57	23° 6	2° 6	1 6	21° 0	565	4 17	618	510	0 40	108	955	0 52	984	941	2 51	43
19	14° 2	13 14	23° 3	4° 8	0 2	18° 5	573	21 32	621	545	12 44	76	951	19 11	963	938	12 13	25
20	15° 9	14 3	24° 0	7° 8	23 52	16° 2	594	6 13	590	546	12 0	44	949	18 50	957	937	11 52	20
21	14° 3	12 36	19° 6	8° 9	0 12	10° 7	576	21 6	626	551	17 26	75	950	18 35	967	938	11 24	29
22	14° 4	13 19	20° 1	5° 2	20 2	14° 9	572	20 10	617	537	9 50	80	954	18 50	972	944	4 58	28
23	14° 0	18 5	28° 5	1° 7	21 24	26° 8	576	17 45	703	508	22 17	195	964	19 21	1033	936	11 30	97
24	14° 1	15 14	55° 4	— 5° 0	17 40	60° 4	522	15 12	707	400	21 17	307	—	—	—*	891	9 23	—
25	14° 5	4 10	30° 5	0° 0	0 35	30° 5	533	3 7	589	472	4 5	117	948	3 25	984	866	3 36	118
26	15° 7	13 46	23° 5	4° 5	21 10	19° 0	560	5 7	597	514	13 35	83	955	16 24	978	927	6 40	51
27	14° 3	12 40	21° 1	8° 4	8 52	12° 7	569	7 24	585	536	13 8	49	956	16 10	965	938	11 17	27
28	14° 1	13 28	21° 3	5° 4	21 45	15° 9	580	7 40	601	556	14 10	45	951	20 33	963	930	11 54	33
Mean	14° 7	—	23° 7	5° 2	—	18° 5	573	—	612	533	—	79	954	—	972	934	—	36
No. of Days used.	28	—	28	28	—	28	28	—	28	28	—	28	27	—	27	28	—	27

TABLE (A) 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.					
MAR.	I3° +	G.M.T. h m	I3° +	I3° +	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	14° 3'	12 4	20° 4'	1° 9'	20 37	18° 5'	580	22 35	607	546	15 55	61	953	16 10	980	936	10 48	44
	2	14° 6'	6 17	23° 3'	— 0° 3'	22 3	23° 6'	574	22 9	633	499	10 46	134	951	15 52	989	931	23 27	58
	3	12° 6'	14 15	20° 8'	0° 0'	18 59	20° 8'	573	6 36	596	522	11 54	74	953	18 10	979	935	0 58	44
	4	13° 8'	13 49	21° 2'	7° 7'	19 7	13° 5'	577	21 56	599	543	10 55	56	952	15 30	972	934	1 26	38
	5	14° 6'	13 46	33° 3'	—19° 9'	21 40	53° 2'	560	15 45	655	425	20 1	230	—	—	—*	923	11 13	—
	6	14° 5'	1 14	22° 2'	1° 5'	3 24	20° 7'	547	22 20	592	495	1 50	97	956	17 11	991	909	5 15	82
	7	13° 2'	12 6	20° 8'	6° 0'	20 30	14° 8'	559	20 38	587	534	12 25	53	964	17 50	992	948	11 17	44
	8	14° 6'	13 20	20° 4'	10° 4'	9 2	10° 0'	579	22 26	602	559	11 40	43	959	0 6	968	942	11 58	26
	9	14° 5'	13 58	26° 8'	—19° 4'	20 11	46° 2'	578	15 43	641	473	19 37	168	961	20 10	1058	932	11 52	126
	10	12° 7'	12 52	23° 8'	— 5° 9'	2 3	29° 7'	553	22 38	603	479	1 18	124	953	17 26	996	897	1 34	99
	11	14° 0'	12 28	22° 9'	5° 7'	20 29	17° 2'	565	19 38	623	519	11 44	104	955	17 47	986	925	6 26	61
	12	13° 2'	14 20	20° 7'	8° 2'	20 27	12° 5'	564	22 46	611	526	9 40	85	959	18 19	982	944	5 12	38
	13	13° 8'	13 48	23° 4'	8° 8'	24 0	14° 6'	570	17 40	595	543	14 24	52	960	17 30	980	946	11 28	34
	14	13° 5'	13 29	22° 2'	6° 4'	2 38	15° 8'	575	22 15	608	548	11 1	60	949	17 36	960	932	11 25	28
	15	14° 2'	13 18	22° 2'	8° 1'	8 54	14° 1'	579	23 26	610	546	11 7	64	952	16 10	965	933	11 59	32
	16	13° 2'	14 25	20° 8'	5° 8'	20 57	15° 0'	576	22 9	615	536	11 22	79	947	17 27	970	930	11 36	40
	17	13° 8'	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	18	13° 4'	14 10	28° 3'	— 1° 5'	1 28	29° 8'	559	0 45	610	526	16 46	84	959	16 53	1028	921	1 15	107
	19	13° 3'	15 31	23° 0'	3° 3'	21 50	19° 7'	569	22 5	628	538	11 43	90	947	18 28	971	925	11 19	46
	20	13° 3'	13 50	23° 4'	4° 0'	19 58	19° 4'	559	23 30	604	520	10 56	84	945	19 4	971	924	5 6	47
	21	13° 4'	23 21	23° 2'	1° 3'	18 14	21° 9'	564	18 20	618	516	9 26	102	945	18 15	979	913	23 55	66
	22	14° 5'	13 45	21° 1'	3° 2'	0 20	17° 9'	573	22 58	648	543	11 2	105	936	21 35	950	913	0 0	37
	23	14° 6'	13 20	21° 8'	8° 2'	3 22	13° 6'	580	1 10	611	542	10 38	69	928	18 6	942	912	1 30	30
	24	15° 0'	13 29	24° 0'	10° 0'	8 8	14° 0'	576	7 26	601	541	13 44	60	936	17 44	961	913	10 44	48
	25	13° 9'	14 10	20° 7'	8° 2'	8 44	12° 5'	579	0 47	604	544	10 57	60	932	16 33	943	920	11 58	23
	26	14° 2'	13 6	21° 2'	8° 7'	8 40	12° 5'	587	5 55	606	554	11 41	52	929	17 20	942	908	11 23	34
	27	14° 0'	13 47	23° 8'	7° 2'	8 35	16° 6'	587	16 52	610	535	12 15	75	929	16 50	944	909	11 37	35
	28	14° 2'	13 37	25° 7'	8° 2'	8 15	17° 5'	587	22 46	600	542	11 6	58	933	15 0	953	914	10 18	39
	29	14° 6'	13 50	23° 5'	3° 1'	18 36	20° 4'	583	22 17	646	542	18 25	104	934	18 45	968	919	22 57	49
	30	12° 9'	14 11	24° 0'	5° 5'	18 42	18° 5'	585	19 6	632	550	10 14	82	943	15 24	977	917	2 8	60
31	14° 0'	12 58	22° 6'	7° 9'	8 32	14° 7'	584	4 53	603	548	10 39	55	947	17 42	957	929	12 2	28	
Mean	13° 9'	—	23° 0'	3° 4'	—	19° 6'	573	—	613	528	—	85	947	—	974	924	—	50	
No. of Days used.	31	—	30	30	—	30	30	—	30	30	—	30	29	—	29	30	—	29	
APRIL	I3° +	h m	I3° +	I3° +	h m	18000γ +	h m	18000γ +	18000γ +	h m	γ	42000γ +	h m	42000γ +	42000γ +	h m	γ		
	1	13° 9'	13 54	23° 3'	6° 2'	18 34	17° 1'	586	18 45	613	545	11 20	68	956	18 42	977	931	12 40	46
	2	14° 2'	14 2	22° 7'	7° 3'	8 20	15° 4'	590	5 38	607	549	11 30	58	962	16 40	980	940	11 24	40
	3	13° 5'	13 12	22° 1'	7° 9'	9 5	14° 2'	591	23 31	616	544	13 54	72	947	19 22	959	917	11 40	42
	4	13° 0'	13 50	18° 7'	6° 5'	20 10	12° 2'	593	0 42	615	563	12 6	52	949	16 39	959	935	11 22	24
	5	13° 7'	13 20	20° 2'	6° 9'	23 58	13° 3'	597	23 35	637	564	12 26	73	945	7 41	955	927	12 8	28
	6	11° 7'	12 40	22° 4'	2° 9'	3 53	19° 5'	586	5 5	647	528	13 15	119	942	20 37	967	915	6 28	52
	7	12° 6'	12 54	24° 2'	5° 9'	8 38	18° 3'	582	22 17	615	502	13 18	113	947	17 55	970	927	5 27	43
	8	12° 4'	13 10	25° 4'	2° 8'	21 27	22° 6'	584	21 43	643	534	12 34	109	945	15 44	965	928	12 29	37
	9	12° 8'	13 29	23° 8'	3° 7'	22 57	20° 1'	584	23 8	643	528	8 58	115	947	15 30	969	922	11 34	47
	10	12° 6'	12 28	21° 9'	5° 1'	19 0	16° 8'	589	19 10	633	565	10 26	68	949	17 17	970	929	0 0	41
	11	12° 9'	14 18	22° 2'	4° 7'	19 53	17° 5'	587	20 0	621	551	9 56	70	945	19 58	959	920	11 55	39
	12	11° 9'	13 20	22° 0'	5° 0'	0 59	17° 0'	588	1 28	620	547	9 12	73	943	19 42	958	912	11 58	46
	13	12° 1'	13 19	23° 7'	5° 0'	8 23	18° 7'	589	20 37	635	552	9 52	83	942	19 23	960	917	12 20	43
	14	—	16 30	44° 9'	—14° 6'	20 41	59° 5'	—	16 6	736	512	22 58	224	—	—	—*	917	11 58	—
	15	—	7 9	42° 9'	—25° 7'	0 27	68° 6'	—	2 10	643	279	7 40	364	—	13 35	1070	—	—	—
	16	12° 1'	13 8	22° 1'	2° 5'	18 47	19° 6'	547	19 4	661	451	10 30	210	964	19 1	999	940	4 50	59
	17	12° 9'	13 50	20° 9'	5° 6'	0 48	15° 3'	559	16 28	609	492	11 28	117	953	17 47	984	923	1 21	61
	18	12° 0'	13 54	18° 8'	5° 3'	20 54	13° 5'	574	21 6	625	534	10 30	91	950	21 0	962	931	11 1	31
	19	12° 6'	12 57	18° 9'	6° 6'	5 43	12° 3'	581	22 40	634	550	10 50	84	945	22 33	960	925	11 30	35
	20	13° 6'	13 31	20° 8'	8° 7'	7 43	12° 1'	586	21 16	609	563	11 55	46	948	21 32	957	927	11 52	30
	21	12° 7'	14 18	23° 7'	5° 6'	22 17	18° 1'	587	23 59	619	544	11 3	75	947	22 22	961	917	10 34	44
	22	13° 3'	13 48	22° 0'	6° 2'	6 13	15° 8'	582	13 49	617	535	15 4	82	954	15 28	981	930	0 34	51
	23	12° 1'	11 54	17° 7'	1° 7'	1 1	16° 0'	580	0 31	630	521	11 19	109	947	18 10	958	913	1 0	45
	24	12° 6'	14 19	20° 8'	1° 4'	19 57	19° 4'	587	20 5	659	554	14 56	105	948	17 33	971	928	12 50	43
	25	13° 0'	13 13	18° 9'	8° 6'	7 16	10° 3'	583	23 2	608	547	10 32	61	946	17 40	959	930	10 23	29
	26	12° 1'	13 24	20° 1'	4° 4'	22 23	15° 7'	583	17 5										

* Trace moved off Sheet.

TABLE (A) 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.					
MAY	13° +	G.M.T. h m	13° +	13° +	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	11° 9	13 47	17° 8	6° 9	8 35	10° 9	594	18 6	611	568	12 54	43	946	18 28	956	924	11 40	32
	2	11° 5	13 17	18° 2	5° 3	7 40	12° 9	590	18 10	609	557	11 8	52	942	5 34	952	918	12 22	34
	3	12° 0	13 32	18° 7	6° 1	7 43	12° 6	600	22 58	666	566	11 3	100	943	21 15	961	917	12 0	44
	4	11° 2	13 57	24° 0	7° 3	1 39	31° 3	581	17 6	662	530	10 8	132	945	17 48	1024	905	1 12	119
	5	12° 8	14 50	19° 8	2° 4	0 20	17° 4	567	18 6	624	506	11 49	118	945	17 59	993	904	4 25	89
	6	12° 0	13 46	20° 5	2° 5	19 11	18° 0	577	16 16	652	525	11 27	127	949	16 14	984	923	10 57	61
	7	11° 3	13 25	20° 1	2° 6	21 7	17° 5	575	18 40	627	543	9 8	84	945	16 47	973	923	11 28	50
	8	11° 5	13 3	18° 7	3° 9	8 0	14° 8	582	21 24	612	566	12 49	46	944	18 22	964	920	10 45	44
	9	11° 4	13 15	19° 7	3° 7	6 30	16° 0	582	18 0	652	556	9 15	96	946	19 33	979	921	11 59	58
	10	11° 8	15 10	23° 6	1° 9	17 39	21° 7	562	17 50	656	495	5 0	161	947	17 47	1009	897	4 27	112
	11	11° 2	14 30	21° 5	0° 6	7 54	22° 1	571	22 17	627	508	9 35	119	948	16 20	971	920	11 27	51
	12	11° 9	11 54	21° 0	4° 4	20 29	16° 6	575	19 0	615	526	10 29	89	943	17 19	977	912	10 20	65
	13	11° 9	12 58	20° 7	3° 2	5 48	17° 5	—	—	—	—	—	—	942	19 45	968	904	10 39	64
	14	12° 0	13 54	19° 1	6° 6	6 59	12° 5	580	19 37	618	535	10 6	83	949	19 34	963	930	10 38	33
	15	11° 4	12 50	20° 1	4° 7	8 35	15° 4	585	18 13	609	550	11 37	59	944	17 41	957	911	11 40	46
	16	11° 8	14 8	18° 4	5° 2	23 53	13° 2	589	21 40	618	558	11 6	60	945	19 3	959	919	11 30	40
	17	11° 1	3 27	20° 3	3° 9	7 58	16° 4	592	21 35	662	547	10 58	115	943	18 50	961	917	10 55	44
	18	10° 8	14 20	20° 7	2° 3	1 33	23° 0	591	0 23	652	551	12 24	101	946	16 49	962	916	1 14	46
	19	11° 2	14 42	17° 9	4° 4	6 47	13° 5	596	19 31	623	546	12 43	77	951	18 5	959	932	11 40	27
	20	11° 9	14 0	19° 2	2° 6	22 20	16° 6	586	22 40	626	540	12 10	86	950	17 4	971	932	6 44	39
	21	10° 8	12 34	17° 1	4° 4	20 56	12° 7	583	21 2	626	530	10 54	96	953	16 17	968	934	10 50	34
	22	11° 4	12 40	18° 3	5° 9	6 44	12° 4	592	16 58	619	567	9 18	52	952	17 50	969	930	10 56	39
	23	10° 8	12 40	16° 5	5° 9	7 30	10° 6	593	22 8	616	567	12 17	49	955	17 50	965	933	12 13	32
	24	10° 7	13 32	16° 0	5° 7	7 3	10° 3	593	18 23	618	567	13 6	51	953	18 14	966	930	11 45	36
	25	10° 9	12 50	15° 9	7° 0	7 36	8° 9	593	21 20	619	569	13 27	50	958	18 26	976	937	11 41	39
	26	10° 7	13 42	16° 3	3° 9	8 16	12° 4	593	20 58	607	580	10 40	27	959	17 17	969	936	11 38	33
	27	10° 7	13 43	16° 6	4° 6	8 24	12° 0	594	15 10	606	561	12 13	45	957	6 1	968	937	12 35	31
	28	11° 0	14 8	15° 9	5° 7	7 23	10° 2	595	15 30	612	571	9 50	41	944	4 59	951	922	11 58	29
	29	11° 8	13 34	16° 1	7° 5	7 55	8° 6	599	16 36	617	580	13 23	37	943	16 57	955	923	11 18	32
	30	10° 8	13 43	15° 9	5° 7	8 33	10° 2	597	20 13	615	558	13 0	57	938	4 53	946	914	10 19	32
31	11° 3	14 6	17° 7	4° 1	8 25	13° 6	598	18 40	623	562	10 29	61	937	18 1	954	915	11 5	39	
Mean	11° 4	—	18° 8	4° 2	—	14° 6	587	—	627	550	—	77	947	—	969	921	—	48	
No. of Days used.	31	—	31	31	—	31	30	—	30	30	—	30	31	—	31	31	—	31	
JUNE	13° +	h m	13° +	13° +	h m	18000γ +	h m	18000γ +	18000γ +	h m	γ	42000γ +	h m	42000γ +	42000γ +	h m	γ		
	1	11° 6	—	—	—	—	604	14 35	737	523	15 26	214	938	20 59	977	900	12 52	77	
	2	11° 0	14 27	20° 5	12° 8	1 55	33° 3	546	17 48	650	428	8 40	222	941	17 3	1009	—	—	—
	3	10° 0	13 25	17° 0	2° 2	7 18	14° 8	572	22 39	618	540	12 1	78	958	18 33	976	942	11 59	34
	4	10° 7	14 6	19° 1	3° 9	8 14	15° 2	576	21 40	600	543	11 57	57	953	18 10	968	929	11 44	39
	5	10° 3	13 56	17° 4	3° 4	7 33	14° 0	583	18 54	605	557	13 30	48	953	16 56	970	931	12 10	39
	6	10° 4	13 0	18° 5	2° 5	7 23	16° 0	591	21 10	640	565	11 42	75	953	20 10	965	934	11 28	31
	7	10° 8	14 0	20° 4	2° 0	7 40	18° 4	589	0 56	625	551	10 32	74	955	17 11	994	921	11 50	73
	8	11° 2	14 4	22° 3	0° 6	23 58	22° 9	579	23 23	677	528	9 24	149	950	17 20	976	929	1 17	47
	9	10° 6	13 15	20° 3	0° 6	0 0	20° 9	579	17 40	638	533	9 1	105	950	17 31	981	928	4 40	53
	10	10° 3	13 16	17° 3	2° 3	6 4	15° 0	580	18 0	633	527	11 2	106	951	17 54	975	938	12 16	37
	11	10° 2	14 10	18° 0	2° 8	8 14	15° 2	586	0 48	626	555	10 15	71	949	18 30	964	936	12 57	28
	12	11° 2	13 52	20° 4	4° 4	7 12	16° 0	591	16 23	612	565	9 26	47	947	16 21	960	922	12 8	38
	13	11° 1	13 50	18° 2	4° 7	5 59	13° 5	597	15 4	642	575	9 59	67	948	18 20	970	924	11 54	46
	14	10° 8	14 5	19° 5	3° 5	7 18	16° 0	587	19 24	618	554	9 38	64	950	19 14	962	929	12 25	33
	15	10° 5	13 40	16° 5	3° 1	6 44	13° 4	598	18 57	636	561	9 37	75	945	18 55	962	924	11 59	38
	16	11° 0	14 56	16° 5	2° 9	8 37	13° 6	592	18 43	622	545	12 24	77	949	18 2	970	932	11 20	38
	17	11° 1	14 24	16° 8	4° 7	5 35	12° 1	599	18 40	633	565	8 37	68	947	18 22	960	926	11 54	34
	18	10° 6	13 28	15° 8	4° 1	7 20	11° 7	593	17 0	624	552	10 27	72	949	18 23	969	939	4 48	30
	19	10° 7	14 32	15° 5	4° 5	7 34	11° 0	594	20 8	615	563	12 50	52	949	18 30	959	936	11 23	23
	20	10° 7	14 12	16° 0	4° 2	7 19	11° 8	593	19 17	613	565	10 30	48	946	19 11	959	932	11 50	27
	21	10° 7	13 52	15° 9	4° 3	6 54	11° 6	599	19 14	625	579	10 34	46	946	17 53	956	929	11 34	27
	22	11° 2	12 5	18° 2	4° 4	6 26	13° 8	596	23 36	625	562	9 50	63	944	18 10	956	920	13 39	36
	23	11° 3	15 1	21° 1	4° 4	19 34	16° 7	602	15 11	656	568	11 0	88	952	18 23	990	930	13 38	60
	24	10° 7	14 11	25° 1	2° 4	5 12	22° 7	599	0 24	613	572	11 44	41	945	18 16	957	925	13 17	32
	25	11° 1	14 23	19° 3	4° 3	7 18	15° 0	591	18 53	614	566	12 22	48	944	1				

TABLE (A) 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.	Mean Value for the Day.	Maximum.	Minimum.	Range.	Mean Value for the Day.	Maximum.
JULY	13° +	G.M.T. h m	13° +	13° +	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	10.3	14 50	16.3	3.4	8 2	592	17 11	617	551	10 16	66	942	18 9	956	923	11 45	33	
2	9.6	14 16	17.2	2.5	8 4	598	0 50	626	572	12 30	54	944	17 52	954	930	12 8	24	
3	9.6	14.34	16.6	2.9	7 23	593	18 36	629	571	12 0	58	953	19 20	978	937	12 40	41	
4	9.8	14 7	17.5	2.3	0 52	598	18 25	616	574	15 37	42	950	17 40	966	928	11 52	38	
5	10.4	12 25	19.5	1.5	5 48	600	15 56	655	554	13 32	101	947	20 33	965	921	12 50	44	
6	10.0	14 24	18.5	2.7	7 20	596	18 31	623	569	9 39	54	944	18 56	962	921	11 10	41	
7	10.8	14 20	20.4	3.9	7 35	597	22 16	646	566	9 16	80	948	17 10	973	923	10 3	50	
8	11.2	13 38	20.0	2.5	7 24	588	22 27	622	552	12 9	70	947	17 52	960	928	12 3	32	
9	10.3	12 30	18.7	4.2	7 56	594	21 58	615	556	9 19	59	947	17 51	961	917	11 52	44	
10	10.3	12 52	18.8	3.0	7 52	597	21 37	618	572	11 30	46	950	19 24	963	929	10 50	34	
11	10.5	12 47	23.6	4.8	7 6	596	18 17	614	562	10 6	52	948	18 7	963	928	12 50	35	
12	10.7	13 17	20.0	3.5	23 25	595	19 4	630	551	9 58	79	956	17 49	975	938	11 37	37	
13	10.1	13 19	18.2	2.9	6 30	599	18 33	629	558	10 20	71	955	18 34	970	934	11 32	36	
14	10.5	13 26	18.0	4.7	7 3	593	17 56	615	558	11 8	57	960	18 55	973	952	10 54	21	
15	10.3	14 20	15.8	4.9	8 23	603	19 20	620	580	9 37	40	955	18 6	967	937	12 8	30	
16	10.1	14 52	15.9	4.7	7 43	597	20 44	628	562	11 40	66	951	18 25	961	933	11 15	28	
17	10.4	14 20	16.8	5.1	5 14	598	20 12	625	572	13 20	53	951	18 50	964	936	12 0	28	
18	10.6	12 58	16.7	5.0	7 30	593	1 0	623	552	10 40	71	954	17 40	971	939	10 50	32	
19	10.3	11 57	16.4	4.6	7 34	593	19 22	622	550	11 13	72	952	17 5	968	926	11 3	42	
20	9.8	12 39	14.5	4.3	6 55	595	21 21	611	579	14 42	32	952	15 24	960	936	12 18	24	
21	9.7	13 16	15.1	4.7	7 8	594	20 34	610	579	12 40	31	951	17 5	965	928	11 38	37	
22	10.2	13 49	15.8	5.8	6 11	597	22 16	610	576	13 3	34	950	18 27	957	935	13 34	22	
23	9.6	14 45	15.6	3.4	7 32	597	23 22	610	577	11 3	33	951	6 57	959	944	12 38	15	
24	10.4	13 56	21.2	3.8	8 55	605	17 42	631	584	11 40	47	945	18 33	957	924	12 55	33	
25	9.4	14 1	17.7	3.7	6 20	598	18 25	622	566	10 1	56	945	16 30	958	921	10 48	37	
26	10.3	13 50	19.2	4.1	5 55	596	24 0	620	565	9 24	55	943	18 11	955	922	10 57	33	
27	9.8	13 54	19.1	2.3	19 30	597	17 0	640	563	10 18	77	948	18 35	981	920	11 20	61	
28	10.4	4 50	18.5	— 0.2	2 33	573	2 15	632	510	11 30	122	941	18 7	972	887	4 32	85	
29	9.9	13 43	16.2	5.2	5 15	582	17 7	605	560	9 24	45	953	17 53	967	936	11 40	31	
30	8.8	14 40	15.7	2.7	7 50	588	18 51	629	550	13 28	79	945	18 47	957	922	13 21	35	
31	9.1	13 16	17.1	— 3.7	23 27	594	17 14	646	537	23 19	109	955	18 42	1007	910	24 0	97	
Mean	10.1	—	17.8	3.4	—	595	—	624	563	—	61	949	—	966	928	—	38	
No. of Days used.	31	—	31	31	—	31	—	31	31	—	31	31	—	31	31	—	31	
AUG.	13° +	h m	13° +	13° +	h m	18000γ +	h m	18000γ +	18000γ +	h m	γ	42000γ +	h m	42000γ +	42000γ +	h m	γ	
1	8.0	13 19	17.1	— 9.1	1 18	565	19 47	602	524	9 40	78	951	16 33	973	912	0 1	61	
2	8.3	14 40	14.1	2.0	8 16	578	23 22	612	541	9 28	71	952	18 18	959	937	11 41	22	
3	8.1	13 28	14.5	1.8	6 9	582	18 44	623	558	9 20	65	949	19 8	966	932	12 9	34	
4	9.0	13 56	15.9	4.3	1 30	583	0 40	615	549	8 43	66	947	16 47	960	929	11 14	31	
5	9.0	13 8	17.8	2.9	1 40	586	0 21	604	557	8 44	47	942	17 31	954	924	12 14	30	
6	9.2	13 26	16.2	4.0	8 14	587	23 54	614	549	10 45	65	943	18 9	954	923	12 55	31	
7	8.5	12 45	15.1	2.3	7 13	586	0 2	614	551	10 34	63	940	5 4	949	925	11 17	24	
8	9.0	13 38	14.5	4.6	8 47	590	19 23	605	562	10 29	43	940	16 52	952	920	12 57	32	
9	10.9	13 21	21.1	1.1	7 32	590	22 58	631	547	8 55	84	940	17 55	969	912	10 59	57	
10	8.5	13 16	17.2	0.7	7 19	581	23 20	608	538	9 29	70	944	16 47	961	927	2 8	34	
11	9.0	12 48	15.9	3.0	7 25	586	19 8	605	554	11 19	51	942	16 53	950	927	12 37	23	
12	10.3	13 46	18.3	4.3	6 14	589	21 4	618	550	11 23	68	942	17 10	965	923	11 20	42	
13	9.5	13 55	18.4	— 1.4	1 56	582	1 30	654	494	9 13	160	942	18 7	972	907	1 56	65	
14	9.1	12 48	17.6	2.5	7 54	581	23 29	619	545	13 22	74	945	16 48	961	930	10 50	31	
15	9.2	12 40	16.6	3.2	0 56	585	0 3	610	542	9 53	68	939	16 19	955	920	12 5	35	
16	9.4	14 56	13.9	5.9	24 0	592	22 26	620	556	12 52	64	943	18 23	963	927	12 56	36	
17	9.0	13 40	15.8	3.5	22 50	588	5 40	617	548	14 32	69	940	17 44	969	923	10 47	46	
18	9.6	13 57	19.3	3.9	7 40	585	22 24	618	543	14 40	75	941	16 40	961	914	11 58	47	
19	9.4	13 53	15.4	2.8	17 40	588	17 49	628	568	10 25	60	945	17 45	969	932	6 40	37	
20	8.2	13 22	14.2	2.0	7 42	587	21 55	610	552	9 58	58	940	18 38	962	929	11 17	33	
21	8.0	13 14	15.2	3.0	7 38	585	0 57	603	560	10 12	43	947	17 1	955	933	12 16	22	
22	8.9	12 30	16.5	4.1	7 8	592	20 54	614	562	9 30	52	939	0 0	950	923	11 8	27	
23	9.0	14 6	17.0	4.4	7 12	597	19 53	610	569	9 24	41	935	4 30	984	872	12 17	112	
24	8.9	13 6	17.2	3.6	8 17	597	22 25	624	560	9 18	64	933	17 28	943	916	12 35	27	
25	9.0	13 20	18.3	4.1	8 12	590	3 33	622	558	11 20	64	936	17 10	949	911	12 21	38	
26	8.7	13 6	15.1	3.5	8 24	593	4 28	613	562	9 43	51	939	17 28	953	923	11 0	30	
27	8.9	13 19	16.6	3.2	6 52	595	1 17	621	562	10 22	59	937	16 30	950	916	11 39	34	
28	8.4	14 27	16.0	1.0	8 24	594	22 53	614	561	10 34	53	941	17 7	952	929	12 18	23	
29	8.6	13 10	14.9	2.1	8 0	594	17 34	620	565	11 30	55	936	17 30	945	921	11 54	24	
30	8.4	12 12	16.4	1.8	7 8	595	19 19	618	567	9 39	51	936	16 30	945	914	11 22	31	
31	7.6	12 59	14.6	1.9	6 53	592	2 57	621	562	9 25	59	939	20 11	945	926	12 20	19	
Mean	8.9	—	16.3	2.5	—	588	—	616	555	—	61	942	—	958	921	—	37	
No. of Days used.	31	—	31	31	—	31	—	31	31	—	31	31	—	31	31	—	31	

TABLE (A) 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.
1928CQAM.		G.M.T. h m		G.M.T. h m			18000γ + h m	G.M.T. h m	18000γ +	18000γ +	G.M.T. h m	γ	42000γ + h m	G.M.T. h m	42000γ +	42000γ +	G.M.T. h m	γ
SEPT.	13° +		13° +	13° +			18000γ +		18000γ +	18000γ +			42000γ +		42000γ +	42000γ +		
1	7.7	13 2	13.7	3.3	7 53	10.4	592	19 50	605	569	10 0	36	939	6 57	945	925	11 58	20
2	8.2	13 19	14.8	3.9	7 24	10.9	595	20 38	618	572	9 19	46	937	23 17	945	921	11 57	24
3	8.4	12 45	15.5	3.3	7 4	12.2	590	23 40	611	569	8 44	42	936	16 5	945	915	10 13	30
4	8.6	11 40	13.9	3.6	7 34	10.3	594	21 13	607	571	9 43	36	940	15 59	950	923	10 30	27
5	8.2	13 35	14.0	3.1	8 11	10.9	591	20 43	608	561	10 30	47	941	15 40	948	930	11 37	18
6	7.8	12 57	15.9	— 5.4	22 20	21.3	598	22 22	646	567	11 40	79	939	21 0	952	923	10 52	29
7	8.1	13 21	15.9	1.7	22 53	14.2	585	19 41	605	552	9 2	53	942	15 46	954	927	11 24	27
8	9.6	15 10	25.7	— 2.4	21 56	28.1	568	21 51	628	499	11 35	129	955	17 58	1020	923	11 14	97
9	7.4	2 22	20.7	— 3.7	21 35	24.4	573	21 15	641	506	11 50	135	948	17 8	989	904	4 12	85
10	9.1	3 27	14.9	3.3	16 39	11.6	578	16 49	627	534	11 56	93	955	16 47	995	937	3 48	58
11	8.8	14 1	15.8	— 2.3	20 19	18.1	580	20 39	624	534	11 26	90	955	16 6	975	935	2 15	40
12	8.3	12 38	14.2	— 0.4	22 5	14.6	580	21 23	610	546	9 50	64	949	17 2	959	933	11 20	26
13	8.1	12 20	15.5	1.9	7 34	13.6	582	23 54	598	548	9 37	50	947	16 52	958	927	11 37	31
14	8.7	13 7	22.9	— 12.0	20 5	34.9	577	21 15	622	504	20 30	118	—	19 37	1109	919	21 57	190
15	7.8	16 5	22.6	— 9.1	21 6	31.7	552	15 54	622	455	19 7	167	968	18 12	1078	926	1 26	152
16	7.2	14 32	16.1	— 2.5	23 17	18.6	549	21 29	669	516	12 0	153	957	16 54	984	946	5 10	38
17	7.6	13 5	11.5	1.2	0 0	10.3	570	22 13	602	539	0 3	63	942	16 50	955	920	1 26	35
18	7.9	13 9	14.0	— 1.0	22 20	15.0	575	23 24	633	545	18 31	88	950	17 55	982	939	4 2	43
19	7.0	20 33	14.7	— 4.6	18 19	19.3	571	20 25	625	527	21 29	98	949	18 21	999	929	11 33	70
20	6.5	6 50	16.1	— 11.4	22 38	27.5	564	16 7	611	512	19 29	99	958	17 59	1016	916	24 0	100
21	7.7	5 50	38.6	— 14.5	17 50	53.1	526	15 59	674	375	7 56	299	954	15 53	1103	829	6 3	274
22	7.4	13 6	14.7	— 1.9	17 28	16.6	555	22 26	605	494	9 18	111	952	17 34	980	933	0 6	47
23	6.4	13 2	15.0	0.1	1 47	14.9	564	21 2	615	529	10 40	86	943	16 44	963	926	3 51	37
24	7.8	13 24	16.1	3.4	23 58	12.7	570	19 17	594	541	9 30	53	946	17 52	957	929	11 15	28
25	8.2	12 15	16.4	3.2	0 11	13.2	572	0 46	601	538	9 40	63	948	17 16	964	926	11 10	38
26	7.8	12 56	12.6	2.6	8 33	10.0	574	0 17	589	548	9 27	41	949	7 43	956	934	10 35	22
27	7.6	13 6	11.6	3.7	8 30	7.9	577	20 56	590	557	9 56	33	952	7 20	959	938	11 23	21
28	7.7	14 24	12.2	4.1	8 33	8.1	579	19 7	591	557	10 38	34	954	8 7	963	944	11 56	19
29	7.2	13 15	10.8	2.6	8 50	8.2	582	20 13	592	555	10 40	37	950	7 20	959	937	12 37	22
30	7.2	13 57	11.3	2.5	5 17	8.8	586	18 14	598	565	10 13	33	948	7 17	955	939	10 54	16
Mean	7.9	—	16.3	— 0.9	—	17.2	575	—	615	533	—	82	948	—	980	928	—	52
No. of Days used.	30	—	30	30	—	30	30	—	30	30	—	30	29	—	30	30	—	30
OCT.	13° +	h m	13° +	13° +	h m		18000γ + h m	18000γ +	18000γ +	h m	γ		42000γ + h m	42000γ +	42000γ +	h m	γ	
1	7.3	13 26	10.6	3.7	8 21	6.9	591	21 28	605	573	11 54	32	946	7 9	952	939	11 40	13
2	7.7	13 20	13.3	2.8	8 22	10.5	587	18 55	603	565	10 44	38	951	21 32	968	939	11 50	29
3	6.9	14 41	12.6	1.2	21 32	11.4	(592)	7 42	618	558	20 29	60	957	22 10	975	941	11 18	34
4	8.4	6 7	14.0	3.3	3 14	10.7	584	4 30	635	530	11 13	105	953	16 10	967	930	6 21	37
5	7.3	13 19	13.5	1.9	8 58	11.6	582	23 7	611	553	11 37	58	958	16 11	969	945	13 24	24
6	7.4	13 45	14.7	2.2	8 33	12.5	586	14 25	595	561	16 42	34	955	17 9	972	932	12 8	40
7	7.8	13 57	16.1	0.8	22 8	15.3	569	3 45	618	532	10 50	86	964	17 24	996	942	5 53	54
8	8.0	12 13	15.1	1.6	0 6	13.5	575	23 50	606	553	9 45	53	965	16 30	984	950	2 34	34
9	7.6	12 20	12.9	3.4	0 10	9.5	581	0 43	606	556	9 30	50	963	15 50	973	954	10 43	19
10	8.1	12 50	13.6	4.7	8 4	8.9	583	2 56	596	558	11 7	38	964	17 20	974	949	10 57	25
11	8.4	12 24	15.2	4.6	5 4	10.6	590	21 37	614	566	10 18	48	959	17 31	967	945	11 57	22
12	7.8	13 14	13.0	3.0	8 54	10.0	588	18 13	610	552	10 36	58	956	18 11	964	942	12 38	22
13	7.5	14 0	17.0	— 1.9	21 52	18.9	592	19 32	641	540	11 47	101	954	22 0	969	933	11 54	36
14	5.3	12 34	17.7	— 18.4	22 10	36.1	576	0 15	705	459	23 37	246	954	18 10	997	924	0 58	73
15	—	19 28	61.4	— 50.4	23 8	111.8	503	19 24	754	—	—	—	935	—	—*	648	22 17	—
16	5.3	0 9	22.0	— 9.2	1 10	31.2	519	22 47	574	365	0 10	209	976	7 32	1003	752	0 7	251
17	7.1	12 49	12.8	1.2	1 12	11.6	548	21 4	565	510	13 14	55	975	13 52	990	968	11 47	22
18	7.1	13 3	13.1	2.8	19 10	10.3	553	23 38	571	527	9 10	44	969	16 10	982	955	12 17	27
19	8.2	14 40	20.0	— 0.7	17 0	20.7	558	14 40	618	508	16 29	110	964	17 8	1003	944	11 40	59
20	7.2	13 16	13.5	3.2	9 14	10.3	560	21 44	575	532	10 7	43	960	16 31	971	943	10 54	28
21	6.6	12 40	10.3	3.3	8 25	7.0	564	19 10	574	549	10 27	25	959	15 50	961	948	10 19	19
22	6.7	12 40	10.8	3.0	8 48	7.8	565	20 52	577	543	10 28	34	956	14 45	963	944	10 40	19
23	6.6	13 40	10.2	2.6	8 42	7.6	570	22 53	582	549	11 52	33	953	16 10	959	943	11 0	16
24	7.2	12 20	12.8	2.4	21 40	10.4	579	19 12	597	505	10 20	32	948	4 52	953	935	10 47	18
25	7.4	16 37	18.3	— 12.9	18 3	31.2	545	4 7	631	475	16 57	156	960	16 48	1024	911	6 3	113
26	6.5	13 7	12.1	1.8	0 43	10.3	557	22 8	577	530	11 40	47	954	16 3	960	939	10 20	21
27	5.8	13 39	13.2	1.8	19 35	11.4	562	0 37	594	545	10 5	49	954	17 59	966	944	11 38	22
28	6.7	14 10	14.9	2.6	0 0	12.3	566	22 25	587	530	13 40	57	95					

TABLE (A) 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.	Mean Value for the Day.	Maximum.	Minimum.	Range.	Mean Value for the Day.	Maximum.
1926	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
NOV.	13° +	13° +	13° +	13° +	18000γ +	18000γ +	18000γ +	18000γ +	γ	42000γ +	42000γ +	42000γ +	42000γ +	γ	γ	γ	γ	γ
1	4.9	12 25	12.8	— 4.9	19 34	17.7	562	0 5	581	525	21 37	56	953	22 14	966	940	10 2	26
2	6.0	0 45	14.6	— 3.6	23 14	18.2	572	22 40	615	535	11 20	80	946	15 5	952	932	1 48	20
3	6.4	11 32	13.7	— 2.6	15 57	16.3	558	23 40	591	506	10 4	85	951	16 6	976	939	10 4	37
4	6.2	11 28	10.5	— 3.1	18 14	13.6	568	0 51	581	550	12 3	31	948	16 26	959	936	10 55	23
5	6.2	12 55	10.2	2.7	8 20	7.5	572	23 37	585	551	9 59	34	948	0 0	954	942	11 7	12
6	6.0	13 37	10.5	1.8	9 21	8.7	579	4 20	597	553	10 40	44	944	15 3	951	937	12 24	14
7	5.9	12 40	9.7	2.6	8 30	7.1	577	20 15	587	554	9 59	33	945	0 34	948	937	10 58	11
8	6.2	12 8	9.4	3.2	8 47	6.2	581	19 32	591	548	11 2	43	944	14 18	950	938	10 50	12
9	5.7	13 1	9.3	3.4	8 47	5.9	579	19 53	592	558	11 22	34	942	17 4	948	934	11 58	14
10	6.3	11 7	9.5	4.0	8 18	5.5	582	22 20	590	560	11 40	30	940	17 3	947	929	11 34	18
11	6.2	13 45	9.9	3.4	23 16	6.5	587	17 54	606	575	11 45	31	939	17 52	946	932	11 42	14
12	5.8	12 9	11.8	0.2	0 38	11.6	583	0 10	602	558	12 40	44	938	17 28	945	929	11 45	16
13	5.7	12 3	8.4	3.5	9 3	4.9	581	21 3	591	561	11 54	30	—	—	—	—	—	—
14	6.1	12 37	10.2	3.0	8 16	7.2	583	18 40	595	558	11 20	37	936	14 40	942	929	10 22	13
15	6.5	12 31	11.8	3.0	9 8	8.8	578	6 11	593	546	12 4	47	938	14 50	946	930	10 40	16
16	5.9	12 40	9.9	2.3	8 50	7.6	582	21 43	593	559	11 36	34	937	14 27	946	928	11 36	18
17	5.7	12 40	8.1	3.1	8 42	5.0	588	22 50	594	577	10 16	17	935	14 8	941	927	10 43	14
18	5.8	13 39	11.5	2.2	23 7	9.3	584	22 53	601	556	10 57	45	934	15 0	944	926	10 27	18
19	5.5	12 58	8.9	1.7	21 20	7.2	588	16 39	600	573	11 16	27	932	21 28	938	921	11 24	17
20	5.8	12 37	8.9	2.6	9 15	6.3	586	5 44	595	568	12 27	27	932	16 8	938	923	11 0	15
21	5.7	13 6	11.8	— 14.2	21 33	26.0	585	21 40	635	548	21 15	87	931	21 34	950	917	11 58	33
22	5.3	12 7	8.6	0.1	21 45	8.5	576	22 5	592	555	16 34	37	936	17 7	940	929	10 36	20
23	6.0	5 27	10.6	3.1	15 41	7.5	579	5 40	603	550	15 24	53	935	16 7	949	927	5 59	22
24	5.5	2 13	9.5	2.0	23 5	7.5	576	2 34	603	556	10 9	47	932	19 20	940	923	12 3	17
25	5.3	13 24	7.5	1.9	22 53	5.6	578	5 6	585	563	11 36	22	929	16 56	938	921	11 4	17
26	5.8	13 51	8.8	3.4	8 51	5.4	583	17 35	597	573	14 19	24	927	5 28	933	914	10 20	19
27	5.7	12 18	8.9	1.5	24 0	7.4	583	18 30	595	568	10 40	27	930	21 16	934	918	11 14	16
28	6.0	13 32	12.0	— 9.3	17 33	21.3	561	21 14	602	493	19 32	109	941	17 32	983	927	11 23	56
29	7.1	13 23	20.1	— 7.4	0 50	27.5	544	5 47	594	485	9 28	109	946	14 51	987	906	1 53	81
30	5.4	13 45	9.2	3.4	8 49	5.8	564	19 13	578	537	10 50	41	943	0 0	951	937	9 40	14
Mean	5.9	—	10.5	0.4	—	10.1	577	—	595	550	—	45	939	—	950	928	—	22
No. of Days used.	30	—	30	30	—	30	30	—	30	30	—	30	29	—	29	29	—	29
DEC.	13° +	h m	13° +	13° +	h m	h m	18000γ +	h m	18000γ +	18000γ +	h m	γ	42000γ +	h m	42000γ +	42000γ +	h m	γ
1	5.0	13 14	8.2	2.2	9 13	6.0	569	21 8	581	549	11 50	32	941	18 52	945	932	11 40	13
2	5.2	13 35	8.5	2.1	9 12	6.4	577	5 2	588	563	13 46	25	937	16 9	943	930	12 14	13
3	6.0	14 4	10.6	4.0	8 8	6.6	579	22 9	610	542	14 45	68	939	15 10	950	928	9 39	22
4	5.6	12 39	8.7	2.8	6 42	5.9	584	0 14	603	563	12 12	40	936	16 6	942	928	7 53	14
5	5.3	12 57	8.0	2.5	4 50	5.5	579	4 21	603	561	11 20	42	936	15 37	942	930	10 58	12
6	5.3	13 43	8.1	0.9	23 3	7.2	583	18 42	594	570	11 0	24	935	15 49	940	930	9 38	10
7	4.9	13 51	8.8	1.2	0 25	7.6	579	19 53	589	561	12 35	28	933	16 10	940	923	10 58	17
8	4.9	14 4	7.1	2.2	9 10	4.9	581	22 50	591	565	12 40	26	935	16 12	941	926	10 51	15
9	4.9	12 54	8.0	2.5	9 14	5.5	588	5 32	597	573	11 20	24	932	17 50	938	923	11 26	15
10	5.5	13 17	11.1	2.6	24 0	8.5	592	15 18	612	575	12 54	37	930	17 6	936	920	12 53	16
11	5.5	13 57	11.3	2.7	0 7	8.6	585	13 29	605	570	12 20	35	933	17 31	938	927	10 52	11
12	4.9	12 55	7.9	2.0	21 53	5.9	585	9 45	609	567	20 52	42	931	21 12	939	918	10 44	21
13	5.3	13 41	8.5	1.5	23 50	7.0	581	23 24	607	565	12 4	42	933	16 35	940	924	12 6	16
14	5.2	12 54	8.9	1.4	0 3	7.5	584	21 40	593	565	10 37	28	932	16 10	937	924	10 47	13
15	4.7	14 5	8.5	— 4.8	22 59	13.3	579	23 10	601	539	17 54	62	938	18 7	952	927	10 46	25
16	5.3	13 16	13.1	— 3.8	0 6	16.9	560	5 35	597	535	11 42	62	943	20 12	963	922	5 54	41
17	4.4	12 47	8.7	— 0.8	0 20	9.5	575	19 13	604	557	11 20	47	940	0 32	947	934	11 48	13
18	4.8	13 20	8.3	1.5	22 51	6.8	583	2 4	595	556	10 35	39	937	15 1	944	928	12 7	16
19	5.1	12 53	8.4	2.3	23 40	6.1	584	19 29	599	569	12 32	30	935	15 58	942	927	10 16	15
20	4.5	13 58	9.7	— 13.3	23 6	23.0	581	22 43	607	555	19 10	52	936	19 42	947	921	22 57	26
21	3.7	12 59	9.2	— 6.3	0 50	15.5	573	20 20	594	551	17 43	43	935	17 53	950	924	10 16	26
22	5.1	12 59	8.8	2.1	20 24	6.7	582	20 34	597	563	11 0	34	936	15 47	942	925	10 18	17
23	4.8	14 3	15.1	— 6.2	16 48	21.3	562	8 45	608	486	19 27	122	945	16 46	992	921	11 19	71
24	5.6	12 10	11.6	0.1	20 54	11.5	556	20 10	573	514	12 55	59	946	14 50	959	938	12 12	21
25	5.3	12 54	10.2	2.1	17 46	8.1	567	6 4	582	542	12 41	40	940	15 8	948	933	12 24	15
26	4.8	12 59	7.7	2.1	4 57	5.6	578	4 30	594	560	10 58	34	935	16 4	940	929	10 53	11
27	4.7	13 53	11.0	— 1.2	19 44	12.2	572	7 26	596	530	19 25	66	937	20 20	954	928	9 48	26
28	3.9	14 10	8.7	— 11.1	20 2	19.8	573	20 26	594	547	19 50	47	936	20 10	947	928	12 32	19
29	4.5	13 40	11.3	— 3.5	20 57	14.8	573	21 6	609	529	13 55	80	936	18 7	948	925	3 24	23
30	4.3	12 0	7.2	0.9	0 30	6.3	580	0 54	594	565	10 28	29	935	15 50	942	930	12 40	12
31	4.6	13 3	8.0	1.0	17 16	7.0	580	20 5	596	558	17 10	38	934	15 28	944	924	12 33	20
Mean	5.0	—	9.3	— 0.3	—	9.6	578	—	598	555	—	43	936	—	946	927	—	19
No. of Days used.	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31	31	—	31

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

"All Days."

DECLINATION WEST.

Month and Season, 1926.	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	-2.1	-1.2	-0.8	-0.9	-0.9	-0.5	-0.7	-0.8	-0.4	+0.9	+2.0	+3.3	+3.7	+2.9	+2.0	+1.0	+0.7	+0.8	+0.2	-0.9	-2.1	-2.1	-2.0
Feb.	-2.4	-1.8	-1.6	-1.1	-1.1	-1.1	-1.0	-1.5	-2.1	-1.8	+0.2	+2.6	+4.7	+5.4	+5.2	+3.8	+1.8	+0.6	+0.7	-0.8	-1.8	-2.8	-3.0	-2.5
Mar.	-2.7	-2.2	-1.7	-1.9	-1.3	-1.0	-0.9	-1.9	-3.0	-2.3	+0.1	+3.4	+5.8	+6.9	+6.3	+4.4	+2.9	+0.2	-1.0	-1.2	-2.2	-2.3	-2.7	-2.4
April	-1.2	-1.4	-1.2	-1.4	-1.4	-2.4	-2.9	-4.0	-4.2	-2.7	0.0	+3.4	+5.8	+6.8	+5.9	+3.9	+2.3	+0.8	-0.4	-0.8	-1.5	-1.7	-1.4	-1.2
May	-0.5	-1.2	-0.9	-1.2	-1.9	-3.1	-4.1	-4.5	-4.8	-3.0	0.0	+3.3	+5.4	+6.2	+5.8	+4.3	+2.8	+1.3	0.0	-0.3	-0.4	-0.5	-0.9	-0.8
June	-1.0	-1.9	-1.9	-1.8	-2.7	-4.7	-5.6	-5.6	-5.1	-2.8	0.0	+3.2	+5.6	+6.6	+6.8	+5.5	+3.8	+2.0	+0.8	+0.1	0.0	-0.2	-0.7	-0.9
July	-1.0	-1.2	-1.5	-1.3	-2.3	-3.7	-4.5	-5.0	-4.7	-2.7	-0.2	+3.1	+5.4	+6.4	+6.3	+4.8	+3.2	+1.7	+0.4	-0.2	-0.5	-0.5	-0.8	-1.0
Aug.	-1.5	-1.9	-1.9	-1.7	-2.2	-3.2	-4.0	-4.4	-3.9	-1.7	+0.9	+3.8	+6.0	+6.7	+5.6	+3.9	+1.9	+0.4	-0.1	-0.1	-0.4	-0.4	-0.7	-1.2
Sept.	-2.0	-1.9	-1.0	-1.4	-1.6	-1.0	-1.8	-2.7	-3.1	-1.8	+0.7	+3.8	+5.8	+6.1	+5.4	+3.5	+1.6	+0.4	-0.3	-1.0	-1.3	-2.0	-2.7	-2.5
Oct.	-1.5	-1.9	-1.3	-1.2	-1.1	-1.0	-1.2	-2.0	-2.7	-1.9	+0.6	+3.2	+4.7	+4.9	+4.2	+3.2	+2.8	+1.0	-0.1	-0.4	-1.0	-2.1	-2.2	-1.9
Nov.	-1.4	-0.5	-0.4	-0.3	-0.4	-0.6	-0.8	-1.2	-1.7	-1.5	+0.5	+2.4	+3.4	+3.3	+2.5	+1.6	+0.9	+0.5	-0.3	-0.6	-0.9	-1.5	-1.7	-1.8
Dec.	-1.5	-0.9	-0.5	0.0	-0.3	-0.5	-0.6	-0.7	-1.0	-1.1	-0.1	+1.5	+2.6	+3.4	+2.9	+2.0	+1.0	+0.2	0.0	-0.8	-1.5	-1.4	-1.6	-2.0
Year	-1.53	-1.58	-1.27	-1.18	-1.43	-1.93	-2.33	-2.85	-3.09	-1.98	+0.30	+2.98	+4.88	+5.53	+4.98	+3.58	+2.17	+0.82	+0.04	-0.49	-1.03	-1.46	-1.71	-1.68
Winter	-1.75	-1.33	-0.93	-0.55	-0.68	-0.78	-0.73	-1.03	-1.40	-1.20	+0.38	+2.13	+3.50	+3.95	+3.38	+2.35	+1.18	+0.50	+0.30	-0.50	-1.28	-1.95	-2.10	-2.08
Equinox	-1.85	-1.85	-1.30	-1.48	-1.35	-1.35	-1.70	-2.65	-3.25	-2.18	+0.35	+3.45	+5.53	+6.18	+5.45	+3.75	+2.40	+0.60	-0.45	-0.85	-1.50	-2.03	-2.25	-2.00
Summer	-1.00	-1.55	-1.55	-1.50	-2.28	-3.68	-4.55	-4.88	-4.63	-2.55	+0.18	+3.35	+5.60	+6.48	+6.13	+4.63	+2.93	+1.35	+0.28	-0.13	-0.33	-0.40	-0.78	-0.98

INCLINATION.

Jan.	-0.1	0.0	0.0	-0.1	-0.4	-0.5	-0.5	-0.4	-0.1	+0.4	+0.6	+0.5	+0.5	+0.5	+0.6	+0.4	+0.2	-0.3	-0.5	-0.2	-0.2	-0.2	0.0	0.0
Feb.	-0.1	0.5	-0.4	-0.3	-0.4	-0.6	-0.7	-0.6	-0.2	+0.4	+0.8	+0.9	+0.9	+0.8	+0.3	+0.2	0.0	-0.2	-0.1	+0.3	0.0	-0.1	+0.1	0.0
Mar.	-0.6	-0.6	-0.5	-0.4	-0.6	-0.8	-0.7	-0.5	+0.2	+0.8	+1.2	+1.2	+1.0	+0.7	+0.6	+0.3	+0.2	+0.3	+0.2	+0.2	-0.1	-0.1	-0.8	-0.7
April	-0.8	-0.5	-0.4	-0.4	-0.5	-0.6	-0.3	+0.2	+0.9	+1.4	+1.4	+1.3	+0.9	+0.5	+0.7	+0.3	+0.1	-0.3	-0.4	-0.5	-0.7	-0.7	-0.7	-0.8
May	-0.5	-0.6	-0.4	-0.3	-0.2	+0.1	+0.4	+0.7	+0.9	+1.2	+1.3	+1.2	+0.9	+0.8	+0.4	0.0	-0.5	-0.7	-0.7	-0.7	-0.7	-0.8	-0.8	-0.6
June	-0.4	-0.3	-0.3	-0.3	-0.2	+0.2	+0.6	+1.0	+1.2	+1.4	+1.3	+0.9	+0.7	+0.6	0.0	-0.1	-0.4	-0.8	-1.0	-0.9	-0.8	-0.7	-0.6	-0.5
July	-0.4	-0.3	-0.3	-0.3	-0.2	0.0	+0.2	+0.6	+0.9	+1.2	+1.1	+0.8	+0.6	+0.4	+0.3	0.0	-0.3	-0.4	-0.5	-0.6	-0.6	-0.4	-0.4	-0.3
Aug.	-0.4	-0.5	-0.3	-0.3	-0.2	0.0	+0.3	+0.7	+1.2	+1.6	+1.2	+0.8	+0.2	+0.1	+0.2	+0.1	-0.1	-0.2	-0.5	-0.7	-0.7	-0.6	-0.7	-0.6
Sept.	-0.5	-0.7	-0.6	-0.8	-0.6	-0.6	-0.1	+0.4	+0.7	+1.0	+1.1	+1.0	+0.6	+0.5	+0.4	+0.1	0.0	+0.1	+0.1	+0.1	+0.1	-0.3	-0.5	-0.5
Oct.	-0.8	-0.4	-0.5	-0.5	-0.7	-0.8	-0.5	-0.2	+0.3	+0.7	+0.8	+0.8	+0.5	+0.3	+0.2	+0.2	+0.5	+0.2	+0.2	-0.1	+0.2	+0.1	0.0	-0.4
Nov.	-0.2	-0.3	-0.6	-0.7	-0.5	-0.6	-0.6	-0.3	+0.2	+0.7	+0.9	+1.0	+0.8	+0.6	+0.3	+0.4	+0.2	-0.1	-0.2	0.0	-0.1	-0.2	-0.3	-0.2
Dec.	-0.1	-0.2	-0.2	-0.3	-0.5	-0.6	-0.6	-0.5	-0.4	+0.1	+0.5	+0.7	+0.6	+0.6	+0.6	+0.6	+0.5	+0.2	+0.2	+0.2	0.0	-0.1	-0.1	-0.1
Year	-0.41	-0.41	-0.38	-0.39	-0.42	-0.40	-0.21	+0.09	+0.48	+0.91	+1.02	+0.93	+0.68	+0.53	+0.38	+0.21	+0.03	-0.18	-0.25	-0.24	-0.33	-0.36	-0.41	-0.39
Winter	-0.13	-0.25	-0.30	-0.35	-0.45	-0.58	-0.60	-0.45	-0.13	+0.40	+0.70	+0.78	+0.70	+0.63	+0.45	+0.40	+0.23	-0.10	-0.10	+0.08	-0.08	-0.15	-0.08	-0.08
Equinox	-0.68	-0.55	-0.50	-0.53	-0.60	-0.70	-0.40	-0.03	-0.53	+0.98	+1.13	+1.08	+0.75	+0.50	+0.48	+0.23	+0.20	+0.08	+0.03	-0.08	-0.23	-0.30	-0.53	-0.60
Summer	-0.43	-0.43	-0.33	-0.30	-0.20	+0.08	+0.38	+0.75	+1.05	+1.35	+1.23	+0.93	+0.60	+0.48	+0.23	0.00	-0.33	-0.53	-0.68	-0.73	-0.70	-0.63	-0.63	-0.50

HORIZONTAL FORCE.

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	-2	-2	-1	+4	+6	+6	+5	0	-8	-11	-9	-9	-7	-6	-3	+1	+8	+10	+5	+5	+5	+1	0
Mar.	+2	+6	+4	+3	+4	+7	+8	+7	+2	-8	-15	-17	-17	-12	-3	0	+4	+6	+2	+0	+4	+4	+0	+1
Apr.	+7	+5	+5	+4	+7	+10	+8	+6	-4	-14	-22	-23	-19	-12	-7	+1	+3	+2	+3	+2	+6	+5	+12	+9
May	+11	+6	+6	+5	+7	+9	+4	-3	-14	-24	-27	-26	-19	-11	-8	-1	+4	+10	+11	+12	+14	+13	+11	+12
June	+8	+7	+5	+3	+2	-2	-6	-11	-16	-22	-26	-25	-20	-14	-5	+4	+13	+17	+18	+16	+14	+15	+13	+10
July	+7	+4	+3	+5	+3	-2	-9	-15	-20	-24	-25	-20	-17	-13	-1	+3	+11	+19	+22	+19	+16	+13	+10	+8
Aug.	+6	+4	+4	+4	+4	+1	-2	-8	-14	-21	-22	-19	-15	-11	-5	+2	+8	+11	+14	+14	+12	+9	+7	+6
Sept.	+6	+6	+4	+5	+4	+1	-3	-10	-19	-26	-23	-18	-10	-6	-4	+1	+6	+7	+11	+13	+12	+11	+11	+9
Oct.	+6	+8	+7	+9	+7	+6	0	-7	-12	-18	-21	-20	-13	-8	-4	+4	+7	+7	+5	+4	+7	+8	+9	+6
Nov.	+9	+3	+4	+6	+9	+10	+6	+3	-5	-12	-16	-15	-10	-5	-1	0	-1	+3	+5	+5	0	+1	0	+4
Dec.	+3	+4	+8	+9	+7	+9	+8	+4	-4	-12	-16	-17	-13	-8	-4	-4	0	+3	+4	+2	+3	+4	+5	+3
Year	+1	+2	+2	+4	+6	+8	+8	+7	+5	-3	-10	-12	-11	-9	-7	-6	-4	0	0	-1	+2	+3	+2	+2
Winter	+5.4	+4.4	+4.2	+4.7	+5.3	+5.3	+2.3	-1.8	-8.4	-16.0	-19.5	-18.4	-14.4	-9.7	-4.6	+0.1	+4.3	+7.8	+8.8	+7.6	+7.9	+7.6	+6.8	+5.8
Equinox	+1.3	+2.5	+3.0	+3.8	+5.3	+7.5	+7.5	+5.8	+0.8	-7.8	-13.0	-13.8	-12.5	-9.0	-5.0	-3.3	+0.3	+4.3	+4.0	+1.5	+3.5	+4.0	+2.0	+1.5
Summer	+8.3	+5.5	+5.5	+6.0	+7.5	+8.8	+4.5	-0.3	-8.8	-17.0	-21.5	-21.0	-15.3	-9.0	-5.0	+1.0	+3.3	+5.5	+6.0	+5.8	+6.8	+6.8	+8.0	+7.8
Year	+6.8	+5.3	+4.0	+4.3	+3.3	-0.5	-5.0	-11.0	-17.3	-23.3	-24.0	-20.5	-15.5	-11.0	-3.8	+2.5	+9.5	+13.5	+16.3	+15.5	+13.5	+12.0	+10.3	+8.3

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

"All Days."

NORTH COMPONENT.

Month and season, 1926.	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 + 1	γ + 1	γ 0	γ 0	γ + 5	γ + 7	γ + 6	γ + 6	γ + 1	γ - 7	γ - 12	γ - 11	γ - 13	γ - 11	γ - 9	γ - 5	γ 0	γ + 7	γ + 9	γ + 5	γ + 6	γ + 8	γ + 4	γ + 3
Feb.	+ 5	+ 8	+ 6	+ 4	+ 5	+ 8	+ 9	+ 9	+ 5	- 6	- 15	- 20	- 22	- 18	- 9	- 5	+ 2	+ 5	+ 1	+ 1	+ 6	+ 7	+ 4	+ 4
Mar.	+ 10	+ 8	+ 7	+ 6	+ 8	+ 11	+ 9	+ 8	0	- 11	- 22	- 27	- 26	- 20	- 15	- 4	- 1	+ 2	+ 4	+ 3	+ 9	+ 8	+ 15	+ 12
April	+ 12	+ 8	+ 7	+ 7	+ 9	+ 12	+ 8	+ 2	- 8	- 20	- 26	- 30	- 26	- 19	- 15	- 6	+ 1	+ 9	+ 11	+ 13	+ 16	+ 15	+ 12	+ 13
May	+ 8	+ 8	+ 6	+ 4	+ 4	+ 2	- 1	- 5	- 10	- 18	- 25	- 29	- 26	- 21	- 12	- 1	+ 9	+ 15	+ 18	+ 16	+ 14	+ 15	+ 14	+ 11
June	+ 8	+ 6	+ 5	+ 7	+ 6	+ 4	- 2	- 8	- 13	- 20	- 24	- 23	- 24	- 21	- 9	- 4	+ 6	+ 16	+ 20	+ 18	+ 16	+ 13	+ 11	+ 9
July	+ 7	+ 5	+ 6	+ 6	+ 7	+ 6	+ 4	- 2	- 8	- 17	- 21	- 22	- 21	- 19	- 13	- 4	+ 4	+ 9	+ 13	+ 14	+ 12	+ 9	+ 8	+ 7
Aug.	+ 8	+ 8	+ 6	+ 7	+ 7	+ 5	+ 2	- 4	- 14	- 23	- 24	- 22	- 17	- 14	- 11	- 4	+ 4	+ 6	+ 11	+ 13	+ 12	+ 11	+ 12	+ 10
Sept.	+ 8	+ 10	+ 8	+ 11	+ 9	+ 7	+ 2	- 4	- 8	- 15	- 21	- 24	- 20	- 15	- 11	0	+ 5	+ 6	+ 5	+ 5	+ 8	+ 10	+ 12	+ 9
Oct.	+ 11	+ 5	+ 6	+ 7	+ 10	+ 11	+ 7	+ 5	- 2	- 9	- 16	- 19	- 16	- 11	- 6	- 4	- 5	+ 2	+ 5	+ 5	+ 1	+ 4	+ 3	+ 6
Nov.	+ 5	+ 5	+ 8	+ 9	+ 7	+ 10	+ 9	+ 5	- 2	- 10	- 16	- 20	- 17	- 12	- 7	- 6	- 1	+ 1	+ 4	+ 3	+ 4	+ 6	+ 7	+ 5
Dec.	+ 3	+ 3	+ 3	+ 4	+ 6	+ 8	+ 9	+ 8	+ 6	- 2	- 10	- 14	- 14	- 13	- 10	- 8	- 5	0	0	0	+ 4	+ 5	+ 4	+ 4
Year	+ 7.2	+ 6.3	+ 5.7	+ 6.0	+ 6.9	+ 7.6	+ 5.2	+ 1.7	- 4.4	- 13.2	- 19.3	- 21.8	- 20.2	- 16.2	- 10.6	- 4.3	+ 1.6	+ 6.5	+ 8.4	+ 8.0	+ 9.0	+ 9.3	+ 8.8	+ 7.8
Winter	+ 3.5	+ 4.3	+ 4.3	+ 4.3	+ 5.8	+ 8.3	+ 8.3	+ 7.0	+ 2.5	- 6.3	- 13.3	- 16.3	- 16.5	- 13.5	- 8.8	- 6.0	- 1.0	+ 3.3	+ 3.5	+ 2.3	+ 5.0	+ 6.5	+ 4.8	+ 4.0
Equinox	+ 10.3	+ 7.8	+ 7.0	+ 7.8	+ 9.0	+ 10.3	+ 6.5	+ 2.8	- 4.5	- 13.8	- 21.3	- 25.0	- 22.0	- 16.3	- 11.8	- 3.5	0.0	+ 4.8	+ 6.3	+ 6.5	+ 8.5	+ 9.3	+ 10.5	+ 10.0
Summer	+ 7.8	+ 6.8	+ 5.8	+ 6.0	+ 6.0	+ 4.3	+ 0.8	- 4.8	- 11.3	- 19.5	- 23.6	- 24.0	- 22.0	- 18.8	- 11.3	- 3.3	+ 5.8	+ 11.5	+ 15.5	+ 15.3	+ 13.5	+ 12.0	+ 11.3	+ 9.3

WEST COMPONENT.

Month and season, 1926.	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.	-9	-12	-7	-4	-4	-3	-1	-3	-4	-4	+2	+8	+15	+18	+14	+10	+6	+6	+7	+2	-4	-10	-11	-11
Feb.	-12	-8	-8	-5	-5	-4	-4	-6	-11	-11	-2	+10	+21	+26	+27	+20	+10	+5	+4	-4	-9	-14	-16	-13
Mar.	-13	-11	-8	-9	-5	-3	-9	-17	-15	-5	+13	+26	+26	+34	+32	+23	+16	+2	-5	-6	-10	-11	-12	-11
April	-4	-6	-5	-6	-6	-11	-14	-22	-25	-20	-6	+12	+26	+33	+29	+20	+13	+7	0	-2	-5	-6	-5	-4
May	-1	-5	-4	-6	-10	-17	-23	-26	-29	-21	-6	+12	+24	+30	+30	+24	+18	+11	+4	+2	+1	+1	-2	-2
June	-4	-9	-9	-8	-14	-25	-32	-33	-32	-20	-6	+12	+26	+32	+36	+30	+23	+15	+9	+5	+4	+2	-1	-3
July	-4	-5	-7	-6	-11	-19	-24	-28	-28	-19	-6	+12	+25	+31	+32	+26	+19	+11	+5	+2	0	-1	-3	-4
Aug.	-7	-9	-9	-8	-11	-17	-22	-26	-25	-15	-1	+16	+29	+34	+29	+21	+11	+4	+2	+3	+1	0	-1	-4
Sept.	-9	-8	-4	-5	-7	-4	-10	-16	-19	-14	-1	+15	+28	+30	+28	+19	+10	+4	-1	-4	-5	-9	-12	-12
Oct.	-6	-9	-6	-5	-4	-3	-5	-10	-15	-13	-1	+13	+23	+25	+22	+17	+15	+6	+1	-1	-5	-11	-12	-9
Nov.	-7	-2	0	+1	-1	-1	-2	-5	-10	-11	-1	+9	+15	+16	+12	+8	+5	+3	-1	-3	-4	-7	-8	-9
Dec.	-8	-4	-2	+1	0	-1	-1	-2	-4	-7	-3	+5	+11	+16	+14	+9	+4	+1	0	-4	-7	-7	-8	-10
Year	-7.0	-7.3	-5.8	-5.0	-6.5	-9.0	-11.8	-15.5	-18.3	-14.2	-3.0	+11.4	+22.4	+27.1	+25.4	+18.9	+12.5	+6.3	+2.1	-0.8	-3.6	-6.1	-7.6	-7.7
Winter	-9.0	-6.5	-4.3	-1.8	-2.5	-2.3	-2.0	-4.0	-7.3	-8.3	-1.0	+8.0	+15.5	+19.0	+16.8	+11.8	+6.3	+3.8	+2.5	-2.3	-6.0	-9.5	-10.8	-10.8
Equinox	-8.0	-8.5	-5.8	-6.3	-5.5	-5.3	-8.0	-14.3	-19.0	-15.5	-3.3	+13.3	+25.8	+30.5	+27.8	+19.8	+13.5	+4.8	-1.3	-3.3	-6.3	-9.3	-10.3	-9.0
Summer	-4.0	-7.0	-7.3	-7.0	-11.5	-19.5	-25.3	-28.3	-28.5	-18.8	-4.8	+13.0	+26.0	+31.8	+31.8	+25.3	+17.8	+10.3	+5.0	+3.0	+1.5	+0.5	-1.8	-3.3

VERTICAL COMPONENT.

Month and season, 1926.	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.	-4	-6	-6	-5	-3	-2	-2	-2	-3	-5	-5	-5	-3	+1	+5	+7	+8	+7	+6	+6	+6	+4	+1	0
Feb.	0	-2	-5	-2	-5	-4	-4	-3	-3	-5	-8	-9	-7	-2	+3	+6	+8	+8	+9	+10	+9	+6	+4	+3
Mar.	-4	-8	-7	-5	-5	-5	-5	-3	-4	-6	-10	-13	-11	-4	+4	+12	+12	+13	+12	+10	+10	+7	+2	-3
April	-2	-2	-1	-1	-1	-1	0	+1	-1	-7	-13	-16	-14	-8	+4	+9	+14	+12	+13	+11	+8	+6	+3	0
May	0	-3	-3	-3	-2	0	0	0	-2	-5	-11	-17	-14	-6	+1	+8	+13	+17	+17	+14	+10	+6	+3	+1
June	+1	-2	-2	0	+1	+2	+1	-1	-4	-8	-12	-16	-16	-11	-3	+4	+11	+15	+15	+13	+10	+7	+4	+2
July	+1	0	-1	0	+1	+1	+1	+1	-1	-7	-12	-16	-15	-11	-3	+3	+9	+12	+14	+12	+9	+7	+4	+2
Aug.	0	-2	-1	0	+1	+1	+2	0	-2	-7	-12	-15	-15	-10	-3	+4	+9	+11	+9	+7	+5	+4	+2	+1
Sept.	-3	-4	-5	-6	-5	-5	-3	-3	-3	-8	-11	-13	-8	-1	+4	+13	+17	+19	+16	+13	+7	+3	0	-3
Oct.	-7	-6	-7	-4	-3	-3	-3	-1	-2	-5	-9	-9	-6	-2	+3	+8	+13	+14	+17	+10	+6	+5	-1	-4
Nov.	-1	-2	-2	-2	-2	-1	-2	-2	-2	-4	-6	-6	-3	+1	+4	+5	+6	+5	+4	+4	+3	+2	0	-1
Dec.	0	-1	-1	-2	-2	-1	-2	-2	-2	-4	-6	-5	-4	-1	+3	+5	+7	+6	+5	+5	+4	+3	+1	0
Year	-1.6	-3.2	-3.4	-2.5	-2.1	-1.5	-1.4	-1.4	-2.7	-6.4	-10.1	-11.8	-9.7	-4.5	+1.8	+7.0	+10.6	+11.8	+11.4	+9.6	+7.3	+5.0	+1.9	-0.2
Winter	-1.3	-2.8	-3.5	-2.8	-3.0	-2.0	-2.5	-2.3	-2.5	-4.5	-6.3	-6.3	-4.3	-0.3	+3.8	+5.8	+7.3	+6.5	+6.0	+6.3	+5.5	+3.8	+1.5	+0.5
Equinox	-4.0	-5.0	-5.0	-4.0	-3.5	-3.5	-2.8	-1.5	-2.5	-6.5	-10.8	-12.8	-9.8	-3.8	+3.8	+10.5	+14.0	+14.5	+14.5	+11.0	+7.8	+5.3	+1.0	-2.5
Summer	+0.5	-1.8	-1.8	-0.8	+0.3	+1.0	+1.0	-0.5	-3.0	-8.3	-13.3	-16.3	-15.0	-9.5	-2.0	+4.8	+10.5	+13.8	+13.8	+11.5	+8.5	+6.0	+3.3	+1.5

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

International Quiet Days.

DECLINATION WEST.

Month and Season, 1926.	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.	-0.7	-0.5	-0.7	-0.8	-1.0	-1.5	-1.1	-1.5	-1.7	-1.4	+0.1	+1.3	+2.7	+3.4	+2.7	+2.0	+1.3	+0.7	+0.7	+0.2	-0.6	-0.4	-1.0	-1.7
Feb.	-0.6	-0.3	-0.1	-0.2	-0.6	-0.9	-1.3	-2.0	-2.9	-3.1	-0.7	+2.0	+4.0	+3.8	+3.4	+2.1	+1.0	+0.6	+0.2	-0.4	-0.7	-1.1	-1.2	-0.8
Mar.	-0.5	-1.1	-0.4	-1.0	-1.5	-1.4	-1.5	-2.6	-4.5	-4.2	-1.5	+1.7	+4.9	+6.1	+5.2	+3.3	+1.4	+0.4	-0.3	-0.4	-0.8	-0.7	-0.9	-1.2
April	-0.4	-0.4	-0.6	-1.2	-1.7	-2.4	-3.4	-4.4	-4.6	-3.3	-0.8	+2.1	+5.1	+5.6	+5.2	+3.6	+2.1	+1.0	+0.4	+0.1	+0.1	-0.2	-0.6	-0.6
May	-0.4	-0.6	-0.5	-0.8	-1.3	-2.7	-4.2	-5.5	-6.0	-4.3	-1.3	+2.0	+4.9	+6.0	+5.6	+4.1	+2.8	+1.5	+0.5	+0.2	+0.2	-0.3	-0.2	-0.2
June	-0.8	-0.7	-1.0	-1.5	-2.9	-4.9	-5.6	-6.0	-5.6	-3.4	-0.3	+3.2	+5.7	+6.8	+6.8	+5.2	+3.2	+1.4	+0.2	-0.3	-0.1	-0.2	-0.4	-0.4
July	-0.6	-0.5	-0.8	-1.5	-2.5	-3.8	-4.6	-4.8	-3.8	-2.2	-0.4	+2.4	+4.7	+5.6	+5.6	+4.3	+2.4	+1.2	+0.3	-0.2	-0.3	0.0	-0.1	-0.4
Aug.	-0.5	-1.2	-1.2	-1.4	-2.2	-3.4	-4.2	-4.7	-3.9	-2.0	+1.1	+4.3	+6.4	+6.4	+5.0	+3.0	+1.0	-0.2	-0.5	-0.2	-0.5	-0.6	-0.4	-0.6
Sept.	-0.6	-0.9	-1.4	-1.4	-1.7	-2.3	-2.8	-3.6	-3.8	-2.4	-0.1	+2.6	+4.2	+4.6	+4.0	+2.6	+1.4	+0.6	+0.5	+0.4	0.0	-0.1	-0.1	-0.4
Oct.	-0.7	-0.6	-0.6	-0.7	-0.9	-1.3	-1.6	-2.1	-3.0	-2.2	+0.2	+2.5	+3.3	+3.3	+2.5	+1.7	+1.3	+0.9	+0.5	0.0	-0.5	-1.2	-0.7	-0.7
Nov.	-0.5	-0.3	-0.2	-0.3	-0.5	-0.9	-1.3	-1.9	-2.6	-2.0	+0.3	+2.5	+3.7	+3.2	+2.3	+1.5	+1.0	+0.3	-0.3	-0.4	-0.6	-0.9	-0.8	-0.7
Dec.	-0.9	-0.1	+0.2	+0.4	+0.1	-0.4	-0.7	-1.1	-1.4	-1.6	-0.7	+1.2	+2.3	+2.6	+2.4	+1.7	+0.8	+0.2	-0.1	-0.4	-0.8	-1.0	-1.2	-1.6
Year	-0.60	-0.60	-0.61	-0.87	-1.39	-2.16	-2.69	-3.35	-3.65	-2.68	-0.34	+2.32	+4.33	+4.78	+4.23	+2.93	+1.64	+0.75	+0.18	-0.12	-0.38	-0.56	-0.63	-0.78
Winter	-0.68	-0.30	-0.20	-0.23	-0.50	-0.93	-1.10	-1.63	-2.15	-2.03	-0.25	+1.75	+3.18	+3.25	+2.70	+1.83	+1.03	+0.45	+0.13	-0.25	-0.68	-0.85	-1.05	-1.20
Equinox	-0.55	-0.75	-0.75	-1.08	-1.45	-1.85	-2.33	-3.18	-3.98	-3.03	-0.55	+2.23	+4.38	+4.90	+4.23	+2.80	+1.55	+0.73	+0.28	+0.03	-0.30	-0.55	-0.58	-0.73
Summer	-0.58	-0.75	-0.88	-1.30	-2.23	-3.70	-4.65	-5.25	-4.83	-2.98	-0.48	+2.98	+5.43	+6.20	+5.75	+4.15	+2.35	+1.08	+0.13	-0.13	-0.18	-0.28	-0.28	-0.40

INCLINATION.

Jan.	+0.1	+0.1	+0.2	+0.1	-0.2	-0.3	-0.3	-0.3	-0.1	+0.3	+0.5	+0.7	+0.5	+0.3	+0.4	+0.3	+0.2	+0.2	-0.5	-0.4	-0.4	-0.4	-0.3	-0.1
Feb.	-0.2	-0.2	-0.2	-0.3	-0.5	-0.5	-0.6	-0.5	-0.1	+0.5	+0.7	+1.0	+1.0	+0.9	+0.5	+0.2	+0.1	-0.1	-0.3	-0.3	-0.4	-0.3	-0.4	-0.4
Mar.	-0.2	-0.2	-0.4	-0.2	-0.4	-0.3	-0.3	-0.2	+0.2	+1.0	+1.5	+1.4	+1.4	+0.6	+0.5	+0.2	0.0	-0.1	-0.3	-0.4	-0.5	-0.6	-0.8	-1.0
April	-0.3	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	+0.1	+0.2	+0.5	+0.9	+0.9	+1.0	+0.4	+0.4	+0.1	+0.1	0.0	-0.2	-0.4	-0.4	-0.6	-0.5	-0.5
May	-0.2	-0.3	-0.3	-0.2	-0.3	-0.2	+0.2	+0.3	+0.7	+0.9	+1.2	+1.0	+0.6	+0.7	+0.4	+0.1	-0.1	-0.5	-0.8	-0.7	-0.6	-0.6	-0.7	-0.7
June	-0.3	-0.2	-0.1	-0.1	0.0	+0.3	+0.8	+1.3	+1.4	+1.5	+1.2	+0.7	+0.5	+0.3	-0.1	-0.4	-0.4	-0.7	-0.9	-0.9	-0.9	-0.8	-0.6	-0.6
July	-0.4	-0.2	-0.3	-0.2	-0.2	-0.1	0.0	+0.1	+0.5	+0.9	+0.8	+0.8	+0.5	+0.3	+0.1	-0.2	0.0	-0.1	-0.3	-0.5	-0.6	-0.7	-0.5	-0.4
Aug.	-0.3	-0.4	+0.1	0.0	+0.1	+0.4	+0.6	+0.8	+1.3	+1.1	+1.2	+0.4	-0.3	-0.4	-0.4	-0.2	-0.1	-0.1	-0.5	-0.8	-0.7	-0.5	-0.5	-0.5
Sept.	-0.3	-0.3	-0.3	-0.3	-0.3	-0.1	+0.3	+0.5	+0.9	+1.2	+1.2	+0.8	+0.5	+0.4	+0.3	+0.3	0.0	-0.3	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6
Oct.	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.2	+0.1	+0.5	+0.7	+0.9	+0.9	+0.7	+0.4	+0.3	+0.3	0.0	0.0	-0.3	-0.4	-0.5	-0.6	-0.6	-0.5
Nov.	-0.3	-0.4	-0.4	-0.4	-0.5	-0.5	-0.5	-0.3	+0.3	+1.1	+1.2	+1.3	+1.1	+0.6	+0.2	0.0	0.0	-0.3	-0.3	-0.4	-0.5	-0.6	-0.6	-0.4
Dec.	0.0	0.0	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.2	+0.2	+0.5	+0.7	+0.6	+0.4	+0.4	+0.2	+0.1	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	0.0
Year	-0.22	-0.20	-0.18	-0.19	-0.25	-0.17	-0.03	+0.14	+0.49	+0.86	+0.98	+0.89	+0.58	+0.41	+0.23	+0.08	-0.02	-0.23	-0.45	-0.51	-0.52	-0.54	-0.53	-0.48
Winter	-0.10	-0.13	-0.13	-0.20	-0.38	-0.40	-0.43	-0.35	-0.03	+0.53	+0.73	+0.93	+0.80	+0.55	+0.38	+0.18	+0.10	-0.20	-0.35	-0.35	-0.35	-0.35	-0.35	-0.23
Equinox	-0.25	-0.20	-0.28	-0.25	-0.28	-0.20	-0.08	+0.15	+0.53	+0.95	+1.13	+1.03	+0.63	+0.45	+0.30	+0.23	0.00	-0.15	-0.38	-0.45	-0.50	-0.60	-0.63	-0.65
Summer	-0.30	-0.28	-0.15	-0.13	-0.10	+0.10	+0.40	+0.63	+0.98	+1.10	+1.10	+0.73	+0.33	+0.23	0.00	-0.18	-0.15	-0.35	-0.63	-0.73	-0.70	-0.68	-0.60	-0.55

HORIZONTAL FORCE.

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	-2	-3	-2	+2	+4	+3	+3	0	-5	-10	-13	-10	-6	-5	-4	-1	+4	+8	+7	+7	+6	+5	+1
Mar.	+3	+3	+3	+5	+6	+7	+9	+8	+2	-8	-14	-18	-18	-14	-6	-2	0	+3	+6	+5	+7	+6	+6	+6
April	+4	+3	+5	+3	+6	+5	+5	+4	-3	-16	-26	-28	-20	-13	-7	0	+4	+5	+6	+8	+9	+10	+12	+15
May	+5	+3	+3	+4	+4	+3	0	-4	-7	-17	-20	-23	-14	-11	-3	0	+3	+6	+9	+10	+9	+11	+9	+9
June	+6	+6	+6	+5	+6	+5	0	-4	-11	-18	-25	-24	-18	-16	-8	2	+4	+12	+16	+14	+12	+11	+11	+11
July	+5	+4	+3	+3	+2	-1	-9	-18	-21	-24	-24	-19	-15	-10	-1	+5	+9	+14	+17	+17	+15	+15	+12	+10
Aug.	+6	+4	+4	+3	+4	+3	+1	-1	-7	-15	-16	-16	-12	-8	-3	+3	+2	+5	+8	+10	+11	+11	+8	+6
Sept.	+7	+7	+1	+2	+1	-2	-6	-10	-19	-19	-23	-12	-3	0	+4	+4	+4	+4	+8	+13	+12	+9	+9	+8
Oct.	+5	+5	+5	+5	+5	+2	-2	-5	-13	-19	-21	-17	-12	-8	-6	-4	+1	+5	+8	+10	+10	+10	+10	+10
Nov.	+4	+4	+5	+5	+5	+4	+3	-1	-7	-13	-17	-17	-13	-7	-4	-3	+2	+2	+5	+6	+7	+8	+8	+7
Dec.	+5	+5	+5	+6	+7	+8	+7	+4	-4	-16	-21	-21	-17	-8	-1	+1	+2	+5	+6	+7	+7	+7	+7	+6
Year	0	0	+1	+3	+4	+5	+5	+4	+2	-4	-10	-12	-10	-7	-5	-1	+1	+4	+6	+5	+4	+3	+2	+1
Winter	+4.1	+3.5	+3.2	+3.5	+4.4	+3.6	+1.6	-1.4	-7.3	-14.5	-18.9	-18.3	-13.5	-9.0	-3.8	-0.3	+2.6	+5.8	+8.6	+9.3	+9.2	+8.9	+8.3	+7.5
Summer	+1.8	+1.5	+1.5	+3.0	+4.8	+6.0	+6.0	+4.8	0.0	-8.3	-13.8	-16.0	-13.8	-8.8	-4.3	-1.5	+0.5	+4.0	+6.5	+6.0	+6.3	+5.5	+5.0	+3.5
Equinox	+4.5	+3.8	+4.5	+4.3	+5.0	+3.5	+2.3	-0.8	-7.5	-16.3	-21.0	-21.3	-14.8	-9.8	-5.0	-1.8	+2.5	+4.5	+7.0	+8.5	+8.8	+9.8	+9.8	+10.3
Summer	+6.0	+5.3	+3.5	+3.3	+3.3	+1.3	-3.5	-8.3	-14.5	-19.0	-22.0	-17.8	-12.0	-8.5	-2.0	+2.5	+4.8	+8.8	+12.3	+13.5	+12.5	+11.5	+10.0	+8.8

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

International Quiet Days.

NORTH COMPONENT.

Month and season, 1926.	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	-1	-2	-1	+3	+6	+4	+5	+2	-3	-10	-14	-13	-10	-8	-6	-3	+3	+7	+7	+8	+6	+6	+3
Feb.	+4	+3	+3	+5	+7	+8	+10	+10	+6	-4	-13	-20	-22	-18	-10	-5	-1	+2	+6	+5	+8	+7	+7	+7
Mar.	+5	+4	+5	+4	+8	+7	+7	+7	+3	-10	-23	-29	-26	-20	-13	-4	+2	+4	+6	+8	+10	+11	+13	+16
April	+5	+3	+4	+5	+6	+6	+7	+4	-1	-12	-19	-25	-20	-18	-9	-4	0	+5	+8	+10	+9	+11	+10	+10
May	+6	+7	+6	+6	+7	+8	+5	+3	-3	-12	-23	-26	-24	-23	-15	-7	0	+10	+15	+13	+12	+11	+11	+11
June	+6	+5	+4	+5	+6	+5	-2	-10	-14	-19	-23	-22	-22	-18	-9	-2	+5	+12	+16	+17	+15	+15	+12	+10
July	+7	+5	+5	+5	+7	+8	+7	+5	-2	-12	-15	-19	-18	-15	-10	-2	-1	+3	+7	+10	+11	+11	+8	+6
Aug.	+7	+8	+3	+4	+4	+2	-1	-4	-14	-16	-24	-17	-11	-8	-2	0	+3	+4	+8	+13	+12	+10	+9	+9
Sept.	+6	+6	+7	+7	+7	+5	+2	-1	-8	-16	-20	-20	-17	-14	-11	-7	-1	+4	+7	+9	+10	+10	+10	+10
Oct.	+5	+5	+6	+6	+6	+6	+5	+2	-3	-10	-17	-20	-17	-11	-7	-5	0	+1	+4	+6	+7	+9	+9	+8
Nov.	+6	+5	+5	+6	+7	+9	+8	+6	-1	-13	-21	-24	-21	-12	-4	-1	+1	+5	+6	+7	+8	+8	+8	+7
Dec.	+1	0	+1	+2	+4	+5	+6	+5	+4	-2	-9	-13	-13	-10	-8	-3	0	+4	+6	+5	+5	+4	+3	+3
Year	+4.8	+4.2	+3.9	+4.5	+6.0	+6.3	+4.8	+2.7	-2.6	-10.8	-18.1	-20.8	-18.7	-14.8	-8.8	-3.8	+0.4	+4.8	+8.0	+9.2	+9.6	+9.4	+8.8	+8.3
Winter	+2.8	+1.8	+1.8	+3.0	+5.3	+7.0	+7.0	+6.5	+2.8	-5.5	-13.3	-17.8	-17.3	-12.5	-7.5	-3.8	-0.8	+3.5	+6.3	+6.0	+7.3	+6.3	+6.0	+5.0
Equinox	+5.3	+4.5	+5.5	+5.5	+6.8	+6.0	+5.3	+3.0	-2.3	-12.0	-19.8	-23.5	-20.0	-15.8	-10.0	-5.0	+0.3	+3.5	+6.3	+8.3	+9.0	+10.3	+10.5	+11.0
Summer	+6.5	+6.3	+4.5	+5.0	+6.0	+5.8	+2.3	-1.5	-8.3	-14.8	-21.3	-21.0	-18.8	-16.0	-9.0	-2.8	+1.8	+7.3	+11.5	+13.3	+12.5	+11.8	+10.0	+9.0

WEST COMPONENT.

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
Jan.	-4	-3	-4	-5	-5	-7	-5	-7	-9	-9	-2	+4	+12	+17	+13	+10	+7	+5	+6	+3	-2	-1	-4	-9	
Feb.	-2	-1	0	0	-2	-3	-5	-9	-15	-18	-7	+6	+17	+17	+17	+11	+5	+4	+2	-1	-2	-4	-5	-3	
Mar.	-2	-5	-1	-5	-7	-6	-7	-13	-24	-26	-14	+3	+21	+29	+26	+17	+8	+3	0	0	-2	-1	-2	-3	
April	-1	-1	-2	-5	-8	-12	-17	-23	-26	-21	-9	+6	+24	+27	+27	+19	+12	+7	+4	+3	+3	+2	-1	-1	
May	-1	-2	-1	-3	-5	-13	-22	-30	-34	-27	-13	+5	+22	+28	+28	+21	+16	+11	+6	+4	+4	+1	+2	+2	
June	-3	-3	-5	-7	-15	-26	-32	-36	-34	-23	-7	+13	+27	+34	+36	+29	+19	+11	+5	+2	+3	+2	+1	0	
July	-2	-2	-3	-7	-12	-19	-24	-26	-22	-15	-6	+9	+22	+28	+29	+23	+13	+7	+3	+1	+1	+3	+1	-1	
Aug.	-1	-5	-6	-7	-11	-18	-24	-27	-25	-15	+1	+20	+33	+34	+27	+17	+6	0	-1	+2	0	-1	0	-1	
Sept.	-2	-4	-6	-6	-8	-12	-15	-20	-23	-17	-5	+10	+19	+22	+20	+13	+8	+4	+4	+4	+2	+2	+2	0	
Oct.	-3	-2	-2	-3	-4	-6	-8	-11	-17	-15	-3	+9	+14	+16	+12	+8	+7	+5	+4	+1	-1	-5	-2	-2	
Nov.	-2	-1	0	0	-1	-3	-5	-9	-15	-14	-3	+8	+16	+15	+12	+8	+6	+3	0	-1	-2	-3	-3	-2	
Dec.	-5	-1	+1	+3	+1	-1	-3	-5	-7	-9	-6	+4	+10	+12	+12	+9	+4	+2	+1	-1	-3	-5	-6	-8	
Year	-2.3	-2.5	-2.4	-3.8	-6.4	-10.5	-13.9	-18.0	-20.9	-17.4	-6.2	+8.1	+19.8	+23.3	+21.6	+15.4	+9.3	+5.2	+2.8	+1.4	+0.1	-0.8	-1.4	-2.3	
Winter	-3.3	-1.5	-0.8	-0.5	-1.8	-3.5	-4.5	-7.5	-11.5	-12.5	-4.5	+5.5	+13.8	+15.3	+13.5	+9.5	+5.5	+3.5	+2.3	0.0	-2.3	-3.3	-4.5	-5.5	
Equinox	-2.0	-3.0	-2.8	-4.8	-6.8	-9.0	-11.8	-16.8	-22.5	-19.8	-7.8	+7.0	+19.5	+23.5	+21.3	+14.3	+8.8	+4.8	+3.0	+2.0	+0.5	-0.5	-0.8	-1.5	
Summer	-1.8	-3.0	-3.8	-6.0	-10.8	-19.0	-25.5	-29.8	-28.8	-20.0	-6.3	+11.8	+26.0	+31.0	+30.0	+22.5	+13.5	+7.3	+3.3	+2.3	+2.0	+1.3	+1.0	0.0	

VERTICAL COMPONENT.

Jan.	+1	0	0	0	-1	-1	-2	-2	-3	-3	-5	-5	-5	-2	+1	+2	+3	+3	+2	+2	+2	+1	-1	-1
Feb.	0	-1	-1	-1	-3	0	0	+1	+1	-2	-7	-9	-6	-2	+2	+3	+4	+3	+2	+2	+2	+2	0	0
Mar.	+1	0	-1	-1	-1	0	+1	+3	+1	-2	-8	-15	-14	-8	+1	+6	+8	+7	+5	+4	+3	+2	+2	0
April	+2	+2	+2	+3	+5	+4	+4	+3	+1	-7	-15	-20	-18	-11	-3	+4	+7	+8	+9	+8	+6	+6	+4	+3
May	+4	+3	+3	+4	+5	+5	+5	+1	-3	-11	-18	-22	-20	-12	-5	0	+5	+10	+10	+8	+6	+5	+4	+3
June	+3	+3	+3	+5	+6	+7	+5	+3	-1	-6	-14	-19	-16	-14	-7	-1	+6	+9	+9	+7	+5	+3	+2	+2
July	+1	+1	0	+1	+3	+4	+3	+2	0	-5	-9	-11	-11	-9	-5	0	+4	+8	+8	+6	+4	+3	+2	+1
Aug.	+5	+4	+5	+5	+7	+8	+6	+3	-1	-6	-13	-15	-16	-12	-5	+1	+5	+6	+3	+3	+3	+3	+3	+3
Sept.	+2	+2	+2	+2	+2	+2	+4	+4	+1	-3	-9	-11	-10	-5	-2	+1	+3	+3	+2	+2	+1	+2	+1	+1
Oct.	+1	+2	+3	+1	+1	0	+1	+2	0	-5	-9	-8	-6	-3	+1	+4	+4	+3	+2	+1	0	-1	-2	-2
Nov.	+1	-1	-1	-1	-1	0	-1	0	+2	-1	-6	-5	-2	+1	+3	+2	+3	+2	+2	+1	+1	0	-1	-1
Dec.	0	0	0	0	0	0	0	-1	-2	-4	-6	-5	-4	-2	+2	+3	+4	+3	+2	+2	+1	0	0	+1
Year	+1.8	+1.3	+1.2	+1.5	+1.9	+2.4	+2.2	+1.6	-0.3	-4.6	-9.9	-12.1	-10.7	-6.6	-1.4	+2.1	+4.7	+5.4	+4.7	+3.8	+2.8	+2.2	+1.3	+0.8
Winter	+0.5	-0.5	-0.5	-0.5	-1.3	-0.3	-0.8	-0.5	-0.5	-2.5	-6.0	-6.0	-4.3	-1.3	+2.0	+2.5	+3.5	+2.8	+2.0	+1.8	+1.5	+0.8	-0.3	-0.3
Equinox	+1.5	+1.5	+1.3	+1.3	+1.8	+1.5	+2.5	+3.0	+0.8	-4.3	-10.3	-13.5	-12.0	-6.8	-0.8	+3.8	+5.5	+5.3	+4.5	+3.8	+2.5	+2.3	+1.3	+0.5
Summer	+3.3	+2.8	+2.8	+2.8	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3	+3.3

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

International Disturbed Days.

DECLINATION WEST.

Month and Season, 1926.	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.	-1.6	-5.7	-2.2	-0.7	-0.9	-0.6	-0.2	-0.8	-1.2	+0.2	+1.3	+2.0	+2.8	+3.6	+2.4	+0.7	+0.6	+1.1	+3.7	+2.9	+0.5	-3.7	-2.6	-2.0
Feb.	-5.4	-4.0	-2.1	-1.1	-0.7	-1.7	-1.2	-1.6	-0.9	-0.7	+1.3	+4.0	+6.3	+7.4	+7.8	+6.2	+1.9	+0.4	+2.3	-1.9	-1.4	-5.6	-4.5	-4.0
Mar.	-4.1	-2.7	-4.9	-4.6	-1.9	-1.9	-1.7	-1.6	-2.8	-1.2	+0.8	+5.4	+8.5	+9.1	+8.4	+8.6	+5.7	+0.8	+0.8	-1.0	-5.2	-5.0	-5.4	-3.6
April	-0.4	-1.8	-1.9	-3.3	-1.3	-3.4	-2.9	-4.4	-3.6	-1.8	+0.6	+4.5	+7.5	+7.3	+6.4	+4.0	+2.2	-0.1	-1.4	-1.3	-2.0	-1.9	-0.2	-1.2
May	-0.4	-3.7	-2.2	-2.1	-2.3	-2.4	-2.9	-3.3	-4.9	-2.5	+1.4	+4.6	+6.3	+7.3	+7.9	+5.7	+3.6	+1.1	-0.9	-1.2	-1.3	-0.7	-1.7	-1.3
June	-3.0	-6.0	-4.9	-3.6	-1.3	-3.9	-4.9	-4.7	-4.4	-1.9	+1.0	+4.2	+7.6	+8.2	+9.5	+8.1	+5.9	+3.0	+1.3	-0.5	-1.2	-1.2	-2.4	-3.6
July	-1.2	-1.9	-2.5	-1.5	-1.9	-3.0	-4.1	-4.8	-4.7	-2.7	-0.2	+3.7	+6.1	+7.4	+7.2	+5.7	+4.1	+2.4	-0.3	-0.9	-2.1	-1.6	-1.5	-1.9
Aug.	-3.7	-4.7	-4.3	-2.9	-2.5	-3.0	-3.2	-3.4	-3.3	-0.3	+1.6	+4.3	+6.6	+8.0	+6.7	+4.9	+2.4	+0.5	+0.4	-0.1	-0.8	-0.7	-1.7	-2.5
Sept.	-3.8	-3.2	-0.3	-1.9	-0.4	+2.9	+2.1	-0.1	-2.9	-1.3	+1.7	+4.9	+7.0	+7.5	+6.9	+4.0	+1.9	+0.1	-1.2	-4.7	-4.5	-4.6	-5.2	-4.9
Oct.	-3.1	-6.9	-3.0	-1.3	-0.4	+0.2	+0.1	-1.0	-1.7	-0.8	+1.2	+4.3	+6.7	+6.7	+6.6	+6.4	+4.3	+2.1	-1.8	-0.4	-3.4	-4.3	-6.1	-4.2
Nov.	-5.8	-1.6	-1.8	-0.4	0.0	-0.3	+0.5	+0.2	+0.3	+0.3	+1.9	+3.9	+5.0	+4.6	+3.7	+2.3	+1.3	+1.0	-1.1	-1.9	-2.2	-3.3	-3.6	-3.9
Dec.	-2.0	-0.9	-0.6	+0.4	-0.5	-0.4	0.0	+0.2	+0.1	-0.3	+0.6	+1.6	+3.1	+5.0	+4.5	+3.1	+0.9	-0.3	+0.4	-1.6	-3.3	-2.2	-3.2	-3.9
Year	-2.88	-3.59	-2.56	-1.92	-1.18	-1.46	-1.53	-2.11	-2.50	-1.08	+1.10	+3.95	+6.13	+6.84	+6.50	+4.98	+2.90	+1.01	+0.18	-1.05	-2.24	-2.90	-3.18	-3.08
Winter	-3.70	-3.05	-1.68	-0.45	-0.53	-0.75	-0.23	-0.50	-0.43	-0.13	+1.28	+2.88	+4.30	+5.15	+4.60	+3.08	+1.18	+0.55	+1.33	-0.63	-1.60	-3.70	-3.48	-3.45
Equinox	-2.85	-3.65	-2.53	-2.78	-1.00	-0.55	-0.60	-1.78	-2.75	-1.28	+1.08	+4.78	+7.43	+7.65	+7.08	+5.75	+3.53	+0.73	-0.90	-1.85	-3.78	-3.95	-4.23	-3.48
Summer	-2.08	-4.08	-3.48	-2.53	-2.00	-3.08	-3.78	-4.05	-4.33	-1.85	+0.95	+4.20	+6.65	+7.73	+7.83	+6.10	+4.00	+1.75	+0.13	-0.68	-1.35	-1.05	-1.83	-2.33

INCLINATION.

Jan.	+0.2	+0.1	+0.7	+0.6	+0.1	+0.1	0.0	-0.2	+0.4	+1.3	+0.9	+0.6	+0.4	+0.1	+0.7	0.0	-1.1	-2.5	-2.0	-0.3	-0.7	-1.0	+0.7	+1.5
Feb.	+0.2	0.0	-1.0	-1.0	-0.3	-0.9	-0.7	-0.2	0.0	+0.2	+0.6	+0.8	+0.4	+0.2	-1.5	-1.2	-0.8	-1.2	+0.7	+2.2	+1.0	+1.2	+1.0	+1.0
Mar.	-0.6	-0.4	-1.0	-0.9	-1.4	-2.0	-1.3	-1.2	-0.3	+0.1	+0.1	0.0	+0.6	+0.6	+0.4	-0.4	+0.1	+0.6	+1.4	+2.1	+0.9	+1.3	+0.2	0.0
April	-1.3	-0.8	-0.6	-0.9	-1.6	-2.5	-1.6	-0.1	+1.5	+2.4	+3.8	+2.9	+2.2	+2.2	+1.1	+0.5	-0.3	-0.6	-1.0	-0.9	-0.8	-1.1	-1.2	-1.2
May	-1.4	-1.1	-0.9	-1.4	-0.7	+0.3	+0.8	+1.1	+1.4	+2.0	+2.1	+2.0	+1.0	+0.8	+0.3	+0.2	-0.8	-1.0	-0.3	-0.7	-0.7	-1.1	-1.3	-0.8
June	-1.0	-0.8	-0.9	-1.5	-0.2	+0.2	+1.0	+1.5	+2.1	+2.0	+1.7	+0.6	+0.3	+0.5	-0.9	+0.5	-0.2	-1.6	-1.4	-0.8	-0.4	-0.5	-0.4	-0.6
July	-0.6	-0.7	-0.8	-0.9	-0.5	-0.4	-0.3	+0.4	+0.9	+1.2	+1.1	+0.5	+0.5	+0.3	+0.2	-0.6	-1.0	-0.6	-0.1	-0.2	+0.4	+0.5	+0.1	0.0
Aug.	-0.6	-1.1	-0.3	-0.4	-0.4	0.0	+0.7	+1.3	+1.8	+0.7	+0.5	+0.5	+0.1	+0.1	+0.8	+0.9	+0.2	0.0	-0.4	-0.8	-0.8	-0.7	-0.9	-0.5
Sept.	-1.2	-1.8	-2.2	-2.4	-2.0	-2.0	-0.6	+0.1	-0.1	+0.3	+1.2	+1.4	+0.7	+0.9	+0.8	-0.5	+0.6	+1.8	+2.8	+1.8	0.0	-0.3	+0.1	+0.1
Oct.	-2.8	-0.5	-0.7	-0.9	-1.6	-1.7	-0.2	-0.4	+0.5	+0.8	+0.5	0.0	-0.4	-0.9	-1.3	-0.6	+0.8	+0.7	+1.4	+1.0	+2.1	+1.9	+1.6	+0.1
Nov.	-0.5	-1.0	-1.0	-1.0	-1.5	-1.8	-1.7	-1.0	0.0	+0.7	+1.0	+1.2	+1.0	+1.1	+0.9	+1.2	+0.8	+0.5	+0.4	+1.0	+0.7	+0.1	0.0	-0.2
Dec.	-0.7	-0.8	-0.9	-0.9	-1.0	-1.5	-1.4	-1.3	-1.1	-0.1	+0.4	+0.7	+0.7	+1.1	+0.9	+1.1	+1.4	+0.7	+0.7	+1.6	+0.6	-0.2	+0.1	+0.3
Year	-0.85	-0.74	-0.80	-0.97	-0.93	-1.05	-0.50	-0.03	+0.55	+1.06	+1.18	+0.93	+0.63	+0.55	+0.20	+0.09	-0.12	-0.37	+0.10	+0.58	+0.33	+0.06	-0.03	-0.03
Winter	-0.20	-0.43	-0.55	-0.58	-0.68	-1.03	-0.95	-0.68	-0.18	+0.53	+0.73	+0.83	+0.63	+0.53	+0.25	+0.28	+0.08	-0.63	-0.05	+1.13	+0.40	+0.03	+0.45	+0.65
Equinox	-1.45	-0.88	-1.13	-1.28	-1.65	-2.05	-0.93	-0.35	+0.40	+0.90	+1.40	+1.08	+0.78	+0.70	+0.25	-0.25	+0.03	+0.33	+0.90	+1.23	+0.98	+0.60	+0.10	-0.25
Summer	-0.90	-0.93	-0.73	-1.05	-0.45	-0.08	+0.38	+0.93	+1.43	+1.75	+1.40	+0.90	+0.48	+0.43	+0.10	+0.25	-0.45	-0.80	-0.55	-0.63	-0.38	-0.45	-0.63	-0.48

HORIZONTAL FORCE.

Jan.	-15	-14	-19	-13	-2	0	+2	+5	-3	-18	-14	-9	-6	-1	-7	+6	+21	+41	+34	+9	+18	+15	-15	-23
Feb.	-5	-4	+7	+4	-4	+7	+8	0	-2	-5	-13	-15	-9	+1	+23	+21	+17	+23	-2	-21	-5	-9	-10	-9
Mar.	+8	-3	+7	+6	+13	+21	+11	+11	-1	-7	-7	-7	-14	-9	-3	+13	+10	+4	-8	-18	-3	-12	0	0
April	+18	+11	+8	+12	+19	+30	+16	-6	-24	-39	-59	-48	-37	-34	-14	+4	+11	+16	+23	+22	+18	+14	+17	+17
May	+17	+10	+9	+14	+2	-11	-18	-22	-25	-36	-39	-38	-19	-13	+1	+7	+25	+32	+20	+21	+18	+20	+18	+10
June	+10	+4	+5	+15	-5	-9	-20	-26	-35	-33	-28	-15	-11	-12	+17	0	+14	+26	+33	+22	+16	+14	+8	+8
July	+9	+9	+8	+9	+3	+1	0	-10	-17	-23	-23	-16	-15	-9	-3	+13	+22	+19	+14	+14	+1	+2	+1	-1
Aug.	+5	+11	+2	+4	+4	-1	-11	-21	-30	-17	-16	-16	-8	-6	-12	-8	+5	+10	+14	+18	+16	+14	+15	+8
Sept.	+9	+16	+19	+21	+17	+13	-7	-17	-8	-12	-24	-25	-11	-7	+1	+30	+32	+18	-5	-24	-19	+1	+1	-7
Oct.	+19	-9	-7	+3	+17	+20	-2	+3	-9	-14	-9	-1	+7	+16	+25	+18	+6	+11	+11	+1	-25	-25	-35	-16
Nov.	+5	+11	+11	+12	+19	+23	+22	+11	-3	-14	-18	-20	-16	-13	-7	-11	-5	-2	-2	-9	-6	+2	+2	+3
Dec.	+9	+10	+11	+10	+11	+19	+17	+16	+14	-1	-10	-13	-12	-17	-11	-12	-14	-5	-5	-18	-3	+5	-1	-4
Year	+7.4	+4.3	+5.1	+8.1	+7.8	+9.8	+2.3	-3.8	-11.2	-19.3	-21.8	-18.6	-12.6	-8.7	+0.8	+6.1	+12.0	+16.9	+10.6	+1.4	+2.2	+3.1	+0.1	-1.2
Winter	-1.5	+0.8	+2.5	+3.3	+6.0	+12.3	+12.3	+8.0	+1.5	-9.5	-13.8	-14.3	-10.8	-7.5	-0.5	+1.0	+4.8	+14.3	+6.3	-9.8	+1.0	+3.3	-6.0	-8.3
Equinox	+13.5	+3.8	+6.8	+10.5	-16.5	+21.0	+4.5	-2.3	-10.5	-18.0	-24.8	-20.3	-13.8	-8.5	+2.3	+14.3	+14.8	+12.3	+5.3	-4.8	-7.3	-5.5	-4.3	-1.5
Summer	+10.3	+8.5	+6.0	+10.5	+1.0	-3.8	-9.8	-17.3	-24.5	-30.5	-26.8	-21.3	-13.3	-10.0	+0.8	+3.0	+16.5	+24.3	+20.3	+18.8	+12.8	+11.5	+10.5	+6.3

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

International Disturbed Days.

NORTH COMPONENT.

Month and Season, 1926.	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 -13	γ -7	γ -16	γ -12	γ -1	γ +1	γ +2	γ +6	γ -1	γ -18	γ -15	γ -11	γ -9	γ -5	γ -10	γ +5	γ +20	γ +39	γ +29	γ +5	γ +17	γ +19	γ -12	γ -20
Feb.	+2	+1	+9	+5	-3	+9	+9	+2	-1	-4	-14	-20	-17	-8	+13	+13	+14	+22	-5	-18	-3	-2	-4	-4
Mar.	+13	0	+13	+12	+15	+23	+13	+13	+3	-5	-8	-13	-24	-20	-13	+2	+3	+3	-9	-16	+4	-6	+7	+4
April	+18	+13	+10	+16	+20	+33	+19	0	-19	-36	-58	-52	-45	-42	-22	-9	+8	+16	+24	+23	+20	+16	+17	+18
May	+17	+14	+12	+16	+5	-8	-14	-17	-18	-32	-40	-43	-26	-22	-9	0	+20	+30	+21	+22	+19	+20	+20	+11
June	+13	+11	+11	+19	-3	-4	-14	-20	-29	-30	-29	-20	-20	-22	+5	-10	+6	+31	+31	+22	+17	+15	+11	+12
July	+10	+11	+11	+11	+5	+5	+5	-4	-11	-19	-22	-20	-22	-18	-12	+6	+16	+16	+14	+15	+4	+1	+3	+1
Aug.	+10	+17	+7	+8	+7	+8	+3	-7	-16	-29	-19	-21	-16	-16	-20	-14	+2	+9	+13	+18	+17	+15	+17	+11
Sept.	+14	+20	+19	+23	+17	+9	-9	-17	-4	-10	-26	-30	-19	-16	-8	+24	+29	+17	-3	-18	-13	+7	-7	-1
Oct.	+22	0	-3	+5	+17	+19	-2	+4	-7	-13	-10	-6	-2	+7	+16	+10	+1	+8	+13	+2	-20	-19	-27	-10
Nov.	+12	+13	+13	+12	+19	+23	+21	+11	-3	-14	-20	-24	-22	-18	-11	-14	-7	-3	-1	-7	-3	+6	+6	+8
Dec.	+11	+11	+11	+9	+11	+19	+17	+15	+14	-1	-10	-15	-16	-23	-16	-16	-15	-5	-5	-16	+1	+8	+3	+1
Year	+10.8	+8.7	+8.1	+10.3	+9.1	+11.4	+4.2	-1.2	-7.7	-17.6	-22.6	-22.9	-19.8	-16.9	-7.3	-0.3	+8.1	+15.3	+10.2	+2.7	+5.0	+5.8	+4.0	+2.6
Winter	+3.0	+4.5	+4.3	+3.5	+6.5	+13.0	+12.3	+8.5	+2.3	-9.3	-14.8	-17.5	-16.0	-13.5	-6.0	-3.0	+3.0	+13.3	+4.5	-9.0	+3.0	+7.8	-1.8	-3.8
Equinox	+16.8	+8.3	+9.8	+14.0	+17.3	+21.0	+5.3	0.0	-6.8	-16.0	-25.5	-25.3	-22.5	-17.8	-6.8	+6.8	+10.3	+11.0	+6.3	-2.3	-2.3	-0.5	+1.0	+2.8
Summer	+12.5	+13.3	+10.3	+13.5	+3.5	+0.3	-5.0	-12.0	-18.5	-27.5	-27.5	-26.0	-21.0	-19.5	-9.0	-4.5	+11.0	+21.5	+19.8	+19.3	+14.3	+12.8	+12.8	+8.8

WEST COMPONENT.

Jan.	-12	-33	-16	-7	-5	-3	-1	-3	-7	-3	+4	+8	+13	+19	+11	+5	+8	+15	+27	+17	+7	-16	-17	-16
Feb.	-30	-22	-10	-5	-5	-7	-5	-8	-5	-5	+4	+18	+31	-39	+46	+38	+14	+7	+12	-15	-9	-32	-26	-23
Mar.	-20	-15	-24	-23	-7	-5	-6	-6	-15	-8	+3	+27	+42	+46	+44	+48	+32	+5	+2	-9	-28	-29	-29	-19
April	+2	-7	-8	-15	-3	-11	-12	-25	-25	-18	-10	+13	+31	+31	+31	+20	+14	+3	-2	-2	-6	-7	+3	-2
May	+2	-17	-10	-8	-12	-15	-19	-22	-32	-21	-2	+16	+29	+36	+42	+32	+25	+13	0	-2	-3	+1	-5	-5
June	-14	-31	-25	-16	-8	-23	-30	-31	-31	-18	-1	+19	+38	+41	+54	+43	+33	+24	+14	+2	-3	-3	-11	-17
July	-4	-8	-11	-6	-9	-16	-22	-28	-29	-19	-6	+16	+29	+37	+37	+33	+27	+17	+2	-2	-11	-9	-8	-10
Aug.	-18	-22	-22	-14	-12	-15	-17	-20	-22	-8	+5	+19	+33	+41	+33	+24	+14	+5	+5	+4	-1	-1	-6	-11
Sept.	-18	-13	+3	-5	+2	+18	+10	-4	-17	-10	+3	+20	+34	+38	+37	+28	+17	+5	-7	-30	-28	-24	-27	-27
Oct.	-12	-38	-17	-6	+2	+6	0	-5	-11	-7	+4	+22	+37	+39	+41	+38	+24	+14	-7	-2	-24	-28	-40	-26
Nov.	-30	-6	-7	+1	+4	+4	+8	+4	+1	-2	+6	+16	+23	+21	+18	+10	+6	+5	-6	-12	-13	-17	-18	-20
Dec.	-8	-2	-1	+4	0	+2	+4	+5	+4	-2	+1	+5	+14	+22	+21	+14	+2	-3	+1	-13	-18	-11	-17	-21
Year	-13.5	-17.8	-12.3	-8.3	-4.4	-5.4	-7.5	-11.9	-15.8	-10.1	+0.9	+16.6	+29.5	+34.2	+34.6	+27.8	+18.0	+9.2	+3.4	-5.3	-11.4	-14.7	-16.8	-16.4
Winter	-20.0	-15.8	-8.5	-1.8	-1.5	-1.0	+1.5	-0.5	-1.8	-3.0	+3.8	+11.8	+20.3	+25.3	+24.0	+16.8	+7.5	+6.0	+8.5	-5.8	-8.3	-19.0	-19.5	-20.0
Equinox	-12.0	-18.3	-11.5	-12.3	-1.5	+2.0	-2.0	-10.0	-17.0	-10.8	0.0	+20.5	+36.0	+38.5	+38.3	+33.5	+21.8	+6.8	-3.5	-10.8	-21.5	-22.0	-23.3	-18.5
Summer	-8.5	-19.5	-17.0	-11.0	-10.3	-17.3	-22.0	-25.3	-28.5	-16.5	-1.0	+17.5	+32.3	+38.8	+41.5	+33.0	+24.8	+14.8	+5.3	+0.5	-4.5	-3.0	-7.5	-10.8

VERTICAL COMPONENT.

Jan.	-27	-28	-21	-10	-1	+3	+5	+5	+5	+2	+0	+2	-1	+2	+8	+15	+12	+9	+10	+12	+16	+0	-10	+3
Feb.	-6	-9	-18	-24	-20	-13	-7	-5	-4	-6	-9	-9	-7	-3	+2	+7	+11	+11	+19	+26	+22	+19	+12	+13
Mar.	-3	-20	-18	-16	-18	-21	-13	-14	-12	-12	-13	-16	-12	-2	+7	+18	+26	+31	+31	+32	+23	+18	+0	+1
April	+1	-2	-2	-3	-11	-18	-16	-10	-6	-7	-7	-10	-9	-3	+6	+9	+14	+16	+20	+17	+12	+5	+1	-2
May	-8	-13	-11	-14	-21	-17	-14	-13	-12	-16	-19	-19	-10	-1	+12	+23	+29	+39	+35	+26	+18	+9	-3	-5
June	-11	-19	-19	-15	-18	-15	-11	-9	-9	-7	-7	-13	-15	-10	+8	+18	+24	+30	+29	+25	+22	+17	+6	-1
July	-1	-4	-8	-9	-10	-11	-9	-8	-7	-12	-16	-19	-18	-11	-1	+8	+18	+24	+28	+24	+17	+12	+6	-3
Aug.	-8	-11	-7	-3	-5	-3	-3	-3	-5	-9	-14	-19	-16	-9	+1	+11	+20	+22	+18	+13	+10	+7	+5	+2
Sept.	-21	-25	-33	-34	-30	-37	-38	-35	-21	-16	-15	-11	0	+16	+29	+51	+56	+62	+51	+42	+16	+3	-8	-12
Oct.	-53	-39	-41	-24	-17	-12	-12	-5	-5	-4	-4	-3	+1	+6	+12	+22	+40	+49	+73	+35	+13	+7	-20	-33
Nov.	-6	-10	-10	-8	-8	-8	-9	-9	-8	-9	-8	-6	-3	+7	+13	+14	+15	+13	+10	+12	+11	+8	+3	+1
Dec.	-4	-5	-6	-8	-8	-6	-8	-7	-6	-7	-8	-6	-5	0	+6	+10	+14	+14	+12	+11	+12	+6	+2	0
Year	-12.3	-15.4	-16.2	-14.0	-13.9	-13.2	-11.7	-9.4	-7.5	-8.6	-10.0	-11.1	-7.9	-0.7	+8.6	+17.2	+23.3	+26.5	+27.9	+23.0	+16.0	+9.3	-0.5	-3.5
Winter	-10.8	-13.0	-13.8	-12.5	-9.3	-6.0	-4.8	-4.0	-3.3	-5.0	-6.3	-5.8	-4.0	+1.5	+7.3	+11.5	+13.0	+11.3	+12.5	+15.5	+15.3	+8.3	+1.8	+2.8
Equinox	-19.0	-21.5	-23.5	-19.3	-19.0	-22.0	-21.0	-16.0	-11.0	-9.8	-9.8	-10.0	-5.0	+4.3	+13.5	+25.0	+34.0	+39.5	+43.8	+31.5	+16.0	+8.3	-6.8	-11.5
Summer	-7.0	-10.0	-13.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0	-15.0

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

Values of a_n b_n in the series $\Sigma(a_n \cos nt + b_n \sin nt)$, t being reckoned in hours from Greenwich Mean Midnight and converted into arc at the rate of 15° to each hour.

MONTH AND SEASON.	NORTH FORCE.								WEST FORCE.								VERTICAL FORCE.							
	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4	a_1	b_1	a_2	b_2	a_3	b_3	a_4	b_4
"ALL" DAYS.																								
Jan.	+6.7	-0.1	-6.2	-2.4	+1.1	-0.7	+1.2	+0.3	-9.5	-4.7	-0.6	+3.9	-2.4	-1.3	+1.5	+1.9	-0.1	-5.8	-2.9	-0.1	+0.8	-1.5	-0.4	-0.3
Feb.	+9.9	+2.7	-7.1	-1.4	+4.1	-0.1	-1.3	+0.3	-12.3	-6.9	+0.6	+9.6	-1.8	-3.4	+1.2	+2.6	+2.9	-6.8	-3.1	-0.7	+1.4	-0.4	-0.9	-0.3
Mar.	+14.9	+2.2	-7.2	-1.5	+4.5	-2.0	-0.3	-0.1	-13.3	-8.2	+2.9	+11.5	-1.7	-7.0	+1.6	+1.8	+1.9	-9.0	-6.0	-0.4	+2.1	-0.5	-2.0	-0.5
Apr.	+18.0	-2.2	-8.9	-0.8	+2.1	-2.3	+1.1	+0.8	-8.3	-12.7	+6.2	+12.2	-3.7	-5.1	+2.2	+1.1	+4.3	-6.6	-7.4	+0.4	+3.1	-0.1	-1.8	+0.1
May	+16.8	-6.9	-8.8	-0.3	+2.6	+0.6	-0.1	-0.4	-7.5	-15.8	+7.4	+10.2	-3.0	-1.9	-0.6	-0.8	+5.6	-8.6	-8.3	+0.5	+2.5	-0.3	0.0	+0.8
June	+16.2	-7.2	-8.9	+0.3	-0.0	+0.9	+1.0	-0.2	-7.2	-23.6	+5.9	+10.4	-5.3	-2.9	-1.0	+0.5	+6.5	-6.2	-8.0	-0.8	+1.9	+0.6	+0.0	-0.6
July	+14.0	-3.3	-8.2	-0.3	+0.8	-0.0	+0.7	+0.5	-7.8	-17.9	+6.9	+12.0	-3.6	-3.3	+0.4	+0.1	+6.4	-5.1	-7.3	-1.1	+2.1	+0.7	-0.5	+0.1
Aug.	+15.1	-4.3	-6.2	+1.5	-0.0	-1.8	+0.8	+0.4	-9.4	-15.3	+8.5	+9.1	-5.3	-4.5	+0.6	+0.3	+5.2	-3.9	-6.8	+0.1	+2.6	+0.3	-0.4	-0.6
Sept.	+14.3	-1.6	-6.0	+2.1	+2.0	-1.2	-0.7	-1.0	-10.8	-9.2	+3.8	+11.4	-4.1	-5.0	+1.5	+2.4	+1.3	-9.9	-7.0	+1.2	+2.7	+0.8	+0.3	-0.6
Oct.	+9.8	+2.5	-5.7	+1.1	+1.8	-1.4	+0.8	+1.4	-10.3	-7.7	+2.0	+9.1	-2.8	-3.3	+2.6	+1.0	+0.3	-7.9	-6.6	-0.2	+1.0	+0.4	-0.4	+0.0
Nov.	+10.2	+2.3	-6.1	+0.5	+1.7	-1.7	-0.4	+0.7	-5.8	-3.2	+1.2	+6.5	-3.1	-1.9	+1.3	+1.3	+0.6	-3.8	-2.2	+1.0	+0.9	-0.7	-0.7	+0.4
Dec.	+7.0	+4.3	-4.6	-2.7	+2.0	-0.8	-0.3	+0.3	-6.6	-2.1	+0.2	+5.9	-1.5	-2.3	+0.1	+1.4	+1.4	-4.0	-2.3	+0.7	+1.1	-0.2	-0.5	+0.1
Year.	+12.8	-1.0	-7.0	-0.3	+1.9	-0.9	+0.2	+0.3	-9.7	-11.3	+3.6	+10.4	-2.4	-3.9	+0.4	+0.6	+3.0	-6.5	-5.7	+0.0	+1.9	-0.1	-0.7	+0.0
W. Eq.	+8.5	+2.2	-6.0	-1.5	+2.3	-0.9	-0.2	+0.5	-8.7	-4.3	+0.3	+6.6	-2.2	-2.3	+1.0	+1.8	+1.2	-5.1	-2.7	+0.2	+1.1	-0.7	-0.7	+0.1
S.	+14.3	+0.3	-7.0	+0.2	+2.6	-1.7	+0.2	+0.2	-11.0	-9.4	+3.8	+11.0	-3.2	-4.9	+1.9	+1.4	+2.0	-8.4	-6.8	+0.2	+2.2	+0.1	-1.2	+0.0
	+15.5	-5.4	-8.0	+0.3	+0.8	-0.1	+0.8	+0.0	-7.9	-18.2	+7.5	+11.3	-4.1	-3.6	+0.4	-0.1	+5.9	-6.0	-7.6	-0.3	+2.3	+0.3	-0.2	-0.1
QUIET DAYS.																								
Year.	+11.5	-0.3	-6.6	-0.8	+1.8	-1.0	-0.3	+0.8	-4.6	-11.2	+5.0	+8.8	-3.4	-3.5	+1.1	+1.2	+4.3	-1.7	-4.5	+0.5	+2.1	-0.2	-0.7	+0.2
W. Eq.	+8.3	+1.2	-6.5	-1.9	+2.3	-1.0	-0.6	+0.7	-4.0	-5.7	+1.6	+6.2	-2.5	-2.5	+1.2	+1.5	+1.3	-2.1	-1.9	+0.6	+1.3	-0.4	-0.7	+0.4
S.	+12.9	+1.1	-6.5	-0.4	+2.3	-1.2	-0.5	+0.8	-2.8	-11.3	+3.5	+9.1	-2.3	-4.8	+0.8	+2.3	+4.2	-1.8	-4.9	+0.5	+2.8	+0.3	-1.2	+0.3
	+13.4	-3.0	-6.8	-0.2	+0.8	-0.9	+0.3	+0.7	-5.7	-16.8	+8.8	+11.5	-4.4	-3.7	+0.4	+0.5	+7.4	-1.2	-6.9	+0.3	+2.3	+0.0	-0.1	-0.1
DISTURBED DAYS.																								
Year.	+12.6	-4.0	-8.9	+3.3	+2.5	-0.5	+1.1	+1.5	-17.2	-11.5	+1.7	+11.2	-2.7	-5.0	+1.9	+0.2	-1.1	-18.0	-8.5	-1.6	+1.3	+1.3	-0.7	-0.2
W. Eq.	+6.7	+2.4	-8.5	+1.0	+3.4	-1.1	+0.2	+0.4	-15.8	-4.3	-2.4	+7.0	-3.0	-2.3	+2.1	-0.5	-1.2	-10.8	-4.6	-2.7	+0.8	-2.0	-0.9	0.0
S.	+12.6	-2.7	-9.8	+5.2	+4.0	-1.5	-2.0	-3.0	-20.8	-9.0	+1.9	+14.8	-1.4	-6.6	+3.8	+0.3	-5.3	-26.0	-11.2	-0.5	+0.3	+4.1	-0.3	-0.1
	+18.6	-11.6	-7.8	+1.9	-0.2	+1.2	+0.4	+1.4	-15.0	-21.4	+5.6	+11.7	-3.5	-6.2	+1.3	-1.8	+3.2	-17.3	-9.7	-1.6	+3.1	+0.7	-0.9	-0.5

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

Values of c_n a_n in the series $\Sigma(c_n \sin T + a_n)$, 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 α , 2α , 3α , 4α , to a_1 , a_2 , a_3 , a_4 , respectively, where α has the following values in 1926:—

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

MONTH AND SEASON.	NORTH FORCE.								WEST FORCE.								VERTICAL FORCE.							
	c ₁	a ₁	c ₂	a ₂	c ₃	a ₃	c ₄	a ₄	c ₁	a ₁	c ₂	a ₂	c ₃	a ₃	c ₄	a ₄	c ₁	a ₁	c ₂	a ₂	c ₃	a ₃	c ₄	a ₄
" ALL DAYS.																								
Jan.	γ 6.7	90.9	γ 6.7	249.9	γ 1.3	124.5	γ 1.2	77.2	γ 10.6	243.9	γ 3.9	352.3	γ 2.8	242.3	γ 2.4	40.0	γ 5.8	181.8	γ 2.9	268.8	γ 1.7	151.9	γ 0.5	241.3
Feb.	10.3	75.3	7.2	259.7	4.1	92.6	1.4	284.9	14.1	241.2	9.6	4.5	3.8	209.4	2.9	26.6	7.4	157.3	3.1	258.5	1.5	118.2	1.0	254.9
Mar.	15.1	82.0	7.4	259.1	4.9	114.9	0.3	249.4	15.7	238.7	11.9	14.8	7.2	194.6	2.4	43.4	9.2	168.7	6.1	266.6	2.1	105.0	2.0	256.1
Apr.	18.1	97.4	9.0	265.9	3.1	139.1	1.3	53.4	15.1	213.7	13.6	27.7	6.3	216.9	2.4	65.1	7.9	147.2	7.5	274.0	3.1	92.9	1.8	275.3
May	18.2	112.7	8.8	268.7	2.6	77.1	0.4	189.6	17.5	205.7	12.6	36.9	3.6	239.0	1.0	218.0	10.2	147.3	8.3	274.5	2.5	98.3	0.8	1.5
June	17.7	114.4	8.9	273.0	0.9	358.5	1.0	102.7	24.7	197.4	12.0	30.4	6.0	243.0	1.1	297.6	9.0	134.0	8.0	265.3	2.0	72.9	0.6	180.5
July	14.3	103.6	8.2	268.7	0.8	91.9	0.9	58.7	19.5	203.9	13.8	30.8	4.9	228.5	0.4	82.0	8.2	128.8	7.4	262.1	2.2	73.8	0.5	284.8
Aug.	15.7	106.2	6.4	284.0	1.8	181.8	0.9	66.6	17.9	211.9	12.4	43.8	7.0	230.8	0.7	62.6	6.5	127.5	6.8	271.3	2.6	85.7	0.7	217.6
Sept.	14.4	96.7	6.4	290.4	2.3	121.5	1.2	213.5	14.2	229.8	12.0	19.2	6.5	220.6	2.8	33.5	10.0	173.0	7.1	280.3	2.8	74.1	0.7	154.2
Oct.	10.1	76.1	5.8	281.4	2.3	128.2	1.7	31.2	12.9	233.8	9.3	13.2	4.3	221.6	2.8	70.3	7.9	178.1	6.6	269.0	1.1	69.0	0.4	277.8
Nov.	10.4	77.9	6.1	275.8	2.4	136.6	0.8	329.0	6.6	242.0	6.6	11.6	3.7	240.4	1.9	46.7	3.8	170.9	2.4	295.0	1.2	128.7	0.8	300.8
Dec.	8.2	59.1	5.4	240.4	2.1	113.1	0.4	312.5	6.9	253.0	5.9	2.4	2.8	213.9	1.4	3.6	4.3	161.6	2.4	287.0	1.1	104.1	0.5	284.7
Year.	12.9	94.7	7.0	268.3	2.1	116.0	0.4	44.2	14.9	221.0	11.0	20.0	4.6	212.8	0.7	32.6	7.2	155.4	5.7	271.2	1.9	93.7	0.7	274.0
W. Eq. S.	8.8 14.3 16.5	75.9 89.3 109.7	6.2 7.0 8.1	257.2 272.8 272.9	2.4 3.1 0.8	112.4 123.8 98.8	0.6 0.3 0.8	27.6 35.2 90.1	9.6 14.5 19.8	244.2 229.7 203.9	6.6 11.6 13.5	3.2 20.0 34.2	3.2 5.8 5.4	225.6 214.1 229.9	2.1 2.4 0.4	31.1 56.3 102.8	5.3 8.6 8.4	167.1 167.2 135.6	2.7 6.8 7.6	275.5 272.8 268.4	1.3 2.2 2.3	125.5 87.6 83.9	0.7 1.2 0.2	282.0 273.4 249.3
QUIET DAYS.																								
Year.	11.5	91.7	6.7	263.9	2.1	121.0	0.8	21.3	12.1	202.5	10.1	30.4	4.9	225.0	1.6	43.7	4.6	112.2	4.6	276.6	2.1	97.4	0.7	287.6
W.	8.4	82.1	6.8	254.4	2.5	113.6	0.9	323.4	6.9	215.4	6.4	14.9	3.5	225.8	1.9	40.2	2.5	148.6	2.0	289.2	1.3	109.5	0.8	300.7
Eq.	12.9	85.7	6.5	267.7	2.6	119.3	0.9	328.0	11.6	194.4	9.7	21.7	5.3	206.8	2.4	19.9	4.6	113.3	4.9	276.2	2.8	96.9	1.2	286.0
S.	13.7	103.1	6.8	269.4	1.2	141.0	0.7	23.8	17.7	199.3	14.5	38.2	5.7	231.0	0.6	37.6	7.5	99.9	6.9	273.1	2.3	90.7	0.1	223.5
DISTURBED DAYS.																								
Year.	13.2	107.8	8.5	291.0	2.6	102.6	1.9	37.8	20.7	236.5	11.3	9.4	5.7	209.1	1.9	86.0	18.0	184.0	8.7	260.4	1.8	46.2	0.8	255.5
W.	7.2	70.5	8.5	277.3	3.6	108.2	0.5	21.9	16.4	255.1	7.5	341.8	3.8	233.6	2.1	104.1	10.8	186.7	5.3	240.8	2.2	159.2	0.9	271.5
Eq.	12.9	85.7	6.5	267.7	2.6	119.3	0.9	328.0	11.6	194.4	9.7	21.7	5.3	206.8	2.4	19.9	4.6	113.3	4.9	276.2	2.8	96.9	1.2	286.0
S.	21.9	122.4	8.1	284.6	1.2	353.1	1.5	16.2	26.1	215.5	12.9	26.3	7.2	210.9	2.2	145.9	17.5	170.1	9.9	261.8	3.1	79.2	1.0	243.2

TABLE (A) X.—RANGE of MEAN DIURNAL INEQUALITIES for the MONTHS, YEAR and SEASONS of 1926.

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 ...	5.8	1.1	21	5.1	1.2	21	9.3	2.5	64	22	30	14	22	26	8	57	60	44
February ...	8.4	1.6	25	7.1	1.6	27	13.4	3.7	38	31	43	19	32	35	13	42	78	50
March ...	9.9	2.0	35	10.6	2.5	43	14.5	4.1	39	42	51	26	45	55	23	47	77	52
April ...	11.0	2.2	41	10.2	1.6	34	10.9	6.3	89	46	58	30	36	53	29	78	56	38
May ...	11.0	2.1	44	12.0	2.0	41	12.8	3.5	71	47	59	35	41	62	32	73	74	60
June ...	12.4	2.4	47	12.8	2.4	41	15.5	3.7	71	44	69	31	40	72	28	61	85	49
July ...	11.4	1.8	36	10.2	1.6	27	12.2	2.1	45	36	60	30	30	55	19	38	66	47
August ...	11.1	2.3	39	11.1	2.1	36	12.7	2.9	48	37	60	26	37	61	24	47	63	41
September ...	9.2	1.9	30	8.4	1.8	31	12.7	5.2	57	36	49	32	30	45	15	59	68	100
October ...	7.6	1.6	26	6.3	1.5	25	13.6	4.9	60	30	40	26	29	33	13	49	81	126
November ...	5.2	1.7	26	6.3	1.9	29	10.8	2.9	43	30	27	12	33	31	9	47	53	25
December ...	5.4	1.3	20	4.2	1.0	18	8.9	3.1	37	23	26	13	19	21	10	42	43	22
Year ...	8.62	1.44	28.3	8.43	1.52	28.2	10.43	2.23	38.7	31.1	45.4	23.4	30.4	44.2	17.5	38.2	52.4	44.1
Winter ...	6.03	1.38	21.3	5.40	1.36	22.5	8.85	1.86	28.6	24.8	29.8	13.6	25.1	27.8	9.5	30.8	45.3	29.3
Equinox ...	9.43	1.83	30.3	8.88	1.78	31.6	11.88	3.45	45.8	35.5	49.5	27.3	34.5	46.0	19.0	46.5	61.8	67.3
Summer ...	11.36	2.08	40.3	11.45	1.83	35.5	12.16	2.80	54.8	39.5	60.3	30.1	34.6	60.8	25.1	49.0	70.0	46.3

TABLE (A) XI.—NON-CYCLIC CHANGE (24^h—0^h).

Month. 1926.	" 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 ...	-0.09	0.1	0.0	-0.70	1.8	2.0	-1.44	12.2	1.6
February ...	-0.04	0.4	-0.2	-0.14	2.8	-0.6	-0.04	-0.4	0.8
March ...	-0.01	0.1	0.0	-0.62	8.6	-1.6	-0.44	-8.8	1.2
April ...	-0.01	0.2	-0.1	+0.08	5.0	+1.0	-0.38	-9.6	-0.6
May ...	-0.05	0.4	-0.3	+0.08	4.8	-0.2	-0.46	-7.2	-3.4
June ...	-0.04	-0.6	+0.2	+0.42	2.0	-0.6	-1.06	-12.6	4.2
July ...	-0.30	-1.3	-0.7	+0.26	-0.8	-0.2	-2.18	-14.8	-5.2
August ...	+0.22	+1.3	+0.6	-0.14	+1.6	-2.4	+0.88	-1.8	+8.2
September ...	+0.01	+0.1	+0.2	+0.06	+3.2	-1.2	+0.22	-15.4	+2.6
October ...	-0.11	-0.9	+0.3	-0.18	+3.4	-2.8	-0.50	-24.0	+6.0
November ...	+0.03	0.0	-0.5	+0.04	+0.6	-1.2	+1.34	-4.2	+4.2
December ...	-0.04	+0.5	-0.2	-0.28	-0.2	+0.4	-1.14	-10.4	+2.8
Year 1926 ...	-0.03	-0.1	-0.1	-0.11	+2.7	-0.9	-0.35	-8.1	+1.9

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

Month. 1926.	Declination (West).	Inclination.	Horizontal Force.	North.	West.	Vertical.
January ...	13 15.8	66 36.5	18580	18084	04263	42954
February ...	13 14.7	66 37.0	18573	18079	04255	42954
March ...	13 13.9	66 36.8	18573	18080	04251	42947
April ...	13 12.7	66 36.2	18583	18091	04247	42948
May ...	13 11.4	66 35.9	18587	18097	04241	42947
June ...	13 10.8	66 35.7	18590	18100	04239	42947
July ...	13 10.1	66 35.4	18595	18106	04236	42949
August ...	13 8.9	66 35.6	18588	18101	04228	42942
September ...	13 7.9	66 36.7	18575	18090	04220	42948
October ...	13 7.1	66 37.4	18569	18084	04214	42957
November ...	13 5.9	66 36.3	18577	18094	04210	42939
December ...	13 5.0	66 36.1	18578	18096	04206	42936
Year	13 10.4	66 36.3	18581	18092	04234	42947

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

1926. Day.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
I	13. 42.6	13. 41.6	13. 42.3	12. 28.1	12. 29.7	12. 32.4 48.5	12. 52.4	12. 54.5	12. 56.2	11. 54.3	11. 52.2	11. 52.6
2	42.7	41.6	42.1	28.7	30.0	48.4	52.4	54.3	56.5	54.6	52.4	52.5
3	42.7	41.7	42.2	28.0	29.9	48.6	52.9	54.3	56.5	55.2	52.4	52.6
4	42.7	41.7	41.9	28.9	29.8	48.8	52.6	54.5	56.7	55.9	52.6	52.6
5	42.7	42.0	41.8	29.2	29.9	49.0	53.0	54.3	—	56.2	53.1	52.7
6	42.7	41.9	41.6	29.3	29.5	49.0	52.8	54.5	56.8	56.3	53.0	52.6
7	42.6	42.4	41.6	29.4	29.2	49.4	52.9	54.3	56.9	57.0	53.4	52.7
8	42.5	42.2	42.2	29.3	28.9	49.8	52.8	54.4	57.1	57.1	53.0	52.8
9	42.3	42.2	42.2	28.9	29.0	49.8	53.2	54.6	57.3	56.6	53.2	53.6
10	42.2	41.8	42.0	28.7	28.8	49.8	53.2	55.0	57.0	56.2	53.1	54.5
11	42.2	41.1	41.6	28.8	29.0	49.6	53.4	55.1	56.8	55.6	53.0	54.3
12	42.2	40.7	41.5	28.9	29.5	49.9	53.5	55.1	11. 56.1	56.0	53.6	54.4
13	42.0	40.9	41.8	28.9	29.5	50.2	53.7	55.2	55.7	56.1	53.5	54.3
14	41.3	40.8	41.9	29.0	29.5	50.1	54.0	55.3	55.2	56.1	53.8	54.4
15	40.3	40.7	41.8	29.1	29.4	50.7	54.4	55.2	55.2	55.7	53.3	54.5
16	39.5	41.2	41.6	28.9	29.4	50.6	53.9	55.6	55.8	56.0	53.5	53.8
17	38.9	41.4	41.6	29.2	29.2	50.8	54.0	55.7	55.8	56.0	53.8	53.6
18	38.5	41.3	12. 28.5	28.9	29.0	51.1	54.2	55.9	56.0	55.6	54.0	12. 54.8
19	38.6	41.5	28.6	28.9	29.0	51.0	54.5	56.1	56.2	54.4	54.2	55.2
20	38.8	41.9	28.5	28.9	28.6	51.3	54.5	55.8	56.7	54.3	53.7	54.8
21	39.3	41.8	28.4	28.8	29.0	51.7	54.6	55.7	56.3	53.6	53.6	54.6
22	39.4	42.2	28.0	28.9	29.3	52.0	54.5	55.5	56.0	53.7	53.8	54.6
23	39.6	42.2	27.3	28.8	29.7	51.4	54.3	55.6	55.6	53.2	53.7	54.3
24	39.8	42.1	27.1	28.9	29.8	51.5	54.3	55.8	55.7	52.9	53.5	53.8
25	40.1	42.4	27.1	28.8	30.0	51.4	54.6	56.0	55.6	53.1	53.3	53.5
26	40.6	42.3	27.4	28.8	30.3	51.5	54.3	56.1	55.0	52.9	53.3	53.6
27	41.0	42.4	27.6	28.8	30.5	51.4	54.0	56.2	54.6	52.5	53.1	53.5
28	41.3	42.6	28.1	29.2	32.0	51.8	53.7	55.9	54.4	52.7	51.9	53.2
29	41.6		28.0	29.5	31.9	52.1	54.1	55.8	54.0	52.9	52.3	53.6
30	41.7		28.4	29.5	32.3	52.1	54.3	55.6	54.3	52.9	52.6	53.9
31	41.6		28.0		32.5		54.5	55.9		53.0		54.1

TABLE (A) XIV.—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, 1926.				In C.G.S. Units.		Greenwich Mean Time, 1926.				In C.G.S. Units.		Greenwich Mean Time, 1926.				In C.G.S. Units.	
				Observed Horizontal Force.	Deduced Base Line.					Observed Horizontal Force.	Deduced Base Line.					Observed Horizontal Force.	Deduced Base Line.
				γ	γ					γ	γ					γ	γ
				h m h m						h m h m						h m h m	
Jan.	1.	II	23-12 14	18564	18550	Mar.	18.	15	18-15 59	18548	18299	June	2.	14	4-14 42	18571	18618
	2.	II	17-12 2	18584	18560		19.	10	53-11 34	18549	18301		3.	10	25-11 17	18545	18611
							20.	9	17- 9 55	18534	18299		4.	14	28-15 12	18578	18618
	4.	14	53-15 57	18580	18540		22.	10	29-11 12	18550	18300		8.	8	54- 9 35	18534	18608
	5.	II	13-11 52	18583	18548		23.	9	12- 9 54	18565	18301		8.	11	20-12 6	18575	18619
	6.	II	10-11 56	18567	18549		24.	9	40-10 19	18570	18304		9.	9	24-10 7	18547	18620
	7.	II	11-12 21	18583	18543		25.	9	35-10 27	18553	18304		10.	8	52- 9 33	18556	18620
	8.	10	36-11 18	18575	18546		26.	9	24-10 8	18573	18307		11.	14	37-15 28	18597	18623
	11.	II	4-11 57	18587	18548		27.	10	12-11 22	18559	18302		12.	8	24- 9 13	18568	18616
	12.	14	45-15 29	18606	18548		29.	9	18-10 6	18564	18309		14.	9	16- 9 58	18553	18614
	13.	II	21-12 7	18567	18550		30.	9	17-10 28	18559	18309		15.	8	44- 9 35	18571	18614
	15.	II	22-12 8	18560	18555		31.	9	30-10 23	18561	18309		16.	8	55- 9 54	18564	18611
	16.	II	21-12 0	18562	18548								17.	8	55- 9 34	18576	18615
	18.	14	34-15 14	18557	18554	April	1.	11	51-12 33	18559	18309		18.	9	35-10 16	18553	18612
	19.	II	50-12 48	18558	18549		3.	9	49-10 39	18579	18333		18.	10	44-11 23	18560	18616
	20.	II	3-11 46	18599	18567		3.	10	39-11 20	18570	18332		19.	8	48- 9 25	18584	18617
	21.	14	51-15 31	18589	18553		4.	10	23-11 1	18575	18336		21.	10	19-11 10	18586	18616
	23.	10	32-11 14	18552	18550		6.	15	12-15 50	18566	18334		21.	13	6-13 49	18596	18625
	25.	10	34-11 19	18575	18550		7.	9	38-10 36	18541	18331		22.	8	15- 9 2	18575	18615
	26.	10	34-11 12	18575	18560		7.	12	40-13 17	18535	18332		23.	8	16- 8 57	18583	18616
	27.	II	53-12 38	18520	18552								23.	10	57-11 37	18577	18619
	28.	II	10-12 8	18549	18547		8.	12	15-12 56	18541	18364		24.	9	10- 9 58	18584	18614
	29.	II	24-12 26	18577	18547		9.	11	52-12 30	18558	18372		25.	9	17-10 5	18574	18619
	30.	10	9-10 52	18558	18545		10.	9	57-10 37	18569	18368		26.	10	34-11 14	18572	18622
Feb.	1.	II	54-12 52	18559	18546		12.	9	54-10 33	18554	18372		28.	8	33- 9 26	18578	18620
	2.	12	11-13 2	18565	18548		13.	10	13-11 8	18560	18374		29.	9	15-10 5	18561	18604
	4.	II	9-12 32	18560	18549		14.	10	36-11 14	18544	18369		30.	14	3-14 54	18588	18622
	5.	9	16-10 1	18578	18546		16.	10	9-10 58	18458	18363	July	1.	9	13-10 16	18563	18616
	6.	10	7-10 55	18573	18547		17.	10	5-10 48	18512	18368		2.	9	19-10 1	18572	18616
	8.	II	37-12 21	18574	18546		19.	14	17-15 24	18594	18382		3.	10	31-11 9	18579	18622
	9.	10	25-11 21	18572	18542		20.	10	36-11 23	18568	18370		5.	14	47-15 30	18596	18617
	10.	9	13-10 1	18585	18549		21.	9	58-10 42	18572	18373		6.	10	25-11 15	18575	18618
	11.	10	21-11 0	18570	18546		22.	11	27-12 8	18552	18372		7.	10	29-11 23	18587	18620
	12.	10	23-11 2	18562	18543		23.	9	52-10 33	18561	18375		8.	10	29-11 23	18587	18620
	13.	10	33-11 10	18569	18545		24.	9	50-10 32	18568	18369		9.	9	1- 9 40	18569	18621
	15.	12	12-12 51	18542	18544		26.	10	21-11 10	18557	18364		9.	14	19-15 7	18602	18623
	16.	II	18-12 1	18541	18544		27.	9	16-10 14	18573	18365		10.	10	30-11 6	18573	18619
	17.	10	40-11 33	18547	18543		28.	8	26- 9 18	18582	18364		12.	13	44-14 24	18585	18619
	18.	9	58-10 41	18547	18545		29.	9	20-10 8	18571	18369		13.	10	4-10 58	18560	18616
	19.	10	5-10 46	18558	18548		30.	9	21-10 12	18569	18368		14.	9	3- 9 46	18572	18619
	20.	9	56-10 32	18559	18548	May	1.	8	36- 9 17	18583	18365		15.	8	45- 9 43	18582	18614
	22.	9	41-10 30	18539	18542		3.	15	4-15 46	18609	18371		16.	9	26-10 11	18575	18613
	23.	II	28-12 10	18575	18549		4.	11	0-11 44	18560	18368		17.	8	23- 9 9	18584	18616
	25.	10	45-11 23	18496	18547		5.	9	25-10 6	18542	18367		19.	11	12-11 51	18563	18614
	26.	10	47-11 38	18533	18546		6.	11	13-12 0	18533	18361		20.	8	20- 9 6	18579	18606
	27.	10	4-10 50	18550	18549		7.	11	14-11 56	18550	18364		21.	8	38- 9 33	18588	18612
Mar.	1.	10	12-10 53	18578	18552		8.	9	58-10 41	18569	18365		22.	8	13- 9 4	18579	18594
	2.	10	38-11 22	18525	18559		11.	8	45- 9 27	18524	18366		23.	9	16-10 5	18584	18606
	3.	10	35-11 32	18554	18549		12.	10	9-11 19	18542	18372		24.	9	18- 9 56	18599	18609
	4.	10	33-11 14	18548	18550		13.	11	18-11 54	18540	—		26.	10	50-11 28	18577	18612
	5.	II	23-12 4	18576	18550		14.	10	5-10 53	18546	18373		27.	11	14-12 0	18593	18619
	6.	9	15- 9 50	18518	18539		15.	10	29-11 14	18551	18368		28.	14	6-14 44	18555	18614
	8.	II	0-11 44	18559	18548		17.	11	9-11 50	18561	18373		30.	13	44-14 54	18579*	(18624)
	9.	9	43-10 31	18583	18548		18.	13	37-14 22	18579	18365		31.	10	45-11 24	18576	18617
	10.	9	49-10 41	18535	18551		19.	10	3-10 40	18564	18363	Aug.	3.	9	32-10 17	18561	18615
	11.	16	28-17 10	18571	18557		20.	14	47-15 31	18591	18377		5.	10	33-11 16	18578	18616
	12.	14	43-15 23	18562	18551		21.	10	9-10 50	18553	18375		7.	8	51- 9 39	18554	18614
	13.	10	27-11 15	18550	18549		22.	8	18- 9 4	18569	18369		9.	11	8-11 53	18575	18616
	15.	14	41-15 32	18584	18553		25.	9	15-10 20	18584	18365		11.	10	29-11 24	18558	18614
	16.	10	0-10 58	18541	18546		26.	11	7-11 55	18587	18371		12.	14	6-14 47	18572	18620
							28.	9	36-10 25	18574	18394		14.	9	27-10 13	18560	18615
							29.	9	23-10 8	18588	18395		16.	9	33-10 13	18578	18614
							31.	14	5-14 53	18590	18403						
	18.	9	36-10 26	18539	18301												

TABLE (A) XIV.—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, 1926.		In C.G.S. Units.		Greenwich Mean Time, 1926.		In C.G.S. Units.		Greenwich Mean Time, 1926.		In C.G.S. Units.	
		Observed Horizontal Force.	Deduced Base Line.			Observed Horizontal Force.	Deduced Base Line.			Observed Horizontal Force.	Deduced Base Line.
Aug. 17.	h m h m	γ	γ	Oct. 1.	h m h m	γ	γ	Nov. 25.	h m h m	γ	γ
18.	8 46- 9 35	18573	18613	9 26-10 9	18581	18374		9 33-10 17	18568	18386	
19.	8 59- 9 46	18572	18612					9 35-10 26	18582	18387	
20.	8 53- 9 49	18576	18612	5.	10 47-11 49	18550	18339	27.	9 37-10 19	18578	18394
21.	8 47- 9 31	18557	18612	6.	10 53-11 36	18572	18343				
22.	8 30- 9 11	18566	18615	7.	10 30-11 15	18532	18341	29.	11 48-12 32	18513	(18377)
23.	9 23-10 14	18575	18615	8.	10 25-11 11	18553	18338	14 28-15 11	18526	(18367)	
24.	11 28-12 11	18588	18619	12.	9 40-10 53	18560	18339	9 45-10 29	18547	18360	
25.	7 55- 8 42	18570	18615	13.	12 4-12 40	18564	18340				
27.	13 33-14 14	18597	18623	14.	15 3-15 52	18597	18344				
28.	9 5- 9 56	18581	18624								
30.	10 34-11 34	18579	18617	19.	12 18-13 18	18566	18390	Dec. 1.	9 31-10 19	18569	18368
31.	8 54- 9 38	18558	18611	20.	10 13-11 5	18557	18400	2.	9 40-10 27	18570	18366
				21.	14 50-15 37	18568	18392	3.	10 7-10 49	18575	18362
Sept. 1.	8 53- 9 33	18567	18607	23.	10 22-11 19	18555	18391	4.	11 24-12 3	18567	18366
2.	11 7-11 46	18584	18619	26.	9 38-10 29	18539	18387	6.	12 42-13 21	18580	18367
3.	8 24- 9 15	18569	18613	28.	9 39-10 50	18546	18387	7.	11 4-12 6	18568	18364
4.	10 57-11 35	18574	18608	29.	11 38-12 30	18552	18387	8.	10 11-11 7	18565	18359
6.	14 46-15 32	18598	18613					9.	10 0-10 42	18571	18358
7.	13 48-14 28	18578	18609	Nov. 2.	14 36-15 25	18571	18390	10.	12 7-12 51	18591	18370
8.	10 47-11 32	18524	18606	4.	10 6-10 57	18561	18384	11.	9 36-10 17	18583	18364
9.	9 22-10 4	18547	18615	5.	12 6-12 53	18562	18388	13.	11 28-12 17	18567	18364
10.	13 49-14 36	18561	18614	6.	12 11-12 54	18567	18393	13.	15 13-15 55	18576	18367
11.	9 36-10 18	18556	18607	8.	14 45-15 39	18588	18393	14.	11 31-12 14	18575	18368
13.	13 45-14 29	18578	18355	9.	10 33-11 19	18568	18396	15.	11 6-11 51	18578	18367
15.	11 6-11 48	18561	18363	10.	9 50-10 45	18567	18390	16.	12 5-12 47	18543	18364
16.	13 52-14 32	18555	18368	11.	14 51-15 44	18590	18394	17.	11 31-12 14	18562	18364
17.	10 40-11 41	18553	18363	12.	10 32-11 20	18572	18389				
18.	8 30- 9 17	18563	18356	13.	9 54-10 38	18561	18383	18.	9 47-10 28	18569	18624
20.	13 55-14 38	18544	18359	16.	9 36-10 43	18564	18388	20.	12 21-13 10	18577	18630
22.	10 45-11 31	18524	18362	17.	9 28-10 23	18577	18386	21.	10 13-10 55	18553	18620
23.	10 26-11 13	18547	18375	18.	9 35-10 29	18568	18387	22.	11 24-12 9	18566	18624
24.	11 3-11 52	18548	18363	19.	9 33-10 24	18589	18390	23.	10 0-10 39	18576	18622
25.	8 25- 9 7	18541	18359	20.	10 8-11 5	18575	18388	24.	11 26-12 15	18546	18629
27.	14 19-15 8	18579	18376	22.	10 7-10 49	18563	18387	28.	14 52-15 47	18578	18628
29.	8 27- 9 21	18569	18371	23.	9 30-10 33	18549	18382	29.	11 41-12 28	18561	18628
30.	13 52-14 54	18579	18372	24.	9 40-10 24	18557	18383	30.	14 50-15 35	18578	18628
								31.	11 57-12 35	18564	18624

TABLE (A) 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.

Day.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
I	γ 43048	γ 43062	γ 43042	γ 43063	γ 43056	γ 43058	γ 43056	γ 43035	γ 43006	γ 43220	γ 43216	γ 43193
2	43029	43060	43059	43095	—	43044 43018	43062	—	42997	—	43239	43201
3	—	43064	43048	43087 43027	43039	43019	43058	43015	43025	—	43228	43204
4	43047	43051	43057	43055	43057	43035	43067	43038	43012	43201	43219	43204
5	43050	43038	43040	43042	43062	43003	43073	43051	—	43217	43210	43196
6	43034	43061	43072	43028	43058	—	43082	43046	43003	43195	43214	43201
7	43038	43028	43022	43039	43064	42997	43068	43038	43001	43207	43216	43213
8	43061	43036	43052	43040	43057	43008	43065	43064	43002	43208	43216	43193
9	43063	43036	43062	43053	43056	43012	43075	43041	43005	43198	43230	43213
10	43080	43060	43063	43042	43055	43013	43088	43050	42987	43203	43225	43205
11	43055	43063	43068	43047	43055	43042	43078	43051	43031	43178	43201	43207
12	43046	43051	43064	43040	43051	43044	43032	43048	43007	43191	43214	—
13	43059	43064	43054	43041	43052	43024	42992	43054	43010	43185	43221	43217
14	43060	43054	43092	43033	43073	43027	42991	43043	43008	43214	43218	43208
15	43039	43053	43048	—	43068	43025	42989	43061	43176	—	43219	43204
16	43065	43047	43052	43055	43054 43036	43032	43025	43070	43198	43202	43210	43197
17	43053	43041	43053	43058	43031	43034	43023	43090	43172	43166	43211	43235
18	43043	43048	43039	—	43035	43047	—	43058	43161	43195	43222	43221
19	43053	43047	43025	43042	43028	43043	43032	43066	—	43188	43254	43206
20	43036	43054	43053	43049	43021	43015	43016	43060	43174	43213	43238	43222
21	43046	43062	43073	43038	43041	43040	43020	43055	43173	43219	43225	43202
22	43062	43058	43030	43060	43041	43059	43037	—	43193	43218	43226	43235
23	43053	43046	43043	43063	—	43029	43022	43088 42988	43173	43206	43224	43236
24	43049	—	43036	43048	43032	43021	43033	42987	43175	43188	43222	43226
25	43046	43056	43043	43054	43036	43046	43034	42998	43186	43213	43235	43216
26	43043	43056	43060	43057	43047	43050	43012	42965	—	43214	43232	—
27	43060	43054	43036	43047	43031	43062	43029	43020	43224	43222	43244	43244
28	43066	43067	43041	43050	43051	43059	43041	42995	43232	43229	43227	43203
29	43062	—	43057	43069	43078	43044	43034	43005	43203	43221	43238	43197
30	43048	—	43045	43053	43073	43053	43050	43001	—	—	43212	43195
31	43051	—	43063	—	43065	—	43024	43002	—	43188	—	43240

MAGNETIC DISTURBANCES IN DECLINATION, HORIZONTAL FORCE, and VERTICAL FORCE,
recorded at the ABINGER MAGNETIC STATION of the ROYAL OBSERVATORY, in the Year 1926.

The following notes give a brief description of all magnetic movements (superposed on the ordinary diurnal movement) exceeding $3'$ in Declination, 20γ in Horizontal Force, or 12γ in Vertical Force, as taken from the photographic records of the respective Magnetometers. The movements in Horizontal and Vertical Force are expressed in C.G.S. units. When any one of the three elements is not specifically mentioned, it is to be understood that the movement, if any, was insignificant. Any failure or want of register is specially indicated.

The term "wave" is used to indicate a movement in one direction and return; "double wave" a movement in one direction and return with continuation in the opposite direction and return; "two successive waves" consecutive wave movement in the same direction; "oscillations" a number of movements in both directions. The extent and direction of the movement are indicated in brackets, $+$ denoting an increase, and $-$ a decrease of the magnetic element. In the case of oscillations the sign $\pm$ denotes positive and negative movements of generally equal extent.

Magnetic movements which do not admit of brief description in this way are exhibited on accompanying plates.

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

1926.
January

- 1^d 11^h to 15^h Two consecutive waves in H.F. (-25). 14^h to 15^h Wave in Dec. ($-6'$).
- 2^d 1^h to 3^h Wave in Dec. ($-5'$). 13^h to 14^h Decrease in H.F. (-30). 17^h to 18^h Wave in Dec. ($-10'$). 17^h to 19^h Wave in H.F. ($+40$). 17^h to 18^h Wave in V.F. ($+12$).
- 3^d 22^h 21^m Sudden movement in all traces.
- 4^d 3^h to 4^h Wave in Dec. ($+4'$). 5^h to 7^h Pointed wave in Dec. ($+10'$). 5^h to 7^h Double crested wave in H.F. ($+35$). 8^h to 10^h Decrease in H.F. (-40). 6^h to 7^h Irregular decrease in V.F. (-15). 9^h to 11^h Double-crested wave in Dec. ($+5'$). 9^h to 10^h Increase in V.F. ($+15$).
- 6^d 22^h to 23^h Wave in H.F. ($+20$).
- 7^d 7^h to 8^h Wave in H.F. (-25). 15^h to 17^h Double wave in H.F. (∓ 35). 15^h to 17^h Wave in Dec. ($-9'$). 15^h to 17^h Wave V.F. ($+12$). 20^h to 21^h Wave in H.F. ($+40$); wave in Dec. ($-4'$). 23^h to 8^h 0^h Decrease in V.F. (-15); wave in H.F. ($+40$); wave in Dec. ($-5'$).
- 8^d 2^h to 3^h Increase in Dec. ($+5'$). 18^h to 19^h Wave in Dec. ($-5'$).
- 10^d 21^h to 23^h Serrated wave in Dec. ($-6'$).
- 11^d 0^h to 2^h Increase in Dec. ($+8'$).
- 12^d 0^h to 0^h Sharp double wave in H.F. (± 15). 2^h to 3^h Wave in Dec. ($+4'$). 23^h to 23^h Decrease in Dec. ($-7'$).
- 13^d 1^h to 2^h Wave in H.F. (-20). 4^h to 5^h Increase in H.F. ($+20$). 18^h to 20^h Accelerated increase in V.F. ($+35$), followed immediately till 21^h by a wave (-20). 19^h to 20^h Decrease in Dec. ($-15'$) followed immediately till 20^h by a steep wave ($+21'$). 19^h to 20^h Double wave in H.F. ($+70$, -40), followed till 24^h by a general oscillatory increase ($+50$). 21^h to 21^h Wave in Dec. ($-5'$). 22^h to 24^h Increase in Dec. ($+10'$).
- 14^d 4^h to 5^h Wave in Dec. ($+4'$). 7^h to 8^h Increase in Dec. ($+6'$). 7^h to 9^h Wave in H.F. ($+20$). 8^h to 10^h Wave in V.F. (-15). 12^h to 13^h Double-crested wave in Dec. ($+7'$). 12^h to 13^h Double-crested wave in H.F. (-20). 13^h to 15^h Oscillatory increase in V.F. ($+30$). 14^h to 15^h Wave in H.F. (-40). 16^h to 18^h Wave in Dec. ($-4'$). 22^h to 24^h Wave in Dec. ($-8'$).
- 15^d 1^h to 3^h Double wave in H.F. ($+40$, -30). 1^h to 3^h Irregular wave in Dec. ($+12'$). 1^h to 4^h Wave in V.F. (-25). 9^h to 10^h Wave in H.F. (-20), and in Dec. ($-4'$). 12^h to 16^h Increase in V.F. ($+40$). 17^h to 18^h Wave in H.F. (-30). 18^h to 19^h Wave in Dec. ($-6'$). 19^h to 20^h Double-crested wave in Dec. ($-3'$). 19^h to 19^h Wave in H.F. ($+25$). 22^h to 22^h Wave in Dec. ($-10'$). 22^h to 23^h Double wave in Dec. ($\pm 4'$). 22^h to 23^h Irregular wave in H.F. with steep ascent ($+100$), followed immediately will 23^h by a further wave ($+30$). 22^h to 22^h Increase in V.F. ($+15$), followed immediately till 23^h by a rapid decrease (-45), and then, till 16^h, 1^h by an oscillatory partial recovery ($+25$).
- 16^d 2^h to 4^h Wave in H.F. ($+50$). 2^h to 3^h Decrease in V.F. (-16). 2^h to 3^h Wave in Dec. ($-6'$). 18^h to 19^h Wave in Dec. ($-4'$). 19^h to 20^h Wave in H.F. ($+25$). 20^h to 21^h Wave in H.F. (-25). 21^h to 22^h Wave in H.F. ($+40$). 21^h to 22^h Decrease in Dec. ($-6'$), followed immediately till 22^h by a wave ($+4'$).

- January 17^d 19³^h to 20³^h Irregular wave in H.F. (-25). 20^h to 21^h Wave in Dec. (-6').
- 18^d 8^h to 9^h Accelerated decrease in H.F. (-90), followed till 10¹^h by a wave (+30), and then till 11^h by a rapid increase (+60). 8³^h to 9¹^h Increase in Dec. (+10'). 9¹^h to 10^h Decrease in V.F. (-15). 14¹^h to 14³^h Decrease in H.F. (-30), followed till 17^h by a general oscillatory increase (+60). 11^h to 18^h General increase in V.F. (+35). 17¹^h to 18¹^h Double-crested wave in H.F. (-30, -40). 17¹^h to 19^h Double-crested wave in Dec. (-5', -10'). 21^h to 21¹^h Wave in Dec. (-6'). 21^h to 21³^h Wave in H.F. (+20).
- 19^d 0^h to 1^h Wave in H.F. (+55). 0^h to 1^h Wave in Dec. (-15'), the return incomplete (+7'). 0^h to 1^h Decrease in V.F. (-16). 1¹^h to 4^h Increase in Dec. (+10'). 14^h to 14¹^h Increase in H.F. (+40). 12¹^h to 17^h Irregular increase in V.F. (+40). 16^h to 17¹^h Irregular wave in H.F. (-30). 16¹^h to 17¹^h Wave in Dec. (-5'). 19^h to 20^h Wave in H.F. (-25). 19¹^h to 21^h Wave in Dec. (-10').
- 20^d 19³^h to 21^h Wave in Dec. (-5').
- 22^d 15^h 37^m Sudden movement in H.F. (+35). 17¹^h to 17³^h Sharp wave in H.F. (+40). 17¹^h to 18^h Increase in Dec. (+8'). 18^h to 21¹^h Increase in V.F. (+55), followed immediately till 22³^h by a decrease very rapid at first (-70). 18^h to 21^h General decrease in Dec. (-8'), with waves at 19^h to 20^h (-4') and 20^h to 21^h (-6'). 18^h to 24^h H.F. trace continuously disturbed. The principal movements are:—a wave from 19^h to 19¹^h (+30); a double wave from 20³^h to 21³^h (±40), followed immediately till 22^h by a very rapid decrease (-70), and a further decrease till 23^h (-50); a rapid increase between 23^h and 23¹^h (+70), a double-crested wave between 23¹^h and 24^h (-45). 21^h to 22^h Oscillatory decrease in Dec. (-20'). 22^h to 23^h Irregular wave in Dec. (+6'). 22³^h to 23¹^h Sharp wave in V.F. (+35), followed immediately till 24^h by an increase (+30). 23^h to 23³^h Double-crested wave in Dec. (+8'), followed immediately till 23^d 0¹^h by an oscillatory increase (+9').
- 23^d 0¹^h to 2^h Double wave in Dec. (+10', -15'). 0^h to 3^h A very steep wave in V.F. (-110). 2^h to 2¹^h Double wave in H.F. (±25). 10^h to 23^h. All traces subject to constant rapid movements, the principal of which are a sharp wave from 12³^h to 13¹^h in H.F. (+60), and in V.F. (-20); and a corresponding series of oscillations in H.F. and V.F. between 19¹^h and 21^h of amplitude 30γ and 15γ respectively.
- 24^d 16¹^h to 16³^h Sharp wave in H.F. (+30), and in V.F. (+15).
- 25^d 4³^h to 6^h Truncated wave in Dec. (+4'). 5^h to 6^h Wave in H.F. (+40). 5¹^h to 5³^h Decrease in V.F. (-15).
- 26^d 12^h to 27^d 12^h. See Plate I.
- 27^d 12^h to 18^h. Wave in V.F. (+45). 12³^h to 13¹^h Increase in H.F. (+35). 14¹^h to 16¹^h Double wave in H.F. (±40), each wave having a double crest. 14³^h to 16^h Wave in Dec. (-12'). 20^h to 21¹^h Serrated wave in Dec. (-12'). 20¹^h to 21³^h Serrated wave in H.F. (+50). 21¹^h to 22¹^h Wave in Dec. (-5'). 22¹^h to 22³^h Wave in Dec. (+8'). 22¹^h to 23^d 2^h Four consecutive waves in H.F. (-40, -50, -30, -25). 22¹^h to 22¹^h Decrease in V.F. (-15). 23¹^h to 28^d 0¹^h Irregular wave in Dec. (-7').
- 28^d 0¹^h to 1¹^h Double wave in Dec. (±4'). 12^h to 15^h Wave in V.F. (+25). 13^h to 13¹^h Increase in H.F. (+30). 20¹^h to 22^h Serrated wave in Dec. (-7'). 21^h to 22¹^h Two consecutive waves in H.F. (+20).
- 29^d 2^h to 3^h Wave in Dec. (+4'). 13^h to 15¹^h Increase in V.F. (+25).
- 30^d 4^h to 4³^h Wave in Dec. (+3'). 22³^h to 31^d 1^h Two consecutive waves in Dec. (-6', -4').
- 31^d 10^h to 11^h Oscillatory decrease in H.F. (-30). 13¹^h to 14^h Wave in Dec. (+3').
- February 1^d 11^h to 12^h Wave in H.F. (-25). 13^h to 13¹^h Increase in Dec. (+4'). 14^h to 15^h Wave in H.F. (-20). 18^h to 19^h Domed wave in H.F. (-20). 18^h to 18³^h Wave in Dec. (-4'). 22^h to 23^h Wave in Dec. (-4').
- 2^d 2^h to 3^h Wave in H.F. (+35), and wave in Dec. (+6'). 2^h to 5^h Wave in V.F. (-20) with slow decline. 18^h to 19¹^h Irregular wave in H.F. (-30). 20¹^h to 22¹^h Two consecutive waves in H.F. (+50). 20³^h to 21¹^h Decrease in V.F. (-15). 20¹^h to 21^h Wave in Dec. (-4'), followed immediately till 22¹^h by a second wave (-19'). 22¹^h to 24^h Three consecutive waves in Dec. (-4', -3', -5').
- 3^d 0^h to 1^h Increase in Dec. (+8'). 0¹^h to 1¹^h Wave in H.F. (+35). 5^h to 7^h Wave in H.F. (+35), and wave in Dec. (+4'). 9^h to 10^h Decrease in H.F. (-40). 10^h to 11^h Increase in Dec. (+6'). 12³^h to 14^h Wave in H.F. (-25). 16³^h to 17¹^h Decrease in Dec. (-6'). 17¹^h to 19^h Wave in Dec. (-10'). 17¹^h to 19¹^h Double-crested wave in H.F. (+35). 20^h to 23^h Wave in H.F. (+60) with several minor oscillations superposed. The greatest of these was from 21^h to 21¹^h (+40). 20³^h to 21^h Wave in Dec. (-4'), followed immediately till 22¹^h by a truncated wave (+9'). 21^h to 24^h Wave in V.F. (-20).

- February 4^d 2^h to 3¹/₄^h Increase in Dec. (+6') and decrease in H.F. (-30). 4³/₄^h to 6¹/₄^h Double wave in H.F. (± 20). 12^h to 14^h Increase in V.F. (+20) continuing into a wave till 18^h (+20). 13³/₄^h to 14^h Increase in H.F. (+25). 15^h to 16¹/₂^h Wave in H.F. (-40). 15¹/₂^h to 17^h Wave in Dec. (-7'). 18^h to 19¹/₂^h Double-crested wave in H.F. (-20). 18¹/₂^h to 19¹/₂^h Wave in Dec. (-6'). 20^h to 21^h Double-crested wave in Dec. (-3', -5'). 20¹/₂^h to 21¹/₂^h Wave in H.F. (+30).
- 5^d 1¹/₂^h to 3¹/₄^h Truncated wave in Dec. (+3'). 21^h to 22^h Wave in H.F. (+30), and wave in Dec. (-4').
- 10^d 5^h 48^m Sudden movement in Dec. and H.F., followed immediately in Dec. till 6^h by a wave (+4'). 10¹/₂^h to 11^h Wave in Dec. (+5'). 21^h to 22^h Oscillating decrease in Dec. (-7'). 21¹/₂^h to 22^h Wave in H.F. (-20).
- 11^d 13^h to 20^h General increase in V.F. (+55) with a wave from 15¹/₂^h to 17^h (+15). 15^h to 16¹/₂^h Double-crested wave in H.F. (-30), followed till 18^h by two consecutive waves (-20). 18^h to 19^h Wave in Dec. (+8'). 18¹/₂^h to 20¹/₂^h Irregular double-crested wave in H.F. (-60). 19^h to 19³/₄^h Wave in Dec. (+4'). 19³/₄^h to 20³/₄^h Wave in Dec. (-10'). 20¹/₂^h to 20³/₄^h Decrease in V.F. (-25), followed immediately till 22^h by two sharp waves (+10, +15), and then till 23^h by a further decrease (-15). 20³/₄^h to 22^h Two consecutive waves in H.F. (-40, -60). 20³/₄^h to 21^h Wave in Dec. (-7'), followed immediately till 21¹/₂^h by a rapid decrease (-23'), partially recovering till 22³/₄^h (+14'). 22¹/₄^h to 22¹/₂^h Decrease in H.F. (-30). 23³/₄^h to 12^d 1^h Increase in Dec. (+7').
- 12^d 1^h to 6^h Broad serrated wave in V.F. (-15). 0¹/₂^h to 1³/₄^h Wave in Dec. (-6'). 2³/₄^h to 4¹/₄^h Wave in Dec. (+9'). 2¹/₂^h to 3¹/₂^h Wave in H.F. (-20). 17³/₄^h to 18³/₄^h Wave in H.F. (+25). 19³/₄^h to 21^h Irregular double wave in H.F. (∓ 20). 19³/₄^h to 21^h Wave in Dec. (-11').
- 13^d 2¹/₂^h to 3¹/₂^h Wave in Dec. (-4'). 4^h to 5^h Wave in Dec. (-4'). 4^h to 5¹/₂^h Wave in H.F. (+20). 6¹/₂^h to 7¹/₂^h Wave in Dec. (+5'). 11^h to 13¹/₄^h Increase in Dec. (+12'), followed till 15^h by a truncated wave (-4'). 12^h to 14¹/₂^h Irregular wave in H.F. (-50). 17^h to 19^h Wave in Dec. (-5'). 17³/₄^h to 19³/₄^h Wave in H.F. (+20). 20¹/₂^h to 22³/₄^h Serrated wave in Dec. (-8').
- 14^d 6¹/₄^h to 7³/₄^h Wave in Dec. (+3'). 11¹/₄^h to 12³/₄^h Wave in H.F. (-20). 16¹/₂^h to 17¹/₂^h Wave in H.F. (-20). 16³/₄^h to 18³/₄^h Wave in Dec. (-7'). 20¹/₂^h to 22^h Wave in Dec. (-8'). 21¹/₂^h to 22^h Oscillatory decrease in H.F. (-30), with return till 23³/₄^h.
- 15^d 8¹/₂^h to 9¹/₄^h Decrease in H.F. (-35). 10^h to 16^h H.F. and Dec. in irregular oscillation. 10¹/₂^h to 11¹/₂^h Wave in Dec. (+5'). 11¹/₂^h to 12^h Increase in Dec. (+5'). 12³/₄^h to 13³/₄^h Increase in H.F. (+30). 15^h to 15³/₄^h Sharp wave in H.F. (-20), and decrease in Dec. (-6'). 18³/₄^h to 24^h Two consecutive serrated waves in Dec. (-15'). 20^h to 22^h Wave in H.F. (-40), followed till 23¹/₂^h by two consecutive waves (-35, -20). 22^h to 23^h Oscillatory decrease in V.F. (-20).
- 17^d 15¹/₂^h to 16^h Wave in H.F. (+20). 12^h to 19^h General increase in V.F. (+40). 17^h to 18^d 6^h General form of all traces disturbed by frequent oscillations, some of quite short period. 17^h to 18¹/₂^h Wave in Dec. (+8'). 17¹/₂^h to 19³/₄^h Wave in H.F. (-40). 19¹/₂^h to 20¹/₂^h Truncated wave in H.F. (-20). 22¹/₂^h Sudden increase in H.F. (+40). 23¹/₂^h to 24^h Accelerated decrease in Dec. (-8'). 23³/₄^h to 18^d 0³/₄^h Irregular decrease in H.F. (-100), rapidly recovering till 18^d 1^h and followed immediately till 18^d 5¹/₄^h by numerous sharp oscillations, the amplitude of which reached maximum values (about ± 30) at 1^h, 3^h and 4¹/₂^h.
- 18^d 0^h to 2^h Wave in V.F. (+35), with several sharp oscillations superposed. Further rapid oscillations occurred between 2¹/₂^h and 3^h, and between 3³/₄^h and 4³/₄^h. 1^h to 1¹/₄^h Double-crested wave in Dec. (-6'). 2¹/₂^h to 3^h and 4^h to 5^h Several rapid oscillations in Dec. (5'). 3¹/₂^h to 3³/₄^h Wave in Dec. (-5'). 23³/₄^h to 19^d 0³/₄^h Wave in Dec. (-8').
- 19^d 0^h to 1^h Irregular wave in H.F. (+40). 18¹/₂^h to 20^h Double-crested wave in Dec. (-6'). 21^h to 22^h Wave in H.F. (+50). 21¹/₂^h to 23^h Wave in V.F. (-12). 21¹/₄^h to 21¹/₂^h Wave in Dec. (-3'). 22^h to 23^h Wave in Dec. (-4').
- 21^d 16^h to 18^h Increase in V.F. (+20). 16¹/₂^h to 18¹/₂^h Wave in H.F. (-30). 17^h to 18³/₄^h Truncated wave in Dec. (-4'). 20^h to 21^h Accelerated decrease in Dec. (-8'). 21^h to 22^h Two consecutive waves in H.F. (+40, +25). 21^h to 22^h Decrease in V.F. (-15).
- 22^d 5¹/₂^h to 6¹/₄^h Wave in Dec. (-3'). 15^h to 17^h Wave in H.F. (+25). 19¹/₂^h to 20¹/₂^h Wave in H.F. (+40). 20^h to 21^h Two consecutive waves in Dec. (-8', -3'). 20^h to 20¹/₂^h Decrease in V.F. (-12). 23¹/₂^h to 23^d 1¹/₂^h Double-crested wave in Dec. (-4').
- 23^d 15^h to 25^d 15^h. See Plates II. and III.
- 26^d 1^h to 2^h Wave in Dec. (+6') and in H.F. (+25). 4¹/₂^h to 7¹/₂^h Double-crested wave in V.F. (-20). 4¹/₂^h to 7^h Wave in Dec. (+10'). 3¹/₂^h to 5^h Increase in H.F. (+40), followed till 7¹/₂^h by two consecutive waves (-60, -40). 11^h to 14^h Increase in V.F. (+30). 12^h to 12¹/₂^h Wave in H.F. (+30). 13^h to 13³/₄^h Wave in H.F. (-25). 16¹/₂^h to 18^h Wave in H.F. (-20). 20¹/₂^h to 21³/₄^h Double wave in H.F. (∓ 15). 20³/₄^h to 22^h Wave in Dec. (-10').
- 27^d 19^h to 19³/₄^h Wave in Dec. (-3').
- 28^d 19³/₄^h to 21^h Wave in H.F. (-20). 21¹/₂^h to 22^h Wave in Dec. (-6').

March

- 1^d 14^h to 19^h Wave in V.F. (+20). 15^h to 16^h Truncated wave in H.F. (-20). 19^h to 20^h Wave in H.F. (-25). 19^h to 21^h Wave in Dec. (-12'). 22^h to 23^h Wave in H.F. (+40). 22^h to 23^h Decrease in V.F. (-25), partially recovering till 24^h. 22^h to 23^h Double wave in Dec. (+6', -4').
- 2^d 0^h to 2^h Double wave in Dec. (±5'). 0^h to 1^h Wave in H.F. (-25). 5^h to 7^h Wave in H.F. (-40). 5^h to 6^h Increase in Dec. (+10'). 6^h to 9^h Decrease in Dec. (-10'). 9^h to 10^h Decrease in H.F. (-50), followed till 12^h by an oscillatory increase (+50). 12^h to 13^h Wave in H.F. (-30). 12^h to 13^h Wave in Dec. (-7'). 13^h to 16^h Oscillatory increase in V.F. (+40), gradually returning till 21^h. 15^h to 16^h Wave in H.F. (-50), and wave in Dec. (-6'). 21^h to 22^h Wave in Dec. (-12'). 22^h to 23^h Irregular double-crested wave in H.F. (+50, +35). 22^h to 23^h Decrease in V.F. (-20), recovering irregularly till 3^d 4^h. 23^h to 3^d 0^h Wave in Dec. (-5').
- 3^d 10^h to 13^h Serrated wave in H.F. (-50). 16^h to 24^h Nearly continuous oscillation in H.F., the principal movements being waves at 18^h to 18^h (+20), 20^h to 20^h (+40) and 22^h to 22^h (+25). 16^h to 18^h Accelerated decrease in Dec. (-15'), followed till 21^h by a general recovery, with waves superposed at 19^h (-6') and 20^h to 20^h (-6'). 22^h to 23^h Increase in Dec. (+6').
- 4^d 1^h to 1^h Decrease in Dec. (-4'). 2^h to 3^h Increase in Dec. (+4'). 0^h to 4^h Wave in V.F. (-15). 14^h to 16^h Wave in H.F. (-30). 14^h to 16^h Wave in Dec. (-5'). 19^h to 19^h Two consecutive waves in Dec. (-3'), and an oscillatory increase in H.F. (+30). 21^h to 22^h Wave in H.F. (+20). 21^h to 22^h Wave in Dec. (+4').
- 5^d 8^h to 6^d 8^h. See Plate IV.
- 6^d 8^h to 9^h Wave in H.F. (+20). 9^h to 9^h Wave in Dec. (+4'). 10^h to 24^h All traces continuously disturbed by minor oscillations. 18^h to 19^h Double wave in H.F. (±20). 18^h to 19^h Wave in Dec. (+4'). 19^h to 20^h Increase in Dec. (+7'). 22^h to 23^h Double wave in H.F. (±20). 22^h to 23^h Wave in Dec. (+7'). 23^h to 23^h Wave in Dec. (-4') and in H.F. (-20).
- 7^d 1^h to 2^h Wave in H.F. (+20). 16^h to 17^h Double wave in H.F. (±20) and irregular increase in V.F. (+30). 16^h to 17^h Accelerated decrease in Dec. (-10'). 18^h to 18^h Wave in H.F. (-20). 20^h to 21^h Double wave in Dec. (±4'), and wave in H.F. (+50). 20^h to 21^h Wave in V.F. (-12). 21^h to 22^h Increase in H.F. (+25). 23^h to 24^h Increase in Dec. (+7').
- 8^d 1^h to 2^h Wave in Dec. (+3').
- 9^d 11^h to 12^h Wave in Dec. (-3'). 12^h to 12^h Decrease in H.F. (-30). 13^h to 14^h Wave in Dec. (+5'), and in H.F. (+30). 15^h to 15^h Sharp wave in H.F. (+35). 15^h to 15^h Rapid increase in H.F. (+50), followed till 16^h by many oscillations ranging up to 70γ. A corresponding movement occurred in V.F. (+15), followed by similar oscillations ranging up to 25γ. 15^h to 15^h Increase in Dec. (+5'), followed till 16^h by rapid oscillation of diminishing amplitude. 17^h to 17^h Steep wave in V.F. (-15), in H.F. (-60), and in Dec. (-4'). 17^h to 17^h Decrease in H.F. (-30) followed immediately till 18^h by a wave (+50). 17^h to 17^h Rapid decrease in Dec. (-4'). 17^h to 19^h Increase in V.F. (+60), with short interruptions at 18^h and 19^h. 18^h to 19^h Wave in H.F. (-20). 19^h to 19^h Steep wave in H.F. (-90) with two large oscillations during the ascent. 19^h to 19^h Sharp wave in Dec. (-12'). 19^h to 20^h Two consecutive steep waves in V.F. (-20, -16), the second wave incomplete, being interrupted by a very steep double wave lasting till 20^h (-40, +50). 19^h to 20^h A very steep wave in H.F. (-145). 20^h Steep wave in Dec. (-7') followed immediately by an extremely rapid and steady decrease (-40'), which partly recovered (+25') in a movement lasting till 21^h, and including one marked oscillation at 20^h (7'). 20^h to 21^h Decrease in V.F. (-35) partially recovering till 21^h (+12). The foregoing large movements coincided with an auroral display witnessed from the Observatory. 20^h to 22^h Double wave in H.F. (+40, -50). 21^h to 21^h Wave in Dec. (-8'). 22^h to 23^h Serrated wave in H.F. (-20).
- 10^d 0^h to 0^h Wave in H.F. (-20). 0^h to 1^h Oscillatory decrease in V.F. (-35). 0^h to 1^h Wave in H.F. (-80) followed immediately till 2^h by a double wave (-50, +30). 1^h to 1^h Oscillatory increase in Dec. (+15'), followed till 3^h by a serrated wave (-20') with steep ascent. 1^h to 2^h Steep wave in V.F. (-40). 2^h to 4^h Truncated wave in V.F. (+15). 4^h to 7^h Irregular wave in H.F. (+40), and wave in Dec. (-10'). 8^h to 9^h Increase in V.F. (+15). 8^h to 9^h Wave in Dec. (-7'). 11^h to 11^h Increase in Dec. (+4'). 13^h to 14^h Oscillatory increase in H.F. (+40), followed immediately till 14^h by two consecutive waves (-25, -20). 12^h to 15^h Increase in V.F. (+40). 16^h to 18^h Irregular wave in V.F. (+20). 16^h to 17^h Double wave in H.F. (±25). 17^h to 18^h Double-crested wave in Dec. (-8', -10'). 19^h to 20^h Two consecutive waves in H.F. (+20). 19^h to 20^h Sharp wave in Dec. (-4'). 20^h to 21^h Double-crested wave in Dec. (-3'). 20^h to 21^h Decrease in H.F. (-25). 22^h to 23^h Wave in H.F. (+40). 22^h to 11^d 0^h Double wave in Dec. (±6'). 23^h Rapid increase in H.F. (+35), and decrease in V.F. (-20).
- 11^d 1^h to 3^h Double wave in Dec. (-6', +8'). 4^h to 7^h Wave in Dec. (+12'). 5^h to 8^h Wave in V.F. (-20). 5^h to 6^h Wave in H.F. (+35). 7^h to 7^h Decrease in H.F. (-25). 8^h to 9^h Wave in H.F. (+20). 8^h to 9^h Wave in Dec. (+5'). 11^h to 11^h Wave in Dec. (+4'). 11^h to 12^h Serrated wave in H.F. (-25). 12^h to 12^h Wave in Dec. (+4'). 16^h to 16^h Increase in V.F. (+15). 16^h to 18^h Wave in H.F. (-40). 16^h to 17^h Decrease in Dec. (-7').

March

- $18\frac{1}{2}^h$ to 19^h Oscillatory decrease in H.F. (-35), followed immediately till 21^h by two consecutive waves ($+70$, $+20$), the second truncated. 19^h to $19\frac{1}{2}^h$ Oscillatory decrease in Dec. (-7), followed immediately till $20\frac{1}{2}^h$ by a wave ($+10'$). $19\frac{1}{2}^h$ to 20^h Decrease in V.F. (-20). $20\frac{1}{2}^h$ to 22^h Increase in Dec. ($+6'$). 22^h to 24^h Irregular serrated wave in H.F. ($+50$). $22\frac{1}{2}^h$ to 23^h Decrease in V.F. (-20). $22\frac{1}{2}^h$ to 23^h Double wave in Dec. ($\pm 4'$), followed till $12^d 1^h$ by three consecutive waves ($-4'$, $-5'$, $-5'$).
- $12^d 2^h$ to 3^h Wave in H.F. (-20). $3\frac{1}{2}^h$ to $5\frac{1}{2}^h$ Double wave in H.F. (∓ 20). $3\frac{1}{2}^h$ to $4\frac{1}{2}^h$ Wave in Dec. ($-3'$). $7\frac{3}{4}^h$ to $8\frac{3}{4}^h$ Decrease in H.F. (-30). 16^h to $17\frac{1}{2}^h$ Wave in H.F. (-25). $18\frac{1}{2}^h$ to $18\frac{3}{4}^h$ Serrated wave in H.F. ($+35$). 18^h to $18\frac{3}{4}^h$ Double-crested wave in Dec. ($-4'$). $19\frac{3}{4}^h$ to 20^h Wave in Dec. ($-4'$). $19\frac{3}{4}^h$ to 21^h Two consecutive waves in H.F. ($+30$, $+20$). 22^h to 24^h Wave in H.F. ($+40$).
- $13^d 14^h$ to 15^h Wave in H.F. (-20). 17^h to $18\frac{1}{2}^h$ Double-crested wave in Dec. ($-5'$, $-3'$). $17\frac{1}{2}^h$ to 18^h Wave in H.F. ($+20$). 23^h to $23\frac{3}{4}^h$ Wave in Dec. ($+4'$).
- $14^d 1\frac{1}{2}^h$ to $1\frac{3}{4}^h$ Increase in H.F. ($+25$), followed till 3^h by a general decrease (-30), with three marked oscillations. $1\frac{1}{2}^h$ to 2^h Decrease in V.F. (-12), followed by three oscillations and then a steady return till $4\frac{1}{2}^h$. 3^h to $4\frac{1}{2}^h$ Increase in Dec. ($+7'$). $20\frac{1}{2}^h$ to $21\frac{1}{2}^h$ Wave in Dec. ($-3'$). 22^h to 23^h Wave in Dec. ($-4'$). $21\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in H.F. ($+25$).
- $16^d 1^h$ to $1\frac{1}{4}^h$ Wave in Dec. ($+4'$). 7^h to $7\frac{3}{4}^h$ Decrease in H.F. (-25). $10\frac{1}{2}^h$ to $11\frac{1}{4}^h$ Increase in Dec. ($+5'$). $16\frac{1}{2}^h$ to $17\frac{1}{2}^h$ Wave in H.F. (-20). $16\frac{3}{4}^h$ to 17^h Decrease in Dec. ($-4'$). $20\frac{1}{2}^h$ to $21\frac{1}{4}^h$ Wave in Dec. ($-4'$). $20\frac{3}{4}^h$ to $22\frac{1}{2}^h$ Three consecutive waves in H.F. ($+25$, $+20$, $+30$). 21^h to $22\frac{1}{2}^h$ Oscillatory decrease in V.F. (-25). $21\frac{1}{2}^h$ to 23^h Double-crested wave in Dec. ($+7'$).
- $17^d 0\frac{1}{2}^h$ to 3^h General increase in Dec. ($+8'$). $14\frac{1}{2}^h$ to $20\frac{1}{2}^h$ Loss of register of all traces. 21^h to $21\frac{1}{2}^h$ Wave in H.F. ($+25$), with partial return. $22\frac{1}{2}^h$ to $22\frac{3}{4}^h$ Wave in H.F. (-25). 22^h to $22\frac{3}{4}^h$ Accelerated decrease in Dec. ($-8'$).
- $18^d 0^h$ to 2^h Double wave in Dec. ($\pm 7'$). 0^h to 1^h Double wave in H.F. (∓ 20). $1\frac{1}{4}^h$ to $2\frac{1}{2}^h$ Two consecutive waves in H.F. (-20). $0\frac{3}{4}^h$ to $1\frac{1}{2}^h$ Rapid decrease in V.F. (-25), followed till $2\frac{1}{2}^h$ by a fluctuating recovery ($+15$). 4^h to $5\frac{3}{4}^h$ Increase in Dec. ($+12'$). $12\frac{1}{2}^h$ to $13\frac{3}{4}^h$ Serrated wave in H.F. (-25). $12\frac{3}{4}^h$ to 17^h Steady increase in V.F. ($+90$), followed till 24^h by an approximately equal decline, rapid for the first half hour, and again between 23^h and $23\frac{1}{2}^h$. $14\frac{1}{2}^h$ to $15\frac{1}{4}^h$ Wave in H.F. (-20). 16^h to $17\frac{1}{2}^h$ Irregular double wave in H.F. (∓ 25). $16\frac{3}{4}^h$ to $17\frac{1}{2}^h$ Wave in Dec. ($-14'$). $21\frac{3}{4}^h$ to $22\frac{3}{4}^h$ Wave in Dec. ($-9'$). 22^h to $22\frac{1}{4}^h$ Increase in H.F. ($+20$), followed till $23\frac{1}{2}^h$ by a double wave (∓ 30), and then till $23\frac{3}{4}^h$ by a further decrease (-10).
- $19^d 16\frac{1}{2}^h$ to 17^h Wave in H.F. (-25). $17\frac{3}{4}^h$ to $18\frac{3}{4}^h$ Wave in Dec. ($-10'$). $18\frac{1}{2}^h$ to $19\frac{3}{4}^h$ Double wave in H.F. (± 30). $21\frac{1}{4}^h$ to $23\frac{1}{4}^h$ Three consecutive waves in H.F. ($+35$, $+50$, $+40$), the last two coalescent at $22\frac{3}{4}^h$. 21^h to $21\frac{1}{2}^h$ Wave in Dec. ($-8'$), followed immediately till $21\frac{1}{4}^h$ by a decrease ($-8'$), which recovered irregularly till 23^h . $21\frac{1}{2}^h$ to 23^h Oscillatory decrease in V.F. (-30).
- $20^d 1\frac{1}{2}^h$ to $2\frac{1}{2}^h$ Wave in Dec. ($-4'$). 3^h to 4^h Wave in Dec. ($-4'$). $3\frac{1}{2}^h$ to $4\frac{1}{2}^h$ Wave in H.F. ($+20$). 4^h to 7^h Increase in Dec. ($+8'$). 6^h to 7^h Wave in H.F. (-25). $6\frac{1}{4}^h$ to $8\frac{1}{4}^h$ Increase in V.F. ($+20$). $15\frac{1}{2}^h$ to 16^h Increase in H.F. ($+40$). $18\frac{1}{4}^h$ to $20\frac{1}{4}^h$ Wave in H.F. (-30). $18\frac{3}{4}^h$ to 20^h Decrease in Dec. ($-13'$). $20\frac{1}{4}^h$ to $21\frac{1}{4}^h$ Oscillatory decrease in H.F. (-40). $21\frac{1}{2}^h$ to $23\frac{1}{2}^h$ Wave in V.F. (-20). $21\frac{1}{4}^h$ to $22\frac{1}{2}^h$ Serrated wave in H.F. ($+50$). $21\frac{3}{4}^h$ to $22\frac{1}{2}^h$ Wave in Dec. ($+9'$). 23^h to 24^h Wave in H.F. ($+40$), and double-crested wave in Dec. ($-7'$).
- $21^d 0\frac{1}{2}^h$ to $1\frac{1}{2}^h$ Wave in H.F. (-20). $1\frac{1}{2}^h$ to $3\frac{1}{2}^h$ Increase in V.F. ($+15$). 1^h to $2\frac{1}{2}^h$ Wave in Dec. ($-8'$). $3\frac{1}{2}^h$ to $4\frac{3}{4}^h$ Wave in Dec. ($-5'$). $6\frac{3}{4}^h$ to $7\frac{1}{2}^h$ Wave in Dec. ($+5'$). 7^h to $7\frac{1}{2}^h$ Decrease in H.F. (-35). $8\frac{1}{2}^h$ to 10^h Wave in H.F. (-40). $13\frac{1}{2}^h$ to $13\frac{3}{4}^h$ Increase in H.F. ($+20$). 15^h to $15\frac{1}{2}^h$ Wave in H.F. ($+30$), followed till 16^h by an increase ($+30$). 15^h to $15\frac{1}{4}^h$ Increase in V.F. ($+15$). $15\frac{1}{2}^h$ to 16^h Decrease in Dec. ($-5'$). $17\frac{3}{4}^h$ to $18\frac{3}{4}^h$ Wave in Dec. ($-13'$). 18^h to 19^h Wave in H.F. ($+45$). $18\frac{1}{2}^h$ to 19^h Decrease in V.F. (-20). 20^h to $20\frac{1}{2}^h$ Wave in H.F. ($+30$). 20^h to 21^h Two consecutive waves in Dec. ($-4'$), followed till $21\frac{1}{4}^h$ by a decrease ($-3'$). 23^h to $23\frac{1}{2}^h$ Steep wave in H.F. ($+30$). 23^h to $22^d 0\frac{3}{4}^h$ Double wave in Dec. ($+13'$, $-7'$). 23^h to $22^d 3\frac{1}{2}^h$ Two consecutive waves in V.F. (-30 , -25), coalescent at $0\frac{1}{2}^h$.
- $22^d 0^h$ to $1\frac{1}{2}^h$ Irregular wave in H.F. ($+30$). 2^h to $2\frac{1}{2}^h$ Increase in Dec. ($+5'$). $14\frac{3}{4}^h$ to 16^h Several irregular oscillations in H.F. ($+20$ to $+30$). $17\frac{1}{2}^h$ to 19^h Double-crested wave in H.F. ($+20$). $22\frac{1}{2}^h$ to 23^h Wave in Dec. ($-5'$). $22\frac{1}{2}^h$ to $23\frac{3}{4}^h$ Wave in H.F. ($+65$). 23^h to $23\frac{1}{2}^h$ Decrease in V.F. (-25).
- $23^d 0\frac{1}{4}^h$ to $1\frac{3}{4}^h$ Double-crested wave in H.F. ($+40$). $1\frac{3}{4}^h$ to 4^h Wave in H.F. ($+35$). $2\frac{1}{2}^h$ to $3\frac{1}{4}^h$ Decrease in Dec. ($-7'$). $2\frac{3}{4}^h$ to 5^h Increase in V.F. ($+15$).
- $24^d 11\frac{1}{4}^h$ to $12\frac{1}{4}^h$ Double wave in H.F. (± 20). $11\frac{1}{4}^h$ to $11\frac{1}{2}^h$ Increase in Dec. ($+4'$). 12^h to 17^h Oscillatory increase in V.F. ($+50$). $13\frac{1}{2}^h$ to 14^h Wave in H.F. (-20), the return continued further as an increase ($+15$), and followed immediately till 15^h by a second wave (-30). $18\frac{1}{2}^h$ to 19^h Increase in H.F. ($+30$). $17\frac{3}{4}^h$ to 20^h Irregular decrease in V.F. (-20).

- March
- 25^d 0 $\frac{1}{2}$ ^h to 1 $\frac{1}{4}$ ^h Wave in H.F. (+20). 0 $\frac{1}{2}$ ^h to 1 $\frac{1}{4}$ ^h Decrease in V.F. (-12). 0 $\frac{3}{4}$ ^h to 2^h Wave in Dec. (-5'). 2^h to 3 $\frac{1}{2}$ ^h Wave in H.F. (+20).
- 27^d 8 $\frac{3}{4}$ ^h to 9 $\frac{1}{2}$ ^h Accelerated decrease in H.F. (-25). 10 $\frac{1}{4}$ ^h to 12^h Fluctuating increase in Dec. (+10'). 12^h to 12 $\frac{3}{4}$ ^h Wave in H.F. (-25). 13 $\frac{1}{2}$ ^h to 14^h Wave in H.F. (+20). 16 $\frac{3}{4}$ ^h to 18^h Double wave in H.F. (± 20).
- 28^d 3^h to 4 $\frac{1}{2}$ ^h Slow wave in Dec. (+4'). 10^h to 12 $\frac{1}{2}$ ^h Double-crested wave in H.F. (-35). 13^h to 15^h Increase in V.F. (+35), with several sharp oscillations superposed at 13 $\frac{3}{4}$ ^h and at 14 $\frac{1}{2}$ ^h. 13 $\frac{1}{2}$ ^h to 15 $\frac{1}{4}$ ^h H.F. trace continuously disturbed. Maxima at 13 $\frac{3}{4}$ ^h and 14 $\frac{1}{2}$ ^h (+50). Several minor oscillations also occurred in Dec. at these times. 14^h to 14 $\frac{1}{2}$ ^h Decrease in Dec. (-6'). 16 $\frac{1}{2}$ ^h to 19^h Double wave in H.F. (± 20). 21^h to 21 $\frac{1}{4}$ ^h Increase in H.F. (+20). 22 $\frac{1}{2}$ ^h to 23 $\frac{1}{2}$ ^h Wave in H.F. (+35). 22 $\frac{1}{2}$ ^h to 23 $\frac{1}{4}$ ^h Wave in Dec. (-5'). 23 $\frac{1}{2}$ ^h to 24^h Increase in Dec. (+3').
- 29^d 2 $\frac{3}{4}$ ^h to 3 $\frac{1}{4}$ ^h Decrease in H.F. (-25), followed till 4 $\frac{1}{2}$ ^h by an irregular recovery. 9 $\frac{1}{2}$ ^h to 10^h Decrease in H.F. (-25). 13 $\frac{3}{4}$ ^h to 15^h Serrated wave in H.F. (-25). 18^h to 19^h Wave in H.F. (-60). 18 $\frac{1}{4}$ ^h to 19 $\frac{1}{4}$ ^h Wave in Dec. (-9'). 19^h to 19 $\frac{1}{2}$ ^h Wave in H.F. (+20). 19^h to 22 $\frac{3}{4}$ ^h Fluctuating decrease in V.F. (-40). 21^h to 23 $\frac{1}{4}$ ^h Triple-crested wave in H.F. (+30, +40, +60). 21^h to 22 $\frac{1}{2}$ ^h Three oscillations in Dec. (-5', -3', -6'), followed till 22 $\frac{3}{4}$ ^h by a decrease (-4'). 23^h to 23 $\frac{3}{4}$ ^h Wave in Dec. (-3').
- 30^d 1^h to 2 $\frac{1}{4}$ ^h Wave in H.F. (+30). 1^h to 2 $\frac{1}{2}$ ^h Wave in Dec. (+6'). 8^h to 9 $\frac{1}{2}$ ^h Decrease in H.F. (-35). 10^h to 11 $\frac{1}{2}$ ^h Increase in Dec. (+7'). 13^h to 15 $\frac{1}{2}$ ^h Accelerated increase in V.F. (+50). 13^h to 14 $\frac{1}{2}$ ^h Serrated wave in H.F. (-25). 14 $\frac{1}{2}$ ^h Rapid decrease in Dec. (-7'), and in H.F. (-25). 14 $\frac{3}{4}$ ^h to 16^h Two consecutive waves in H.F. (+40, +50). 15^h to 16^h Wave in Dec. (-6'), with steep ascent. 18 $\frac{1}{4}$ ^h to 20^h Two consecutive waves in Dec. (-8', -4'). 18 $\frac{1}{2}$ ^h to 20 $\frac{1}{2}$ ^h Two consecutive waves in H.F. (+55, +25). 18 $\frac{3}{4}$ ^h to 20 $\frac{1}{2}$ ^h Fluctuating decrease in V.F. (-25). 22 $\frac{3}{4}$ ^h to 24^h Wave in H.F. (+40). 23^h to 31^d 0 $\frac{1}{2}$ ^h Wave in V.F. (-15).
- 31^d 3^h to 4 $\frac{1}{2}$ ^h Wave in Dec. (+4'). 14^h to 15 $\frac{1}{2}$ ^h Increase in H.F. (+30).

- April
- 1^d 14^h to 15^h Wave in H.F. (-25). 18 $\frac{1}{4}$ ^h to 19^h Wave in Dec. (-7'). 18 $\frac{1}{2}$ ^h to 19 $\frac{1}{2}$ ^h Wave in H.F. (+30).
- 2^d 15 $\frac{3}{4}$ ^h to 16 $\frac{1}{2}$ ^h Wave in H.F. (-25).
- 3^d 11 $\frac{3}{4}$ ^h to 14 $\frac{3}{4}$ ^h Two consecutive waves in H.F. (-30, -40). 23^h to 24^h Wave in H.F. (+20).
- 4^d 0 $\frac{1}{2}$ ^h to 1 $\frac{3}{4}$ ^h Wave in H.F. (+20). 8 $\frac{3}{4}$ ^h to 10 $\frac{3}{4}$ ^h Fluctuating decrease in H.F. (-35). 19 $\frac{3}{4}$ ^h to 21^h Wave in Dec. (-6').
- 5^d 23 $\frac{1}{4}$ ^h to 24^h Wave in H.F. (+20). 23^h to 6^d 2 $\frac{1}{4}$ ^h Two consecutive waves in Dec. (-5', -7'). 23 $\frac{1}{2}$ ^h to 6^d 1 $\frac{1}{2}$ ^h Fluctuating decrease in V.F. (-15).
- 6^d 0 $\frac{1}{2}$ ^h to 3^h Double wave in H.F. (± 25). 3^h to 5^h Wave in Dec. (-8'), followed immediately by a very rapid decrease (-7'). 4 $\frac{1}{2}$ ^h to 5^h Increase in H.F. (+60), followed till 10^h by a general decrease (-100), with a wave superposed from 6 $\frac{1}{2}$ ^h to 7^h (-30). 4 $\frac{3}{4}$ ^h to 8^h Double-crested wave in V.F. (-20). 13 $\frac{1}{4}$ ^h to 14 $\frac{1}{4}$ ^h Oscillatory increase in H.F. (+50). 14 $\frac{3}{4}$ ^h to 16^h Wave in H.F. (-30). 13^h to 16^h Irregular increase in V.F. (+30). 19 $\frac{1}{2}$ ^h to 22 $\frac{1}{2}$ ^h Two consecutive waves in Dec. (-11', -6'). 20^h to 21 $\frac{1}{2}$ ^h Double-crested wave in V.F. (+12). 20 $\frac{1}{2}$ ^h to 21 $\frac{1}{2}$ ^h Serrated wave in H.F. (+35). 23 $\frac{1}{2}$ ^h to 7^d 0 $\frac{1}{2}$ ^h Decrease in V.F. (-15). 23 $\frac{1}{4}$ ^h to 7^d 0 $\frac{1}{4}$ ^h Fluctuating increase in H.F. (+30). 23 $\frac{1}{2}$ ^h to 23 $\frac{1}{4}$ ^h Increase in Dec. (+3'). 23 $\frac{3}{4}$ ^h to 7^d 0 $\frac{1}{2}$ ^h Wave in Dec. (+5').
- 7^d 1 $\frac{1}{4}$ ^h to 2^h Decrease in H.F. (-25). 2^h to 5^h Truncated wave in Dec. (-7'). 4^h to 5^h General increase in H.F. (+25). 4^h to 7^h Wave in V.F. (-15). 5^h to 5 $\frac{3}{4}$ ^h Decrease in Dec. (-5'). 6 $\frac{1}{2}$ ^h Rapid decrease in H.F. (-20), recovering irregularly till 6 $\frac{3}{4}$ ^h. 6 $\frac{1}{2}$ ^h Rapid decrease in Dec. (-3'), followed till 8 $\frac{3}{4}$ ^h by many small oscillations, the largest of which occurred at 8 $\frac{1}{4}$ ^h (-3'). 8^h to 10^h Oscillatory decrease in H.F. (-50). 11 $\frac{1}{2}$ ^h to 12 $\frac{1}{2}$ ^h Increase in H.F. (+25), followed till 13 $\frac{3}{4}$ ^h by a wave (-60). 11 $\frac{1}{4}$ ^h to 12 $\frac{1}{4}$ ^h Increase in Dec. (+9'). 13 $\frac{1}{4}$ ^h to 13 $\frac{3}{4}$ ^h Increase in V.F. (+20). 14 $\frac{1}{2}$ ^h to 16 $\frac{1}{2}$ ^h General increase in H.F. (+50). 17 $\frac{1}{4}$ ^h to 18^h Wave in H.F. (-20). 19^h to 20^h Wave in H.F. (-20). 20 $\frac{1}{2}$ ^h to 21^h Wave in H.F. (-25). 21 $\frac{1}{2}$ ^h to 22^h Increase in Dec. (+5'). 22^h to 22 $\frac{1}{2}$ ^h Wave in H.F. (+20).
- 8^d 0 $\frac{1}{2}$ ^h to 2^h Wave in Dec. (+7'). 0 $\frac{3}{4}$ ^h to 1 $\frac{3}{4}$ ^h Decrease in V.F. (-20). 14 $\frac{1}{4}$ ^h to 15^h Wave in H.F. (-40). 15 $\frac{1}{4}$ ^h to 16^h Wave in H.F. (+20). 12 $\frac{1}{2}$ ^h to 15^h Fluctuating increase in V.F. (+30). 20^h to 22 $\frac{1}{2}$ ^h Two consecutive waves in Dec. (-8'). 20 $\frac{1}{4}$ ^h to 23^h Two consecutive waves in H.F. (+40, +50), the first serrated. 20 $\frac{3}{4}$ ^h to 22 $\frac{3}{4}$ ^h Oscillating decrease in V.F. (-15).
- 9^d 8^h to 10^h Wave in H.F. (-50). 8 $\frac{1}{2}$ ^h to 9 $\frac{1}{2}$ ^h Increase in Dec. (+7'). 12^h to 12 $\frac{1}{2}$ ^h Wave in H.F. (+30). 15^h to 15 $\frac{1}{2}$ ^h Decrease in Dec. (-6'). 15^h to 15 $\frac{3}{4}$ ^h Increase in H.F. (+30). 18 $\frac{1}{2}$ ^h to 19 $\frac{1}{4}$ ^h Wave in H.F. (+30). 18 $\frac{3}{4}$ ^h to 19^h Wave in Dec. (-5'). 21 $\frac{1}{2}$ ^h to 23 $\frac{1}{2}$ ^h Three consecutive waves in Dec. (-3', -4', -7'). 22^h to 10^d 2^h Wave in V.F. (-25). 22 $\frac{3}{4}$ ^h to 24^h Wave in H.F. (+40), with steep ascent.

April

- 10^d 3^h to 5^h Flat wave in Dec. (+3'). 4^h to 5^h Increase in H.F. (+30). 15^h to 15^h Increase in H.F. (+35). 18^h to 19^h Wave in Dec. (-6'). 19^h to 19^h Wave in H.F. (+30).
- 11^d 19^h to 20^h Decrease in Dec. (-7'). 19^h to 20^h Wave in H.F. (+20).
- 12^d 0^h to 1^h Accelerated decrease in Dec. (-7'). 0^h to 2^h Truncated wave in H.F. (+20). 5^h to 7^h Wave in H.F. (-25). 19^h to 20^h Wave in Dec. (+4'). 20^h to 21^h Increase in Dec. (+6'). 20^h to 21^h Decrease in H.F. (-30). 23^h to 13^d 1^h Double wave in H.F. (+20).
- 13^d 0^h to 0^h Decrease in V.F. (-15), returning irregularly till 6^h. 2^h to 4^h Wave in H.F. (+20). 20^h to 21^h Wave in H.F. (+30).
- 14^d 8^h to 12^h Steady increase in Dec. (+20').
- 14^d 14^h to 15^d 14^h. See Plate V.
- 15^d 14^h to 14^h Wave in V.F. (+15). 14^h to 15^h Triple-crested wave in H.F. (+40). 15^h to 22^h Steady decrease in V.F. (-85), with a wave superposed from 16^h to 18^h (+20). 16^h to 16^h Wave in H.F. (-25). 16^h to 18^h Wave in H.F. (+70), with steep oscillating ascent, and rapid decline becoming more gradual from 17^h. 16^h to 18^h Similar movement in Dec. (-12'). 21^h to 21^h Wave in Dec. (-4'). 21^h to 21^h Wave in H.F. (+50), with partial return (-30).
- 16^d 0^h to 1^h Wave in Dec. (-3'). 0^h to 1^h Wave in H.F. (+20). 1^h to 2^h Decrease in Dec. (-7'). 2^h to 5^h Decrease in V.F. (-30). 3^h to 4^h Increase in H.F. (+40), rapid at first. 3^h to 4^h Truncated wave in Dec. (+3'). 5^h to 6^h Two consecutive waves in Dec. (+4', +3'). 6^h to 7^h Wave in Dec. (+9'). 6^h to 8^h Oscillatory decrease in H.F. (-110). 7^h to 8^h Oscillatory increase in V.F. (+20). 7^h to 9^h Increase in Dec. (+12'). 8^h to 8^h Increase in H.F. (+35). 10^h to 11^h Domed wave in H.F. (-35). 10^h to 10^h Wave in Dec. (-4'). 10^h to 12^h Wave in V.F. (+15). 12^h to 12^h Wave in H.F. (+25), followed till 13^h by a rapid increase (+35). 17^h to 17^h Increase in H.F. (+20). 18^h to 19^h Wave in Dec. (-10'), and in V.F. (+20). 18^h to 19^h Double wave in H.F. (-30, +60), followed immediately till 20^h by another double wave (+15). 19^h to 19^h Decrease in Dec. (-5'), followed immediately till 20^h by a wave (+3'). 20^h to 20^h Steep wave in H.F. (+80), followed immediately till 21^h by a double wave (+20, -25). 20^h to 20^h Wave in Dec. (+12'), followed till 21^h by another wave (+4'), and then till 22^h by an oscillatory increase (+6'). 20^h to 20^h Decrease in V.F. (-30). 21^h to 22^h Double wave in H.F. (+15). 23^h to 23^h Decrease in Dec. (-4'). 22^h to 17^d 1^h Fluctuating decrease in V.F. (-30).
- 17^d 1^h to 2^h Slightly truncated wave in H.F. (-60). 1^h to 2^h Increase in Dec. (+9'). 3^h to 8^h Irregular increase in V.F. (+35). 5^h to 5^h Increase in Dec. (+4'). 8^h to 9^h Decrease in H.F. (-30). 11^h to 13^h Increase in H.F. (+40), with a wave superposed from 11^h to 12^h (+20). 15^h to 17^h Domed wave in H.F. (+30). 22^h to 23^h Wave in Dec. (-3'). 23^h to 24^h Wave in H.F. (+20).
- 18^d 20^h to 23^h Slow wave in Dec. (-8'). 20^h to 22^h Wave in H.F. (+40).
- 19^d 1^h to 3^h Wave in H.F. (+25), followed till 3^h by increase (+20). 1^h to 4^h Two consecutive waves in Dec. (+3', +5'). 2^h to 4^h Fluctuating decrease in V.F. (-20). 7^h to 7^h Decrease in H.F. (-20). 22^h to 23^h Decrease in V.F. (-15). 22^h to 23^h Wave in H.F. (+40). 22^h to 23^h Wave in Dec. (+4').
- 21^d 10^h to 12^h Serrated wave in H.F. (-30). 12^h to 12^h Wave in H.F. (-20). 8^h to 10^h Accelerated decrease in V.F. (-35), partially recovering till 11^h (+15). 13^h to 14^h Two consecutive waves in H.F. (-20). 14^h to 15^h Domed wave in H.F. (-40). 13^h to 15^h Oscillatory increase in V.F. (+20). 17^h to 18^h Wave in H.F. (+20). 21^h to 22^h Decrease in H.F. (-20). 21^h to 23^h Wave in Dec. (-5'). 22^h to 22^h 6^h Two consecutive waves in V.F. (-30, -15); merging at 22^d 2^h. 23^h to 22^d 0^h Domed wave in H.F. (+40). 23^h to 24^h Decrease in Dec. (-5').
- 22^d 3^h to 4^h Wave in Dec. (+8'), and in H.F. (-20). 6^h to 8^h Decrease in H.F. (-30). 11^h to 12^h Wave in H.F. (+20), followed till 13^h by an oscillatory increase (+35). 13^h to 14^h Double-crested wave in H.F. (+45, +30). 12^h to 15^h Oscillatory increase in V.F. (+35), followed till 16^h by a decrease (-12). 14^h to 15^h Wave in H.F. (-35). 15^h to 16^h Wave in Dec. (-6'). 16^h to 17^h Oscillatory increase in H.F. (+40), followed till 19^h by a double wave (+20). 18^h to 19^h Wave in Dec. (-5'). 22^h to 24^h Two consecutive waves in H.F. (+20). 23^h to 23^d 4^h Wave in V.F. (-45). 23^h to 23^d 0^h Wave in Dec. (+4'). 23^h to 23^h 1^d Wave in H.F. (+50).
- 23^d 0^h to 2^h Wave in Dec. (-8'). 3^h to 4^h Increase in Dec. (+3'). 9^h to 10^h Wave in Dec. (+3'). 9^h to 10^h Wave in H.F. (-20). 10^h to 12^h Serrated wave in H.F. (-40), followed till 12^h by an increase (+35). 11^h to 12^h Oscillatory increase in V.F. (+12). 22^h to 24^h Two consecutive waves in Dec. (-3'). 22^h to 23^h Wave in H.F. (+30). 23^h to 23^h Decrease in V.F. (-12).
- 24^d 12^h to 13^h Wave in H.F. (-20). 13^h to 13^h Increase in H.F. (+20), and in Dec. (+3'). 14^h to 15^h Serrated wave in H.F. (-60). 16^h to 17^h Irregular wave in H.F. (-30). 18^h to 19^h Serrated wave in H.F. (-30). 18^h to 19^h Wave in Dec. (-3'). 19^h to 19^h Decrease in H.F. (-20), followed immediately till 21^h by a wave (+65). 19^h to 20^h Wave in Dec. (-10'). 20^h to 20^h Decrease in V.F. (-15). 21^h to 22^h Wave in Dec. (-4'). 21^h to 23^h Wave in H.F. (+60). 22^h to 23^h Wave in V.F. (-15). 23^h to 25^d 0^h Wave in Dec. (-3').

April

- 25^d 0^h to 0¹₂^h Decrease in H.F. (−20). 7²₃^h to 8¹₂^h Wave in H.F. (−20). 10¹₂^h to 11¹₂^h Double-crested wave in H.F. (−25). 15³₃^h to 16¹₄^h Wave in H.F. (−20).
- 26^d 2^h to 3¹₂^h Wave in Dec. (+4'). 8^h to 11^h Wave in H.F. (−50). 17^h to 18¹₂^h Wave in Dec. (−4'). 19¹₂^h to 20^h Wave in H.F. (−20). 19³₃^h to 20^h Decrease in Dec. (−4'). 21¹₂^h to 22¹₂^h Wave in H.F. (−30). 22¹₂^h to 23^h Decrease in V.F. (−15). 23¹₂^h to 24^h Decrease in H.F. (−30) and increase in Dec. (+6').
- 27^d 17¹₂^h to 18^h Wave in H.F. (+20). 20^h to 20³₃^h Double wave in H.F. (±20). 21^h to 21³₄^h Decrease in H.F. (−35). 20³₂^h to 21¹₂^h Decrease in V.F. (−15).

May

3^d 17¹₂^h to 18^h Wave in H.F. (−20).

3^d 20^h to 4^d 20^h. See Plate VI.

4^d 20¹₂^h to 21¹₂^h Wave in H.F. (+65). 20³₂^h to 21^h Decrease in Dec. (−5'), followed immediately till 21³₂^h by a wave (+9'). 21^h to 21³₂^h Decrease in V.F. (−30), followed till 22^h by an oscillatory increase (+12), and then till 22³₂^h by a very rapid decrease (−40). 21³₂^h to 22^h Increase in Dec. (+4'). 22^h to 23^h Two consecutive waves in H.F. (+80, +60), and in Dec. (+8'). 23^h to 5^d 1¹₂^h Irregular double-crested wave in V.F. (+25, +20). 23¹₂^h to 24^h Wave in Dec. (−3'). 23¹₂^h to 5^d 0¹₂^h Wave in H.F. (+35).

5^d 0^h to 1³₂^h Double wave in Dec. (−6', +7'), the second part truncated. 0¹₂^h to 1¹₂^h Double wave in H.F. (±15). 1¹₂^h to 2¹₂^h Wave in H.F. (+30). 1¹₂^h to 2³₃^h Wave in V.F. (+15). 3^h to 5¹₂^h Wave in V.F. (−15). 3^h to 4^h Wave in Dec. (+4'), with steep ascent. 3¹₂^h to 4³₃^h Wave in H.F. (+30). 5¹₂^h to 5³₂^h Rapid decrease in H.F. (−50), followed till 6¹₂^h by a wave (+20), and then till 7^h by an oscillatory increase (+30). 6^h to 6¹₂^h Double wave in Dec. (±3'), followed by many small oscillations till 8¹₂^h, the largest of these being a wave from 8^h to 8¹₂^h (+3'). 10^h to 10¹₂^h Decrease in H.F. (−30), followed immediately till 11¹₂^h by a wave (+20). 11¹₂^h to 12^h Serrated wave in H.F. (−30). 11¹₂^h to 17¹₂^h General increase in V.F. (+50). 15^h to 15¹₂^h Wave in H.F. (−25), followed immediately till 17¹₂^h by a double wave (−45, +35), and then till 19^h by a further wave (+45). 17¹₂^h to 19^h Wave in V.F. (+20), and in Dec. (−6'). 19^h to 22¹₂^h Decrease in V.F. (−25). 21¹₂^h to 22¹₂^h Wave in Dec. (−5'). 22¹₂^h to 23¹₂^h Truncated wave in H.F. (−25). 22¹₂^h to 23¹₂^h Wave in Dec. (−3'). 23¹₂^h to 6^d 3¹₄^h Wave in V.F. (−20).

6^d 3^h to 4^h Wave in Dec. (+3'). 6³₂^h to 7^h Increase in Dec. (+3'). 11^h to 14³₂^h Accelerated increase in V.F. (+45). 11¹₂^h to 13^h Increase in H.F. (+40). 13¹₂^h to 14^h Oscillatory decrease in H.F. (−30), followed immediately till 14³₂^h by an increase (+60). 16^h to 17^h Wave in H.F. (+60), and in V.F. (+15). 16^h to 16¹₂^h Wave in Dec. (−5'). 19^h to 19³₂^h Wave in H.F. (+60). 18³₂^h to 19¹₂^h Wave in Dec. (−9'). 19¹₂^h to 20¹₂^h Decrease in V.F. (−20). 21^h to 22¹₂^h Increase in H.F. (+30), followed till 7^d 0¹₂^h by a decrease (−40), with a wave superposed from 23^h to 23¹₂^h (−20). 21¹₂^h to 23¹₂^h Wave in Dec. (−8'). 22¹₂^h to 7^d 5¹₂^h Slow wave in V.F. (−25).

7^d 0^h to 0¹₂^h Increase in Dec. (+5'), followed till 1³₂^h by a decrease (−6'). 0¹₂^h to 2^h Wave in H.F. (+30). 1¹₂^h to 2^h Increase in Dec. (+3'). 13¹₂^h to 13³₂^h Decrease in Dec. (−3'). 13³₂^h to 14¹₂^h Increase in H.F. (+35). 16¹₂^h to 17¹₂^h Wave in H.F. (+30). 18^h to 19¹₂^h Wave in Dec. (−5'). 18¹₂^h to 19^h Wave in H.F. (+20). 20¹₂^h to 22^h Wave in Dec. (−9'). 21^h to 22^h Irregular wave in H.F. (+20).

8^d 1³₂^h to 2³₂^h Wave in Dec. (+6'). 1³₂^h to 2¹₂^h Wave in H.F. (+25). 1³₂^h to 2¹₂^h Decrease in V.F. (−15). 14¹₂^h to 15¹₂^h Increase in H.F. (+30). 16^h to 17^h Wave in H.F. (+20). 21^h to 21¹₂^h Decrease in Dec. (−4'). 21^h to 22^h Wave in H.F. (+25).

9^d 0³₂^h to 2^h Truncated wave in H.F. (+20). 1^h to 1³₄^h Wave in Dec. (+4'). 1^h to 5^h Two consecutive waves in V.F. (−15), merging at 3^h. 3^h to 4^h Wave in H.F. (+20), and in Dec. (+3'). 12^h to 19^h Increase in V.F. (+60). 12³₂^h to 14^h Increase in H.F. (+30). 15^h to 16^h Increase in H.F. (+40). 17^h to 18¹₂^h Double wave in H.F. (±30). 18¹₂^h to 19¹₂^h Accelerated decrease in H.F. (−30). 18³₂^h to 19^h Decrease in Dec. (−6'). 20¹₂^h to 22^h Serrated wave in H.F. (−35).

10^d 0¹₂^h to 2^h Wave in Dec. (−6'). 0^h to 1¹₂^h Irregular wave in H.F. (+20). 1¹₂^h to 2^h Increase in H.F. (+20). 1¹₂^h to 4¹₂^h Decrease in V.F. (−50), interrupted from 3¹₂^h to 4^h by a small wave (+10). 2¹₂^h to 3¹₂^h Wave in Dec. (−7'). 3^h to 3¹₂^h Decrease in H.F. (−25), followed immediately till 6^h by a double wave (+60, −80). 4¹₂^h to 5^h Serrated wave in Dec. (−7'). 5^h to 5¹₂^h Wave in Dec. (−4'). 6^h to 6¹₂^h Decrease in H.F. (−40). 6^h to 7^h Wave in Dec. (−7'). 6¹₂^h to 7¹₂^h Wave in H.F. (−25). 6^h to 11^h All traces disturbed by continuous small oscillations. 7¹₂^h to 8^h Decrease in Dec. (−7'). 11¹₂^h to 15^h Fluctuating increase in V.F. (+50). 12¹₂^h to 13¹₂^h Oscillatory decrease in H.F. (−40), followed till 14^h by a wave (+40), and then immediately till 14¹₂^h by an increase (+60). 13^h to 14¹₂^h Two consecutive waves in Dec. (−3', −4'). 15^h to 18¹₂^h Two consecutive waves in V.F. (+25, +30). 15¹₂^h to 15³₂^h Decrease in Dec. (−10'). 15^h to 15¹₂^h Wave in H.F. (+50). 16¹₂^h to 17¹₂^h Wave in H.F. (+50), followed immediately till 18¹₂^h by a further wave (+90), with a very steep ascent. 17^h to 18¹₂^h Wave in Dec. (−15'). 20^h to 21¹₂^h Triple-crested wave in Dec. (−7'). 20^h to 22^h Wave in H.F. (+40), with three consecutive smaller waves superposed (−20, −25, −15). 22¹₂^h to 11^d 1^h Four oscillations in Dec., amplitude about 3'.

May

- 11^d 1^h to 2^h Irregular wave in H.F. (-20). 3^h to 4^h Decrease in H.F. (-25). 11^h to 11^h Decrease in H.F. (-25). 12^h to 13^h Increase in H.F. (+60), followed till 14^h by an irregular wave (-30). 15^h to 16^h Increase in H.F. (+50). 19^h to 20^h Wave in H.F. (+40). 22^h to 22^h Wave in H.F. (+35). 22^h to 22^h Decrease in V.F. (-15). 22^h to 22^h Increase in Dec. (+5). 23^h to 12^d 0^h Wave in H.F. (-20). 23^h to 12^d 0^h Decrease in Dec. (-7').
- 12^d 1^h to 1^h Increase in Dec. (+4'). 1^h to 3^h Two consecutive waves in H.F. (-20, -25). 2^h to 4^h Wave in Dec. (+9'), with steep ascent. 2^h to 5^h Irregular increase in V.F. (+25). 3^h to 4^h Decrease in H.F. (-30). 13^h to 14^h Increase in H.F. (+20). 15^h to 15^h Increase in H.F. (+25). 16^h to 17^h Truncated wave in H.F. (-20). 17^h to 18^h Wave in H.F. (-20). 19^h to 20^h Decrease in H.F. (-25). 19^h to 21^h Wave in Dec. (-7'). 20^h to 21^h Double-crested wave in H.F. (+20). 22^h to 24^h Wave in H.F. (+20).
- 13^d 1^h to 6^h Wave in V.F. (-35). 1^h to 1^h Wave in Dec. (+5'). 1^h to 4^h Wave in H.F. (+50). 4^h to 13^h Loss of register of H.F. 6^h to 7^h Increase in Dec. (+4'). 7^h to 8^h Truncated wave in Dec. (+4'). 8^h to 12^h Wave in V.F. (-30). 14^h to 16^h Wave in H.F. (+40), followed till 18^h by an increase (+50). 19^h to 21^h Decrease in V.F. (-25). 21^h to 21^h Decrease in H.F. (-20). 20^h to 21^h Wave in Dec. (-3').
- 14^d 18^h to 19^h Wave in H.F. (-20), and decrease in Dec. (-3').
- 15^d 12^h to 13^h Wave in H.F. (+20). 21^h to 21^h Decrease in Dec. (-3').
- 16^d 17^h to 17^h Wave in H.F. (-20).
- 17^d 3^h to 4^h Wave in H.F. (+40), and in Dec. (+10'). 3^h to 6^h Wave in V.F. (-25). 21^h to 21^h Wave in Dec. (-5'). 21^h to 22^h Wave in H.F. (+45).
- 18^d 0^h to 1^h Serrated wave in H.F. (+40), followed till 1^h by a decrease (-30). 0^h to 4^h Wave in V.F. (-30). 0^h to 2^h Wave in Dec. (-15'). 15^h to 15^h Increase in V.F. (+15). 14^h to 15^h Wave in H.F. (-40).
- 19^d 4^h to 4^h Decrease in Dec. (-3'). 12^h to 13^h Wave in H.F. (-30). 22^h to 23^h Decrease in Dec. (-7').
- 20^d 1^h to 2^h Decrease in H.F. (-20). 4^h to 4^h Increase in Dec. (+8'), with partial return till 5^h (-3'). 4^h to 5^h Increase in H.F. (+30). 13^h to 14^h Accelerated increase in H.F. (+50), followed immediately till 15^h by a serrated wave (-55). 20^h to 23^h Three consecutive waves in H.F. (+20, +20, +30). 21^h to 21^h Wave in Dec. (+3'). 22^h to 23^h Wave in Dec. (-7'). 22^h to 22^h Decrease in V.F. (-15).
- 21^d 1^h to 5^h Wave in V.F. (-15). 3^h to 4^h Wave in H.F. (+20). 2^h to 3^h Increase in Dec. (+5'), followed immediately till 5^h by a decrease (-8'). 6^h to 6^h Increase in Dec. (+4'). 11^h to 12^h Increase in H.F. (+35). 15^h to 16^h Irregular wave in H.F. (+40), with steep decline. 20^h to 22^h Wave in Dec. (-6'), with steep ascent. 20^h to 21^h Increase in H.F. (+25), followed immediately till 22^h by a rapid decrease (-40). 23^h to 22^d 0^h Wave in H.F. (+30).
- 22^d 15^h to 16^h Wave in H.F. (+20).
- 23^d 12^h to 12^h Decrease in H.F. (-20). 21^h to 23^h Wave in Dec. (-3').
- 24^d 17^h to 18^h Increase in H.F. (+20).
- 25^d 13^h to 14^h Increase in H.F. (+20). 15^h to 15^h Increase in H.F. (+20). 16^h to 17^h Increase in H.F. (+20). 17^h to 18^h Decrease in H.F. (-20). 21^h to 21^h Wave in Dec. (-4'). 21^h to 22^h Wave in H.F. (+20).
- 27^d 14^h to 15^h Wave in H.F. (+20).
- 29^d 14^h to 15^h Wave in H.F. (+20), followed till 17^h by an increase (+25).

June

- 1^d 11^h to 12^h Loss of register of Dec. and H.F.
- 1^d 9^h to 2^d 9^h See Plate VII.
- 2^d 9^h to 9^h Increase in H.F. (+30). 10^h to 11^h Increase in H.F. (+50). 14^h to 15^h Increase in V.F. (+20). 13^h to 14^h Increase in H.F. (+50). 16^h to 17^h Wave in H.F. (+25), followed immediately till 17^h by an increase (+60). 16^h to 17^h Wave in Dec. (-4'). 16^h to 18^h Double-crested wave in V.F. (+12). 17^h to 21^h General decrease in H.F. (-60), with two consecutive waves superposed from 17^h to 18^h (+30, +20).
- 3^d 0^h to 1^h Wave in Dec. (+3'). 22^h to 23^h Wave in Dec. (+5). 22^h to 23^h Wave in H.F. (+25), and decrease in V.F. (-12).
- 5^d 3^h to 4^h Increase in H.F. (+20). 14^h to 15^h Increase in H.F. (+20).
- 6^d 19^h to 19^h Increase in H.F. (+20). 20^h to 22^h Double wave in H.F. (± 20). 21^h to 23^h Wave in Dec. (-7').

June

- 7^d 0^h to 0¹₂^h Decrease in H.F. (-20), followed immediately till 1¹₂^h by a wave (+35). 0¹₂^h to 1^h Decrease in V.F. (-12). 0¹₂^h to 1¹₂^h Wave in Dec. (+4'). 1²^h to 1⁶^h Rapid increase in V.F. (+60). 1⁴₂^h to 1⁵^h Wave in H.F. (+20). 1⁴₂^h to 1⁵₂^h Decrease in Dec. (-4'). 1⁵₂^h to 1⁵₂^h Increase in H.F. (+30). 1⁶₂^h to 1⁷₂^h Wave in H.F. (-25).
- 8^d 0¹₂^h to 2³₂^h Double wave in Dec. (+12', -6'). 0³₂^h to 1¹₂^h Wave in H.F. (+25). 0³₂^h to 3^h Wave in V.F. (-30). 2¹₂^h to 3³₂^h Increase in H.F. (+25). 3³₂^h to 4³₂^h Wave in V.F. (-12). 4^h to 4¹₂^h Decrease in H.F. (-60). 4¹₂^h to 5^h Wave in Dec. (+4'). 9^h to 9³₂^h Serrated wave in H.F. (-20). 10³₂^h to 11^h Increase in H.F. (+25). 13^h to 14^h Accelerated increase in H.F. (+25), followed immediately till 14¹₂^h by a rapid decrease (-50). 15¹₂^h to 16^h Wave in H.F. (-30). 16^h to 16³₂^h Wave in H.F. (+25), followed till 20^h by a general increase (+50). 20¹₂^h to 20¹₂^h Decrease in H.F. (-20). 22^h to 9^d 0¹₂^h Two consecutive waves in Dec. (-10', -12') the first wave being serrated. 22³₂^h to 9^d 0³₂^h Two consecutive waves in H.F. (+85, +30). 23^h to 23³₂^h Decrease in V.F. (-25).
- 9^d 0¹₂^h to 1¹₂^h Decrease in Dec. (-5'). 3¹₂^h to 4¹₂^h Wave in Dec. (+5'). 4^h to 5¹₂^h Wave in V.F. (-15). 4¹₂^h to 5¹₂^h Wave in H.F. (-30). 15^h to 15¹₂^h Increase in H.F. (+20). 16¹₂^h to 17¹₂^h Decrease in Dec. (-7'). 17^h to 18³₂^h Wave in H.F. (+40). 20^h to 21¹₂^h Decrease in H.F. (-30). 21³₂^h to 22³₂^h Irregular wave in Dec. (+7'). 22^h to 22¹₂^h Wave in H.F. (-20).
- 10^d 3¹₂^h to 4¹₂^h Wave in H.F. (+20). 10^h to 11³₂^h Wave in H.F. (-30). 16^h to 16³₂^h Increase in H.F. (+35). 17¹₂^h to 19^h Wave in H.F. (+30).
- 11^d 0¹₂^h to 1³₂^h Wave in H.F. (+30). 0¹₂^h to 3¹₂^h Wave in V.F. (-12).
- 12^d 16^h to 16¹₂^h Increase in H.F. (+20).
- 13^d 13¹₂^h to 15^h Increase in H.F. (+55), followed till 15¹₂^h by an oscillatory decrease (-20).
- 15^d 8³₂^h to 9^h Decrease in H.F. (-25). 8³₂^h to 10^h Increase in Dec. (+8'). 11³₂^h to 17^h An irregular series of oscillations in H.F., the principal being a wave at 13³₂^h to 15^h (-30). 21^h to 21¹₂^h Decrease in H.F. (-20).
- 16^d 2¹₂^h to 4^h Wave in Dec. (-7'). 15³₂^h to 16¹₂^h Increase in H.F. (+20). 17¹₂^h to 18^h Wave in H.F. (-25).
- 18^d 3¹₂^h to 6^h Wave in H.F. (+30). 4^h to 5¹₂^h Decrease in Dec. (-7'). 9¹₂^h to 10^h Decrease in H.F. (-20). 14¹₂^h to 16³₂^h Irregular increase in H.F. (+60).
- 19^d 15^h to 15¹₂^h Increase in H.F. (+20).
- 21^d 14¹₂^h to 15¹₂^h Increase in H.F. (+25).
- 22^d 8¹₂^h to 10³₂^h Increase in Dec. (+12').
- 23^d 12^h 57^m Sudden movement in H.F. (+25), with small movements simultaneously in Dec. and V.F. 13³₂^h to 14¹₂^h Serrated wave in H.F. (+30). 14³₂^h to 15¹₂^h Rapid increase in V.F. (+15), followed immediately till 16^h by a wave (-12). 15^h to 15³₂^h Wave in H.F. (+70), followed immediately till 16^h by an increase (+50). 17^h to 17³₂^h Wave in H.F. (+25). 17^h to 18^h Increase in V.F. (+20). 18¹₂^h to 19¹₂^h Double wave in H.F. (±30), and in V.F. (±10). 19^h to 23^h Irregular decrease in V.F. (-35). 18¹₂^h to 18³₂^h Wave in Dec. (-3'), followed immediately till 20¹₂^h by a truncated wave (-7'). 19¹₂^h to 20^h Decrease in H.F. (-30). 21^h to 21¹₂^h Wave in H.F. (+20). 22^h to 23¹₂^h Two consecutive waves in H.F. (+20), and a double-crested wave in Dec. (-4').
- 24^d 4¹₂^h to 5^h Decrease in Dec. (-4'). 11^h to 18^h Many small oscillations in H.F., the principal being a wave from 15³₂^h to 16^h.
- 28^d 14¹₂^h to 14¹₂^h Increase in H.F. (+25). 20¹₂^h to 21¹₂^h Wave in H.F. (-20).
- 29^d 6¹₂^h to 7¹₂^h Double-crested wave in H.F. (-20). 10¹₂^h to 12^h Decrease in V.F. (-15), followed till 15^h by an accelerated increase (+35). 11³₂^h to 12^h Decrease in H.F. (-25), followed till 15^h by an oscillatory increase (+40). 16¹₂^h to 17^h Increase in H.F. (+20).

July

- 2^d 0¹₂^h to 2^h Decrease in H.F. (-30).
- 4^d 0^h to 1¹₂^h Wave in Dec. (-6'). 17¹₂^h to 18^h Increase in H.F. (+25).
- 5^d 11^h to 14^h Wave in V.F. (-20). 12¹₂^h to 14^h Irregular truncated wave in H.F. (-40). 15¹₂^h to 17¹₂^h Double-crested wave in H.F. (+60, +50), followed till 19¹₂^h by an increase (+40). 19³₂^h to 24^h Four consecutive waves in H.F. (-25, -30, -20, -15). 23^h to 6^d 1^h Wave in Dec. (+4').
- 6^d 0¹₂^h to 1^h Decrease in H.F. (-20). 3¹₂^h to 4¹₂^h Increase in H.F. (+20), followed till 5¹₂^h by a decrease (-30). 15^h to 16^h Decrease in H.F. (-30). 17^h to 18^h Increase in H.F. (+25). 19^h to 20^h Wave in H.F. (-20).

July

- 7^d 13³⁰^h to 14³⁰^h Wave in H.F. (+30). 14³⁰^h to 15³⁰^h Wave in H.F. (-25). 16^h to 17¹⁵^h Domed wave in H.F. (-25). 16^h to 16¹⁵^h Decrease in Dec. (-6'). 17¹⁵^h to 18¹⁵^h Wave in H.F. (-20). 19³⁰^h to 20¹⁵^h Wave in H.F. (+20). 22^h to 22³⁰^h Wave in H.F. (+30). 22³⁰^h to 24^h Decrease in H.F. (-30).
- 8^d 12^h to 13³⁰^h Increase in H.F. (+40).
- 9^d 2³⁰^h to 4¹⁵^h Wave in Dec. (+4').
- 10^d 21³⁰^h to 22^h Decrease in H.F. (-20).
- 12^d 18¹⁵^h to 19^h Wave in H.F. (-20). 23^h to 24^h Wave in Dec. (-3') and in H.F. (-20).
- 13^d 11³⁰^h to 12¹⁵^h Wave in H.F. (+20). 12³⁰^h to 13¹⁵^h Wave in H.F. (+20). 18^h to 19¹⁵^h Wave in H.F. (+25).
- 17^d 1³⁰^h to 2¹⁵^h Decrease in Dec. (-4'). 14¹⁵^h to 15¹⁵^h Wave in H.F. (-25).
- 18^d 0^h to 1³⁰^h Wave in Dec. (+6'). 13^h to 14¹⁵^h Wave in H.F. (-30).
- 19^d 3¹⁵^h to 4^h Wave in Dec. (+3'). 13^h to 14^h Wave in H.F. (+20).
- 20^d 14^h to 14¹⁵^h Decrease in H.F. (-20).
- 24^d 15¹⁵^h to 16^h Wave in H.F. (-25), followed till 18^h by a series of small oscillations. 18¹⁵^h to 20^h Double-crested wave in H.F. (-30).
- 26^d 23¹⁵^h to 27^d 0¹⁵^h Increase in H.F. (+30). 23¹⁵^h to 27^d 0³⁰^h Wave in Dec. (+5'), and decrease in V.F. (-15).
- 27^d 10¹⁵^h to 11^h Increase in H.F. (+25). 12¹⁵^h to 13^h Wave in H.F. (-20). 12³⁰^h to 18¹⁵^h General increase in V.F. (+60). 13³⁰^h to 13¹⁵^h Increase in H.F. (+20). 14^h to 14³⁰^h Decrease in H.F. (-35). 15^h to 16^h Accelerated increase in H.F. (+50), followed immediately till 17^h by a truncated wave (-30). 17^h to 19¹⁵^h General decrease in H.F. (-40), followed immediately till 20¹⁵^h by a wave (+25). 19^h to 19³⁰^h Accelerated decrease in Dec. (-7'). 19³⁰^h to 21¹⁵^h Decrease in V.F. (-20).
- 28^d 0^h to 1^h Truncated wave in H.F. (-20). 1^h to 1³⁰^h Wave in Dec. (-3'). 1^h to 4¹⁵^h General decrease in V.F. (-60), with a wave superposed from 2^h to 3^h (-15). 1³⁰^h to 2¹⁵^h Oscillatory increase in H.F. (+50). 2¹⁵^h to 3^h Wave in Dec. (-9'). 2¹⁵^h to 4^h Three consecutive waves in H.F. (-25, -15, -20). 3¹⁵^h to 4¹⁵^h Wave in Dec. (+7'). 4^h to 4³⁰^h Decrease in H.F. (-30), followed immediately till 6¹⁵^h by two consecutive waves (-50, -70). 4³⁰^h to 5¹⁵^h Serrated wave in Dec. (+8'). 4¹⁵^h to 5¹⁵^h Wave in V.F. (+15), followed till 8^h by a fluctuating increase (+55). 5¹⁵^h to 5³⁰^h Increase in Dec. (+4'), followed till 7¹⁵^h by an irregular decrease (-10'). 6¹⁵^h to 10^h General decrease in H.F. (-60), with a wave superposed from 7¹⁵^h to 8^h (-30). 7¹⁵^h to 8¹⁵^h Irregular wave in Dec. (+4'). 11¹⁵^h to 16¹⁵^h Oscillatory increase in H.F. (+70). 17¹⁵^h to 18¹⁵^h Increase in H.F. (+20).
- 30^d 0¹⁵^h to 1¹⁵^h Wave in H.F. (+20). 15¹⁵^h to 16¹⁵^h Increase in H.F. (+30), followed till 17^h by two consecutive waves (-20). 17^h to 18^h Increase in H.F. (+30).
- 31^d 0³⁰^h to 1¹⁵^h Decrease in V.F. (-12). 12¹⁵^h to 13³⁰^h Irregular serrated wave in H.F. (+30), followed till 16^h by an increase (+50). 12¹⁵^h to 17¹⁵^h Steady increase in V.F. (+75). 17³⁰^h to 18¹⁵^h Decrease in Dec. (-12'), followed till 18³⁰^h by a wave (+3'), and then till 19^h by an increase (+5'). 17¹⁵^h to 17³⁰^h Decrease in H.F. (-30). 18¹⁵^h to 18³⁰^h Wave in H.F. (-25), followed till 21^h by an oscillatory decrease (-65), with a wave superposed from 20^h to 20³⁰^h (-30). 18³⁰^h to 23^h Oscillatory decrease in V.F. (-50). 20¹⁵^h to 21¹⁵^h Wave in Dec. (-5'). 22^h to 22³⁰^h Wave in H.F. (+20), followed till 23^h by a rapid decrease (-30). 22^h to 23^h Domed wave in Dec. (-6'), followed immediately till 23³⁰^h by a double wave (+6', -12'), and then till Aug. 1^d 0¹⁵^h by a decrease (-13'). 23^h to 24^h Steep wave in H.F. (+80). 23^h to Aug. 1^d 2³⁰^h Triple-crested wave in V.F. (-25, -45, -35).

August

- 1^d 0³⁰^h to 1¹⁵^h Decrease in Dec. (-6'), followed immediately till 2¹⁵^h by an increase (+12'). 1¹⁵^h to 2^h Increase in H.F. (+30). 3¹⁵^h to 6¹⁵^h Wave in V.F. (-25). 3^h to 3³⁰^h Increase in Dec. (+5'). 3³⁰^h to 7^h Registration of H.F. and Dec. interrupted. 4³⁰^h to 5^h Decrease in H.F. (-30). 12¹⁵^h to 13¹⁵^h Wave in H.F. (+20). 13³⁰^h to 14³⁰^h Increase in H.F. (+25). 16^h to 16¹⁵^h Increase in V.F. (+12). 16¹⁵^h to 16³⁰^h Increase in H.F. (+40). 23^h to 24^h Decrease in H.F. (-20).
- 2^d 3^h to 4¹⁵^h Wave in Dec. (+3'). 23^h to 24^h Wave in H.F. (+20), and decrease in Dec. (-4').
- 3^d 14¹⁵^h to 16^h Increase in H.F. (+30). 16¹⁵^h to 17³⁰^h Wave in H.F. (+30), followed immediately till 18¹⁵^h by an oscillatory increase (+35). 18^h to 19^h Decrease in Dec. (-4'). 19¹⁵^h to 19³⁰^h Decrease in H.F. (-20). 20^h to 20¹⁵^h Decrease in H.F. (-20), followed immediately till 20³⁰^h by a wave (+20).
- 4^d 0^h to 0¹⁵^h Wave in Dec. (+3'). 0^h to 1¹⁵^h Wave in H.F. (+30). 22³⁰^h to 23³⁰^h Wave in Dec. (+5').

August

- 6^d 23^h₃ to 23^h₈ Increase in Dec. (+3'). 23^h₃ to 7^d 0^h₂ Truncated wave in H.F. (+20).
- 9^d 14^h₄ to 15^h₂ Wave in H.F. (-30). 16^h₁ to 17^{h Decrease in H.F. (-30), followed till 20^h by a general increase (+50). 22^h₃ to 23^h₁ Wave in H.F. (+25).}
- 10^d 2^h to 3^h Truncated wave in H.F. (-20). 7^h to 7^h₁ Wave in Dec. (-3'). 14^h₁ to 15^h₃ Oscillatory increase in H.F. (+40). 22^h₁ to 11^d 0^h₃ Double wave in Dec. (±3'). 23^h₃ to 11^d 0^h₃ Wave in H.F. (-20).
- 12^d 11^h to 12^h₃ Irregular wave in H.F. (-25). 12^h₃ to 13^h₁ Wave in H.F. (-20). 14^h₃ to 15^h₂ Increase in H.F. (+30). 17^h₂ to 19^h Double wave in H.F. (±20).
- 13^d 0^h₂ to 4^h Wave in V.F. (-30). 0^h₂ to 1^h₄ Wave in Dec. (-3'), followed till 3^h₂ by a wave (-10'), with steep ascent. 1^h to 1^h₂ Increase in H.F. (+35), followed till 2^h₁ by a decrease (-60). 8^h₁ to 10^h₃ Serrated wave in H.F. (-90). 9^h₁ to 9^h₂ Irregular increase in Dec. (+10'). 8^h₁ to 9^h₁ Serrated wave in V.F. (-12). 10^h₂ to 11^h₁ General decrease in H.F. (-25). 12^h to 12^h₃ Domed wave in H.F. (+25). 13^h₃ to 14^h Sharp wave in H.F. (+30). 14^h to 14^h₄ Decrease in Dec. (-4'). 15^h to 15^h₂ Wave in H.F. (-30). 16^h to 16^h₃ Wave in H.F. (+25). 19^h₃ to 19^h₃ Decrease in Dec. (-7'). 19^h₃ to 21^h Two consecutive waves in H.F. (+25, +35). 20^h to 20^h₂ Wave in Dec. (-6').
- 14^d 1^h₂ to 2^h₃ Wave in Dec. (+5'). 16^h₃ to 17^h₄ Wave in H.F. (+20). 20^h₄ to 21^h₂ Wave in Dec. (-4').
- 15^d 0^h₄ to 1^h₄ Wave in Dec. (-5'). 2^h₁ to 3^h₃ Wave in H.F. (-20). 2^h₂ to 5^h₂ Two consecutive waves in Dec. (+5', +4'). 12^h₁ to 13^h₁ Irregular wave in H.F. (-20).
- 16^d 12^h₄ to 14^h Wave in H.F. (-35). 15^h to 16^h Increase in H.F. (+30). 16^h to 18^h Decrease in H.F. (-30). 17^h₃ to 18^h Decrease in Dec. (-5'). 18^h to 19^h Serrated wave in H.F. (+30). 22^h₄ to 23^h₂ Double wave in H.F. (±20). 22^h₄ to 22^h₄ Wave in Dec. (+3'). 22^h₂ to 23^h Decrease in V.F. (-12).
- 17^d 4^h to 4^h₂ Increase in Dec. (+4'). 4^h₂ to 7^h Wave in H.F. (+40). 13^h₃ to 15^h Serrated wave in H.F. (-40). 17^h to 18^h Wave in Dec. (-3'). 17^h₃ to 17^h₄ Increase in H.F. (+25). 21^h₂ to 22^h Decrease in Dec. (-5').
- 18^d 0^h₄ to 1^h₄ Wave in Dec. (+7'). 0^h₂ to 1^h Increase in H.F. (+25). 13^h to 16^h₁ Oscillatory increase in V.F. (+40), with a wave superposed from 15^h to 15^h₂ (+12). 13^h₃ to 16^h₃ Wave in H.F. (-60), with two consecutive waves superposed in the opposite direction from 14^h₃ to 15^h₃ (+30). 15^h₃ to 16^h₃ Decrease in Dec. (-8'). 22^h to 23^h Wave in Dec. (-4'). 22^h to 23^h Wave in H.F. (+25).
- 19^d 4^h₁ to 5^h₁ Wave in Dec. (+4'). 4^h₂ to 6^h Wave in H.F. (-20). 17^h₄ to 18^h₂ Triple wave in H.F. (-20, +20, -20). 17^h₃ to 19^h Double-crested wave in Dec. (-7', -4').
- 21^d 0^h₂ to 1^h₂ Decrease in Dec. (-3').
- 24^d 0^h₂ to 1^h₄ Wave in H.F. (+20). 22^h to 23^h Wave in H.F. (+25).
- 25^d 3^h₁ to 4^h Wave in H.F. (+20). 3^h₂ to 4^h Decrease in Dec. (-3').
- 26^d 4^h to 5^h Decrease in Dec. (-4').
- 27^d 0^h₂ to 1^h₂ Wave in Dec. (+3'), and in H.F. (+20).
- 30^d 17^h to 17^h₄ Increase in H.F. (+20).
- 31^d 1^h to 1^h₂ Decrease in H.F. (-20), followed till 3^h₃ by a wave (+35). 1^h₄ to 1^h₂ Increase in Dec. (+3'). 2^h to 4^h₁ Wave in Dec. (-4'). 19^h₃ to 21^h Wave in H.F. (+20).

September

- 6^d 21^h to 7^d 0^h₁ Three consecutive waves in Dec. (-5', -10', -4'). 22^h to 7^d 0^h₁ Irregular double wave in H.F. (+45, -25). 22^h to 24^h Wave in V.F. (-25), with partial return (+12).
- 8^d 1^h₃ to 2^h₄ Wave in H.F. (-20). 2^h to 3^h₁ Wave in Dec. (+6'). 9^h₃ to 10^h₃ Decrease in H.F. (-25). 11^h₁ to 12^h Double-crested wave in H.F. (-30, -40). 11^h₃ to 18^h Oscillatory increase in V.F. (+90), especially rapid between 15^h₃ and 16^h (+30). 10^h₂ to 12^h₃ Increase in Dec. (+10'). 13^h to 13^h₃ Serrated wave in H.F. (+30), followed till 18^h₂ by a series of oscillations of irregular character. 13^h₃ to 14^h₃ Wave in H.F. (+45), followed till 14^h₃ by an increase (+20). 13^h₃ to 14^h₃ Increase in Dec. (+8'). 15^h₁ to 15^h₂ Oscillatory decrease in Dec. (-10'), followed immediately till 17^h₃ by a double wave (±5'). 15^h₃ to 16^h Sharp wave in H.F. (-70). 16^h to 16^h₃ Accelerated decrease in H.F. (-50), followed till 17^h₃ by an oscillatory increase (+50), and then till 18^h₂ by a double-crested wave (-35, -40). 17^h₃ to 17^h₄ Decrease in Dec. (-4'). 18^h to 18^h₃ Wave in Dec. (-8'). 18^h to 22^h Decrease in V.F. (-75), with a marked acceleration after 21^h₃. 19^h₃ to 19^h₃ Increase in H.F. (+25). 21^h₄ to 22^h₃ Double-crested wave in Dec. (-8'). 21^h₃ to 22^h Sharp wave in H.F. (+50). 22^h₄ to 22^h₃ Wave in H.F. (+20). 22^h₂ to 24^h Broad wave in Dec. (-4'). 23^h to 24^h Truncated wave in H.F. (-20).

- September 9^d 0^h to 2^h Wave in H.F. (+20). 1^h to 3^h Wave in Dec. (+15'), followed till 3^h by an increase. 2^h to 4^h Two consecutive irregular waves in H.F. (+25, +40). 2^h to 2^h Decrease in V.F. (-40). 4^h to 8^h Increase in V.F. (+40). 6^h to 8^h Two consecutive waves in H.F. (-25, -35). 5^h to 7^h Wave in Dec. (+10'). 11^h to 11^h Decrease in H.F. (-30). 11^h to 12^h Wave in H.F. (-20). 12^h to 12^h Wave in H.F. (+20). 12^h to 13^h Increase in H.F. (+30). 11^h to 16^h Fluctuating increase in V.F. (+40). 14^h to 14^h Increase in H.F. (+25), followed immediately till 15^h by a wave (-40). 14^h to 15^h Decrease in Dec. (-5'). 16^h to 16^h Wave in H.F. (-20), followed till 18^h by a double wave ($\mp$ 35), the second part serrated. 16^h to 18^h Wave in V.F. (+15), and in Dec. (-10'). 19^h to 20^h Wave in Dec. (-6'). 19^h to 20^h Wave in H.F. (+50). 19^h to 20^h Decrease in V.F. (-15). 21^h to 22^h Double wave in Dec. ($\mp$ 7'). 21^h to 22^h Wave in H.F. (+55). 21^h to 22^h Decrease in V.F. (-15). 22^h to 23^h Decrease in H.F. (-30). 22^h to 10^d 0^h Oscillatory increase in Dec. (+10').
- 10^d 0^h to 3^h Wave in V.F. (+12). 2^h to 4^h Wave in Dec. (+7'). 2^h to 3^h Wave in H.F. (-20). 3^h to 4^h Increase in H.F. (+25), followed till 6^h by a decrease (-35). 3^h to 6^h Increase in V.F. (+15). 6^h to 7^h Wave in H.F. (+30). 12^h to 15^h Increase in V.F. (+40). 13^h to 14^h Wave in H.F. (+20). 14^h to 16^h Wave in H.F. (+45). 16^h to 17^h Wave in H.F. (+50). 16^h to 17^h Wave in Dec. (-6'). 16^h to 17^h Wave in V.F. (+15). 21^h to 22^h Wave in H.F. (+25).
- 11^d 1^h to 2^h Wave in H.F. (+20). 1^h to 2^h Wave in Dec. (+8'). 1^h to 4^h Wave in V.F. (-15), with steep ascent. 7^h to 7^h Decrease in H.F. (-25). 14^h to 15^h Increase in H.F. (+50). 19^h to 20^h Irregular wave in H.F. (+20). 20^h to 21^h Wave in Dec. (-9'). 20^h to 21^h Truncated wave in H.F. (+35).
- 12^d 21^h to 22^h Wave in H.F. (+20). 21^h to 23^h Wave in Dec. (-7').
- 14^d 13^h to 14^h Wave in H.F. (-35). 16^h to 17^h Wave in H.F. (-20). 17^h to 19^h Oscillatory decrease in H.F. (-90). 13^h to 16^h No register of V.F. 19^h to 20^h Double wave in Dec. (-16', +10'). 20^h to 20^h Very steep wave in H.F. (+120). 20^h to 20^h Rapid decrease in V.F. (-45), followed till 21^h by an increase (+25), and then till 22^h by an oscillatory decrease (-45). 21^h to 22^h Triple-crested wave in H.F. (+60, +90, +70), preceded from 20^h by an increase (+30), and followed till 23^h by a double wave (+50, -40). 21^h to 21^h Wave in Dec. (-6'), followed till 22^h by a double wave (+5', -7'). 22^h to 22^h Wave in V.F. (+20), followed till 23^h by an increase (+15). 23^h to 23^h Decrease in Dec. (-6'), followed till 15^d 3^h by an oscillatory increase (+15').
- 15^d 1^h to 1^h Wave in H.F. (+20). 3^h to 4^h Decrease in Dec. (-6').
- 15^d 12^h to 16^d 12^h See Plate VIII.
- 16^d 12^h to 13^h Increase in H.F. (+30). 13^h to 14^h Wave in H.F. (-20). 14^h to 16^h Wave in H.F. (-35). 17^h to 17^h Wave in H.F. (-20). 18^h to 20^h Increase in H.F. (+25). 20^h to 22^h Double-crested wave in Dec. (-7'). 20^h to 22^h Steep double-crested wave in H.F. (+100). 21^h to 22^h Decrease in V.F. (-35). 22^h to 22^h Decrease in Dec. (-7'). 23^h to 23^h Wave in Dec. (-4'). 23^h to 17^d 1^h Double wave in H.F. ($\mp$ 20).
- 17^d 1^h to 2^h Increase in H.F. (+20). 4^h to 5^h Increase in Dec. (+3'). 4^h to 5^h Increase in H.F. (+20).
- 18^d 3^h to 3^h Increase in H.F. (+20). 6^h to 6^h Decrease in H.F. (-25). 15^h to 16^h Wave in H.F. (+25). 18^h to 18^h Decrease in H.F. (-30), followed till 20^h by an increase (+40). 21^h to 23^h Wave in Dec. (-6'). 22^h to 22^h Decrease in H.F. (-25). 23^h to 24^h Decrease in V.F. (-30). 23^h to 19^d 0^h Wave in H.F. (+70). 23^h to 24^h Decrease in Dec. (-4').
- 19^d 0^h to 1^h Increase in H.F. (+25). 0^h to 5^h Irregular increase in Dec. (+10'). 5^h to 6^h Decrease in Dec. (-5'). 15^h to 17^h General increase in H.F. (+30), with a wave superposed from 16^h to 16^h (-35). 16^h to 17^h Increase in V.F. (+35). 17^h to 19^h General decrease in H.F. (-60), with a wave superposed from 17^h to 18^h (-40). 17^h to 19^h Wave in Dec. (-13'). 17^h to 18^h Wave in V.F. (+25). 19^h to 20^h Wave in Dec. (-5'). 19^h to 19^h Truncated wave in H.F. (-30). 20^h to 20^h Double wave in Dec. (-4', +8'). 20^h to 20^h Steep wave in H.F. (+80). 20^h to 20^h Decrease in V.F. (-30). 20^h to 21^h Two consecutive waves in H.F. (-20, -30). 21^h to 21^h Wave in Dec. (-3'), followed till 22^h by a second wave (-5').
- 20^d 0^h to 1^h Wave in H.F. (+20). 1^h to 4^h Wave in V.F. (-15). 1^h to 4^h Double wave in H.F. (+20, -30). 1^h to 3^h Wave in Dec. (-4'). 6^h to 7^h Wave in H.F. (-40). 6^h to 7^h Wave in Dec. (+10'). 11^h to 12^h Increase in H.F. (+35). 12^h to 12^h Wave in H.F. (-20). 13^h to 13^h Increase in H.F. (+30), followed immediately till 15^h by a sharp serrated wave (-75). 13^h to 13^h Increase in Dec. (+3'), followed till 14^h by a decrease (-5'). 14^h to 17^h General increase in V.F. (+60). 16^h to 17^h Wave in H.F. (-40), and in Dec. (+3'). 17^h to 17^h Decrease in H.F. (-40). 17^h to 18^h Steep double wave in H.F. ($\pm$ 50). 17^h to 18^h Wave in Dec. (-7'), followed immediately till 18^h by a truncated wave (-10'), and then till 19^h by a decrease (-6'). 18^h to 18^h Wave in V.F. (-15). 18^h to 18^h Wave in H.F. (+30), the return being further continued till 19^h (-35). 18^h to 19^h Decrease in V.F. (-20). 19^h to 19^h Wave in H.F. (+20).

September 20^d 20^h to 21^d 20^h See Plate IX.

- 21^d 20^h to 20³/₄^h Wave in Dec. (-4'), and in H.F. (-20). 20^h to 21¹/₂^h Decrease in V.F. (-30), followed till 22¹/₄^h by a wave (-20). 20³/₄^h to 22^h Double wave in Dec. (-4', +8'). 21^h to 21¹/₂^h Increase in H.F. (+30). 22¹/₄^h to 23¹/₄^h Accelerated increase in Dec. (+14'), followed till 23¹/₂^h by a decrease (-5'). 22³/₄^h to 22^d 0¹/₄^h Irregular double wave in H.F. (±20).
- 22^d 8^h to 9¹/₈^h Decrease in H.F. (-40). 16¹/₄^h to 18^h Two consecutive waves in Dec. (-4', -8'). 16³/₈^h to 18^h Two consecutive waves in H.F. (+35, +50). 21³/₈^h to 23³/₈^h Triple-crested wave in H.F. (+40), followed till 24^h by an increase (+25).
- 23^d 0³/₈^h to 2^h Wave in H.F. (+20). 2¹/₂^h to 3¹/₂^h Wave in Dec. (+3'). 20¹/₂^h to 22^h Wave in H.F. (+50). 20³/₈^h to 21¹/₂^h Wave in Dec. (-6'), with very steep ascent.
- 24^d 22¹/₂^h to 23³/₄^h Wave in H.F. (+20).
- 25^d 0^h to 0¹/₂^h Increase in Dec. (+3'). 0^h to 1³/₄^h Wave in H.F. (+25). 12¹/₂^h to 13¹/₄^h Wave in H.F. (-25).

October 2^d 18^h to 19³/₈^h Truncated wave in H.F. (+20).

- 3^d 10^h to 14¹/₄^h Loss of register of Dec. and H.F. 14¹/₄^h to 14³/₄^h Wave in H.F. (-20). 15^h to 15¹/₂^h Double-crested wave in H.F. (+20). 16³/₄^h to 17¹/₂^h Wave in H.F. (+20). 17^h to 17¹/₂^h Decrease in Dec. (-4'). 19¹/₂^h to 20¹/₂^h Decrease in H.F. (-20).
- 4^d 1¹/₂^h to 2^h Wave in Dec. (+5'). 2¹/₄^h to 3¹/₄^h Decrease in Dec. (-4'), followed till 4¹/₂^h by an increase (+10'). 3³/₈^h to 5^h Wave in H.F. (+35). 4^h to 5^h Decrease in V.F. (-15). 6^h to 8^h Decrease in Dec. (-8'). 6^h to 7¹/₂^h Decrease in H.F. (-40). 10^h to 12¹/₂^h Wave in H.F. (-30).
- 5^d 20¹/₈^h to 21¹/₈^h Wave in Dec. (-3'). 22¹/₂^h to 24^h Wave in H.F. (+25).
- 6^d 15¹/₂^h to 17¹/₂^h Wave in H.F. (-20).
- 7^d 2¹/₂^h to 2³/₄^h Increase in Dec. (+3'). 2¹/₂^h to 4^h Increase in H.F. (+30). 3^h to 4^h Decrease in Dec. (-5'). 14^h to 14³/₄^h Decrease in Dec. (-4').
- 8^d 0^h to 1^h Increase in Dec. (+3'), followed till 3^h by a wave (+5'). 1^h to 2^h Increase in H.F. (+25). 7¹/₂^h to 8^h Decrease in H.F. (-20). 23¹/₂^h to 9^d 1¹/₂^h Two consecutive waves in H.F. (+20).
- 11^d 21¹/₈^h to 22^h Wave in H.F. (+20).
- 12^d 1^h to 1³/₄^h Wave in Dec. (+3').
- 13^d 0^h to 1^h Wave in H.F. (+30). 0¹/₄^h to 2^h Wave in Dec. (-5'). 11¹/₈^h to 12¹/₄^h Wave in H.F. (-20). 13³/₄^h to 14¹/₄^h Wave in Dec. (+4'). 19^h 25^m Sudden movement in H.F. (+40), returning irregularly at first (till 19^h 59^m) and then suddenly. 20^h to 20¹/₄^h Increase in H.F. (+20). 20¹/₄^h to 22^h Two consecutive waves in H.F. (-20). 21¹/₂^h to 22¹/₂^h Wave in Dec. (-8'). 22¹/₄^h to 22¹/₂^h Steep wave in H.F. (-20).
- 14^d 0^h to 0¹/₄^h Very rapid increase in H.F. (+80), followed at once till 1³/₈^h by an oscillatory decrease (-160). 0¹/₄^h to 2¹/₄^h Two consecutive waves in Dec. (-10', -17'), merging at 1^h. 0¹/₄^h to 1^h Oscillatory decrease in V.F. (-40), recovering irregularly till 4^h. 1³/₄^h to 2³/₄^h General increase in H.F. (+35). 3^h to 3¹/₄^h Two consecutive waves in Dec. (-3', -4'), and in H.F. (-20, -25). 5^h to 12^h All traces disturbed by continuous small oscillations, reaching a maximum at about 9¹/₄^h. 11¹/₄^h to 12^h Wave in H.F. (+30).
- 14^d 12^h to 16^d 12^h See Plates X. and XI.
- 16^d 12^h to 16^h Continuous oscillation in all traces, but especially in H.F. The principal movements in H.F. are from 12¹/₂^h to 12³/₄^h, a wave (-30), and from 13¹/₄^h to 13³/₄^h three oscillations of diminishing amplitude (30, 25, 15). 18¹/₄^h to 20^h Wave in Dec. (-4'). 22¹/₄^h to 23¹/₄^h Wave in H.F. (+25). 22³/₈^h to 23³/₄^h Truncated wave in Dec. (+3').
- 17^d 0³/₈^h to 2^h Wave in Dec. (-6'). 7^h to 8^h Decrease in H.F. (-25). 13^h to 13¹/₈^h Decrease in Dec. (-4'). 12¹/₂^h to 13¹/₂^h Irregular wave in H.F. (-30).
- 18^d 8^h to 9^h Decrease in H.F. (-30). 14^h to 14¹/₂^h Decrease in Dec. (-4'). 18³/₈^h to 20^h Wave in Dec. (-4').
- 19^d 0¹/₄^h to 1^h Decrease in Dec. (-4'), followed till 4¹/₂^h by an increase (+9'). 3^h to 4¹/₂^h Increase in H.F. (+30), followed till 5¹/₂^h by a decrease (-20). 4¹/₂^h to 6^h Wave in Dec. (-4'). 11¹/₄^h to 12^h Increase in H.F. (+20). 14¹/₄^h to 15^h Sharp wave in H.F. (+50), and in Dec. (+7'). 14^h to 14¹/₂^h Increase in V.F. (+25), followed till 14³/₄^h by a decrease (-12), and then till 17^h by a general increase (+40). 15¹/₄^h to 16¹/₄^h General decrease in H.F. (-70), with two consecutive waves superposed from 15³/₄^h to 16¹/₂^h (+25). 16^h to 17¹/₂^h Wave in Dec. (-18'), the return incomplete (+11'). 16¹/₂^h to 17¹/₂^h Wave in H.F. (+40). 17³/₈^h to 18¹/₈^h Increase in H.F. (+30). 18³/₈^h to 19¹/₄^h Wave in H.F. (-30). 20^h to 21^h Increase in Dec. (+4').

- October 20^d 15 $\frac{1}{2}$ ^h to 17^h Wave in H.F. (-25). 16^h to 17 $\frac{1}{2}$ ^h Wave in Dec. (-5').
- 24^d 21^h to 22 $\frac{1}{2}$ ^h Wave in Dec. (-4').
- 25^d 1 $\frac{3}{4}$ ^h to 3 $\frac{1}{4}$ ^h Double wave in Dec. ($\pm 3'$). 2^h to 6^h General decrease in V.F. (-30). 3 $\frac{1}{4}$ ^h to 4 $\frac{1}{2}$ ^h Double wave in H.F. (∓ 30), the second wave incomplete. 3 $\frac{3}{4}$ ^h to 4 $\frac{3}{4}$ ^h Double wave in Dec. ($\pm 5'$). 5^h to 5 $\frac{1}{2}$ ^h Increase in Dec. (+5'). 5^h to 5 $\frac{3}{4}$ ^h Decrease in H.F. (-20). 6^h to 6 $\frac{1}{4}$ ^h Decrease in H.F. (-35). 7^h to 9^h Decrease in H.F. (-70). 10^h to 11^h Wave in H.F. (-20). 12^h to 13 $\frac{1}{4}$ ^h Increase in H.F. (+40), and increase in V.F. (+25). 14^h to 19^h Wave in V.F. (+50). 15 $\frac{3}{4}$ ^h to 16 $\frac{1}{4}$ ^h Serrated wave in Dec. (-5'). 16 $\frac{1}{4}$ ^h to 18^h Accelerated decrease in Dec. (-30'), followed till 19^h by an oscillatory partial recovery (+15'). 16 $\frac{1}{4}$ ^h to 17 $\frac{3}{4}$ ^h Serrated wave in H.F. (-50). 17 $\frac{3}{4}$ ^h to 18 $\frac{3}{4}$ ^h Double wave in H.F. (∓ 40), the second part serrated. 22^h to 22 $\frac{1}{2}$ ^h Decrease in Dec. (-3'). 23^h to 26^d 0 $\frac{1}{8}$ ^h Increase in Dec. (+5').
- 27^d 0 $\frac{1}{8}$ ^h to 1 $\frac{1}{8}$ ^h Wave in Dec. (+3'), and in H.F. (+30). 17 $\frac{3}{4}$ ^h to 18 $\frac{1}{4}$ ^h Decrease in Dec. (-5'), and increase in H.F. (+25). 15^h to 17 $\frac{1}{2}$ ^h Increase in H.F. (+35).
- 29^d 12 $\frac{1}{2}$ ^h to 13 $\frac{1}{2}$ ^h Two consecutive waves in Dec. (+3'). 12 $\frac{1}{2}$ ^h to 13 $\frac{1}{4}$ ^h Double wave in H.F. (+25, -15). 21^h to 21 $\frac{3}{8}$ ^h Accelerated decrease in Dec. (-6'), steadily recovering till 23 $\frac{1}{8}$ ^h. 23 $\frac{3}{8}$ ^h to 30^d 1^h Wave in Dec. (+4'), and in H.F. (+25).
- 31^d 20 $\frac{3}{4}$ ^h to 21 $\frac{3}{4}$ ^h Wave in Dec. (-4'). 23 $\frac{1}{2}$ ^h to 24^h Increase in H.F. (+25).
- November 1^d 19^h to 19 $\frac{1}{2}$ ^h Decrease in Dec. (-12'), followed till 20^h by a partial recovery (+5'). 19^h to 20^h Increase in V.F. (+15). 19^h to 23^h Broad wave in H.F. (-40), with eight oscillations superposed irregularly (15 $\pm$). 20 $\frac{1}{2}$ ^h to 21^h Wave in Dec. (+4'). 22 $\frac{1}{2}$ ^h to 23^h Wave in Dec. (-4').
- 2^d 0 $\frac{1}{4}$ ^h to 1^h Wave in Dec. (+13'). 0 $\frac{1}{4}$ ^h to 1 $\frac{1}{4}$ ^h Oscillatory increase in H.F. (+50), followed till 2^h by a decrease (-25). 0 $\frac{1}{2}$ ^h to 1^h Decrease in V.F. (-15). 7^h to 7 $\frac{1}{2}$ ^h Decrease in H.F. (-20). 12 $\frac{1}{4}$ ^h to 12 $\frac{3}{4}$ ^h Increase in Dec. (+3'). 22 $\frac{1}{2}$ ^h to 23 $\frac{1}{2}$ ^h Wave in H.F. (+40). 22 $\frac{1}{2}$ ^h to 3^d 1^h Double-crested wave in Dec. (-8', -6'). 23 $\frac{3}{8}$ ^h to 3^d 1 $\frac{1}{4}$ ^h Truncated wave in H.F. (-20).
- 3^d 1^h to 1 $\frac{1}{2}$ ^h Wave in Dec. (+3'). 3 $\frac{3}{8}$ ^h to 4 $\frac{1}{2}$ ^h Wave in Dec. (+3'). 6^h to 8 $\frac{1}{2}$ ^h Decrease in H.F. (-50), followed till 10 $\frac{1}{2}$ ^h by a double wave (± 20). 8^h to 8 $\frac{1}{2}$ ^h Increase in Dec. (+5'). 15^h to 17^h Wave in Dec. (-11'). 15^h to 16^h Two consecutive waves in H.F. (-20). 17^h Rapid increase in H.F. (+20). 17 $\frac{1}{4}$ ^h to 18^h Decrease in Dec. (-4'). 18 $\frac{1}{2}$ ^h to 19 $\frac{1}{2}$ ^h Wave in Dec. (-4'). 23 $\frac{1}{4}$ ^h to 24^h Wave in H.F. (+20).
- 4^d 0 $\frac{3}{8}$ ^h to 1^h Wave in Dec. (+3').
- 6^d 5 $\frac{1}{2}$ ^h to 6 $\frac{1}{2}$ ^h Decrease in H.F. (-25).
- 11^d 17^h 52^m Sudden movement in H.F. (+20).
- 12^d 0^h to 1 $\frac{1}{2}$ ^h Wave in Dec. (-4'). 0^h to 0 $\frac{1}{2}$ ^h Truncated wave in H.F. (+20). 12^h to 13 $\frac{1}{2}$ ^h Wave in H.F. (-20).
- 13^d 11 $\frac{1}{2}$ ^h to 20 $\frac{1}{2}$ ^h No register of V.F.
- 19^d 21^h to 21 $\frac{3}{8}$ ^h Wave in Dec. (-3').
- 21^d 18^h to 18 $\frac{3}{8}$ ^h Decrease in H.F. (-30). 21^h to 22^h Steep wave in Dec. (-18'). 21 $\frac{1}{4}$ ^h to 22 $\frac{1}{8}$ ^h Irregular wave in H.F. (+70). 21 $\frac{1}{2}$ ^h to 22 $\frac{1}{8}$ ^h Decrease in V.F. (-20).
- 22^d 15 $\frac{1}{2}$ ^h to 17 $\frac{1}{2}$ ^h Wave in Dec. (-4'). 17^h to 17 $\frac{1}{2}$ ^h Increase in H.F. (+20). 21 $\frac{1}{4}$ ^h to 21 $\frac{3}{4}$ ^h Decrease in Dec. (-3'). 21^h to 23^h Wave in H.F. (+20).
- 23^d 1^h to 2^h Wave in Dec. (+4'). 4 $\frac{1}{2}$ ^h to 6 $\frac{1}{2}$ ^h Wave in Dec. (+7'). 8^h to 9 $\frac{1}{4}$ ^h Decrease in H.F. (-30). 15^h to 16^h Wave in H.F. (-20). 15^h to 16 $\frac{3}{8}$ ^h Wave in Dec. (-4').
- 24^d 2^h to 3 $\frac{1}{4}$ ^h Wave in Dec. (+4'), with steep ascent. 2 $\frac{1}{4}$ ^h to 4^h Double-crested wave in H.F. (+20). 18 $\frac{1}{2}$ ^h to 19 $\frac{1}{2}$ ^h Wave in Dec. (-3').
- 28^d 0 $\frac{3}{8}$ ^h to 1 $\frac{1}{2}$ ^h Increase in Dec. (+4'). 14 $\frac{3}{4}$ ^h to 15 $\frac{1}{2}$ ^h Oscillatory decrease in H.F. (-20). 15 $\frac{3}{4}$ ^h to 16 $\frac{1}{2}$ ^h Wave in Dec. (+4'). 16^h to 17^h Double wave in H.F. (∓ 20). 17^h to 18 $\frac{1}{4}$ ^h Wave in Dec. (-18'). 17 $\frac{1}{4}$ ^h to 18 $\frac{3}{4}$ ^h Double wave in H.F. (-20, +40). 13^h to 17 $\frac{1}{2}$ ^h Increase in V.F. (+45). 17 $\frac{1}{2}$ ^h to 19 $\frac{1}{2}$ ^h Wave in V.F. (-20). 18 $\frac{1}{4}$ ^h to 19^h Wave in Dec. (-3'). 18 $\frac{1}{2}$ ^h to 20^h Wave in H.F. (-50), with a small wave superposed from 18 $\frac{3}{8}$ ^h to 19^h (-20). 19^h to 20^h Double-crested wave in Dec. (+5'). 21^h to 21 $\frac{3}{8}$ ^h Wave in H.F. (+60). 21^h to 22^h Wave in Dec. (+8'). 21 $\frac{1}{4}$ ^h to 21 $\frac{1}{2}$ ^h Decrease in V.F. (-25). 21 $\frac{3}{8}$ ^h to 23^h General increase in H.F. (+30), followed till 23 $\frac{1}{2}$ ^h by a rapid decrease (-30). 22^h to 22 $\frac{3}{8}$ ^h Wave in Dec. (-3'). 23 $\frac{1}{4}$ ^h to 29^d 1 $\frac{1}{4}$ ^h Double-crested wave in Dec. (-10', -12').

November 29^d 1^h to 3^h Serrated wave in H.F. (+50), and double-crested wave in V.F. (-15). 1^h to 3^h Truncated wave in Dec. (-5'). 3^h to 5^h Increase in H.F. (+40), followed till 8^h by a fluctuating decrease (-65). 5^h to 6^h Wave in Dec. (-4'). 9^h to 10^h Wave in H.F. (-30). 11^h to 12^h Wave in H.F. (-25). 12^h to 13^h Increase in Dec. (+7'). 11^h to 13^h Increase in V.F. (+15), followed till 13^h by a further rapid increase (+30), interrupted at 13^h by a small wave (-10). 13^h to 13^h Wave in Dec. (-4'), continuing into a double wave from 13^h to 14^h (+6', -10'). 13^h to 13^h Double wave in H.F. (± 40). 14^h to 15^h Double wave in H.F. (∓ 20), followed till 17^h by a fluctuating increase (+40). 18^h to 18^h Increase in H.F. (+20).

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

3^d 15^h to 16^h Increase in H.F. (+25), and decrease in Dec. (-3'). 22^h 3^m Sudden movement in H.F. (+25).

5^d 3^h to 5^h Wave in H.F. (+25).

6^d 22^h to 23^h Wave in Dec. (-3'). 1^h to 2^h Increase in Dec. (+4').

10^d 13^h to 14^h Wave in Dec. (+3'). 14^h to 15^h Wave in H.F. (-20), followed till 16^h by numerous small oscillations.

11^d 13^h to 13^h Increase in Dec. (+3'). 13^h to 14^h Serrated wave in H.F. (+25).

12^d 10^h to 10^h Decrease in H.F. (-20).

13^d 23^h to 14^d 1^h Broad wave in Dec. (-3'), with accompanying wave in H.F. (+20).

15^d 15^h to 16^h Decrease in H.F. (-30). 17^h to 18^h Wave in H.F. (-25). 17^h to 18^h Wave in Dec. (-5'). 20^h to 20^h Wave in Dec. (+3'). 20^h to 21^h Double-crested wave in H.F. (-30). 22^h to 16^d 1^h Two consecutive waves in Dec. (-9', -6'), merging at 23^h. 22^h to 23^h Wave in H.F. (+30).

16^d 2^h to 3^h Increase in Dec. (+3'). 3^h to 3^h Wave in H.F. (+20). 5^h to 6^h Wave in H.F. (+35). 7^h to 7^h Increase in Dec. (+3'). 8^h to 9^h Wave in H.F. (+20). 17^h to 19^h Wave in Dec. (-5'), followed till 22^h by a fluctuating decrease (-12'). 18^h to 19^h Irregular wave in H.F. (+25). 20^h to 21^h Fluctuating increase in H.F. (+50), followed till 22^h by a decrease (-25). 22^h to 23^h Increase in Dec. (+4').

17^d 0^h to 0^h Decrease in Dec. (-3').

20^d 18^h to 20^h Wave in H.F. (-30). 22^h to 21^d 1^h Two consecutive waves in Dec. (-15', -4'). 22^h to 23^h Wave in H.F. (+40). 22^h to 24^h Wave in V.F. (-15).

21^d 1^h to 3^h Accelerated increase in Dec. (+7'). 17^h to 18^h Increase in H.F. (+25). 19^h to 21^h Wave in Dec. (-6'). 20^h to 21^h Wave in H.F. (+20).

23^d 1^h to 2^h Wave in Dec. (+3'). 2^h to 3^h Wave in H.F. (+20). 8^h to 9^h Wave in H.F. (+20). 12^h to 16^h General increase in V.F. (+50), followed till 17^h by a wave (+25). 11^h to 13^h Decrease in H.F. (-35). 11^h to 14^h General increase in Dec. (+10'), rapid at the last. 13^h to 14^h Serrated wave in H.F. (-25). 14^h to 16^h Double wave in H.F. (+30, -20), the first part truncated, the second serrated. 15^h to 18^h Three consecutive waves in Dec. (-7', -14', -5'). 16^h to 17^h Double wave in H.F. (∓ 40), followed till 18^h by an increase (+50). 18^h to 21^h Wave in H.F. (-80), with three oscillations superposed from 18^h to 19^h (+25). 18^h to 20^h Wave in Dec. (-12'), with four oscillations superposed (5').

24^d 8^h to 9^h Decrease in H.F. (-30). 12^h to 14^h Serrated wave in H.F. (-30). 20^h to 21^h Domed wave in Dec. (-3').

25^d 17^h to 19^h Wave in Dec. (-3'), with gradual decline.

26^d 3^h to 4^h Wave in Dec. (+3'). 3^h to 4^h Increase in H.F. (+20). 8^h to 10^h Accelerated decrease in H.F. (-30).

27^d 16^h to 16^h Decrease in Dec. (-3'). 16^h to 18^h Truncated wave in H.F. (+40). 17^h to 19^h Wave in Dec. (+3'). 19^h to 21^h Increase in H.F. (+40). 19^h to 21^h Truncated wave in Dec. (-4').

28^d 16^h to 17^h Wave in H.F. (-20). 19^h to 21^h Wave in Dec. (-15'). 19^h to 21^h Double wave in H.F. (∓ 25), the second part truncated. 23^h to 29^d 1^h Wave in H.F. (+20).

December 29^d 2 $\frac{1}{2}$ ^h to 3^h Increase in Dec. (+5'). 4^h to 4 $\frac{1}{2}$ ^h Decrease in Dec. (-3'). 8^h to 10^h Decrease in H.F. (-40). 10 $\frac{3}{4}$ ^h to 11 $\frac{1}{2}$ ^h Double-crested wave in H.F. (-20). 10 $\frac{3}{4}$ ^h to 11^h Wave in Dec. (+3'). 12 $\frac{3}{4}$ ^h to 14 $\frac{1}{4}$ ^h Truncated wave in Dec. (+4'). 13^h to 14 $\frac{1}{2}$ ^h Wave in H.F. (-35). 17^h to 18 $\frac{1}{2}$ ^h Double-crested wave in Dec. (-6', -8'). 17^h to 19^h Wave in H.F. (+30). 19^h to 20^h Wave in H.F. (+20). 20 $\frac{1}{2}$ ^h to 21 $\frac{1}{4}$ ^h Wave in Dec. (-5'). 20 $\frac{3}{4}$ ^h to 22^h Serrated wave in H.F. (+40).

31^d 16 $\frac{1}{2}$ ^h to 17 $\frac{1}{2}$ ^h Wave in H.F. (-25). 17^h to 17 $\frac{3}{4}$ ^h Wave in Dec. (-4').

EXPLANATION OF THE PLATES.

The magnetic changes figured on the Plates are those for days of disturbance selected by the International Committee—January 26^d 12^h to 27^d 12^h; February 23^d 15^h to 24^d 15^h, and 24^d 15^h to 25^d 15^h; March 5^d 8^h to 6^d 8^h; April 14^d 14^h to 15^d 14^h; May 3^d 20^h to 4^d 20^h; June 1^d 9^h to 2^d 9^h; September 15^d 12^h to 16^d 12^h, and 20^d 20^h to 21^d 20^h; October 14^d 12^h to 15^d 12^h, and 15^d 12^h to 16^d 12^h.

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.

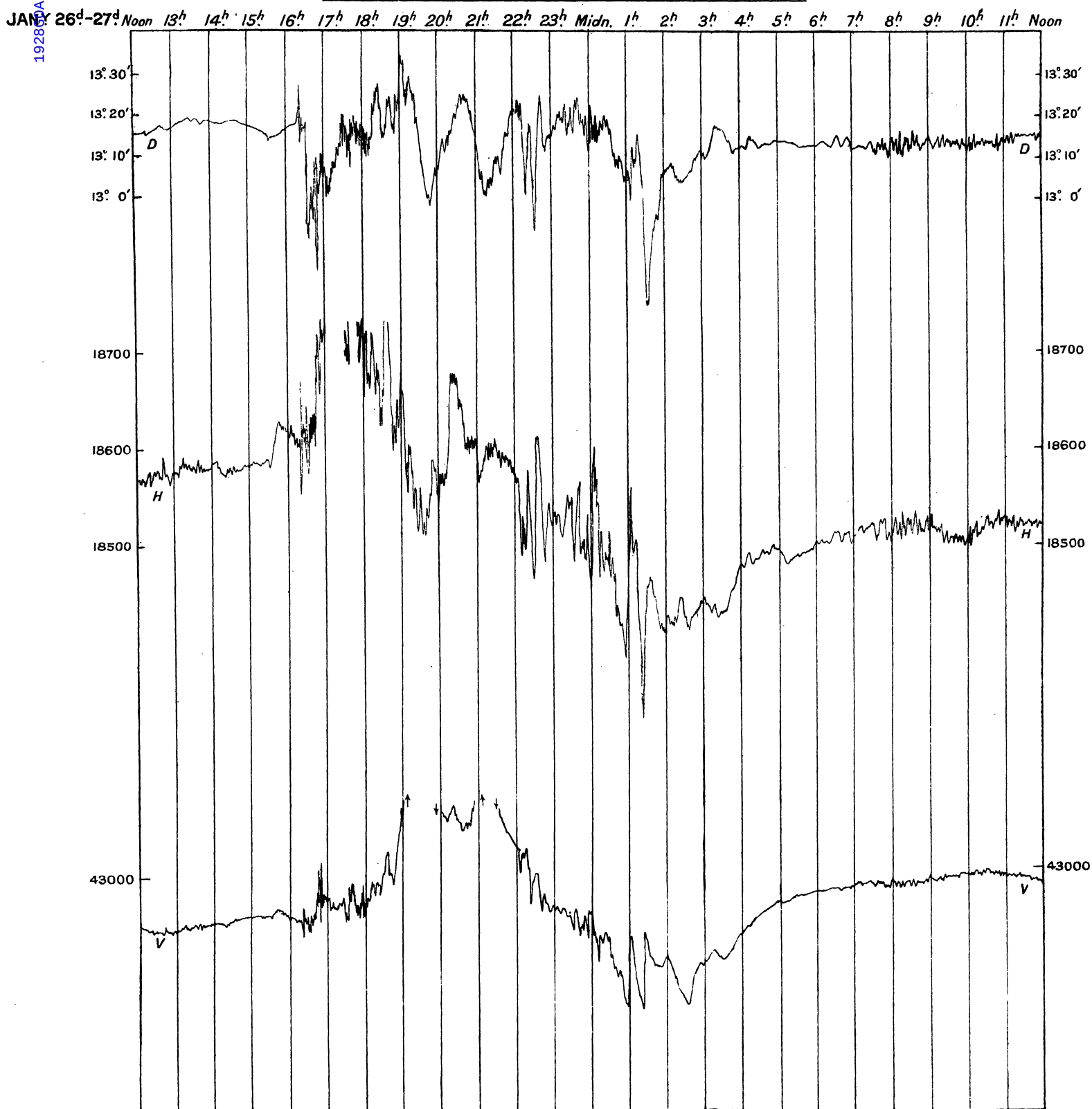
Scales for reading the traces in units of γ (.00001 C.G.S.) are given at the foot of each page, and a datum line is marked for each trace at the sides of the diagram.

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

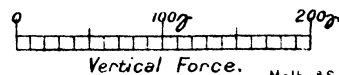
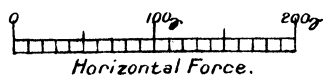
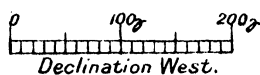
Upward motion indicates increase of declination west, and increase of force in all cases.

1928 JAN 26 11 20 AM

MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)
MAGNETIC STATION IN THE YEAR 1926.



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



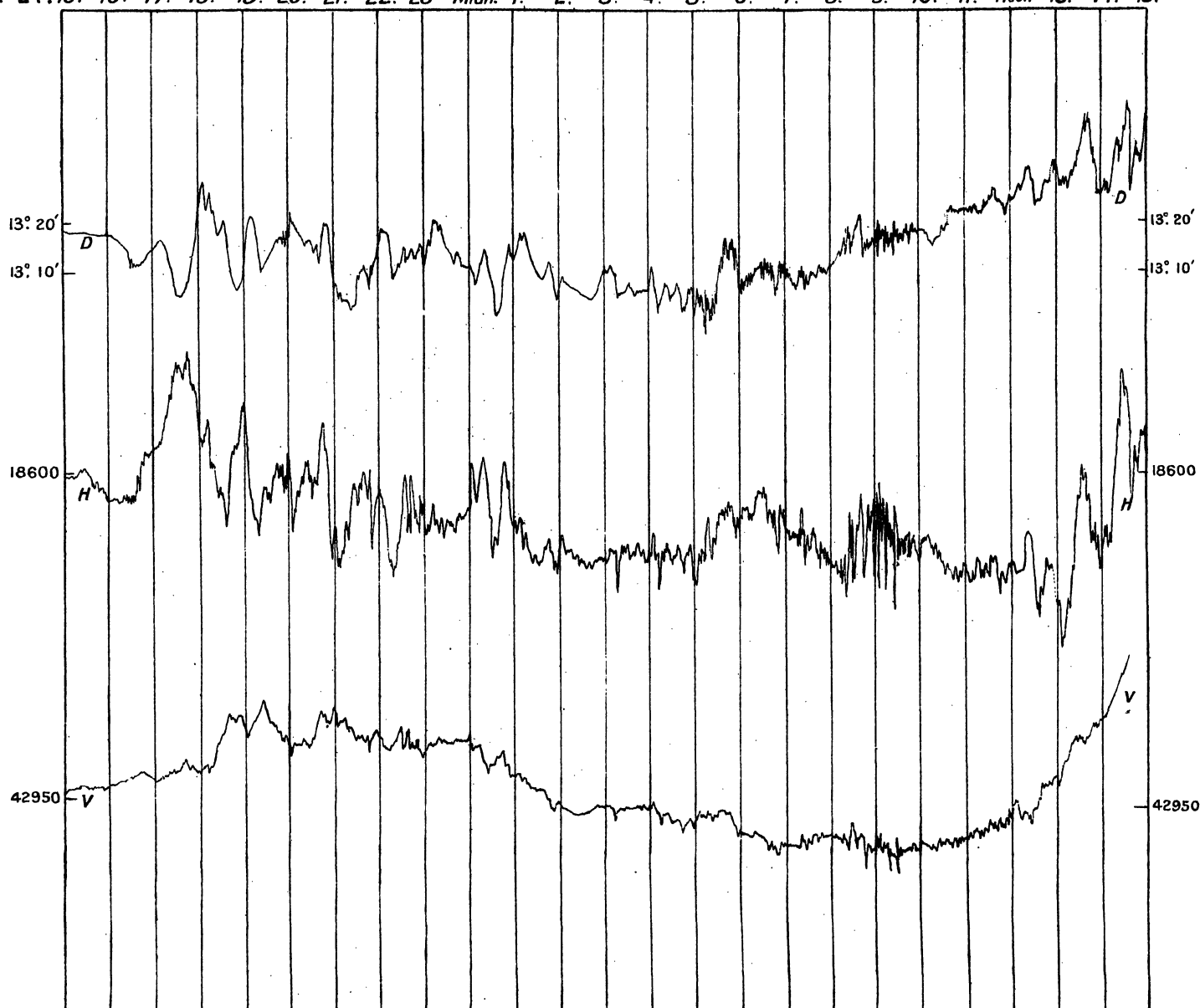
1139, 25095, 176/305, 560 2/28

Malby & Sons Lith

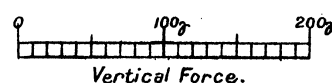
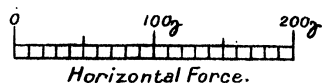
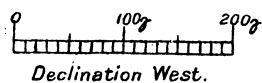
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)

MAGNETIC STATION IN THE YEAR 1926.

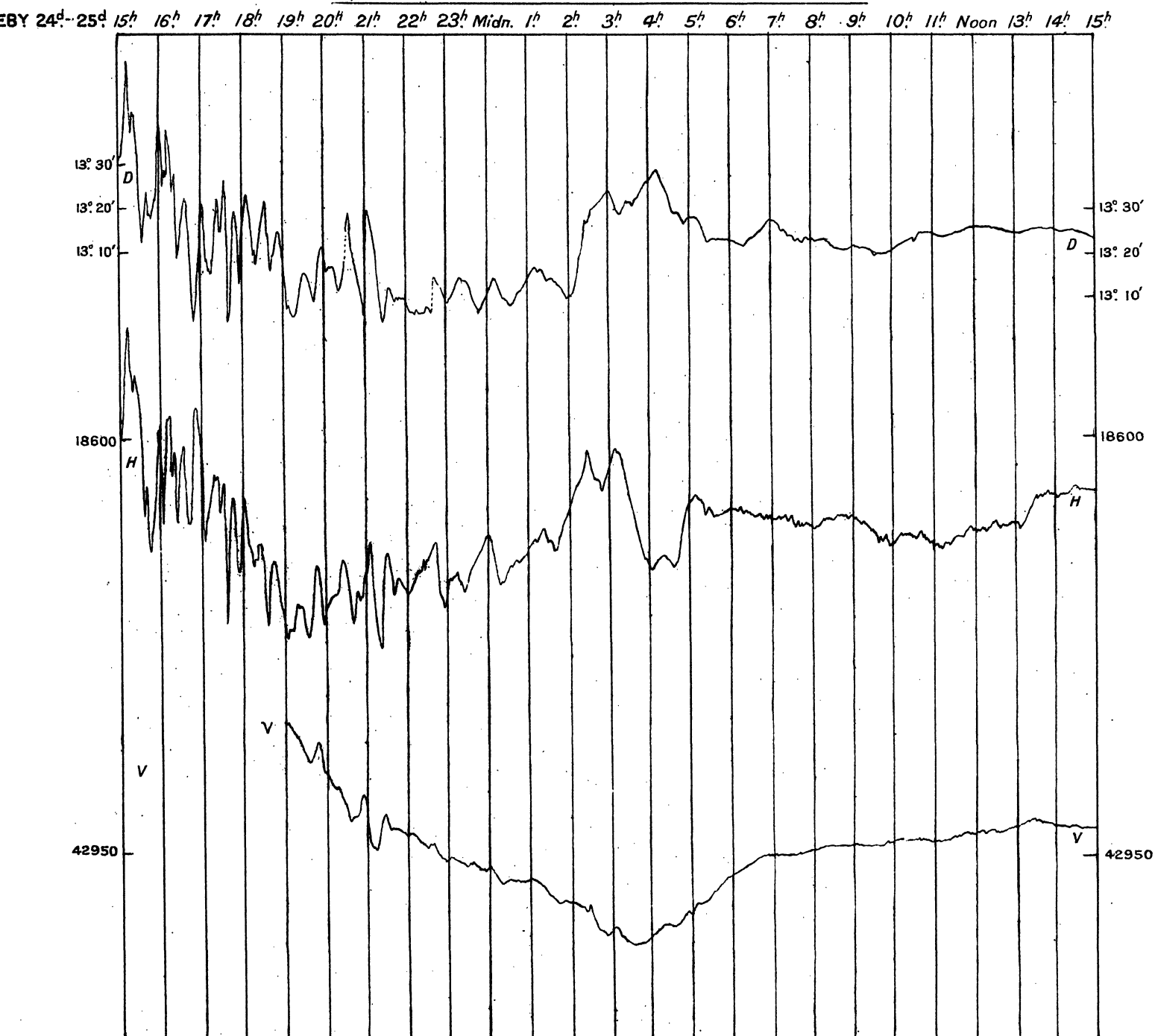
FEBY 23^d-24^d 15^h 16^h 17^h 18^h 19^h 20^h 21^h 22^h 23^h Midn. 1^h 2^h 3^h 4^h 5^h 6^h 7^h 8^h 9^h 10^h 11^h Noon 13^h 14^h 15^h



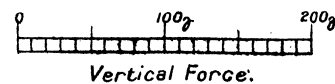
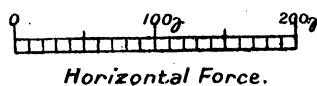
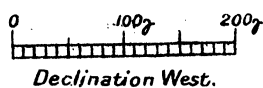
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



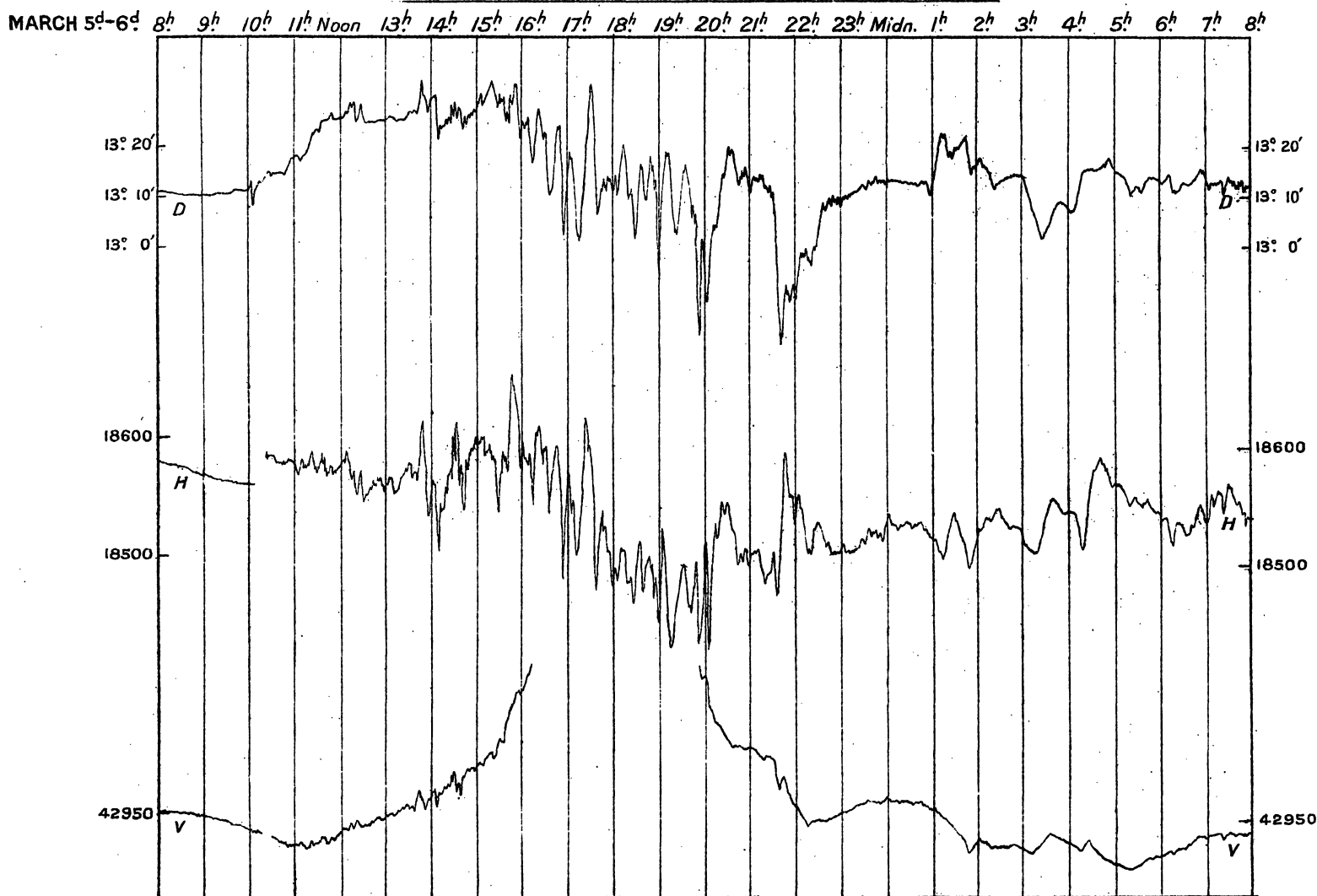
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)
MAGNETIC STATION IN THE YEAR 1926.



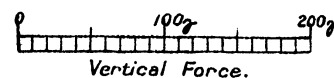
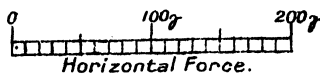
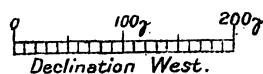
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



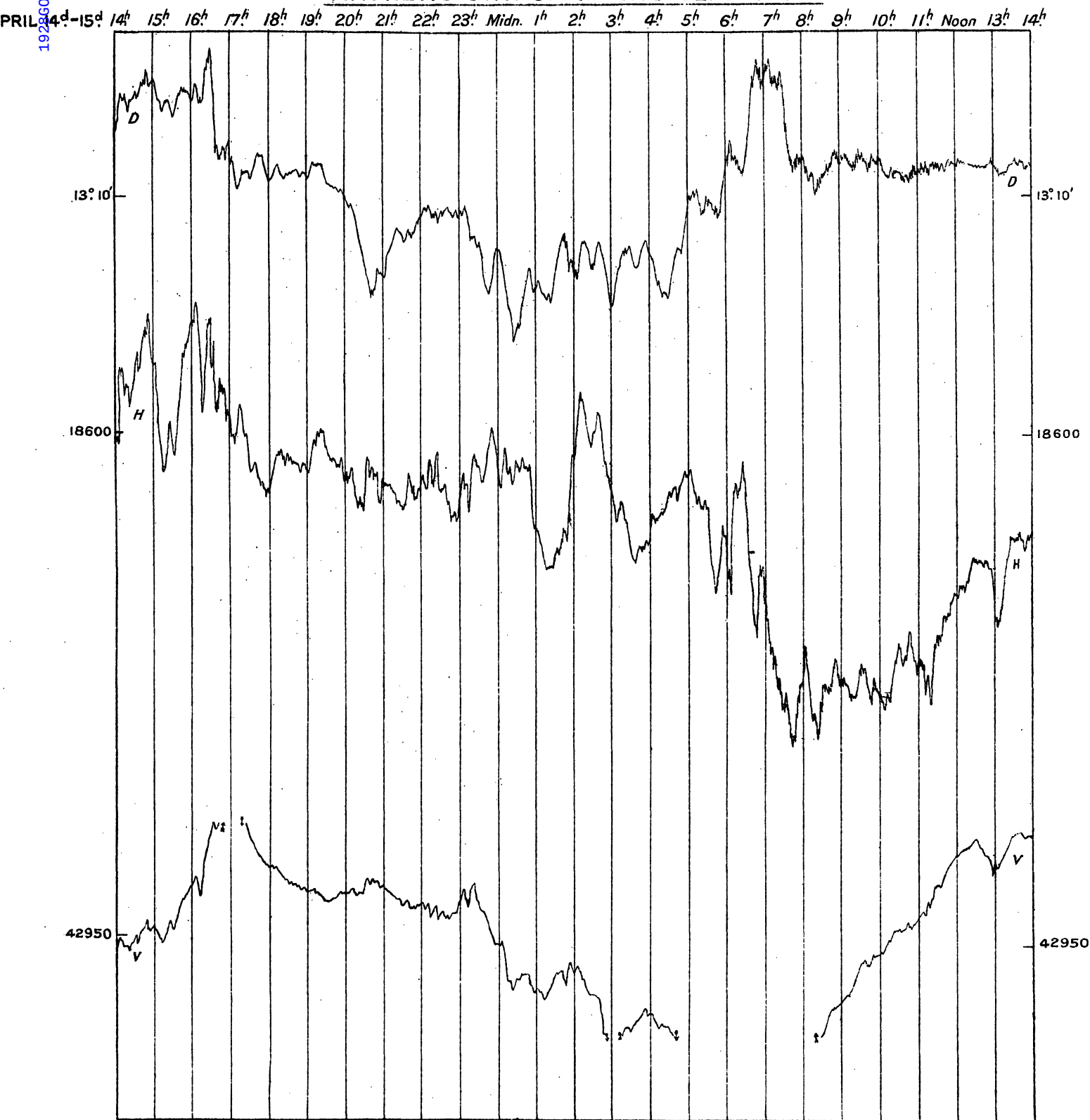
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)
MAGNETIC STATION IN THE YEAR 1926.



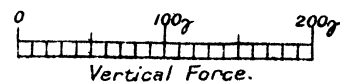
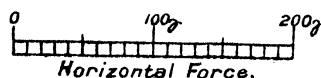
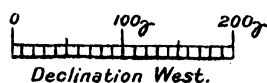
SCALES FOR MAGNETIC ELEMENTS IN C. G. S. UNITS.



MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)
MAGNETIC STATION IN THE YEAR 1926.



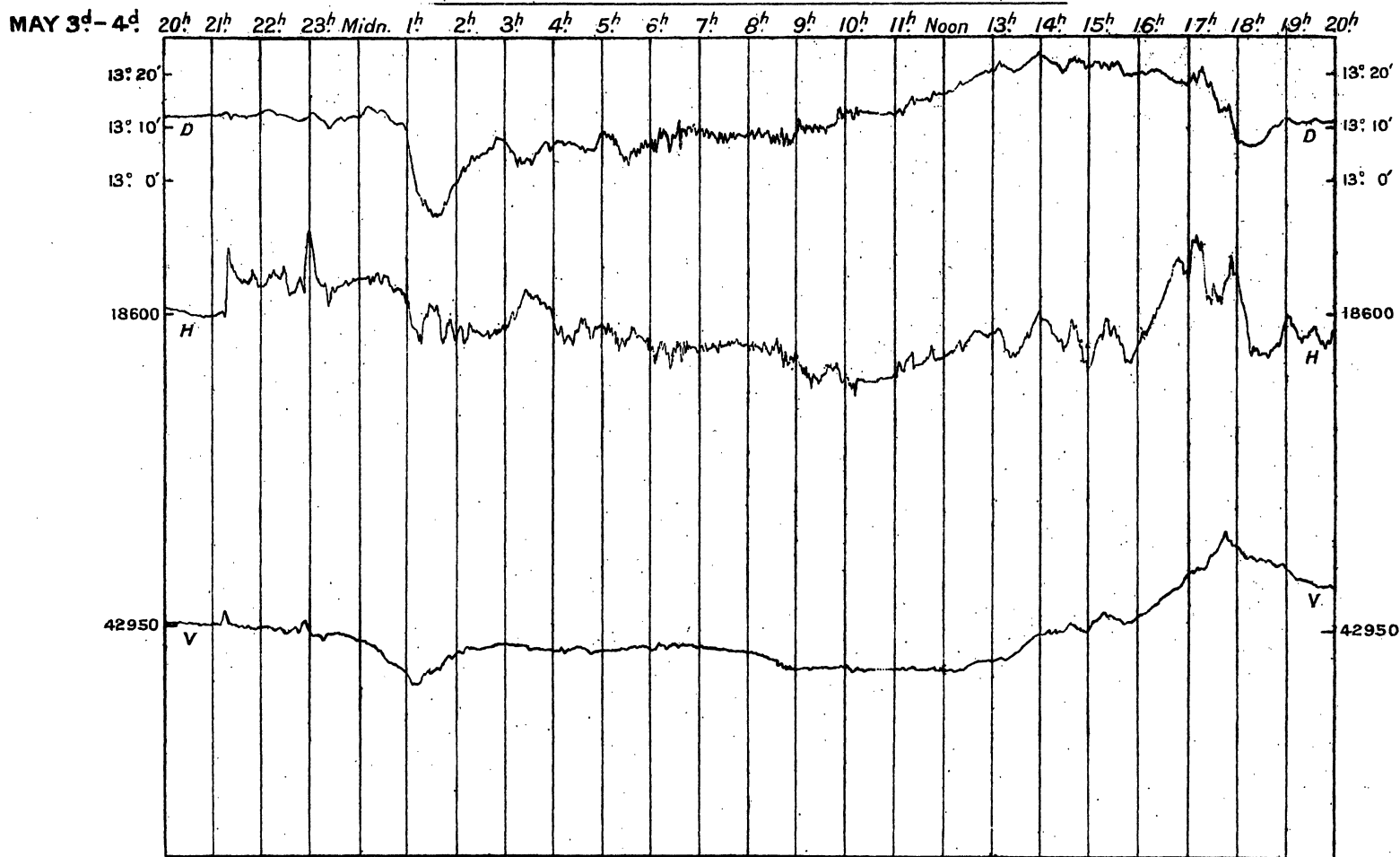
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



Maity & Sons, Lith

Plate VI.

MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)
MAGNETIC STATION IN THE YEAR 1926.



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

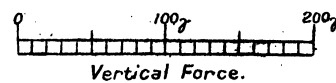
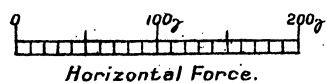
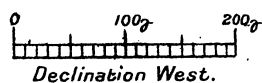
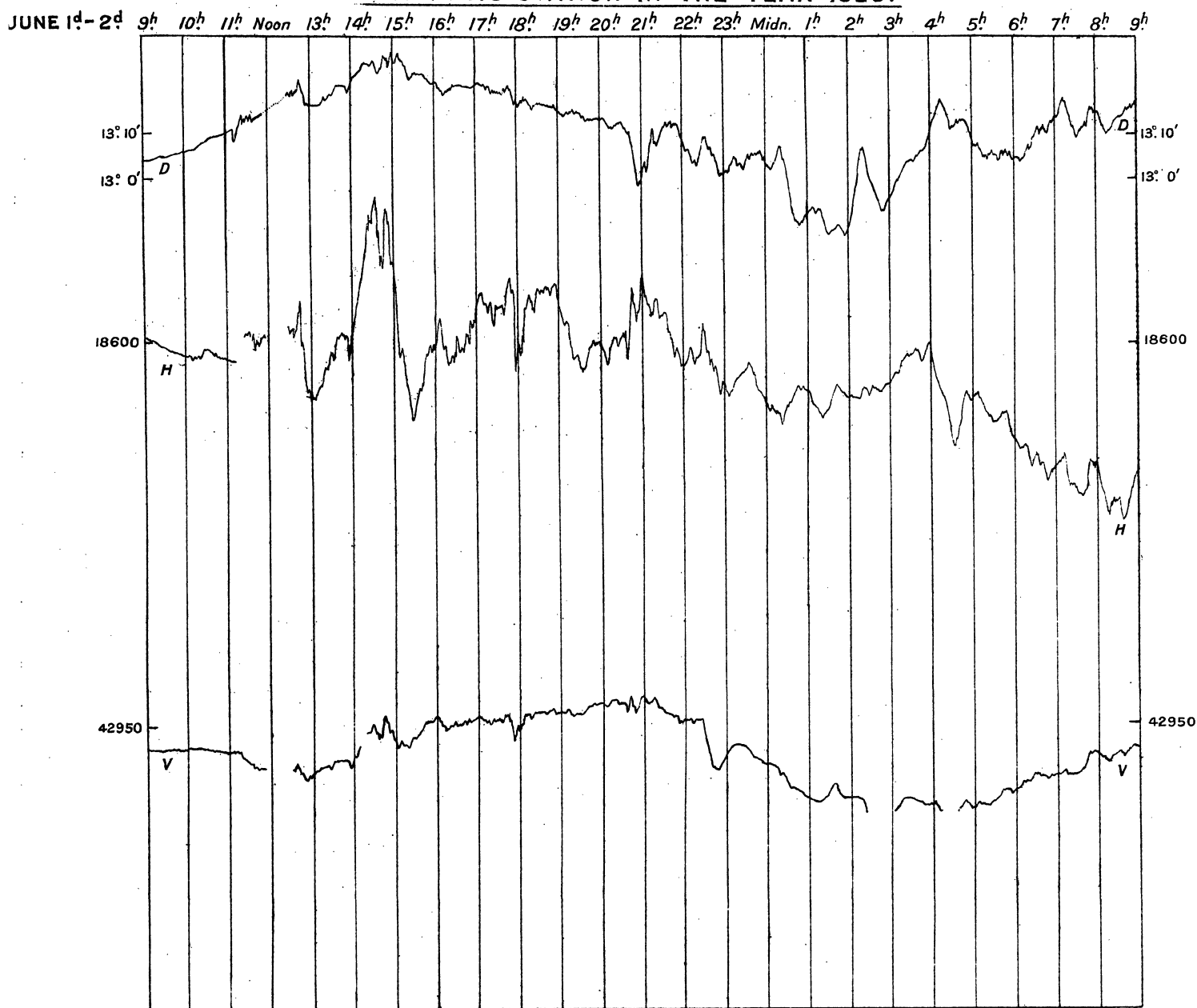
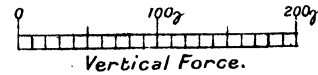
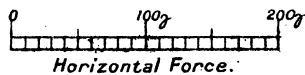
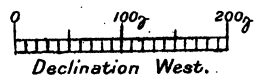


Plate VII.

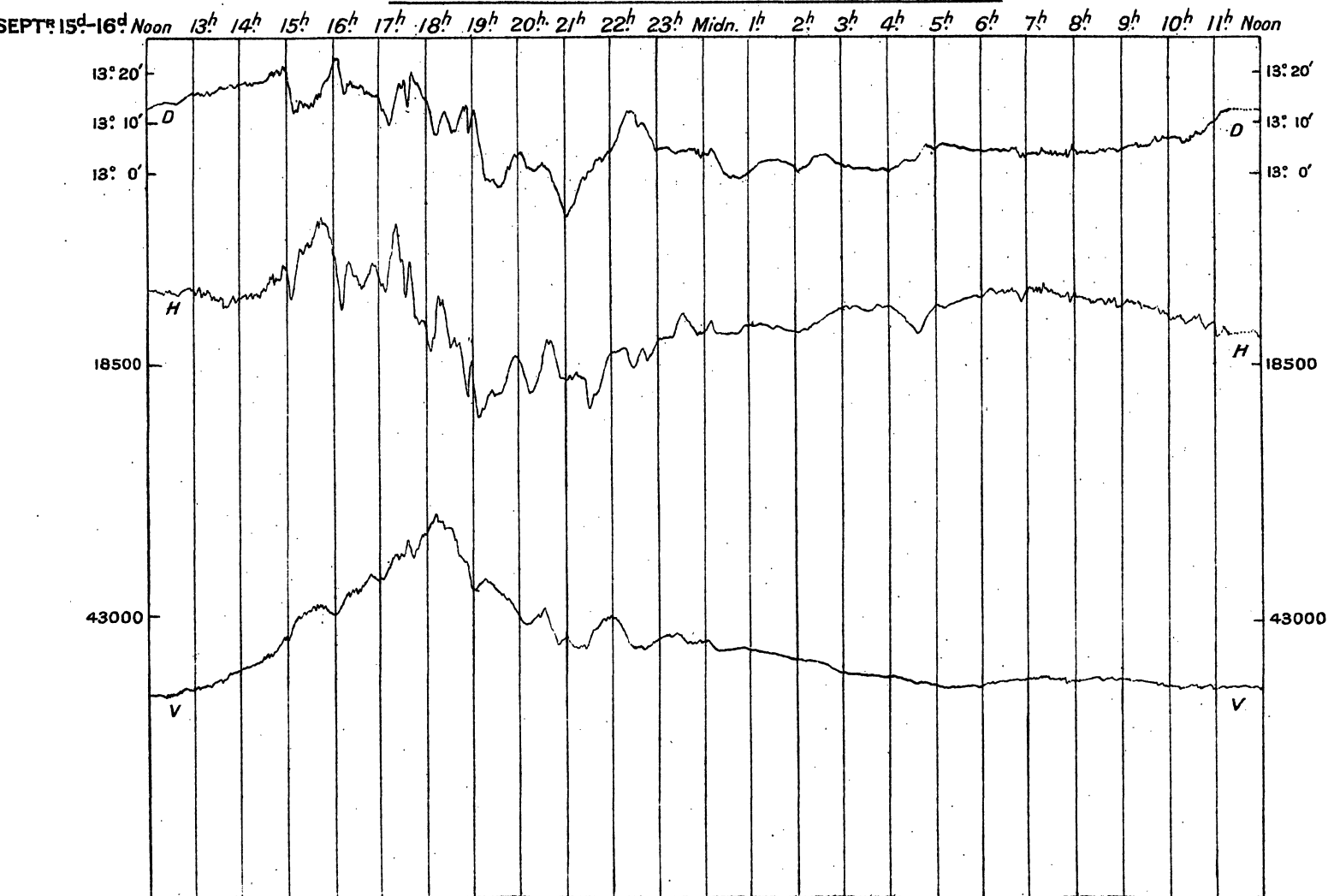
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)
MAGNETIC STATION IN THE YEAR 1926.



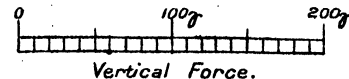
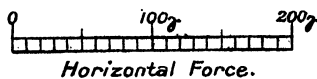
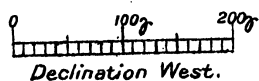
SCALES FOR MAGNETIC ELEMENTS IN C.G.S. UNITS.



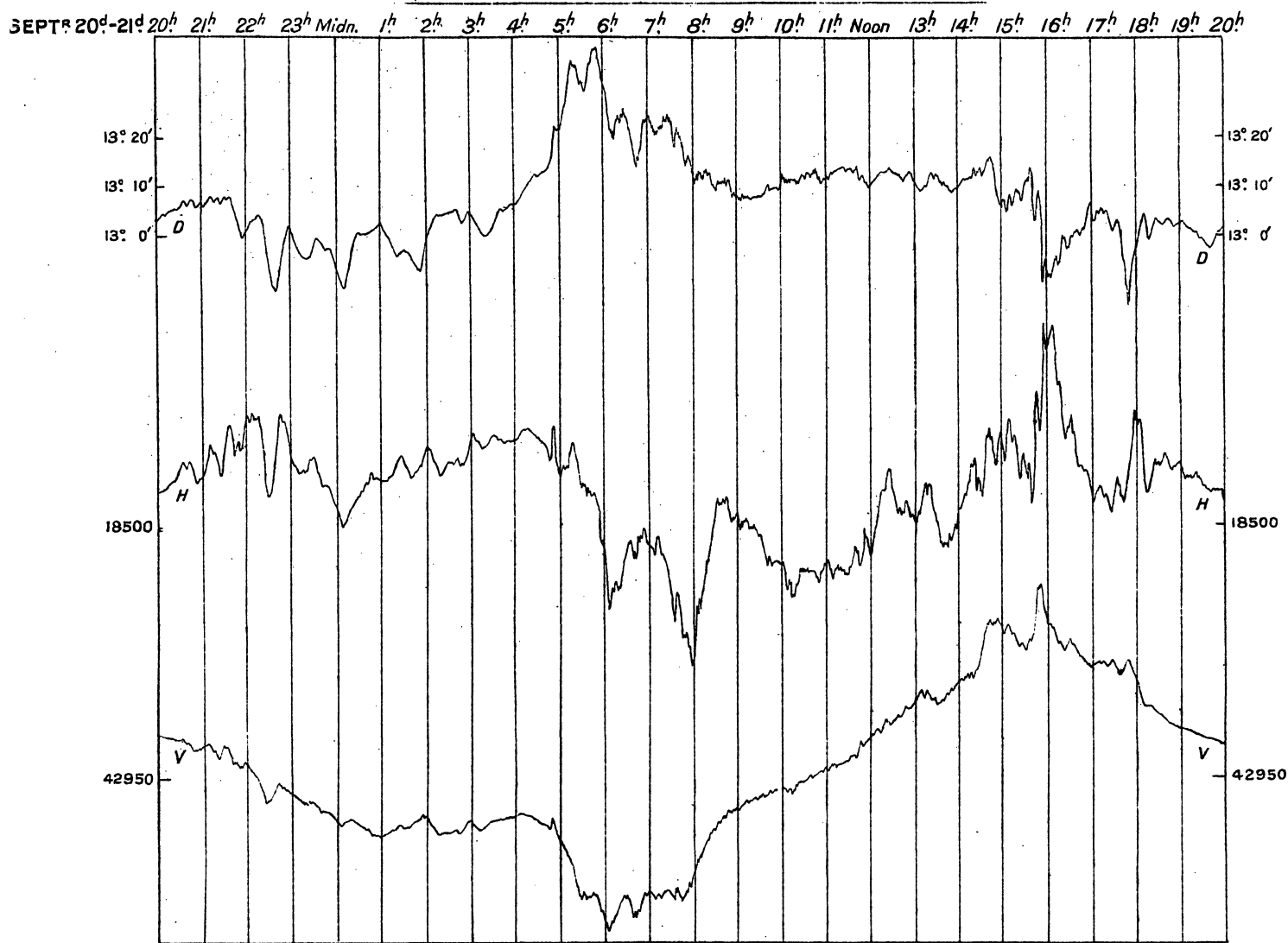
MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)
MAGNETIC STATION IN THE YEAR 1926.



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



MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)
MAGNETIC STATION IN THE YEAR 1926.



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

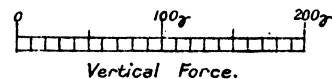
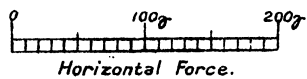
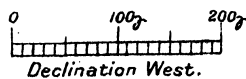
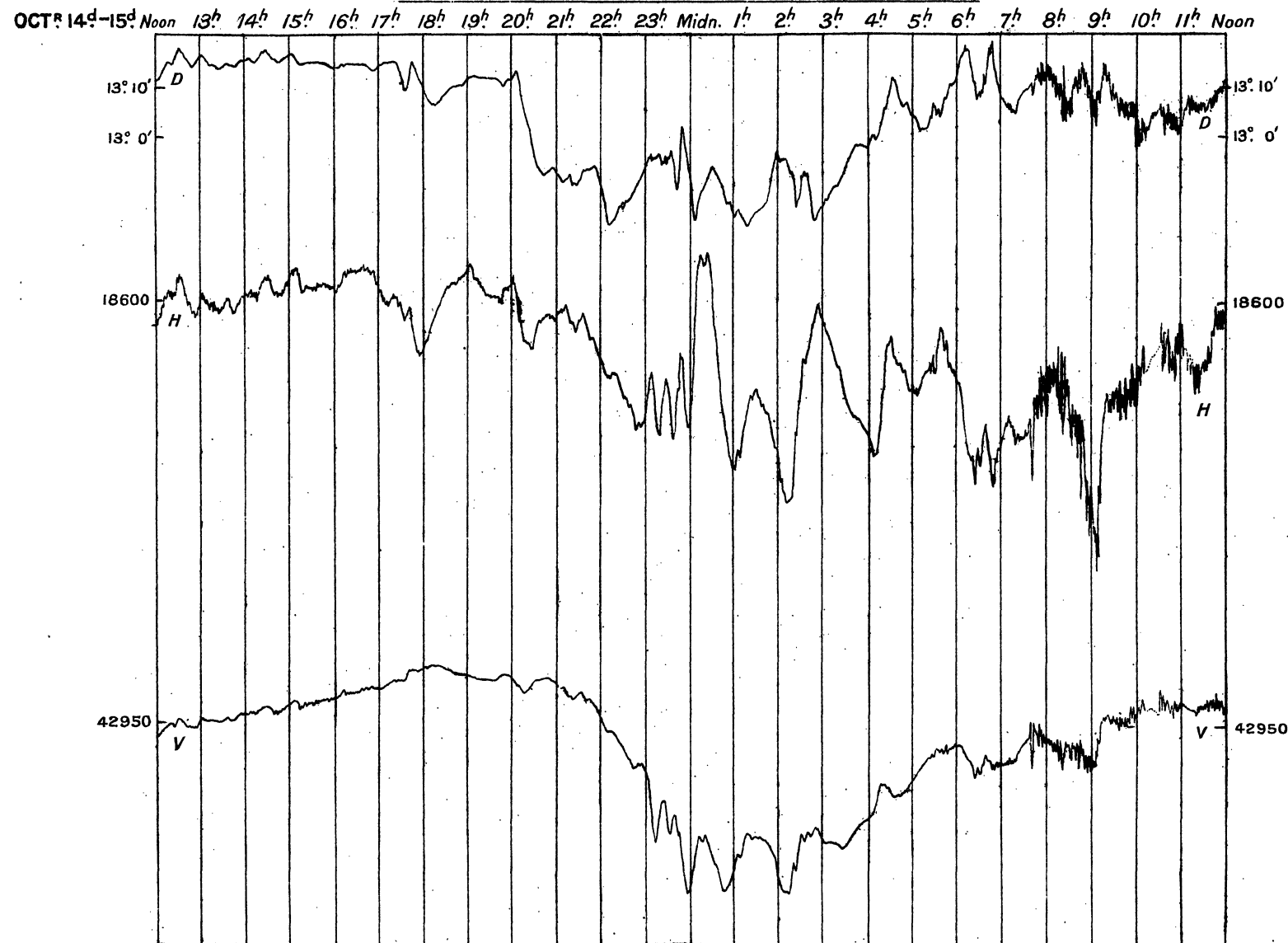
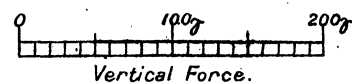
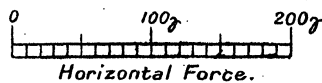
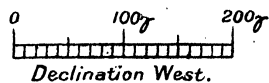


Plate X.

MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)
MAGNETIC STATION IN THE YEAR 1926.



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

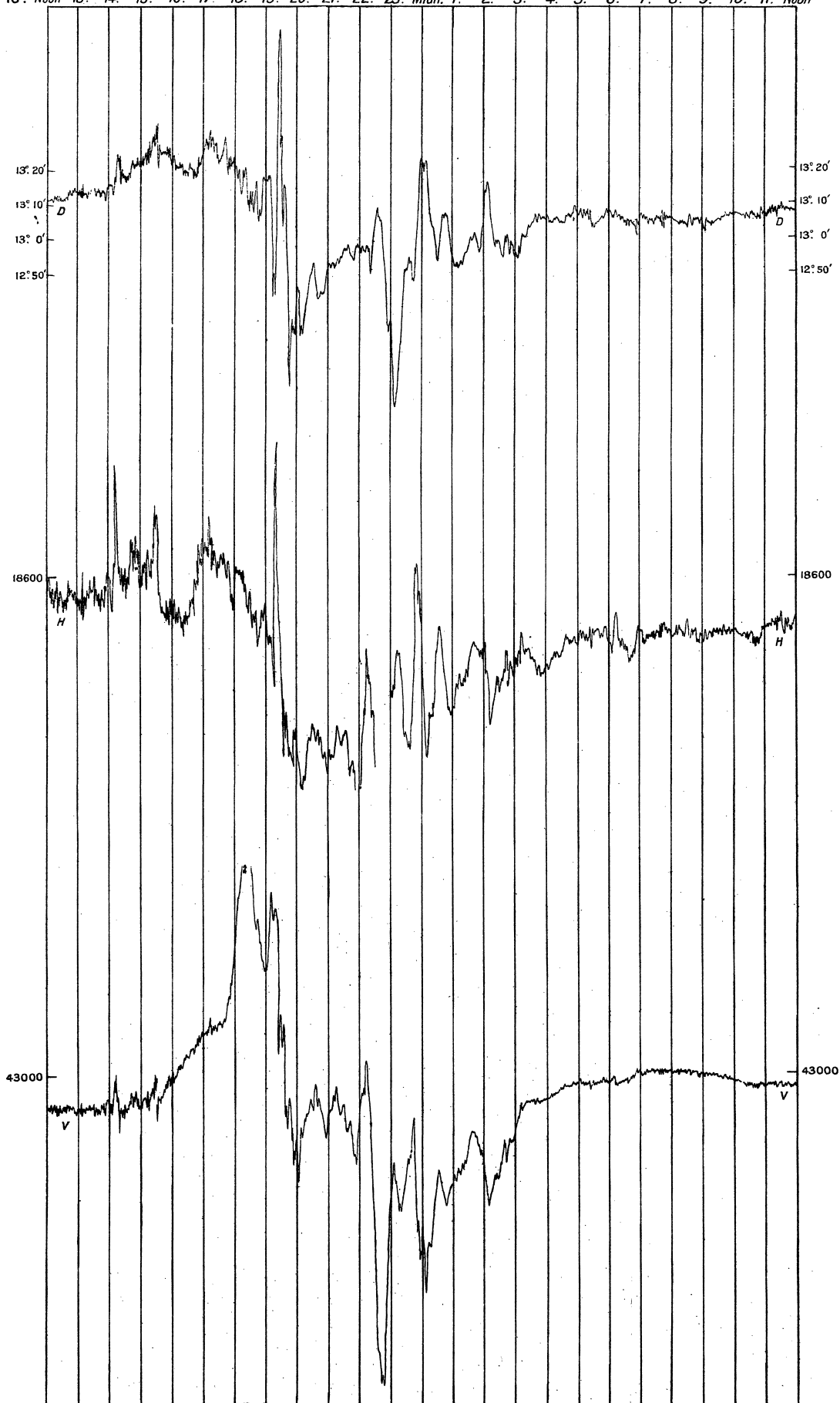


MAGNETIC DISTURBANCES AS RECORDED AT THE ABINGER (Surrey)

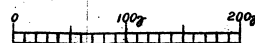
MAGNETIC STATION IN THE YEAR 1926.

192860AM.....2E...1D

OCTOBER 15^d-16^d Noon 13^h 14^h 15^h 16^h 17^h 18^h 19^h 20^h 21^h 22^h 23^h Midn. 1^h 2^h 3^h 4^h 5^h 6^h 7^h 8^h 9^h 10^h 11^h Noon



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



[APPENDIX I TO MAGNETIC RESULTS, 1926.]

Comparison of Simultaneous Records at Greenwich and Abinger.

A comparison of simultaneous records of the magnetographs at Greenwich and Abinger was made covering the period during which the Greenwich traces remained comparatively free from disturbance by electric trains on the Southern Railway.

In addition to the differences tabulated for monthly means of hourly values and for daily mean values in Tables (1) to (6), a discussion of results emerging from a detailed comparison of selected days and periods is given.

Since the Greenwich variometer recorded the North component and the Abinger variometer the Horizontal component of magnetic intensity, Greenwich variations were transformed from geographical to magnetic north by the aid of the recorded variations in declination before being compared.

SPECIAL COMPARISONS BETWEEN GREENWICH AND ABINGER (AND STONYHURST).

This series of comparisons was carried out with the object of investigating the closeness of parallelism between the Declination and Horizontal Force traces at Greenwich and Abinger. The comparisons were carried out over four series of days, viz.:

- (i.) 30 International Quiet Days, April to October 1925.
 - (ii.) 20 International Quiet Days, November 1925 to February 1926.
 - (iii.) 30 Selected disturbed periods of 24 hours, 1925 April to October.*
 - (iv.) 30 Selected disturbed periods of 24 hours, 1925 December to 1926 May.
- These four series of days will be referred to as Quiet I, Quiet II, Disturbed I and Disturbed II respectively.

The Director of Stonyhurst College Observatory kindly made a loan of the Stonyhurst Declination and Horizontal Force traces for the "Disturbed I" period.

* 32 in the case of Horizontal Force.

APPENDIX I. COMPARISON OF RECORDS AT GREENWICH AND ABINGER.

These Greenwich, Abinger and Stonyhurst sheets were measured at the exact hour in each case. Tables I, II and III show diurnal inequalities derived from the measures. The ranges of the various inequalities and the A.D. (or average departures from the mean) are also given.

The Declination results indicate a small, but definite, difference between Greenwich and Abinger. This is especially pronounced in the cases of Disturbed I and Quiet I, that is, in the summer comparisons. The Greenwich minus Abinger Horizontal Force inequality shows a decided correlation with the Greenwich (or Abinger) Declination inequality. This correlation is weaker in the case of the Disturbed II series, but is quite striking in the other three cases. It is the kind of relation that one would expect if the orientation of the magnetographs were in error.

The Greenwich Horizontal Force values given in the Tables were obtained by combining the North Force and Declination measures. After the comparisons were completed the orientation of the Greenwich North Force magnet was examined by the method described in the Introduction (p. E xii). It was found to be in error, the north pole of the magnet being pointed in a direction about $1\frac{1}{2}^\circ$ south of true east. This error of orientation will account for about half of the Greenwich minus Abinger differences in Table II.

The orientation of the Abinger Horizontal Force instrument has been since re-examined and found correct to within a quarter of a degree.

Tables IV-V were prepared with the object of investigating variations from place to place in the extent of *short period* movements in the elements. They exhibit for the three observatories the respective changes that occur in Declination between two consecutive hours in all the cases in which such changes amount to more than 5'. The results indicate that, in the mean, Greenwich movements are 2 per cent greater than the corresponding Abinger movements and that Stonyhurst movements are 20 per cent greater than corresponding Greenwich movements.

Table VI was prepared to obtain confirmation or otherwise of the result. 35 well-defined short period movements were selected and the differences between maximum and minimum measured in each case. The results indicate that in the mean the Greenwich movements are about 4 per cent in excess of the Abinger ones, but that wide departures from this ratio may occur in individual cases.

APPENDIX I. COMPARISON OF RECORDS AT GREENWICH AND ABINGER.

Tables VII and VIII are similar to Tables IV and V and show the relation of the extent of short period movements in Horizontal Force. The results indicate that, in the mean, Greenwich is about 4 per cent less than Abinger and about 6 per cent less than Stonyhurst, so that the extent of short period movements in Horizontal Force at Abinger and Stonyhurst are approximately the same. The deficiency at Greenwich may be due in whole or in part to an error in scale value.

The whole set of comparisons seem to indicate that sensible departures from true parallelism are to be found between the Greenwich and Abinger traces. In the case of Declination these departures from exact parallelism may amount to about 1 minute of arc on quiet days and still larger values on disturbed days. The Horizontal Force results are not very conclusive, owing to possibilities of instrumental error in scale and orientation, and the departures from parallelism on quiet days do not seem to exceed $2''$.

(1) TABLE SHOWING THE MONTHLY MEAN DIFFERENCE OF MAGNETIC DECLINATION (WEST), ABINGER MINUS GREENWICH, DURING TWELVE CONSECUTIVE MONTHS IN 1925-26 FOR EACH HOUR OF THE DAY.

Greenwich Mean Time. Hour commencing	1925.							1926.				
	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.
Midnight	+12.9	+13.3	+13.1	+12.9	+12.9	+12.8	+12.8	+12.5	+12.4	+12.4	+13.3	+12.7
1 ^h	12.9	13.5	13.2	13.0	13.0	12.9	12.9	12.8	12.6	12.6	13.4	12.6
2	12.9	13.5	13.2	13.1	13.1	12.8	12.9	12.8	12.4	12.6	13.3	12.7
3	13.1	13.5	13.3	13.1	13.0	13.0	12.9	12.6	12.5	12.5	13.3	12.7
4	13.2	13.6	13.2	12.9	13.0	12.9	13.0	12.6	12.5	12.5	13.2	12.7
5	13.1	13.5	13.2	12.8	12.9	12.9	12.9	12.4	12.5	12.3	12.6	12.6
6	13.0	13.4	13.0	12.8	12.8	12.9	12.9	12.4	12.6	12.3	11.9	12.5
7	13.4	13.4	12.9	12.7	13.1	12.8	12.7	12.5	12.4	12.3	11.8	12.4
8	13.1	13.3	12.9	12.6	12.8	12.8	12.8	12.5	12.4	12.0	12.0	12.3
9	13.1	13.3	12.8	12.7	12.7	12.7	12.6	12.3	12.4	12.2	12.1	12.4
10	12.7	12.9	12.7	12.9	12.3	12.7	12.7	12.6	12.6	12.4	12.5	12.5
11	12.9	13.1	12.8	12.6	12.6	12.8	12.8	12.6	12.7	12.4	12.7	12.5
Noon	12.8	13.0	12.6	12.6	12.6	12.8	12.8	12.8	12.8	12.3	12.4	12.4
13 ^h	12.9	13.0	12.9	12.8	12.7	12.8	12.8	12.9	12.9	12.3	12.5	12.6
14	13.0	13.0	12.8	12.7	12.8	12.9	12.8	13.0	12.9	12.6	12.2	12.5
15	13.0	13.1	12.8	12.9	12.8	12.8	12.9	12.9	13.1	12.5	12.1	12.5
16	13.1	13.2	12.8	13.3	12.8	12.8	12.8	12.8	12.4	12.5	11.9	12.4
17	13.0	13.3	12.8	12.6	12.7	12.6	12.7	12.6	12.2	12.0	12.3	12.5
18	13.2	13.2	12.9	12.5	12.5	12.7	12.9	12.5	12.2	12.3	12.4	12.5
19	13.2	13.4	13.1	12.8	12.8	12.8	13.0	12.6	12.9	12.4	12.5	12.4
20	13.1	13.4	13.0	13.2	12.9	12.9	13.0	12.5	12.3	12.7	13.1	12.5
21	13.1	13.6	13.0	12.7	12.5	12.9	12.9	12.1	12.8	12.6	13.0	12.7
22	13.1	13.3	13.0	12.7	12.6	12.8	13.0	12.4	12.0	12.4	12.8	12.5
23	12.8	13.3	13.1	12.7	12.8	12.8	12.9	12.2	12.1	12.4	13.0	12.5
Means	13.0	13.3	13.0	12.8	12.8	12.8	12.9	12.6	12.5	12.4	12.6	12.5

(2) TABLE SHOWING THE DAILY MEAN DIFFERENCE OF MAGNETIC DECLINATION (WEST), ABINGER MINUS GREENWICH, FOR TWELVE CONSECUTIVE MONTHS IN 1925-26.

Day.	1925.							1926.				
	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.
1	+12.6	+13.6	+13.0	+12.6	—	+12.4	+12.5	+13.2	+12.5	+12.8	+12.0	+11.8
2	13.2	13.5	12.9	13.1	+12.6	12.8	12.8	13.1	12.4	12.5	12.3	12.2
3	—	13.5	12.9	12.2	12.9	13.2	13.1	12.9	—	11.9	12.6	12.4
4	12.9	13.9	12.8	12.6	13.3	12.7	12.8	12.7	—	12.2	12.3	12.6
5	12.8	13.0	12.7	12.9	13.3	12.8	12.9	12.8	12.4	13.2	12.3	12.5
6	13.3	13.1	13.2	13.1	13.0	13.4	12.9	12.8	12.5	12.8	12.5	12.5
7	12.9	13.0	12.5	12.9	12.8	13.4	12.7	12.5	12.4	12.4	12.5	12.9
8	12.2	13.1	12.9	12.5	13.6	13.3	12.5	12.7	12.2	12.2	12.3	13.7
9	12.4	13.5	12.7	12.3	12.3	13.4	12.4	12.8	12.2	12.3	12.5	12.5
10	13.0	13.3	13.1	12.6	12.7	13.4	12.5	12.9	12.4	12.6	12.5	11.7
11	13.0	13.2	13.2	12.8	12.9	12.6	12.3	(12.3)	12.4	12.7	12.8	12.4
12	13.3	13.3	13.0	12.7	12.6	—	12.6	—	12.4	12.5	12.8	12.5
13	13.4	13.1	12.9	13.0	12.0	11.9	12.9	—	12.5	12.2	12.6	12.6
14	13.1	13.4	12.8	13.0	12.3	13.0	13.0	—	12.7	12.4	—	12.5
15	12.9	13.6	13.1	13.4	—	12.9	12.8	—	12.6	12.2	—	12.7
16	13.1	13.9	12.9	12.4	13.3	12.7	12.8	12.2	12.3	12.1	12.2	12.9
17	13.1	13.9	—	12.3	13.1	12.7	12.7	12.1	12.4	12.4	12.4	12.7
18	12.9	13.6	13.2	12.1	12.8	12.9	12.7	11.8	12.7	12.7	12.8	12.3
19	13.0	—	13.4	12.2	13.2	12.9	12.9	11.7	12.7	12.3	12.8	12.5
20	—	12.9	13.1	12.4	13.4	13.0	12.9	11.9	12.4	12.2	12.9	12.6
21	—	13.0	13.2	12.5	13.4	13.1	12.6	12.1	12.6	12.6	12.7	12.4
22	13.2	13.0	13.0	13.4	12.8	13.0	13.0	12.4	12.8	12.7	12.8	12.6
23	13.1	12.9	12.8	13.0	12.8	12.7	13.2	12.7	12.7	12.6	12.6	12.7
24	13.2	14.0	12.9	13.3	12.4	12.8	13.4	12.4	—	12.5	12.7	12.6
25	13.2	13.1	13.0	13.7	12.8	12.8	13.7	12.4	12.6	12.3	12.9	12.4
26	12.9	13.4	13.0	13.3	12.8	12.7	13.7	12.7	12.8	12.4	12.6	12.4
27	12.5	13.6	13.0	13.5	12.5	12.7	12.9	12.7	12.4	12.2	12.7	12.3
28	13.1	12.9	13.0	13.6	12.5	12.9	12.9	12.7	12.4	12.2	12.4	12.6
29	13.3	13.0	13.0	13.2	12.7	—	12.7	12.7	—	12.1	12.7	12.6
30	13.5	12.8	13.1	11.9	12.5	12.6	12.8	12.7	—	12.0	12.4	12.4
31	—	13.0	12.9	—	12.5	—	13.1	12.8	—	12.3	—	12.4
Mean	13.0	13.3	13.0	12.8	12.8	12.8	12.9	12.6	12.5	12.4	12.6	12.5

(3) TABLE SHOWING THE MONTHLY MEAN DIFFERENCE OF HORIZONTAL FORCE, ABINGER MINUS GREENWICH, DURING SIXTEEN CONSECUTIVE MONTHS IN 1925-26 FOR EACH HOUR OF THE DAY.

Greenwich Mean Time. Hour commencing	1925.												1926.				
	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	
1926 QAW																	
Midnight	γ +177	γ +179	γ +178	γ +173	γ +185	γ +195	γ +184	γ +178	γ +176	γ +188	γ +191	γ +173	γ +169	γ +168	γ +173	γ +169	
1 ^h	176	180	178	171	186	193	186	177	174	187	190	175	170	166	175	170	
2	176	179	179	172	186	194	185	179	177	188	190	174	165	168	172	169	
3	176	180	178	172	185	195	183	178	177	186	190	174	166	168	174	169	
4	176	180	178	172	185	194	185	179	176	186	189	183	166	167	174	170	
5	177	180	178	171	185	193	183	177	178	187	190	175	168	168	177	170	
6	176	179	177	172	184	194	183	177	178	187	190	174	167	175	177	171	
7	176	178	178	174	185	193	184	176	178	188	188	174	166	168	181	172	
8	177	179	177	173	187	194	184	177	177	187	191	164	167	170	182	171	
9	176	179	174	174	187	195	185	179	178	187	188	174	168	169	181	169	
10	177	180	178	175	190	194	185	180	178	187	185	174	166	168	180	172	
11	178	180	178	173	188	195	185	178	179	188	191	176	167	168	181	173	
Noon	178	182	177	174	183	195	186	177	180	189	192	175	167	169	179	173	
13 ^h	178	182	181	174	188	196	186	180	181	188	193	174	167	170	179	172	
14	178	181	181	171	189	196	186	179	181	184	192	176	170	170	173	170	
15	177	180	180	174	187	194	184	180	179	189	193	184	169	180	174	171	
16	176	180	179	174	187	195	185	179	179	188	193	172	168	170	173	173	
17	177	179	179	174	187	196	187	177	179	188	192	176	170	170	176	171	
18	177	181	177	172	187	195	187	177	179	185	191	175	164	169	176	171	
19	178	180	178	173	186	195	185	178	176	187	191	174	162	169	176	170	
20	178	180	178	173	185	195	184	174	176	187	191	173	165	169	176	169	
21	178	180	179	173	187	195	184	175	177	187	191	173	166	168	176	170	
22	176	180	179	173	190	195	185	175	179	188	192	174	164	168	176	170	
23	177	180	179	173	187	195	184	174	178	187	191	174	168	168	175	169	
Means	177	180	178	173	186	194	184	178	178	188	191	174	166	169	176	171	

(4) TABLE SHOWING THE DAILY MEAN DIFFERENCE OF HORIZONTAL FORCE, ABINGER MINUS GREENWICH, FOR SIXTEEN CONSECUTIVE MONTHS IN 1925-26.

1925.												1926.				
Day.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.
1	γ +177	γ +184	γ +189	γ +171	γ +173	γ +196	γ +187	γ +183	γ +174	γ +182	γ +191	γ +182	γ +168	γ +172	γ +168	γ +174
2	178	184	185	171	175	196	186	184	172	183	193	179	167	173	173	173
3	181	183	181	172	—	196	187	181	173	186	190	183	—	163	164	173
4	180	182	181	169	176	198	185	183	173	186	190	186	—	174	162	170
5	180	176	181	170	177	197	187	181	174	190	188	186	167	173	173	170
6	183	180	180	170	179	196	187	178	176	191	190	187	167	172	173	170
7	186	180	181	161	174	195	186	179	177	187	190	187	168	160	171	168
8	182	180	180	170	178	196	185	180	178	186	191	187	168	174	176	170
9	173	179	182	170	180	198	186	180	177	185	192	189	168	174	178	167
10	174	178	181	169	182	193	186	182	179	184	192	191	169	162	178	166
11	174	176	180	170	189	196	188	177	180	181	194	190	168	173	175	167
12	175	176	180	170	191	196	188	176	177	—	192	—	168	161	175	167
13	175	175	182	172	188	195	187	176	179	188	192	—	167	168	174	—
14	174	173	182	174	194	197	186	175	180	191	192	—	167	171	—	170
15	176	175	179	177	194	197	185	175	179	187	191	—	169	171	—	172
16	175	176	178	177	193	198	186	178	177	189	190	168	166	171	175	170
17	178	177	178	177	195	199	—	178	176	186	189	165	166	—	176	172
18	177	179	179	176	194	197	184	177	175	187	181	166	166	158	175	170
19	170	—	178	174	192	—	184	177	178	186	188	165	165	166	176	170
20	171	—	177	179	—	195	184	176	177	186	190	165	166	165	176	168
21	172	179	176	179	—	191	183	178	180	186	190	165	166	153	175	170
22	174	179	177	178	189	195	184	184	182	188	192	164	168	163	178	170
23	173	180	176	178	190	196	183	178	183	187	192	166	172	162	170	171
24	—	178	176	178	189	197	179	178	183	189	191	168	—	161	173	171
25	—	175	174	176	190	197	183	179	182	195	190	168	170	162	172	171
26	180	185	173	175	189	200	180	174	182	189	191	166	172	169	172	172
27	179	184	—	175	190	(180)	181	177	185	189	191	167	172	165	171	172
28	178	185	175	172	190	190	183	176	181	190	193	167	175	162	172	172
29	—	186	—	172	191	190	182	178	183	—	192	162	—	163	173	171
30	—	186	—	171	191	187	182	173	183	192	195	168	—	152	174	171
31	—	—	—	172	—	187	183	—	178	—	194	169	—	164	—	172
Mean	177	180	179	173	186	195	185	178	178	188	191	174	166	169	176	171

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(5) TABLE SHOWING THE MONTHLY MEAN DIFFERENCE OF VERTICAL FORCE, ABINGER MINUS GREENWICH, DURING THIRTEEN CONSECUTIVE MONTHS IN 1925-26, FOR EACH HOUR OF THE DAY.

Greenwich Civil Time. Hour commencing	1925.											1926.	
	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.
Midnight	γ -156	γ -150	γ -137	γ -128	γ -112	γ -102	γ -125	γ -161	γ -146	γ -125	γ -119	γ -169	γ -171
1 ^h	156	149	137	128	112	102	124	161	144	124	119	171	169
2	156	150	137	127	113	101	124	161	145	124	118	168	168
3	155	150	136	128	113	102	125	160	145	124	119	165	175
4	156	151	137	129	113	104	126	163	145	124	119	164	169
5	156	151	138	133	114	105	127	164	147	126	120	166	171
6	156	152	139	130	113	104	126	164	147	126	120	167	172
7	157	151	138	131	114	105	127	164	147	127	123	168	172
8	156	152	138	133	113	105	128	164	147	128	121	169	171
9	159	155	139	130	113	103	125	163	147	128	121	170	173
10	156	153	139	129	113	103	127	164	146	129	121	170	175
11	157	155	140	128	114	103	125	163	146	129	119	169	174
Noon	157	152	138	126	112	103	125	163	145	128	119	168	177
13 ^h	156	151	137	128	116	103	126	163	145	127	118	167	175
14	156	151	137	127	114	102	126	163	146	126	119	168	179
15	156	150	137	129	113	103	127	165	146	126	119	168	181
16	156	150	137	128	113	104	128	165	147	129	119	170	183
17	156	150	138	129	114	102	127	165	147	129	120	170	180
18	157	151	138	129	113	104	127	166	147	128	120	174	178
19	157	150	138	129	114	103	128	166	147	129	119	174	176
20	157	150	138	128	109	103	128	166	146	128	119	172	174
21	157	151	138	131	114	102	127	165	146	128	119	173	172
22	156	151	138	129	115	103	127	165	145	128	120	170	171
23	157	151	138	128	113	101	126	164	146	127	119	168	174
Mean	157	151	137	129	113	103	126	164	146	127	119	169	174

(6) TABLE SHOWING THE DAILY MEAN DIFFERENCE OF VERTICAL FORCE, ABINGER MINUS GREENWICH, FOR THIRTEEN CONSECUTIVE MONTHS IN 1925-26.

Day.	1925.											1926.	
	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.
1	γ -131	γ -146	γ -145	γ -146	γ -126	γ -128	γ -108	γ -128	γ -184	γ -114	γ -134	γ -123	γ -177
2	132	148	155	145	126	125	110	125	172	116	129	129	170
3	135	147	135	144	—	122	113	128	168	117	125	130	172
4	135	145	134	147	—	115	117	127	161	115	120	136	169
5	140	153	135	144	—	115	121	132	159	118	122	134	168
6	145	155	138	144	125	116	93	135	158	110	124	128	165
7	152	160	140	141	120	120	130	139	158	113	121	137	165
8	155	165	139	139	117	121	137	144	158	110	109	140	167
9	162	160	139	136	117	121	138	146	154	108	101	148	165
10	164	155	140	134	120	103	139	149	150	109	105	152	165
11	169	155	138	132	123	97	137	152	145	109	108	157	169
12	168	157	139	128	113	89	134	157	145	—	108	160	172
13	162	154	129	124	109	92	133	155	149	—	109	165	167
14	160	156	—	119	102	93	133	156	151	—	111	171	167
15	160	155	—	116	98	94	130	158	153	129	111	176	173
16	164	154	137	114	94	92	127	164	151	133	113	180	173
17	166	155	137	110	93	92	126	167	153	138	116	188	179
18	168	154	137	109	92	93	126	170	153	138	111	186	176
19	168	154	135	107	91	97	127	174	148	137	118	193	175
20	171	153	135	109	95	97	127	176	149	137	122	194	172
21	167	154	135	114	101	97	128	178	143	140	124	198	171
22	163	—	134	115	107	93	129	—	140	140	126	199	174
23	162	152	136	121	112	91	126	190	139	144	122	203	179
24	—	154	136	129	115	95	127	191	134	143	126	193	—
25	—	152	136	133	117	94	128	184	130	137	126	191	176
26	154	148	136	136	121	94	129	203	127	141	127	—	181
27	153	146	137	137	123	92	129	206	127	136	129	187	182
28	149	142	139	—	123	96	129	207	122	135	127	181	186
29	—	138	134	128	125	102	129	207	120	138	127	185	—
30	—	136	134	124	128	107	127	202	129	140	128	181	—
31	—	133	—	—	—	111	126	—	117	—	124	177	—
Mean	157	153	137	128	113	103	126	164	147	127	119	167	172

TABLE I.—GREENWICH AND ABINGER DECLINATION (IN MINUTES OF ARC).

Departures from Mean Value of Hourly Ordinates.

h	QUIET I.			QUIET II.			DISTURBED I.			DISTURBED II.		
	Gr.	Ab.	Gr.-Ab.	Gr.	Ab.	Gr.-Ab.	Gr.	Ab.	Gr.-Ab.	Gr.	Ab.	Gr.-Ab.
0	-0.30	-0.28	-0.02	-1.04	-1.11	+0.07	-4.33	-4.21	-0.12	-3.83	-4.00	+0.17
1	-0.56	-0.41	-0.15	-0.78	-0.77	-0.01	-3.99	-3.88	-0.11	-4.55	-4.53	-0.02
2	-0.54	-0.41	-0.13	-0.72	-0.66	-0.06	-2.48	-2.34	-0.14	-4.19	-4.03	-0.16
3	-1.06	-0.85	-0.21	-0.49	-0.42	-0.07	-1.09	-1.07	-0.02	-2.91	-2.76	-0.15
4	-1.46	-1.11	-0.35	-0.66	-0.55	-0.11	-1.82	-1.73	-0.09	-2.78	-2.68	-0.10
5	-2.30	-1.99	-0.31	-1.04	-0.94	-0.10	-1.11	-1.02	-0.09	-1.44	-1.25	-0.19
6	-3.24	-2.68	-0.56	-1.00	-1.08	+0.08	-0.92	-0.94	+0.02	-0.18	-0.23	+0.05
7	-3.82	-3.23	-0.59	-1.24	-1.30	+0.06	-2.19	-2.22	+0.03	+0.23	+0.18	+0.05
8	-4.30	-3.81	-0.49	-1.52	-1.65	+0.13	-2.18	-2.17	-0.01	-0.46	-0.61	+0.15
9	-3.56	-3.17	-0.39	-1.93	-2.10	+0.17	-1.84	-2.04	+0.20	-0.26	-0.51	+0.25
10	-1.49	-1.38	-0.11	-1.14	-1.24	+0.10	+0.68	+0.39	+0.29	+0.08	+0.09	-0.01
11	+1.52	+1.22	+0.30	+0.71	+0.59	+0.12	+3.22	+2.90	+0.32	+2.02	+2.14	-0.12
12	+3.84	+3.27	+0.57	+2.51	+2.51	0.00	+5.43	+5.21	+0.22	+4.68	+4.52	+0.16
13	+4.93	+4.27	+0.66	+3.22	+3.29	-0.07	+6.74	+6.55	+0.19	+6.24	+6.23	+0.01
14	+4.73	+4.19	+0.54	+3.03	+3.07	-0.04	+6.46	+6.23	+0.23	+6.63	+6.69	-0.06
15	+3.45	+3.03	+0.42	+2.20	+2.31	-0.11	+5.61	+5.60	+0.01	+5.70	+5.85	-0.15
16	+2.03	+1.72	+0.31	+1.42	+1.67	-0.25	+3.67	+3.67	0.00	+4.26	+4.38	-0.12
17	+0.98	+0.82	+0.16	+0.90	+0.77	+0.13	+1.87	+1.93	-0.06	+2.52	+2.58	-0.06
18	+0.39	+0.38	+0.01	+0.66	+0.60	+0.06	+0.81	+0.76	+0.05	+0.79	+0.50	+0.29
19	+0.26	+0.27	-0.01	+0.23	+0.22	+0.01	-0.01	+0.13	-0.14	+0.65	+0.45	+0.20
20	+0.14	+0.11	+0.03	-0.59	-0.52	-0.07	-1.80	-1.58	-0.22	-1.47	-1.26	-0.21
21	+0.08	+0.10	-0.02	-0.77	-0.70	-0.07	-2.73	-2.60	-0.13	-3.62	-3.65	+0.03
22	+0.05	+0.05	0.00	-0.89	-0.89	0.00	-4.22	-4.01	-0.21	-4.45	-4.57	+0.12
23	+0.14	-0.03	+0.17	-1.22	-1.20	-0.02	-3.76	-3.72	-0.04	-3.66	-3.52	-0.14
Range	9.23	8.08	1.25	5.15	4.40	0.42	11.07	10.76	0.54	11.18	11.26	0.50
A.D.	1.88	1.62	0.27	1.24	1.25	0.08	2.87	2.78	0.13	2.82	2.80	0.12

TABLE II.—GREENWICH AND ABINGER. HORIZONTAL FORCE.

Departures from Mean Value of Hourly Ordinates.

h	QUIET I.			QUIET II.			DISTURBED I.			DISTURBED II.		
	Gr.	Ab.	Gr.-Ab.	Gr.	Ab.	Gr.-Ab.	Gr.	Ab.	Gr.-Ab.	Gr.	Ab.	Gr.-Ab.
0	+6.0	+5.4	+0.6	+1.2	+0.4	+0.8	+6.9	+5.8	+1.1	+12.9	+12.0	+0.9
1	+4.6	+4.3	+0.3	+1.6	+0.8	+0.8	+9.5	+8.6	+0.9	+6.8	+5.4	+1.4
2	+3.7	+3.2	+0.5	+1.2	+0.2	+1.0	+8.4	+7.4	+1.0	+1.6	+0.2	+1.4
3	+3.2	+2.3	+0.9	+2.0	+1.0	+1.0	+11.8	+11.2	+0.6	-1.1	-1.6	+0.5
4	+3.7	+3.2	+0.5	+3.5	+2.3	+1.2	+11.3	+10.3	+1.0	+4.5	+4.0	+0.5
5	+3.2	+2.2	+1.0	+5.4	+5.0	+0.4	+5.4	+5.3	+0.1	+12.0	+12.3	-0.3
6	+1.4	-0.1	+1.5	+5.4	+4.7	+0.7	+1.5	+0.7	+0.8	+7.3	+7.4	-0.1
7	-3.7	-5.0	+1.3	+5.4	+4.7	+0.7	-8.4	-10.1	+1.7	+1.5	+1.9	-0.4
8	-10.5	-11.3	+0.8	+3.6	+3.3	+0.3	-13.8	-14.0	+0.2	-7.9	-5.7	-2.2
9	-16.7	-16.5	-0.2	-2.4	-2.4	0.0	-18.4	-18.7	+0.3	-19.1	-17.1	-2.0
10	-20.3	-20.1	-0.2	-8.1	-7.8	-0.3	-27.3	-27.3	0.0	-29.0	-28.9	-0.1
11	-20.2	-19.6	-0.6	-11.6	-11.4	-0.2	-25.3	-24.2	-1.1	-20.3	-20.2	-0.1
12	-15.6	-14.4	-1.2	-13.3	-12.3	-1.0	-19.3	-18.4	-0.9	-22.2	-22.8	+0.6
13	-11.2	-10.1	-1.1	-10.2	-9.3	-0.9	-14.5	-12.7	-1.8	-17.2	-17.2	0.0
14	-5.8	-4.7	-1.1	-7.0	-6.3	-0.7	-4.1	-3.7	-0.4	-6.2	-5.6	-0.6
15	+0.2	+0.7	-0.5	-4.8	-4.8	0.0	+0.8	+2.3	-1.5	+1.8	+1.2	+0.6
16	+4.6	+4.9	-0.3	-2.4	-1.5	-0.9	+4.8	+4.5	+0.3	+8.7	+9.1	-0.4
17	+7.7	+7.4	+0.3	+1.1	+1.9	-0.8	+8.7	+9.6	-0.9	+13.0	+13.3	-0.3
18	+10.7	+10.8	-0.1	+4.8	+5.4	-0.6	+14.3	+14.4	-0.1	+14.2	+15.3	-1.1
19	+13.2	+13.6	-0.4	+4.9	+5.5	-0.6	+13.1	+14.1	-1.0	+13.9	+14.5	-0.6
20	+12.7	+13.1	-0.4	+5.5	+5.7	-0.2	+5.8	+5.7	+0.1	+7.6	+7.0	+0.6
21	+10.9	+11.5	-0.6	+5.0	+5.4	-0.4	+8.6	+8.9	-0.3	+8.5	+8.1	+0.4
22	+10.0	+10.6	-0.6	+5.0	+5.6	-0.6	+9.0	+9.1	-0.1	+7.7	+6.9	+0.8
23	+9.1	+9.6	-0.5	+4.2	+4.4	-0.2	+9.6	+10.0	-0.4	+2.1	+1.6	+0.5
Range	33.5	33.7	2.7	18.8	18.0	2.2	41.6	41.7	3.5	43.2	44.2	3.6
A.D.	8.7	8.5	0.6	5.0	4.7	0.6	10.9	10.7	0.7	10.3	10.0	0.7

TABLE III.—COMPARISONS WITH STONYHURST.—Departures from Mean Value of Hourly Ordinates.

	Declination—Disturbed I.			Horizontal Force—Disturbed I.		
	Gr.	St.	St.—Gr.	Ab.	St.	St.—Ab.
h				γ	γ	γ
0	-4.60	-5.29	-0.69	+ 3.1	- 4.8	- 7.9
1	-3.80	-4.40	-0.60	+ 7.5	- 0.6	- 8.1
2	-2.46	-2.88	-0.42	+ 7.5	+ 0.2	- 7.3
3	-1.01	-1.30	-0.29	+11.5	+ 6.2	- 5.3
4	-1.77	-2.30	-0.53	+ 9.2	+ 3.9	- 5.3
5	-1.13	-1.32	-0.19	+ 5.7	+ 1.2	- 4.5
6	-1.02	-0.94	+0.08	+ 1.7	+ 0.6	- 1.1
7	-2.28	-2.18	+0.10	- 8.7	-10.6	- 1.9
8	-2.17	-1.94	+0.23	-16.0	-19.1	- 3.1
9	-1.80	-1.61	+0.19	-19.2	-20.1	- 0.9
10	+0.49	+0.44	-0.05	-27.2	-27.4	- 0.2
11	+3.29	+3.17	-0.12	-23.9	-23.0	+ 0.9
12	+5.48	+5.41	-0.07	-18.7	-16.7	+ 2.0
13	+6.82	+7.08	+0.26	-11.8	- 8.1	+ 3.7
14	+6.47	+6.71	+0.24	- 2.7	+ 5.0	+ 7.7
15	+5.55	+5.89	+0.34	+ 3.9	+13.1	+ 9.2
16	+3.67	+4.03	+0.36	+ 8.5	+18.5	+10.0
17	+1.75	+2.34	+0.59	+ 9.4	+15.3	+ 5.9
18	+0.86	+1.19	+0.33	+16.2	+24.1	+ 7.9
19	+0.19	+0.76	+0.57	+15.1	+21.3	+ 6.2
20	-1.80	-1.46	+0.34	+ 5.8	+ 7.7	+ 1.9
21	-2.64	-2.61	+0.03	+ 7.5	+ 7.5	0.0
22	-4.27	-4.55	-0.28	+ 8.1	+ 2.8	- 5.3
23	-3.84	-4.23	-0.39	+ 8.5	+ 2.8	- 5.7
Range	11.42	12.37	1.28	43.4	51.5	18.1
A.D.	2.88	3.08	0.30	10.7	10.9	4.7

TABLE IV.—GREENWICH, ABINGER and STONYHURST. SHORT PERIOD CHANGES IN DECLINATION. FROM HOURLY VALUES. DISTURBED I.

Date.	G.M.T.	St.	Gr.	Ab.	Gr.—Ab.	St.—Gr.	Date.	G.M.T.	St.	Gr.	Ab.	Gr.—Ab.	St.—Gr.
1925—	h h						1925—	h h					
April 10 ..	0-1	7.5	6.0	5.1	+0.9	+1.5	Sept. 15 ..	1-2	22.8	16.2	16.0	+0.2	+6.6
April 10 ..	23-24	8.9	6.8	6.3	+0.5	+2.1	Sept. 15 ..	15-16	6.8	6.1	6.2	-0.1	+0.7
April 11 ..	2-3	6.8	5.8	6.0	-0.2	+1.0	Sept. 15 ..	23-24	7.8	6.2	6.1	+0.1	+1.6
April 16 ..	0-1	6.5	5.2	5.5	-0.3	+1.3	Sept. 17 ..	6-7	6.0	5.3	5.2	+0.1	+0.7
May 27 ..	23-24	6.2	5.7	5.2	+0.5	+0.5	Sept. 21 ..	7-8	11.3	9.4	9.0	+0.4	+1.9
May 28 ..	1-2	9.5	8.0	7.6	+0.4	+1.5	Sept. 24 ..	16-17	8.7	9.2	8.3	+0.9	-0.5
May 28 ..	3-4	8.4	7.2	6.1	+1.1	+1.2	Sept. 24 ..	17-18	5.3	5.3	4.5	+0.8	0.0
May 28 ..	4-5	8.0	6.1	5.9	+0.2	+1.9	Sept. 24 ..	20-21	6.3	5.8	5.9	-0.1	+0.5
June 13 ..	6-7	7.3	6.9	6.1	+0.8	+0.4	Sept. 24 ..	21-22	7.0	5.2	5.1	+0.1	+1.8
June 13 ..	7-8	11.6	10.2	10.0	+0.2	+1.4	Sept. 24 ..	22-23	9.9	8.5	7.8	+0.7	+1.4
June 14 ..	0-1	7.2	6.2	5.9	+0.3	+1.0	Oct. 4 ..	22-23	6.1	5.6	6.3	-0.7	+0.5
June 24 ..	4-5	7.3	6.6	5.5	+1.1	+0.7	Oct. 8 ..	20-21	6.8	5.6	5.0	+0.6	+1.2
June 24 ..	22-23	11.6	9.5	9.5	0.0	+2.1	Oct. 8 ..	21-22	11.5	9.6	10.0	-0.4	+1.9
June 24 ..	23-24	24.2	21.1	22.2	-1.1	+3.1	Oct. 9 ..	3-4	7.4	6.6	6.0	+0.6	+0.8
June 25 ..	0-1	22.7	18.8	20.0	-1.2	+3.9	Oct. 9 ..	5-6	7.9	6.3	7.0	-0.7	+1.6
June 25 ..	1-2	13.7	10.6	10.8	-0.2	+3.1	Oct. 12 ..	0-1	7.8	5.8	5.7	+0.1	+2.0
June 27 ..	20-21	7.4	6.6	6.1	+0.5	+0.8	Oct. 12 ..	17-18	26.2	20.6	20.6	0.0	+5.6
June 28 ..	0-1	8.4	7.3	7.2	+0.1	+1.1	Oct. 12 ..	18-19	27.3	20.7	20.9	-0.2	+6.6
June 28 ..	2-3	7.9	6.1	7.1	-1.0	+1.8	Oct. 21 ..	19-20	19.5	16.5	15.7	+0.8	+3.0
June 28 ..	5-6	8.1	6.4	6.3	+0.1	+1.7	Oct. 21 ..	20-21	6.6	6.5	6.3	+0.2	+0.1
July 14 ..	23-24	5.7	5.3	5.4	-0.1	+0.4	Oct. 21 ..	21-22	11.4	11.0	9.6	+1.4	+0.4
July 15 ..	4-5	7.7	6.3	6.8	-0.5	+1.4	Oct. 22 ..	0-1	13.8	13.1	12.2	+0.9	+0.7
July 26 ..	2-3	9.5	8.4	8.0	+0.4	+1.1	Oct. 22 ..	4-5	7.8	6.3	6.1	+0.2	+1.5
July 26 ..	3-4	6.6	6.4	5.9	+0.5	+0.2	Oct. 22 ..	19-20	8.0	7.3	7.0	+0.3	+0.7
July 27 ..	16-17	7.2	6.2	6.3	-0.1	+1.0	Oct. 23 ..	15-16	13.5	12.4	12.5	-0.1	+1.1
August 7 ..	15-16	6.0	5.7	5.4	+0.3	+0.3	Oct. 23 ..	16-17	8.3	7.1	7.2	-0.1	+1.2
August 8 ..	1-2	8.4	7.5	7.1	+0.4	+0.9	Oct. 23 ..	18-19	13.5	11.3	10.1	+1.2	+2.2
August 8 ..	23-24	8.2	6.8	6.6	+0.2	+1.4	Oct. 23 ..	19-20	5.8	6.3	5.4	+0.9	-0.5
August 22 ..	23-24	8.1	7.0	6.6	+0.4	+1.1	Oct. 23 ..	23-24	8.6	5.8	6.1	-0.3	+2.8
August 23 ..	0-1	7.2	5.3	5.2	+0.1	+1.9	Oct. 24 ..	2-3	15.9	12.9	12.0	+0.9	+3.0
August 23 ..	1-2	12.9	8.6	8.3	+0.3	+4.3	Oct. 24 ..	3-4	18.2	12.7	12.3	+0.4	+5.5
Sept. 2 ..	2-3	9.1	6.8	7.0	-0.2	+2.3	Oct. 24 ..	4-5	14.6	10.8	11.6	-0.8	+3.8
Sept. 2 ..	3-4	6.7	7.2	7.0	+0.2	-0.5	Oct. 24 ..	10-11	7.1	5.5	5.6	-0.1	+1.6
Sept. 2 ..	9-10	5.7	5.8	5.0	+0.8	-0.1	Oct. 31 ..	17-18	9.0	6.8	6.4	+0.4	+2.2
Sept. 14 ..	16-17	5.8	5.3	5.3	0.0	+0.5	Oct. 31 ..	18-19	7.5	5.6	5.6	0.0	+1.9
Sept. 14 ..	19-20	8.3	6.0	7.0	-1.0	+2.3	Nov. 1 ..	3-4	8.2	6.6	6.5	+0.1	+1.6
Sept. 14 ..	20-21	10.1	7.9	8.9	-1.0	+2.2	Nov. 1 ..	4-5	5.2	5.1	5.0	+0.1	+0.1
Sept. 14 ..	22-23	10.2	8.5	6.8	+1.7	+1.7							
Sept. 14 ..	23-24	10.3	6.0	6.8	-0.8	+4.3							
Mean ..							Mean ..		9.85	8.18	8.01	+0.17	+1.67

TABLE V.

GREENWICH and ABINGER. SHORT PERIOD CHANGES in DECLINATION.

FROM HOURLY VALUES.

DISTURBED II.

Date.	G.M.T.	Gr.	Ab.	Gr.-Ab.	Date.	G.M.T.	Gr.	Ab.	Gr.-Ab.
1925—	h h	'	'	'	1926—	h h	'	'	'
December 27 ..	19-20	12.8	12.5	+ 0.3	March 6 ..	3-4	5.8	6.7	- 0.9
December 28 ..	7-8	14.6	14.5	+ 0.1	March 6 ..	4-5	7.7	8.0	- 0.3
December 28 ..	8-9	6.0	5.3	+ 0.7	March 9 ..	11-12	6.0	6.0	0.0
December 28 ..	9-10	10.5	11.1	- 0.6	March 9 ..	14-15	6.3	6.2	+ 0.1
1926—					March 9 ..	20-21	9.2	9.8	- 0.6
January 15 ..	1-2	6.4	6.2	+ 0.2	March 10 ..	1-2	9.6	9.0	+ 0.6
January 15 ..	17-18	5.1	5.0	+ 0.1	March 10 ..	2-3	9.1	8.1	+ 1.0
January 15 ..	22-23	6.3	6.2	+ 0.1	March 10 ..	3-4	6.6	7.2	- 0.6
January 18 ..	9-10	6.3	5.8	+ 0.5	March 10 ..	6-7	7.0	6.9	+ 0.1
January 18 ..	17-18	8.0	7.5	+ 0.5	March 10 ..	17-18	5.0	5.7	- 0.7
January 18 ..	18-19	11.3	10.7	+ 0.6	March 11 ..	5-6	8.2	7.8	+ 0.4
January 18 ..	20-21	6.0	6.1	- 0.1	March 11 ..	6-7	9.2	8.9	+ 0.3
January 19 ..	0-1	8.0	7.4	+ 0.6	March 19 ..	17-18	7.0	6.7	+ 0.3
January 22 ..	21-22	18.3	18.7	- 0.4	March 19 ..	21-22	7.0	7.4	- 0.4
January 22 ..	23-24	6.1	6.3	- 0.2	March 19 ..	22-23	5.5	5.8	- 0.3
January 23 ..	0-1	11.6	12.1	- 0.5	March 20 ..	5-6	6.1	5.3	+ 0.8
January 23 ..	1-2	16.5	16.5	0.0	March 20 ..	19-20	9.2	9.6	- 0.4
January 27 ..	14-15	12.6	11.5	+ 1.1	March 20 ..	21-22	10.7	10.8	- 0.1
January 27 ..	15-16	10.9	10.0	+ 0.9	March 20 ..	22-23	5.9	6.0	- 0.1
January 27 ..	21-22	8.9	9.2	- 0.3	March 21 ..	4-5	5.4	5.3	+ 0.1
January 28 ..	0-1	6.4	6.5	- 0.1	March 21 ..	17-18	6.0	6.6	- 0.6
February 3 ..	0-1	8.6	8.4	+ 0.2	March 29 ..	18-19	6.1	6.0	+ 0.1
February 3 ..	6-7	5.8	5.3	+ 0.5	March 29 ..	19-20	7.8	7.8	0.0
February 3 ..	10-11	6.3	6.4	- 0.1	March 30 ..	11-12	5.1	5.0	+ 0.1
February 3 ..	17-18	10.4	10.1	+ 0.3	March 30 ..	14-15	7.5	6.9	+ 0.6
February 11 ..	19-20	5.4	5.5	- 0.1	April 6 ..	3-4	5.5	5.8	- 0.3
February 11 ..	20-21	7.9	5.6	+ 2.3	April 8 ..	11-12	5.5	5.7	- 0.2
February 11 ..	21-22	15.5	13.8	+ 1.7	April 8 ..	21-22	6.1	5.9	+ 0.2
February 12 ..	1-2	5.7	5.2	+ 0.5	April 14 ..	11-12	5.9	5.8	+ 0.1
February 12 ..	2-3	5.4	5.1	+ 0.3	April 14 ..	14-15	12.2	12.1	+ 0.1
February 13 ..	11-12	6.4	6.2	+ 0.2	April 14 ..	16-17	14.1	11.7	+ 2.4
February 13 ..	20-21	7.5	7.6	- 0.1	April 14 ..	17-18	5.9	7.8	- 1.9
February 14 ..	20-21	10.2	10.1	+ 0.1	April 14 ..	20-21	18.9	19.7	- 0.8
February 15 ..	15-16	6.7	6.4	+ 0.3	April 14 ..	21-22	14.8	14.5	+ 0.3
February 15 ..	18-19	6.7	6.5	+ 0.2	April 14 ..	23-24	7.5	8.0	- 0.5
February 15 ..	20-21	9.4	9.3	+ 0.1	April 15 ..	0-1	9.1	9.0	+ 0.1
February 15 ..	21-22	7.7	8.0	+ 0.3	April 15 ..	2-3	8.0	7.9	+ 0.1
February 17 ..	17-18	7.0	7.9	- 0.9	April 15 ..	3-4	11.6	12.1	- 0.5
February 17 ..	23-24	7.6	7.2	+ 0.4	April 15 ..	4-5	13.2	10.6	+ 2.6
February 23 ..	17-18	10.4	8.8	+ 1.6	April 15 ..	5-6	8.0	8.8	- 0.8
February 23 ..	18-19	12.0	12.1	- 0.1	April 15 ..	6-7	21.9	22.0	- 0.1
February 23 ..	20-21	9.9	8.5	+ 1.4	April 15 ..	7-8	18.7	18.1	+ 0.6
February 23 ..	21-22	8.4	5.4	+ 3.0	April 15 ..	16-17	9.8	9.6	+ 0.2
February 24 ..	1-2	6.3	6.8	- 0.5	April 15 ..	17-18	6.9	5.8	+ 1.1
February 26 ..	6-7	6.4	6.1	+ 0.3	April 16 ..	8-9	7.5	7.2	+ 0.3
February 26 ..	20-21	6.1	5.9	+ 0.2	April 16 ..	18-19	7.7	7.8	- 0.1
March 1 ..	19-20	11.9	11.6	+ 0.3	April 17 ..	1-2	7.1	6.7	+ 0.4
March 2 ..	5-6	6.4	6.6	- 0.2	April 17 ..	10-11	5.3	6.7	- 1.4
March 2 ..	8-9	5.9	5.6	+ 0.3	May 4 ..	0-1	6.6	5.2	+ 1.4
March 3 ..	16-17	5.3	5.4	- 0.1	May 4 ..	1-2	6.6	7.6	- 1.0
March 3 ..	17-18	8.6	8.8	- 0.2	May 4 ..	2-3	8.4	8.5	- 0.1
March 3 ..	19-20	5.4	6.6	- 1.2	May 14 ..	17-18	11.1	10.2	+ 0.9
March 5 ..	21-22	21.2	21.9	- 0.7					
March 5 ..	22-23	18.7	18.9	- 0.2					
					Mean ..	..	8.75	8.60	+ 0.15

Gr/Ab=1.017.

TABLE VI.
GREENWICH and ABINGER. SHORT PERIOD CHANGES in DECLINATION.
FROM MAXIMA and MINIMA.

Date.	Approx. G.M.T.		Gr.	Ab.	Gr.-Ab.	Gr./Ab.	Date.	Approx. G.M.T.		Gr.	Ab.	Gr.-Ab.	Gr./Ab.				
	Max.	Min.						Max.	Min.								
1925—	h	m	h	m			1926—	h	m	h	m						
September 1	21	3	20	33	24.9	21.4	+3.5	1.17	January 26	22	44	22	33	33.4	33.0	+0.4	1.01
September 14	18	35	19	34	20.7	18.9	+1.8	1.10	January 27	1	14	1	27	40.3	41.5	-1.2	0.97
September 15	2	11	1	22	21.2	20.0	+1.2	1.06	February 2	20	54	21	36	20.8	21.0	-0.2	0.99
October 9	18	6	18	45	18.9	16.2	+2.7	1.17	February 11	21	3	21	27	23.2	23.0	+0.2	1.01
October 12	17	15	17	47	26.5	22.5	+4.0	1.18	February 15	21	0	22	34	14.8	14.9	-0.1	0.99
October 21	19	36	20	22	19.6	18.7	+0.9	1.05	February 23	18	4	17	30	23.5	24.1	-0.6	0.98
October 22	0	57	1	20	14.6	12.9	+1.7	1.13	February 24	15	13	15	34	44.9	42.1	+2.8	1.07
October 24	4	45	3	37	27.0	23.8	+3.2	1.13	February 24	16	12	16	26	30.5	28.5	+2.0	1.07
November 1	2	43	3	42	19.2	16.5	+2.7	1.16	February 24	17	32	17	37	34.5	33.3	+1.2	1.04
November 9	21	56	22	30	24.9	21.7	+3.2	1.15	February 25	4	11	1	55	29.0	29.2	-0.2	0.98
November 9	24	57	23	42	21.9	19.2	+2.7	1.14	March 5	17	32	17	16	31.9	30.9	+1.0	1.03
December 27	19	10	20	23	20.5	20.6	-0.1	1.00	March 5	19	34	19	53	33.5	33.6	-0.1	1.00
December 28	7	47	7	16	18.4	18.2	+0.2	1.01	March 5	20	32	21	40	38.5	39.1	-0.6	0.98
									March 9	20	4	20	13	39.1	39.5	-0.4	0.99
1926—									March 10	1	28	2	3	20.3	20.6	-0.3	0.99
January 13	20	16	21	27	30.0	29.6	+0.4	1.01	March 18	16	3	17	6	17.7	17.5	+0.2	1.01
January 23	0	34	0	57	26.0	26.5	-0.5	0.98	March 21	23	24	24	18	20.4	20.3	+0.1	1.00
January 26	19	3	19	46	35.9	36.1	-0.2	1.00	March 30	14	13	15	8	14.8	14.6	+0.2	1.01
January 26	20	34	21	16	23.6	24.7	-1.1	0.96									
								Mean	—	—	—	—	—	—	—	—	1.043

TABLE VII.
GREENWICH, ABINGER and STONYHURST. SHORT PERIOD CHANGES in HORIZONTAL FORCE.
FROM HOURLY VALUES. DISTURBED I.

Date.	G.M.T.		St.	Gr.	Ab.	Gr.-Ab.	St.-Gr.	Date.	G.M.T.		St.	Gr.	Ab.	Gr.-Ab.	St.-Gr.
	h	h							h	h					
1925—			γ	γ	γ	γ	γ	1925—			γ	γ	γ	γ	γ
April 9 ..	20-21		42	38	38	0	+4	September 15 ..	9-10		31	30	30	0	+1
April 10 ..	2-3		35	37	34	+3	-2	September 16 ..	11-12		52	45	48	-3	+7
April 10 ..	3-4		45	35	35	0	+10	September 17 ..	1-2		45	37	43	-6	+8
April 10 ..	22-23		41	31	38	-7	+10	September 24 ..	1-2		33	36	34	+2	-3
May 4 ..	11-12		55	52	46	+6	+3	September 24 ..	5-6		45	33	37	-4	+12
May 4 ..	15-16		59	40	52	-12	+19	September 24 ..	6-7		27	36	35	+1	-9
May 4 ..	16-17		64	56	69	-13	+8	September 24 ..	22-23		5	35	31	+4	-30
June 13 ..	6-7		46	38	41	-3	+8	October 4 ..	21-22		46	52	56	-4	-6
June 13 ..	13-14		49	42	46	-4	+7	October 4 ..	22-23		44	56	57	-1	-12
June 13 ..	14-15		56	54	59	-5	+2	October 5 ..	9-10		32	34	33	+1	-2
June 13 ..	23-24		43	39	39	0	+4	October 8 ..	22-23		70	56	65	-9	+14
June 24 ..	16-17		40	35	34	+1	+5	October 8 ..	23-24		45	30	36	-6	+15
June 24 ..	18-19		74	71	70	+1	+3	October 9 ..	2-3		52	32	35	-3	+20
June 24 ..	19-20		80	69	72	-3	+11	October 9 ..	3-4		30	32	32	0	-2
June 24 ..	23-24		41	59	54	+5	-18	October 9 ..	18-19		54	67	71	-4	-13
June 25 ..	0-1		34	38	35	+3	-4	October 9 ..	19-20		96	94	98	-4	+2
June 28 ..	14-15		45	40	39	+1	+5	October 12 ..	11-12		45	38	41	-3	+7
July 27 ..	16-17		38	38	41	-3	0	October 12 ..	12-13		39	32	35	-3	+7
August 7 ..	13-14		54	43	45	-2	+11	October 12 ..	17-18		39	60	59	+1	-21
August 9 ..	9-10		22	30	31	-1	-8	October 12 ..	18-19		48	65	64	+1	-17
August 18 ..	14-15		36	32	35	-3	+4	October 21 ..	21-22		56	30	38	-8	+26
August 18 ..	15-16		41	35	39	-4	+6	October 22 ..	0-1		61	54	65	-11	+7
August 18 ..	21-22		52	40	49	-9	+12	October 23 ..	18-19		55	34	36	-2	+21
August 22 ..	14-15		54	51	54	-3	+3	October 23 ..	19-20		52	36	32	+4	+16
August 22 ..	18-19		52	45	47	-2	+7	October 23 ..	22-23		64	69	71	-2	-5
August 22 ..	22-23		45	44	46	-2	+1	October 23 ..	23-24		46	47	46	+1	-1
August 23 ..	3-4		44	50	46	+4	-6	October 24 ..	2-3		70	57	62	-5	+13
August 23 ..	5-6		36	32	30	+2	+4	October 24 ..	4-5		62	71	64	+7	-9
September 1 ..	17-18		52	43	43	0	+9	October 24 ..	7-8		73	65	72	-7	+8
September 1 ..	19-20		62	64	65	-1	-2	October 24 ..	8-9		97	76	89	-13	+21
September 1 ..	21-22		33	43	50	-7	-10	October 31 ..	16-17		48	41	44	-3	+7
September 14 ..	17-18		42	39	42	-3	+3	October 31 ..	18-19		24	30	31	-1	-6
September 14 ..	18-19		55	43	44	-1	+12	November 1 ..	1-2		28	36	40	-4	-8
September 14 ..	22-23		72	46	55	-9	+26	November 1 ..	3-4		98	90	93	-3	+8
September 14 ..	23-24		57	55	57	-2	+2	Means ...							
September 15 ..	1-2		26	49	44	+5	-23				49.1	46.2	48.4	-2.2	+2.9

Gr/Ab=0.954.

St/Gr=1.063.

TABLE VIII.
GREENWICH and ABINGER. SHORT PERIOD CHANGES IN HORIZONTAL FORCE.
FROM HOURLY VALUES.
DISTURBED II.

Date.	G.M.T.	Gr.	Ab.	Gr.-Ab.	Date.	G.M.T.	Gr.	Ab.	Gr.-Ab.
1925—	h h	γ	γ	γ	1926—	h h	γ	γ	γ
December 27 ..	20-21	67	67	0	March 10 ..	0-1	57	54	+ 3
December 27 ..	21-22	42	43	- 1	March 10 ..	1-2	53	43	+10
December 28 ..	8-9	52	53	- 1	March 10 ..	4-5	36	36	0
December 28 ..	9-10	39	44	- 5	March 10 ..	6-7	35	33	+ 2
December 28 ..	10-11	52	52	0	March 19 ..	21-22	45	46	- 1
1926—					March 21 ..	7-8	32	32	0
January 7 ..	15-16	36	38	- 2	March 30 ..	14-15	37	38	- 1
January 7 ..	16-17	48	55	- 7	April 6 ..	1-2	40	42	- 2
January 7 ..	23-24	35	37	- 2	April 6 ..	4-5	36	41	- 5
January 15 ..	22-23	33	34	- 1	April 8 ..	22-23	32	33	- 1
January 18 ..	8-9	90	93	- 3	April 9 ..	8-9	43	43	0
January 18 ..	10-11	52	51	+ 1	April 14 ..	14-15	79	82	- 3
January 27 ..	3-4	41	42	- 1	April 14 ..	16-17	94	102	- 8
January 27 ..	15-16	56	61	- 5	April 14 ..	17-18	63	67	- 4
January 27 ..	21-22	42	39	+ 3	April 14 ..	23-24	43	54	-11
February 2 ..	22-23	33	40	- 7	April 15 ..	0-1	54	66	-12
February 3 ..	9-10	39	43	- 4	April 15 ..	1-2	58	70	-12
February 11 ..	18-19	63	67	- 4	April 15 ..	4-5	39	48	- 9
February 11 ..	20-21	32	45	-13	April 15 ..	5-6	91	93	- 2
February 15 ..	21-22	31	30	+ 1	April 15 ..	6-7	51	44	+ 7
February 23 ..	16-17	43	46	- 3	April 15 ..	7-8	44	51	- 7
February 23 ..	19-20	48	46	+ 2	April 15 ..	13-14	69	65	+ 4
February 23 ..	20-21	40	57	-17	April 15 ..	16-17	46	47	- 1
February 24 ..	5-6	47	52	- 5	April 16 ..	6-7	42	38	+ 4
February 26 ..	5-6	54	57	- 3	April 16 ..	7-8	69	72	- 3
March 1 ..	6-7	33	35	- 2	April 16 ..	18-19	57	53	+ 4
March 1 ..	10-11	33	40	- 7	April 16 ..	19-20	68	69	- 1
March 3 ..	12-13	42	46	- 4	April 17 ..	0-1	41	41	0
March 5 ..	21-22	45	38	+ 7	May 4 ..	14-15	33	41	- 8
March 5 ..	22-23	39	30	+ 9	May 4 ..	16-17	68	60	+ 8
March 9 ..	12-13	30	31	- 1	May 4 ..	20-21	39	37	+ 2
March 9 ..	18-19	40	54	-14	May 4 ..	21-22	67	64	+ 3
March 9 ..	19-20	38	31	+ 7	Means	—	48.1	50.0	-1.9

Gr/Ab=0.962.

The Adoption of a Standard Inertia Cylinder.

In the *Philosophical Magazine*, 1905, Vol. II., page 133, the late Dr. W. Watson, F.R.S., gave an account of experiments made by him on the determination of moments of inertia of the auxiliary inertia cylinders supplied by makers of unifilar magnetometers for deriving the most important constant of the instrument. He pointed out that in calculating the moment of inertia from measures of mass and dimension certain assumptions had to be made which were not always true in fact. In particular, perfect homogeneity of the material could not be assumed, and the risk of internal flaws could not be wholly eliminated.

Any error arising from such causes would persist as a systematic error throughout all determinations of horizontal force made with a given magnetometer, since the calculated moment of inertia of the vibrating collimator-magnet depends fundamentally upon the assumed moment of inertia of the auxiliary cylinder.

Dr. Watson proposed that a special cylinder should be compared with a number of other cylinders of highest possible accuracy of manufacture, by actual observation of the several periods of vibration, and that the mean moment of inertia resulting should be adopted as the actual moment of this special cylinder which should thereafter be considered as a Standard.

All magnetometers could ultimately be related to this standard by similar comparison of the vibration-period of their respective auxiliary cylinders with that of the standard cylinder.

Dr. Watson obtained such a cylinder and devised apparatus for comparing moments of inertia of different cylinders by observation of their vibration-periods.

For a detailed description of his apparatus, method and work, reference should be made to the account given in the *Philosophical Magazine*.

Briefly, the period of vibration is observed of a given cylinder resting on "V"s in a brass carriage, the carriage being suspended by a stout quartz fibre about 30 cm. long and 0.3 mm. in diameter. The period is compared with that of the standard similarly supported, and of the carriage alone. A small mirror on the carriage reflects a fixed scale, and the reflection when observed through a telescope indicates the vibration. The elasticity of the quartz suspension fibre maintains vibration for many minutes.

The observed periods being t_s , t_c and t_o respectively, we have

$$\frac{K_s}{K_c} = \frac{t_s^2 - t_o^2}{t_c^2 - t_o^2}$$

where K_s is the moment of inertia of the standard cylinder and K_c is the calculated moment of inertia of the comparison cylinder. Small temperature corrections are applicable, but if the experiment is arranged symmetrically, these may be ignored in general, and the result obtained is the ratio of the moments of inertia of the two cylinders at the mean temperature of the experiment.

The apparatus and some of the comparison cylinders were acquired by the Meteorological Office at the death of Dr. Watson. It was the intention of the Director of the Meteorological Office to have the experiments repeated at Kew Observatory with a view to the definite adoption of a Standard Cylinder. Owing, however, to the cessation of magnetic work at Kew and the consequent transference of the standardisation of magnetometers to the Royal Observatory the determination of the moment of inertia of a standard cylinder was undertaken at the latter place.

The cylinder to be denominated "The Standard" is Watson's cylinder No. 10. It is of rolled brass, and has slightly bevelled ends, minimising the risk of deformation in use; also its surface is highly polished and gilt to minimise corrosion.

The fiduciary cylinders used in the determination were Watson's Nos. 1, 7, 8, 9.

The first of these is of rolled brass and the others are of rolled copper. Great care was exercised in the manufacture of the copper cylinders to make the end faces optically plane.

The observations were carried out on the central pier of the magnetic pavilion at Greenwich. In order to increase the accuracy and to lessen the fatigue of the observation, temporary arrangements were made for electrically recording the periods of oscillation.

The chronograph of the Altazimuth received the records, which were thus timed by the Sidereal Standard Clock. They were subsequently read off by scale to the nearest hundredth of a second.

The order of operations comprised in the experiments was as follows. After a preliminary levelling of the base carrying the suspension box and tube, the carriage with an ordinary inertia cylinder in position on the V's was placed upon the small movable platform provided for its support beneath the suspension hooks, and the levelling screws of the carriage were adjusted until a tiny striding level resting on the inertia cylinder indicated that the latter was truly horizontal.

The mirror on the carriage was then adjusted until the base of the reflected scale was seen to be approximately coincident with the horizontal cross wire on looking through the telescope. The cylinder was then removed, the carriage was suspended and a movable rider on the carriage was adjusted until the base of the scale again coincided with the horizontal wire of the telescope. The carriage was by this means suspended in the condition in which it would support cylinders in a horizontal plane without being itself displaced.

The standard cylinder was next placed in position and adjusted until the reflected scale and the horizontal wire of the telescope once again indicated that a true horizontal was attained in suspension.

The carriage was now set in lateral oscillation by giving the torsion head of the suspension tube a small twist to and fro, and the instants of 100 consecutive transits of a chosen division of the reflected scale across the vertical cross-wire in the telescope were recorded by tapping an electric key.

The standard inertia cylinder was then removed and every 10th transit of the unloaded carriage was timed for 200 consecutive vibrations.

A *comparison* cylinder was next placed on the carriage and a set of vibrations similar to those of the standard was observed.

The vibration experiments were then repeated in the reverse order. A full set thus consisted of 440 observed instants.

Thermometer readings of the temperature of the interior of the suspension box (which, as the box was frequently open, did not materially differ from that of the room) were taken at the beginning, middle and end of the set of comparisons.

The semi-arc of vibration varied as a rule between about 40' and 20' for cylinders, while for the unloaded carriage (in which damping was rather rapid) the semi-arc was between 30' and 10'.

The cylinders were freely exposed to the room temperature for at least ten minutes before being used, so that steady conditions could be presumed throughout the experiment.

The cylinders for comparison were taken in cyclic order. Six cycles were carried through, and concurrently with them comparisons, ten in number, were made between the standard cylinder and a cylinder known as Greenwich No. II. It is intended that the latter shall be used as the actual medium of comparison in standardising other cylinders, the Standard itself being reserved for reference only, at long intervals. All the observations were made by Mr. Witchell.

The reduction of the observations proceeds as follows.—The time of 1st transit being subtracted from the time of 51st, the time of 2nd transit from the 52nd, and so on, 100 independent measures of the interval occupied by 50 vibrations are obtained from the double set (or in the case of the unloaded carriage 20 independent measures of the interval occupied by 100 vibrations). From the means of these, the vibration periods t_c , t_s and t_o are computed to five decimal places. The apparent value of the moment of inertia of the standard cylinder inferred from the calculated value of that of the particular comparison cylinder is then easily derived by the formula already given.

The dimensions and masses of the fiduciary cylinders were supplied by the Director of the Meteorological Office from measurements made at the National Physical Laboratory, Teddington, in May and June 1922.

Particulars will be found in the following table :—

Watson's No.	Description.	Mean Diameter at 15° C.	Mean Length at 15° C.	Mass.	Errors of End Faces.	
					Parallelism.	Convexity.
1	Rolled brass	cms. 0.9909	cms. 9.9756	gms. 65.229	cms. .0008	cms. .0003
7	Rolled copper	1.0000	9.9963	68.744	.0002	.0001
8	„ „	0.9981	9.9836	68.412	.0002	.0002
9	„ „	0.9983	9.9855	68.479	.0008	.0001

In reducing the dimensions to a common temperature of 15°C. , a co-efficient of linear expansion equal to 17.3×10^{-6} was used at the National Physical Laboratory for all the cylinders indifferently. This is the adopted co-efficient for brass, but copper (according to the tables of Physical Constants published by the Smithsonian Institution) has a co-efficient about 10 per cent. smaller than that of brass. Allowance for this difference has been made in computing the moments of inertia of the copper cylinders at the temperature of the comparison observations, having regard also to the temperature at which the dimensions were measured at the National Physical Laboratory, namely, between 17° and 18°C.

Dr. Watson called attention to the fact that since the period of vibration of the carriage when loaded is $t_1 = 2\pi \sqrt{\left(\frac{K+k}{c}\right)}$, and unloaded is $t_o = 2\pi \sqrt{\left(\frac{k}{c}\right)}$, we have the relation $c = 4\pi^2 \frac{K}{t_1^2 - t_o^2}$, c being a quantity dependent on the suspension fibre. If one cylinder alone is considered, the constancy of c can be tested.

Watson found substantially the same value for c at various times over an interval of four months, but the suspension fibre used in the Greenwich experiments has not the same quality. A distinct gradual diminution amounting to nearly .02 per cent. took place during the two months occupied by the experiments.

This circumstance does not invalidate the observations, the actual effect of a change in c during a comparison being eliminated by the symmetrical arrangement of the experiment.

One set each of comparisons with cylinders 8 and 9 was rendered imperfect through faulty registration. The fragmentary results were, however, reduced and have been given half weight in taking the means for the separate cylinders.

Dr. Watson considered that results from cylinders 7, 8 and 9 were worthy of special weight on account of the very great care which had been exercised in manufacturing these cylinders.

Deference has been paid to his opinion by giving double weight to results from these three cylinders when adopting the final mean value of the Standard.

The following table summarises the results obtained :—

Date.	Comparison Cylinder.	Mean Temperature °C.	Mean Observed Period of Vibration.			Apparent Value of Log K for Standard Cylinder at 15° C.
			Standard Cylinder.	Comparison Cylinder.	Carriage unloaded.	
1926 Dec. 31	I	8.2	2.73381	2.72830	0.92457	2.738329
1927 Jan. 13	I	7.3	.73382	.72855	.92464	.738233
Feb. 7	I	6.9	.73475	.72905	.92534	.738387
17	I	9.5	.73648	.73119	.92527	.738238
21	I	12.3	.73546	.73055	.92458	.738102
23	I	11.2	.73563	.73010	.92475	.738325
Jan. 25	7	10.1	2.73428	2.79890	0.92467	2.738150
27	7	9.2	.73404	.79906	.92464	.738010
Feb. 3	7	7.1	.73418	.79882	.92488	.738147
17	7	10.2	.73578	.80034	.92545	.738183
23	7	10.9	.73525	.79946	.92453	.738304
23	7	12.0	.73584	.80017	.92474	.738265
Jan. 25	8	10.4	2.73470	2.78960	0.92483	2.738334
27	8	10.1	.73470	.78987	.92512	.738239
Feb. 3	8	7.6	.73446	.78991	.92495	.738144
18	8	10.0	.73584	.79110	.92534	.738217*
21	8	10.4	.73556	.79158	.92535	.737948
23	8	11.2	.73543	.79095	.92461	.738124
25	8	7.6	.73472	.79028	.92454	.738110
Jan. 25	9	10.7	2.73463	2.79185	0.92483	2.738116
28	9	8.2	.73461	.79180	.92511	.738129
Feb. 4	9	8.4	.73457	.79166	.92521	.738163
18	9	10.1	.73589	.79293	.92530	.738188*
21	9	12.2	.73615	.79296	.92480	.738270
23	9	11.3	.73549	.79222	.92460	.738294
25	9	8.1	.73520	.79261	.92432	.738062

* Half weight.

The apparent mean values of the logarithm of the moment of inertia of the Standard Cylinder derived from each comparison cylinder separately are :—

From Watson's No. 1.—2.738269, weight 1.

No. 7.—.738177, weight 2.

No. 8.—.738155, weight 2.

No. 9.—.738174, weight 2.

The finally-adopted mean value at 15° C. is 2.738183 and at 0° C. 2.737958.

Dr. Watson's value of the moment of inertia at 15° C. is given in the *Philosophical Magazine* as 547.24, the logarithm of which is 2.73818.

APPENDIX II. STANDARD INERTIA CYLINDER

E 85

The result to five places of decimals is thus identical with that obtained by Dr. Watson in 1903.

As explained earlier, a series of comparisons with an auxiliary cylinder was undertaken concurrently with the foregoing in order that the Standard itself might be preserved unused except for subsequent re-comparison.

The cylinder chosen for this purpose was one obtained in 1923 and used for determining the moment of inertia of the Gibson magnet from 1923-26.

Results of the comparison follow :—

Date.				Mean Temperature, °C.	Apparent Value of Log K of Standard at 15° C.
Feb. 7	Morning	..	..	6.4	2.738662
	Afternoon	..	..	6.2	.738404
8	Morning	..	..	4.4	.738394
	Afternoon	..	..	5.3	.738343
10	Morning	..	..	5.0	.738426
	Afternoon	..	..	5.8	.738362
15	Morning	..	..	5.9	.738365
	Afternoon	..	..	5.6	.738221
17	Morning	..	..	8.6	.738098
	Afternoon	..	..	8.9	.738366

Mean 2.738364 ± .000010.

The difference between the above value and the adopted value is .000181. A correction of —.000181 is therefore necessary to the logarithm of the moment of inertia of Greenwich No. II used for the years 1923 to 1926, if referred to the Greenwich Standard Cylinder. The effect of this correction would be to diminish all observations of horizontal force during that period by 3.9 γ .

From 1912 to 1922 the cylinder Greenwich No. I was used to determine the moment of inertia of the Gibson magnet.

A series of four accordant comparisons with the auxiliary standard (Greenwich No. II) indicates that a correction of —7.0 γ is applicable to observations of horizontal force during those years.

The cylinder Casella 181, in use with the Abinger magnetometer, has similarly been compared with the auxiliary standard. Six comparisons give a mean correction of —.000045 to the assumed value of log K ; or a correction of —1.0 γ to observations of horizontal force.

C 27

Commencing with 1926 January 1 the standardised value of $\log K$ has been used in the reduction of the Abinger observations.

In the foregoing work no account has been taken of the fact that the effective moment of inertia of a cylinder in use is slightly larger than the theoretical moment, owing to air carried along with the cylinder during vibration. Since all the cylinders are approximately alike, the same effect may be anticipated with all. Dr. Watson estimated the increase at normal speed of vibration to be 0.049 per cent. of the theoretical moment.